



European Bank
for Reconstruction and Development

PROGRAMME EVALUATION

Supporting Green Transformations in Municipalities

The EBRD Green Cities Programme interim evaluation (2016–21)

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Abbreviations

| | | | |
|--------------|---|--------------|--|
| ABI | Annual Bank Investment | NDC | Nationally Determined Contributions |
| CAS | Central Asia | OECD | Organisation for Economic Co-operation and Development |
| CDP | Corporate Development Programme | OL | Operational Leader |
| CEB | Central Europe and Baltics | PPP | Public Private Partnership |
| CoO | Country of Operations | PSC | Public Service Contract |
| CSD | Climate Strategy and Delivery | PSP | Private sector participation |
| EE | Energy efficiency | RO | Resident office |
| EEC | Eastern Europe and Caucasus | RVA | Risk and Vulnerability Assessment |
| EU | European Union | SCF | Strategic and Capital Framework |
| EvD | Evaluation Department (EBRD) | SECAP | Sustainable Energy and Climate Action Plan |
| FOPIP | Financial and Operational Performance Improvement Programme | SEE | South-Eastern Europe |
| GC | Green Cities | SEM | Southern and Eastern Mediterranean, SEMED |
| GCAP | Green City Action Plan | SI3P | Sustainable Infrastructure Policy and Project Preparation (EBRD) |
| GCF | Green Climate Fund | SIG | Sustainable Infrastructure Group (EBRD) |
| GCO | Green City Officer | SMA | Smart Maturity Assessment |
| GET | Green Economy Transition | SO | Sub-operation |
| GFR | Green Finance Roadmap | TC | Technical Cooperation |
| GHG | Greenhouse Gas | TI | Transition Impact |
| GrCF | Green Cities Framework | ToC | Theory of Change |
| GrCF2 | Second Green Cities Framework | ToR | Terms of Reference |
| GrCP | Green Cities Programme | TQ | Transition Quality |
| ICLEI | Local Governments for Sustainability (NGO) | TRK | Türkiye |
| MEI | Municipal and Environmental Infrastructure | URP | Unfunded Risk Participation |
| NCBI | Net Cumulative Bank Investment | | |

Executive Summary

Cities are major contributors to climate change. Their global share of greenhouse gas emissions stands at 70% and is increasing. Urban populations are at the same time highly vulnerable to the effects of climate change. Climate change has costly effects on the delivery of municipal services such as infrastructure, housing, health and safety, and also undermines cities' capabilities to grow sustainably and inclusively. The effects of climate change are worse in poor and low-income communities. There is a growing global consensus that organisations like EBRD should work at the nexus of cities and climate change and provide significant, long-term support to cities to invest and to adopt policies aimed at preventing or mitigating the negative effect of climate change.

“The development banks should also consider targeting additional resources toward sub-sovereign levels where local expertise and reform energy could result in faster, more tangible benefits. Green city and smart city initiatives are examples of sub-sovereign development that multilateral development banks could support in a more direct and integrated fashion.”¹

Janet L. Yellen, US Secretary of the Treasury, October 2022

EBRD has been implementing the Green Cities Programme (GrCP) since 2016. The GrCP unique approach is the preparation of Green City Action Plans (GCAPs) for participating cities that enables strategic level engagement where

priorities and actions are defined and driven by local stakeholders rather than by EBRD. The programme also delivers horizontal programmatic activities for scaling up, exchanging experience and learning and innovations. The EBRD has concentrated investments in the GrCP under the Green Cities Frameworks (GrCF), which were approved in 2016 and 2018 and extended in 2020 and 2021.

This report presents the outcome of the interim evaluation of the GrCP implementation in 2016–21. The evaluation focused on assessing the extent of GrCP's progress towards its objective of becoming a sector-wide catalyst for addressing environmental and climate change challenges at the municipal level. Three evaluation questions corresponding to three specific criteria shaped the evaluation:

1. To what extent has the GrCP approach been meeting partner cities' needs and supporting EBRD strategic objectives? *Relevance & Coherence*
2. How efficiently has the GrCP utilised resources for implementation and delivery of its objectives? *Efficiency*
3. What progress has the GrCP made in delivering its stated objectives and contributing to transition? *Effectiveness*

The Green Cities investment portfolio has grown rapidly. By the end of October 2022, the GrCF reported **€1.96 billion ABI in Sustainable Infrastructure** operations. Of this over €1.88 billion was in the municipal and environmental infrastructure (MEI) sub-sector. A total of 66 projects were signed as GrCF sub-operations. **The largest share of GrCF investments have been in the Southern and Eastern Mediterranean (SEMED) region** with 30 per

¹ Remarks by Secretary of the Treasury Janet L. Yellen at the Center for Global Development, October 6, 2022, <https://home.treasury.gov/news/press-releases/jy0997>

cent of all investments, followed by Eastern Europe and Caucasus (EEC, 25 per cent) and South-Eastern Europe (SEE, 21 per cent). EEC and SEE were the major regions of activity in 2016-19 but as of 2020, Türkiye and SEMED caught up in investment volumes with a small number of high value projects. GrCF is concentrated in **the urban transport sector**, which **accounted for** over 60 per cent of investments and comprised 22 projects.

The key evaluation findings are organised by evaluation questions:

To what extent has the GrCP approach been meeting partner cities' needs and supporting EBRD strategic objectives?

The GrCP is highly relevant for municipalities and supports their needs and aspirations to combat the most pressing environmental and climate challenges.

The approach of the Programme through the development of GCAPs has **empowered cities to define their own green objectives and related investment priorities**. The Bank proved its ability to connect meaningfully with the strategic vision and direction of municipalities by offering them relevant and necessary support in developing a realistic and essential action plan and to provide financing to implement selected investment actions. As the main tool of the GrCP, the GCAP is well integrated into existing strategic and legal frameworks. The guided and expertly supported process of technical assessment, public consultation and political deliberation underpins local ownership of GCAP in most cases. But the processes and follow-on implementation depend on the power that is delegated to municipal authorities and centrally-imposed limits on municipal borrowing. Centralised governance models require national authorities to be more involved.

GrCP is strategically aligned with the focus on GET but has yet to achieve sector integration and become an internal catalyst of investment.

The programme has been **leading the way from mainstreaming to a systemic approach in the green transition** within the Bank. It has harnessed the expected strategic institutional orientation towards a green transition and positioned Sustainable Infrastructure at the forefront of climate finance. Its design and strategy spearheaded the evolution of the approach articulated in GET 2.1 in 2020. Thus far, the GrCF sub-operations (SO) have been almost entirely within the MEI sub-sectors. The intention and design for sector integration in the programme has not yet fully materialised and is the next milestone in the programme's systemic approach to GET. GrCF investment has grown steadily as a share of MEI ABI, whereas overall MEI ABI and average MEI GET share have not trended upward. This means that **no strong indication yet exists that the GrCP is catalysing additional GET investment within the Bank**. Rather there is a continuing existing strong MEI GET delivery, increasingly consolidated under the Programme.

The significant non-financial additionality at programme level is not yet matched by financial additionality.

Significant non-financial additionality is created at programme level primarily by developing GCAPs and related networking, learning and experience sharing opportunities. The financial additionality of GrCF is tied mainly to individual SO, depending on the local context, but is not specifically enhanced by the programme. The intention and potential are for the programme to enhance its financial additionality at Programme-level with bond issues and Green Finance Roadmaps (GFR) but progress has been limited on these aspirations.

The GrCP has demonstrated its ability to adapt and respond to crises

Several crises have affected the programme and have required a very dynamic response and different support to ensure that municipal stakeholders have the tools to strengthen their resilience. The programme has **successfully demonstrated its agility and pro-active approach in responding to crises and incorporating the resulting lessons** into its

methodology. Dealing with Covid-19 crisis demonstrated that GCAP is an appropriate framework for absorbing the changes that are required to deliver an altered set of services in a more stringent fiscal context. In Ukrainian cities, a GCAP might become an appropriate platform for defining priority actions and ensuring they are translated into green investment projects. The GrCP has already launched a process of integrating the war effects into existing GCAPs and into those being prepared in Ukrainian green cities.

How efficiently has the GrCP utilised resources for implementation and delivery of its objectives?

The GrCP introduced successful cross-team integration

The GrCP’s internal governance structure has evolved organically to accommodate the needs of a rapidly expanding framework and the many internal and external stakeholders necessary for implementation. The programme successfully built an unparalleled **internal ecosystem connecting banking and climate strategy functions with various policy and delivery departments** across all regions of Bank operations. It dedicates resources for strategic planning, management, monitoring and reporting, stakeholder engagement and learning. Overall, the GrCP governance structure is robust and agile, its information flows are streamlined, and its decision-making is effectively managed by the core GrCP team.

International and local expertise are balanced to deliver a standardised methodology but improvements are needed to ensure municipal ownership and greater localisation.

The GrCP developed a balanced approach to managing external consultants making it possible to internalise and blend the **best available knowledge and skills with the Bank’s in-house technical expertise**. The GrCP core team is highly engaged with external experts. Programme leaders remain in close contact with consultants throughout the process. However, **local expertise could be used more**

effectively to better reflect the individuality of cities and their dynamic needs based on governance models and degrees of decentralisation, especially for tailor-made capacity-building programmes.

What progress has GrCP made in delivering its stated objectives and contributing to transition?

GCAP implementation has progressed well albeit with limitations related to monitoring

Given the programme’s overall objective of environmental improvement at city level implemented through municipal infrastructure, there was little expectation that the overall objective would be achieved by 2022. A key programme feature is that cities successfully complete and adopt the GCAPs whose **preparation is on track** relative to the expectations of the frameworks. Progress on **GCAP implementation** is also good in general, but the available monitoring does not collect outcome level data and is therefore a real limitation.

To date, the GrCP has established a credible path towards the overarching objective of “becoming a catalyst for addressing environmental and climate change challenges at municipal level,” But this remains a work in progress.

By developing GCAPs, the programme supports an analytical, comprehensive approach to a green path to municipal infrastructure. The green cities methodology is elaborate and comprehensive and provides a conceptual, practical underpinning to implementation. The ability to combine the preparation of a roadmap of actions linked to a city’s strategic objectives with the provision of investment finance for the action implementation is a key programme strength. The GCAPs have made some progress towards a systemic approach to green cities development but in practice, GCAPs and investments are still often developed separately along sectoral lines. Whether or not a GCAP will become a catalyst of sector-wide action depends on a number of factors, some of which

can be addressed or identified upfront: local ownership and local implementation and financing capacity.

EBRD's participation in the GCAP implementation has grown while the programme has been broadening primarily

GCAP are city-level documents. Cities drive their implementation, which is financed from various sources, including municipal and state budgets. But the goal of the GrCP is not only to expand the number of cities in the programme and the number of completed GCAPs, but also growing in depth – to develop a relationship between a city and EBRD and to facilitate multiple investment contributions from the Bank. **This deeper participation of EBRD in GCAP implementation has been increasing over time.** So far, 26 GrCF SO are follow-on investments, which are distributed unevenly, as two cities represent 40 per cent of them. There is considerable scope for further deepening programme growth: 12 of 58 green cities have had multiple GC operations thus far. The EBRD implementation of GCAPs is centred on investments; the intention is to implement GCAP policy action as well but the **funding sources for non-transactional policy work are limited.**

Better GrCP transition monitoring is needed to better guide effective implementation.

Transition Impact monitoring is reasonably well designed to ascertain whether the intended objectives are achieved, but there is no actual monitoring or reporting beyond output level. The GCAP methodology provides for developing a sophisticated baseline and the GCAPs develop links between actions and verifiable targets according to cities' strategic objectives and the links between actions and broader environmental indicators. However, the data collected by the GC team is at activity implementation status only and breaks the GCAP monitoring plan link between the actions and targets of city objectives. There have been no clearly defined plans for an end of GCAP assessment and follow up, whereas this could bridge the current monitoring gap.

The next independent programme evaluation conducted in 3-4 years should focus on outcomes and impact, on meeting the dynamic needs of the cities and on the flexibility of the GCAP format in long-term city planning.

The evaluation proposes the following recommendations in response to the areas highlighted for improvement and to **further augment the value added of the GrCP for cities and for the Bank.**

At the strategic level:

- **Recommendation 1** – Strengthen the catalytic function of the programme and synergies across sectors to derive maximum value from the prioritisation exercise through deepening GCAP implementation with follow-on investments, including in the energy sector, and accompanying policy action. Policy action implementation requires non-transactional TC funding and a framework-level benchmark to track it, which does not exist currently.
- **Recommendation 2** – In the next extension of the framework to be brought to the Board for approval, the GrCP should clarify the ambition of providing support to cities in financial mobilisation through Green Finance Roadmaps and municipal/green bonds. If the experience of GrCF2 implementation shows that its objectives in this area are not attainable for contextual reasons, this should be specified. If the ambition of GrCF2 is still in place for the future of the programme, support to cities in financial mobilisation should be enhanced. This should be supported by articulating framework-level targets for this aspect of the programme to facilitate future accountability.

At the operational level:

- **Recommendation 3** – Enhance the localisation of the approach to GCAP development and implementation by optimising the use of RO-based in-house expertise (bankers and climate strategy

and delivery specialists) and consultants, including local consultants, and through tailored continuous capacity building actions matching the city’s initial and developing capabilities and needs.

- **Recommendation 4** – To enable the programme to translate its implementation and delivery into credible narratives of successful Green transition, substantial improvement in its transition monitoring and reporting will be needed.

This in the first instance means delivering on the programme’s existing commitments under the current transition monitoring framework to provide adequate reporting on the Bank’s transition mandate. In the next steps, the programme should consider strengthening the transition monitoring framework in line with its increased ambition in GrCF2.

1. Evaluation rationale and scope

1.1. Cities are major contributors to climate change and are highly vulnerable to its effects

1. Cities are major contributors to climate change. The Intergovernmental Panel on Climate Change reports that an increasing share of emissions can be attributed to urban areas. In 2015, urban emissions were estimated to account for about 62 per cent of the global share of emissions. By 2020, this grew to about 70 per cent. UN projections foresee another 2.5 billion people living in urban areas by 2050; nearly 90 per cent of them in cities in Asia and Africa. The IPPC indicates that limiting global warming to 1.5 degrees Celsius would “require rapid and far-reaching transitions in uses of energy, land, urban and infrastructure (including transport and buildings), and industrial systems.” Rising urbanisation means the world must ensure climate-resilient development if it is to achieve net zero targets.²
2. The number of people relying on fossil fuels also makes urban populations highly vulnerable to the effects of climate change. The paucity of green spaces exacerbates the problem. The effects of climate change on urban delivery of basic services such as infrastructure, housing, health and safety are costly. Climate change also undermines cities’ abilities to grow sustainably and inclusively or to plan strategically. It forces them to concentrate often scarce investment resources to address the consequences of climate calamities rather than on innovative long-term solutions. These effects are worse among poor and low-income communities where many live on the margins of society, in unstable structures in areas that are more susceptible to flooding, landslides and earthquakes. In addition, poor and low-income communities have inadequate capacities, limited resources and reduced access to emergency response systems.³
3. This situation calls for organisations like EBRD to work at the nexus of cities and climate change and provide significant, long-term support to cities to invest and adopt policies to prevent or mitigate the negative effect of climate change.
4. EBRD has been implementing the Green Cities Programme (GrCP), an ambitious initiative aimed to support cities to adapt to and mitigate climate change. The GrCP was initiated in 2016 with the approval of the first GrCF, an instrument to scale up EBRD’s Green Economy Transition (GET) investment in cities across its countries of operations. A green city (GC) was defined as “a city which shows high environmental performance relative to established benchmarks in terms of i) quality of environmental assets (air, water, land/soil and biodiversity), ii) efficient use of resources (water, energy, land and materials) and iii) mitigating and adapting to risks deriving from climate change, while maximising the economic and social co-benefits and considering its context (population size, socio-economic structure and geographical and climate characteristics).⁴
5. The programme scope is broader than the scope of GC framework (GrCF). It includes EBRD investments, investments and concessional financing from other financiers, and technical cooperation (TC) activities as well as the preparation of Green City Action Plans (GCAPs), and horizontal programmatic activities related to scaling up, exchanging experience, learning and innovations. It is also

² <https://www.ipcc.ch/report/ar6/wg3/>

³ <https://www.unep.org/explore-topics/resource-efficiency/what-we-do/cities/cities-and-climate-change>

⁴ Source: Green Cities Framework (GrCF) BDS16-207

unique in offering engagement with cities at the strategic levels where priorities and actions are defined and driven by local stakeholders rather than by EBRD. The programme is ongoing and the number of cities involved and investment projects launched are growing rapidly. The underpinning programme framework, the second GrCF (GrCF2) was extended first in October 2020 and again in November 2021. This is, therefore, an interim evaluation of the programme.

1.2. Assessing the progress of the EBRD Green Cities programme

6. EvD contributes to the Bank's green agenda and strategic objectives by delivering a series of green-focussed evaluations over the Strategic and Capital Framework (SCF) for 2021-25. These evaluations are building a body of evidence that will enable key stakeholders to more deeply understand the results of EBRD green finance and policy actions.

7. The volume of EBRD GET finance has been growing in absolute volumes and as a share of EBRD investment. Shareholders and Bank management are very interested in understanding the outcomes of these operations and their contributions to a green transition. High level strategic targets are defined as inputs (volumes of green finance) but a robust monitoring and evaluation system is needed for contextualised information on the extent to which investments and policy actions have achieved their intended impacts and on the factors facilitating their effectiveness.

8. The interim evaluation of the GrCP is an important building block in this regard. Designed to bring together investment, capacity building and policy action, the programme has grown rapidly since its inception. It achieved more than €800 million ABI in 2021 under the two GrCFs. Its objectives span beyond the scope of individual projects to expected significant environmental outcomes at city level, and the mobilisation of green finance and facilitating the use of green bonds. After five years of implementation, the framework has reached its first phase of maturity and is ready for an interim evaluation to identify emerging results and lessons. When the Board of Directors approved the second extension of GrCF2 in November 2021, they emphasised the importance of an independent evaluation for informing future decisions regarding GrCF. This report responds to this demand.

9. The **purpose** of this evaluation is twofold. First, to contribute to institutional accountability by evaluating past operations against commitments and expectations. Second, to provide evidence and insights for institutional learning so that the continuing programme adds maximum value to the EBRD's ambitious green agenda.

The evaluation **objectives** are to do the following:

- i. Assess programme merits insofar as they can be identified at this stage, including objectives and results achieved, and gather insights to improve programme design and implementation in future iterations.
- ii. Contribute to the body of knowledge on the implementation of the Bank's strategic priorities including green investments and make this available to internal decision-makers and the external stakeholders involved in the programme, including municipalities, governments, private and public sector companies and CSOs.

10. The evaluation **scope** is from 2016 to 2021 and covers the implementation of the GrCP from its launch under the initial framework (GrCF, November 2016)⁵, the follow-up framework (GrCF2, October 2018)⁶ and its first extension (October 2020).⁷ The implementation of the GrCF second extension (November 2021) is outside the scope of this evaluation.⁸ However, the evaluation did consider the design and objectives of the most recent extension and the relevant contextual developments during this period to understand GrCP's trajectory and future orientations and to ensure that its recommendations are forward looking and relevant for future operations.

2. Green Cities overview

2.1. Green Cities frameworks

The EBRD Board of Directors approved the initial Green Cities Framework (GrCF) in November 2016. The total headroom was approved at €250 million for an expected period of five years.

Geographically, the framework covered all EBRD countries of operations but the cities of the Caucasus, Moldova and Belarus and a further roll out to the western Balkans were its initial focus.

11. **Sub-operations (SO)** were to consist of sovereign and non-sovereign loans to governments, municipalities, municipally-owned utility companies and private companies providing municipal services. The use of proceeds of the SOs were investments in municipal infrastructure sectors (Municipal and Environmental Infrastructure, MEI), that also addressed climate change mitigation or adaptation. The framework included specific eligibility criteria and stipulated process requirements and standards for all SO.

12. **The GrCF introduced a new systematic approach to prioritising investment at city level** that was underpinned by the development of **Green City Action Plans (GCAP)**. The implementation approach is tied to having each city develop a GCAP, which is a condition for joining the GrCP. The initial engagement with a city typically begins with the first investment project (trigger investment), during which the municipal authorities commit to developing and adopting a GCAP. The EBRD supports the development of the GCAPs with consultancies financed by technical cooperation (TC) funds. Consultants carry out **baseline diagnostics** using a set methodology and identify the priority environmental issues to be addressed.

13. The rapid implementation of the GrCF and the high demand for investments led to a **follow up framework (GrCF2)** that was brought for approval in October 2018. The objectives for GrCF2 were broadly consistent with those of GrCF but were more ambitious, with higher impact thresholds, stronger GCAP methodology and facilitation of access to finance. GrCF was split into two implementation windows: Window I was dedicated to co-financing with the Green Climate Fund (GCF), and Window II had no specific co-financing arrangement. In October 2020, an extension of GrCF2 added €950 million

⁵ BDS16-207

⁶ BDS18-183

⁷ BDS18-183 (Addendum14)

⁸ BDS21-140

in headroom and introduced changes in the GCAP methodology. A second GrCF2 extension was approved in November 2021 with headroom of €2 billion. (See Annex 1 and Annex 2 for a detailed overview of GrCF).

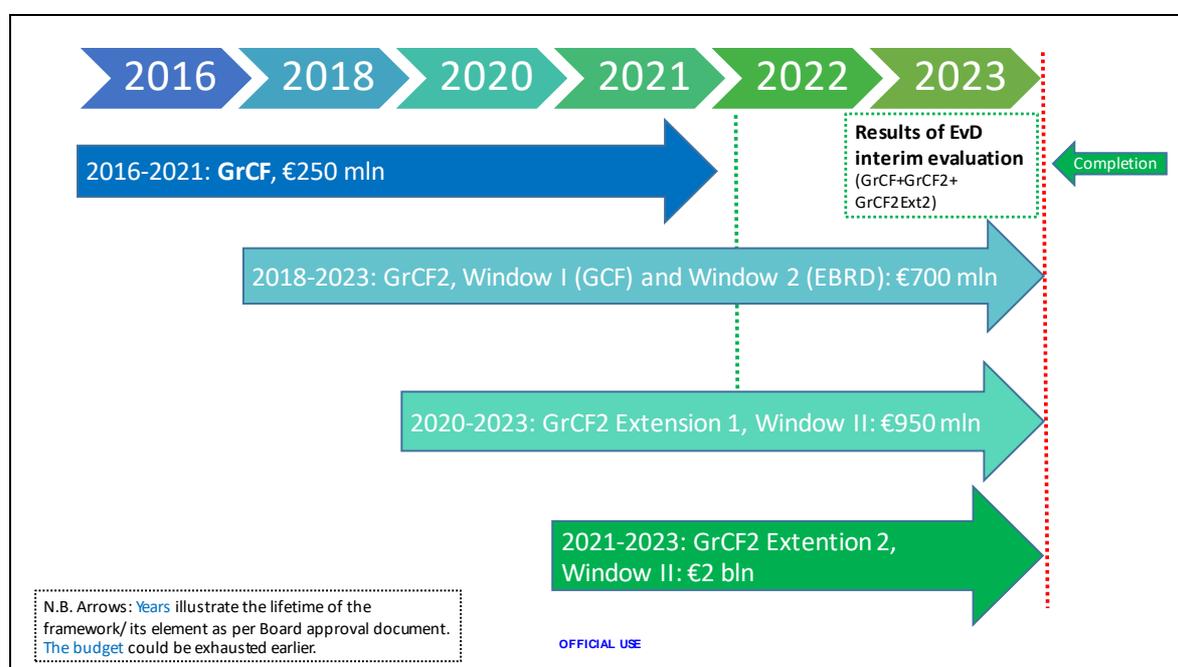
Table 1: GrCF Overview

| Fwk Op Id | Board Approved | Name | Headroom |
|-----------|----------------|--|-----------|
| 48171 | 2016 | Green Cities | €250m |
| 50440 | 2018 | Green Cities 2 - Window I (GCF) | €133m* |
| 50674 | 2018 | Green Cities 2 - Window II | €1,517m** |
| 53170 | 2021 | Green Cities 2 - Window II Extension 2 | €2,000m |

* after reallocation from W I to WII in February 2020

** after reallocation from WI to WII in February 2020, and with the first WII extension in October 2020

Figure 1: Overview of the GrCF timeline and evaluation scope



Source: EvD elaboration

2.2. The Green Cities frameworks portfolio

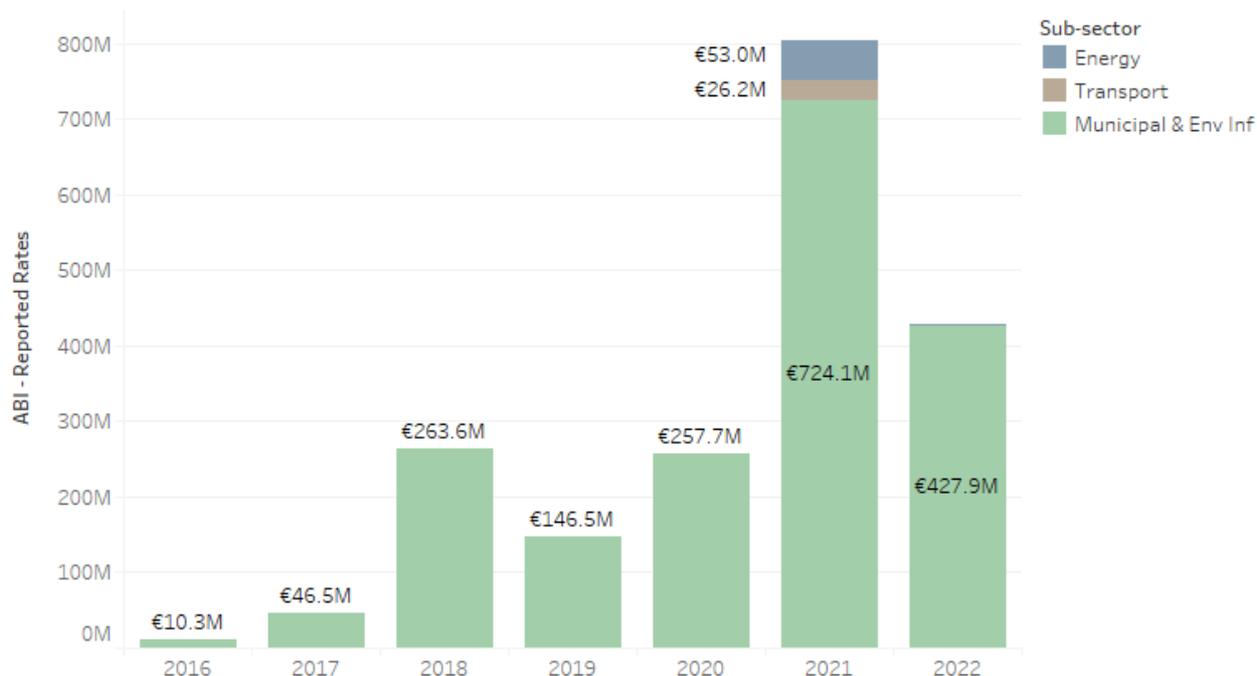
14. By the end of October 2022, the GrCF reported €1.96 billion ABI in Sustainable Infrastructure operations of which over €1.88 billion in MEI sub-sector. GrCF operations were a growing share of MEI ABI over the period. A total of 66 projects were signed as GrCF SO, representing a total investment (Net Cumulative Bank Investment [NCBI]) of €1.89 billion.

15. The Southern and Eastern Mediterranean (SEMED) received the largest share of the GrCF investment with 30 per cent of GrCF NCBI, followed by Eastern Europe and Caucasus (EEC, 25 per cent) and South-Eastern Europe (SEE, 21 per cent). The framework first rolled out in EEC and SEE, which were the major regions of activity in 2016-19. A single project in Türkiye was realised during that period,

but as of 2020 Türkiye and SEMED caught up with investment volumes by realising a small number of high-value projects.

16. **Urban transport dominates the sectoral distribution of GrCFs** (under MEI) and comprises over 60 per cent of NCBI with 22 projects. (For a detailed description of GC operations see Annex 3.)

Figure 2: GrCF ABI (2016–22)



2022 data until end October

2.3. Green Cities Theory of Change

17. The objectives and transition expectations of the GrCP have remained broadly consistent throughout the implementation period, making it possible to reconstruct a unified theory of change (ToC). GrCP developed no formal ToC ex-ante, so EvD reconstructed this ToC using available documentation for the purpose of this evaluation.

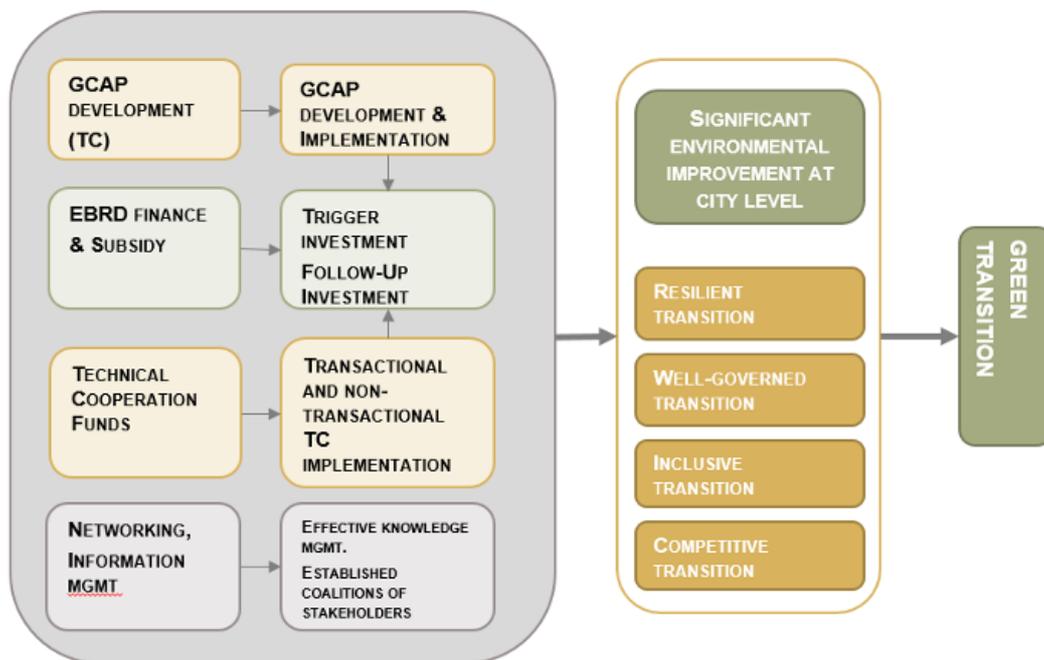
18. The overarching objective of the programme was to become a ‘sector-wide catalyst for addressing environmental challenges’. The objective of the framework is to deliver a ‘significant environmental improvement in at least one priority environmental challenge’ at city level, contributing to a green transition in countries of operations where the GrCP was present. Both GrCF and GrCF2 focused initially on Green and Well-governed transition qualities (TQ). In the first extension of GrCF2 (2020) this was broadened to include other secondary TQs (Inclusive, Competitive, Resilient).

19. There are four broad types of inputs into the GrCP that lead to mutually reinforcing results chains. Collectively they contribute to achieving the overall GrCP objective of significant environmental improvements at city level and contributions to secondary TQs:

- Green City Action Plans (GCAP)
- Investment finance, often blended with concessional funds
- Technical Cooperation (TC) funds
- Knowledge management and learning activities

20. By developing GCAPs that prioritise investments and policy measures, the framework’s operation is meant to distinguish the GrCP from a traditional project-by-project approach by using synergies among coherent actions and finance mobilisation to implement GCAP priorities. (For a detailed description of GC ToC see Annex 4.)

Figure 3: Simplified ToC for GrCP



Source: EvD elaboration

3. Evaluation Approach and Challenges

3.1. Evaluation Questions

This interim evaluation answers the overarching question of programme progress in achieving its main objective.

3.1.1. To what extent has the GrCP become a sector-wide catalyst for addressing environmental and climate change challenges at the municipal level?

21. Given the programme's overall objective to contribute to environmental improvements at city level and its implementation through municipal infrastructure, there is no expectation that the overall objective will have been achieved by now. Rather, the evaluation focused on the programme's value-added over what would have been the counterfactual, which would have been to implement stand-alone municipal operations or smaller frameworks, the prior practice in the sector that continues outside this programme. This was the lens for looking at the evaluation criteria for the three evaluation questions. The focus of the evaluation is therefore not specific SO, but rather the contribution of the programme's systematic approach to improved relevance, results and efficiency.

EQ1: To what extent has the GrCP approach been meeting partner cities' needs and supporting EBRD strategic objectives?

22. This question addresses the evaluation criteria of *relevance* and *coherence*. With respect to internal institutional coherence, the evaluation looked at the programme's alignment with the EBRD mandate and strategic institutional priorities including the GET approach and cross-cutting priorities. As the GrCP approach is centred around the development of city-level action plans, this evaluation question considers the coherence of these plans with the existing municipal strategic framework and action plans and their relevance to city needs. Finally, this question addresses the programme's financial and non-financial additionality.

EQ2: How efficiently has the GrCP utilised resources for implementation and delivery of its objectives?

23. The *efficiency* of the GrCP was evaluated and focused on the efficiency of programme governance. This includes internal organisational fitness for purpose, the balance between external consultants and internal expertise in delivering the programme's key pillars and adequacy of the management with respect to local counterpart capacity.

EQ3: What progress has the GrCP made in delivering its stated objectives and contributing to transition?

24. This question addresses the evaluation criterion of *effectiveness* and is focused on the programme's design and trajectory to reach its objectives as well as early results. It considers programme design and the underlying theory of change (ToC) and how results monitoring was set up. It discusses the progress of the implementation of GCAPs and their wider role as a catalyst for investment and action. This question also addresses the extent to which network building and capacity building activities and knowledge sharing lead to effective learning for results and innovating.

3.2. Evaluation approach, challenges and limitations

25. The **evaluation followed a mixed-method approach**. It used various data collection and data analysis methods, including document review, data and portfolio analysis, and semi-structured interviews with relevant actors in. It also covered three case studies of selected green cities (Izmir, Türkiye; Sarajevo, Bosnia and Herzegovina, and Ulaanbaatar, Mongolia). Field visits were conducted in case study cities, allowing discussions with representatives of partner cities, implementing agencies,

multilateral and bilateral financiers, business associations, civil society, development agencies and consultants.

26. Data collection for the evaluation was fully supported by the GC team, which provided all internal documentation and data as requested, facilitated mission organisation and contacts with partners and clients.

27. **Three key interrelated challenges to this evaluation** imposed some limitations on its approach and eventual findings. These were mitigated to the extent possible by adjusting the approach as relevant.

- i. **The interim nature of the evaluation:** The programme began with the first GrCF in 2016. This first framework was approved for a period of five years and its results benchmarks was set for this timeframe. In that sense, an evaluation of the progress of the programme in 2022 is a realistic proposition. But complex environmental results at city level, such as those that arose from the synergistic effect of multiple investment and policy actions primarily in municipal infrastructure, are not expected to be fully achieved in five years. This first phase was dedicated to establishing and promoting the programme, its growth from the initial regions to all regions, and the initial engagement of cities in the network. The evaluation therefore focused on the programme design and set-up and how its new approach to city investment moved the programme towards its ambition.
- ii. **Fast changing programme developments:** The programme grew rapidly. Its initial headroom was quickly exhausted and a follow up framework with almost three times as much headroom was approved in 2018 and further extended in 2020 and 2021. The dynamic environment also imposed some limitations on the approach to assessing programme design and the trajectory to achieving results. For example, the GCAP methodology was revised at the end of 2020 based on initial experiences and the Covid-19 pandemic implications for cities. The revisions led to more focus on urban resilience and on integrating cross-cutting priorities such as digitalisation and inclusion. However, these revisions had not been used to prepare GCAP by the time of this evaluation. The review of GCAPs available to the evaluation and the synthesis of the lessons learned from developing them is therefore based on the initial methodology. The evaluation considered the changes on an ex-ante basis in discussions about the programme's evolving relevance and design quality and specifically looked at the learning and feedback loops as the approach evolved to capture the value delivered by these processes. The evaluation approach also intentionally excluded any assessment of the implementation of the 2021 extension. In terms of the data for portfolio analysis and GCAP implementation analysis, however, the most recent data were used (end-October 2022 unless otherwise indicated). If the 2022 portfolio developments were excluded, outdated data would be presented. In addition, the new signings in 2022 were done under the new extension as well as the earlier ones. While these sources could be separated, this would be somewhat artificial.
- iii. **The war on Ukraine:** Initiated by renewed Russian aggression in February 2022, the war is having vast implications for Ukrainian cities and for EBRD's crisis response operations in Ukraine and countries directly affected by the war. The implications for this evaluation were two-fold. First, whereas several cities in Ukraine, the Caucasus and Eastern Europe are among those that have made the most progress in the GC network, few could be considered for field missions. Alternatives were discussed jointly with the GC team given the situation and resources in ROs and partner cities. Second, the report does not include the GC team's most recent efforts to integrate reconstruction efforts into the framework of Green Cities approach where needed; they began to materialise only very recently. EvD is currently carrying out a real-time evaluation of EBRD's Ukraine crisis response, which will consider relevant reconstruction aspects as currently possible. Any future evaluation of GrCP in the medium term will be better suited to assessing the programme's contribution to this aspect of transition.

4. To what extent has the GrCP approach been meeting partner cities' needs and supporting EBRD strategic objectives?

This section presents findings about GrCP's alignment with the Bank's strategic frameworks, the environmental and climate-related strategies and policies of cities and countries, the dependence of the programme's success on governance models and degree of fiscal decentralisation, GCAP's value added compared to similar programmes and its ability to react in an agile manner to dynamic changes in context and to crises. It also covers findings about the programme's financial and non-financial additionality.

4.1. Relevance of the GrCP strategic objectives and model to the EBRD mandate

28. The GrCP harnessed the expected strategic institutional orientation towards green transition and put Sustainable Infrastructure at the forefront of climate finance. While the first GrCF was still developed under the previous Transition Impact concept, designed to support the transition to free market economies, the programme was already designed with the vision to harness what was to come after – Transition Impact understood as transition to economies that are sustainable, which would with increasing urgency mean climate change mitigation and resilience. This vision allowed the Programme to transform EBRD's previously ordinary municipal business, which was well established but sitting somewhat uneasily in the private sector development orientation of the previous transition concept, to be at the forefront of its green transition and climate change mitigation finance.⁹

29. The GrCP is fully aligned with and actively pursuing key institutional priorities. This especially relates to the priorities articulated in the successive Strategic and Capital Frameworks in the area of Green Economy Transition (GET). GrCP's ability to lead on the key institutional priorities was reflected in references to it in the current SCF (2021-25). The SCF priority actions include "Promoting sustainability and innovation through the application of digital technology in infrastructure design and implementation, including integrating smart infrastructure elements into all urban operations, through widening and deepening the scope of the Bank's Green Cities Programme." The programme is further referred to as a component of promoting equality of opportunity, whereby GCs are a vehicle to enhanced access to services by integrating gender and inclusion. Finally, in its directions for accelerating digital transition, the SCF refers to GrCP in that "All future Green City Action Plans generated by the Bank will include 'smart city' elements to connect disparate utility, infrastructure and public services to generate real time data allowing a range of benefits, including reduced pollution, improved environment and the more efficient delivery of public services. This is particularly important as evidence suggests that digitally-enabled cities have mitigated Covid-19 impacts better."¹⁰ (See Annex 5 for a detailed discussion)

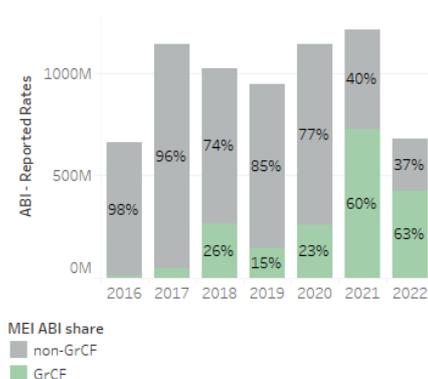
⁹ See e.g., CS/AU/14-11: *EvD Special Study: Private Sector Participation in Municipal and Environmental Infrastructure Projects*; This evaluation covered the period of 2001-2012. It found a gradual loss of status of Private Sector Participation (PSP) as a strategic priority over the period in the Bank's MEI approach, whereby disappointing results from specific PSP initiatives reduced the Bank's ambition and operations having a PSP dimension became limited, cautious and highly selective.

¹⁰ BDS20-030 (Final): Strategic and Capital Framework 2021-2025.

30. The GrCP has been leading the way from mainstreaming to a systemic approach in the Bank’s green transition. The initial GET approach for 2015-20 specified the Bank’s commitments to green finance and alignment with global commitments and objectives, including the Paris Agreement targets.¹¹ The programme began within the framework of the initial GET approach but its design and strategy already spearheaded the evolution from mainstreaming to systemic laid out in GET 2.1, approved in 2020 for the period 2021-25¹² GET 2.1 scales up ambitions and calls for a more systemic approach to increase impact with a greater scale of operations and by creating green market opportunities for other actors to go beyond own financing. This involves alignment with the Paris Agreement but also enhanced policy action and structuring operations in specific thematic areas promoting environmental integration across targeted sectors. GrCP is highlighted as part of enhanced policy action. It prioritises city level work and reiterates the role of cities as significant GHG emitters and as essential actors for accelerated climate and sustainability action. This attention to policy work at city level links to the GET2.1 focus on the thematic area of Cities and Environmental Infrastructure, and to other focal areas relevant to the GrCP such as Energy Systems and Green Buildings and cross-cutting thematic areas of Energy Efficiency and Climate Resilience.

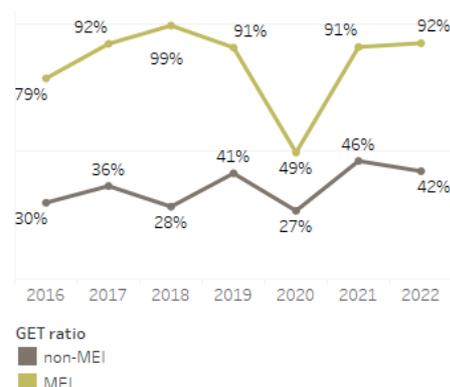
31. The intention and design for sector integration in the Programme has not yet fully materialised in practice and is the next milestone in its systemic approach to GET. The GrCF SO have been almost entirely in the MEI sub-sectors, with a sole energy distribution project signed in 2021. Further integration of renewable and urban energy projects is the objective and an important milestone for the Programme if the intention of catalysing additional GET investment should be realised. So far, the GrCF operations have been increasing as a share of MEI ABI, which has not had an upward trend overall (Figure 4). At the same time, MEI has been the strongest contributor in terms of ABI GET share, which has been over 90 per cent for the sector since 2017 regardless of origination within or outside of the GrCF (Figure 5).¹³ This means that **there is no strong indication that the GrCP is catalysing additional GET investment within the Bank yet** rather than continuing and consolidating the existing strong MEI GET delivery.

Figure 4: Share of GrCF in MEI ABI



Data for end-October 2022

Figure 5: GET ratio comparison MEI and non-MEI sectors



32. Through the GCAP, the main tool of the programme, it has been incorporating cross-cutting priorities progressively, including resilience, gender and inclusion, digitalisation and

¹¹ BDS15-196 (Final): Green Economy Transition Approach.

¹² BDS20-082 (Final): Green Economy Transition Approach 2021-2025.

¹³ With the exception of 2020 when the GET share of all sectors fell dramatically mostly due to the Covid-19 crisis response.

recovery/reconstruction. The 2016 GrCF introduced a new approach to municipal infrastructure planning and delivery to scale up green finance and reach the GET targets. The approach was defined as ‘systematic and multi-sectoral’, referring to the development of GCAPs as its key delivery tool. The 2018 GrCF included the integration of ‘green smart solutions’ at project level where relevant and increased its climate ambition with higher eligibility criteria, exceeding existing GET requirements. Finally, green finance mobilisation became a stronger focus.

33. The revised GCAP methodology represents an important integration of cross-cutting priorities at the Programme level. The extension of the framework in 2020 was a step-change in the approach and programme-level integration of SCF priorities. Internally, the programme revised its GCAP methodology in 2020 prompted by the accumulated lessons of the first years of implementation, and by the Covid-19 pandemic and the need to support cities’ resilience. This was a programme-level and not merely SO level of integration of cross-cutting priorities. The priorities are thus integral to developing the GCAP and the priority policy and investment actions in the entire action plan and not just in operations financed by the EBRD. The most recent extension in 2021 further emphasised the intention to expand into the renewable power sector with investments in small-scale or integrated renewables or energy distribution. It also refers to clearly linking projects and Nationally Determined Contributions (NDCs), which is also integrated in the revised GCAP methodology.

4.2. Relevance of GrCP to partner cities and coherence with context

34. The Green Cities Programme must fit into the overall local architecture, context and financial capabilities. For its design and implementation to be relevant and impactful, they must be aligned with local needs and context, national and local legal and regulatory framework, and with the priorities and opportunities created by other financial institutions and international partners. Participating cities are also committing to the mission of the Green City, reflected in its definition (see Annex 1). The delivery model must match the municipal financial and administrative capabilities and offer a comprehensive framework that brings together sometimes-disparate initiatives and investment needs. Inbuilt flexibility is crucial for responding effectively to systemic crises such as the Covid-19 pandemic and war on Ukraine.

4.2.1. GCAP as an effective response to local needs

35. Evaluative evidence suggests that GCAP is highly relevant for the municipalities and supports their aspirations to combat the most pressing climate challenges and achieve (sometimes) ambitious Net Zero goals that are aligned with national and international commitments. Designed as a programmatic platform for delivering the green transition through investments in sustainable and climate resilient municipal solutions, the GCAP is now one of the main vehicles for enabling a meaningful subnational Green Economic Transition (GET) in EBRD’s countries of operation. This is done by engaging in a comprehensive benchmarking exercise to define the most pressing needs and a participatory exercise prioritising the potential actions involving municipal stakeholders from the public, private and CSO sectors. Prioritisation includes a comprehensive needs’ mapping and a realistic assessment of financial resources required to meet environmental and climate objectives. The GCAP design is not entirely sensitive to local context because it uses a standardised methodology that does not really cater for nuanced delivery that considers the degree of administrative and fiscal decentralisation. This implies that modalities in implementation and in the approach to capacity building are essential for achieving the desired impact (see section 5.3 for more details).

36. Priorities defined in GCAPs do match the cities’ most acute environmental needs, with a growing focus on resilience, but there is space for using knowledge about the local context. An analysis of

completed GCAPs in 20 member cities revealed that pressure-state-response framework methodology combined with the public consultation did deliver a realistic set of objectives (Annex 10). The final list inevitably reflects compromises reached through the stakeholder prioritisation process and the political process of adopting GCAP as a municipal accountability document. A deficit of reliable data during the benchmarking exercise and its interpretation might also lead to a somewhat incomplete picture. The top three priority environmental challenges defined in the 20 GCAPs are air quality, climate change and water quality followed by green spaces, biodiversity, soil quality and land use. Three GCAPs did not have clearly prioritised environmental challenges. There were cases where the GCAP governance and implementation mechanisms might be less closely aligned with the local context than desired. In one case local stakeholders reported that international consultants were not aware of the specifics of that country's municipal governance and fiscal domains and did not manage to establish a productive consultation process at the beginning, which somewhat alienated local stakeholders. The situation was subsequently remedied by involving a recalibrated team of experts but a perception exists of missed opportunities for making the city greener this initial lack of understanding of the local context.

37. Messages are sometimes lost in translation. Or rather in “double translation”, when local language baseline report data is translated into English and after verification and production of the final report is retranslated back into the local language. It might result in some misinterpretations and gaps in content and context. Local stakeholders consulted in the evaluation process opined that engaging bilingual experts who knew the local context and specifics is yielding a more efficient and effective process.

38. Localisation requires a clear division of the roles between the Bank and the consultants it recruits to produce GCAPs. In interviews, the consultants involved in GCAP preparation highlighted that it is EBRD's responsibility and particularly that of its teams on the ground to ensure that municipal partners and other local stakeholders understand the programme, that it is properly “translated and localised”, and demonstrate buy-in for the Programme, based on their own strategic objectives. Bankers do not always have the capacity to engage with municipal stakeholders beyond investment projects on an ongoing basis and meaningfully and may sometimes push for those priorities that are not necessarily the most pressing for the cities but lend themselves more easily to investment projects. In the same way relations with local stakeholders might be impacted by frequent changes in the dedicated teams at municipal offices (case of Ulaanbaatar) or generally low capacity in the administration (case of Sarajevo). Where policy experts from the EBRD's CSD team are available to step in to lead the GCAP preparation (as operational leaders), the engagement process might be smoother and the level of localisation of programme objectives higher.

4.2.2. Coherence with existing strategies and plans

39. Substantial investment programmes and green strategic frameworks designed for the city consider ongoing national and regional commitments and priorities and often provide a platform for coordination. An analysis of 20 completed GCAPs (Annex 10) shows that they all consider the local governance structure, financial context and fiscal capabilities, legal and regulatory framework and existing policies and strategies. They take on board the nexus of national and regional strategic plans for the environment and climate change. GCAPs often build on the existing regional, municipal and sectoral strategic frameworks (transport, housing, water management, etc.) thereby providing an important coordination platform for them. They can also contribute to delivering international commitments such as compliance with the principles and criteria of the EU Green Deal and Emission Trading System (case of Izmir). In some cases, the development of the GCAP can trigger the preparation of other municipal strategies based on the gaps identified in the diagnostics and prioritisation of actions, including in policy. This is particularly true for early transition countries and countries with more centralised governance systems.

40. Consulted local stakeholders have somewhat divergent views about the position of GCAP in the overall architecture of strategic documents. Some see it as a strategic document, with a clear vision, objectives, and corresponding actions. One municipal leader noted that GCAP “is a great political tool to build coalitions around projects” (Sarajevo). Others see GCAP as an implementation document that serves as a bridge between an existing municipal strategy and specific investment needs that were difficult to map previously in the strategic context. Another municipal leader noted that “GCAP is a roadmap to design what we already wanted to do.” (Izmir) This latter interpretation of GCAP is notable in the context of the Green Finance Roadmap (GFR), a follow-up GCAP instrument aimed at mobilising green finance. Designed jointly by the EBRD and GCF, the GFR aims to address financial barriers in economies with underdeveloped capital markets. The only GFR to have been developed thus far is Tirana (see Box 4).

4.2.3. Coherence with cities’ levels of fiscal decentralisation

41. Local stakeholders’ ownership and leadership of GCAP development and implementation is key for it to succeed. Their ability depends on the attributes of the governance system and fiscal foundations that define the division of powers among the national, regional and municipal authorities and on cities’ ability to finance green investment projects. When deep diving into three green cities, the evaluation team used several attributes, including (i) cities’ autonomy in decision making, including in transport, infrastructure, environmental protection and land use; (ii) cities’ powers to raise local taxes and borrowing in capital markets (through bonds); (iii) share of own income in municipal budgets, (iv) dependence on central budget transfers and their volumes, etc.

42. The level of fiscal decentralisation is one of the key determinants of cities’ ability to implement green investments. There is no unified dataset that would make it possible to build a universal typology of all EBRD’s CoOs based on their spatial governance model and degree of decentralisation. Generally, more advanced transition economies tend to be more decentralised while early transition countries and SEMED countries are centralised. EBRD’s own survey in 2018 of partners at ministries of finance and other central agencies responsible for overseeing municipal finance across 16 CoOs summarised that in three-quarters of countries the cities are responsible for waste collection, wastewater treatment and water supply, and that in half of the countries cities are responsible for housing, urban transport and heating.¹⁴ Therefore, cities can influence substantial elements of a municipal system to make it greener and more climate resilient. However, many CoOs remain highly centralised and national ministries and agencies might be responsible for the full cycle of scoping, prioritising, financing and overseeing the implementation of green investments at city level. When national government is heavily involved in the process, particularly when GCAP aligned projects are sovereign, a sophisticated triangular relationship must be established and maintained. Cities in Central Asia and SEMED might be engaged in the diagnostics and development stage of GCAP formulation whereas financing aspects, either in general terms or specifically related to a project, must be meticulously negotiated with the Ministry of Finance or a similar central government agency. Legally defined caps on amount of municipal borrowings are another factor that might limit a city’s ability to mobilise adequate financing for green investment projects. Most countries had clearly-defined limits for the funds the city can borrow relative to their income base. In Türkiye for example the borrowing ceiling is set at 150 per cent of the annual revenue from the previous year, while in Romania it is 30 per cent of revenues (excluding loans for financing EU projects) and in Ukraine it is 200 per cent of the annual development budget (with interest limited to 20 per cent of the total expenditure).¹⁵

43. Cities that enjoy a higher degree of autonomy and ability to raise finance for their own investment projects demonstrate higher rates of success in implementing GCAPs and aligned investment projects according to observations from three deep dive cases and an analysis of documents from several other

¹⁴ EBRD Transition Report 2019-2020 Chapter “Governance at Municipal and Regional Level”

¹⁵ Sources: Committee of Regions, Ukrainian Budget Code.

green cities. These two elements are not always aligned and a city can have power but only limited access to financing, including from the national budget. Collaborative relations between a municipality and the national government can create a conducive environment for green investments even in systems with limited decentralisation (case of Tbilisi).

44. Most GCAPs outline different sources of finance for each action as proposed by the methodology. Additionally, some cities like Belgrade conducted an ex-ante analysis of delivery and implementation risks to identify implementation hurdles and to adjust priorities accordingly. Such detailed analysis indicate an assessment of the feasibility of different funding options and a higher likelihood of implementing the proposed actions. In another case, of Balti in Moldova, when discussing financing options, the GCAP assesses the (limited) capacity of the municipality to service loans and priority sources of funding for the actions on the basis of their purpose and characteristics. The Balti GCAP provides an action timeline and corresponding capital investments and operational expenditures, which enhances transparency and makes it easier to assess whether the estimated costs and corresponding financing are likely to be commensurate over time. The Balti GCAP is the only plan (analysed by this evaluation) that explicitly considers green municipal bonds for funding and refunding green projects. This financing option might be considered more often in future GCAPs.

45. The political-economic context of the city with respect to the central government might also add to the dynamics of an active partnership between the municipality and international financiers like EBRD. Some cases (Izmir and Sarajevo) suggest that when municipal leadership is in opposition to central government or has a complex relationship that might affect access to national funds, there is a higher propensity to proactively engage with the IFIs and international partners who can provide alternative sources of funding. In more centralised systems, for example in the case of Mongolia and Ulaanbaatar, less active engagement is observed.¹⁶

4.2.4. The value-added approach of GCAPs and similar programmes

46. The GCAP approach represents a qualitatively different instrument for ensuring that cities can identify and address their environmental and climate change challenges in a coherent and synergetic way. This finding emerged from interviews with multiple local stakeholders who almost unanimously confirmed this synergetic role of the Action Plan. For both bankers within EBRD and municipal stakeholders, the preparation work for GCAP, its implementation and regular monitoring/reporting represent a firm basis for investment planning. Instead of commissioning a detailed technical and financial analysis prior to each potential project, stakeholders can now refer to a politically approved and administratively implemented Action Plan and accompanying documents. This clearly sets the city's multiannual priorities for investing in green infrastructure, and the policy and regulatory measures aimed at enhancing the investment climate in green municipal infrastructure. Incoming potential financiers have more reassurance that the appropriate process will be followed and priority projects truly reflect the city's needs and its leaderships' commitment, including regulatory and financing attributes.

47. Addressing the challenges of climate change and building sustainable climate resilient municipal infrastructure requires the joint efforts of many local, national, and international stakeholders. Often participating cities are also members of other international alliances and are committed to a variety of objectives, such as Net Zero.

48. None of the IFIs has a programme aimed at supporting cities to meet their environmental objectives with a similar synergetic ambition, scale and outreach. The World Bank has a Sustainable

¹⁶ Mongolia initiated administrative-territorial reform in 2020 and approved new Law on the Legal Status of the Capital City of Ulaanbaatar, which increased its authorities, including in fiscal area. However, these changes are very recent and not all implementation mechanisms are in place, which means that Ulaanbaatar municipal authorities have not yet completely embraced the new model.

Cities Initiative where energy efficiency and climate change are one of the modules,¹⁷ and GEF in partnership with WB, IADB and other MDBs established a Global Platform for Sustainable Cities.¹⁸ IFC and EIB are active in the municipal segment and often co-finance significant projects in the EBRD's CoOs, but they usually rely on EBRD-supported GCAPs. There is also an informal cross-MDB City group (chaired by EBRD) that informally coordinates and exchanges relevant information about municipal investment projects. In the past, the Inter-American Development Bank had a similar programme called the Emerging and Sustainable Cities Initiative but it had no lending mandate and only a TC component whose connection to the investments and its engagement with the local stakeholders were insufficient. The initiative was eventually wound down.¹⁹

49. C40 and the Covenant of Mayors are among the most notable international programmes harnessing strategic and investment potential for combatting climate change.

- **C40** is a network of mayors of nearly 100 cities worldwide collaborating to deliver the urgent action needed to confront the climate crisis. Its mission is to half the emissions of its member cities within a decade. Its efforts are focused on reaching carbon neutrality by 2050 through strengthened long-term quantitative modelling of GHG emissions, with mandatory two- to three-year monitoring reports submitted by cities on achieving ambitious interim targets. It focuses less on financing and more on diverse instruments for reducing GHG emission. Some of EBRD's Green Cities are also members of C40 network, specifically Warsaw.
- **Covenant of Mayors** is a network of more than 11 000 local and regional governments (including cities) across 55 countries that are committed to achieving and exceeding EU climate and energy targets. They pledge to support the implementation of the EU 55 per cent GHG-reduction target by 2030 and to adopt a joint approach to tackling mitigation and adaptation to climate change. Covenant signatories commit to prepare and implement Sustainable Energy and Climate Action Plan (SECAP) and report biannually on its implementation. Many of EBRD's Green Cities are also members, such as Tirana, Yerevan, Tbilisi, Izmir and Belgrade.

50. **Developing various frameworks like GCAP, SECAP and the C40 Climate Action Plan in parallel often adds synergy.** In Warsaw, clear-eyed municipal leadership led to close collaboration between the GCAP consulting team and the C40 Climate Action Plan stakeholders. A clear division of labour ensured complementarity and avoided confusion among municipal partners. In Belgrade and Izmir, the municipal authorities ensured that SECAP and GCAP were developed simultaneously, with complementary scopes and tools. This helped streamline the preparation and approval processes and ensured co-ordinated enforcement, monitoring and reporting mechanisms. These cases demonstrate the improved quality of ex-ante assessments and quantification of GHG emissions for various sectors of the municipal economy such as transport, housing, waste and water, etc. However, the two processes must be significantly connected to avoid duplication and achieve resource and effort efficiencies. In some instances, the local stakeholders and consultants who were engaged in preparing the GCAP suggested that a pre-existing SECAP increases a city's commitment to GCAP and its clarity about objectives.²⁰ **One potential area of improvement would be a clearly-defined methodology to calculate the potential for reducing GHG emissions of specific GCAP actions, which is currently absent.** This would improve the comparability among GCAPs and enhance the internal coherence of the plans.

51. Other frameworks anchor the commitment of green cities to Net Zero. In 2021 the Canton of Sarajevo joined the EU 100+12 NetZeroCities Programme, which supports its Green Deal. Designed within the framework of Horizon 2020 programme, it provides a one-stop platform for new and existing

¹⁷ <https://www.worldbank.org/en/region/eca/brief/sustainable-cities-initiative>

¹⁸ <https://www.thegpsc.org/>

¹⁹ IADB, Office of Evaluation and Oversight, Evaluation of the IDB's Emerging and Sustainable Cities Initiative, 2016.

²⁰ GCAP Lessons learned, based on the synthesis of consultant's GCAP completion reports in Annex 9.

instruments aimed at ensuring that participating cities reduce their GHG emissions by 55 per cent by 2030 and achieve climate neutrality by 2050. The Canton of Sarajevo now strives to connect its GCAP actions with the strategic commitment of climate neutrality.

52. The GrCP approach and the GCAP as its core instrument have sufficient connectivity potential to fit into cities' strategic and international commitments. It is unique, action-oriented, and does not overlap with commitments under other programmes, often adding value and creating potential for synergies.

4.2.5. Fluidity of context

53. **Dealing with the Covid-19 crisis demonstrated that GCAP is an appropriate framework for absorbing the changes necessary to deliver an altered set of services in a more stringent fiscal context.** Section 6.4 provides more details on this. The current energy price crisis in Europe creates new challenges for municipal leaders in delivering their green commitments while providing basic heating and electricity services to residents. The Russian war of aggression on Ukraine forces many municipal leaders to rethink their short- and mid-term priorities. Coal-dependent cities in the Western Balkans and Central and Eastern Europe had to stock coal despite the strategic objective of phasing it out. Not only does this prevent any reduction in GHG emissions, but it also means that the city must make higher carbon emission payments, straining the municipal budget that is already overstretched by significantly higher fuel and energy prices.²¹

54. **In Ukrainian cities, GCAP might become an appropriate platform for defining priority actions and ensuring they are translated into green investment projects financed with borrowed funds, concessional grants or direct budget support.** Looking forward, all Ukrainian cities will need substantial support and investments to rebuild destroyed infrastructure and reconstruct municipal services respectful of the principles of sustainability, inclusivity, human-centricity, transparency and subsidiarity. Box 1 provides some insights from past experience about what can and should not be done when reconstructing the cities after conflict. EBRD has already launched the process of integrating the effects of the war into current GCAPs in Ukrainian green cities and in those being prepared using rapid assessments of damages and their impact on municipal infrastructure and services. The city of Khmelnytsky is pioneering this. Kyiv and Mariupol are designing new actions adjusted to wartime, and Polish Warsaw and Walbrzych are designing those suitable for large influxes of refugees.

55. Many cities in the CEE and EEC and in Central Asia may need similar revisions to accommodate substantially higher pressure on municipal services from the dramatic number of Ukrainian refugees and Russian immigrants. GCAP could become a suitable instrument for this re-prioritisation and for creating a relevant pipeline of bankable green investment projects. In this case, resilience will have to become an even stronger focus than it was in GCAP Methodology 2.1.

²¹ Timisoara Mayor, Fominic Fritz, speech at the Green Cities Conference in Vienna, October 2022.

Box 1 Reconstructing cities after the war²²

Post-war reconstruction has become a central theme since Russia's full-scale invasion of Ukraine in 2022 and its significant consequences across the global value chains and regional human flows.

Lessons from previous reconstruction efforts in fragile and conflict context, as described in EvD's recent knowledge product, "Building Back Better", suggest the following:

- i. local stakeholders should own the reconstruction
- ii. clear prioritisation and a single pipeline of investment projects is essential to deploy financing rapidly and effectively
- iii. setting realistic expectations
- iv. ensuring co-ordination among various stakeholders
- v. sequencing actions
- vi. innovative deployment of various investment instruments

Almost all these elements are part of the GCAP toolkit, which might become a suitable sub-national platform for adjusting municipal investment plans to the war's direct and indirect effects.

Several cities in EBRD's regions of operations have experienced massive destruction due to the war: Vukovar in Croatia and Sarajevo in Bosnia in Herzegovina (BiH). The latter, one of three cases in this evaluation, illustrates what should and should not be done in the reconstruction effort delivered with the participation of many international stakeholders.

There were two distinctive periods in Sarajevo's reconstruction effort after the 1992-95 war that shaped the current cantonal/municipal system.

1. **A decade of donor-led reconstruction and consolidation:** The first ten years of "reconstruction and consolidation" were led by the international community and the cantonal government and focused primarily on rebuilding housing, public infrastructure and buildings. Sarajevo aspired to transition from a post-conflict city into a modern European city. During the first decade, international aid to BiH was over \$5 billion and the bulk of it was spent in and managed from Sarajevo. However, donor and MDBs programmes were largely designed and implemented without due consultation with the local authorities because of the complicated governance architecture. Nor were the authorities proactively involved in international aid coordination. This led to a deficit of essential local capabilities and contributed to the development of a donor-dependent administrative machinery and society. The negative impact of these deficiencies is still defining the modern municipal strategies and infrastructure investments, including GCAP-related actions and investments. Many stakeholders who previously used "free money" are unwilling to accept the need for loans and blended instruments with repayment mechanisms.
2. **Regained ownership and leadership:** The second period coincided with the 2008 economic crisis and political instability in the region. Foreign aid funding dropped and BiH economic growth slowed compared to the previous decade. This further illuminated how dependent the country's economic development was on international aid. The cantonal government launched a coalition of "stimulated urban growth", where the city of Sarajevo was treated as a "growth-machine". The Canton administration involved private capital to secure steady urban growth and a thriving economy and allowed private investors to extract maximum profit from their capital without any environmental or social considerations and investments in communal infrastructure or municipal services. As a result, the Canton's financial and political power was concentrated in a rampantly corrupt and nepotistic minority elite, and this continues today (attested to by BiH's position as 110 in Transparency International Corruption Perception Index in 2022). The quality of municipal

²² The text is based on the EvD Connecting the Dots Issue 5 "Building back better: Evaluation insights on reconstructing the private sector in fragile and conflict-affected contexts" of October 2022, and the report prepared by the local consultant, Andrea Pavlovic, Sarajevo, Bosnia and Herzegovina, in the framework of the Green Cities Programme Evaluation.

infrastructure remains poor and energy losses are high, which means that for Sarajevo to be liveable, significant investments are needed.

Currently there is a new push to reshape the urban landscape of Sarajevo to respect the principles of **inclusivity, environmental sustainability and circularity**. External anchors, such as commitments under GCAP and the EU 100+12 NetZeroCities Programme, create a potent strategic framework. However, implementation capabilities remain weak given the lack of practical experience managing large-scale investment projects, the loss of the most talented specialists and an unreformed civil service that precludes hiring new staff with appropriate skills.

At the same time annual environmental challenges in Sarajevo, especially during the cold season, are becoming more critical for the health and wellbeing of its residents. Decision-makers are under ever-growing pressure to reduce emissions and counteract climate change as a result.

4.3. Financial and non-financial additionality

56. Significant non-financial additionality is created at programme level for member cities, primarily by developing GCAPs and the related networking, learning and experience-sharing opportunities. The most significant sources of additionality at the Programme level are non-financial. Support developing GCAPs for each city, a transformative approach to municipal infrastructure investment planning based on environmental diagnostics and systematic prioritisation is first and foremost. The ability to combine the preparation of a roadmap of actions linked to the city's strategic objectives with the provision of investment finance for implementation is a key programme strength. The GCAPs also represent non-financial additionality in their integration of cross-cutting priorities such as gender and inclusion, resilience and digitalisation, which were introduced in the revised methodology in 2020. There is also significant additional value in the associated networking and experience-sharing opportunities that the programme has provided. These include GC annual conferences, a GC officers' (GCO) network, presence at high-profile climate events, and dedicated resources such as the Policy Tool for cities. These programme elements are presented and discussed in section 6.4.

57. GrCF creates non-financial additionality through its eligibility criteria. The eligibility criteria for GrCF SO support its non-financial additionality and became more demanding in the second framework. All projects must be consistent with the Bank's GET approach. All subsequent investments must also address a priority environmental challenge as identified in the city GCAP. The second framework (2018) introduced enhanced eligibility criteria based on impact thresholds:²³

- Mitigation projects: reduce GHG by at least 20 per cent or improve energy efficiency by at least 20 per cent
- Adaptation projects: Climate Resilience Benefit Ratio of at least 10 per cent
- Environmental impacts outside of climate change: EU environmental standards or reducing pollution or GHG by at least 20 per cent, or improved energy efficiency by at least 20 per cent.

58. Financial additionality of the GrCF is mainly tied to specific sub-operations, depending on local context. The programme does not specifically enhance this. The core of the framework's financial additionality lies in providing long-term municipal finance for each SO. Its real additional value depends therefore on the local context and availability of such financing. The framework documents argue that this availability is 'extremely limited' in many cases, with local Banks unable to offer debt to match

²³ This is for Window II SO. SO financed under Window I, co-financed by GCF, have specific eligibility criteria based on the EBRD-GCF agreement ("Green Cities Facility").

asset life and that unlike many other IFIs, EBRD also provides municipal finance on non-sovereign terms. EBRD has long experience in providing municipal finance, so from the perspective of financing structure, the SO derive no specific value from the GC framework/programme. They are comparable to municipal operations carried out under other frameworks or as stand-alone operations. The first and second frameworks (2016, 2018) specifically alluded to a more limited financial additionality of municipal finance in advanced transition countries, “where municipal financing is readily available, the Bank’s additionality will be to focus on financing innovative structures not available on the market.”

59. There has been limited progress so far in introducing innovative financing in the municipal space under GrCF. One reason for this is that the most advanced region (CEB) has the fewest programme operations. Nevertheless, one innovation was introduced under the *48666 Warsaw Metro Line II extension* project that introduced a novel financial structure based on eliminating the commonly used Municipal Support Agreement or city guarantee and relies instead on an updated Public Sector Contract to provide a loan to the Warsaw Metro Company. In other more advanced countries, strong financial additionality can exist depending on local context: in Türkiye for example a specific political context limits the access of some municipalities to non-sovereign finance. In this context, EBRD is filling an important funding gap.

60. The overwhelming majority of investment in the GrCF is in the State portfolio class and just over a half is in Sovereign risk. There are 62 projects in the State portfolio class that represent €1.8 billion NCBI (95 per cent). Only four projects are in the Private portfolio: two MEI projects and both projects from the other two sub-sectors (Energy, Transport).²⁴ The GC team has questioned the inclusion of municipal non-sovereign finance within the State portfolio since the limits on the Bank’s State portfolio could restrict strong programme growth: “the restriction on public sector lending to 25 per cent by the end of the recently approved Strategic Capital Framework (SCF), could potentially constrain the reach of the programme, in terms of total Green Cities lending volumes.”²⁵ Whereas the claims of the programme’s financial additionality come from providing municipal finance on a non-sovereign basis, about half the SOs are sovereign guaranteed. Less than half of the projects (30 of 66 projects) are in sovereign risk but they represent over half of the portfolio in terms of investment (€1.05 billion, 55 per cent). All projects in Türkiye and CEB are non-sovereign. In the rest of the regions this is largely split by country, although both sovereign and non-sovereign projects have been implemented in a few countries. There were attempts to progress from sovereign to non-sovereign guaranteed projects within a city under GrCF (Zenica, Sarajevo, Ulaanbaatar) but this has not been successful so far. (For further details on the GrCF portfolio composition see Annex 3.)

61. There is the intention and potential for the programme to enhance its financial additionality at programme-level through bond issues and Green Finance Roadmaps (GFR). The second GrCF (2018) focused the programme further on facilitating cities’ access to finance, especially beyond public sources. The framework committed to “develop the tools and skills cities need to attract private sector finance for green investments, particularly in local capital markets.”²⁶ This included reference to the Bank’s work at national level policy and on regulatory frameworks to develop conditions and standards for green investments, including green bonds. The implementation of policy dialogue at national level beyond the framework of Green Cities is outside the scope of this evaluation. At the programme level, the second framework introduced the investment in bonds in the eligible instruments in 2018; the most recent extension (2021) also introduced the possible use of guarantees. Issuing green or sustainability-linked bonds structured by the use of proceeds based on GCAP or linked to KPIs based on GCAP would be a great achievement of the programme. It would establish the GCAP as a platform for impact investors and directly link the source of its non-financial additionality (GCAP) to financial mobilisation.

²⁴ 52868 GrCF2 W2 - ENA Investment Program, Armenia; 51830 GrCF2 W2 - Project Goose, Egypt; 52789 GrCF2 W2 - Dushanbe E-Mobility, Tajikistan; 53239 GrCF2 W2 - Shymkent WWTP Capacity Extension Project; Kazakhstan.

²⁵ BDS18-183 (Addendum 14); Subject: Regional: Green Cities 2 (GrCF2) - Window II Extension

²⁶ BDS18-183: Regional: Green Cities Framework 2 (GrCF2)

There have been some exploratory efforts already with some cities, but this has not materialised yet. In terms of developing tools and skills at city level for enhanced mobilisation, the main tool has been the introduction of GFR that were also presented in the 2018 framework. The intention was to cover readiness assessments, tools, implementation plans and capacity building for cities so that they could attract financing for GCAP investments. So far, however, the only GFR to be developed is with the municipality of Tirana in 2021. (See Box 4)

62. Developing programme-level financial additionality is closely tied to the programme’s aspiration of becoming a sector-wide catalyst for addressing environmental challenges at the city level. In its own reflection on this objective, the GrCF remarked that, “After only 2 years of operation, the Framework proved its ability to act as such a catalyst with the utilisation of the entire EUR 250 million headroom.”²⁷ Viewing the catalysation objective solely through the lens of EBRD’s own investment would be exceedingly narrow and miss the point. The first two years of operations consisted of ‘first operations’ – not necessarily first engagement with the cities, but first engagements under the programme/ framework. Most of these operations would probably have been carried out anyway. They were not additional investments made by EBRD on top of what MEI investment there would have been without the programme. The programme’s objective to become a catalyst stems from the additional value of the GCAPs as an investment roadmap. During these first two years the investments were triggering the preparation of the GCAP rather than the converse. At this stage, at the end of the programme’s first growth phase, it can be said that deploying GCAPs has enhanced the path to mobilising green investment. Developing GCAPs supports an analytical and comprehensive approach to a green path in municipal infrastructure and sends private sector investors a positive signal about the political commitment and seriousness of delivery incentivised by its visibility. [See section 6.2 on effectiveness].

63. On the EBRD side, GrCF has not been a vehicle for private sector mobilisation in public sector projects thus far. Three SOs have been associated with direct private sector mobilisation. One through a parallel loan (*48666 Warsaw Metro Line II extension*; €43.1 million), and two via Unfunded Risk Participation (*48348 Izmir Metro Project II*, €40 million; *51599 Izmir Metro Project III*, €35 million). One of these projects was also syndicated with a commercial lender (*48348 Izmir Metro Project II*, €25 million).

64. There is a systematic effort to identify the potential for urban PPPs in the programme. To date, one PPP project has been implemented. Developing PPPs in the municipal sector is particularly resource intensive and often requires not only project preparation advisory services but also involvement in national level policy dialogue to strengthen the necessary regulatory framework. This together with the high standards required by EBRD on the quality and risk profile of such investments, and the often relatively smaller sizes in the municipal sector that may not attract private investors, explain the difficulty in developing urban PPPs. In more advanced countries where the capacity for developing PPPs may be higher, there is often also the possibility of accessing EU structural funds to finance municipal infrastructure, which can be a cheaper and easier solution. Specifically in the context of GrCF, cities may also be reluctant to include PPPs in the programme since the transaction counterpart is a private sector entity rather than the city itself. GrCF nonetheless intends to “use this financial structure to promote new technologies and infrastructure such as EV charging, urban transit and digital solutions for street lighting.”²⁸ The GCAPs can help expand PPPs by highlighting the opportunities for private sector involvement. Internally a coordination group between the GC team and the Sustainable Infrastructure Policy & Project Preparation (SI3) PPP advisory unit is reviewing systematically GCAPs to identify potential PPP opportunities to pursue; these are discussed every three months internally. A single PPP project was achieved under the GrCF in 2021 for the dry port in the city of 6th October, Egypt (*51830 GrCF2 W2 - Project Goose*). This was a trigger (initial) investment for the

²⁷ BDS18-183 (Addendum 4): Regional: EBRD Green Cities 2 (GrCF2)

²⁸ BDS21-140 Regional: Green Cities Framework 2 – Window II Extension 2

city that had been in development for some four years with the support of EBRD's Infrastructure Project Preparation Facility (IPPF) located in the same department as the GrCP programme – SI3P. While this is a significant achievement for the Bank, it cannot be considered a specific programme achievement.

65. **GrCF SO have justified the use of non-TC finance in line with EBRD guidelines to avoid contributing to market distortions in line with additionality principles.**²⁹ Finally, the second framework and extensions (2018, 2020, 2021) refer to the “the mobilisation of concessional loans and grants” under the framework as part of its financial additionality. While it is understood that the use of blended concessional finance can be justified based on affordability constraints or externalities, concessionality is not in itself a source of additionality and should not be treated as such. In their use of non-TC finance, the SO have been found to follow the relevant EBRD guidelines and to include the non-TC grant checklist annex where applicable. This describes the economic rationale for using concessional finance and provides the size justification. The requirement only applies to grants managed by the Bank where it can directly influence their structure and calibration.

5. How efficiently has the GrCP utilised resources for implementation and delivery of its objectives?

This section presents findings about GrCP's governance model, including the use of external consultants, the alignment of the GCAP preparation process with local capacity, the use of TC and non-TC funds and the timeliness of implementation.

5.1. Efficiency of programme governance

66. **The GrCP internal governance structure has evolved organically to accommodate the needs of the rapidly expanding framework and the many internal and external relationships essential for its implementation.** From the start, the GrCP's design and delivery management were split equally between the Sustainable Infrastructure Group's (SIG) Policy and Project Preparation team (SI3P) and the Climate Strategy and Delivery Department's Infrastructure group (CSD, formerly the Green Economy and Climate Action (GECA)). The entire programme is managed by two ADs from SIG and CSD and an AD from SIGs is the operational leader (OL) for two GC frameworks. The ADs are supported by a core GC team of six specialists who are responsible for framework level activities that include managing relations with international partners (i.e. OECD, ICLEI, C40 etc.) and municipalities including Green City officers, managing consultants (see below), GCAP implementation monitoring and reporting, stakeholder engagement, knowledge exchange and learning, etc. Additionally, there are about 10 sector specialists from various teams (infrastructure engineers, inclusion, and digital experts) whose

²⁹ Non-TC refers to donor co-investment funds, which is funding provided in direct support of an EBRD investment operation on a reimbursable or non-reimbursable basis. This also includes funding provided on concessional terms from the Net Income Allocation. Non-TC finance includes capex grants, incentive payments, risk mitigation instruments, and concessional lending.

expertise is called upon regularly in the process of development of GCAPs to ensure those are aligned with the Bank’s priorities and practices, and best available technologies and standards.

67. The programme is governed by a steering group (SG) chaired by the SI3P Director and comprising SIG and CSD senior management, including three regional Infrastructure directors. It ensures strategic oversight, coordination, and exchange of information. At its monthly/bimonthly meetings, the group makes decisions about establishing partnerships with potential green cities, including certain pipeline projects into GrCF depending on the criteria, balancing programme breadth and depth in certain geographies (new GCAPs compared to follow-on projects). All SG participants agree on its effectiveness as a governing body in ensuring consistent decision making, an adequate division of labour and horizon scanning for iterative and agile programme development. Both SIG and CSD Managing Directors regularly participate in SG meetings, providing strategic guidance and alignment with the Bank’s corporate green commitments.

68. Sub-operations that cover large geographic areas and have varied scopes are managed by country-based and sometimes by HQ-based bankers from three Infrastructure geographic groups: Europe, Eurasia, Türkiye, and Middle East and Africa (TMEA) with the banking teams from the power sector, Energy Europe and Energy Eurasia-MEA. A growing number of CSD specialists have become operational leaders (OL) for GCAP preparation (a separate post-signing TC project), thereby freeing bankers to originate and implement projects. This shift is positively perceived by both banking and CSD colleagues but bankers remain key relations managers with the municipality. Sector economists from the Impact Department (formerly EPG) contributed to adjusting the GrCP methodology to EBRD’s transition impact model and were also responsible for assuring the quality of monitoring progress against achieving transition objectives at the framework and project levels. The Gender Equality and Inclusion team is participating increasingly in formulating GCAPs, driven by the updated methodology (see section 6.1). The teams supporting TC and non-TC fund acquisition, specifically the Grant Unit at SI3P (SIG) and Donor Co-Financing (DCF), have strong connections.

69. **Overall, the GrCP governance structure is robust and agile. Its information flows are streamlined and decision making is effectively managed by the core GrCP team.** A matrix system that integrates banking with various specialist teams makes it possible to spearhead innovative solutions and ensure that the Bank’s green and inclusive commitments are delivered through this flagship programme. Feedback from many interviews across the teams suggests that the structure and processes evolved greatly over time, which resulted in a relatively light but authoritative governance model, which is essential for multi-faceted, geographically diverse programme such as GrCP. This might be considered a model of effective cross-functional programmatic management worth replicating in similar EBRD initiatives.

70. The core organisational structure supporting GrCP implementation has grown organically and substantially. Core human resources have been reallocated from banking and policy teams, and have sometimes been hired externally, particularly for horizontal activities such as knowledge management, learning and events management (see section 6.4).

71. **The current framework is due to expire in 2023. If a new generation framework is to be adopted, the decision will be required about adequate core resources for managing the programme as a synergetic platform rather than a collection of individual activities.** There is less clarity on programme sustainability in the absence of internal programme-level resources. Currently all synergetic programme-level activities are funded through individual TC projects (activities) and core budgets of CSD and SIG (staff positions). But there is a finite amount of internal technical expertise. There is a limited number of engineers, economists and inclusion specialists who need to go through a rapidly growing number of GCAPs being developed. The same specialists are involved in the project preparation and approval

cycles. The structure is lean and agile and receives many high marks for these characteristics. At the same time, the workload is becoming overwhelming for some experts. This is exacerbated by remote working during the Covid-19 crisis and fast-paced working during the ongoing crisis created by the Russian war on Ukraine. The responses to these crises require additional effort as many projects are in vital infrastructure, which is often covered in GCAP-aligned investment projects.

5.2. Use of consultants

72. GrCP developed a balanced approach to managing external consultants that makes it possible to internalise the best available knowledge and skills efficiently and blending with the Bank's own technical expertise. GrCP relies heavily on external expertise, starting from methodology preparation and adaptation to preparing the GCAP, to capacity building in participating municipalities. Developing the GCAP is contracted out to one of the consulting companies participating in the framework agreement. A Terms of Reference template stipulates the stages of the process, the deliverables, the range of expertise required and the timeline of 60 weeks.³⁰ The current framework contract in operation since February 2021 includes ten consultants (individual companies or consortia) bidding for the GCAP implementation contracts. Previously the framework contract included five companies. The first three GCAPs (Tbilisi, Tirana and Yerevan) were developed by consultants on a one off basis.

73. Feedback from international consultants indicate a high degree of engagement between the GrCP core team and external experts. Programme leaders stay in close contact with the consultants throughout the process. Consultants follow standard procedures for engagement with the city stakeholders who are the ultimate owners of the GCAP. Some processes had to be amended during the Covid-19 pandemic, which significantly limited in-person contact and city visits by international consultants. Using local consultants and remote meeting technologies allowed some GCAPs to proceed, although some were substantially delayed (see Section 5.3). Consultant ToRs required a combination of international and national expertise to ensure that the local context was deeply integrated into activities during all four stages of GCAP preparation: i) baselining (technical assessment with the indicators database); ii) prioritisation of challenges and needs, formulation of vision; iii) developing options, and (iv) GCAP production. Policy, legal, financial, engineering, monitoring and evaluation, and stakeholder engagement skills are essential elements of this mix. On average about 15 experts are required for the full cycle, although the profile of their expertise is a variable that depends on the final selection of city priorities, which define the choice of policy and investment actions to be included in GCAP.

74. Overall, international and local expertise are balanced to deliver a standard internationally-recognised methodology. However, local expertise could be used more effectively to better reflect the individuality of cities and their needs, based on their models of governance and degree of decentralisation. This is particularly true for tailor-made capacity building programmes, which could be improved. Feedback from some local consultants interviewed during this evaluation suggested a more nuanced picture. Engagement of local expertise is based on a generally defined scope that does not necessarily consider the local specificity of capacity, technical skills or the strength of the change coalition (see section 4.2 on details about deficient localisation in some cases). The lack of local context knowledge and local languages can occasionally negatively affect the scope and prioritisation of the GCAP. Some interviewees saw “lost opportunities” caused by the excessive internationalisation of the GCAP development exercise. In addition, local consultants are often well-known to the city and receive requests that are beyond their contractual scope, but want to fulfil them to achieve maximum effect from the GCAP development process. This creates an imbalance in contracted and actual tasks. There is also a challenge related to well-embedded local consultants who might have a conflict of

³⁰ GCAP ToR template, internal document provided by the GrCP team.

interest, given the limited local consultancy market, or because they are politically engaged, which is not allowed by the terms and conditions.

75. Internally there is a well-developed system for managing the consultants' cycle from engagement and contracting, to reporting and lessons learning. This is essential for the programme which now has 58 GCAPs at different stages (from drafting ToR to monitoring the GCAP implementation progress). Regular meetings between EBRD and all consultants focus on identifying common themes, challenges and trends that could be usefully addressed through existing or new mechanisms from the GC toolkit. A range of adjustments were made, including a revision of the GCAP methodology in 2020, that took on board consultants' feedback.

76. The ownership of the preparatory work for GCAP is an issue on which external and internal views are more divergent. After signing an MoU or a letter of intent, city leaders commit to the principles of green city. Consultants responsible for preparing GCAPs noted that in some cases at the very beginning of the process the degree of municipal ownership and understanding of the depth of commitment was inadequate for the scale of the task at hand. Commitment level can also fluctuate depending on changes in political configurations. **The consultants suggest that the EBRD play a stronger role in ensuring adequate ownership of the GCAP by municipality, including in a fluid political economy and electoral cycles.** This approach will be less effective in highly centralised systems, where a national government defines priorities and volumes of investments. The profile of the GCAP OL is also important for ensuring that the RO-based OL is successful when the holistic nature of the GCAP is well understood and where good relations with the city are most helpful. Being located in HQ adds unnecessary distance, while bankers who focus on projects lack the capacity to engage in a process that delivers systematic change rather than operational change in a single sector.

5.3. GCAP process commensurate with local capacity

77. **The capacity of municipal stakeholders to actively engage in developing and implementing a GCAP is a crucial factor of success.** Lack of capacity was identified as one of the key risks of GrCF and the mitigation offered was a “selection of cities with a clear commitment to embark on both a green and institutional reform agenda”.³¹ **But this commitment cannot be considered to be as constant.** Local capacity to develop and, especially, to implement GCAP is fluid, and a significant share of a consultant's effort goes to strengthening it.

78. The wide range of cities currently involved in the GrCP means diverse governance models and administrative capacities for developing and delivering GCAP (see section 4.2 for details). Cities in Central and Eastern Europe have significantly higher capabilities and resources to engage in GCAP preparation than cities of Central Asia and SEMED, where decentralisation is limited and financial decision-making is concentrated in the national government. Methodology is standardised, but according to some consultants interviewed, “it offers flexibility and tweaks could be made when relevant for the local context”. Others believe that the flexibility of approach is limited, the costs are too great for smaller cities and capacity gaps in others require much more upfront work by the Bank.

79. Deep dives in three green cities confirmed in-built flexibility in the process when a GCAP is being developed in accordance with local strategic and regulatory framework, sometimes in parallel with other relevant documents (SECAP in the case of Izmir). There are also significant gaps in public service culture and the legal status of civil servants that can be positive or negative in different situations. For

³¹ BDS16-207 Regional: Green Cities Framework.

example, according to background information the turnover of municipal servants is low in Sarajevo and new and necessary capacities cannot be acquired whereas it is high in Ulaanbaatar, which leads to a lack of institutional memory.

80. These cases also demonstrate that other factors erode local capacity, specifically changes of leadership due to the electoral cycle and governance reforms affecting the balance of powers between national and municipal authorities. These lead to changes in the execution team, often leaving a knowledge void at the critical stage of the process. **Mitigation is possible by expanding the circle of “key persons” involved in the GCAP development and implementation process and offering tailored packages of capacity building during GCAP development.** Additionally, consultants involved in GCAP delivery are “developing a tool for legacy handover, which would enhance continuity in case key people leave”. Introducing this tool can at least partly create more opportunities for continuous engagement on the side of municipality. Spreading capacity building activities throughout the GCAP development cycle rather than bunching them towards the end might also enhance their effect by offering more opportunities for “learning by doing” rather than learning from presentation.

81. **The progress in GCAP implementation and the quality of its monitoring/reporting, captured annually by the GrCP core team correlates directly with municipal capacity.** Where well-versed green city officers (GCO) are present, the quality of engagement and implementation progress are noticeably higher. These are usually public servants working in the municipality for whom GCAP co-ordination is only one of their tasks. There are cases when GCO are recruited specifically to oversee GCAP development and implementation and they are paid in some instances through an EBRD-initiated TC project (case of Sarajevo). The case of the Ulaanbaatar GCAP is telling: there is no clearly-defined GCO because of municipal staff fluidity, and progress in implementing the GCAP and reporting quality are low.

82. **Local capacity is a common challenge for most cities in EBRD’s countries of operation. It should be distinguished from commitment and ownership, which are usually upfront attributes of political leadership. Local capacity should be enhanced through continuous and consistent capacity-building activities throughout the GCAP preparation cycle.**

5.4. TC and non-TC mobilisation and use

83. **The GrCF relies on a great deal of TC and non-TC funds from donors.** The former cover policy advice, technical expertise, corporate governance activities and capacity building, while the latter cover investment grants and concessional loans. Annex 2 provides details about the expectations of donor concessional finance/grants and TC financing provided to all four iterations of the GrCF, which represent €524 million and €139 million cumulatively. By the time of the last framework extension at the end of 2021, the team reported commitments of €13 million for GCAPs, €28 million for other TCs, and €124.5 million for non-TCs (grants and concessional loans).³² The programme uses TC funds for programme-level activities and for individual sub-operations. Project-level TCs are similar to the pre- and post-signing TCs that commonly support municipal infrastructure projects (feasibility studies, programme implementation units (PIUs), corporate development programmes (CDPs), financial and

³² As of September 2021, BDS21-140. The aggregated figure for non-TCs (€124.5 million) includes a capital grant of €28 million for the Varna climate resilience project (49366) financed by the EU directly with the client, and not through EBRD donor systems. Such grants are not commonly reported as EBRD non-TC. The aggregated non-TC and TC figures also include some commitments associated with investment operations in Green Cities but outside the GrCF as such.

operational performance improvement programmes (FOPIPs), etc. with the exception of the TCs for GCAP development, which is commonly a transaction-level post-signing TC with the trigger investment.

84. **There was an expectation the GCF would co-fund GC but this has happened only to a very limited extent so far.** The second GC framework (2018) was split into two implementation windows. Window I (WI) is dedicated to co-financing with GCF in nine eligible countries of operations with an anticipated EBRD allocation of €350 million and a matching €228 million from GCF through concessional loans, grants and TC. However, to date only three GC SOs have been signed in WI and only about €14 million of GCF funding has been committed overall. Most of EBRD’s own headroom was re-allocated from Window I to Window II (WII) in 2020. The agreement between EBRD and GCF must now be restructured due to the expiration date of the original GCF Facility. This process is ongoing at the time of evaluation (Box 2).

Box 2: GC and the Green Climate Fund

The initial GrCF (2016) refers to the Green Climate Fund (GCF) as a potential source of financing for GCAPs, for a GCAP manager, feasibility studies, PIUs, and CSO capacity building, “subject to approval of funding, which is expected in the next 6 months”.

GCF did not approve funding until October 2018. The 2018 GrCF2 was then approved with two implementation windows. **Window I is dedicated to co-financing with GCF.**

- Allocated headroom for both windows was €350 million.
- GCF co-financing for WI was anticipated through three tranches of the Green Cities Facility GCF-EBRD FP086) totalling €228 million, for concessional loans (€180 million), capex grants (€30 million) and TC (€18 million).
- Each tranche of GCF funding was subject to GCF Board approval.

The split into two windows affected the SO **eligibility criteria**. WI was open only to operations in nine countries that had endorsed the funding proposal.³³ Some additional eligibility criteria were also tied to the GCF co-financed operation. For example, projects must target climate change impacts and demonstrate an investment cost per tonne of CO2 eq. that is reduced to less than €50 per tonne for mitigation projects in all sectors other than urban transport. This is calculated as the total mitigation project value over the lifetime the GHG reduced.

Access to GCF co-funding was seen as a potential means of scaling-up GC in ETC countries, where the low capacity of municipalities was seen as a hindrance to expansion: “GCF funding, detailed in the Board document includes Mongolia and, as such should provide a means of scaling-up green city investments in this country”.

In February 2020 the majority of EBRD finance (€217 million) allocated for WI was reallocated to Window II (WII) due to limited implementation. By 2020 only the first tranche of GCF finance of €87 million had been approved and there had been minimal implementation.

At this point, no projects under WI had been signed while nine projects (€260 million approved) had been signed under WII with a pipeline indicating that the headroom in WII would soon be exhausted.

Figure 6: Anticipated GCF co-financing

| Window I (GCF) | |
|---------------------|---------------------|
| EBRD € 350m | |
| Committed | Uncommitted |
| Tranche 1 € 133m | Tranche 2 € 133m |
| Tranche 1 € 87m | Tranche 2 € 87m |
| Tranche 3 € 84m | Tranche 3 € 54m |
| Committed | Uncommitted |
| GCF €228 million | |

³³ Albania, Armenia, FYR Macedonia, Georgia, Jordan, Moldova, Mongolia, Serbia and Tunisia

The remaining EBRD funds in WI (€133 million) had to remain there to demonstrate the Bank’s financial contribution to the agreed activities with the GCF. These were not transferrable to WI. The expectation was, however, that with future framework extensions, further funds would be allocated to GCF co-financing, for which the Board document indicated a good pipeline of projects. The framework extensions made no further comment on GCF implementation, except to present the commitment data. By November 2021 only €13.1 million of GCF finance had been committed.

To date, **only three GC sub-operations have been signed under the GrCF2 WI.**

| Operation ID | Operation Name | Country | Signing Year | EBRD NCBI (€) | GCF TC (€) | GCF non-TC (€) (concessional loan) |
|--------------|---|---------|--------------|---------------|------------|------------------------------------|
| 51392 | GrCF2 W1 - Tbilisi Metro Project | GEORGIA | 2020 | 50,000,000 | 33,170 | 10,000,000 |
| 52505 | GrCF2 W1: Amman Electric Bus Project | JORDAN | 2020 | 2,800,000 | | 2,800,000 |
| 52019 | GrCF2 W1-Balti District Heating Phase 2 | MOLDOVA | 2021 | 14,000,000 | | 1,000,000 |

In addition, GCF funds were used to finance GC knowledge activities (approx. €200 000), Tirana Green Finance Roadmap (€440 000) (see Box 4), and due diligence on several projects that have not been signed (approx. €500 000). GCF funds were also used to finance GCAP preparation for Novi Sad, Serbia (€300 000).

GCF co-financing has been used much more slowly than expected, and the situation requires restructuring the GCF Facility (ongoing). Overall, only about 15 per cent of the first GCF tranche has been committed so far. Given the original expiration date of the Facility, EBRD and the GCF have engaged in restructuring the Agreement, which is ongoing at the time of this evaluation. Internal stakeholders attributed the under-utilisation of the available GCF funds to a combination of several factors:

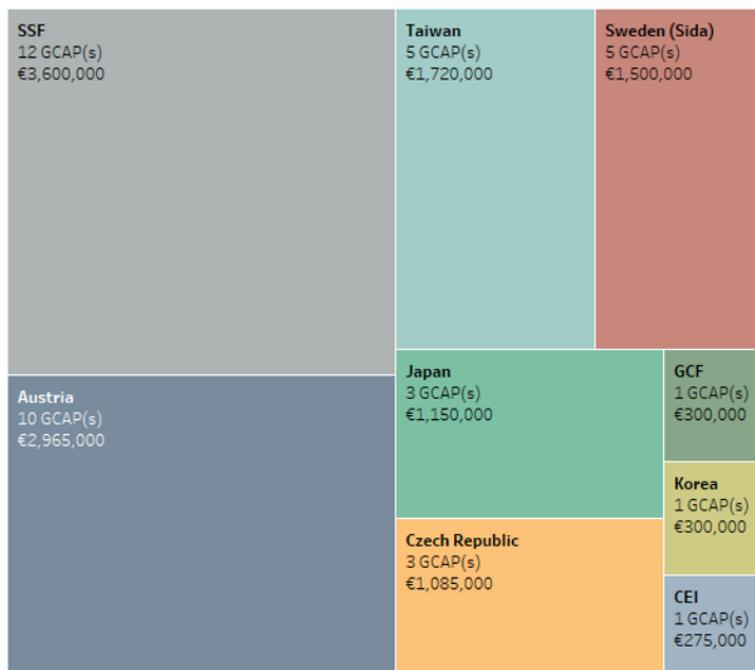
- Limitations on the number of countries where GCF funding could be used
- The pricing is concessional but still too high to co-finance projects in ETCs, where co-financing with capex grants is often needed
- A limited pipeline of adaptation projects in GC that would have been eligible for GCF grants.

Sources: BDS16-207: Regional: Green Cities Framework (GrCF), SGS18-351 (Addendum 1): Information Session: Green Cities; GrCF2 DAQs; BDS18-183 (Addendum 4): Regional: EBRD Green Cities 2 (GrCF2); BDS18-183 (Addendum 14): Regional: Green Cities 2 (GrCF2) - Window II Extension, BDS21-140: Regional: Green Cities Framework 2 – Window II Extension 2; report DCF023 ME202210; interviews

85. Preparing a GCAP is treated as a transactional TC, commonly anchored to trigger investment projects. There are 42 GCAP contracts so far (24 completed, 17 ongoing), with a cumulative value of €12.9 million and an average cost close to €300 000. Only two GCAPs had a significantly larger budget of €500 000 (Belgrade, Yerevan). These figures do not include upcoming expected high-value GCAP contracts, which were not yet in place at time of this evaluation (Cairo €1.3 million, Istanbul €1 million). The biggest donor contributor to funding GCAPs is the Shareholders Special Fund (SSF, 12 GCAPs, €3.6 million), followed by Austria (10 GCAPs, €2.965 million). Taiwan and Sweden have financed five GCAPs, and Japan and the Czech Republic have each financed three GCAPs. (Figure 7) Most donors see high value in providing funds for GrCP, as GCAP offers a “holistic approach that helps the city to think strategically about its green investments compared to stand-alone MEI projects”.³⁴ (For detailed data see Annex 6)

³⁴ Interview with a representative of a shareholding government that provides substantial TC funding to GrCF.

Figure 7: Donor contributions to GCAP TC funding



Source: GC team monitoring, data valid in October 2022, EvD analysis

86. Some sceptical internal voices question the need for such a substantial budget and for such a long GCAP development process, particularly for smaller cities. There are some discussions about a “light GCAP” for those cities but this idea does not elicit unanimous support. At the time of the evaluation there was no evidence that a “light GCAP” was being prepared. The evaluative evidence suggests that an abridged, shortened process will not lead to a truly robust, comprehensive and action-oriented GCAP, which is most appreciated by municipal stakeholders. Going light will mean either narrowing the sectors of application, reducing the depth of analysis, limiting the extent of the public consultation or making compromises in the approval process that affect the document’s legal status. This would reverse the project-focused instruments of engagement with a city used historically and thus undermine the strategic drive towards a green transition in EBRD’s countries of operation.

5.5. Timeliness of implementation

87. **GrCP delivery is aligned with the timetable specific to MEI investment projects.** A dedicated GrCP team operates across departments, including those responsible for securing TC. This precludes observable delays in launching GCAP work after signing a trigger project or a MOU or a commitment letter with city authorities. This evaluation does not address timeliness of sub-operations, especially after signing.

88. **GrCP is expanding fast. Initial results at activity level (GCAP signed, project approved) are attracting attention from potential participants and keeping demand very high.** Several GCAPs were completed within the recommended 60 weeks (Tirana, Ulaanbaatar), and where there were delays, they ranged from 10-20 weeks in most cases. The very first GCAPs, in Tbilisi and Yerevan, were completed

within 37 and 44 weeks respectively. The cities of Lviv and Sarajevo met the under-60 weeks target (see Annex 6 for details of individual GCAP timelines).

89. Two reasons for objectively justified delays in the process are the Covid-19 pandemic in 2020-21 and the Russian war on Ukraine in 2022. It tended to take longer to prepare GCAPs shortly before or during the pandemic in 2020-21 and sometimes more than twice the estimated time. Severe lockdown measures and restricted travel affected essential activities at each stage, especially public consultation, which can be done remotely but then might not deliver the same results. For example, Varna took 135 weeks to prepare its GCAP, Pristina took 115 weeks, Almaty took 114 weeks, and Dushanbe took 95 weeks. The GCAP development process was longest in Belgrade at 139 weeks. The preparation process started at the end of 2018 but was on hold for seven months for lack of institutional commitment.

90. The war on Ukraine has had real effects. One Ukrainian city, Kyiv, completed its GCAP just before the invasion. Khmelnytskyi, another Ukrainian city, is currently revising its needs and priorities after a rapid assessment of damages and of the impact of internally displaced persons on municipal infrastructure. In Mariupol, where GCAP preparation was launched in March 2021, the process is on hold and other activities related to damage assessment are being launched. There is an extremely high demand for municipal reconstruction projects (Box 2, section 4.2) In Poland, Warsaw and Walbrzych are also revising their priorities to accommodate a great number of Ukrainian refugees and higher demands for municipal services. Similar revisions are possible in green cities in other neighbouring countries directly affected by war. Annex 6 provides details on the length and timeline of the GCAP preparation.

91. The process of GCAP TC project procurement is straightforward particularly in the framework contract arrangement established in 2018. Neither consultants nor external stakeholders complained about its efficiency. Consultants consider that the process for bidding for the GCAP contract could be more efficient. All ten framework consultants, who were selected through a competitive process from a larger pool of companies/consortia, can now bid and most feel pressed to compete for each GCAP. This involves significant preparation costs and could become unsustainable with large numbers of bidders. Greater collaboration and a division of labour among pre-qualified consultancy companies/consortia could improve the situation but this might limit healthy competition, which is a cornerstone of EBRD procurement practices. Another solution could be to invite a limited number of consortia to compete for each contract. This could improve efficiency and resources by pre-qualified consultants while offering the most competitive, relevant solution for client cities.

92. The procurement process often causes delivery and implementation delays in investment projects aligned with GCAP, particularly with public sector clients. This evaluation did not look deeply into project procurement issues. Some context information was gathered during the interviews and deep-dive cases. One issue noted by the evaluation is the Bank's proactive work on ensuring timely disbursements, particularly in SEMED region. Many projects there are sovereign and require extensive co-ordination and agreement on all procedures with the central government ministries and agencies, which often have capacity gaps. Slower disbursement is typical in MEI and the transport sector, as mentioned in the GrCF documents. For example, the Director Advisers' Question Document (DAQs) for GrCF VII Extension 2 notes that of €1.1 billion signed to date, €292 million were disbursed for transactions signed 2.5 years earlier on average.³⁵ The Bank tried advanced procurement practices in SEMED countries with significant support and supervision by launching the tendering process before the project was signed. This cut the time between signing and first disbursement as much as 2 years. This positive proactive practice could be replicated in other countries with similar challenges.

³⁵ DAQs for BDS21-140, November 2021

93. Lengthy procurement procedures were noted in two case study cities, Izmir and Sarajevo. In Izmir one client noted that they would prefer local rules since they lead to faster processes and delivery than the EBRD rules. Representatives of the project implementation unit (PIU) of the Sarajevo public building project, which is aligned with GCAP, raised the issue of the use of the contingency budget. The Canton counterparts had not been previously well informed about its use, particularly for variation orders. When supply chain problems raised prices significantly for building works/materials in 2021-22, the PIU triggered the use of a contingency budget to cover the costs. But this unexpectedly required local stakeholders to go through the full EBRD approval cycle for variation orders, which resulted in a two-month delay. During this time, contractors raised their prices further, complicating timely delivery.³⁶

94. **Overall, there are no significant delays in GrCP implementation beyond the normal project delivery timeline for the MEI sector, which is usually quite significant. GCAP consultants, municipal stakeholders and clients do have recommendations for simplifying or fast-tracking EBRD's procurement procedures but they do recognise the benefits of a thorough process.** Having dedicated EBRD procurement experts work closely and consistently with partner municipalities might address some of the problems identified by local stakeholders and consultants.

6. How has the GrCP progressed on its objectives and in contributing to transition?

This section presents findings on the suitability of programme design and monitoring arrangements for delivering results (and their future evaluability), progress in developing GCAPs and their catalytic function, emerging results along green transition quality (TQ) and other TQs, and along its horizontal streams of activities aimed at learning and innovations.

6.1. Design and monitoring for results

6.1.1. Programme design

95. **The programme has a consistent, coherent theory of change (ToC) that establishes credible causal links for results delivery.** Programme objectives and transition expectations have remained broadly consistent over the implementation period. This makes it possible to reconstruct an implicit, unified ToC for the purposes of this evaluation. Given the overarching programme objective to become a “sector-wide catalyst for addressing environmental challenges” the framework objective is to deliver “significant environmental improvement in at least one priority environmental challenge” at city level, contributing to the green transition of the GrCF countries of operations. To do so, it identifies several pillars of inputs, combining city-level planning and prioritisation (GCAPs) with investment and technical cooperation at project level and networking, knowledge management and sharing at programme level. (For a detailed description of the ToC see Annex 4).

³⁶ Interview with the local stakeholders in Sarajevo, Bosnia and Herzegovina

96. **Significant environmental improvement is the central sole programme-level transition objective.** It underpins the synergic delivery of the programme parts, as opposed to delivering individual projects. If the programme rationale and approach are to deliver additional value beyond what would otherwise be a series of stand-alone investments in cities, this objective reflects the delivery of this additional value. This is also the only objective with framework-level targets in TQ Green; secondary TQs are selected at project (SO) level and have no framework-level targets.

97. **Significant environmental change has not been defined with adequate visibility for a programme of this size and significance.** The initial framework introduced this objective and referred only to the GCAP methodology for explaining the key impact.³⁷ The methodology did not define the meaning, however. The only source of this information is an annex to the Board document of the framework presented for the final OpsCom review. The annex was not included in the version of the document presented to the Board of Directors for approval. The final review version of the framework document is not readily available even to Bank staff, let alone to other potentially interested stakeholders, including the Board Directors, advisors or donors. This is not an optimal location for key information about the programme’s expected impact. The definition is shown in Box 3.

Box 3: Definition of Significant environmental improvement in the context of the Green Cities Programme

The overall objective of the GrCF is to achieve a ‘significant environmental improvement’ in at least one priority area for each of the GrCF countries by the end of the GrCF period. In this context, significant environmental improvement will be measured as:

- Either, moving a state or pressure indicator from ‘red’ to ‘amber’ or ‘amber’ to ‘green’;
- Or preventing a colour change to ‘red’ from an ‘amber’ or ‘green’ indicator which has an expected trend into a ‘red’ category within 5 years under a base-line (doing-nothing) scenario.

Source: Regional: Green Cities Framework, Final Review – Update, 4 November 2016, Annex 2

98. **Two major crises have affected and shaped the implementation of GrCP since its inception.** The first GrCF was approved at the end of 2016. The first three GCAPs were delivered in 2017 and 2018, but the majority of GCAPs completed during the evaluation period date from 2019 onwards. Their implementation and the preparation of new GCAPs was affected by the Covid-19 pandemic in all regions and cities and later by the war on Ukraine. The war affected Ukrainian member cities primarily but other cities experienced significant secondary effects of more refugees from Ukraine and immigrants from Russia.

99. **The programme has demonstrated its agility and pro-active approach in responding to crises and incorporating the resulting lessons into its own methodology.** It is underpinned by an elaborate GCAP methodology initially developed by ICLEI in 2016 based on a city Pressure-State-Response (PSR) framework, which is adapted from an OECD framework. The GC PSR framework builds causal links between the environmental performance of a green city, the key associated economic activities, and the investment, services and policy instruments to respond to the challenges. The methodology defined a Green City and a Green City approach with a focus on environmental issues: “For the Bank, green cities are characterised predominantly by their environmental performance, with the intent to maximise subsequent social and economic benefits.”³⁸ The set of PSR indicators used for the initial diagnostics of the city also forms the basis for prioritising GCAP actions and, ultimately, the assessment of GCAP success, which is defined as a significant environmental improvement along the identified priority

³⁷ BDS16-207: Regional: Green Cities Framework (GrCF): “Significant environmental improvement is defined in the GCAP methodology”, p.16.

³⁸ Green Cities Programme Methodology, 2016, p. 5.

indicators. With the 2020 onset of the Covid-19 pandemic, the programme commissioned a review of its impact on the EBRD cities and outlook for their recovery as well as of the continued suitability of the GCAP methodology and potential for modifications given the crisis. The review proposed to maintain the focus on climate but to incorporate broader attention to resilience and to integrate considerations of resilience in the methodology by including new or adapted indicators for the diagnostics. The PSR framework now serves to select “indicators to assess a city’s environmental performance, with sensitivity given to overlaps with urban resilience.” In addition, “By committing to developing a GCAP, a city sets a priority for high environmental performance, in a manner that also strengthens urban resilience.”³⁹

100. This new orientation to resilience has not been fully translated into the programme’s transition ambition within the context of EBRD’s own fragmented approach and understanding of resilience. The EBRD transition concept includes TQ Resilient, which within this framework is operationalised along the lines of the resilience of capital, energy markets and food security. TQ Green/ GET framework recognises actions in support of climate change adaptation and resilience. In addition recent urgent responses to crises in the EBRD region broadly referred to resilience along the lines of providing support to clients to avoid reversals in transition impacts along any dimension of transition.^{40,41} The GrCF second extension in 2020 introduced the revised methodology and approach whereas the transition framework remained broadly the same. The TQ Green primary objective of significant environmental improvements remained unchanged as the overall programme objective. The extension introduced the possibility that SO could claim additional secondary TQ benefits (previously limited to Well-Governed), including Resilient. The available indicators under Resilience are fairly limited however and focus mainly on financial resilience such as tariff increases to reduce cost recovery gap, Green Finance Roadmap development, access to new sources of funding. The only broader-based resilience indicator is “Institution-level capacity strengthened in target area – Promote and help implement priority policy actions, as identified in the GCAP, to enhance urban resilience (including better risk assessment and mitigation, warning systems or emergency response planning).” This indicator appears to be relevant only to policy rather than also to investment actions. The secondary TQ options now include resilience, but there is no framework-level ambition for resilience in the operationalisation of the programme’s transition. (For more detail on transition objectives in the subsequent frameworks and extensions see Annex 1 and Annex 2.)

6.1.2. Quality of monitoring

101. Monitoring the overall programme objective follows a simplified causal chain, whereby GCAP development and implementation lead to achieving the intermediate targets linked in turn to environmental indicators. The transition monitoring of the programme is centred on the overall transition objective of significant environmental improvement at city level. The development of GCAPs is underpinned by a detailed methodology, which establishes a city diagnostic baseline along a series of environmental indicators. All GCAP actions are then linked to their own verifiable targets, as well as to the environmental indicators to which they contribute. The GCAP thus establishes credible causal links between implementing actions and their cumulative effect on moving contextual indicators. This logic is translated into the TIMS monitoring benchmarks (Table 2).

³⁹ Green City Action Plan methodology, 2020.

⁴⁰ See e.g., BDS20-039: COVID-19 Solidarity Package.

⁴¹ Recent EvD evaluation also found that the transition concept operationalisation did not allow for an assessment of the EBRD contribution to healthcare systems’ resilience and recommended the introduction of a sub-dimension under the Resilient ATQ to measure and monitor country-level transition progress in health sector resilience to transition reversals such as public health crises. (CS/AU/21-31: EvD Special Study: EBRD’s Health-focused Interventions)

Table 2: Approach to transition monitoring of GrCF TQ Green

| Results chain | GCAP delivery (inputs) → | Action implementation (outputs) → | Action results (results) → | Environmental results (transition impact) |
|------------------------|--|---|--|---|
| TIMS benchmark | Preparation and adoption of GCAPs in Green Cities | <ul style="list-style-type: none"> • Multiple GCAP investments in each city • Proportion of EBRD-financed GCAP investments | <ul style="list-style-type: none"> • GCAP action-linked verifiable targets achieved | <ul style="list-style-type: none"> • Significant environmental improvement at city level |
| TIMS monitoring | Adequately monitored Delivery of GCAPs in cities is monitored and reported | Adequately monitored <ul style="list-style-type: none"> • Status of GCAP actions is monitored • Proportion of EBRD follow-on investments is monitored | Not monitored | Not monitored |

102. While the Transition Impact monitoring is reasonably well designed to substantiate the achievement of intended objectives, the actual monitoring is not carried out nor reported beyond outputs. The transition monitoring of TQ Green covers the appropriate basic proxy indicators to substantiate the delivery and achievement of the ultimate overall objective. This is especially true in conjunction with the GCAP methodology, which provides for developing a sophisticated baseline as well as GCAPs which develop links between the actions and the verifiable targets under cities’ strategic objectives and links between actions and the broader environmental indicators. GCAPs also develop comprehensive monitoring plans and tools. Each city is responsible for implementing GCAP monitoring at city level as part of their programme obligations. The EBRD internal GC team carries out an annual monitoring exercise with the cities to collect data but this data is at activity implementation status only. This breaks the link set up in the GCAP monitoring plan between the actions and targets of city objectives and the contextual (environmental) indicators that the actions are intended to contribute. (For detailed evidence related to this finding see Annex 7.)

103. No intentions for end-of-GCAP assessment and follow-up are currently specified. This would be a way to close the existing monitoring gap. Some internal interviewees for this evaluation suggested that the programme anticipated a re-run of the original baseline diagnostics in the cities after GCAP implementation, which usually means 5 years. This would collect the relevant data according to the same methodology and assess the outcomes of the implemented actions. It is currently not clear whether this intention is still in place or whether the resources are available for it. This kind of comprehensive data collection and impact assessment would indeed close the current monitoring gap. While many GCAPs have only just been adopted during the programme’s recent growth and many more are in different stages of development, some early GCAPs will be nearing the end of their expected implementation period. In addition to possible end-of-GCAP impact assessments, the outstanding question is what comes next for those cities.

104. The current state of the framework transition impact monitoring and reporting is not commensurate with the programme’s size and importance. The GC team has dedicated internal resources for data collection and monitoring, including specific collection directly from the cities, including information that is not directly related to EBRD-specific investments but rather to the overall status of GCAP implementation. This is a positive feature of the programme that sets it apart from other frameworks in the Bank. However, the monitoring that is available does not provide crucial information on the programme outcomes and impact along the benchmarks agreed at the outset with the Impact team. This situation also points to the inadequate quality assurance of the transition reporting on the side of Impact. Given the size, visibility and flagship status of the Programme, the expectations for the quality of the reporting on the mandate of the Bank are currently not being met.

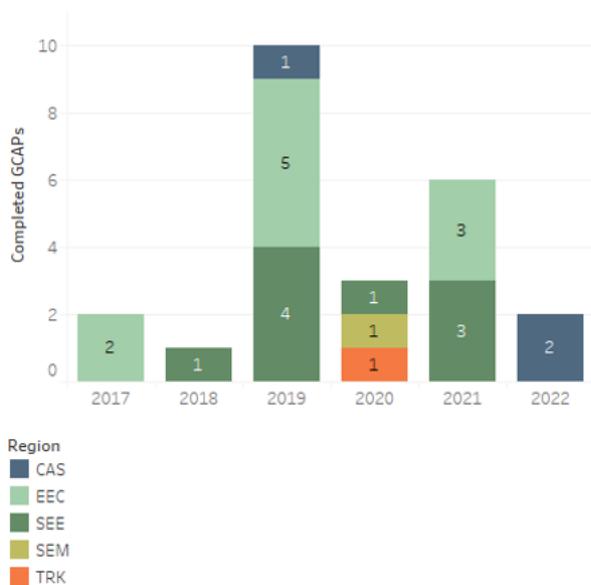
6.2. Progress made in achieving Green results

105. This interim evaluation assesses the programme’s implementation and growth in the first generation of green cities. The programme started at the end of 2016 with the development of the GCAP methodology and the approval of the first investment framework at the end of the year. The first three GCAPs were completed in 2017 and 2018, while programme growth accelerated from 2019 onwards. Given the overall objective of environmental improvement at city level and the implementation modality through municipal infrastructure, there was not expectation that the overall objective would be achieved by now. This section therefore considers the programme’s trajectory of implementation and growth in light of the expectations embedded in its transition rationale. At the time of this evaluation, only the GCAPs that had been completed in line with the original methodology were available. More recent changes in the programme’s approach (embodied in the revised methodology) would not yet be identifiable in tangible implementation.

6.2.1. Progress on GCAPs implementation

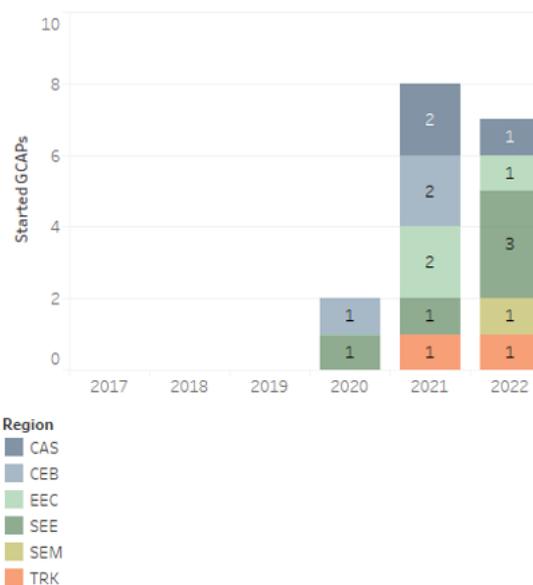
106. Preparation of GCAPs is on track relative to the expectations of the frameworks. Having cities successfully complete and adopt GCAPs is a key programme feature and an input level target in transition monitoring. The expectation (target) for completed GCAPs grew gradually with successive GC frameworks and their extensions. The combined framework-level target across GrCF and GrCF2 is now 50 GCAPs finalised and submitted for approval by the end of 2023. To date, there are 24 completed GCAPs of which 20 have formally been adopted by city authorities. In addition, there are 17 GCAPs for which the contract for GCAP development has started. The programme was initiated with cities in EEC and SEE and the first three GCAPs were completed for Tbilisi, Yerevan and Tirana in 2017 and 2018. The growth in GCAP completion accelerated in 2019, when 10 GCAPs were completed, including the first GCAP in CAS (Ulaanbaatar). Only three GCAPs were completed in 2020, but these included the first (and so far only) GCAPs in Türkiye (Izmir) and SEMED (Amman). Six more GCAPs were completed in 2021 and two were completed in 2022 (by October). New GCAPs are being developed in all regions of operations, including three in CEB, which does not yet have a completed GCAP. (For a more detailed analysis of GCAP completion and preparation see Annex 6).

Figure 8: Completed GCAPs by completion year and region



Data as of October 2022. GCAPs start year based on contract start date.

Figure 9: Ongoing GCAP preparation by start year and region



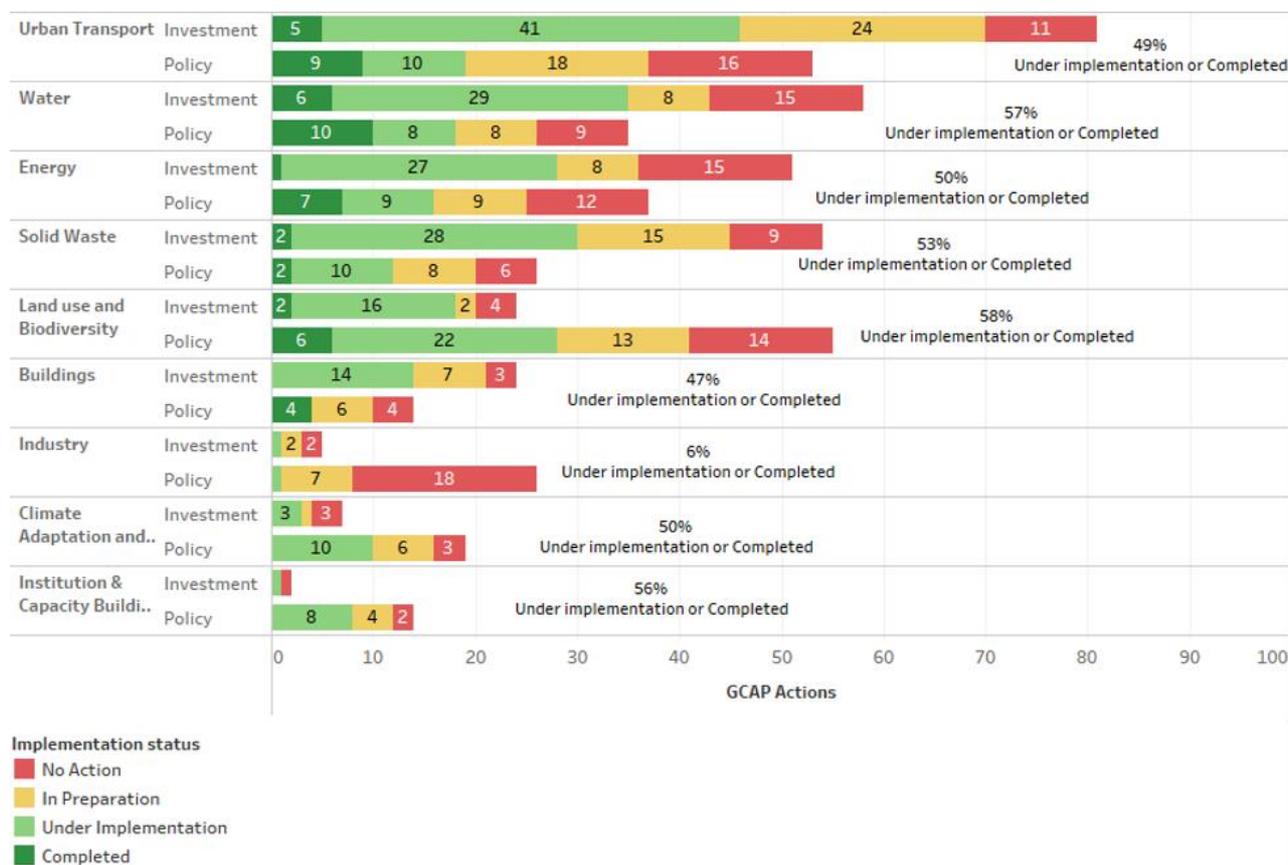
Data as of October 2022. GCAPs start year based on contract start date.

107. GCAP implementation has progressed well in general, but there are important limitations in the monitoring available. Transition monitoring of the framework translates this into targets on overall GCAP implementation and EBRD’s participation in it. In overall GCAP implementation, the transition monitoring target calls for each city to make at least 3 investments based on the GCAP. On the EBRD side, GCAP implementation is monitored through annual city reporting on the status of actions. The monitoring available for 14 GCAPs comprises a total of 585 actions of 306 investments (52 per cent) and 279 policy (48 per cent).⁴² Sixteen investment and 38 policy actions are reported as being completed and another 160 and 78 as being under implementation, respectively. Annex 7 presents the implementation status of actions by sector. Data on GCAP implementation by city are included in Annex 8. This reporting includes some limitations that should be considered:

- Actions classified as Investment include preparatory actions such as feasibility or other pre-investment support actions which would be implemented initially, due to their nature.
- Monitoring consists of the status of action implementation (No action =action has not been initiated yet/ In preparation/ Under implementation/ Completed) but does not collect data on the expected verifiable targets connected to actions. The implementation in relation to the GCAP intention is not systematically clear from the monitoring as a result. An investment may be under implementation but only in a certain part of the city as a pilot project, or a partial investment to the extent that funds or donor support were available, or one GCAP action was split into several investments for implementation purposes. Even for actions reported as being completed, there is no information on the achievement of the targets linked to them in the GCAP. (For a detailed discussion see Annex 7.)

⁴² The most recent round of status monitoring from 2022, 14 cities

Figure 10: All monitored GCAP actions by sector and by implementation status (14 cities/GCAPs)



Source: 2022 GCAP status monitoring provided by GC team

108. **EBRD participation in GCAP implementation has been increasing, while the Programme has been growing in breadth primarily.** Including EBRD’s participation in the GCAPs implementation as a target points to the expectation that the programme should, on the EBRD side, grow not only in breadth (growing the number of cities and GCAPs completed) but also in depth. A relationship should be built between the city and EBRD therefore, and the Bank should make multiple investment contributions to GCAPs’ implementation. The transition target here is for GrCF SO to represent 50 per cent of ‘follow-on’ investments addressing critical environmental challenges as identified in the GCAPs. This target was only adopted from GrCF2 whereas in the first framework most SOs would understandably have been initial, or trigger, city investments. To date there is a total of 66 SO under all GrCFs and extensions, out of which 51 in GrCF2 and later. Of these, 26 SOs are either a second (or subsequent) SO with the city under GrCF or were signed after GCAP completion. This ratio is exactly 50 per cent of the target, as called for by the transition benchmark. Some observations about the spirit of the benchmark and other potential ways to look at it follow.

- **Some ‘follow-on’ investments were signed before the GCAP was finalised.** A ‘follow-on’ investment is based on the critical environmental challenges identified in the GCAP diagnostics process. These key challenges are identified in the earlier stages of GCAP preparation before the related actions are prioritised by the technical and stakeholder engagement processes. Several operations were signed during the GCAP process. For example, the Skopje Wastewater project document indicates that it is a follow-on investment that “was identified as a priority investment

under the Skopje GCAP.”⁴³ It was signed in December 2019, whereas the GCAP was not actually completed until July 2020. The project then sets its own benchmark for finalising the GCAP, which contradicts the previous statement. While follow-on investments can be based on diagnostics only, the reference to it as a ‘priority investment’ suggests that it was brought for approval after the GCAP prioritisation and finalisation. However, this is unlikely based on the timing.

- **The Programme’s deepening growth is not evenly distributed, with just two cities representing 40 per cent of follow-on investments.** One perspective on the growing depth of the programme is to consider the proportion of operations signed each year under the GrCF, which were the first SO with a city, compared to second or subsequent operations. Including all 66 sub-operations to date makes it clear that the programme began to grow deeper from 2019 (Figure 11). However, while all first operations are, by definition, in different cities, subsequent operations are not evenly distributed. Tbilisi and Sarajevo are the over-achievers and account for a total of 10 of the 26 follow-on investments, or almost 40 per cent.

Figure 11: GrCF SO: first as compared to subsequent city operations by year of signing



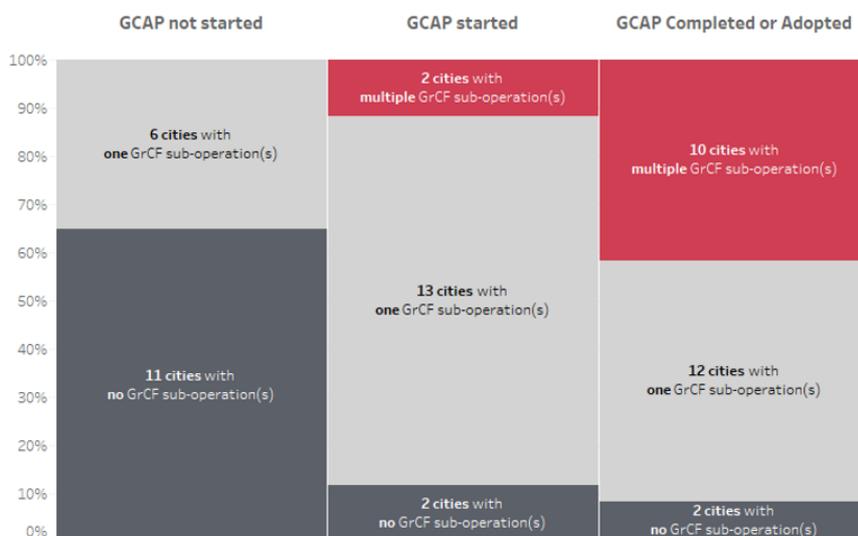
Data for 2022 until end-October

- **There is great scope for further deepening programme growth. So far 12 cities have had multiple GC operations of 58 cities in all stages of the programme.** Considerable growth in the breadth of operations can be expected. Of the 58 cities that have joined the programme so far, 12 have had multiple GrCF SO and 15 have had no operation yet under the framework.⁴⁴ (Figure 12)

⁴³ BDS18-183 (Addendum 2): North Macedonia: Skopje Wastewater Project (Under Regional: Green Cities Framework 2)

⁴⁴ The two cities where GCAP has been completed but have had no GrCF SO are Almaty (a large investment is expected to be signed before the end of 2022, 52821: GrCF2 W2 E2: Almaty CHP Coal Phase Out), and Gyumri (operation 52868: GrCF2 W2 - ENA Investment Program has been assigned to Yerevan for the purpose of the portfolio analysis. No Gyumri-specific SO have been signed yet, and none appear to be in the pipeline; Gyumri GCAP was adopted in December 2019).

Figure 12: GrCF SO: Number of operations in cities by GCAP status



109. The expectation for the next phase, expressed by most of the programme’s senior leadership, is for the Programme to increase focus on further implementation in participating cities and identifying the enablers of translating GCAPs into investment projects. As the first phase of the programme draws to its close, senior leadership anticipates increasing the depth of operations and growing the engagement with participating cities. The first five years of programme implementation can be seen as its initial phase dedicated to its establishment and promotion, and its growth from the initial regions (EEC, SEE) to all regions and the multiple cities in the countries of operations. The first version of the methodology was developed and tested in operations and a revised version was introduced after a wealth of experience in various settings, lessons learned, feedback from cities, consultants and internal staff, and a formal review commissioned in 2020. The Programme is almost universally seen as successful and transformative within the Bank. The programme introduced a new business model that moved from responding to individual demand or need for projects to proactive approach of developing a comprehensive diagnostics, investment and policy plan. To make the most from the initial significant dedication of resources, the relationship with the cities should be actively maintained, harnessing efficiencies in project development over the life of the GCAP.

110. EBRD centres its implementation of GCAPs on investments. The intention exists for GCAP policy implementation but that still requires action backed by sufficient funding for non-transactional policy work. While the design and preparation of GCAP can be considered stand-alone policy involvement at the city level, the implementation of GCAPs from the EBRD side is largely focused on investments. This intention can be seen in the transition targets set for the proportion of follow-on investments but there is no mention of GCAP policy actions. The vast majority of GrCF SO are in the MEI sub-sector and as such they usually contain post-signing TCs traditionally used in these types of operations. This means establishing formal relationships between utilities and the city (Public Service Contracts, PSCs), implementing Corporate Development Programmes (CDPs), Financial and Operational Performance Improvement Programmes (FOPIPs), and a review of tariff or user fees, etc. These are important elements of technical cooperation that the Bank has a long experience in facilitating with municipal clients. They represent transitional value as much as a value for sound banking – improved financial and operational governance of city-owned operators is important for creditworthiness and sustainability. However, at the GCAP level, identified policy actions are rarely addressed with specific EBRD-financed action if they cannot be connected to an investment at the same time. The GC team systematically reviews GCAP policy actions to identify a potential for EBRD involvement in policy support. However,

identifying a source of funding for non-transactional policy actions has hindered implementation. This can lead to attaching TCs to investments that are not directly related on substance such as in 52565 *GrCF2 W2 - Tbilisi Bus Phase III*, which is the acquisition of CNG buses. This project has a post-signing TC on the *Support for Development of an Urban E-Mobility Roadmap for Tbilisi*, to cover the electric vehicle (EV) market, regulation and policy, design of related city policies, including an initial scoping of the EV charging network and the outline of an EV charging system.

111. General policy support was implemented by developing a Policy Toolkit for cities. This is a compendium of urban policy options and case studies from urban infrastructure sectors that is designed to “help cities accelerate their green agendas”. It was developed by EBRD economists and sectoral experts and is presented as an interactive external website.⁴⁵ Further policy knowledge-sharing events and networks for members cities are discussed in section 6.4.

6.2.2. GCAPs as a catalyst for addressing environmental challenges

112. By developing GCAPs, the programme supports an analytical, comprehensive approach to cities’ green path in municipal infrastructure. The programme methodology developed in 2016 is elaborate and comprehensive. It provided a conceptual and practical underpinning to implementation with a sophistication not previously seen in EBRD frameworks or programmes. It was based on a wide-ranging review of similar programmes in other institutions, of existing international best practices in city strategic planning instruments and of indicator frameworks and links to EBRD strategic orientations and mandate. The programme’s aim is that GCAP become a sector-wide catalyst for addressing environmental challenges at the city level.

113. The ability to combine the preparation of a roadmap of actions linked to the city’s strategic objectives and providing investment finance for implementation is a key programme strength. Both internal and external stakeholders identified this link between planning and investment as a key strength contributing to the programme’s ability to facilitate concerted action. Other initiatives that provide methodological support to cities to develop studies or strategic plans are not equipped to provide access to finance. In this sense the cities see the GCAP as more practical. Both sides expect the GCAP to structure an ongoing and future relationship between the city and EBRD. Correspondingly, in EBRD banking teams the GCAPs are seen as a ‘pipeline builder’, an indication of potential investment projects that the cities have already prioritised according to their potential benefits and linked to wider strategic and environmental objectives to which they contribute.

114. The GCAPs are making some progress towards a systemic approach to green city development. In practice, however, interviewees recognize that GCAPs and investments are still often developed separately along sectoral lines. The idea behind GCAP development is that cities are complex interdependent systems in which environmental state indicators can be influenced by several pressure indicators that are not limited to a single source or sector. The technical analysis of the GCAP methodology should lead to the development of actions that are similarly interdependent and reinforcing, rather than being developed separately by sectoral lines. The GCAP should represent a ‘joined-up thinking’. In practice, most technical experts interviewed recognised some progress towards this objective, while noting that a fully holistic approach has not been yet achieved. Cities administrations are usually organised by sector, as are their budgets. Projects and actions with identified revenue streams and potential bankability are more represented in the GCAPs, as are projects with high immediate visibility and utility to citizens. The most actions overall in GCAPs are in urban transport and water. More complex actions on cross-sectoral climate resilience or biodiversity have more difficulty gaining political support and to implement. That said, the programme has resisted internal Banking suggestions so far for reduced-scope GCAPs in smaller cities that would essentially

⁴⁵ <https://www.ebrdgreencities.com/policy-tool/>

lead to pre-selecting and separating focus sectors rather than making a comprehensive diagnostic and assessment of challenges.

“It was advantageous to merge stakeholders with different areas of responsibility for the participatory exercises, as this facilitated valuable cross-sectoral conversations and information sharing. Even when not directly beneficial to the GCAP document, these ‘silo-breaking’ discussions were an added value of EBRD’s engagement with the city.” (Amman)

“The prioritisation exercise was conducted separately for sector action types, such as transport. This allowed identification of key ‘anchor projects’ that have wide support from the Canton Administration and the stakeholders but were not prioritised in a holistic / integrated approach.” (Sarajevo)”

115. The prioritisation of challenges and actions is not only a technical process but a politically delicate process as well. The GCAP methodology bases the prioritisation of challenges on the technical assessment (diagnostics) but recognises the importance of wide stakeholder involvement in the process: “While the traffic light approach can help guide the prioritisation of Green City challenges, ultimately the City and stakeholders identified [...] can confirm key challenges and identify issues that are absent from the GCAP analysis thus far.”⁴⁶ The following prioritisation of actions for implementation is also a process requiring consultation with and the engagement of city technical experts and wider public as well as the buy-in of the city’s political representation, which is a key factor in the GCAP process for successful implementation. For the GCAP to be an effective catalyst for action, it must be aligned with the interests of the city administration. While the political risk (of a change of administration and loss of political ownership) cannot be fully mitigated, the increased focus in the revised methodology’s on stakeholder engagement and public awareness and support for the CGAP are steps in the right direction.

116. The success of GCAP as a catalyst for action cannot be judged solely by the implementation of its individual actions but on the extent to which it can leverage and integrate them into wider policy and related decisions and actions that work together to create systemic effects. Many actions on the GCAP were a priority or intention of the administration in some form regardless of the GCAP process, such as large infrastructure investments that follow long investment cycles (e.g., metro systems). The preparation of many of the initial operations with a city (especially those with high investment volumes) preceded programme. It was their development that facilitated the GCAP rather than the converse. The roots of the GCAP success are already in its design and the ability to align stakeholders’ existing priorities with a holistic plan underpinned by systemic thinking.

⁴⁶ GCAP methodology 2020, p.22

“There was also additional complexity when the steps of assessment were not aligned. For example, an action may have scored relatively high in the technical assessment but was not popular with stakeholders and political representatives – a water section action scored relatively highly in the technical assessment but was ranked as low priority in both the stakeholder and political prioritisation. This issue highlights the direction and importance of GCAP ownership. As this is a political document subject to political approval, the political prioritisation comprises the final deciding step.” (Banja Luka)

117. Linking GCAPs to existing policy space can enhance their value as catalysts. The GCAP process includes a policy review that identifies relevant existing initiatives, strategies, policies and action plans, for the GCAP to build on relevant existing commitments and is additional to them. In some cases, the GCAP was co-developed with a complementary plan such as the Sustainable Energy and Climate Action Plan (SECAP) or similar, creating efficiencies and complementarity in the process (Izmir, Belgrade, Sarajevo). When the GCAP brings the benefit of linking the city development and priorities to other external anchors, there is additional value that can facilitate action and external finance. For example, the importance of the EU Green Deal to a country like Türkiye creates further incentives for green action at city level. Similarly, the EU Green Agenda for the Western Balkans creates an opportunity for investment funding for well-designed city actions in Sarajevo and other cities in the region. Likewise, Sarajevo used its GCAP plan to support its application to the EU 100 net-zero cities mission (only 12 cities were selected from outside the EU) which will give it access to additional funds from the Horizon 2020 Research and Innovation Programme for carbon neutral actions.

118. Whether the GCAP becomes a catalyst of sector-wide action depends on several factors, some of which can be addressed or identified upfront. A variety of factors are emerging as potential determinants of success. In most cities, these are based on the experience with the GCAP preparation process rather than with its implementation, which has only been ongoing for a relatively limited time in most cases.

- **City ownership of the GCAP is key.** Where cities own the GCAP process and mobilise internal resources for delivery, they appreciate a prioritised, broadly costed, coherent set of actions with a developed rationale that they can use for their budgeting, priority investment lists and discussions with potential financiers. Motivated political leadership can embrace action and harness the opportunity provided by the GCAP. In cities that had made significant progress implementing the GCAP such as Sarajevo and Tbilisi, political drive behind the plan is a key success factor. The city must drive implementation. It is not likely that potential financiers actively use GCAP as a source of an investment pipeline unless it is actively promoted and used by the city itself in its dialogue with other IFIs, for example.
- **Cities vary in their capacity to create the most value from GCAP.** The programme includes cities of different sizes and at various stages of development. The GCAP preparation process requires sufficient capacity in the city to handle the responsibilities stemming from the initial political commitment. Successful GCAP preparation and approval must then be translated into efficiently coordinated implementation, monitoring and reporting. In this sense initial (and sustained) political ownership is the necessary but not sufficient success factor if there is not capacity to deliver. For some cities GCAP represents a first instance of systematic planning in sustainable urban development and is a great value but they might also subsequently lack the internal capacity for systematic implementation. There are also large, developed, sophisticated cities in the programme as well that have already progressed with their priorities and have cross-sectoral

planning capacities. For these cities, the full GCAP process with a new baseline development and prioritisation might not bring as much additional value.

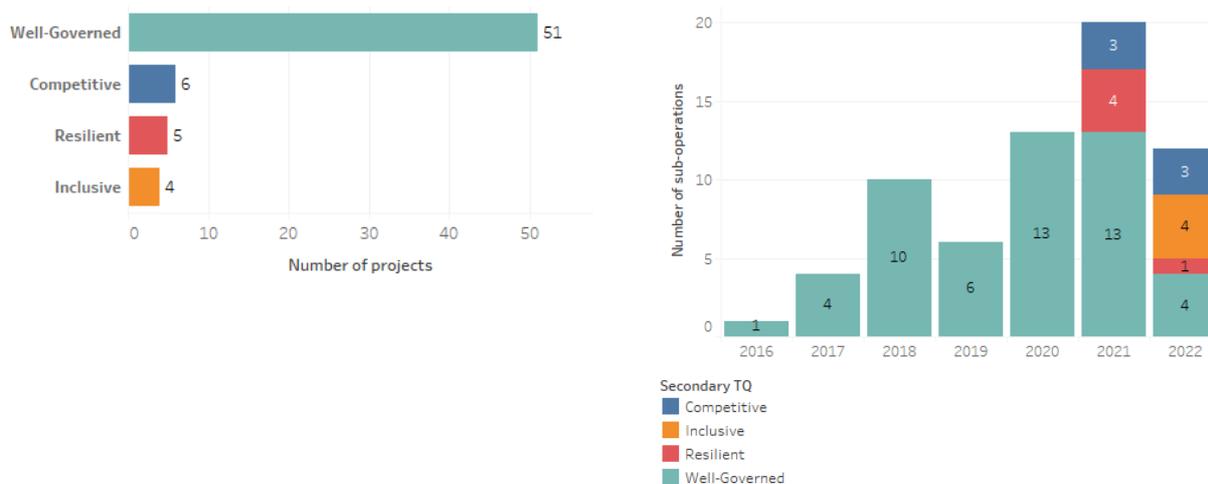
- **The level of fiscal decentralisation**, the city's ability to make independent decisions about its investments and the ability to raise funds at capital markets is a factor in GCAP implementation. This decentralisation is not always in place, and about half of all GrCF investment is has a sovereign guarantee rather than being fully guaranteed by the cities themselves. The involvement of the central government may not always be a deterrent in the GCAP implementation process. For example, Tbilisi is among the cities that have made the most progress and has the most follow-up investments from EBRD. By comparison, several years after the GCAP completion, Yerevan, where the GCAP was developed at around the same time, has had only one follow-on investment from EBRD because of more limited fiscal space and a stricter approach to sovereign borrowing. EBRD does internally review a city's ability to follow through with GCAP implementation and considers the likelihood of a further banking relationship with it before embarking on the resource-intensive process of GCAP preparation. With the GrCF extension in 2020 the programme also extended its flexibility regarding the appropriate counterparty. While it initially targeted municipalities with sufficient autonomy to enact the GCAP, it has now started to work with other levels of governments as well in cases where the national level of centralisation makes this relevant. Egypt is a prominent example of this approach. No GCAP has been completed in Egypt yet. The process began with a Memorandum of Understanding between EBRD, the central government ministry, and the relevant governorate. Implementation will show whether these circumstances provide sufficient momentum for the GCAP to become a catalyst for city-level action.

6.3. Progress in achieving secondary transition results

119. Secondary TQ objectives and targets are set at SO level without any cumulative framework-level ambition placed on them. All projects under GrCF have TQ Green as the primary transition quality. It is also in the TQ Green where the programme-level objective is set (environmental improvement at city level). With respect to transition monitoring, all SOs contribute to framework-level targets for TQ Green (GCAP development, multiple GCAP investments, achievement of GCAP verifiable targets), while also having their own GET indicator expectations (such as GHG reduction, or water savings). No such framework-level targets exist for secondary TQ and while common benchmarks exist, there is no cumulative framework-level ambition placed on them.

120. Initially all SO were implemented with TQ Well-governed as the secondary TQ. From the framework extension in 2020 other TQs can be pursued as secondary. The initial transition expectations of the first framework in 2016 were developed under the previous transition concept and translated to TQ Green and TQ Well-governed soon thereafter, with essentially the same benchmarks. The TQ Well-governed for the SO was operationalised according to common sources of transition in MEI operations. These include introducing public service contracts between operators and cities, bringing tariffs materially towards cost recovery, implementing Corporate Development Programmes (CDPs) or Financial and Operational Performance Improvement Programmes (FOPIPs) targeting cost reductions and introducing private sector participation through incentive-based outsourcing or management contracts. The framework extension in 2020 extended the option for secondary TQs, so that each SO can choose among Well-governed, Resilient, Competitive and Inclusive, depending on the nature of the project.

Figure 13: GrCF SO distribution of secondary TQ by number and year of signing



2022 data until end-October

121. **Well-governed is the source of secondary transition expectations for a majority of GrCF SO overall. However, in 2022 the majority of signed projects already had another secondary TQ.** Due to the lack of another option under the framework until 2020, most operations have targets under Well-governed TQ. After the flexibility was extended in 2021, about a third of newly-signed SO already claimed another source of secondary transition impact. In 2022 (until October), the majority of new projects had a different secondary TQ and the first four projects with Inclusive secondary transition were signed. (Figure 13)

6.3.1. Well-governed emerging results

122. **There are some emerging results in Well-governed but many expected targets are delayed.** Given the relatively recent addition of other secondary TQs, Well-governed is the only secondary TQ where results targets would have been expected for the projects signed in the first half of the evaluation period. This evaluation reviewed the internal monitoring for all projects signed in the first three years of GrCF implementation (2016-18), for which their WG targets were generally supposed to have been achieved by 2021 or earlier. Of these 15 operations, only six have reported achieving at least one of their WG targets. Implementation delays are the main reason for non-achievement so far, so it is possible that more will still be achieved. One project had no targets (*49267 Belgrade Green Boulevard*) and one was cancelled after signing (*49483 Minsk VK*). Reported results achieved include the following:

- Successful private sector participation by introducing Energy Performance Contracts (*47899 Chisinau Buildings*) and through majority private ownership of a new district heating company (*49407 GrCF - Banja Luka District Heating*)
- Signed Public Service Contract (*49161 UKT Tirana Water Company, 49407 Banja Luka District Heating, 49437 Lviv Solid Waste*)
- Cost reductions (*49407 Banja Luka District Heating, 49366 Varna Climate Resilience Infra Project*)
- Tariff increases (*49559 Sofia Electric Buses Acquisition*)

(For detailed evidence for this finding see Annex 11.)

6.3.2. Private sector participation

123. The objective of private sector participation has not been a strong focus in GrCF within the context of general weakening of this objective in public sector projects. Private sector participation (PSP) in the public sector, and especially the MEI sub-sector, used to be one of the pillars of the transition concept operationalisation. This strategic orientation was gradually become less important in operations even before the transition concept change in 2016.⁴⁷ With the change to understanding transition through the lens of six Transition Qualities, it was still possible to operationalise the elements of private sector participation but it was not central to the approach to transition. While the first GrCF in 2016, still under the old transition system, contained a benchmark for PSP (Effective private sector participation through incentive-based outsourcing- or management contracts), the translation of framework monitoring to the new TQ-based system removed without replacing this benchmark. The second extension of the framework in 2021 introduced a benchmark for PPP contract or concession award under the secondary TQ Competitive, which addressed the possibility of private sector participation through urban PPPs. Overall, five of 66 GrCF projects have been identified as having PSP objectives.⁴⁸ Two of these report results in this area (see above). The PPP achieved in 2021 in Egypt was a dry port in the city of 6th October (51830 GrCF2 W2 - Project Goose).

6.3.3. Access to financial markets

124. As of the second GrCF, the GrCP has worked to help cities access local capital markets. This represents not only transition ambition but also potential for financial additionality at programme level. The second GrCF in 2018 brought new attention to helping cities access capital beyond public finance. It committed to developing the tools and skills they might need to attract private green investments, particularly in local capital markets. This was translated to the framework's description of eligible SO transactions that now included bonds and support to develop cities' Green Finance Roadmaps for attracting finance for green investments. At this point a new transition objective for the framework was added under Well-governed: Develop green finance roadmaps in 4 cities to address the key elements required to access green finance markets, including green bonds. However, with the following extension in 2020, the objective of developing Green Finance Roadmaps development was moved under TQ Resilient, to be pursued at SO level and its framework-level ambition abandoned. This extension also added a further benchmark under TQ Resilient for SO that improve access to new sources of financing or funding, including fully commercial bank debt, new access to bond markets or the introduction of land value capture.

125. There has been some limited progress on access to finance so far. One Green Finance Roadmap was developed and a municipal bond was recently issued. The preparation of a Green Finance Roadmaps (GFR) was initiated based on the agreement between the Bank and the Green Climate Fund (GCF) for support to Green Cities ("Green Cities Facility"). This GCF among other components included funds available for roadmaps to address the financial barrier of underdeveloped local capital markets. The GFR objective is to build the capacity of participating municipalities to address the key elements of accessing green finance markets including green bonds. They should develop the skills that cities need to attract private sector finance for green investments. According to the Facility Agreement, the roadmaps should include readiness assessments, tools and implementation plans to enable cities to access green finance. One GFR has been completed so far. In 2021 Tirana, Albania became the first and only city so far with which a GFR was developed (Box 4). Moreover as of 2021 two projects have been signed with TQ Resilient objectives to pursue new financial instruments for cities: The aim of the 51599 *Izmir Metro Project III* is to support the development of a land value capture model and identify

⁴⁷ See e.g. CS/AU/14-11: *EvD Special Study: Private Sector Participation in Municipal and Environmental Infrastructure Projects*

⁴⁸ 47582 GrCF - Tbilisi Solid Waste; 47899 GrCF - Chisinau Buildings; 49407 GrCF - Banja Luka District Heating; 49437 GrCF - Lviv Solid Waste; 51294 GrCF2 W2 - Sarajevo Public Transport Part 2

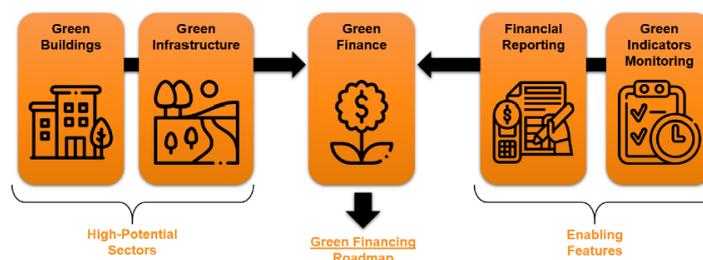
and earmark specific revenues from relevant commercial /real estate activities. In the 53815 Project *Kasbah*, the Bank supported the issuance of the first bond by a local authority in Morocco.

Box 4: Green Finance Roadmap Tirana

The GFR for Tirana was initiated in 2021 after the Tirana GCAP was completed in 2018.

The GFR was developed to help improve the municipality’s processes and procedures to diversify sources of green finance, particularly from the private sector.

The consultant framed the GFR within five components: Green Finance is the core component. It is supported by two technical sector components, Green Buildings and Green Infrastructure, and two enabling components, Financial Reporting and Green Indicators Monitoring. The GFR, one of the key outputs, was complemented by several technical reports and capacity building sessions.



The GFR is organised under three outcome areas, and for each outcome area there are priority recommendations (15 in total) to be delivered to catalyse a pathway towards scaled-up public and private finance for GC development.

- **Advancing green finance recommendations** include improvements to the consolidated financial statements of the municipality with audits to prepare for a creditworthiness assessment in order to obtain a credit rating and a future bond issuance for green projects.
- **Strengthening capacities and systems** includes incorporating green and climate criteria for project planning and budgeting.
- **Scaling up green solutions** includes expanding green infrastructure through policy and incentives and building energy efficiency in the municipality.

Insights from developing the first GFR:

- **Adapting to the city’s capacity and context improves implementation:** The initial ToR proved too ambitious in some respects for the readiness of the city and the political and regulatory contexts. A more detailed pre-assessment could be made in the future to tailor expectations to the context. In the case of Tirana the issue was alleviated through a collaborative inception phase between EBRD and the consultants to adjust the GFR methodology and components to the situation and needs. For example, the Monitoring, Reporting and Verification component was added, and the financial reporting component was appropriately revised.
- **Future GFR assignments should involve national-level entities early on.** Depending on the specific country context, some of the GC development-related aspects of responsibility, regulations, spending decisions, etc. come under the authority of upper-level government,
- **Broadening stakeholder engagement might increase inclusion and ownership:** Stakeholder engagement focused internally on the municipal staff. This could be broadened to benefit from a broader range of perspectives including those of end-beneficiaries and those directly or indirectly affected by the projects.
- **EBRD and the consultants appreciated the municipality’s active ownership and engagement, including at senior political levels and identified this a key success factor.** The municipal focal

points were responsive and engaged. They actively adopted the role of intermediaries between the consultants and the relevant municipal departments.

- **Efficiencies were gained from engaging the same consultant on both assignments of the 2018 GCAP and GFR.** Tie-in with the previously developed GCAP was an important link. The municipality had a vision, green objectives and priority projects. The GFR assignment eventually included elements of capacity building on green indicators monitoring as well that will enable the municipality to more effectively monitor and report on the GCAP implementation and outcomes. To maintain momentum and build on the process, the GFR could be provided to interested and engaged cities that have recently completed the GCAP.

Source: Green Financing Roadmap Summary Report, AECOM 2022; Green Financing Roadmap, Tirana: Final Report, Lessons Learnt Report, AECOM 2022; interviews.

6.4. Learning, networking and managing knowledge

126. Several important horizontal initiatives and activities help information flow and knowledge, internal and external stakeholder learning, and establishing connections among stakeholders across all areas of operations. To be “catalytic” for the cities the programme must effectively connect many elements of the EBRD system to achieve synergetic effects inside and outside the Bank. This was mentioned as a main GrCP attribute. The Board approval document for GrCF2 WII Extension 2 from November 2021 states, “Green Cities is now recognised as a leading player in city financing, with an ever expanding programme comprising 53 sub-Projects, a growing network of Green Cities (now at 51) and multiple tools for global outreach including an annual knowledge sharing events, attendance at high profile climate events including COP and WUF, a Green Cities Officer (GCO) network and a dedicated website www.ebrdgreencities.com. Moreover, the programme can harness the skills of the SIG banking teams with their municipal finance experience spanning more than 25 years and equally the climate finance skills of GECA (currently CSD)”.⁴⁹

Impactful efforts of knowledge management

127. The GrCP brings new meaning to an historically strong, attractive portfolio of (mostly) MEI operations. The Bank has substantial technical and financial expertise in this area. GrCP repackages the elements of this expertise in a novel way that ultimately delivers synergetic effects from combining strategic frameworks, investment projects, and a motivated change coalition of local stakeholders to implement them. During interviews the evaluation team met some initially sceptical EBRD bankers and specialists who saw GrCP as rebranding old “plain vanilla” MEI projects. But as the programme progressed and expanded, Bank staff better perceived and appreciated its systematic nature. An effective central GC unit included a mix of bankers and environmental policy specialists. This was subsequently expanded to include e-mobility, digital/smart technologies and inclusion expertise among others and created infrastructure and systems that effectively capture tacit and explicit knowledge produced in the Bank and acquired externally. The knowledge is used to design new potential solutions for a diverse group of municipal partners and clients who are keen recipients of and valuable contributors to new information/ knowledge.

128. Direct engagement with municipal authorities on a strategic level means that the Bank has a high-level overview of the city’s challenges and needs and understands the policies and regulatory issues that help formulate relevant project ideas. The Bank’s crucial role in supporting the development of GCAP also helps establish trust and strong partnerships with municipal stakeholders.

⁴⁹ BDS 21-140 Regional: Green Cities Framework 2 – Window II Extension 2

This opens new opportunities for Bank investments and for those by other financial institutions. One banker pointed out, “The Green City Programme really helps to build relations with the city”. Another colleague noted, “Initial concern that GCAP might become a box-ticking exercise is no longer relevant. GrCP provides good value for the Bank”.

129. Internally the Bank created a core governance and organisational structure that effectively manages information flows from bankers, technical and policy specialists, partner cities, consultants and clients. It is used for internal monitoring and reporting and for monitoring city level impact and shared across many channels, some of which have unrestricted access to programme data. The best example of this is www.ebrdgreencities.com. Transparent disclosure of large volumes of information about the GC methodology, approach, policy toolkit, GCAP approvals and public consultation events, GC practice cases, events and resources enhances programme visibility and stokes demand among potential participants. It also shows that the Bank “walks the talk” when insisting on transparent stakeholder engagement and disclosure of information about city approval and implementation of GCAPs. As a fully publicly-funded initiative, GrCP is subject to few restrictions on disclosing sensitive data.

130. Mayors of cities that are already GrCP members are also playing role of GC champions and encouraging their peers to reach out to EBRD. This is especially true when mayors also lead national associations of local authorities/mayors (case of Türkiye and Ukraine). There is evidence that city leaders are eager to participate in GrCP events and that they find the association with the GC brand to be very positive. There is always a possibility that programme participation is used for political dividends. However, aligning GCAP with both trigger and follow up investment projects creates additional leverage for a sustained prioritisation of the plan’s policy and investment actions.

131. Like all horizontal activities GrCP knowledge management is supported with donor funding.⁵⁰ Compliance with the internal EBRD systems and requirements, including IT platforms and software, puts certain limitations on filing and retrieving programme information internally. EBRD’s IT capabilities are currently being seriously reengineered to match the Bank’s growing ambition. The programme is one of a very few initiatives allowed to have a dedicated website. Its platform and design are more advanced than the ebrd.com platform. This significantly improves user experience and the accessibility of information. It is in fact far easier to find proactively disclosed information about GrCP externally than internally. It should be noted that the evaluation team received all necessary background information from the GrCP team, which possessed the relevant skills and capabilities, always reacted promptly and was very helpful. EvD found the programme’s information management system to be quite efficient and complete.

Effective learning loops and innovation

132. GrCP provides good insights into the opportunities and challenges of EBRD’s internal institutional learning and innovations. Evaluation has encountered various feedback loops in the GrCP design and evidence of institutional learning based on real-time data/information from EBRD bankers and policy experts, GCAP consultants, municipal stakeholders and external partners. The dual programme leadership of banking and policy teams creates a good balance of practical actions, experimentation and reflection on what has and has not worked. CSD colleagues cover the programme’s strategic and policy elements and its constantly evolving approach, while bankers lead on managing relations with municipal stakeholders and building a pipeline of projects aligned with GCAP priorities. All key decision makers associated with the GrCP were very vocal about the programme’s weaknesses and challenges internally and externally and indicated how internal thinking is going to address them.

⁵⁰ Key donors include government of Japan, Austria, Taipei China, Sweden, Czech Republic, Poland, Korea, GCF and CTF

133. The programme’s rapid expansion, the Bank’s new impact methodology (2017), the emergence of new EBRD strategic priorities (50 per cent of GET ABI, gender and inclusion, smart and digital solutions) and Covid-19 resulted in a revised approach and methodology and expanded policy toolkit (see Section 6.1 for details). Finalised in October 2020, GCAP Methodology 2.1 created a stronger focus on (i) resilience; (ii) gender equality, and (iii) economic and social inclusion.⁵¹ It was prepared on the basis of the review of what worked or did not work in the initial GCAP methodology, the pandemic’s impact on the delivery of municipal services and mid- to long-term planning of green municipal investments. ICLEI, one of the co-authors of the original methodology, did the review in the first months of the pandemic and delivered the results in July 2020.⁵² It included feedback from nine green cities that had nearly prepared a GCAP.⁵³ Quickly delivered the review was nonetheless comprehensive and thoroughgoing. It used a mixture of methods and consulted a wide variety of stakeholders, although delivered fully remotely due to lock-down.

134. **Similarly, reflections and feedback loops are integrated into the various tools and instruments used for advancing GCAP development and implementation.** For example the first pilot guidance of the Smart Maturity Assessment included a review and enhancements based on feedback from the cities, consultants and clients.⁵⁴ Connections with the recently established Digital Hub made it possible to further expand opportunities for applying smart and digital technologies to support cities as they realise their ambitions to be green and climate resilient. Moreover, colleagues from the engineering, gender equality and inclusion teams noted the iterations of their processes and practices (such as the Gender tag) in GrCF projects.

135. **Consultants’ feedback is another pool of knowledge that is constantly obtained, reflected upon and used for future actions.** It is delivered in the form of reports (explicit knowledge) and through regular meetings with the GrCP team (tacit knowledge). All consultants produce Lessons Learned Reports upon completing each GCAP. These contain useful material for future refinement (see Annex 9 with the synthesis of findings from the consultants’ reports made available to EvD).

136. **Learning and innovation at the city level is a primary objective of the GrCP. All activities regarding the preparation, implementation and monitoring of its execution are designed to provide municipal authorities with new knowledge and skills from the reports of external consultants and from EBRD.** Interviews with GCOs and some city leaders carried out for the deep-dive cases and attending GrCP events confirm that most stakeholders experience a steep learning curve. They also demonstrated their readiness to teach others in the growing trend of horizontal exchanges where cities that have only recently joined the programme visit others where GCAP implementation is advanced. They can learn on the ground about the specifics and challenges and how to overcome them (for example representatives of two Kazakhstan GC visited Izmir in autumn 2022). This was in addition to the field visits and conferences in the “green cities” of Western Europe (Stockholm in 2018 and Vienna in 2022).

137. **The programme is constantly innovating and gradually adding new components.** The latest components include the Green Cities Start-up Innovation Challenge for companies that have developed and deployed innovative solutions to achieve carbon neutrality in urban areas.⁵⁵ Launched in September 2022 by GrCP jointly with the EBRD Star Venture Programme, it announced the winners in December 2022. This is another example of cross-departmental collaboration enabled through the GrCP core team that delivers solutions for partner cities to achieve their environmental objectives.

51 EBRD. Green City Action Plan Methodology, October 2020.

52 ICLEI. Analysis of how EBRD can amend the EBRD Green Cities Approach to support Covid-19 crisis response.

53 Izmir, Yerevan, Tbilisi, Tirana, Zenica, Lviv, Almaty, Chisinau and Amman.

54 This is SIG-wide tool, rather than specific to GrCP.

55 Intranet post “Time to be bold: The Green Cities Start-up Innovation Challenge”, November 2022. See <https://intranet.ebrd.com/16155/time-to-be-bold-the-green-cities-start-up-innovation-challenge>

Proactive outreach and networking

138. **The GrCP has substantially increased its outreach and networking agenda connecting different groups of municipal stakeholders from GCOs to mayors to CSOs.** As the programme has reached more cities across all regions of EBRD operations, its stakeholder engagement and outreach activities have matured and expanded. This was also driven by the dedicated expertise hired for the core GC team. Stakeholder engagement and communication is at the heart of GCAP development. It hones to clearly defined objectives and mechanisms, some of which are captured in the various internal and external guidance such as “EBRD Green Cities Stakeholder Engagement Guidance for GCAPs”.

139. **GCOs play an important role steering the process of GCAP preparation, implementation and monitoring on the municipality side as the main points of contact for EBRD’s GC team and international/local consultants working on the plan.** They facilitate relations with various municipal teams, organise internal and public consultation meetings and provide annual reports on progress achieved in GCAP implementation (see section 6.2 for details). This model was first tested in the very first Tbilisi GCAP and adopted as the key element of project governance at city level. GCOs are usually public servants from municipal administrations, although a dedicated GCO can be hired occasionally to manage the process to fill an existing capacity gap. These positions are sometimes funded by the TC provided by EBRD (case of Sarajevo).

140. **The network of GCOs was created in October 2020 as the number of green cities was increasing dramatically and required more internal coherence.** Currently there are members from all 35 cities where a GCAP exists or is of being prepared. The network has an established action plan, participants receive a bimonthly e-newsletter with key programme updates from the cities, links to useful documents, and highlights of past and forthcoming events organised either by the EBRD or by external partners, where EBRD might facilitate GC participation. EBRD holds dedicated GCO events during annual GrCP conferences and tries to celebrate their successes through awards.

141. Table 3 summarises selected events organised or facilitated by the GrCP team in 2022. Some focus on acquiring new skills and broadening the horizon of GCOs and municipal specialists by exposing them to new solutions and technologies while others provide a platform for showcasing successful (or failed) practices from various green cities and learning from peer’ experience.

Table 3: Selected Green City events, 2022

| # | Event | Date | EBRD workshop | EBRD large event | External event |
|---|---|----------------|---------------|------------------|----------------|
| 1 | Online energy security workshop | April 2022 | ✓ | | |
| 2 | GrCP event at EBRD Annual Meeting (Marrakech, Morocco) | May 2022 | | ✓ | |
| 3 | Online workshop on nature-based solutions | June 2022 | ✓ | | |
| 4 | World Urban Forum (Katowice, Poland) | June 2022 | | | ✓ |
| 5 | Online workshop on e-mobility | September 2022 | ✓ | | |
| 6 | Online launch of Green Cities Start-up Innovation Challenge | September 2022 | | ✓ | |
| 7 | Green Cities Annual Conference (Vienna, Austria) | October 2022 | | ✓ | |
| 8 | COP27 (Sharm El-Sheikh, Egypt) | November 2022 | | | ✓ |

Source: GrCP communications

142. The evaluation team participated in two annual GrCP conferences and in its event at EBRD’s Annual Meeting in Marrakech. It demonstrated great interest and engagement and showed clear evidence of peer learning and interest in more horizontal connections among mayors, municipal officials, GCOs and external stakeholders and CSOs.

143. GrCP also reaches out to a wide range of non-governmental stakeholders who are very interested in the climate change and environmental aspects of municipal development. Local stakeholders are usually engaged in the events in their own city or are invited to specific international events to showcase their experience. At the EBRD Annual Meeting in Marrakech, the Green Cities event attracted many CSOs and included city activists as panel members. There is also engagement with regional and international CSOs helping active citizens and local organisations to enhance their participation in the decision-making and oversight of the activities of municipal and state authorities. Examples of productive collaboration with CSOs include the CEE BankWatch Network, which issued its own guide to EBRD’s Green Cities for CSOs offering practical advice on communications themes and channels with the municipality during the development and approval stages and during GCAP implementation.

144. EBRD’s approach to engaging with external stakeholders is positive, and takes on board lessons learned from other organisations, including other MDBs. Some MDBs have used programmes like GrCP to enhance green investments in cities but somewhat neglected the role of stakeholder engagement, which had consequences for the result (IADB case). **However, intensive engagement and outreach, and high-quality knowledge management that leads to institutional learning and continuous innovation requires resources that are not always available internally. Donor support is crucial for producing and disseminating information and knowledge through various channels and ensuring incremental improvement in programme activities, instruments and results.**

6.5. Contribution to significant environmental change at city level

145. Given the programme’s overall objective of environmental improvement at the city level and its implementation through municipal infrastructure, the overall objective was not expected to be achieved by now. This is therefore an interim evaluation of an ongoing programme that has only just completed its first phase of growth. The evaluation has identified the characteristics that distinguish this programme from other Bank frameworks and that have set it on the path to successfully achieve its objective. These include the design of the GCAP methodology, the combination of technical assistance and investment, a new business model of city-level engagement, efficient internal governance and constant learning that leads to iterative improvements. There are also external factors of success that are not fully within the Bank’s control but can be partially supported or identified. The evaluation also noted some deficiencies in programme monitoring, which will prevent it from making inferences about the environmental impacts of GCAP implementation to substantiate future claims that it achieved its overall objective if they are not addressed.

146. The programme brought climate mitigation and adaptation considerations to support planning cities in regions that have not been at the forefront of these efforts historically. This has been especially important for secondary cities that have not been part of larger schemes and initiatives such as the Covenant of Mayors or C40. There is an element of a demonstration effect that should be harnessed and promoted to incentivise cities to join a programme such as GC. The programme does this by dedicating resources to horizontal events for cities, by sharing experience, supporting the GCO network and twinning events. While monitoring does not capture this and it is nearly impossible to quantify in terms of green results, there is qualitative evidence that shows that these kinds of events keep cities engaged and motivated in GCAP implementation.

147. There are many reasons to focus on cities in climate action. These include growing urbanisation and population share, being one of the largest sources of carbon emissions and vulnerability to the consequences of climate change. In the various contexts in which EBRD works the illustrative case studies show that the GrCP can deliver specific additional value here.

Box 5: GrCP contribution in the context of case study cities

- **Izmir:** This large, developed city with extensive internal capacity can harness the programme benefits and manage synergies with other strategic planning such as SECAP. Business and trade links to the EU ensure that climate considerations are on the political agenda. The high financial additionality of EBRD investment is driven by the specific political-economic context. Sufficient decentralisation supports independent decision making.
- **Sarajevo:** In a fragmented country with a complex governance structure that prevents any meaningful progress on EU accession climate commitments and harmonisation, strong political leadership can deliver meaningful actions and commitments at the city (Canton) level. Low internal administration capacity creates key-person risk and there is the risk of losing political ownership after a democratic change of leadership. Decentralisation together with complicated multi-tier governance necessitates sovereign guarantee. Within the context of GrCF Sarajevo is one of the most successful cities in terms of number of EBRD investments.
- **Ulaanbaatar:** Citizens recognize the great need for environmental improvement, which is a political priority. Low internal capacity and high turnover of municipal staff means that the GCAP is not a living document. In the context of low donor coordination, large development partners follow their own strategies in one-to-one with the central government and the UB municipality. Mongolia is highly centralised and EBRD presence in the municipal sector is limited so far.

7. Insights and Recommendations

7.1. Key findings and insights

148. This interim evaluation finds that in its first five years of implementation the programme has established a credible path to achieving its overarching objective of “becoming a catalyst for addressing environmental and climate change challenges at municipal level” and to anticipated transition results at city level. The Bank proved its ability to connect meaningfully with cities’ strategic visions and directions, to offer relevant support in developing a roadmap of realistic and essential actions and to provide financing for implementing the selected actions. However, the catalytic benefit has not fully materialized yet and the upcoming phase will be key in delivering on the overarching objective. An evaluation in 3 to 4 years is recommended. It will have to focus on the environmental changes achieved and the transition results at municipal level.

How the Green Cities Programme Is adding value for cities...

149. The programme integrated climate mitigation and adaptation considerations into the local strategic context by informing and supporting urban planning in the regions and countries that have not been at the forefront of these efforts historically. This has been especially important for secondary cities that are usually not part of the larger schemes and initiatives such as the Covenant of Mayors or C40. Demonstration effect of the programme has incentivised new cities to join and it should be harnessed and promoted albeit with considerations about operational efficiency and resource availability. The programme’s strong demonstration effect is largely enabled by its donor-funded

effective horizontal activities, extensive peer-to-peer learning opportunities and networking. The programme monitoring does not capture this and it is nearly impossible to quantify in terms of green results but qualitative evidence shows that these types of actions keep cities engaged and motivated in developing and implementing their GCAP.

GrCP has empowered cities to define their own green objectives and related investment priorities (strategic)

150. The Bank proved its ability to connect meaningfully with the cities' strategic visions and directions, to offer relevant support in developing a realistic and essential action plan and to provide financing to implement selected actions. This roadmap is then visible to many external stakeholders, including potential investors, who might have a greater comfort in city's ability to prioritise, commit and follow up on the green investment projects.

151. As the main GrCP tool the GCAP is well integrated into the existing strategic and legal framework. In most cases, local ownership of the GCAP has been underpinned by guided, expertly supported processes of technical assessment, public consultation and political deliberation. Nevertheless, these processes and follow-on implementation depend on the powers delegated to municipal authorities and the centrally imposed limits on municipal borrowing. Centralised governance models require that national authorities be more involved.

152. Environmental and climate challenges are appropriately reflected in the priority policy and investment actions identified. Lack of GHG emission monitoring might impede future monitoring of implementation and integration into city priorities that increasingly have emission targets.

GrCP offers a robust analytical, systematic approach and link to investment finance (operational)

153. By developing GCAPs the programme supports an analytical, comprehensive approach to the cities' green path in municipal infrastructure. The GCAP methodology developed in 2016 and refined in 2020 is elaborate and comprehensive and underpins programme implementation conceptually and practically. Previous EBRD frameworks and programmes have not shown such sophistication. The programme's key strength is the ability to connect the preparation of a GCAP rooted in a city's strategic objectives with the provision of investment finance to implement actions. Both internal and external stakeholders identified this link between planning and investment as a key strength of the programme and of the Bank as its main protagonist, contributing to its ability to facilitate concerted action. This compares to initiatives by other MDBs that provide methodological support to cities in developing studies or strategic plans but that are not equipped to provide access to finance. While using standardised methodology, municipalities can localise its toolkit to fit their context with the support of the consultants – there is room for improvement, however.

GrCP offers a unique opportunity for peer-to-peer learning and shared value for participating cities (operational)

154. The GrCP is a successful example of continuous learning and innovation achieved by connecting participating cities to each other and with international expertise and centres of excellence in urban

sustainable development. EBRD has a history of transition-to-transition networking where countries of operation can learn from one another. The GrCP offers a new level of systemic, continuous connection and learning for cities that are implementing similar actions in different contexts. Networks created among different groups of stakeholders (i.e., mayors, GCOs) create new opportunities and are good channels for promoting the GC ethos among peers. These activities represent significant programme-level non-financial additionality.

And how it could do more...

GrCP has made limited progress on programme-level financial additionality so far (strategic)

155. The ambition is that the programme enhance its financial additionality at Programme level, through bond issues and Green Finance Roadmaps. Whereas this potential exists, the progress has been limited so far. The second GrCF introduced more ambition of the Programme on facilitating cities' access to finance, especially beyond public sources. It added bonds to the framework's possible use of proceeds and introduced Green Finance Roadmaps. Issuing green or sustainability-linked bonds structured by the use of proceeds based on a GCAP or linked to KPIs based on the GCAP would be a great programme achievement. It would establish the GCAP as a platform for impact investors and directly link the source of its non-financial additionality (GCAP) to financial mobilisation. Developing programme-level financial additionality is closely tied to the programme's ambition to become a sector-wide catalyst. → [Recommendation 2](#)

GrCP approach to municipalities' capacity building needs to be more robust (operational)

156. In the next phase, more effort will be required to ensure that the municipality's skills and knowledge to implement, monitor, evaluate GCAP and plan its future iterations are consistent and ongoing. Capacity building requires more robust localisation to respond to the real needs of municipal authorities and to fill the gaps in their capabilities. → [Recommendation 3](#)

How the Green Cities Programme is adding value for the Bank...

GrCP led the way in GET systemic approach (strategic)

157. The programme has been leading the way from mainstreaming green actions to a systemic approach to the green transition within the Bank. While it was initiated within the framework of the initial GET approach, the programme's design and strategy were already spearheading the new approach described in GET 2.1. It involves not only alignment with the Paris Agreement commitments, but also enhanced policy action and structuring operations in specific thematic areas promoting environment-specific integration across targeted sectors.

GrCP enables the integration of cross-cutting issues at programme level through the GCAP (strategic)

158. The 2020 extension of the framework represented a step-change in how GrCP integrates SCF priorities. The GCAP methodology revision in 2020 was prompted by the accumulated lessons of the

first years of implementation and by the Covid-19 pandemic, which demanded support to strengthen cities' resilience. Cross-cutting priorities were incorporated at the programme-level, rather than at SO level, making them integral part of the GCAP development process. They became part of the city strategy, policy, and investment actions, not just in operations financed by the EBRD. Crisis response and resilience capabilities are particularly important in many green cities given the ongoing war on Ukraine and its implications for many neighbouring countries.

GrCP demonstrated agile learning and responsive design (operational)

159. Several crises have affected the programme, including a global pandemic that required a very dynamic response and altered support offer to ensure that municipal stakeholders have the essential tools to strengthen their resilience. The evidence shows that the programme was successful in demonstrating agility and taking a pro-active approach to crises and incorporating the resulting lessons into its own methodology. Extensive internal and external networks and a pool of consultants were harnessed effectively to design and offer relevant solutions. In the current context of significant crisis created by the war on Ukraine, the GrCP is quite able to serve as the basis for reconstruction-related priorities in Ukrainian cities and for the challenges facing cities in affected countries.

GrCP creates Banking pipeline (operational)

160. The strength of the programme from the cities' perspective is combining technical expertise in strategic planning with access to investment finance. This has practical relevance for EBRD banking teams, which emphasise the GCAP's value for establishing a credible pipeline of potential investment projects. In this way, the programme has introduced a new business model that shifts from projects responding to individual demand or need to a proactive approach of developing investment and policy plans. The cities have already prioritised the GCAP actions, which are assessed on the basis of their potential benefits and linked to wider strategic and environmental objectives to which they contribute. This is a unique feature compared to implementing traditional stand-alone MEI projects. It also saves some time and resources on the extensive project preparatory stage.

And how it could do more...

GrCP has yet to scale up the integration of sectors and EBRD-side catalysation (strategic)

161. The intention and design for sector integration within the programme has not yet fully materialised in practice and is the next milestone in its systemic approach to GET. The GrCF SO have been almost entirely within the MEI sub-sectors so far; only one energy distribution project has been signed. Further integration of renewable and urban energy projects is the programme's objective if the intention of catalysing additional GET investment should be realised. There is as yet no strong indication that the GrCP is increasing GET investment in the Bank rather than continuing existing strong MEI GET delivery and consolidating it under the Programme ⇒ [Recommendation 1](#)

GrCP effectiveness would benefit by growing in depth and intensify of its contribution to policy actions (strategic)

162. The first five years of programme implementation can be characterised as its initial phase that was dedicated to establishing and promoting it and its growth within the regions and to new cities. EBRD participation in GCAP implementation has been increasing, while the Programme growth so far has been enabled through expansion to more green cities. While it is fair to say that all cities in EBRD's countries of operation (fitting the criteria) can benefit from GrCP participation, the expectations for the next phase as expressed by the programme's leadership and confirmed by this evaluation is for the Programme to increase its focus on further implementation in participating cities and identify the enablers for translating GCAP priority actions into investment projects. This could be greatly assisted if EBRD were to participate in implementing GCAP policy actions, whereas currently it is centred largely on investments. The existing intention for GCAP policy implementation should be backed by sufficient funding for non-transactional policy projects. ⇒ [Recommendation 1](#)

GrCP's successful cross-team integration needs to be strengthened by greater localisation (operational)

163. The programme has succeeded in building an unparalleled internal ecosystem connecting banking and climate strategy functions with various policy and delivery departments across all regions of Bank operations. It dedicates resources for strategic planning, management, monitoring and reporting, stakeholder engagement and learning, enabled by a small inter-departmental core team and involving a larger group of in-house experts on a regular basis, under the guidance of MD/Director-level Steering Group. It manages to overcome Bank-wide system and process limitations thanks mainly to the generous support of donors and relative autonomy due to its (city-led) nature. It has reinvented traditional Bank functions and high-quality expertise through connections and synergies and its agile delivery model reacts quickly to a very fluid environment. It surpasses previously developed and implemented frameworks in the Bank. But further improvements are required to ensure greater and continuous local ownership and the localisation of a standard approach by better use of RO-based bankers and climate policy experts who are key in managing relations with municipal, national and other in-country stakeholders. ⇒ [Recommendation 3](#)

GrCP's monitoring of Transition Impact is inadequate (operational)

164. The framework's current transition impact monitoring and reporting is not commensurate with the programme's size and importance. It does not provide crucial information on the outcomes and impact along the benchmarks agreed with the Impact team at the outset. This concerns especially the lack of data collection on the achievement of verifiable targets of GCAP actions. In addition, the design of the transition monitoring has not been updated to reflect the programme's growing ambition. GCAP-aligned policy action is not at all reflected in programme TI monitoring and reporting. If left unchanged, the current approach will not yield the necessary data and analysis to substantiate the eventual achievement of green transition results or the overall objective of significant environmental change at municipal level. The intentions for an end-of-GCAP assessment and follow-up are not currently specified but this would be one way to close the existing monitoring gap. ⇒ [Recommendation 4](#)

7.2. Recommendations

Two strategic recommendations

165. **Recommendation 1.** Strengthen the catalytic function of the programme and synergies across sectors to derive maximum value from the prioritisation exercise through deepening GCAP implementation with follow-on investments, including in the energy sector, and accompanying policy action. Policy action implementation requires non-transactional TC funding and a framework-level benchmark to track it, which does not exist currently.

166. **Recommendation 2.** In the next extension of the framework to be brought to the Board for approval, the GrCP should clarify the ambition of providing support to cities in financial mobilisation through Green Finance Roadmaps and municipal/ green bonds. If the experience of GrCF2 implementation shows that its objectives in this area are not attainable for contextual reasons, this should be specified. If the ambition of GrCF2 is still in place for the future of the programme, support to cities in financial mobilisation should be enhanced. This should be supported by articulating framework-level targets for this aspect of the programme to facilitate future accountability.

Two operational recommendations

167. **Recommendation 3.** Enhance the localisation of the approach to GCAP development and implementation by optimising the use of RO-based in-house expertise (bankers and climate strategy and delivery specialists) and consultants, including local consultants, and through tailored continuous capacity building actions matching the city's initial and developing capabilities and needs.

168. **Recommendation 4.** To enable the programme to translate its implementation and delivery into credible narratives of successful Green transition, substantial improvement in its transition monitoring and reporting will be needed. This in the first instance means delivering on the programme's existing commitments under the current transition monitoring framework to provide adequate reporting on the Bank's transition mandate. In the next steps, the programme should consider strengthening the transition monitoring framework in line with its increased ambition in GrCF2.

Possible actions which could be considered for implementing recommendation 4 include:

- Consolidate TI reporting into a single report and deliver adequate data and narrative reporting on the TQ Green benchmarks for the next round of TI reporting (September 2023), including progress on GCAP verifiable targets and meaningful reporting on the overall programme objective.
- Better integrate the Impact team representative into the core GC team to ensure that reporting quality corresponds to the intended substance of the benchmarks and to the programme's scale and importance.
- Consider incorporating new programme objectives/benchmarks to support the expanded ambitions in urban resilience and cross-cutting priorities.
- Incorporate city-level progress updates. For each new (follow-on) sub-operation with a city provide a one to two-page annex summarising city-level progress in the GrCP, including on GCAP action implementation, on the verifiable targets and GCAP objectives achieved, on environmental impacts where relevant and on implementation challenges and opportunities.
- Clarify the intentions and resources for end-of-GCAP impact assessments and intentions for cities at the end of their GCAP timeline in the next extension of the GrCF.

ANNEXES

Annex 1. Overview of Green Cities frameworks

The initial Green Cities framework (GrCF, 48171) was approved by the EBRD Board of Directors in November 2016.⁵⁶ The total headroom approved for the GrCF was €250m for an expected duration of five years. While its geographical coverage was all EBRD countries of operations, the framework intended to focus on Caucasus, Moldova and Belarus in the first instance, and further roll out to Western Balkans. The sub-operations (SOs) were to consist of sovereign and non-sovereign loans to governments, municipalities, municipal owned utility companies and private companies providing municipal services. The use of proceeds of the SOs were investments within municipal infrastructure sectors, which also addressed climate change mitigation or adaptation. The framework included specific eligibility criteria, and the requirements of process and standards were stipulated for all SOs. It also introduced the following definition of a Green City, based on the purpose-developed Green City methodology, developed by ICLEI/OECD.

Box 6: Green City definition

A Green City is a city which shows high environmental performance relative to established benchmarks in terms of i) quality of environmental assets (air, water, land/soil and biodiversity), ii) efficient use of resources (water, energy, land and materials) and iii) mitigating and adapting to risks deriving from climate change, while maximising the economic and social co-benefits and considering its context (population size, socio-economic structure and geographical and climate characteristics).

Source: Green Cities Framework (GrCF) BDS16-207

The strategic context of the GrCF was firmly rooted in the context of climate change and the comprehensive need for scaling up financing for adaptation and mitigation investments. The framework document noted the significant environmental impact of cities, which reportedly account for 70% of energy use and 80% of greenhouse gas (GHG) emissions, as well as being the sources of air and water pollution and waste generation. Targeted investment with environmental benefits on cities could contribute to delivering each country's climate change action objectives as per the Paris agreement. Internally, the framework was presented as an instrument of the GET approach, noting that investments in cities are seen as a 'key channel of delivering *GET targets*'.

The GrCF introduced a new systematic approach to prioritising investment at city level, underpinned by the development of Green City Action Plans (GCAPs). The approach to implementation is tied to the development of a GCAP by each participating City, a conditionality for each City joining the GrCF. The engagement with a City typically starts through the first investment ('trigger investment'), in the course of which the municipal authorities commit to the development and adoption of a GCAP. The EBRD supports the development of the GCAPs through consultancies financed by technical cooperation (TC) funds. The consultants carry out baseline diagnostics using a set methodology, identifying priority environmental issues to be tackled. Based on the diagnostics, the consultants support the city in articulating the City's vision, strategic objectives and priority actions for the GCAP. The GCAP sets out

⁵⁶ BDS16-207

clear targets for achieving environmental improvements, and lists the key programmes to address the priority areas, identifying priority investments and policy actions. The GCAP is approved and adopted by the appropriate municipal authorities. The aim is that after the initial investment, subsequent projects will be driven by the GCAP priorities, and may be financed from a variety of sources, including the municipal budget, other IFIs or commercial lenders, including through municipal bond issuance. The GCAP methodology was prepared for the Bank by the CSO Local Governments for Sustainability (ICLEI) and OECD.

Box 7: Green City approach

A Green City Approach is an integrated, multi-sector process whereby a city's environmental challenges are periodically identified, prioritised and addressed through targeted investments and services, regulations and other relevant policy instruments with the aim to enhance the city's environmental performance in a cost-efficient and financially sustainable manner, while at the same time seeking to maximise the economic and social co-benefits .

Source: Green Cities Programme Methodology, EBRD 2016

The overall objective articulated in the first framework was to serve as a 'sector-wide catalyst for addressing environmental challenges' at the City level, while its transition rationale and objectives were based on the pre-2016 Transition Impact (TI) concept. The overall GrCF objective was to achieve significant environmental improvement in at least one priority environmental challenge for each GrCF country of implementation, by the end of the framework (5 years). The transition objectives of the framework were articulated based on the pre-2016 TI concept. The key transition expectations included i) improved framework for markets, through the implementation of GCAPs, but also public service contracts (PSCs) and tariff reforms; ii) demonstration of new replicable behaviour and activities, expected to demonstrate how the implementation of GCAPs can help address core environmental challenges in a cost-efficient and financially sustainable manner; iii) demonstration of successful restructuring, through TC delivery of corporate development programmes (CDPs) and Financial and Operational Performance Improvement Programmes (FOPIPs), and iv) private sector participation, through outsourcing and incentive based management contracts.

The GrCF's rapid implementation led to the follow-up framework (GrCF2, 50440 & 50674) being brought for approval after two years, in October 2018.⁵⁷ The initial framework was being rapidly utilised, and a fast growing list of participating Green Cities started to emerge. The GrCF update reported that within 22 months of implementation the framework funds were mostly committed through 11 investment projects (€214m) in nine cities of nine different countries, with a strong pipeline exceeding the available remaining headroom. Three GCAPs were completed at that time (Yerevan, Tbilisi, Tirana) with seven others under development. The new framework proposed a scaled-up headroom of €700m for an expected duration of further five years. The GrCF2 continued to deploy similar instruments in the main municipal infrastructure areas while addressing climate change and environmental challenges.

GrCF2 was split into two implementation windows, with Window I dedicated to co-financing with Green Climate Fund (GCF). The allocated headroom for both windows was €350m. The co-financing from GCF for Window I was anticipated to materialise through three tranches of Green Cities Facility (GCF-EBRD FP) totalling €228m, for concessional loans (€180m), capex grants (€30m) and TC (€18m). The split into two Windows affected the eligibility criteria for sub-operations, whereby Window I was only open to

⁵⁷ BDS18-183

operations in nine countries⁵⁸ which had given their endorsement for the funding proposal. Window II was open to operations in all CoOs. There were also some additional eligibility criteria tied to the GCF co-financed operations.

The objectives of GrCF2 remained broadly consistent with GrCF, while pursuing enhanced ambition through higher impact thresholds, strengthened GCAP methodology and facilitation of access to finance. While the general approach of operations under GrCF2 remained rooted in the development and implementation of GCAPs to pursue significant environmental improvements at the City level, the framework introduced '*enhanced level of ambition*'. One aspect of this was focused on further implementation of GCAP actions, with at least half of SOs being follow-on projects on existing GCAPs. The methodology for GCAPs was also refined, introducing more attention to coherence with existing city plans and strategies. It also improved the process for stakeholder involvement and feedback loops in the GCAP development. Another change was introduced in the eligibility criteria and their 'impact thresholds', which were made more stringent for SOs. Finally, the framework brought new attention to helping cities access capital beyond public finance. It committed to develop the tools and skills cities might need to attract private green investments, particularly in local capital markets. As part of this effort, the Bank would support selected cities in developing Green Finance Roadmaps for attracting finance for green investments.

The transition rationale of GrCF2 was based on the TQ-based transition concept and targeted TQ Green and Well-governed objectives. The transition objectives of GrCF2 were articulated within the Transition Qualities (TQ) framework. The key objectives on environmental improvements including policy interventions were operationalised under TQ Green. TQ Well-governed comprised objectives around the development and adoption of CGAPs, as well as the strengthening of contractual and regulatory setups at City level through PSCs and tariff reforms. The improved access to green capital markets and Green Finance Roadmaps were also included under TQ Well-governed. At this time the transition objectives and benchmarks of the original GrCF were also brought under the TQ framework and harmonised with GrCF2, while the two frameworks continued to be monitored separately.

Both GrCF and GrCF2 were designed with additional TC support at framework, City, and project level, and anticipated further subsidies through non-TC grants and concessional finance. An important element of the Green City approach is the significant amount of TC and further non-TC subsidies that facilitate the viability of the GCAP approach and in some cases the affordability of the investments. GrCF introduced framework level TC for GCAP development (approx. €300k per City) and a framework level GCAP manager position. In addition, similar to other SIG projects, pre- and post-signing TCs include support for feasibility studies, audits, gender advisory, PIUs, corporate development programmes, CSO capacity building, as relevant. Non-TCs in the form of grants would be provided for up to one third of project costs for eligible projects. GrCF2 specifically introduced GCF co-financing Window but TCs and capex grants were to be used in both implementation Windows. In total, for €700m of EBRD finance GrCF2 projected €329m in additional subsidy (€188m in concessional loans, €101.5m in capex grants, €39.5m in TCs). Notably, TC of €500k per City for the preparation of Green Finance Roadmaps was added under GrCF2, with the expectation of four Roadmaps to be developed.

In February 2020 the majority of EBRD finance allocated for Window I (WI) was reallocated to Window II (WII).⁵⁹ The reallocation of €217m from WI to WII was requested due to limited implementation under WI. At this point, no projects under WI had been signed, while there had been nine projects (€260m approved) signed under WII with a pipeline which indicated that the headroom in WII would soon be exhausted. The reason given for the underutilisation of WI was the relatively later effectiveness of the GCF facility, which did not become operational until second half of 2019. There was however an

⁵⁸ Albania, Armenia, FYR Macedonia, Georgia, Jordan, Moldova, Mongolia, Serbia and Tunisia

⁵⁹ BDS18-183 (Addendum 4)

expectation that with future framework extensions further funds would be allocated to co-financing with GCF.

An extension of GrCF2 in October 2020 added €950m headroom to Window II together with introducing changes in the GCAP methodology.⁶⁰ This extension of Window II was to be implemented within the original timeframe of the GrCF2, by the end of 2023. Likewise, the eligibility criteria for sub-operations of Window II remained unchanged, while new use of proceeds were added, including nature-based solutions, climate resilience, renewables, smart solutions and urban regeneration. The extension also described the effects of the Covid19 pandemic on the approach to the programme, manifested in the revisions of the GCAP methodology to include a risk and vulnerability assessment, consideration of gender equality and economic inclusion, consideration of the co-benefits from green investments, a smart maturity assessment, and consideration of Just Transition where appropriate.

The programme also extended its flexibility with respect to the appropriate counterparty – while initially the programme worked with municipalities which had sufficient autonomy to enact the GCAP, it had now started to also work with alternative levels of governments where the country's level of centralisation/ decentralisation makes it relevant, such as at regional or even central level; the cases of Egypt and Moldova were provided as examples of this approach.

The extension changed the transition ambition of the framework: only TQ Green remained in framework-level focus, while secondary TQ options were extended for SOs with no framework level targets. The main framework level transition objective of significant environmental change in each country of GC operation through the implementation of GCAPs remained in place under TQ Green. However, the secondary Well-governed TQ, which until now was universal for all SOs, was made optional – each SO can choose between Well-governed, Resilient, Competitive and Inclusive, depending on the nature of the project. The secondary quality therefore ceased to have any framework-level ambition, and would only be tracked at SO level. Notably, this means that the development of Green Finance Roadmaps, initially under Well-Governed and with framework target of four Roadmaps developed, has now been moved under Resilient and has no target.

In November 2021 a second extension to GrCF2 Window II (53170) was approved, with a headroom of €2,000m.⁶¹ While approved with its own project document as opposed to an addendum to GrCF2, this extension represented an additional headroom to Window II, still to be implemented within the timeframe of GrCF2 by the end of 2023. There were relatively minor changes in the implementation prospects; the anticipated investments now specifically mention guarantees, in addition to loans and bonds; eligibility was lowered for cities over 50k population (from 100k previously), and GCAPs now specifically mention a link to countries' NDCs. The volume of the extension exceeds the previous available headroom of the framework's both Windows (€1,650m), to be utilised within two years. The need for such significant extension was explained by the existing pipeline of projects, as well as the expansion of the framework operations to the power sector and urban PPPs. *The implementation of this second extension is not within the scope of this evaluation.*

⁶⁰ BDS18-183 (Addendum 14)

⁶¹ BDS21-140

Annex 2. Green Cities frameworks – comparison of key characteristics

| | GrCF BDS16-207, November 2016 | GrCF2 BDS18-183, October 2018 BDS18-183 (Addendum 4), February 2020 | GrCF2 extension of WII (GrCF2-1) BDS18-183 (Addendum 14), October 2020 | GrCF2 extension2 (GrCF2-2) BDS21-140, November 2021 (<i>implementation out of scope of the evaluation</i>) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|--------------------------------------|--|--|--|--|------------|-------------|--|----------|--------------------------|--------------------|--------------------------|---|--|-----|------|------|-------|-------|------------------------|-------|--|-----------|------|--|--------|------|--|--------------------------|-----|--|-------------|--------|------|----------|-------|------|--------------------|------|------|----------------------------------|-------|-------|------------------------------|--------|--------|-------------|--------------|--------------|---|--|------|------|-------|---------------------------------|-------|----|------|--------------------|-------|--|---------|---|--|------|------|---------|---------------------------------|-------|----|------|--------------------|-------|--|---------|
| Headroom & Financing plan | <p>€250m</p> <table border="1"> <tr> <td>EBRD</td> <td>€250m</td> </tr> <tr> <td>Donor concessional loan</td> <td>Up to €75m</td> </tr> <tr> <td>Donor capex</td> <td></td> </tr> <tr> <td>Donor TC</td> <td>Expected, not quantified</td> </tr> <tr> <td>Local contribution</td> <td>Expected, not quantified</td> </tr> </table> | EBRD | €250m | Donor concessional loan | Up to €75m | Donor capex | | Donor TC | Expected, not quantified | Local contribution | Expected, not quantified | <p>€700m</p> <table border="1"> <tr> <td></td> <td>W I</td> <td>W II</td> </tr> <tr> <td>EBRD</td> <td>€350m</td> <td>€350m</td> </tr> <tr> <td>GCF concessional loans</td> <td>€180m</td> <td></td> </tr> <tr> <td>GCF capex</td> <td>€30m</td> <td></td> </tr> <tr> <td>GCF TC</td> <td>€18m</td> <td></td> </tr> <tr> <td>Donor concessional loans</td> <td>€8m</td> <td></td> </tr> <tr> <td>Donor capex</td> <td>€21.5m</td> <td>€50m</td> </tr> <tr> <td>Donor TC</td> <td>€6.5m</td> <td>€15m</td> </tr> <tr> <td>Local contribution</td> <td>€60m</td> <td>€60m</td> </tr> <tr> <td>TOTAL before reallocation</td> <td>€674m</td> <td>€475m</td> </tr> <tr> <td>Reallocation Feb 2020</td> <td>-€217m</td> <td>+€217m</td> </tr> <tr> <td>EBRD</td> <td>€133m</td> <td>€567m</td> </tr> </table> <p>Reallocation in February 2020: €217m of EBRD finance from Window I to Window II</p> | | W I | W II | EBRD | €350m | €350m | GCF concessional loans | €180m | | GCF capex | €30m | | GCF TC | €18m | | Donor concessional loans | €8m | | Donor capex | €21.5m | €50m | Donor TC | €6.5m | €15m | Local contribution | €60m | €60m | TOTAL before reallocation | €674m | €475m | Reallocation Feb 2020 | -€217m | +€217m | EBRD | €133m | €567m | <p>€950m for Window II</p> <table border="1"> <tr> <td></td> <td>W II</td> </tr> <tr> <td>EBRD</td> <td>€950m</td> </tr> <tr> <td>Concessional finance and grants</td> <td>€119m</td> </tr> <tr> <td>TC</td> <td>€38m</td> </tr> <tr> <td>Local contribution</td> <td>€171m</td> </tr> <tr> <td></td> <td>€1,278m</td> </tr> </table> | | W II | EBRD | €950m | Concessional finance and grants | €119m | TC | €38m | Local contribution | €171m | | €1,278m | <p>€2,000m for Window II</p> <table border="1"> <tr> <td></td> <td>W II</td> </tr> <tr> <td>EBRD</td> <td>€2,000m</td> </tr> <tr> <td>Concessional finance and grants</td> <td>€250m</td> </tr> <tr> <td>TC</td> <td>€80m</td> </tr> <tr> <td>Local contribution</td> <td>€360m</td> </tr> <tr> <td></td> <td>€2,690m</td> </tr> </table> | | W II | EBRD | €2,000m | Concessional finance and grants | €250m | TC | €80m | Local contribution | €360m | | €2,690m |
| EBRD | €250m | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Donor concessional loan | Up to €75m | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Donor capex | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Donor TC | Expected, not quantified | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Local contribution | Expected, not quantified | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | W I | W II | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| EBRD | €350m | €350m | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| GCF concessional loans | €180m | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| GCF capex | €30m | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| GCF TC | €18m | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Donor concessional loans | €8m | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Donor capex | €21.5m | €50m | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Donor TC | €6.5m | €15m | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Local contribution | €60m | €60m | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| TOTAL before reallocation | €674m | €475m | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Reallocation Feb 2020 | -€217m | +€217m | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| EBRD | €133m | €567m | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | W II | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| EBRD | €950m | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Concessional finance and grants | €119m | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| TC | €38m | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Local contribution | €171m | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | €1,278m | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | W II | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| EBRD | €2,000m | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Concessional finance and grants | €250m | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| TC | €80m | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Local contribution | €360m | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | €2,690m | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Instrument | Sovereign and non-sovereign loans to governments, municipalities, municipal owned utility companies and private companies providing municipal services. | Sovereign and non-sovereign loans to governments, municipalities, municipally owned and private companies, and other sovereign entities, together with bonds . Some loans in LCY . | No change | Loans, bonds, and guarantees , to sovereigns, state owned enterprises, municipalities, municipal owned utility companies, private companies, and other sovereign entities. Some loans in LCY . | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Use of proceeds | Investments falling within the municipal infrastructure sectors of urban transport, including street lighting and automated fare collection, district heating, water and wastewater, solid waste or energy | Cover the main municipal infrastructure areas including district energy (both cooling and heating), water and waste water, solid waste management, low-carbon and climate resilient buildings (public and residential), urban | Cover the core urban sectors of urban transport, water and waste water, solid waste management, district energy, street lighting and low-carbon | Cover the core urban sectors of district energy, energy distribution, low-carbon and climate resilient buildings, nature based solutions, solid waste management, street lighting, urban | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

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| | efficiency in public buildings <u>and</u> addressing climate change mitigation and adaptation | transport, street lighting, automatic fare collection and metro rolling stock and infrastructure and, where it makes sense, green smart solutions; <u>and</u> address climate change mitigation or adaptation and cities' local environmental challenges . | and climate resilient buildings. Beyond this, it will also seek to promote areas which have been less prominent to date, including nature based solutions, more effective integration of climate resilience/adaptation (including flooding), renewables, smart solutions and urban regeneration. | transport, urban drainage or water and wastewater. Within these sectors also continue to promote effective integration of resilience/adaptation (including flooding), renewables, digital, circular economy, urban regeneration, gender and inclusion and crowding-in the private sector. Low-carbon and renewable power will be further emphasised. GCAPs clearly to addressing city specific priority climate and environmental challenges and the clear link to Nationally Determined Contributions ('NDCs') . |
| CoOs | All CoOs , starting in Caucasus, Moldova and Belarus ,) and rolling out to the Western Balkans ; other regions within the Bank's remit on a needs basis | WI: Albania, Armenia, FYR Macedonia, Georgia, Jordan, Moldova, Mongolia, Serbia and Tunisia. WII: All CoOs | No change | No change |
| Eligibility | <ul style="list-style-type: none"> - GET - Eligible sector <u>or</u> climate change mitigation/adaptation - Covenant on GCAP with the City - Addressing a GCAP-identified priority environmental challenge in all subsequent investments - EU environmental standards, or reducing pollution or GHG by at least 15%, or energy efficiency improvement by at least 15%, or promoting climate change adaptation | <ul style="list-style-type: none"> - GET - Eligible sector <u>and</u> climate change or local environmental challenges - Minimum level of concessionality - Covenant on GCAP with the City in trigger investment - Addressing a priority environmental challenge per GCAP in all subsequent investments - Specific impact thresholds <ul style="list-style-type: none"> ▪ Mitigation projects: reduce GHG by at least 20% or improve EE by at least 20% ▪ Adaptation projects: Climate Resilience Benefit Ratio of at least 10% ▪ Environmental impacts outside of CC: EU environmental standards, or reducing pollution or GHG by at least 20%, or energy efficiency improvement by at least 20% - Cities of population >100k <p>GCF specific:</p> | No change | No change except cities w/ population >50k |

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| | | <ul style="list-style-type: none"> - Target CC impacts - Investment cost per tonne of CO2 eq. reduced below € 50 / tonne for mitigation projects in all sectors other than urban transport | | |
| Objective | <p><u>Over-arching aim:</u> Serve as a sector-wide catalyst for addressing environmental challenges at the City level</p> <p><u>Overall objective</u> To achieve a significant environmental improvement in at least one priority environmental challenge for each of the GrCF countries</p> <p><u>Implementation objective</u> At least 50% of all verifiable targets in all GCAPs achieved within 5 yrs.</p> | <p><u>Over-arching aim:</u> Serve as a sector-wide catalyst for addressing environmental challenges at the City level</p> <p><u>Primary objective</u> To achieve significant environmental improvements and promote the Green transition quality within the targeted cities.</p> <p><u>Implementation objective</u> At least half of all SOs to be follow-on transactions under GCAPs.</p> | <p><u>Aim:</u> Serve as a sector-wide catalyst for addressing environmental challenges at the City level</p> <p><u>Overall objective:</u> To help Green Cities to scale up their green ambitions and achieve significant environmental improvements.</p> <p><u>Implementation objective</u> At least half of transactions (under GrCF2 and future extensions) are follow-on investments addressing priority environmental challenges identified in the GCAPs.</p> | <p><u>Overall objective:</u> To help Green Cities to scale up their green ambitions and achieve significant environmental improvements.</p> <p><u>Implementation objective</u> At least half of transactions (under GrCF2 and future extensions) are follow-on investments addressing priority environmental challenges identified in the GCAPs.</p> |
| Transition objectives | <p><u>Framework for Markets</u></p> <ul style="list-style-type: none"> - GCAPs, PSCs, Tariffs <p><u>Demonstration of new replicable behaviour and activities</u></p> <ul style="list-style-type: none"> - Significant environmental improvements <p><u>Demonstration of Successful Restructuring</u></p> <ul style="list-style-type: none"> - CDPs, FOIPs - Reduction of GHG or pollution, or improved EE | <p><u>TQ Green</u></p> <ul style="list-style-type: none"> - Environmental improvements - Policy interventions w/ environmental benefits <p><u>TQ Well-Governed</u></p> <ul style="list-style-type: none"> - Improve planning and supervision of green activities through GCAPs - Strengthen contractual and regulatory setup (PSCs, tariffs) - Access to green capital markets – Green Finance Roadmaps | <p><u>Primary FWK level: TQ Green</u></p> <ul style="list-style-type: none"> - Environmental improvements - Improve planning and supervision of green activities through GCAPs <p><u>Secondary SO level: selective TQ Well-governed</u></p> <ul style="list-style-type: none"> - Tariff, PSCs, corporate governance, procurement, capacity building <p>TQ Inclusive</p> | <p><u>Primary FWK level: TQ Green</u></p> <ul style="list-style-type: none"> - Environmental improvements - Improve planning and supervision of green activities through GCAPs <p><u>Secondary SO level: selective TQ Well-governed</u></p> <ul style="list-style-type: none"> - Tariff, PSCs, corporate governance, procurement, capacity building <p>TQ Inclusive</p> <ul style="list-style-type: none"> - Inclusive policies/ practices, training, capacity building |

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| | <p><u>Private sector participation</u></p> <ul style="list-style-type: none"> - incentive based outsourcing or management contracts <p><u>Setting standards</u></p> <ul style="list-style-type: none"> - no specifics | | <ul style="list-style-type: none"> - Inclusive policies/ practices, training, capacity building <p>TQ Resilient</p> <ul style="list-style-type: none"> - Green Finance Roadmaps, access to new sources of financing, policy <p>TQ Competitive</p> <ul style="list-style-type: none"> - New technology, restructuring, sustainable land mgmt, capacity building | <p>TQ Resilient</p> <ul style="list-style-type: none"> - Green Finance Roadmaps, access to new sources of financing, policy <p>TQ Competitive</p> <ul style="list-style-type: none"> - New technology, restructuring, sustainable land mgmt, capacity building, PPP contracts |
| ETI | 80 | <p>70 baseline</p> <p>75 for transactions that are (i) follow-on transactions with a green city, <u>and</u> (ii) based on a GCAP that explicitly ranks potential investments on the basis of greening impact <u>and</u> (iii) where the project is a top priority in this quantitative GCAP prioritisation</p> | <p>70 baseline</p> <p>75 for transactions that are follow-on transactions with a Green City that (i) addresses priority environmental challenge identified in a city's GCAP and meet an ambitious predefined green impact threshold, <u>or</u> (ii) promotes and helps implement ambitious priority policy actions, as identified in the GCAP.</p> | No change |
| TC | <p><u>Fwk level</u></p> <ul style="list-style-type: none"> - GCAP & Policy Dialogue – €300k per city - GCAP manager – €275k <p><u>SO level</u></p> <p>Pre-signing</p> <ul style="list-style-type: none"> - Feasibility Study; €200k per SO - Audit and restatement of financial accounts; €25k per SO <p>Post-signing</p> <ul style="list-style-type: none"> - Gender Advisory Services Programme; €100-300k per SO - Project Implementation Support; €300-500k per SO | <p><u>Fwk level</u></p> <ul style="list-style-type: none"> - GCAP & Policy Dialogue – €300k per city - Annual City Green Cities Networking event – €150k <p><u>SO level</u></p> <p>Pre-signing</p> <ul style="list-style-type: none"> - Feasibility Study; €300k per SO - Audit and restatement of financial accounts; €25k per SO - Gender Advisory Services Programme; €100-300k per SO <p>Post-signing</p> | <ul style="list-style-type: none"> - Trigger investments TC to formulate GCAPs <p><u>SO level</u></p> <p>Pre-signing</p> <ul style="list-style-type: none"> - Project preparation: to develop an affordable, cost effective and bankable investment programme; including, financial, technical, environmental (eg. energy audits), social, and gender and economic inclusion aspects as appropriate | <ul style="list-style-type: none"> - Trigger investments TC to formulate GCAPs <p><u>SO level</u></p> <p>Pre-signing</p> <ul style="list-style-type: none"> - to develop affordable, cost effective and bankable investment programmes including, financial, technical, environmental, social, gender and economic inclusion aspects as appropriate. In addition, where applicable, PPP Advisory support TC will be utilised, in close |

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| | <ul style="list-style-type: none"> - Corporate Development, City Support and Stakeholder Participation Programmes; €350k per SO - Civil Society Capacity Building; €75-250k per SO | <ul style="list-style-type: none"> - Technical Assistance and Capacity Building, €350k (<i>per city? Not clear</i>) - Project Implementation Support; €500k per SO - Green Finance Roadmaps, €500k per city - Civil Society Capacity Building; €75-250k (<i>per city? Not clear</i>) | <p>Post-signing</p> <ul style="list-style-type: none"> - project implementation support; - capacity building support to build the capacity of city administrators and key stakeholders (such as through CDPs and FOIPs), - promoting economic inclusion, equal economic opportunities for all genders, Just Transition, - civil society and stakeholder engagement capacity building support; - Green Finance Roadmaps | <p>coordination with the PPP Unit within SI3P</p> <p>Post-signing</p> <ul style="list-style-type: none"> - project implementation support; - capacity building support to build the capacity of city administrators and key stakeholders (such as through CDPs and FOIPs); - promoting economic inclusion, equal economic opportunities, Just Transition; - civil society and stakeholder engagement capacity building support; - Green Finance Roadmaps if applicable |
| Non-TC | <p>Some of the sub-projects under the GrCF are envisaged to benefit from non-TC grants by up to one-third of the total project cost</p> | <ul style="list-style-type: none"> - GCF – EBRD Funding Proposal 086 Green Cities Facility¹² (GCF-EBRD FP) (Loans/Grants) - Green City Infrastructure Investment (Grants) - Energy Efficiency and Sustainable Cities in the Neighbourhood - Sida Guarantee Framework ('SGFr') | <p>As appropriate to address affordability issues, externalities or compensate for the costs of achieving higher standards to deliver transformative climate change mitigation and adaptation outcomes</p> | <p>As appropriate to address affordability issues, externalities or compensate for the costs of achieving higher standards to deliver transformative climate change mitigation and adaptation outcomes</p> |

Annex 3. GrCF portfolio analysis

NB: All data in this annex originates from DW_Banking_Operational dataset as available on the EBRD Tableau server at time of preparation of this report, unless stated otherwise. Analysis by EvD.

Data valid at **month end October 2022**.

While the implementation of the second extension of the second Green Cities framework Window II⁶² (FwkID 53170), Board approved November 2021, is not within the scope of this evaluation, the portfolio analysis includes the relevant data from this extension for completeness.

Data comprises the following frameworks:

| Name of fwk | Abbreviation | Board Approval | FwkID |
|--|------------------------|----------------------|-------|
| Green Cities | GrCF | Nov-2016 | 48171 |
| Green Cities 2 - Window I (GCF) | GrCF2 - WI | Oct-2018 | 50440 |
| Green Cities 2 - Window II Green Cities 2 (GrCF2) - Window II Extension | GrCF2 - WII GrCF2-1 | Oct-2018 Oct-2020 | 50674 |
| Green Cities 2 - Window II Extension 2 | GrCF2-2 | Nov-2021 | 53170 |

Annual business volumes

By the end of October 2022, Green City frameworks reported €1.96bn of ABI in Sustainable Infrastructure operations, of which over €1.88bn has been in MEI sub-sector. GrCF operations represented an increasing share of MEI ABI over the period. GrCF was approved in November 2016, and the framework generated over €10m ABI before the end of the year with its first SOs. Its first full year ABI in 2017 was over €46m before rising more than five-fold in the following year (€264m). In 2019 the GrCF ABI dropped to €147m and recovered in 2020 to €266m. In 2021 the ABI rose to record volume of over €800m. The majority of SOs and ABI was delivered in MEI sub-sector, which was the sole contributor until 2021, when Transport and Energy SOs were signed, with one project in each sub-sector. In 2018 GrCF operations already represented over a quarter of MEI ABI. After a drop in this ratio in 2019 and recovery in 2020, the share of GrCF ABI rose to 60% of MEI ABI in 2021, and remained at 63% of MEI ABI in 2022 at the end of October 2022.

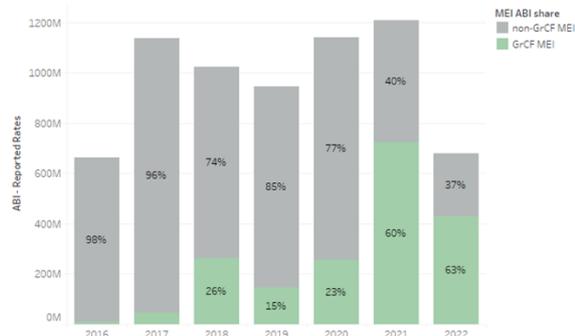
⁶² BDS21-140: Regional: Green Cities Framework 2 – Window II Extension 2

Figure 14: Green Cities frameworks ABI (2016–2022)



2022 data until October

Figure 15: Green Cities frameworks ABI as a share of MEI ABI (2016–2022)



2022 data until October

Investments

A total of 66 projects were signed as sub-operations of the Green Cities frameworks, representing a total investment (NCBI) of €1.89bn. To date, there have been two GrCF frameworks – GrCF (BA 2016, OpID 48171) and GrCF2 which was split into two implementation Windows with individual OpIDs (BA 2018, 50440 & 50674). Window II of GrCF2 was extended twice, the second extension in November 2021 was under a new OpID (53170). The frameworks represent a volume of investment (NCBI) of €1.89bn over 66 signed sub-operations.

In addition to the sub-operations of GrCFs, there were four projects signed, which the GC team identifies as follow-on Green City investments. These projects outside of GrCFs represent two stand-alone projects (Gyumri Urban Roads, 46540; Chisinau Solid Waste, 47314) and two sub-operations of the Municipal Resilience Refugee Response Framework (48536).⁶³ By the end of October 2022, these four operations represented NCBI of over €32m.

Table 4: Overview of Green Cities frameworks

| Op Id | Board Approved | Name | Headroom |
|-------|----------------|--|-----------|
| 48171 | 2016 | Green Cities | €250m |
| 50440 | 2018 | Green Cities 2 - Window I (GCF) | €133m* |
| 50674 | 2018 | Green Cities 2 - Window II | €1,517m** |
| 53170 | 2021 | Green Cities 2 - Window II Extension 2 | €2,000m |

* after reallocation from WI to WII in February 2020

** after reallocation from WI to WII in February 2020, and with first WII extension in October 2020

The generation of investment under the framework has not been even as the Programme’s growth significantly accelerated in the most recent two years. The ABI of 2021 and 2022 represents over 60% of the frameworks’ ABI since 2016. The ABI reported for 2021 and the first ten months of 2022 was over €1.23bn, or over 60% of the ABI of all GC frameworks. This was achieved especially though

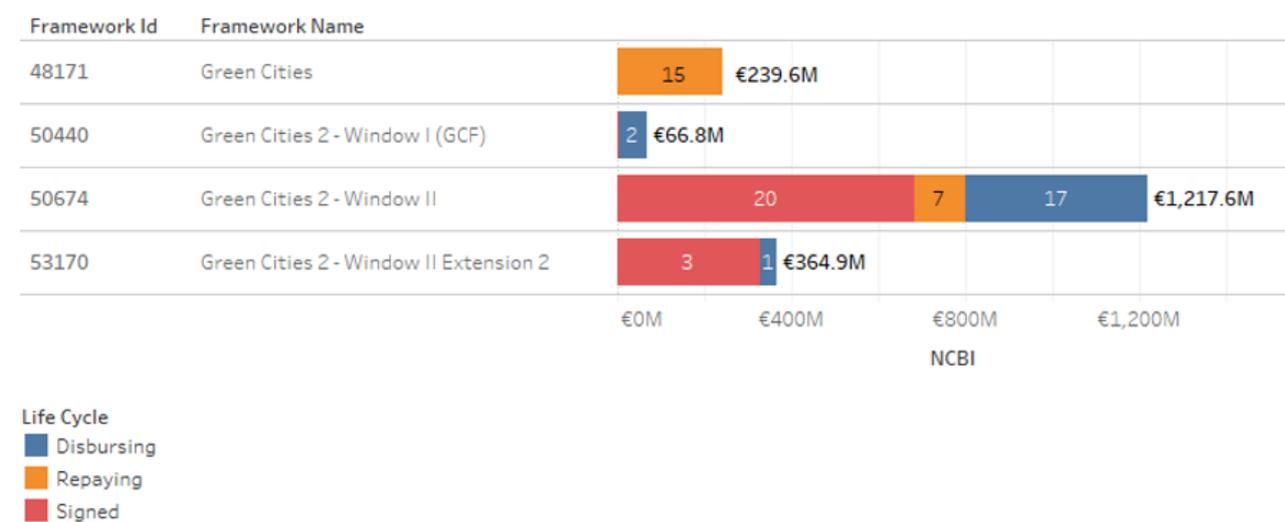
⁶³ Sub-operations: 50488 GAM Lagoon Remediation Project, and 51044 GAM Solid Waste Crisis Response - Al Shaer WTS, both in Amman, Jordan

the entry of the Programme to new regions with a relatively small number of high value projects. This relatively uneven distribution of the investment, highly concentrated towards the end of the time period, means that large proportion of projects is still in signed status, prior to disbursing. In terms of individual projects, this means that 24 (out of total 66) projects are prior to disbursing, representing over €1bn (53%) of the frameworks' €1.89bn NCBI.

Figure 16: GrCF investment (NCBI) split between stages of project life cycle; at October 2022

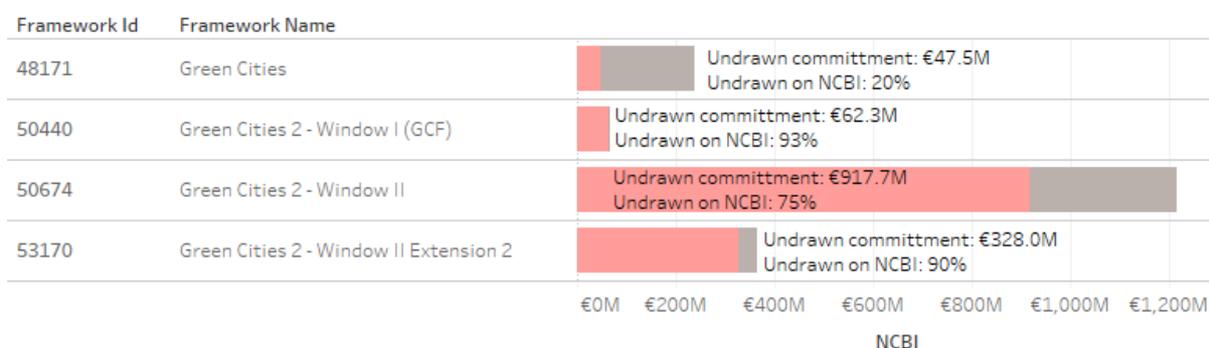
| | | | |
|--|--|--|--|
| <p>Total NCBI €1,888,905,950</p> <p>Number of projects 66 Number of countries 23</p> <p>October 2022</p> | <p>Signed €1,013,074,529</p> <p>Number of projects 24 Number of countries 15</p> <p>October 2022</p> | <p>Disbursing €519,906,834</p> <p>Number of projects 20 Number of countries 13</p> <p>October 2022</p> | <p>Repaying €355,924,587</p> <p>Number of projects 22 Number of countries 11</p> <p>October 2022</p> |
|--|--|--|--|

Figure 17: Green Cities NCBI by framework, number of operations and life cycle stage (2016–2022)



2022 data until October

Figure 18: Green Cities frameworks undrawn commitments as a share of NCBI (2016–2022)



2022 data until October

Regional distribution

The largest region of GrCF investment has been Southern and Eastern Mediterranean (SEMED), assuming 30% of GrCFs NCBI, followed Eastern Europe and Caucasus (EEC, 25%) and South-Eastern Europe (SEE, 21%). The largest region of GrCF operations based on NCBI so far has been SEMED with 30% of investment volume (€570m over 5 projects), followed by EEC with 25% of investment (€466m over 18 projects), and SEE with 21% of investment (€390m over 27 projects). Türkiye alone represents 18% of investment volume, which came from only four projects. Central Europe (CEB), Central Asia (CAS) countries have so far represented small share of investment (around 3% each). There is a strong pipeline of projects (in various stages, from Concept review to Board approved but not yet signed) for all regions except CEB.

Figure 19: Shares of GrCFs investment (NCBI) in EBRD regions at end October 2022

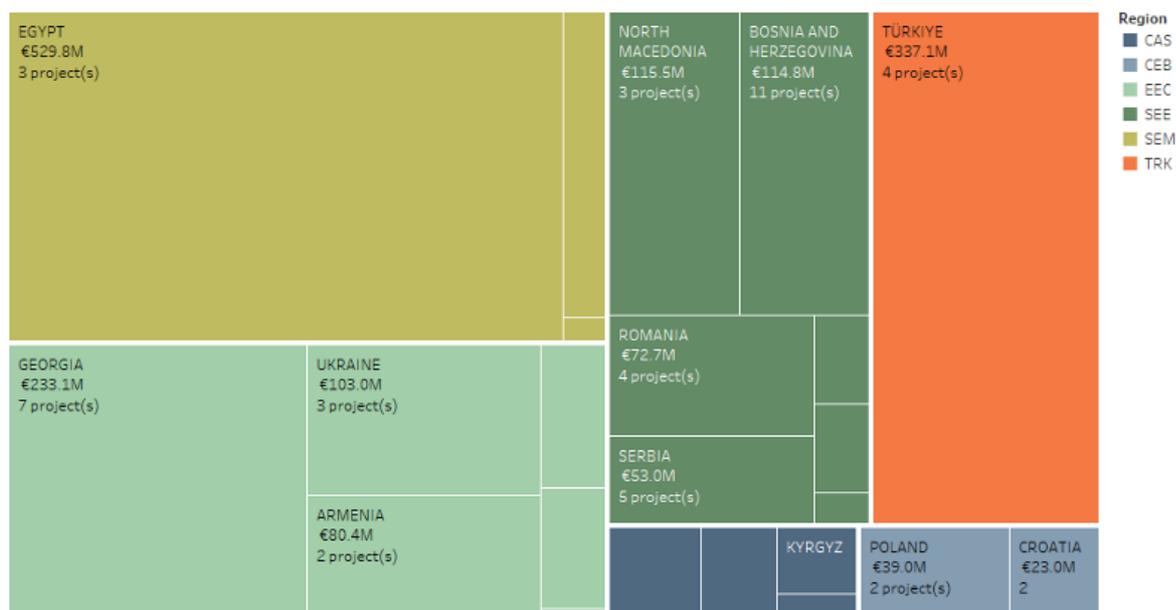
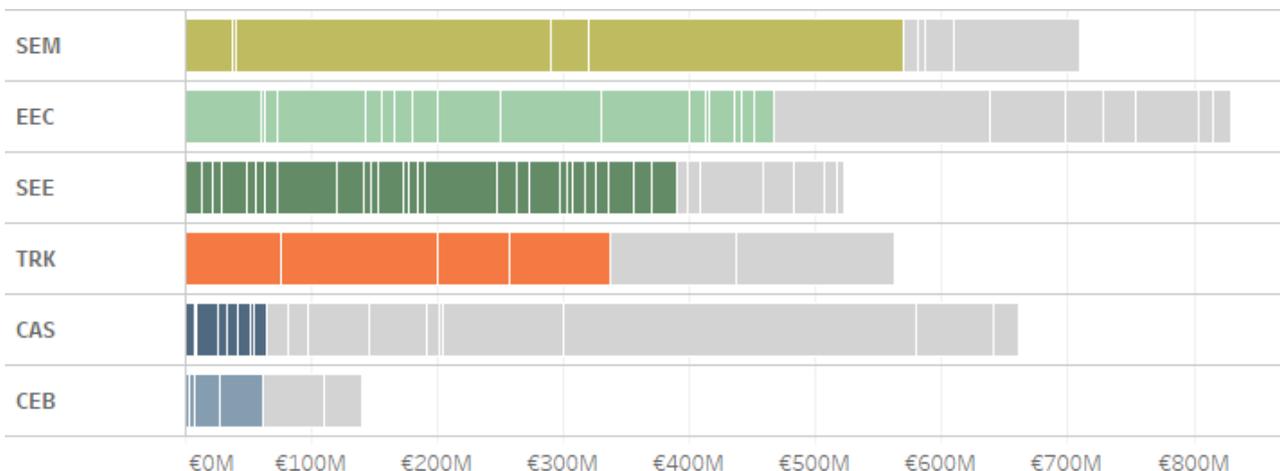
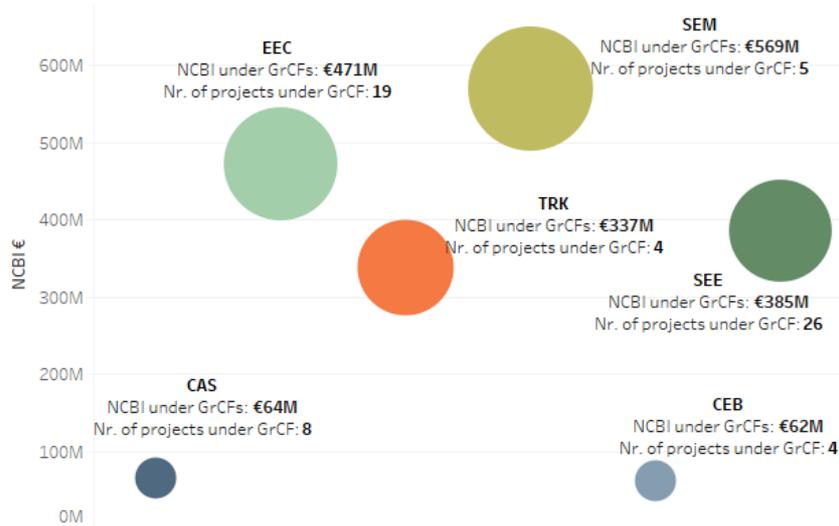


Figure 20: GCFs NCBI and pipeline per region



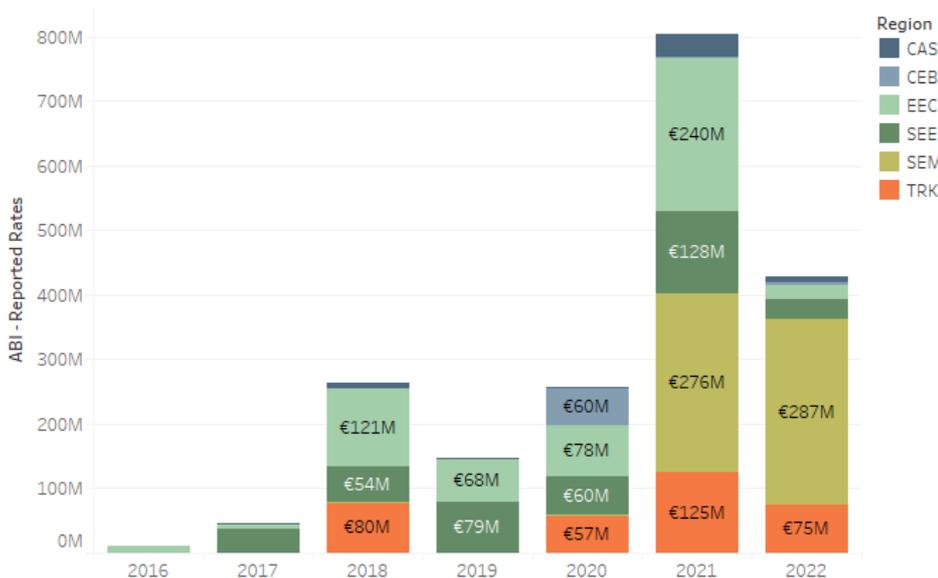
Note: Projects in pipeline are in grey; pipeline projects are considered Active projects at all life cycle stages from passing Concept review to Board Approved, before signing

Figure 21: Green Cities EBRD investment (NCBI) under Green Cities frameworks, number of operations, by region



While the four key implementation regions of the Programme (SEMED, EEC, SEE, TRK) represent between 21 and 30% of the investment volume each, this investment has not been distributed evenly across years. The framework first rolled out in EEC and SEE, and these were the major regions of activity in 2016-2019, with only one project in TRK realised within that period. From 2020, TRK and SEMED caught up in terms of investment volumes through the realisation of a small number of high value projects.

Figure 22: Temporal distribution of investment (ABI) per region, 2016–2022

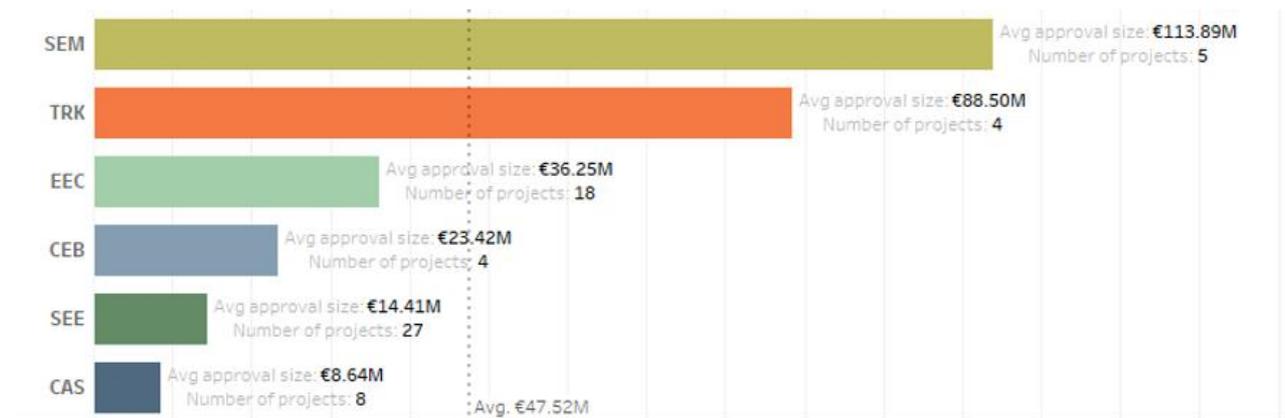


* 2022 data until ME202210

In terms of number of projects per region SEE leads with 27 projects, followed by EEC with 18 projects. The proportion of investment under the frameworks is not reflected in the same distribution of

number of projects. The initial regions of the Programme rollout have the largest number of projects under the frameworks. SEE has 27 signed sub-operations, and EEC has 18 sub-operations. This mismatch between total investment per region and number of projects stems from significant variation of average project size. Average project size at approval in SEMED is over €113m, and in Türkiye €88m. These two regions then represent significant proportion of the portfolio, while comprising only five and four projects respectively. The average project size in the initial GC regions is in contrast only €36m (EEC) and €14m (SEE).

Figure 23: Average size of project at approval per region, signed projects



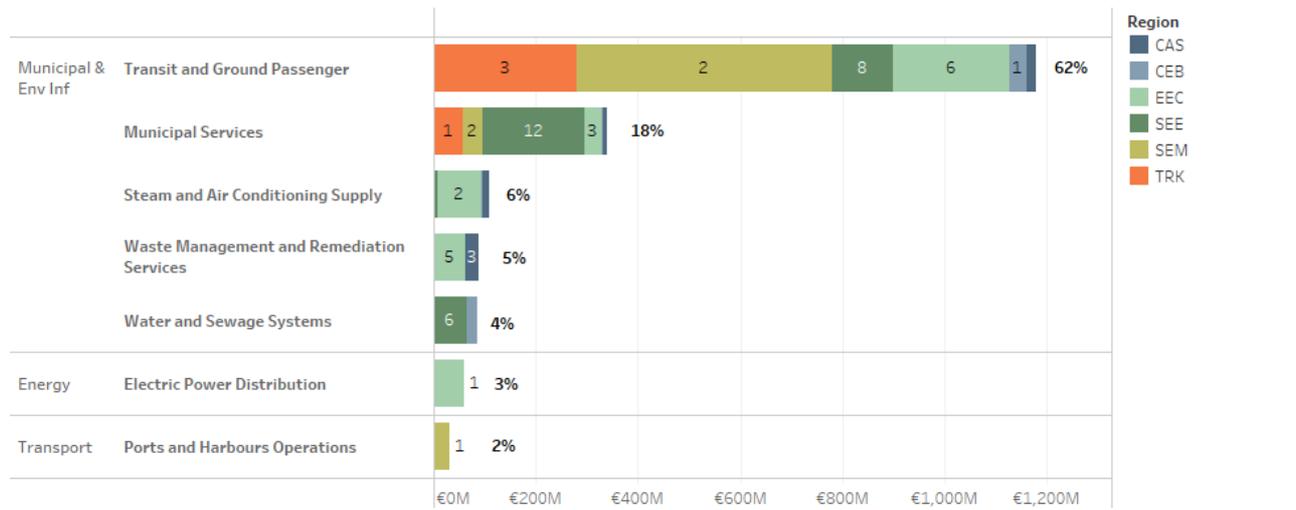
Sector distribution

Sector distribution of GrCFs is dominated by urban transport, comprising over 60% of NCBI and 22 projects. The majority of GrCF investment has been in urban transport, with €1.18bn of NCBI (62%). The following sector by some distance is municipal services, representing 20 projects but only €340m NCBI (18%). In addition, a number of projects classified in this category are in fact urban transport projects – this includes Skopje, Amman and Ankara bus projects,⁶⁴ as well as Timisoara tram project.⁶⁵ The cumulative NCBI of these projects is over €90m, or 5% of overall NCBI. The rest of the sectors are represented relatively little in comparison, with steam and air-conditioning (district heating projects) represented by six projects and €107m (6%), waste management by 8 projects and €88m (5%), and water and waste water by 8 projects and €85m (4%). Energy subsector is represented by one project in electric power distribution with €70m investment (3%), and transport is likewise represented by one project in ports operation with €30 investment (2%).

⁶⁴ 50185, 52505, 51474

⁶⁵ 52471

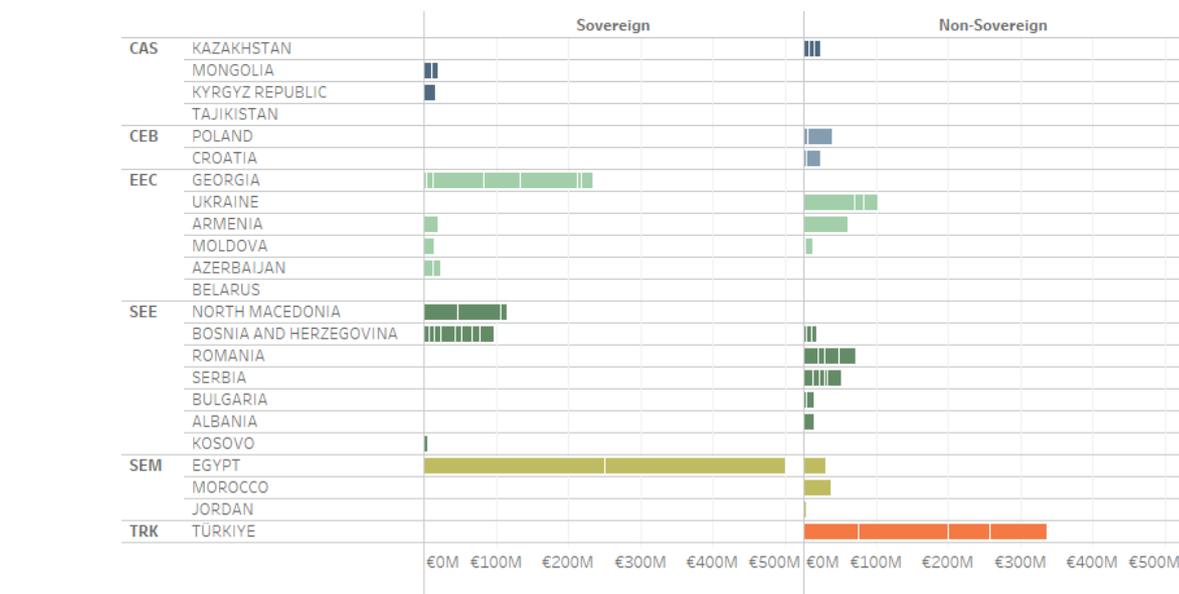
Figure 24: GrCFs sector distribution per region and number of projects, NCBI



Portfolio class and sovereign risk

The overwhelming majority of investment (95%) is in the State portfolio class, and just over a half (55%) in Sovereign risk. The overwhelming majority of projects is in State portfolio class – this is 62 projects, representing €1.8bn NCBI (95%). Only four projects are in Private portfolio – this is two MEI projects and both projects from the other two sub-sectors (Energy, Transport). Less than half of the projects is in sovereign risk (30 projects) but these represent over half of the portfolio in terms of investment (€1.05bn, 55%). All projects in Türkiye and CEB are non-sovereign; in the rest of the regions this is largely split by country, although in a few countries both sovereign and non-sovereign projects have been implemented.

Figure 25: Sovereign and non-sovereign investment per country



Private sector mobilisation

Private sector mobilisation is not a strong feature of GrCFs. Three sub-operations have so far been associated with direct private sector mobilisation – one via a parallel loan, and two via Unfunded Risk Participation (URP). One of these also achieved a syndication with a commercial lender. In addition, one operation (*52868 ENA Investment Program*) reported a syndication with a public sector entity (FMO).

Table 5: GrCF Private sector mobilisation

| Op Id | Operation Name | Type | Amount (€) |
|-------|---------------------------------------|---------------|---------------|
| 51599 | GrCF2 W2 - Izmir Metro Project III | URP | 35.0m |
| 48348 | GrCF - Izmir Metro Project II | URPs | 40.0m |
| | | Syndication | 25.0m |
| 48666 | GrCF - Warsaw Metro Line II extension | Parallel loan | 43.1m |
| | TOTAL | | 143.1m |

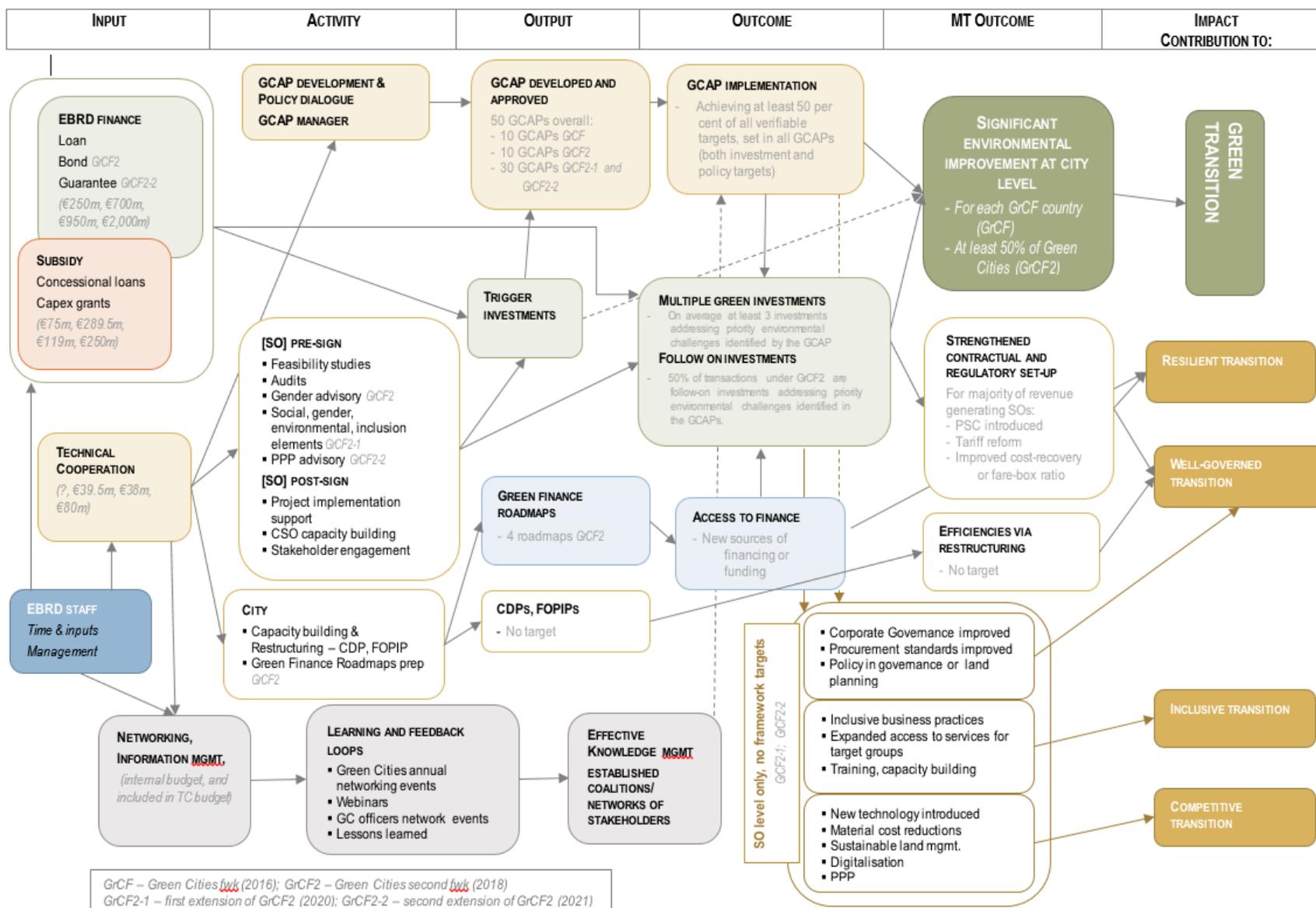
Annex 4. Green Cities Theory of Change

The objectives and transition expectations of the GrCP have remained broadly consistent over the implementation period, allowing for the reconstruction of a unified theory of change (ToC). The overarching objective of the programme was to become a ‘sector-wide catalyst for addressing environmental challenges’. The objective for the framework is to deliver a ‘*significant environmental improvement in at least one priority environmental challenge*’ at city level, contributing to Green transition of the GrCF countries of operations.⁶⁶ The initial focus of GrCF and GrCF2 on TQ Green and Well-governed was in the first extension of the latter (2020) broadened to include also other secondary TQs.

There are four broad types of inputs in GrCP, leading to mutually reinforcing results chains collectively leading to the overall GrCP objective of significant environmental improvement at city level, as well as contributions to secondary TQs. The framework’s operation through the development of GCAPs and their prioritisation of investments and policy measures is meant to distinguish GrCP from a traditional project-by-project approach – utilising synergies of coherent actions and the mobilisation of finance for the implementation of GCAP priorities.

- i. **The Programme’s approach is underpinned by the development of Green City Action Plans (GCAPs).** The engagement with a city typically starts through the first investment (*‘trigger investment’*), in the course of which the municipal authorities commit to the development and finalisation of a GCAP. The EBRD supports the development of the GCAPs through consultancies financed by TC funds. The municipal authorities are taking ownership of the document and ensure it is approved and implemented in line with the local legal and regulatory requirements. The aim is that after the initial EBRD investment, subsequent (*‘follow-up investments’*) projects will be driven by the GCAP priorities.
- ii. **EBRD provides finance for the implementation of investments, as well as subsidy.** The GrCF was designed with anticipation of EBRD finance to be blended with concessional loans and capex grants where appropriate. The expectation is that follow-up investments may be financed from a variety of sources, including other IFIs, DFIs or commercial lenders, or indeed state budget of city’s own funds. In this way, the GrCP becomes not the sole financial source of the GCAP implementation but a ‘catalyst for addressing environmental challenges’, as envisioned by the Programme.
- iii. **GrCP is supported by significant TC funds.** In addition to the TC provided for the development of GCAPs, TC funds are used to support GrCP at framework, city, and project level. Pre- and post-signing TCs include support for feasibility studies, audits, gender advisory, Project Implementation Units (PIUs), corporate development programmes, as relevant. GrCF2 also introduced TC for the preparation of Green Finance Roadmaps, a tool to facilitate the access to cities to green capital markets.
- iv. **GrCP includes components of horizontal knowledge management and learning, intended to connect all its activities across sectors and geographies to improve effectiveness over time.** There are networking and learning events organised, as well as efforts to gather, systematise, and apply lessons in GrCP implementation. These activities are supported via TC funds and internal core EBRD budget, including staff contributions.

⁶⁶ The target for this objective was for this significant environmental improvement to occur ‘for each of the GrCF countries’ in GrCF, which was then changed to ‘more than 50 per cent of the Green Cities’ for GrCF2.



Annex 5. GrCP strategic relevance

The Green Cities Programme harnessed the expected strategic institutional orientation towards green transition and positioned Sustainable Infrastructure at the forefront of climate finance. While the first GrCF was still developed under the previous Transition Impact concept, which was designed to support impacts in transition to free market economies, the Programme was already designed with the vision to harness what was to come after – Transition Impact understood as transition to economies that are sustainable, which would with increasing urgency mean climate change mitigation and resilience. This vision allowed the Programme to transform EBRD’s previously ordinary municipal business, which was well established but sitting somewhat uneasily within the private sector development orientation of the previous transition concept,⁶⁷ to be at the forefront of the green transition and climate change mitigation finance of the Bank.

The strategic setting of the GrCP is firmly rooted in the context of climate change and the comprehensive need for scaling up financing for adaptation and mitigation investments. The framework document noted the significant environmental impact of cities, which reportedly account for 70% of energy use and 80% of greenhouse gas (GHG) emissions, and are the sources of air and water pollution and waste generation.⁶⁸ Targeted investment with environmental benefits on cities could contribute to delivering each country’s climate change action objectives as per the Paris Agreement. Internally, the framework was presented as an instrument of the GET approach, noting that investments in cities are seen as a ‘*key channel of delivering GET targets*’.⁶⁹

The Green Cities programme is fully aligned with and actively pursuing key institutional priorities as articulated in the successive Strategic and Capital Frameworks in the area of Green Economy Transition (GET). The GrCF was first approved in 2016, in the framework of the first Strategic and Capital Framework (2016-2020, SCF). The SCF committed to having “*an even higher proportion of activities that incorporate sustainable energy and resource efficiency components and considerably stepped-up operations in energy security*” and “*a strong infrastructure project preparation offer together with increased financing for sustainable infrastructure projects*”.⁷⁰ In the current SCF 2021-2025 one of three strategic themes is supporting the transition to green, low carbon economy. “*The goal is to raise the share of green finance to at least 50 per cent and to reduce net CO2 by 25 to 40 million tonnes by the end of the SCF period*”.⁷¹ This SCF already refers to GrCP directly in its sectoral strategic direction for sustainable infrastructure: “*The Bank deploys innovative approaches to sub-sovereign lending, including the Green Cities programme, which will be an important component in the strategy period.*” The SCF is operationalised in Strategy Implementation Plans (SIPs); the current SIP 2022-24⁷² sets up an incremental goal of 45 per cent share of green finance (GET %ABI) for 2022. In the key areas for operational prioritisation of GET, scaling up policy engagement on ambitious low carbon and climate resilient pathways includes a specific reference to Green City Action Plans (GCAPs).

⁶⁷ See e.g. CS/AU/14-11: *EvD Special Study: Private Sector Participation in Municipal and Environmental Infrastructure Projects*; This evaluation covered the period of 2001-2012. It found a gradual loss of status of Private Sector Participation (PSP) as a strategic priority over the period in the Bank’s MEI approach, whereby disappointing results from specific PSP initiatives reduced the Bank’s ambition and operations with a PSP dimension became limited, cautious and highly selective.

⁶⁸ BDS16-207: Regional: Green Cities Framework (GrCF)

⁶⁹ BDS16-207: Regional: Green Cities Framework (GrCF); p.11

⁷⁰ BDS15-013 (Final): Strategic and Capital Framework 2016-2020

⁷¹ BDS20-030 (Final): Strategic and Capital Framework 2021-2025, p. 8

⁷² BDS21-152 (Final): Strategy Implementation Plan 2022 - 2024

The Green Cities programme has been leading the path from mainstreaming to systemic approach in Green transition within the Bank. The initial GET Approach for 2015-2020⁷³ spelled out the Bank’s specific commitments to green finance and alignment with global commitments and objectives, including Paris Agreement targets. While the Programme was initiated within the framework of the initial GET approach, its design and strategy already spearheaded the upcoming evolution of the approach from mainstreaming to systemic, articulated in the following GET 2.1 approved in 2020 for the period 2021-2025.⁷⁴ GET 2.1 scales up the ambition and calls for a more systemic approach to increase impact both through increased scale of operations and through achieving impact beyond own financing by creating green market opportunities for other actors. This approach involves not only alignment with the Paris Agreement but also enhanced policy action and structuring operations in specific thematic areas promoting environmental integration across targeted sectors. GrCP is highlighted, as part of enhanced policy action, as one of the key instruments for defining green strategies and related action plans at municipal level, formulated through broad stakeholder engagement with a clear definition of objectives and intermediate milestones. It specifically prioritises work at city level, reiterating cities’ role as significant GHG emitters as well as essential actors for accelerated climate and sustainability action, and *“the potential contribution of activities in this sector to the green, inclusive and resilient transition qualities including support to connect local climate policies with national goals. Under EBRD Green Cities, the Bank also assists municipalities in the development of Green City Action Plans”*. This attention to policy work at city level links to the GET2.1 focus on the thematic area of Cities and Environmental Infrastructure, but also other focal areas relevant to the GrCP including Energy Systems and Green Buildings and cross-cutting thematic areas of Energy Efficiency and Climate Resilience. In its assessment of regional relevance, GET2.1 foresees high thematic relevance combined with high business opportunity for Cities and Environmental Infrastructure thematic priority in Central and South-eastern Europe, and Eastern Europe and Caucasus, and medium level of thematic and business relevance in Central Asia and Türkiye.

Through its main tool, GCAP, the Programme has been progressively incorporating cross-cutting priorities, including resilience, gender and inclusion, digitalisation, and recovery/reconstruction. The initial GrCF in 2016 introduced a new approach to municipal infrastructure planning and delivery as a means to scaling up green finance and achieving GET targets. The GC approach was specifically defined as *‘systematic and multi-sectoral’*, referring to the development of Green City Action Plans (GCAPs) as the key tool for delivery. The following GrCF in 2018 included the integration of ‘green smart solutions’ at project level where relevant, and increased its climate ambition with higher eligibility criteria, exceeding existing GET requirements. It also introduced minimum Climate Resilience Benefit Ratio requirement for adaptation projects (Box 8). Finally, it also introduced more focus on green finance mobilisation. The extension of the Framework in 2020 represented a step-change in the approach and Programme-level integration of SCF priorities. Internally, the Programme revised its GCAP methodology in 2020 prompted by the accumulated lessons of the first years of implementation but also by the Covid-19 pandemic and the need to support cities’ resilience.

The revised methodology includes

- i. a Risk and Vulnerability Assessment (RVA) to determine which citizens and assets are vulnerable to external shocks such as pandemics;
- ii. consideration of gender equality and economic inclusion throughout the GCAP process;
- iii. consideration of the co-benefits from green investments such as increased gender equality, economic inclusion and improvements in public health;

⁷³ BDS15-196 (Final): Green Economy Transition Approach

⁷⁴ BDS20-082 (Final): Green Economy Transition Approach 2021-2025

- iv. a Smart Maturity Assessment (SMA); and
- v. consideration of Just Transition where appropriate.⁷⁵

This represents an important integration of cross-cutting priorities at the Programme-level, rather than just a sub-operation level – it means that these considerations are integral to the development of the GCAP and the priority policy and investment actions within the whole Action Plan, not just in operations to be financed by the EBRD. In addition, this extension extended the intended use of proceeds ‘to promote areas which have been less prominent to date, including nature based solutions, more effective integration of climate resilience/adaptation (including flooding), renewables, smart solutions and urban regeneration’. The most recent extension of the Framework (2021) further emphasises the intention to expand into the renewable power sector, with investments in small-scale or integrated renewables or energy distribution. This extension also makes a reference to making a clear link between projects and Nationally Determined Contributions (NDCs), which is also integrated in the revised GCAP methodology. The framework document concludes that “GCAPs contribute to a city-specific gender-responsive low-carbon pathway and the programme as a whole ticks all the boxes of the Bank’s Strategic and Capital Framework”.

Box 8: Climate Resilience Benefit Ratio

Minimum Climate Resilience Benefit Ratio requirement for adaptation projects

- Introduced by the second GrCF (2018), the minimum requirement of 10 per cent **Climate Resilience Benefit Ratio** for all sub-operations with climate adaptation impacts is referred to as a highly innovative measure developed by EBRD: “The ratio and the methodology for calculating it are setting global precedent for best practice in evaluating and reporting on climate resilience impacts. The EBRD is exploring how this approach could be established as a common standard amongst IFIs for assessing climate resilience projects.” The GET Handbook sets out the methodology of approach to climate adaptation projects, including the ratio, referred to as ‘Climate resilience outcome ratio’.
- The innovation in this approach to adaptation finance measurement lies in the valorisation of the actual outcomes (adaptation benefits) as opposed to considering adaptation finance solely based on the additional costs that adaptation measures incur.
- In the context of Green Cities, one project has been identified as introducing the calculation of the adaptation benefits – the *Split water Purification Project, Croatia (51317)* expects to deliver reduction of water losses up to 47 per cent and needed abstraction from the local aquifer while improving local water quality. According to the project document these benefits would result in a climate resilience outcomes ratio, measuring the Project’s valorised benefits compared to its total costs, of 699 per cent.
- Overall however, developing and designing innovative climate resilience projects is still not a straightforward process within the Bank, even in the context of Green Cities. For example, a potential locally and regionally innovative project on an orbital forest for the city of Tirana to address issues with urban heat and flooding has been in development since at least 2019. This is despite the fact that the EBRD investment is estimated at a relatively modest €7m.

Source: BDS18-183 : Green Cities Framework 2 (GrCF2); Annexes to the Green Economy Transition Handbook, January 2022; BDS18-183 (Addendum 7): Croatia: GrCF – Split water Purification Project

The ability of GrCP to lead on the key institutional priorities was reflected in the references to the Programme in the current SCF (2021-2025). The SCF priority actions include “Promoting sustainability and innovation through the application of digital technology in infrastructure design and

⁷⁵ BDS21-140: Regional: Green Cities Framework 2 – Window II Extension 2

implementation, including integrating smart infrastructure elements into all urban operations, through widening and deepening the scope of the Bank’s Green Cities Programme.” The Programme is further referred to as a component of promotion of Equality of Opportunity, whereby GCs are a vehicle to enhanced access to services via the integration of gender and inclusion aspects. Finally, in its directions for accelerating digital transition, the SCF refers to GrCP in that “All future Green City Action Plans generated by the Bank will include ‘smart city’ elements to connect disparate utility, infrastructure and public services to generate real time data allowing a range of benefits, including reduced pollution, improved environment and the more efficient delivery of public services. This is particularly important as evidence suggests that digitally-enabled cities have mitigated Covid-19 impacts better.”⁷⁶

The Green Cities programme is fully aligned with the approach articulated in the relevant sector strategies. The initial GrCF in 2016 was approved in the framework of the 2012 Municipal and Environmental Infrastructure (MEI) strategy.⁷⁷ It referred to its alignment with this strategy in that it identifies municipalities as ‘key players in addressing climate change’. GrCF is at the heart of the following MEI strategy for 2019-2024,⁷⁸ where it is a key element of Priority 1: Providing access to enhanced infrastructure. It is used as a vehicle for:

- Providing financing to at least 100 cities to promote green and sustainable investments;
- Scaling up high GET-impact investments in water and wastewater, urban transport, solid waste management, district energy and energy efficiency sectors;
- Scaling up impact in cities through repeat investments supporting the green agenda;
- Promoting the switch to less carbon-intensive solutions and support projects with renewable energy and/or resource-efficiency components;
- Strengthening project preparation and implementation process.

Green Cities are also a component of delivery on Priority 2, Driving sector sustainability, via Improving public governance and strengthening the institutional and regulatory context (reference to GCAPs); and Priority 3 Bridging infrastructure funding gaps via Implementing diversified and innovative financing schemes (with reference to Green Finance Roadmaps). No other sector strategies have strong imperative for the framework, although some strategies implementation toolkit include enabling elements, such as enhancement of legal and regulatory environment for green bonds in the LC2 Strategy.⁷⁹

⁷⁶ BDS20-030 (Final): Strategic and Capital Framework 2021-2025

⁷⁷ BDS12-126 (Final): Municipal and Environmental Infrastructure Sector Strategy

⁷⁸ BDS19-069 (Final) : Municipal and Environmental Infrastructure (MEI) Sector Strategy 2019-2024

⁷⁹ Local Currency and Capital Markets Development Strategy, 2019-2024

Annex 6. GCAP and City portfolio

Data on Cities in the programme and status of GCAP preparation originates from internal monitoring data provided by the GC team. Analysis by EvD.

Data on GrCF sub-operations from DW_Banking_Operational dataset as available on the EBRD Tableau server. Analysis by EvD.

All data valid at month end October 2022.

Number of cities in the Green City programme and status of GCAPs

Cities from all EBRD regions of operations are represented in the Green Cities Programme; this is to date total of 58 cities which have formally joined the Programme. All regions are represented in the Programme,⁸⁰ with EEC and SEE, where the Programme started, leading with 18 cities each, followed by CAS with 8 cities. TRK, being a separate region but also a single country, has currently 4 cities in the Programme. According to the GCAP methodology, a City formally declares its commitment to develop a GCAP and become an EBRD Green City as part of one of the following mechanisms:

- A loan or project agreement with EBRD for a **trigger investment** project; or
- A **Memorandum of Understanding** with EBRD stating a City will undertake an EBRD-financed sustainable infrastructure investment project in two years; or
- A **Commitment Letter** submitted to EBRD outlining a City's intention to undertake an EBRD-financed sustainable infrastructure investment project in two years.

The cities counted in the 58 total in this overview are those that are reported to have joined by one of the three methods. There are a number of other cities at earlier stages of the process, from discussions on potential joining to trigger projects being at some stage of pipeline preparation. These cities, which have not yet formally joined, are not considered in this overview.

For cities that are part of the Programme, there have been 24 GCAPs completed, out of which 20 GCAPs formally adopted at City level. EEC has the largest number of cities with completed GCAPs at 10, followed by SEE with 9 completed GCAPs. There are 3 completed GCAPs in CAS, and 1 each in TRK and SEM. There has not yet been a GCAP completed in CEB.

⁸⁰ This excludes Greece and Cyprus; regions represented are Central Asia (CAS), Central Europe and Baltics (CEB), Eastern Europe and Caucasus (EEC), South-Eastern Europe (SEE), Southern and Eastern Mediterranean (SEM), Türkiye (TRK)

Figure 26: Number of Green Cities and GCAPs by region

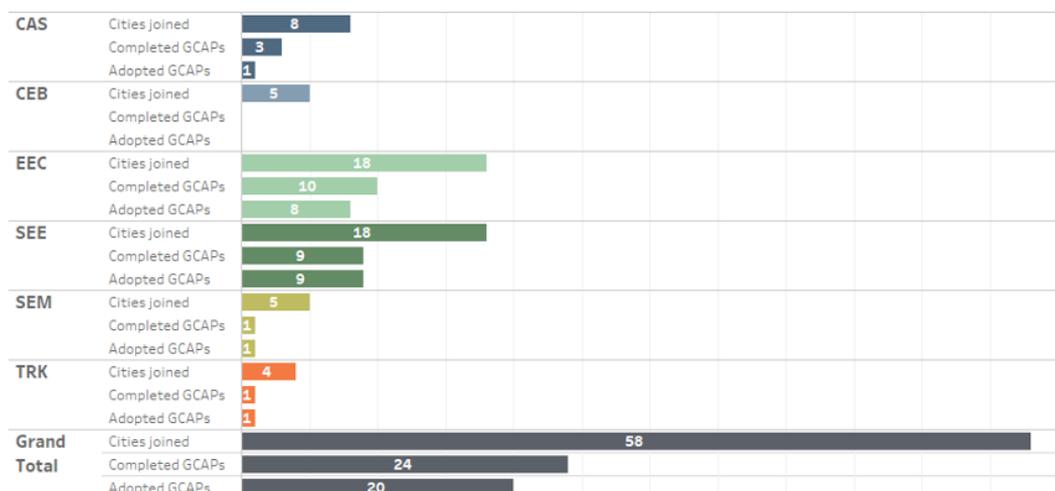


Table 6: Overview of cities in the Programme and status of GCAP

| CITY | Joined by | GCAP preparation status | Nr. of projects under GrCF | NCBI (€) under GrCF |
|------------------------------------|-----------------|-------------------------|----------------------------|---------------------|
| Central Asia | | | 8 | 64.3 m |
| KAZAKHSTAN | | | | |
| Almaty | Letter | Completed | 0 | - |
| Semey | MoU | Started | 1 | 8.3 m |
| Shymkent | MoU | Not started | 1 | 7.0 m |
| Ust-Kamenogorsk | MoU | Started | 1 | 8.8 m |
| KYRGYZ REPUBLIC | | | | |
| Bishkek | MoU | Started | 1 | 16.0 m |
| MONGOLIA | | | | |
| Ulaanbaatar | MoU | Adopted | 2 | 19.8 m |
| TAJKISTAN | | | | |
| Dushanbe | MoU | Completed | 2 | 4.5 m |
| UZBEKISTAN | | | | |
| Samarkand | MoU | Not started | 0 | - |
| Central Europe and Baltics | | | 4 | 62.0 m |
| CROATIA | | | | |
| Karlovac | Trigger Project | Not started | 1 | 3.0 m |
| Pula | Letter | Not started | 0 | - |
| Split | MoU | Started | 1 | 20.0 m |
| POLAND | | | | |
| Walbrzych | MoU | Started | 1 | 4.8 m |
| Warsaw | MoU | Started | 1 | 34.2 m |
| Eastern Europe and Caucasus | | | 19 | 471.4 m |
| ARMENIA | | | | |
| Gyumri* | Letter | Adopted | 0 | - |
| Yerevan* | Letter | Adopted | 2 | 80.4 m |
| AZERBAIJAN | | | | |
| Ganja | Letter | Started | 2 | 22.5 m |

| | | | | |
|------------------------------------|-----------------|-------------|----|---------|
| BELARUS** | | | | |
| Minsk | Letter | Completed | 1 | 0.8 m |
| Novopolotsk | MoU | Not started | 0 | - |
| Pinsk | Letter | Not started | 0 | - |
| GEORGIA | | | | |
| Batumi | Trigger Project | Adopted | 1 | 5.5 m |
| Tbilisi | Letter | Adopted | 6 | 227.6 m |
| KOSOVO | | | | |
| Pristina | Letter | Adopted | 1 | 5.0 m |
| MOLDOVA | | | | |
| Balti | Trigger Project | Adopted | 2 | 16.5 m |
| Chisinau | Trigger Project | Adopted | 1 | 10.0 m |
| UKRAINE | | | | |
| Dnipro | MoU | Not started | 0 | - |
| Kharkiv | MoU | Not started | 0 | - |
| Khmelnitskyi | MoU | Started | 1 | 13.0 m |
| Kyiv | MoU | Completed | 1 | 70.0 m |
| Lviv | Trigger Project | Adopted | 1 | 20.0 m |
| Mariupol | MoU | Started | 0 | - |
| South-Eastern Europe | | | 26 | 384.6 m |
| ALBANIA | | | | |
| Tirana | Letter | Adopted | 1 | 14.2 m |
| BOSNIA AND HERZEGOVINA | | | | |
| Banja Luka | Trigger Project | Adopted | 3 | 18.3 m |
| Brcko | Trigger Project | Started | 1 | 6.5 m |
| Mostar | MoU | Not started | 0 | |
| Sarajevo | Trigger Project | Adopted | 6 | 80.0 m |
| Zenica | MoU | Adopted | 1 | 10.0 m |
| BULGARIA | | | | |
| Sofia | Letter | Adopted | 1 | 4.2 m |
| Varna | Trigger Project | Adopted | 1 | 10.2 m |
| MONTENEGRO | | | | |
| Podgorica | Letter | Not started | 0 | - |
| NORTH MACEDONIA | | | | |
| Kumanovo | MoU | Not started | 0 | - |
| Skopje | Letter | Adopted | 3 | 115.5 m |
| ROMANIA | | | | |
| Bucharest | Trigger Project | Not started | 0 | - |
| Craiova | Trigger Project | Adopted | 1 | 24.2 m |
| Iasi | Letter | Started | 1 | 20.4 m |
| Medias | Trigger Project | Started | 1 | 7.7 m |
| Timisoara | Trigger Project | Started | 1 | 20.3 m |
| SERBIA | | | | |
| Belgrade | Trigger Project | Adopted | 3 | 38.0 m |
| Novi Sad | Letter | Started | 2 | 15.0 m |
| Southern and Eastern Mediterranean | | | 5 | 569.5 m |
| EGYPT | | | | |
| 6th of October | MoU | Started | 1 | 29.8 m |

| | | | | |
|----------------|-----------------|-------------|---|---------|
| Alexandria | Letter | Not started | 1 | 250.0 m |
| Cairo | Letter | Not started | 1 | 250.0 m |
| JORDAN | | | | |
| Amman | MoU | Adopted | 1 | 2.8 m |
| MOROCCO | | | | |
| Agadir | Trigger Project | Not started | 1 | 36.9 m |
| Türkiye | | | 4 | 337.1 m |
| TÜRKIYE | | | | |
| Ankara | MoU | Started | 1 | 57.1 m |
| Gaziantep | MoU | Started | 0 | - |
| Istanbul | MoU | Not started | 1 | 75.0 m |
| Izmir | Trigger Project | Adopted | 2 | 205.0 m |

GCAP status 'Started' is based on reported GCAP contract starting date and no completed GCAP; 'Not started' is based on no reported GCAP contract starting date

* for the purpose of this overview, project 52868 GrCF2 W2 - ENA Investment Program in Armenia was assigned to Yerevan

** All operations in Belarus are suspended as of March 2022

Table 7: GCAP budgets and source of financing (GCAPs with existing contract)

| City | Donor | Budget (€) | GCAP status | Contract start | GCAP completion | GCAP adoption |
|---------------|----------------------|------------|-------------|----------------|-----------------|---------------|
| Tbilisi | Czech Republic | 287,000 | Adopted | | 01/08/2017 | 01/09/2017 |
| Yerevan | Czech Republic | 498,000 | Adopted | | 01/08/2017 | 12/09/2017 |
| Tirana | Austria [♦] | 285,000 | Adopted | | 01/04/2018 | 07/06/2018 |
| Zenica | Austria [♦] | 300,000 | Adopted | | 28/10/2019 | 26/12/2019 |
| Batumi | SSF | 250,000 | Adopted | | 20/11/2019 | 16/10/2020 |
| Ulaanbaatar | Korea | 300,000 | Adopted | | 22/11/2019 | 19/12/2019 |
| Gyumri | SSF | 250,000 | Adopted | | 26/11/2019 | 20/12/2019 |
| Sofia | SSF | 300,000 | Adopted | | 27/11/2019 | 25/06/2020 |
| Chisinau | Austria [♦] | 300,000 | Adopted | | 27/11/2019 | 21/05/2020 |
| Banja Luka | Austria [♦] | 300,000 | Adopted | | 10/12/2019 | 06/10/2020 |
| Sarajevo | Japan | 300,000 | Adopted | | 13/12/2019 | 11/05/2021 |
| Lviv | Czech Republic | 300,000 | Adopted | | 29/12/2019 | 12/07/2021 |
| Skopje | SSF | 300,000 | Adopted | | 21/07/2020 | 27/10/2020 |
| Izmir | SSF | 300,000 | Adopted | | 28/07/2020 | 17/12/2020 |
| Amman | Austria [♦] | 300,000 | Adopted | | 27/11/2020 | 08/06/2021 |
| Craiova | Austria [♦] | 290,000 | Adopted | | 21/01/2021 | 28/01/2021 |
| Belgrade | Japan | 500,000 | Adopted | | 31/03/2021 | 09/06/2021 |
| Pristina | Austria [♦] | 290,000 | Adopted | | 19/08/2021 | 02/09/2021 |
| Balti | Sweden (Sida) | 300,000 | Adopted | | 23/11/2021 | 23/11/2021 |
| Varna | SSF | 300,000 | Adopted | | 17/12/2021 | 10/08/2022 |
| Kyiv | Sweden (Sida) | 300,000 | Completed | | 22/12/2021 | |
| Dushanbe | SSF | 300,000 | Completed | | 25/07/2022 | |
| Almaty | Austria [♦] | 300,000 | Completed | | 10/10/2022 | |
| Minsk | Sweden (Sida) | 300,000 | Completed | | 13/12/2019 | |
| Mariupol | Sweden (Sida) | 300,000 | On-going | 18/03/2021 | | |
| Bishkek | Japan | 350,000 | On-going | 14/04/2022 | | |
| Novi Sad | GCF | 300,000 | On-going | 05/10/2020 | | |
| Khmel'nitskyi | Sweden (Sida) | 300,000 | On-going | 24/03/2021 | | |
| Semey* | Austria [♦] | 300,000 | On-going | 01/10/2021 | | |

| | | | | | | |
|------------------|-----------|---------|----------|------------|--|--|
| Ust-Kamenogorsk* | Austria♦ | 300,000 | On-going | 01/10/2021 | | |
| Ganja | SSF | 350,000 | On-going | 13/06/2022 | | |
| Split | Taiwan◇ | 350,000 | On-going | 05/03/2021 | | |
| Iasi | Taiwan◇ | 350,000 | On-going | 21/10/2021 | | |
| Warsaw | Taiwan◇ ❖ | 300,000 | On-going | 19/11/2020 | | |
| Ankara | Taiwan◇ | 350,000 | On-going | 06/08/2021 | | |
| Walbrzych | Taiwan◇ ❖ | 370,000 | On-going | 14/06/2021 | | |
| 6 October City | SSF | 350,000 | On-going | 25/07/2022 | | |
| Medias | SSF | 275,000 | On-going | 03/05/2022 | | |
| Gaziantep** | SSF | 275,000 | On-going | 28/04/2022 | | |
| Timisoara | SSF | 350,000 | On-going | 09/05/2022 | | |
| Brcko | CEI | 275,000 | On-going | 29/08/2022 | | |

Source: GC team monitoring, data valid at October 2022

Notes:

* Joint contract for Semey and Ust-Kamenogorsk at €600k has been split equally

** Contract value for Gaziantep at US\$ 300k has been converted to €275k

♦ Funds sources from Austria include: Austria, Austria DRIVE, Austria MEI bilateral fund, CREATE Fund

◇ Funds from Taiwan include: Taiwan Business - EBRD TC Fund

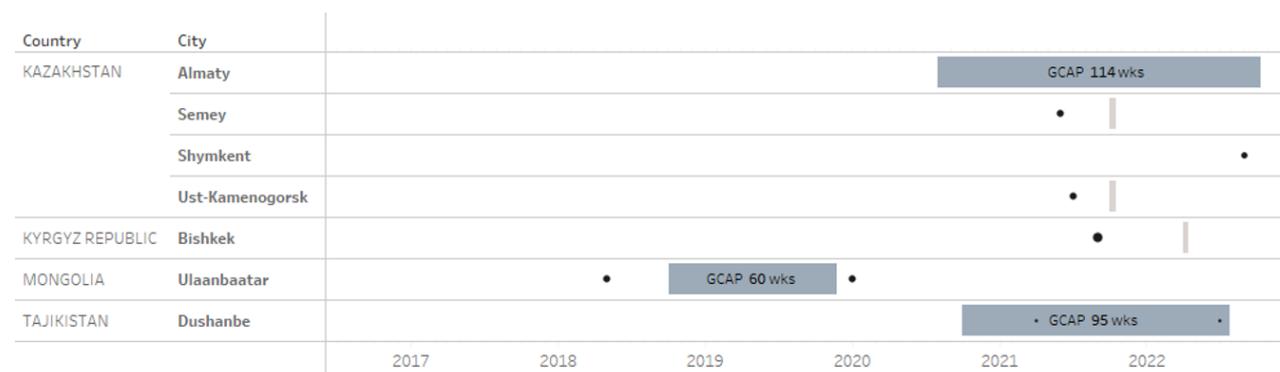
❖ For Warsaw and Walbrzych the budget amount indicates the volume of TC donor funds; these two GCAPs were co-financed by Poland

Timeline of GCAP preparation and GrCF investment by region

NB: only cities which have either started GCAP preparation contract or have at least one GrCF sub-operation are included in this overview

Central Asia

Figure 27: Timeline of GCAP and GrCF implementation in Central Asia



GCAP duration was calculated from contract start to GCAP completion

Grey bar represents start of GCAP contract where GCAP has not been completed to date

Circles represent date of signing of GrCF Sub-operations in the city; their size is relative to NCBI

There are **3 completed GCAPs** in CAS, out of which 1 also adopted. Completed but not yet adopted are GCAPs in Almaty and Dushanbe. **Almaty** is the only city in the Programme, which has a completed GCAP but no GrCF investment. There is a GrCF sub-operation *51583 Almaty Electric Public Transport*, Board approved in March 2022, which has not been signed to date. **Semey**, and **Ust-Kamenogorsk** started GCAP preparation contracts in October 2021. They have one investment under GrCF each. **Shymkent** has not started GCAP preparation. There is one GrCF investment signed. **Bishkek** started GCAP

preparation contracts in April 2022. There is one GrCF investment signed. **Ulaanbaatar** has a completed GCAP since November 2021. There was one GrCF investment prior to GCAP and one follow-up. **Dushanbe** has a completed GCAP since July 2022; there have been two GrCF sub-operations signed (cumulatively of less than €5m NCBI), both were signed within the period of GCAP preparation.

Central Europe and Baltics

Figure 28: Timeline of GCAP and GrCF implementation in Central Europe and Baltics

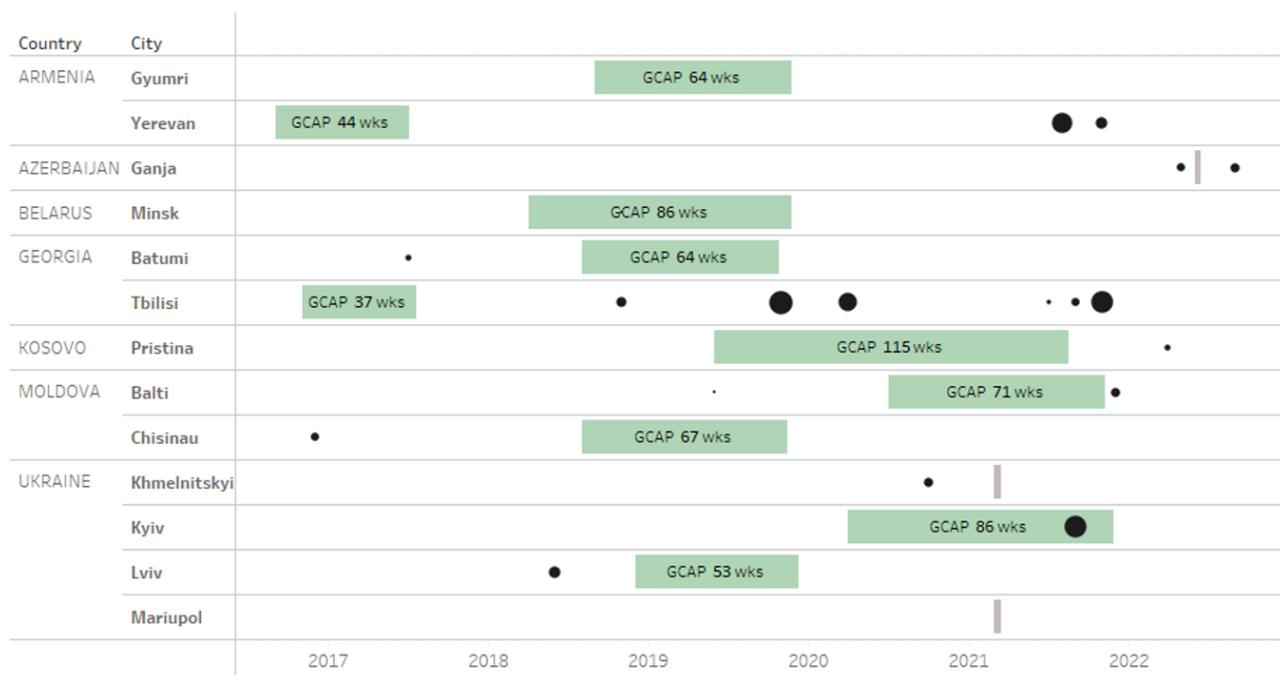


GCAP duration was calculated from contract start to GCAP completion
Grey bar represents start of GCAP contract where GCAP has not been completed to date
Circles represent date of signing of GrCF Sub-operations in the city; their size is relative to NCBI

There are **no completed GCAPs in CEB**. **Warsaw** started GCAP preparations in November 2020, at the same time as signing its only sub-operation so far. **Split** and **Walbrzych** started GCAP preparations in March and November 2021 respectively, following signing one operation each in December 2020. **Karlovac** has one sub-operation as a trigger project but GCAP contract has not started yet.

Eastern Europe and Caucasus

Figure 29: Timeline of GCAP and GrCF implementation in Eastern Europe and Caucasus



GCAP duration was calculated from contract start to GCAP completion
Grey bar represents start of GCAP contract where GCAP has not been completed to date
Circles represent date of signing of GrCF Sub-operations in the city; their size is relative to NCBI

EEC region has seen **10 completed GCAPs, out of which 8 also adopted** (not adopted remain Minsk and Kyiv). The two earliest GCAPs were in this region – Yerevan and Tbilisi.

While **Yerevan** GCAP was completed in August 2017, its first operation was signed in August 2021. This was *52868 GrCF2 W2 - ENA Investment Program*, assigned to Yerevan for the purpose of this overview; the project is however an investment with the national electricity distribution company ENA with the objective of nation-wide improvements in the distribution network; according to the project description this will include benefits for both Yerevan and Gyumri estimated at about 50% of the overall investment. Solely Yerevan-related investment was then a bus project signed in November 2021.

The other Armenian city, **Gyumri**, completed its GCAP in November 2021 has no GrCF sub-operations aside from benefitting from the electricity distribution investment noted under Yerevan. However, the team identifies *46540 Gyumri Urban Roads*, which was signed outside the Green City Framework as a stand-alone operation, as a part of the Green City Programme. Its relation to the programme is not clear however; this project was signed in May 2016, two years before GCAP preparation started in September 2019, and it was not identified as a trigger project.

Tbilisi represents one of the most extensive GrCF implementation in terms of follow-up projects. There was not trigger sub-operation, but the city has 6 signed follow-up operations after the completion of GCAP in August 2017. There was one operation signed each year 2018-2020, and 3 operations in 2021.

Balti has a completed GCAP and one trigger project and one follow-up.

Batumi, Lviv, Pristina, and Kyiv have completed GCAPs and one sub-operation each.

Chisinau has a completed GCAP and one sub-operation. In addition, the team identifies *47314 Chisinau Solid Waste*, which was signed outside the Green City Framework as a stand-alone operation, as a part of the Green City Programme. This project was signed in December 2020.

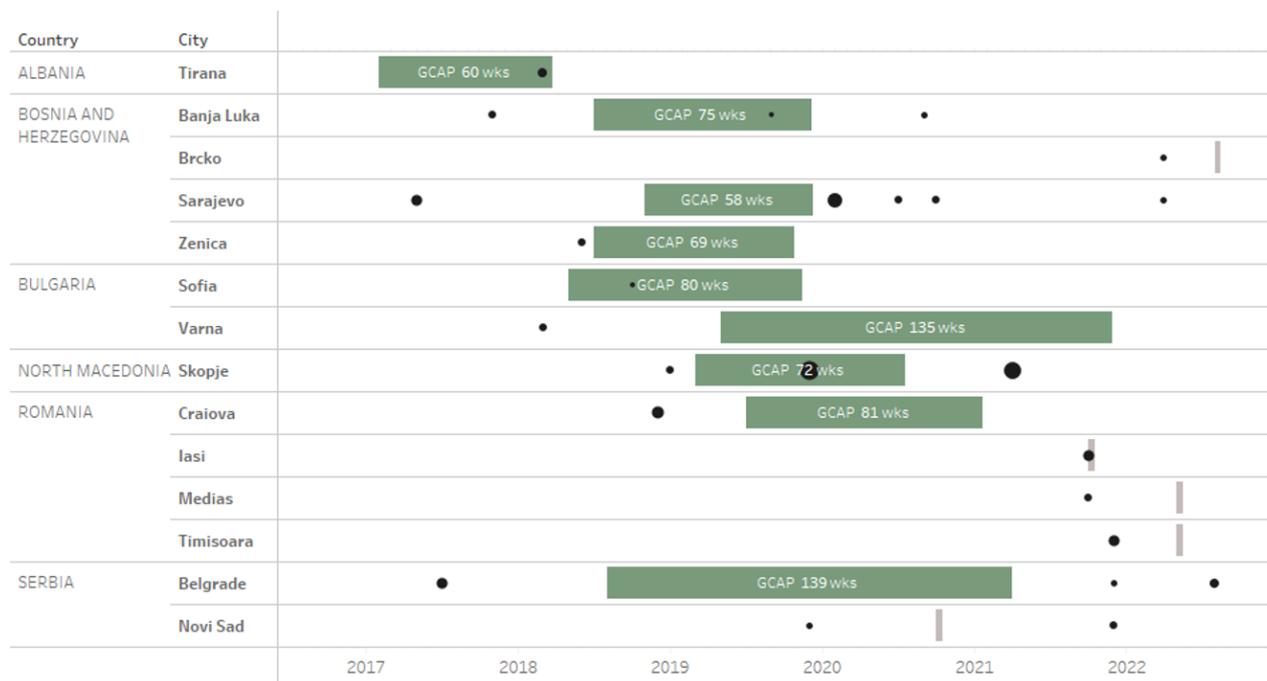
Khmelnitskyi and Ganja have started GCAPs in March 2021 and June 2022, and have 1 and 2 sub-operations respectively.

Minsk has a completed GCAP; its sub-operation *49483 GrCF2 W2 - Minsk VK*, originally signed in November 2018, was largely cancelled. EBRD is unlikely to have any further sub-operations in Minsk as Belarus has been suspended from EBRD operations in April 2022.

Mariupol started GCAP contract in March 2021; there is no GrCF sub-operation in the city.

South-Eastern Europe

Figure 30: Timeline of GCAP and GrCF implementation in South-Eastern Europe



GCAP duration was calculated from contract start to GCAP completion
 Grey bar represents start of GCAP contract where GCAP has not been completed to date
 Circles represent date of signing of GrCF Sub-operations in the city; their size is relative to NCBI

There are **9 completed and adopted GCAPs** in SEE cities.

Tirana completed a GCAP as one of the first three cities in the Programme in April 2018, and signed its only sub-operation just before that, in March 2018.

Sarajevo is the city with most implementation within the framework in the region, with a total of 6 signed operations and GCAP completed in December 2019 (this was not formally approved by the city until May 2021).

Belgrade signed its trigger sub-operation in July 2017 but did not start its GCAP preparation until August 2018. This was protracted (essentially on hold for a period of time) and not completed until March 2021. Since then, two follow-up operations were signed, in December 2021 and August 2022.

Banja Luka and **Skopje** have both a completed GCAP and 3 sub-operations, one prior, one within and one after GCAP preparation period.

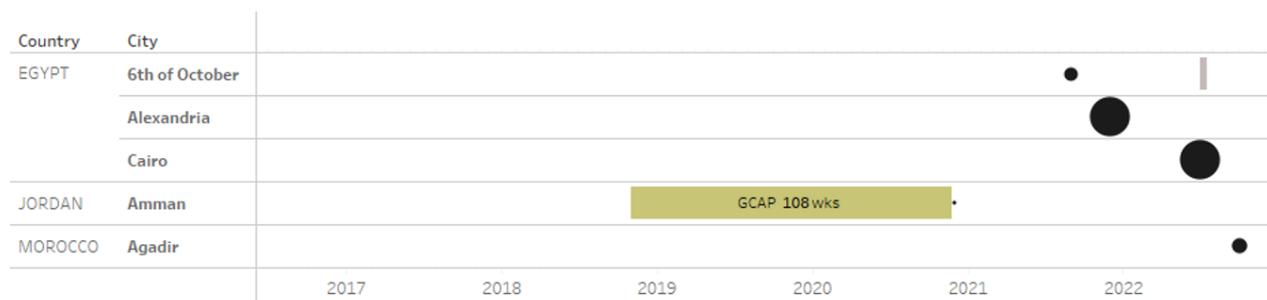
Varna, **Zenica**, **Sofia** and **Craiova** have all completed GCAPs and one sub-operation each. These were trigger projects signed before or during GCAP preparation in March, June, October and December 2018 respectively.

Iasi, **Medias**, **Timisoara** and **Brcko** have started GCAP preparations in 2021 (Iasi) and 2022; they all have one signed sub-operation signed in 2021 (Iasi, Medias, Timisoara) and 2022 (Brcko).

Novi Sad started its GCAP preparation in October 2020 already but this has not been reported completed so far. There are two sub-operations in the city, signed in December 2019 and December 2021.

Southern and Eastern Mediterranean

Figure 31: Timeline of GCAP and GrCF implementation in Southern and Eastern Mediterranean



GCAP duration was calculated from contract start to GCAP completion
Grey bar represents start of GCAP contract where GCAP has not been completed to date
Circles represent date of signing of GrCF Sub-operations in the city; their size is relative to NCBI

There is **1 completed and adopted GCAP** in SEM, this is in Amman.

Amman completed GCAP in November 2020, and had so far one sub-operation, signed in December 2020. In addition, the team identifies two sub-operations of another framework as part of the Green City Programme: *50488 GAM Lagoon Remediation Project*, and *51044 GAM Solid Waste Crisis Response - Al Shaer WTS*, both under the Municipal Resilience Refugee Response Framework (48536). These were both signed in December 2019, within the time period of GCAP preparation, a year before the GCAP completion in November 2020.

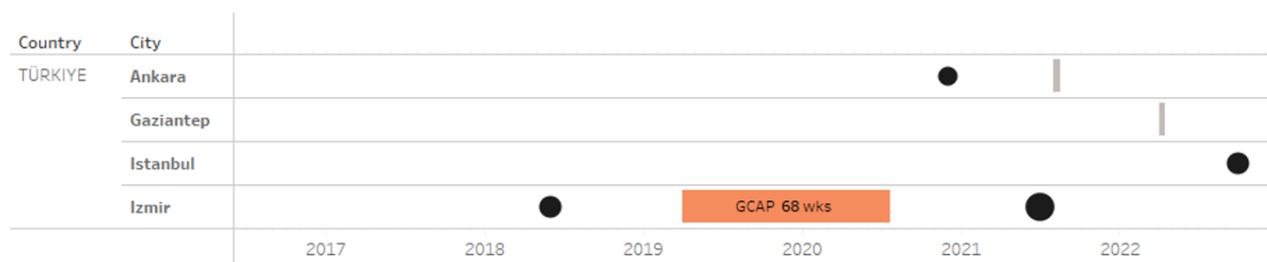
Alexandria and **Cairo** are the cities with the largest GrCF sub-operations overall, with investment of €250m each for metro systems. Neither of them has started GCAP preparations yet.

City of 6th October has one sub-operation signed in September 2021, and GCAP preparation is underway since July 2022.

Agadir has not started GCAP preparation and has just signed its trigger sub-operation in October 2022.

Türkiye

Figure 32: Timeline of GCAP and GrCF implementation in Türkiye



GCAP duration was calculated from contract start to GCAP completion

Grey bar represents start of GCAP contract where GCAP has not been completed to date

Circles represent date of signing of GrCF Sub-operations in the city; their size is relative to NCBI

There is **1 completed and adopted GCAP** in TRK, this is in Izmir.

Izmir completed its GCAP in July 2020, and has two sub-operations; a trigger signed in June 2018, and a follow-up signed in July 2021.

Ankara started its GCAP preparation in August 2021, and has one sub-operation signed in December 2020.

Istanbul has not started GCAP preparation, and its sub-operation was just signed in October 2022.

Gaziantep started GCAP preparation in April 2022, there is no GrCF sub-operation.

Table 8: GrCF sub-operations by city

| CITY | OpID | Operation name | GC framework | Date signed | NCBI (€) |
|-----------------------------------|----------|--|--------------|-------------|---------------|
| Central Asia | 8 | | | | 64.3 m |
| KAZAKHSTAN | | | | | |
| Semey | 50142 | GrCF2 W2 - Semey Solid Waste Management | GrCF2 W2 | 16/06/2021 | 8,254,536 |
| Shymkent | 53239 | GrCF2 W2 - Shymkent WWTP Capacity Extension Project | GrCF2 W2 | 23/09/2022 | 7,004,502 |
| Ust-Kamenogorsk | 50141 | GrCF2 W2 - Ust-Kamenogorsk Solid Waste Management | GrCF2 W2 | 02/07/2021 | 8,750,239 |
| KYRGYZ REPUBLIC | | | | | |
| Bishkek | 51598 | GrCF2 W2 - Bishkek Buses | GrCF2 W2 | 16/09/2021 | 16,000,000 |
| MONGOLIA | | | | | |
| Ulaanbaatar | 46581 | GrCF - Ulaanbaatar Solid Waste Modernisation Project | GrCF | 09/05/2018 | 9,764,445 |
| | 49511 | GrCF2 W2 - Ulaanbaatar District Heating Project | GrCF2 W2 | 10/01/2020 | 10,066,438 |
| TAJKISTAN | | | | | |
| Dushanbe | 49375 | GrCF2 W2 - Dushanbe District Heating Project | GrCF2 W2 | 14/04/2021 | 2,516,610 |
| | 52789 | GrCF2 W2 - Dushanbe E-Mobility | GrCF2 W2 | 01/07/2022 | 2,013,288 |
| Central Europe and Baltics | 4 | | | | 62.0 m |
| CROATIA | | | | | |
| Karlovac | 52899 | GrCF2 W2 E2 - Karlovac District Heating Project | GrCF2 W2 E2 | 11/07/2022 | 3,000,000 |

| | | | | | |
|------------------------------------|-----------|--|----------|------------|----------------|
| Split | 51317 | GrCF2 W2 - Split water purification project | GrCF2 W2 | 23/12/2020 | 20,000,000 |
| POLAND | | | | | |
| Walbrzych | 51556 | GrCF2 W2 - WALBRZYCH BUILDINGS THERMOMODE | GrCF2 W2 | 23/12/2020 | 4,771,277 |
| Warsaw | 48666 | GrCF2 W2 - Warsaw Metro Line II extension | GrCF2 W2 | 26/11/2020 | 34,215,355 |
| Eastern Europe and Caucasus | 19 | | | | 471.4 m |
| ARMENIA | | | | | |
| Yerevan* | 51749 | GrCF2 W2 - Yerevan Bus Project | GrCF2 W2 | 24/11/2021 | 20,000,000 |
| | 52868 | GrCF2 W2 - ENA Investment Program | GrCF2 W2 | 10/08/2021 | 60,398,631 |
| AZERBAIJAN | | | | | |
| Ganja | 52399 | GrCF2 W2 - Ganja Solid Waste | GrCF2 W2 | 12/05/2022 | 10,000,000 |
| | 52419 | GrCF2 W2 - Ganja Street Lighting | GrCF2 W2 | 12/09/2022 | 12,500,000 |
| BELARUS | | | | | |
| Minsk | 49483 | GrCF2 W2 - Minsk VK | GrCF2 W2 | 20/11/2018 | 840,000 |
| GEORGIA | | | | | |
| Batumi | 48104 | GrCF - Batumi Bus | GrCF | 13/07/2017 | 5,500,000 |
| Tbilisi | 47582 | GrCF - Tbilisi Solid Waste | GrCF | 27/11/2018 | 15,000,000 |
| | 51207 | GrCF2 W2 - Tbilisi Bus extension | GrCF2 W2 | 29/11/2019 | 80,000,000 |
| | 51392 | GrCF2 W1 - Tbilisi Metro Project | GrCF2 W1 | 29/04/2020 | 50,000,000 |
| | 52565 | GrCF2 W2 - Tbilisi Bus Phase III | GrCF2 W2 | 24/11/2021 | 70,000,000 |
| | 52577 | GrCF2 W2 - Tbilisi Municipal Services | GrCF2 W2 | 09/09/2021 | 9,600,000 |
| | 52825 | GrCF2 W2 - Tbilisi Solid Waste Extension | GrCF2 W2 | 01/07/2021 | 3,030,000 |
| KOSOVO | | | | | |
| Pristina | 50591 | GrCF2 W2 - Pristina Public Buildings | GrCF2 W2 | 12/04/2022 | 5,000,000 |
| MOLDOVA | | | | | |
| Balti | 50503 | GrCF - Balti Trolleybus | GrCF | 03/06/2019 | 2,500,000 |
| Balti | 52019 | GrCF2 W1-Balti District Heating Phase 2 | GrCF2 W1 | 24/12/2021 | 14,000,000 |
| Chisinau | 47899 | GrCF - Chisinau Buildings | GrCF | 06/12/2016 | 10,000,000 |
| UKRAINE | | | | | |
| Khmelnitskyi | 50729 | GrCF2 W2 - Khmelnytskyi Solid Waste Project | GrCF2 W2 | 07/10/2020 | 13,000,000 |
| Kyiv | 50839 | GrCF2 W2 - Kyiv District Heating | GrCF2 W2 | 02/09/2021 | 70,000,000 |
| Lviv | 49437 | GrCF - Lviv Solid Waste | GrCF | 01/06/2018 | 20,000,000 |
| South-Eastern Europe | 26 | | | | 384.6 m |
| ALBANIA | | | | | |
| Tirana | 49161 | GrCF - UKT Tirana Water Company | GrCF | 19/03/2018 | 14,202,015 |
| BOSNIA AND HERZEGOVINA | | | | | |
| Banja Luka | 49407 | GrCF - Banja Luka District Heating | GrCF | 13/11/2017 | 8,347,000 |
| | 49668 | GrCF2 W2 - Banja Luka Water - Phase 2 | GrCF2 W2 | 04/09/2020 | 6,000,000 |
| | 51214 | GrCF2 W2 - Banja Luka Water - Phase 1 | GrCF2 W2 | 13/09/2019 | 4,000,000 |
| Brcko | 52273 | GrCF2 W2 - Brcko Water | GrCF2 W2 | 12/04/2022 | 6,500,000 |
| Sarajevo | 48252 | GrCF - Sarajevo Water | GrCF | 11/05/2017 | 20,000,000 |
| | 50246 | GrCF2 W2 - Sarajevo Public Transport Project | GrCF2 W2 | 05/02/2020 | 15,000,000 |
| | 51113 | GrCF2 W2 - Sarajevo Public Buildings | GrCF2 W2 | 29/07/2020 | 8,000,000 |
| | 51294 | GrCF2 W2 - Sarajevo Public Transport Part 2 | GrCF2 W2 | 05/02/2020 | 20,000,000 |
| | 51784 | GrCF2 W2 - Sarajevo Public Transport Part 3 | GrCF2 W2 | 29/10/2020 | 10,000,000 |
| | 52520 | GrCF2 W2 - Sarajevo Public Transport e-Mobility | GrCF2 W2 | 12/04/2022 | 7,000,000 |
| Zenica | 49431 | GrCF - Energy Efficient Refurbishment of Zenica Hospital | GrCF | 27/06/2018 | 10,000,000 |
| BULGARIA | | | | | |
| Sofia | 49559 | GrCF - Sofia Electric Buses Acquisition P | GrCF | 15/10/2018 | 4,175,000 |

| | | | | | |
|---|----------|---|-------------|------------|----------------|
| Varna | 49366 | GrCF - Varna Climate Resilience Infra Project | GrCF | 28/03/2018 | 10,160,615 |
| NORTH MACEDONIA | | | | | |
| Skopje | 50185 | GrCF - Skopje Bus project | GrCF | 28/01/2019 | 9,947,912 |
| | 50376 | GrCF2 W2 - Skopje Wastewater Project | GrCF2 W2 | 20/12/2019 | 58,000,000 |
| | 51752 | GrCF2 W2 - Skopje Bus Rapid Transit Project | GrCF2 W2 | 21/04/2021 | 47,600,000 |
| ROMANIA | | | | | |
| Craiova | 50083 | GrCF2 W2 - Craiova Urban Rehabilitation | GrCF2 W2 | 04/12/2018 | 24,200,000 |
| Iasi | 51703 | GrCF2 W2 - Iasi Green Buildings | GrCF2 W2 | 21/10/2021 | 20,449,898 |
| Medias | 52456 | GrCF2 W2 - Medias Infrastructure Loan | GrCF2 W2 | 04/10/2021 | 7,732,221 |
| Timisoara | 52471 | GrCF2 W2 - Timisoara City Trams | GrCF2 W2 | 23/12/2021 | 20,300,000 |
| SERBIA | | | | | |
| Belgrade | 49267 | GrCF - Belgrade Green Boulevard | GrCF | 11/07/2017 | 20,000,000 |
| | 51421 | GrCF2 W2 - Belgrade Public Buildings | GrCF2 W2 | 23/12/2021 | 5,000,000 |
| | 53745 | GrCF2 W2 - Belgrade Water Phase 2 | GrCF2 W2 | 12/08/2022 | 13,000,000 |
| Novi Sad | 51441 | GrCF2 W2 - Novi Sad Bus Fleet Renewal | GrCF2 W2 | 31/12/2019 | 6,997,600 |
| | 53206 | GrCF2 W2 - Novi Sad Electric Buses | GrCF2 W2 | 07/12/2021 | 8,000,000 |
| Southern and Eastern Mediterranean | 5 | | | | 569.5 m |
| EGYPT | | | | | |
| 6th of October | 51830 | GrCF2 W2 - Project Goose | GrCF2 W2 | 09/09/2021 | 29,796,658 |
| Alexandria | 49905 | GrCF2 W2 - Alexandria Metro | GrCF2 W2 | 27/12/2021 | 250,000,000 |
| Cairo | 52385 | GrCF2 W2 E2 CML2 Sustainable Urban Transport Loan | GrCF2 W2 E2 | 25/07/2022 | 250,000,000 |
| JORDAN | | | | | |
| Amman | 52505 | GrCF2 W1: Amman Electric Bus Project | GrCF2 W1 | 31/12/2020 | 2,800,000 |
| MOROCCO | | | | | |
| Agadir | 53815 | GrCF2 W2 E2 - Project Kasbah | GrCF2 W2 E2 | 13/10/2022 | 36,871,712 |
| Türkiye | 4 | | | | 337.1 m |
| TÜRKIYE | | | | | |
| Ankara | 51474 | GrCF2 W2 - Ankara Bus Project | GrCF2 W2 | 07/12/2020 | 57,100,000 |
| Istanbul | 53615 | GrCF2W2E2 - Istanbul Metro II Extension | GrCF2W2E2 | 14/10/2022 | 75,000,000 |
| Izmir | 48348 | GrCF - Izmir Metro Project II | GrCF | 08/06/2018 | 80,000,000 |
| | 51599 | GrCF2 W2 - Izmir Metro Project III | GrCF2 W2 | 28/07/2021 | 125,000,000 |

* for the purpose of this overview, project 52868 GrCF2 W2 - ENA Investment Program in Armenia was assigned to Yerevan

Annex 7. GCAP outcomes monitoring

Monitoring of GCAP implementation and outcomes

Monitoring of GCAP actions implementation and progress on targets and objectives is the responsibility of the cities. As part of their Green City commitments, cities are required to set up structures and assign responsibilities for the monitoring of GCAP implementation and progress. The setup of this institutional monitoring framework and specific monitoring tools is part of the GCAP preparation, and is therefore completed and approved together with the GCAP.

GCAP consultants design the monitoring plans and tools as a part of GCAP preparation. As part of GCAP preparation, consultants are required to prepare a monitoring plan. This is a plan which translates the GCAP objectives, targets and actions into a document to enable the city to track action implementation and the development of related indicators from the indicator database. According to the methodology, the monitoring plan should be incorporated into and approved as a part of the GCAP, with key city personnel identified to execute the plan upon approval. The consultants also prepare the monitoring tools based on EBRD templates; these are usually large spreadsheet tables, which will underpin the monitoring, and comprise of:

- i. Progress monitoring plan; for the monitoring of action implementation and the related medium term targets;
- ii. Impact monitoring plan; based on the tracking of the development of the Indicator Database of contextual environmental indicators, which is used in the initial phase of GCAP preparation to establish diagnostics and baselines for the technical assessment.

The EBRD Green City team collects monitoring from cities annually. The GC team has dedicated internal resources to collect implementation monitoring from the cities. Cities with GCAP adopted for at least 6 months prior are included in the annual monitoring collection. The first round of this monitoring was carried out in 2020. The monitoring for 2021 and 2022 was provided by the team for the purpose of this evaluation.

The data collected by EBRD GC team is at activity implementation level only, thus breaking the link established in the GCAP monitoring plan between the actions and the targets of the GCAP objectives and the contextual (environmental) indicators to which the actions are intended to contribute. The EBRD spreadsheet template of data collection is based on the full list of GCAP actions for each city, for which cities provide status (*No action/ In preparation/ Under implementation/ Completed*), together with a brief description of the implementation. This allows to gain understanding of the proportion of actions that are being implemented or have been completed. However, this simplified template does not maintain the link of GCAP actions to medium-term targets to which the actions are supposed to contribute, nor does it maintain the link of the actions to the contextual environmental indicators. While the monitoring of actions maintains their grouping under strategic objectives, and sometimes (not systematically) mention the actual medium-term targets for the actions, these are not monitored or provided updates on.

The GCAPs develop links between the actions and the medium term targets under strategic objectives, as well as links between actions and the broader environmental indicators. The monitoring plan developed by the consultants in the process of GCAP preparation includes verifiable targets for indicators at action (or cluster of actions) level, which are achievable during the GCAP implementation period. Likewise actions are linked to the indicators from the Indicator database.

In general, the GCAPs link:

- actions to strategic objectives;
- actions to verifiable medium-term indicator/ targets;
- actions to context (state or pressure) indicators to which they contribute – these are indicators from the indicator database used for developing the city diagnostics/ baseline.

Table 9: GCAP actions and targets vs. EBRD monitoring, illustrative examples

| GCAP | EBRD monitoring | | |
|---|----------------------|---|--|
| | Status | Description | Mentions targets or indicators? |
| <p>GCAP objective – action – target and link to context</p> <p>Chisinau Objective: Sustainable mobility & transport Action 111: Renewing the urban bus fleet Targets: - average age of vehicles to be 8 years and the maximum 12 years by 2023 - 50% of vehicles to be compatible with Euro 3 or more Link to indicators: ▪ CO2 reduction</p> | Under implementation | No description | No link to target No link to context indicators |
| <p>Objective: Sustainable resource and waste management Action 411: Extending the waste collection services to the suburbs Targets: - 100% collection coverage in the suburbs - 90% collection rate for tariffs Link to indicators ▪ Quality of soil and underground water</p> | Under implementation | No description | No link to target No link to context indicators |
| <p>Tirana Objective: Sustainable energy Action SE1: Deployment of electric vehicle charging infrastructure Targets: - 500 charging points installed by 2023 Link to indicators ▪ State: Air quality (1, 1.1, 1.2 1.3), GHG emissions (8, 8.1) ▪ Pressure: Transport energy (10.1, 10.3)</p> | Under implementation | [...] there are 17 public charging points across the city, at the public parking lots [...] but we do not have a clear number of private EV charging points in Tirana | No link to target No link to context indicators |
| <p>Objective: Resource management Action RM3: Instalment of smart water meters in buildings Targets: - 50% of commercial properties and 25% of homes with smart water meter Link to indicators ▪ State: Drinking water quality (3), Water use (5) ▪ Pressure: Water consumption (25, 25.1), Water supply (26, 26.1)</p> | Completed | The status of the project for the installation of Smart devices has been completed during 2020. | No link to target No link to context indicators |

| | | | |
|---|--------------------|--|---|
| <p>Batumi Objective: Modernise and expand potable water and wastewater services W1: Investment in the modernisation of potable water distribution of under-served areas of Batumi Targets: - Modernised service for 80% area of newly acquired territories by 2025 - Reduce non-revenue water to 25% on average Link to indicators ▪ Non-revenue water ▪ Average of daily number of hours of continuous water supply per household</p> | <p>Completed</p> | <p>Batumi Municipality provides adequate supply of drinking water services throughout the municipality. According to the data of 2020, 100% of the population of Batumi Municipality was provided with drinking water without a schedule.</p> | <p><i>Links to action targets in action description; does not provide target update No link to context indicators</i></p> |
| <p>Ulaanbaatar Objective: Energy efficiency in buildings 5.3. Energy Efficiency in residential buildings programme Targets: - 20% building heat loss reduction - 15% precast panel buildings refurbished as a cumulative impact of policy and investment Link to indicators ▪ Energy savings ▪ CO2 mitigation</p> | <p>In progress</p> | <p>The “Energy Performance Contracting for Residential Retrofitting in Ulaanbaatar City” project developed by GGGI Mongolia. The project requested grant financing from NAMA to design a financing mechanism to retrofit 132 residential buildings. Pilot projects are being implemented. 1008 buildings for insulation to be financed by a grant of \$18m from NAMA/GCF Facility.</p> | <p><i>No link to target No link to context indicators</i></p> |

These illustrative examples show how EBRD monitoring of GCAP implementation is confined to progress status of actions. While GCAPs establish verifiable targets for actions, these are not carried over to the EBRD monitoring (Batumi example the only where these targets are mentioned in action description). The data for action targets are not being collected.

Likewise, links between actions and context indicators established in GCAPs are not carried over in monitoring. This means that even though selected high level context indicators are being monitored at city level by EBRD, it is not possible to make links between completed GCAP actions and the movement of those indicators.

The monitoring available on the EBRD side consists of outputs (status of action implementation) and, separately, selected high level context indicators updates. It does not contain updates on action targets (mid-level outcomes) or links of action to context indicators. This means it is not possible to establish the causality or contribution between the actions and the city-level environmental indicators. By not requesting the updates on the monitoring plan developed as a part of the GCAP, EBRD does not have data on the measurable indicators of actions’ outcomes, which were established as part of the GCAP design. For actions indicated as ‘completed’ it is not possible to know whether they were completed to the extent expected in the GCAP design or whether they were e.g. completed to the extent the city was able to resource them. It is also not possible to know whether the physical completion of the actions achieved the expected targeted outcomes.

Even investments under GCAP implemented by EBRD do not collect data on the related verifiable targets. While overall monitoring of GCAP action implementation is dependent on the information provided by the cities themselves, it would be possible (and probably expected) that GCAP actions which are financed by EBRD would include the related GCAP targets in its own monitoring. This is not currently carried out either.

While the full monitoring and reporting according to the monitoring plan is the responsibility of the cities, it is not clear that this is systematically happening. The monitoring of GCAP and related targets is the responsibility of each city and the GCAPs contain sections where they outline the organisation, scheduling, department responsibilities and resourcing for the monitoring and reporting. The

consultants also prepare the monitoring templates for progress and impact monitoring. Some GCAPs also include actions for the city’s own capacity strengthening for action delivery and monitoring, as part of GCAP actions. Nevertheless, it is not clear that this monitoring is systematically being carried out according to these plans. EBRD annual monitoring does not collect this data, and it is not clear that the cities themselves have the capacity, resources or incentive to carry out this reporting. It is possible that some cities have maintained the internal structures and monitoring plans developed as part of the GCAP to systematically report not only on action status but also on the progress towards the verifiable outcome targets for those actions. This was for example not the case in the case study cities for this evaluation.

The revised ToR for GCAP consultants now contain provisions for more support to the cities with monitoring. The new ToR for consultants used with the revised GCAP methodology now contains a provision for the consultants to support the city in the first monitoring (“*guide the first monitoring exercise to understand the status of implementing each action included in the GCAP*”) within 6 months of the GCAP completion, as well as provide related capacity building following this first monitoring based on identified capacity gaps. These provisions are likely the result of the first generation cities not being in all cases able to maintain the monitoring plan setup without further support.

With the reporting available on the EBRD side, it will not be possible to make inferences about the environmental impacts of GCAP implementation, to substantiate the Programme’s main objective of ‘significant environmental change’ at city level. In principle, based on the GCAP design, it would be possible to link GCAP cumulative implementation to changes in environmental indicators. This would require resources but by no means to the extent that would be required for a quantitative impact research study. It would allow for an informed qualitative contribution analysis, which could link implemented actions to the achievement of the medium term targets, and to their contribution to the movement of the environmental indicators with a reasonable level of confidence. This is indeed also within the spirit of the GCAP methodology, which does expect this reporting and evaluation to be carried out. Both the original GCAP methodology (which underpins the development of all first generation GCAPs included in this evaluation) and the revised version of the methodology from end 2020 make it clear that monitoring of GCAPs needs to link the actions to the contextual environmental indicators used for diagnostics baseline, based on which the objectives and actions themselves were developed and prioritised. E.g. the revised methodology stipulates that:

“Data should be collected across all relevant [pressure-state-response] indicators for each action to measure progress relative to the Green City baseline. Relevant indicators for each action will have previously been identified in the GCAP but may be expanded as new indicators and data collection tools become available.”⁸¹

Related transition impact monitoring

The transition monitoring of the Programme is centred on the overall transition objective of significant environmental improvement at the city level. While the first GrCF was still designed under the previous transition impact concept (the overall objective being included under ‘demonstration of new products and processes’), it was soon after translated into the new TQ-based system, and transition benchmarks were harmonised across the subsequent frameworks and extensions. While originally TQ Well-Governed was the secondary TQ for the framework (and all sub-operations), from the extension of the second framework in 2020, secondary TQs are selective for all sub-operations. TQ Green is the only

⁸¹ EBRD Green City Action Plan methodology, 2020; p.34 [emphasis added]

representation of a framework level ambition, while secondary TQs are monitored at sub-operation level and do not have framework-level targets.

While the Transition Impact monitoring is reasonably well designed to substantiate the achievement of intended objectives, the actual monitoring is not carried out nor reported beyond outputs. The transition monitoring of TQ Green covers the appropriate basic proxy indicators to substantiate the delivery and achievement of the ultimate overall objective. This is especially true in conjunction with the GCAP methodology, which provides for a development of sophisticated baseline as well as GCAPs which develop links between the actions and the verifiable targets under cities' strategic objectives, as well as links between actions and the broader environmental indicators. GCAPs also develop comprehensive monitoring plans and tools. The implementation of the GCAP monitoring at city level is the responsibility of each city, within their obligations under the Programme. The EBRD internal Green City team carries out annual monitoring exercise with the cities to collect data. However, the data collected by EBRD GC team is at activity implementation status only, thus breaking the link established in the GCAP monitoring plan between the actions and the targets of the city objectives and the contextual (environmental) indicators to which the actions are intended to contribute.

- **Preparation and adoption of GCAPs:** the implementation of GCAP contracts is monitored and the information on their completion and adoption in each city is available (as are the GCAPs themselves, published on an external website).
- **Multiple GCAP investments:** The GC team monitors the status of action implementation for all GCAP actions through annual monitoring request to the cities. The average number of investments within GCAPs is then reported through TIMS. This is broadly adequate, even if improvements in approach could be made to make the monitoring more meaningful within the spirit of the indicator; for example pre-investment or support actions (such as feasibility studies) here are counted as investment if they constitute a separate action in the GCAP.
- **EBRD follow-on investments:** The proportion of EBRD-financed investments as 'follow-ons' embodies the expectation for the Programme to grow in depth (rather than just in breadth), and for EBRD to participate in the financing of the implementation of the GCAPs. Here likewise some improvements in reporting could be made. One observation is that in the TIMS monitoring projects in the pipeline were included in the follow-on count to increase their proportion.⁸² Another observation is that in its list of cities that have 'multiple investments under the Green Cities Frameworks' the reporting includes Amman, Chisinau, Craiova and Sofia, which in fact only have had one investment project under GrCF each to date. While this probably could be characterised as borderline inadequate reporting, the data on EBRD own investments are internally available and this indicator can be fairly easily calculated.
- **Achievement of verifiable targets:** This indicator refers to the GCAP action-linked measurable targets; the benchmark asks for the achievement of 'at least 50 per cent of all verifiable targets, set in the GCAP, within 5 years after the respective GCAP finalisation (including both investments and well-defined policy measures).' The TIMS reporting on this benchmark notes that assessment of this is not yet possible as GCAPs had not yet been in implementation for 5 years, and adds that "GCAP implementation progress is closely monitored by EBRD". This latter part is incorrect as far as the substance of this benchmark is concerned – the GC team only collect data on the implementation status of the actions, but not on the achievement of the expected targets. Moreover, in the internal monitoring actions are not linked to those targets any more, and they are likewise separated from the contextual environmental indicators to which they are contributing.

⁸² There is no convincing reason for including projects in the pipeline in the count of follow-on projects in this count. Within the spirit of this indicator project can be considered delivered when at least signed with the client.

This means that no more than aggregated status reporting is currently possible – this is already covered in the ‘action implementation’ (output) benchmark.

- **Significant environmental improvement:** The latest TIMS reporting on this overall Programme objective consists of solely one sentence: “8 cities (out of the 13 that have provided data) are showing improvement in environmental indicators either towards to the higher benchmark or within the same benchmark.” This cannot be considered adequate reporting on this crucial impact expectation of this Programme:
 - The purpose of TIMS is to be impact monitoring. The setting of the benchmarks follows certain logic, which approximates the results causal chain and should ensure that this logic is translated in the reporting. The rationale of this benchmark is not to see whether any arbitrary environmental indicator in the city showed an improvement. The rationale is to establish a reasonably credible contribution between actions, their outcomes and this impact. The practice of not monitoring measurable targets of implemented actions, and not retaining the links of the actions to the environmental indicators, while collecting stand-alone data on selected environmental indicators does not serve the intended purpose here.
 - If this benchmark should be appropriately reported on, the minimum information provided would include: reporting separately on each city where this objective is considered achieved; including information on which environmental indicator has improved, which priority environmental area of the GCAP diagnostics it corresponded to, which were the actions of the GCAP that were related to this indicator and to what extent they were implemented (verifiable targets), and making a reasoned assessment of the possible cumulative contribution of these actions to the movement of the indicator.

Annex 8. GCAP action implementation

Data in this annex originate from 2022 GCAP action monitoring provided to the evaluation by the GC team. Analysis by EvD.

This aggregation of data from GCAP monitoring is based on the 2022 monitoring round data provided by the Green Cities team. The source data on the status of GCAP action implementation was collected from cities by the GC team in 2022. Only cities, in which GCAP has been adopted for at least 6 months, are approached to provide the update in the implementation status. Out of currently 24 completed GCAPs, this round collected monitoring data from 14 cities.

Table 10: Cities included in 2022 monitoring of GCAP implementation

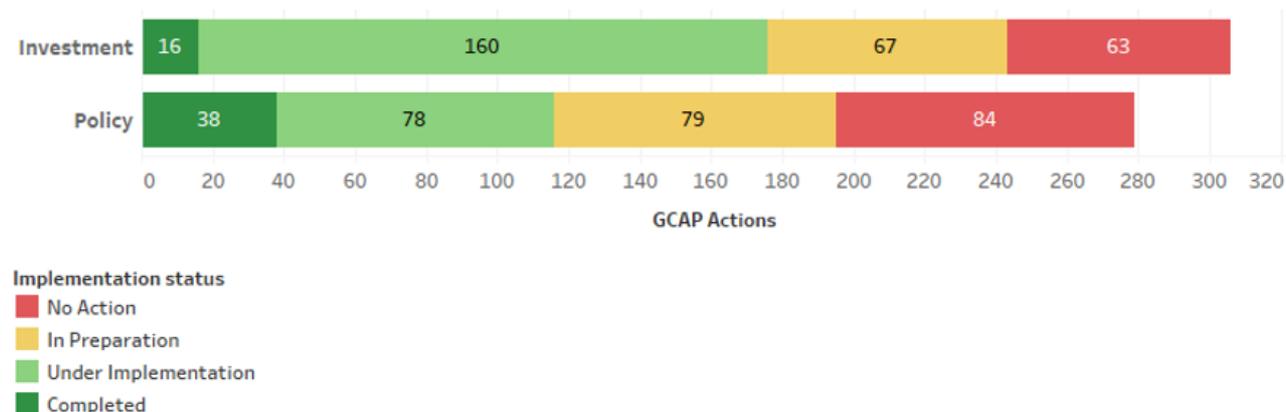
| City | GCAP status | GCAP completion | GCAP approval | 2022 monitoring |
|-------------|-------------|-----------------|---------------|----------------------------------|
| Tbilisi | Adopted | 01/08/2017 | 01/09/2017 | Yes |
| Yerevan | Adopted | 01/08/2017 | 12/09/2017 | Yes |
| Tirana | Adopted | 01/04/2018 | 07/06/2018 | Yes |
| Ulaanbaatar | Adopted | 22/11/2019 | 19/12/2019 | Yes |
| Gyumri | Adopted | 26/11/2019 | 20/12/2019 | Yes |
| Zenica | Adopted | 28/10/2019 | 26/12/2019 | Yes |
| Chisinau | Adopted | 27/11/2019 | 21/05/2020 | Yes |
| Sofia | Adopted | 27/11/2019 | 25/06/2020 | Yes |
| Banja Luka | Adopted | 10/12/2019 | 06/10/2020 | No |
| Batumi | Adopted | 20/11/2019 | 16/10/2020 | Yes |
| Skopje | Adopted | 21/07/2020 | 27/10/2020 | Yes |
| Izmir | Adopted | 28/07/2020 | 17/12/2020 | Yes |
| Craiova | Adopted | 21/01/2021 | 28/01/2021 | No |
| Sarajevo | Adopted | 13/12/2019 | 11/05/2021 | Yes |
| Amman | Adopted | 27/11/2020 | 08/06/2021 | Yes |
| Belgrade | Adopted | 31/03/2021 | 09/06/2021 | No |
| Lviv | Adopted | 29/12/2019 | 12/07/2021 | No |
| Pristina | Adopted | 19/08/2021 | 02/09/2021 | Yes |
| Balti | Adopted | 23/11/2021 | 23/11/2021 | No |
| Varna | Adopted | 17/12/2021 | 10/08/2022 | No, less than 6 mo from adoption |
| Minsk | Completed | 13/12/2019 | | No, not adopted |
| Kyiv | Completed | 22/12/2021 | | No, not adopted |
| Dushanbe | Completed | 25/07/2022 | | No, not adopted |
| Almaty | Completed | 10/10/2022 | | No, not adopted |

As discussed in the first section of this annex, data available consist of the status of action implementation but outcome data is not available. Therefore, this analysis consists of the aggregation of the progress of GCAP implementation, for which data exist. Data includes only actions of the 14 cities for which monitoring is available.

Actions in GCAPs are classified as Investment or Policy; these categories assume about half of the GCAP actions each on average. Investment actions comprise also actions that are preparatory such as feasibility or other pre-investment support actions. Overall across the 14 monitored GCAPs, there are

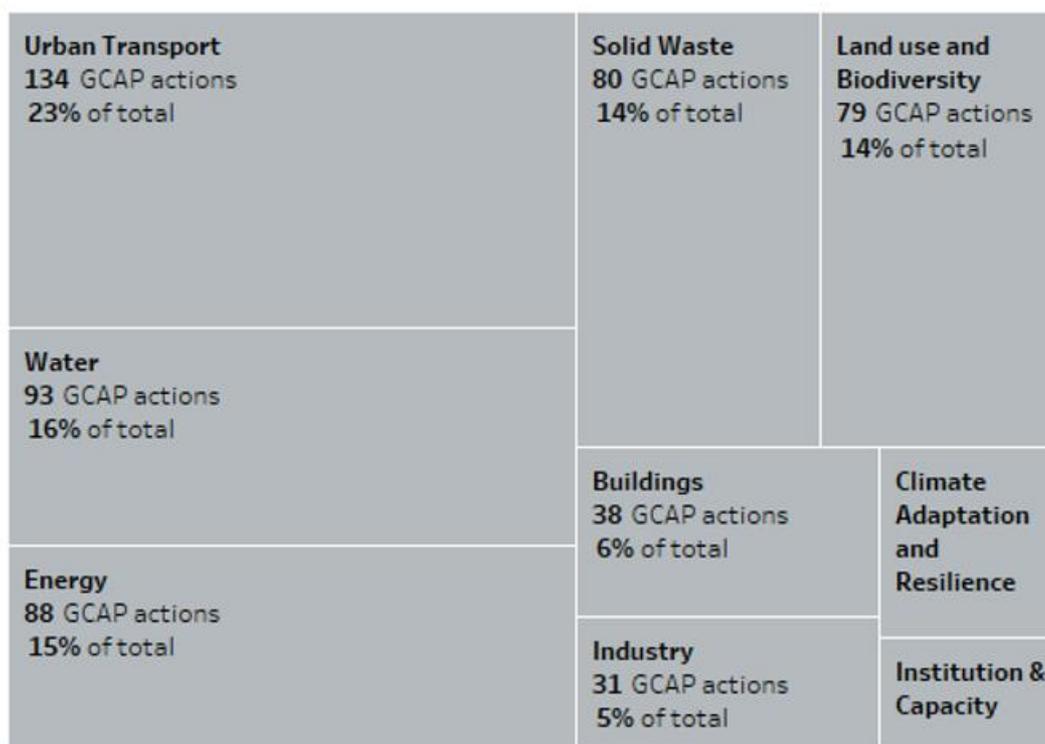
585 actions, out of which 306 Investment (52%) and 279 Policy (48%). 16 Investment and 38 Policy actions are reported as completed, and another 160 and 78 as Under implementation, respectively.

Figure 33: All monitored GCAP actions by status of implementation



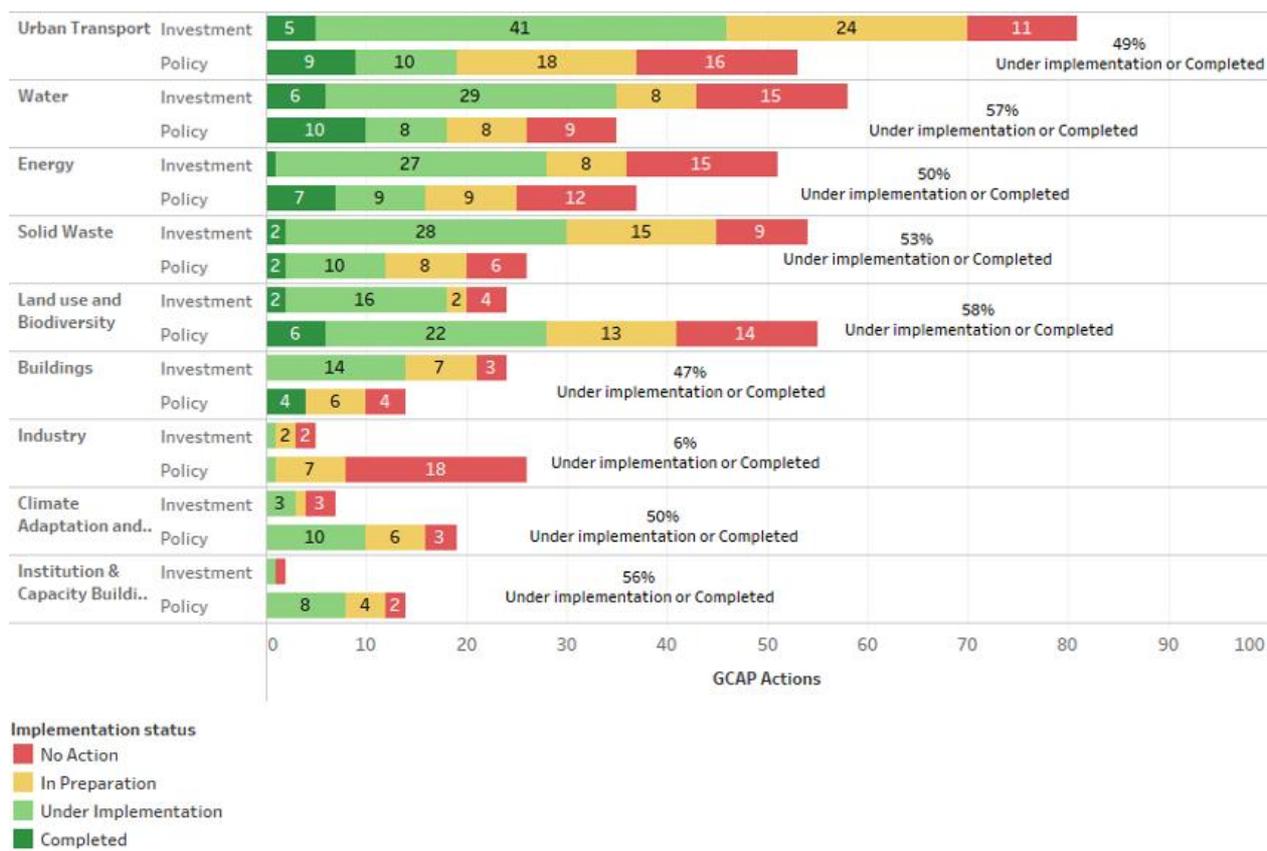
In sector distribution, most GCAP actions are in Urban transport, followed by Water, Energy and Solid waste. In the monitored GCAPs, the most represented sector is Urban transport with almost quarter of all actions (23%, 134 actions), followed by Water (16%, 93 actions), Energy (15%, 88 actions) and Solid waste (14%, 80 actions). Actions classified as Climate adaptation and resilience are at the end of the distribution (4%, 26 actions), just above actions aimed at general institution capacity building (3%, 16 actions).

Figure 34: All monitored GCAP actions by sector classification



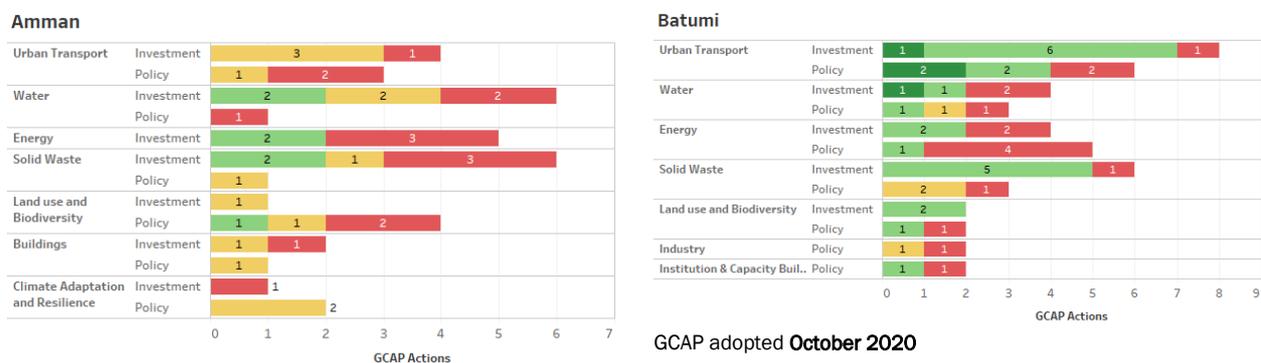
In terms of implementation progress, in most sectors around half of actions are either Under implementation or Completed. In most sectors the share of actions Under implementation or Completed are in the range of 47% to 58%. The exception are actions in Industry sector, of which only 6% are Under implementation.

Figure 35: All monitored GCAP actions by sector classification, status of implementation



An overview of progress of GCAP action implementation for each city is presented in the following set of figures.

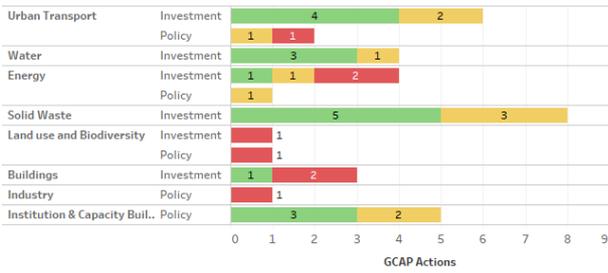
Figure 36: GCAP actions by city and sector classification, status of implementation



GCAP adopted June 2021

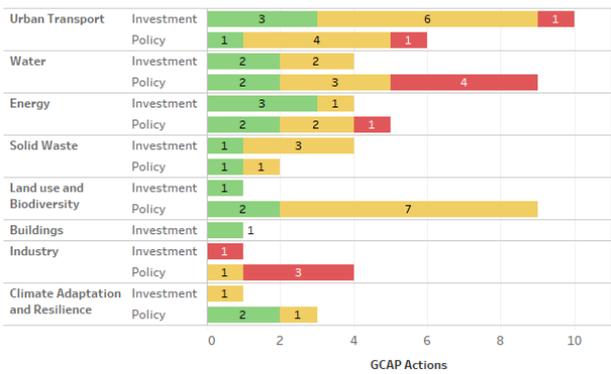
GCAP adopted October 2020

Chisinau



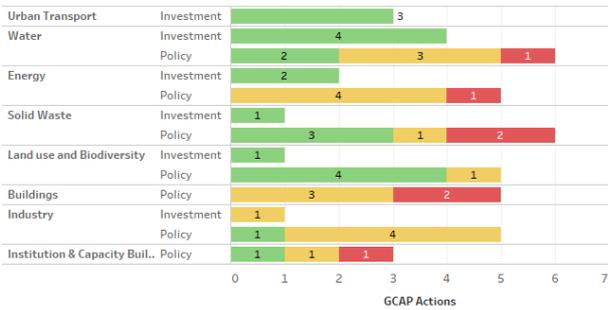
GCAP adopted **May 2020**

Gyumri



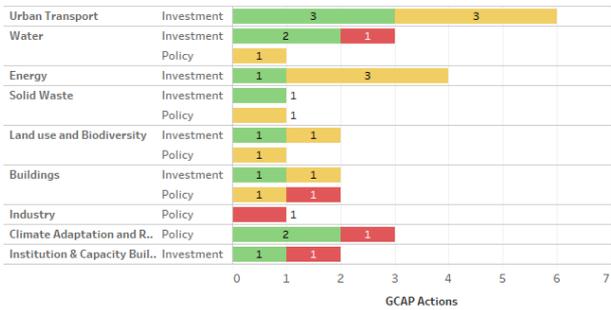
GCAP adopted **December 2019**

Izmir



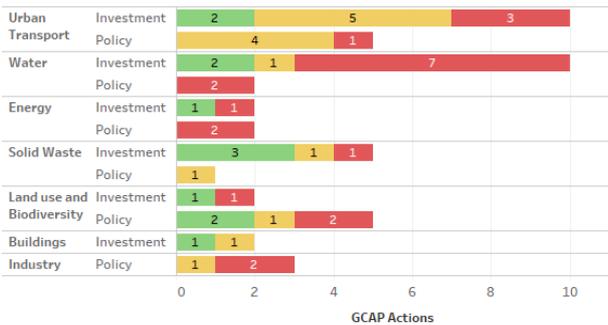
GCAP adopted **December 2020**

Pristina



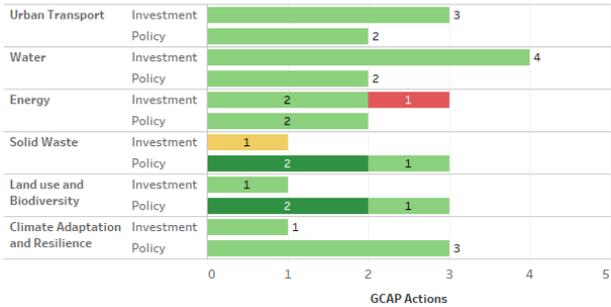
GCAP adopted **September 2021**

Sarajevo Canton



GCAP adopted **May 2021**

Skopje



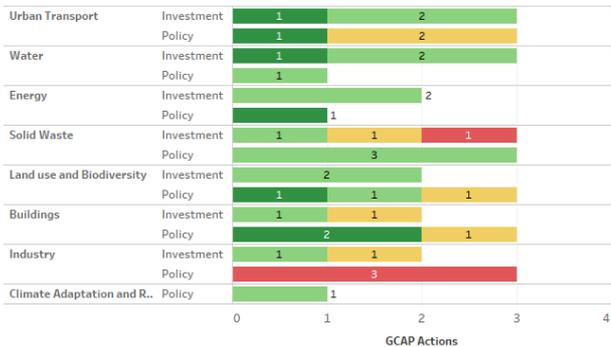
GCAP adopted **October 2020**

Sofia



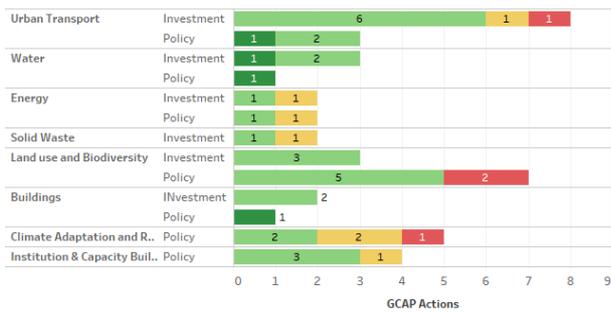
GCAP adopted **June 2020**

Tbilisi



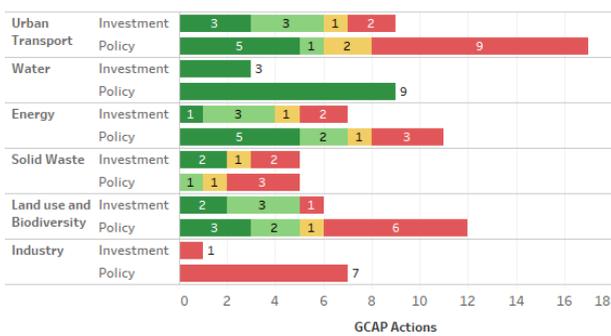
GCAP adopted **September 2017**

Tirana



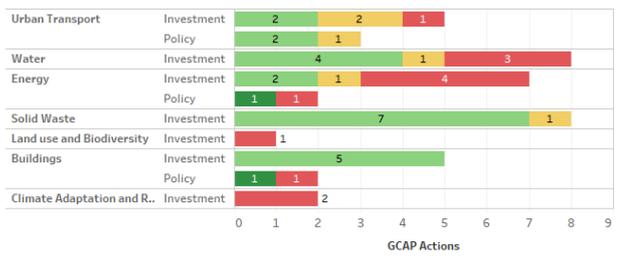
GCAP adopted **June 2018**

Yerevan



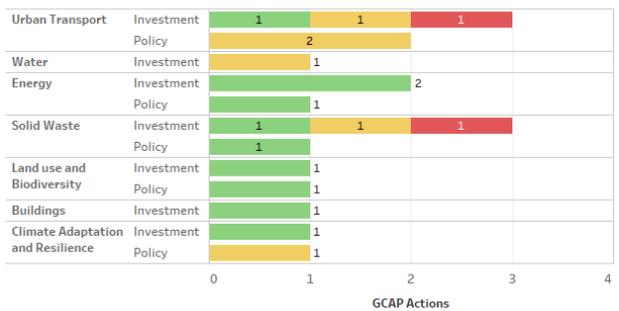
GCAP adopted **September 2017**

Ulaanbaatar



GCAP adopted **December 2019**

Zenica



GCAP adopted **December 2019**

Table 11: GCAP action implementation status by city

| | GCAP adopted | No Action | In Preparation | Under Implementation | Completed | |
|-----------------|--------------|------------|----------------|----------------------|-----------|----|
| Amman | Jun-21 | 16 | 14 | 7 | | 37 |
| Batumi | Oct-20 | 17 | 4 | 22 | 4 | 47 |
| Chisinau | May-20 | 8 | 11 | 17 | | 36 |
| Gyumri | Dec-19 | 11 | 32 | 21 | | 64 |
| Izmir | Dec-20 | 7 | 18 | 22 | | 47 |
| Pristina | Sep-21 | 5 | 12 | 12 | | 29 |
| Sarajevo Canton | May-21 | 22 | 15 | 12 | | 49 |
| Skopje | Oct-20 | 1 | 1 | 22 | 4 | 28 |
| Sofia | Jun-20 | 1 | 5 | 11 | | 17 |
| Tbilisi | Sep-17 | 4 | 7 | 17 | 7 | 35 |
| Tirana | Jun-18 | 4 | 7 | 28 | 4 | 43 |
| Ulaanbaatar | Dec-19 | 13 | 6 | 22 | 2 | 43 |
| Yerevan | Sep-17 | 36 | 8 | 15 | 33 | 92 |
| Zenica | Dec-19 | 2 | 6 | 10 | | 18 |
| | | 147 | 146 | 238 | 54 | |

Annex 9. GCAP Lessons learned

This Annex presents a synthesis of lessons learned from the GCAP process. The basis for this synthesis are GCAP Consultants' Final reports (Lessons Learned reports). These reports are required to be delivered by the Consultants after the finalisation of each GCAP. The purpose of the Final report is to identify the lessons for the production of the GCAP including difficulties faced during the assignment and suggestions for improvements. The reports are delivered to EBRD GC team and are intended for internal utilisation as part of the Programme's learning and knowledge management processes, and are therefore not made public. The reports were provided to the evaluation by the GC team.

This synthesis presents valuable insights and lessons emerging from the first generation of Green Cities GCAP implementation. This synthesis is based on 21 Final consultants' reports made available to the evaluation team. By definition these reports are only available when the GCAP process is finalised. This meant that all the reports are based on processes initiated and carried out under the initial GCAP methodology and consultants' ToR. The revised methodology incorporated a number of changes and additions to the GCAP process, some based on the experiences and lessons from the first generation of Green Cities. In this respect, while some of the observations distilled from the reports may be seen as having only partial applicability to the current methodology, they are meaningful in at least two respects: i) as a part of an ex-post evaluation of the first generation of Green Cities under the Programme; and ii) as an evidence of learning processes the Programme employs for continuous internal improvements. That said, majority of the key lessons reflecting on the key success factors of the GCAP process remain valid and are not related to the particulars of the GCAP methodology.

Table 12: Reports included in this synthesis review

| City | Country | Lead Consultant | Date of report |
|-------------|------------------------|-----------------|----------------|
| Tbilisi | GEORGIA | Empress/Enviros | Oct-17 |
| Yerevan | ARMENIA | EY | Apr-18 |
| Tirana | ALBANIA | ARUP | Jul-18 |
| Ulaanbaatar | MONGOLIA | RWA | Dec-19 |
| Minsk | BELARUS | Mott MacDonald | Feb-20 |
| Zenica | BOSNIA AND HERZEGOVINA | PWC | Feb-20 |
| Batumi | GEORGIA | AECOM | Mar-20 |
| Chisinau | MOLDOVA | RWA | Mar-20 |
| Lviv | UKRAINE | Mott MacDonald | Mar-20 |
| Gyumri | ARMENIA | Atkins | May-20 |
| Skopje | NORTH MACEDONIA | Atkins | Aug-20 |
| Sofia | BULGARIA | PWC | Sep-20 |
| Izmir | TÜRKIYE | AECOM | Sep-20 |
| Banja Luka | BOSNIA AND HERZEGOVINA | Atkins | Nov-20 |
| Sarajevo | BOSNIA AND HERZEGOVINA | Atkins | Dec-20 |
| Craiova | ROMANIA | Mott MacDonald | Feb-21 |
| Belgrade | SERBIA | Mott MacDonald | Mar-21 |
| Amman | JORDAN | AECOM | May-21 |
| Pristina | KOSOVO | Mott MacDonald | Oct-21 |
| Kyiv | UKRAINE | Atkins | Dec-21 |
| Balti | MOLDOVA | RWA | Jan-22 |

Lessons emerging from GCAP process

In the first generation of GCAPs there were clear emerging common areas of lessons and opportunities for improvement. The majority of first generation of GCAPs were generated in the two regions of the Programme rollout, Eastern Europe and Caucasus (CEE), and South Eastern Europe (SEE). There was also one representative each from Central Asia (CA), Türkiye, and Southern and Eastern Mediterranean (SEMED). This group is far from homogenous; it comprises countries (and cities) at various stages of transition from early transition countries (e.g. Georgia, Mongolia), to upper-middle income countries (Türkiye) and EU member states (Romania, Bulgaria). Yet, there were some clear areas of the GCAP process that were subject to reflections and lessons across the board, indicating areas for potential improvement and strengthening the case for the identification of key success factors. The main lessons learned are summarised in this section, accompanied by a selection of examples and observations from various cities – these examples are intended to be illustrative rather than exhaustive.

The Basics

The nature of GCAP and its formal approval

There is a need for clarity about the nature of GCAP as a strategic planning document vs. an operational action plan. This can vary city by city depending on their specific needs and context. But there should be an understanding and agreement – at the city level first and foremost – of the nature of the GCAP and its position in the city planning structures.

- Chisinau report encapsulates this lesson: The GCAP is a document that ultimately guide green investments at city level. For some, this is a strategic document, whilst for other is an operational planning one. In Chisinau, the driving force behind the GCAP was the need for green investments, integrating all policy actions and investments. Since the GCAP defines action ideas and estimates a financial implication and environmental results, it was avoided to name the GCAP as an action plan, naming it a strategic planning for a green city.
- Likewise in Ulaanbaatar, the municipality avoided to name the GCAP as an action plan, and preferred to name this document as a strategic investment plan.
- Kyiv report suggests that The GCAP should not be considered as a strict policy document which must be adhered to and formally adopted and implemented in its entirety. It should be labelled an “infrastructure and policy gap assessment” rather than an “investment plan”, with recommendations for possible investment supporting project preparation in line with ongoing initiatives.
- Skopje report recommended that the GCAP should not be pitched as a Policy document for the city but rather an advisory one.

This clarity is important also because it determines the nature of the GCAP’s formal approval. The positioning of the document has further implications for other aspects of its implementation, not least its approval and the level at which this approval happens. The GCAP methodology refers to a ‘legal process’ for the GCAP approval, and underlying this requirement is an expectation that high level of formalisation facilitates the GCAP’s implementation and to some extent resistance to political change. This expectation has borne out in some cities, while the experience from others shows a more complex reality.

- In Yerevan, one of the first GCAPs launched, the approval by the Council of Elders was seen as a significant success: the consultant was invited to the Council of Elders’ meeting where the document was presented for adoption. This is also highlighted as success and the eventual expression of ownership and commitment to GCAP implementation.

- Experience from Skopje goes as far as to suggest the removal of the formal approval requirement: Any requirement for formal adoption should be avoided and the document should serve an advisory function only, providing an environmental intervention gap assessment, avoiding any obligation of the City to adopt the action plan formally, or incorporate large investment programmes into their budgets. From this experience, by enforcing strict adoption, responsible departments viewed any current review as criticism and any future plans as additional pressure.
- In addition, there was some perception that the policy document that will be adopted may lead to enforced pressure on already capacity and financially-constrained departments. Nervousness seemed to exist around formally and legally adopting a plan totalling €300m, where the City budget is around €6m.
- Reports from Belgrade and Craiova note that GCAPs are more likely to be meaningfully adopted and followed through if they are attached to or embedded within an existing plan, such as a General Urban Plan. The reports contend that the formal GCAP approval is generally a political statement of support, rather than a genuine statutory obligation or “duty” in the way that implementing a General Urban Plan (or similar) would be. Similarly Pristina report notes that by attaching the GCAP to an existing plan or process, it is probable that there would be a stronger obligation to both develop and the implement it, than a stand-alone plan.
- In the case of Belgrade the consultants established good contact with Urban Planning Bureau and were able to align the GCAP; but in reality many of the investments will be delivered under other plans, rather than being specifically driven by the GCAP. On the other hand in Craiova while the process of General Urban Plan update in principle offered an opportunity for alignment, there was not enough engagement between the two teams and this led to limited streamlining of the GCAP to the City plan.
- In some cities the combining of the GCAP with the Sustainable Energy Action Plan (SEAP) or similar process was seen as strengthening the formal status of the document. This was the case for example in Belgrade, Sarajevo, Izmir.
- Report from Kyiv notes that despite the city’s engagement which eases the approval does not necessarily translate to the commitment in implementation: The level of engagement eased the approval process in the following stages. However since finalisation of the plan, it has not been followed by forthcoming ownership and leadership into the implementation stage.

City ownership & responsibilities

Readiness and engagement of the city prior to the start of the GCAP process, and clarity on the responsibilities and resources this will entail is necessary for smooth implementation. The GCAP methodology is clear in its understanding that the development of GCAP will place requirements on the city itself. The foreseen role of the city is not to solely ‘cooperate’ with an externally driven process, but rather to lead this process and make genuine commitment to its success. This requires political leadership, engagement, and mobilisation of internal resources in setting up appropriate institutional structures. The clarity on the nature of GCAP as discussed above is also a factor in the creation of the city’s expectations and their allocation of resources at the adequate levels. Experience shows that city readiness and ownership were achieved at varying levels.

- There are various examples of strong city leadership and commitment. Balti report for example notes that the decision making level of the city was engaged throughout the entire project implementation, with two vice-mayors directly coordinating the work.
- Likewise in Craiova, the City established a Focal Point group which acted as a steering committee for the development of the GCAP. This was extremely useful to have in place from an early stage as it gave good access to stakeholders and data while we were developing the plan. This included representatives from the Public Services Department, PR Department and experts in energy, transport and environment, which were the key areas of interest. However, the city’s urbanism team were not engaged and senior representation from this team on this group would have been beneficial.

- In Lviv, it was clear from the outset that the City authorities had a clear understanding of the environmental challenges they face and had already started to address the most pressing problems. There was also a high level of support for the GCAP projects at all levels of the City administration. The city established a ‘GCAP unit’ as not an official department within the City formal organisation, but a combination of four people from the City Investment Department and the City Institute, which oversees strategic projects. The Unit included the Heads of both organisations. This initiative was extremely helpful throughout the project.
- In Yerevan, the city welcomed the fact it had been selected as a pilot city for the GCAP development and declared its readiness to support the process. As the process started it was clear, however, the City did not plan any active participation in the GCAP development. Similarly in Gyumri, while the Mayor continuously expressed his high esteem of the support of the GCAP Programme, political commitment and ownership was only partly achieved.
- The Belgrade report notes that stronger municipal ownership of the plan is needed as it would encourage ownership and help integrate the GCAP into the wider municipal context. However, this has to be balanced against the risks of non-delivery and the benefits of having the consultant drive the programme.
- The Belgrade GCAP development suffered from initial lack of city engagement and significant delays. The report notes that despite the mayor’s early personal commitment, there was a lack of institutional commitment to the project in the early phases which were characterised by delays in mobilising a working group and a GCAP/SECAP coordinator for the city. This led to minimal engagement from other city stakeholders. The process was effectively stalled for a period of about seven months after the initial phase. It was then revived thanks to EBRD involvement, and successfully completed. The consultant reflects on the potential reasons for the initial lack of progress, and suggests that the way of signing up the city for the Programme through a ‘trigger’ project, where commitment to GCAP was a condition attached to a specific investment was a contributing factor as it could have been perceived as an ‘external obligation’. The report concludes that the formal MoU, which was later signed for the re-mobilisation of the project, specifically managing involvement in the GCAP and SECAP (independent of other investments), presented a much clearer mandate for stakeholders to engage.
- Similarly in Kyiv, the required internal structures at the city level were not in place at the beginning of the project, and were not assigned for almost ten months. This resulted in an absence of ownership, leadership and accountability from the city for their own Plan. This effectively paused the project and caused significant delays. However, once the GCAP teams were created, the Coordinators and Working Group were deeply engaged and provided excellent feedback in the developing of the actions process. This contributed to producing a robust plan.
- The establishment of internal structures within the city to manage the process while engaging the right stakeholders at the right levels is also a subject of attention. This partly stems from the understanding of the nature of the GCAP as discussed above; in the case of Chisinau, the city’s initial assumption was that the department responsible for the implementation of the ‘trigger’ project, which included the GCAP commitment, would also be responsible for the GCAP development. Likewise in Ulaanbaatar, it was initially the department implementing the trigger investment, which was responsible for GCAP. The responsibility for the GCAP coordination was later re-assigned to the Policy and Planning Department, which had however limited capacities in terms of implementation knowledge and experience in the sectors covered by GCAP. The report concludes that it would probably be more appropriate to work with a technical department as a counterpart, for instance the Urban Planning Department. The more integrated the approach, the better – usually, the Urban Planning Department is the entity that integrates all the elements in one design document.
- In some cases, the responsibilities of the city were not clear. For Amman, the report notes the Technical Committee and particularly the Steering Committee experienced misunderstanding of their roles and responsibilities and the GCAP process itself. Although this is the responsibility of the city point of contact, there has not been much evidence in any GCAPs the consultant has developed that this has been done correctly.

- In Banja Luka, the city administration did not take a fully active role in the majority of the GCAP tasks. This caused the problem that feedback came late and at points in the process where considerable work had already been included in the drafting of various elements of the GCAP. Likewise the data collection and technical assessment was entirely done by the Consultant Team with minimal engagement of the City Administration staff. A more technically responsive relationship, where there was a greater understanding of the tasks and timescales, as well as ownership, with the City Administration would have been beneficial.
- In Batumi the report reflected on the fact that despite setting up two Project Governance bodies (the Internal Advisory Group and the Steering Committee) the City did not engage in much detail with the process and deliverables that were produced by the Consultant team. The consultant team started engaging with the City Lead at the beginning of the project but it was evident from the onset that there were certain communication barriers such as language and capacity issues. Developing open and two-way communication with the City Lead proved to be increasingly challenging as the project progressed.
- Lack of engagement was a serious issue in Minsk. The report notes that it is by no means clear that the City has fully bought into the idea of the GCAP and had a weak understanding of the project cycle of projects and their priorities and strategies financed by IFIs. Culturally, it became apparent that the concept of setting an ambitious multi-year “green plan” with stretch target was not accepted. Moreover, the use of indicators which suggested failure of current aspects of the City performance clearly caused significant political disquiet as did engagement with civil society and non-governmental agencies. Overall the City has failed to allocate adequate resources (political, project management and technical) to ensure good delivery.

Within the context of the city’s supporting institutions, the role of the Green City coordinator has been shown to be crucial to efficient and effective GCAP process implementation in many cities. Especially when matched with a knowledgeable and well-connected local coordinator on the consultant side, the GCAP process has best chances for smooth implementation.

- In Craiova the city has a very proactive and enthusiastic GCAP coordinator who worked hard to secure inputs from both the City officials but also ensured that it received appropriate attention from the City’s Mayor. This was a very significant advantage in the delivery of the project.
- In Pristina, while there was a coordinator nominated early on, the person nominated was not employed by the Municipality which caused problems in terms of their status and ability to effectively co-ordinate with other City officials. Despite attempts to formalise her role within the Municipality, this was not successful and resulted in a much lower level of support being provided to the Consultant. Towards the end of the process, there was very little input at all from the Green City Coordinator, such that the Consultant Team Co-ordinator based in Pristina facilitated most meetings with the City’s Political and Technical Team to ensure that the necessary input and feedback was provided.
- In Sarajevo, the consultant’s local coordinator was well-respected and connected specialist, who was also leading on the development of the Cantonal Environmental Action Plan, which helped to better understand key issues on delivering and developing the plan. However, additional resources had to be allocated to this consultant because the main point of contact in the administration did not speak English and all communication including progress emails had to be translated to both languages.
- The Belgrade report highlights that an early appointment of a committed GCAP coordinator in the city is critical. The absence of someone performing this role was, in the view of the consultant, the root cause of substantial delays. The report recommends clear ToR for the GCAP coordinator so that this person can be in place prior to the GCAP consultant being appointed.
- In Yerevan the report notes that the project manager on the City’s part was an external person whose responsibilities covered actual implementation of large investment projects, such as road infrastructure, and was not really interested in the GCAP. Likewise this role was lacking direct

levers to the personnel of the relevant departments to actively participate in the different activities supporting the GCAP development. The report concludes that the leadership and focal point on behalf of the city is absolutely crucial to the progress and facilitation of GCAP development and approvals, and should be carefully appointed in the first stage of the project

- The Batumi report reflects that open and two-way communication with the City Lead was increasingly challenging, and suggests that the city be required to nominate a day-to-day lead person with sufficient English language skills who is empowered to promptly respond to requests from the Consultant team or can effectively escalate issues within the city administration.
- The Minsk report notes that the City GCAP Coordinator of the City was lacking availability or resources to actively develop the GCAP, and strict procedures were preventing communication between the Consultant and any other staff of the City, which has led to a lot of delays and a GCAP developed by the Consultant with minimal local input.

Process

Mobilisation/initialisation

The initialisation of the GCAP preparation on the part of the city is a crucial foundation of the process. While the methodology is clear on the importance of city ownership and commitment, there is less specificity on how to actually achieve this, and where the responsibility lies. In some cases of responsibilities formally assigned to the city fell into the scope of consultants' work, and processes were more consultant-driven than expected. Some reports recommend carrying out of pre-GCAP city readiness assessments, or underpinning all GCAPs with an EBRD-City MoU clearly setting out the expectations and responsibilities for all parties.

- For example, Banja Luka report recommends a 'pre-assessment of city readiness' – before selecting a city for the development of a GCAP, the EBRD should undertake a more detailed pre-assessment of the City Administration's capacity and preparedness to take an active role in the GCAP process, with a particular focus on GCAP implementation, monitoring and leadership. This could also help build a stronger relationship with the City Administration and would raise understanding of the City GCAP team and likely increase their engagement and ownership. In the case of Banja Luka, there was, in some cases, a lack of understanding of the GCAP ownership and responsibility at the outset. The same recommendation was made in Gyumri and Sarajevo reports (developed by the same lead consultant).
- For Izmir, the report points to a possible 'scope creep' for the consultants particularly in the early stages of the GCAP process and during deliverable review periods, putting pressure on consultant time during the later stages of the project.
- Positive experience from Skopje reiterated the importance of early identification of a core project team, and clear ownership of the GCAP. The city team early, clear direction and ownership of the process by the Mayor's office. This meant that the team were well engaged with the consultants immediately at project inception, and this resulted in quick mobilisation and excellent support to activities. The report recommends that this should be ensured for all GCAPs before the consultant is contracted to start.
- Yerevan, one of the first GCAPs, struggled with active city engagement, and the consultants suggested that an MoU signed between the EBRD and the City spelling out the role and responsibilities of each party, including the consultants.
- The Kyiv experience led to a recommendation for the City departments and teams to be given prior notice of the start of the GCAP, and be given suitable time to prepare. Only then should the consultant be engaged and begin their contracted obligations. This would help ensure buy-in but also help with the timescales for delivery. Similar recommendation was made in Skopje.

City capacity and capacity building

The Green Cities Programme includes cities of different sizes at various stages of development. The process of GCAP preparation requires sufficient capacity on the side of the city to fulfil the responsibilities stemming from the initial political commitment. Successful GCAP preparation and approval needs to be then translated into efficient coordination of its implementation, monitoring and reporting. The GCAP methodology includes provision for three capacity building workshops in the course of the GCAP preparation as a standard. Standardised GCAP methodology supports rigour and consistent quality in GCAP development. However, not all cities have the same level of internal capacity to be able to successfully lead and own the process from the start. This issue can be further exacerbated in some cities by high staff turnover. Assessment of institutional capacity at the outset of the process and adjusting the methodology for possible strengthening of the capacity building elements where needed may be desirable.

- In Zenica, the report suggests that capacity building sessions are better when integrated into the process, instead of scheduled at the end. The experience of capacity building value was mixed and depended greatly on whether the city can both identify a need which is specific enough to respond to, and then can mobilise the individuals to attend on the day. An alternative approach to capacity building would be to focus more on the practical aspects of GCAP implementation, with smaller group discussions focused on the steps and structures needed for effective implementation.
- The Sarajevo report links the above discussed readiness pre-assessment of the city to the city's capacity building needs and to the fact that the city needs to be able to subsequently implement the GCAP without consultant support: where possible, capacity gaps should be identified at an early stage by the EBRD, which would then enable the Consultant Team to conduct specific capacity building sessions to guide the beneficiary through the process and make sure they are able to drive the process further, when the beneficiary is responsible for implementing the GCAP actions and reporting progress to the EBRD.
- In Sarajevo also the report pointed out that some gaps in capacity were filled in by the consultants where their Stakeholder Engagement Expert provided support to the administration with the preparation of the documents needed for the GCAP adoption and approval by the Cantonal Assembly. Such support however is not available after the GCAP completion – the report suggests that more capacity building sessions could be included as part of the GCAP implementation and integration processes, although this would require additional resources.
- The Banja Luka report also notes that the methodology does not consider a specific assessment of the institutional capacity and capability of the City Administration as part of the GCAP process. This would help the Consultant Team to identify, at an early stage, the most suitable form of capacity building throughout the process, to address specific knowledge or skill gaps the City Administration faces. In the case of Banja Luka, this has been an ongoing challenge and one which has become more prevalent since the project has commenced.
- The Chisinau report notes that the capacities of the Municipality representatives were limited and generally, there is a shortage of human resources and the fluctuations of personnel is quite high. Taking into account that the estimated timeframe for the GCAP development process is 14 months, there are high chances that Municipality personnel who were involved in the development stage will no longer be engaged at the implementation phase.
- Through the implementation of the capacity building workshops with the representatives of the Ulaanbaatar municipality the consultant reflected that the capacities of the municipality representatives were very limited, and the capacities built will likely also be eroded through high staff turnovers.
- For Gyumri, the report notes that the methodology does not consider a specific assessment of the institutional capacity and capability of the City Administration as part of the GCAP process. This would help the consultant team to identify the most suitable form of engagement and include capacity building sessions at relevant moments throughout the process to address specific

knowledge or skill gaps the City Administration faces. The report concludes that the city is currently limited in its institutional capacity to adequately monitor and engage in the development of national and international policy landscape. While seeking opportunities to leverage financial and technical assistance resources, this is truly a restrictive factor for maintaining an adequate level of engagement in the development possibilities for the environmental protection programs.

- The Skopje report also suggests that capacity building events could be staggered across the whole GCAP deadline, to provide iterative support to City project teams to manage the process and prepare for the next stages.

Prioritisation of actions

Prioritisation of actions for the GCAP is a critical step in the preparation process. The balancing of priorities of various stakeholders and political interests with the outcomes of the data-based technical assessment and expert recommendations, and arriving to a plan which is well-rounded and respects the inter-dependence between individual actions is not always straightforward. There are choices to be made between more holistic and all-encompassing plans and more streamlined sector-focussed ones. Some questions were raised with respect to the eligibility of certain actions to be included in a GCAP.

Balancing priorities

- The Banja Luka report notes that there was also additional complexity when the steps of assessment were not aligned. For example, an action may have scored relatively high in the technical assessment but was not popular with stakeholders and political representatives – a water section action scored relatively highly in the technical assessment, but was ranked as low priority in both the stakeholder and political prioritisation. This issue highlights the direction and importance of GCAP ownership. As this is a political document subject to political approval, the political prioritisation comprises the final deciding step. However, this approach has risks in relation to potential political change in the leadership of the City Administration.

Interrelation between actions and sectors

- In the case of Amman, it was advantageous to merge stakeholders with different areas of responsibility for the participatory exercises, as this facilitated valuable cross-sectoral conversations and information sharing. Even when not directly beneficial to the GCAP document, these 'silo-breaking' discussions were an added value of EBRD's engagement with the city.
- In Izmir during the challenge prioritisation workshop, the tables were split by state indicator to allow for attendees to focus on their expert areas. The more popular tables were those where the City had a good track record in with past and existing projects, whereas the tables that were less popular were those state indicators where more significant gaps and challenges had been identified. To help counteract this, the consultants recommend that round-table exercises are cross-sectoral. This would also be beneficial in that, it would help avoid polarised responses for each state indicator, providing a range of perspectives.
- The Amman report noted that while at the prioritisation stage it may be simplest to consider all options as independent, the GCAP is prepared it is helpful to think about actions as packages within an interdependent programme.
- In Sarajevo the prioritisation exercise was conducted separately for sector action types, such as transport. This allowed identification of key 'anchor projects' that have wide support from the Canton Administration and the stakeholders but were not prioritised in holistic/ integrated approach.
- Banja Luka: the inter-dependence of actions needs to be kept in mind: The environmental impact if actions varies significantly but some low impact actions need to precede more impactful ones. A data collection action might not have any direct environmental impact but will lay the groundwork for developing infrastructure with maximised impact.

- Batumi: Consideration needs to be given to how the suite of Green City Policy Options and Actions will work together as a programme of initiatives. It is understood that a key focus of GCAPs needs to be on infrastructure investments, but their success will typically require a range of enabling actions (e.g. capacity building and awareness raising).

Depth vs. breadth of GCAP

- The Skopje report points out that due to the multi-sectoral nature of the study, and the competing nature of stakeholders, it is difficult to limit the GCAP to a very small number of options. Therefore, honing down 100 options to 25 is a significant challenge which faces repeated contest from stakeholders from all sides.
- In Sarajevo there were recurrent comments from stakeholders on the level of detail and spatial tailoring of actions. The consultants suggest that the definition of the level of detail of the actions should be agreed at the commencement of the task. Similarly, the cost estimates should be considered as high-level estimates not in-depth assessment of Capex and Opex.
- The Kyiv report comments that it was occasionally hard to strike a balance between a range of strategic level identification of actions and policies, and highly in-depth, focused action for each sector and sub-sector. Some stakeholders understood the strategic nature of the GCAP in so much as it identifies priority areas for intervention, with targeted projects indicating potential scope. While others expected a detailed full feasibility review of small-scale schemes to be completed for every potential action.
- In Tirana the prioritisation process resulted in a broad range of sectors of interest, which in turn led to a GCAP with many actions. Consequently, the consultants were able to apply limited resources to the costing and analysis of each action. This limited the utility of that analysis for the municipality.
- The prioritisation process resulted in a broad range of sectors of interest, which in turn led to a GCAP with many interdisciplinary actions. The consultants suggest that future action plans could be more valuable for the cities if they were more aggressively focused and did not claim to be comprehensive in nature. [Sofia/Zenica]
- The Sarajevo report suggests that the final number of priority actions should be fully deliverable for the administration within the GCAP period. The accumulated budget calculated for those actions should be within reach for the Canton to raise sufficient capital and ensure appropriate management to guarantee implementation.
- In Izmir actions were divided into 'baskets' by action type. Although a logical approach to take during action development, this complicated matters when constructing the final report, resulting in a more voluminous report than first anticipated. On reflection, retaining a sector-based structure to the final report would have been more time efficient and reader friendly.

Project eligibility

- The Craiova report suggests that there may be some benefit in developing clear criteria for what cannot be a GCAP project. When developing initial options, stakeholders proposed actions which may not be appropriate to the GCAP such as capacity improvements and the airport and capital works to road infrastructure to increase capacity. There are cases that could be made for some of these projects, for example reducing GHG emissions from power plants by transitioning from coal to gas. However, policy in some of these areas is unclear and it may be useful to have a definitive list of criteria for excluding projects to avoid the risk of "greenwash".

EBRD coordination

There is practically universal appreciation of the role of the EBRD team in the coordination, management and guidance of the GCAP preparation, problem solving and mediation with city representatives where needed, as well as technical expertise support. EBRD's presence and support has also been linked to improvements in the city's ownership and engagement, one of the key

determinants of the success of GCAP preparation. In some cities more involvement of the local Resident Office staff in the GCAP process could have helped to develop stronger relationship with the municipality. Some consultants highlighted that the exact balance between close management by EBRD and sufficient degree of freedom for the consultant may be difficult to formally determine. In a complex process delivering for ‘two clients’ (the city and EBRD) clearly established communication and feedback channels are key.

- Banja Luka: EBRD’s intervention and support was critical in encouraging the City Administration leadership to take a larger role and ownership of the process in the final stages of the GCAP review, public consultation and endorsement stage.
- The Zenica report notes that a description of the project refers to the City as a client, but the contract is concluded between the EBRD and the Consultant. The division into who is the "customer" and who pays for services can lead to both uncertainty and conflict over priorities, and for the Consultant uncertainty about the approval and signing of protocols. This is a general challenge when the funding entity deploys consultants to provide technical assistance to a third-party beneficiary. Overall, we've found that EBRD employees are supportive and sustainable, and with the development of relationships, roles have become more clear and comfortable.
- Batumi: The bi-weekly calls held between the Consultant and EBRD teams were a useful platform to feedback key project updates such as progress on deliverables, upcoming tasks or milestones, as well as current or emerging risks to project success and any other business. Ad hoc ways to communicate with the bank, such as through emails, were a sufficient way to raise any updates or concerns that needed addressing more promptly, outside the bi-weekly calls. However, in some instances, a more proactive stance from the Bank to the city could have helped keep things moving, especially with regards to reviewing key deliverables or the Strategic Environmental Assessment (SEA) process.
- In Chisinau the cooperation with EBRD is considered to have been successful and results oriented. Whenever a challenge related to implementation of project on time, the EBRD Regional Office offered support for the Consultant and reached out to Chisinau Municipality in order to ensure their commitment.
- In Belgrade there were no scheduled regular formal progress meeting and progress against the programme was predominantly tracked by the consultant. There were advantages to this, in that less time was spent on internal progress discussions and it felt more genuinely like the consultant team were working on behalf of the City than EBRD. However, it meant there was less direct management of the programme which might have contributed to some of the delays. It is difficult to define what the optimal balance is between close management from EBRD and giving the consultant and the city freedom to develop the plan.
- In Amman the consistent bi-weekly discussions with the City and EBRD provided continuous opportunity for feedback and improvement. Meetings with EBRD sector specialists was extremely helpful in developing the actions and mapping their integration with ongoing EBRD projects.
- The Sarajevo report notes that EBRD’s engagement in the process and participation in events strongly helps to encourage the beneficiary’s overall level of engagement.
- In Skopje, the efforts of the local EBRD staff were integral for the success of this GCAP development. Potentially increased level of involvement of EBRD staff in some of the public events would further demonstrate and cement their hands-on and participatory approach to development of the GCAP, thus maintaining the momentum and gravitas gained at the Kick-off meeting. Moreover, an induction for local bank staff before the start of the process on the GCAP development, would help streamline and kick-start the projects more smoothly.
- In Ulaanbaatar the main support came from EBRD London office. This was mainly technical support and overall guidance. Beside this, the consultant recommends to have a strong engagement on behalf of the EBRD Regional Office since they are operating in the county and striving to build a working relationship with the municipality.

- In Izmir the consultant team appreciated EBRD’s proactive approach in communicating with and managing the City, setting expectations alongside discussing and resolving queries and challenges that developed throughout the GCAP process.

Impact of Covid-19

Many of the GCAP preparation processes were disrupted by the Covid pandemic. This had some adverse effects in delays, inability to travel, or sub-optimal stakeholder engagement. On the whole however the programme demonstrated resilience to the Covid disruptions and GCAPs were continued to be delivered. Some digital tools developed to mitigate the disruptions were found to be value enhancing and remained in the toolbox beyond the necessity created by the pandemic.

- The Sarajevo report notes that due to Covid-19 there was an opportunity to innovate and move from the traditional methods of presentation to a webinar style, which helped to reduce travel related emissions. The Administration was reluctant at first to carry out online engagement, but later agreed it was appropriate. The feedback from the online sessions was positive. Based on this experience, the consultants suggested that digital technology should be considered in the future for other capacity building sessions and/or engagement.
- The Balti report notes that the pandemic had a strong direct impact on the engagement with the municipal representatives and the stakeholder consultation. Meetings were organised online, with only few exceptions. This also highlighted further challenges such as insufficient technological capabilities of the city to participate in online meetings and limited adequate competencies to engage with stakeholders in an online environment. The consultant made efforts to overcome this situation by supporting the municipality with technical assistance
- In Amman offline engagement activities were well adapted to an online platform, for instance by using social media to ask members of the public to submit questions to the discussion panel instead of having a live, physical audience at the event. However, there were difficulties in terms of physical ‘face-to-face’ engagement opportunities. Face-to-face engagement activities can have a vital role in reaching hard to reach demographics, especially those who do not have regular access to the internet or are not familiar with social media platforms. A significant challenge was recreating the learning experience delivered through face-to-face activities.
- For the Banja Luka GCAP, following discussions with the EBRD and the City Administration, it was agreed that the three GCAP Capacity Building Workshops would be held using a suitable online collaboration platform.
- The Belgrade report reflects that delivering online courses is a very different experience to delivering live courses, which in itself is a fairly specialised skill set where there is a multilingual and multidisciplinary audience. The consultants used tools such as regular Q&A opportunities, open questions, chat tools, and online polls in the sessions.
- In Kyiv Covid-19 presented a significant challenge to project implementation, but new ways of working, engagement methods and a collaborative approach helped to mitigate these challenges. Many of the alternative practices used will be carried forward into future commissions to supplement traditional approaches.
- Likewise the Pristina report notes that the online questionnaire was a good tool for collecting public views to support workshops and actions. Irrespective of the need to do this because of Covid, this tool allowed stakeholders to comment on the potential options by completing a mixture of open and closed questions.
- In Skopje Covid-19 did not present a serious problem to this commission, as the vast majority of the study had already been completed.

Strategic Environmental Assessment (SEA)

A number of GCAP preparation projects were delayed by the uncertainty of the need of conducting a Strategic Environmental Assessment (SEA) as part of the GCAP. This depends on local legislation and

in some cases it was not clear whether GCAP does fulfil the requirements for a SEA. While the GCAP methodology includes reference to the confirmation of the need for SEA as part of the preparation process this was not always straightforward or budgeted for.

- Craiova consultant suggests that an EBRD position on the principal of the applicability of the SEA directive to GCAPs would be valuable. In this case the local decision maker was uncomfortable issuing an opinion on the need for an SEA and ultimately neglected to do so. A guidance note from EBRD may help decision makers to have confidence either way. It would also help resolve the ambiguity around whether SEA should be routinely priced for in GCAP bids. This could be based on our analysis here or independent work by the ESD team in EBRD.
- The Minsk report suggests that ideally, there would be clarity as to whether SEA is required at the outset of an assignment for a GCAP. This would simplify both the tender process and programming. That said it is not surprising that there is lack of clarity about application of SEA for GCAP: The requirements may differ country by, but considering the EU SEA Directive the GCAP the most probably should not be seen as a 'plan or programme' under the Directive (as it is not 'required by legislative, regulatory or administrative provisions') and thus SEA should not be applied.
- Likewise Chisinau report recommends clarity prior to launching GCAP, and notes that in case a full SEA is required, then two aspects should be considered: a) timing – a SEA procedure can start only after the GCAP actions are defined and it lasts on average between 4 to 6 months. This will have a direct consequence on the GCAP development timeline; and b) budgetary implications – the effort to prepare a SEA is estimated at between 50,000 to 75,000 EUR. This amount should be supplementary allocated to the overall GCAP development budget.
- In Ulaanbaatar EBRD prepared a document which provides reasons why GCAP would not require a SEA. According to the national legislation of Mongolia, the SEA is to be applied to strategies and programme level documents. There were no previous SEA experiences in the country. As this document presents a list of potential projects and due to the fact that each project will have to go through a feasibility stage, the legal experts of the Municipality decided that there is no need for a SEA.
- Yerevan's GCAP development was significantly disrupted by the need to carry out the SEA, which was not expected by the consultants. This was unforeseen also considering the fact that the City had just adopted the Sustainable Energy Action Plan (SEAP) to follow up on its commitments to the Covenant of Mayors and SEA was not part of the development process.

Technical assessment

It is not within the scope of this evaluation to review and assess the specifics of the GCAP methodology in terms of the approach to the environmental diagnostics, the pressure-state-response approach, or the suitability of the indicators used. Most of the reports reflected on these aspects of the methodology, and proposed various potential improvements. These features of the methodology are not covered in this synthesis due to their technical nature, which goes beyond the purpose of this report. The issues presented here reflects briefly on selected more general elements of the methodology.

Local data availability

The majority of GCAPs experienced some difficulties with local sources of data for the baseline diagnostics indicators. The issues included the extent of city engagement in data collection, existing data gaps, and mixed geographical or time scope of the data. Various ways of overcoming local shortcomings were devised in response. This however further translates into the GCAP implementation and monitoring where local capacity or resources are not sufficient to continuously source and collect data trends. Some projects proposed data management actions in the GCAP to

alleviate this constraint. Some reports also suggested the development of a future platform for data collection and analysis, which would facilitate data management for Green Cities.

- Chisinau experience showed that data availability for the indicators was quite scarce and had significant gaps in terms of consistency throughout the years. There were cases when the data is not measured at all, the data is not measured at city level and data available for the national level is not relevant and/or cannot be disaggregated for Chisinau, and available data is too old and not reflecting current situation in the city. Whenever possible, efforts were made to suggest an additional, relevant alternate indicator for the sector for which data was available, together with suitable benchmarks.
- The Balti report noted that data monitoring on environmental indicators and GCAP sectors are not a common practice at city level. More data were available at national or regional level. Therefore, the consultant had to use qualitative data and other proxy data for missing indicators from GCAP dataset. Still, the municipality was very responsive and made all the efforts to provide all the information they had from all municipal enterprises under their coordination.
- Establishing the Green City Baseline was relatively straightforward for Lviv. The assistance of our City counterparts, regional (Oblast) Statistical Office and the consultant's local team was, however, vital in achieving the desired result. The situation would be different for a city where the required data (especially for the Indicators) is not so readily available.
- In Amman it was crucial to have key contacts within GAM who either were data holders or could readily access or put the Project Team in touch with data holders. EBRD's ongoing work in Amman meant that the consultant were able to draw on them for information on data sources.
- The Amman report also noted that data collection was challenging in that there was a significant lack of data. Additionally, duplicated datasets often had different data. It was helpful to challenge the provided methodology indicators in each city's specific context to ensure a realistic interpretation of the indicator and associated data. Where feasible and in agreement with EBRD, the City and technical experts, alternative metrics or impact measures have been sourced to supplement those required under the Green Cities methodology.
- In Sofia the data collection and processing – of both quantitative and qualitative data – emerged as one of the most critical and challenging tasks in the GCAP development process. Data collection was cumbersome, slow and demanding, with much delays in responses from the Municipality and other stakeholders involved.
- The Administration's engagement in developing the indicator database is required to ensure that the GCAP process, including updating of the database, is continuous and seamless after the Consultant's work is completed. In the case of Banja Luka, the data collection, as well as the technical assessment, was entirely done by the Consultant Team with minimal engagement of the City Administration staff. This was due to a lack of capacity and time but potentially also knowledge of the CGAP process.
- In Batumi much of the data available and collated was provided for only one year, or for a maximum of two to three years. This limited the ability to derive and reliably analyse trends. Data for certain indicators was not available. The Consultant team attempted to source data from different municipal and national departments and, where that failed, from desktop research. There was lack of data on a municipal level; data which is disaggregated is typically disaggregated on a regional level. The team suggested several additional indicators that would be most relevant to certain actions to begin collecting data on during the monitoring and evaluation process. The absence of some data means that it is especially crucial that the city begins data collection to establish a baseline that will inform the M&E process, although this is beyond the scope of works for the consultant teams conducting GCAPs at this time.

Methodology

Some reports reflected on the methodology more broadly, and suggested various elements for improvements or future inclusion. Some of the later reports, while still completed under the initial methodology, noted that the revised methodology already addressed a number of the lessons learned from the first generation of GCAPs. One element to highlight is that attention needs to be paid to level of development and appropriate contextualisation of indicators and their interpretation.

- The Gyumri report articulated this concern: The resource use indicators that favour low specific numbers, such as energy use per person, energy use per square meter, or vehicle ownership per person, are closely tied to economic development and economic welfare of the population. It is a common fact that these indicators grow with the increasing wealth of the society, and later start declining due to sustainability policies and actions. Simple favouring of low resource intensity levels of these indicators may disregard the fact that this may be a result of low affordability, suppressed comfort, low service quality or poverty. The report recommended to i) exclude indicators that mirror quality of life rather than environmental issues to remain focused on achieving environmental outcomes; and ii) include measures to correct indicators for reduced comfort in order to avoid masking poverty as environmentally sustainable.
- Some local stakeholders also reflected on the need for contextualisation – during the data validation workshop held in Chisinau, several participants noted that the benchmarks for a few indicators are defined from the perspective of developed European cities. Taking into consideration a city such as Chisinau, with its struggling economy, the benchmarks for several indicators seemed highly ambitious to the participants.

Success factors

City ownership

The ownership of the GCAP process and outcomes at the city level emerges, unsurprisingly, as the key determinant of success. This city ownership and commitment is crucial not least because the city remains responsible for the GCAP implementation and monitoring/ reporting, which is not further supported by consultants.

“Only full engagement of the city in the whole process from the start of the GCAP and ownership of the outputs allows for a successful continuation of the GCAP cycle after the consultant’s role expires. This includes both the political leadership who’s buy-in is critical for adopting the GCAP, as well as the City administration’s technical staff who will operationalise its implementation and oversee related monitoring and evaluation tasks. Without political commitment and adequate capacity within the City Administration, there is significant risk of the plan becoming shelved, with minimal implementation and hence failing in achieving its intended environmental outcomes.” [Gyumri]

“Ownership of the programme is a key task that the city can fulfil (with support from the Consultant). This has several benefits 1) it fosters a stronger sense of ownership of the process 2) it ensures that events such as elections or other administrative cycles are properly accounted for in planning 3) it empowers the city to hold the consultant or other parts of the city accountable for any delays to stop programme drift.” [Belgrade]

Green City officers

Among the institutional set up and support on the side of the city itself, the role of the Green City off/ coordinator stands out in many cities as the key factor of success. An engaged, resourced and motivated officer, empowered with authority and access to both the political power brokers as well as key technical and civil service roles can be an efficient enabler of the GCAP process. This role then remains important in the follow up stages of GCAP implementation and monitoring, where the support of the consultants is no longer present. There is a possibility that this in some cases creates a 'key person risk' if broader institutional links are not created at the same time.

Stakeholder engagement

Meaningful engagement of all relevant internal and external stakeholders is key to building ownership, support and alliances for eventual delivery of actions. To some extent this also builds foundations or strengthens the relationship between EBRD and key stakeholders at the city level.

Political context

Apart from initial political commitment to the project and the buy-in of the city's political representation, the political landscape can change with new elections and change of administration. Some cities can experience periods of protracted political instability or face localised or global crises which alter priorities and necessitate resource reallocation. External factors play a role in the development and sustainability of GCAP and can be only mitigated to some extent. Building wide stakeholder consensus, public awareness and support, and formalising the GCAP through democratic representation play important role in this respect.

"The GCAP is not just a standalone technical document but a political document that, due to the obligation for formal adoption by the City Assembly and subsequent integration into the City Administration's development strategy, is situated within a political arena. It represents an opportunity for pursuing different political interests that might be contradicting those of the stakeholders or not aligned with what is advisable from a purely technical perspective. Gaining an understanding of the local political landscape is thus critical for designing an inclusive engagement process and mitigating risks posed to the GCAP process by a complex and unstable political context." [Banja Luka]

Consultant's experience

While recognising each city's specific context, having previous experience with the GCAP methodology and process in another city also facilitates more efficient new implementation. Learning and knowledge management activities of the Programme facilitate the transfer of consultant experiences and lessons learned across cities and framework companies.

Assessment of the reports and look forward

The consultants' final reports provide a candid assessment of the successes and challenges of the GCAP preparation in the first generation of Green Cities. The reports contain a wealth of valuable experience, and in aggregate support the view that despite overall diversity of contexts there are key common success factors across the landscape. While some of the reports created by the same consultants were prone to some repetitiveness across cities, this does not take away from the

important reality behind these observations. The internal character of the reports supports an honest assessment of the challenges encountered, while many reports dedicate space to various suggestions for improvements in future iterations.

The existence of these reports points to a system which is based on continuous learning and iterative improvements. These reports form a part of evidence in support of continuous learning integrated in the Green Cities Programme. Together with other learning elements (which are discussed elsewhere in this evaluation) the feedback loops created here show commitment to a culture of knowledge creation and management, and understanding that a Programme such as Green Cities has to exist and evolve in an environment of constant change. This practice of final lessons learned reports from consultants will continue to be an important source of feedback, due to i) extension of the framework to new consultancy companies; ii) the revisions of the methodology, which will bring new experiences and lessons; and iii) expansion of the Programme to new contexts, including Central Asia and SEMED.

The evidence of lessons being absorbed and utilised can be seen in the revisions to the GCAP methodology. While all the reports included in this synthesis were reflecting on processes conducted under the initial methodology, some of them already acknowledged the existence of the revised version and credited it with improvements following previous recommendations. There were various sources driving the changes in the revision – the extension of the overall concept of the programme to a more encompassing climate resilience one with better articulated approach to vulnerability assessments, smart city assessment and attention to socio-economic co-benefits; the Programme’s own internal review of the methodology and covid-impact assessment; as well as other forms of feedback. It is however likely that the consultants’ reports contributed to the methodology revisions. These include, for example, an extended guidance on the city’s responsibility for securing political commitment to the process and setting up institutional structures in support. The revised methodology also stipulates that EBRD in cooperation with the city will conduct a relevant policy review and confirm the need for a SEA.

Annex 10. GCAP Assessment

This annex presents an extract from a review of GCAPs prepared by an external consultant. The consultant reviewed all existing finalised GCAPs available by mid-2022 according to a set of standardise criteria. The review was based only on the publicly available final GCAPs; interim products that consultants produce in preparation for the GCA were not available or used – this means specifically the technical report (diagnostics), or the policy review. These elements were only reviewed to the extent that they are reflected in the final GCAPs. In addition, as is the case for all parts of this evaluation, only GCAPs based on the initial GCAP methodology were available for the review.

Abbreviations

| | |
|-------|--|
| BEI | Baseline Emissions Inventory |
| CAPEX | Capital Expenditures |
| EBRD | European Bank for Reconstruction and Development |
| GCAP | Green City Action Plan |
| GHG | Greenhouse Gas (emissions) |
| OECD | Organisation for Economic Co-operation and Development |
| OPEX | Operational Expenditures |
| PSR | Pressure-State-Response Framework |
| SECAP | Sustainable Energy and Climate Action Plan |

GCAPs included in the review

| City | Country |
|-------------|------------------------|
| Amman | Jordan |
| Balti | Moldova |
| Banja Luka | Bosnia and Herzegovina |
| Batumi | Georgia |
| Belgrade | Serbia |
| Chisinau | Moldova |
| Craiova | Romania |
| Gyumri | Armenia |
| Izmir | Türkiye |
| Lviv | Ukraine |
| Minsk | Belarus |
| Pristina | Kosovo |
| Sarajevo | Bosnia and Herzegovina |
| Skopje | North Macedonia |
| Sofia | Bulgaria |
| Tbilisi | Georgia |
| Tirana | Albania |
| Ulaanbaatar | Mongolia |
| Yerevan | Armenia |
| Zenica | Bosnia and Herzegovina |

Introduction

This report contains a synthesis of findings and conclusions from a structured review of 20 Green City Action Plans (GCAP). GCAPs constitute a central pillar of the Green Cities Programme. GCAPs are action plans that outline various policy instruments, sustainable investment projects, and other initiatives to address the predominant environmental challenges in an urban area. They build on a systematic process to assess environmental challenges based on specific indicators and prioritise the challenges with the help of stakeholder consultations. Among other things, GCAPs assign implementation responsibilities and identify potential sources of finance for the proposed actions.

The basis for this review are 20 GCAPs that were assessed and evaluated using a predefined set of criteria. The main reference for the assessments is the GCAP methodology. Information was collected in a database to systematically retrieve and aggregate information for the synthesis. The written assessments were captured in fact sheets with detailed analyses of each city GCAP. In addition, answers to key questions were coded into binary and categorical responses to facilitate further comparisons, analyses, and visualizations. For this report, key insights, contributions, and challenges of the GCAPs were identified based on a systematic comparison of the coded information stored in the database. While the individual comparability in assessments may vary, this form of analysis allows detection of systematic trends and tendencies at the aggregate level and helps to identify strengths and weaknesses of the GCAP development process.

To put the overall assessment into perspective, it is helpful to recall first the EBRD's definition of a Green City: "A Green City preserves or improves the quality of its environmental assets, uses resources sustainably, mitigates and adapts to the risk of climate change, and ensures the social and economic co-benefits of environmental policies." Taken together, the findings of this analysis lead to the conclusion that – if most actions are going to be implemented as proposed – the GCAPs hold the potential to promote the development towards this ideal in a meaningful way.

With few exceptions, the GCAPs generally include a systematic identification and prioritization of environmental challenges and derive relevant actions to address them. They provide a substantial amount of detail on the actions in terms of their context, the challenges they aim to address, and their objectives and benefits. While there is variability in the quality between GCAPs, the developed actions correspond to the stated objectives in general. Nevertheless, this document also identifies a number of opportunities for improving the GCAP methodology. These suggestions include banning the consideration of fossil fuel-based solutions, clarifying the methodology used to estimate the physical impact of actions, providing guidelines for a more systematic, comparable assessment of financing options, and ensuring that investments in the transport sector are green and sustainable while promoting stronger investments in green spaces, blue-green infrastructure, and land use.

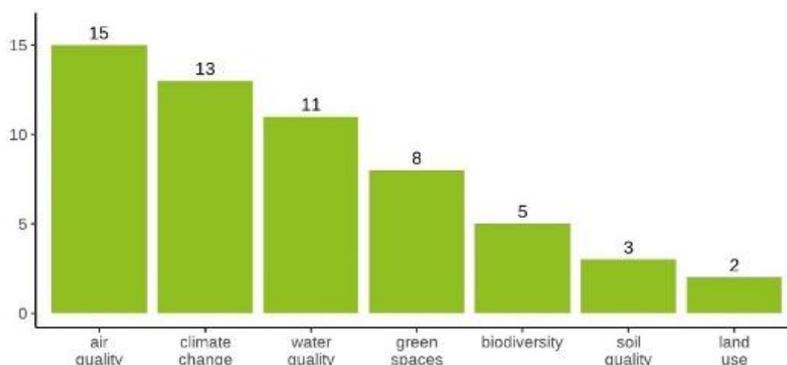
Analysis

The 20 GCAPs analyzed for this review come from various EBRD regions and cover 15 countries. Yerevan and Tbilisi were the first cities in our sample to adopt a GCAP in September 2017. While there is some variation, the average development time was 18 months. Balti is the last city among the cities under review to finish developing a GCAP in November 2021. Possibly due to the outbreak of COVID-19, the time of development is slightly shorter for cities that finished the GCAP development process before 2020. The pandemic forced several cities to delay key aspects of the development process such as stakeholder meetings to online formats, thereby causing slower development.

Key Environmental Challenges Identified

At the heart of the GCAP methodology lies the establishment of a baseline and the corresponding identification and prioritization of key environmental challenges. For this, the GCAP methodology proposes a guiding process that consists of the application of the pressure-state-response (PSR) framework and the consultation of key stakeholders. The former categorizes and structures various indicators that capture environmental pressures, the resulting state of the environment, as well as associated responses by the government, residents, and private sector. The resulting assessment of the state of the environment based on international benchmarks is being supplemented by further input from stakeholders. displays the resulting priority environmental challenges as identified and mentioned in the GCAPs. Air quality and challenges related to climate change are the environmental problems that are mentioned most often in the GCAPs. They are closely followed by concerns about (surface) water quality and green spaces. In turn, challenges related to soil quality and land use are mentioned the least.

Figure 37: Priority environmental challenges identified in the GCAP

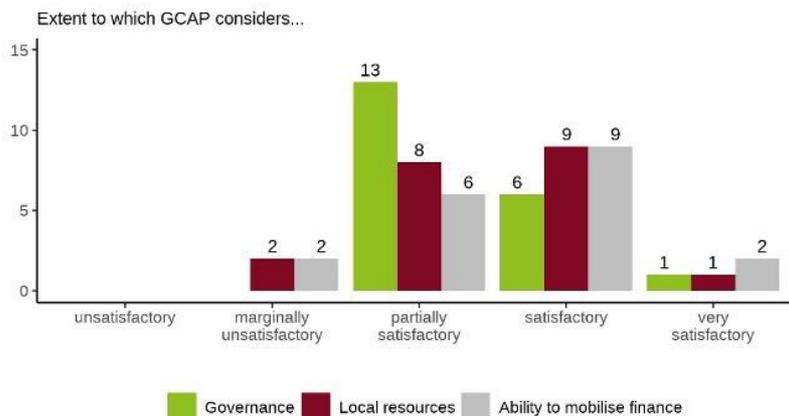


NB: Several cities listed more than one priority challenge. For three cities, environmental challenges were not clearly prioritized

Consideration of the Local Context

The methodology requires the GCAP to provide a review of the institutional context accounting for both the political context, the administrative context, and the financial context, and discussing the financial and administrative leeway of the municipality. As shown in Figure 38, most GCAPs conduct this review at least to a satisfactory degree.

Figure 38: Consideration of Local Context (Governance, Local Resources, City's Ability to Mobilize Finance)



N=20

Local Governance Structure

Accounting for the institutional context is important for the design of feasible GCAP actions. Many GCAPs outline the spatial coverage and general administrative setup of the respective municipality. At the same time, municipal administrations are usually embedded in a multilevel context in which regional-level and national-level authorities likewise exercise influence on environmental policymaking. In this regard, several GCAPs provide an in-depth consideration of this multi-level structure when discussing the local governance structure. A good treatise can be found in some GCAPs, for example, in the GCAP of Ulaanbaatar. Such identification of legislative and executive actors responsible for the different policy areas decreases the likelihood of hitting unexpected legal hurdles in the implementation phase.

Local Financial Context

Cities have different levels of ability to mobilize finance, which is important for the implementation of actions and is discussed to varying degrees in the GCAPs. Most GCAPs outline different sources of finance for each action as proposed by the methodology. Additionally, some cities like Belgrade conducted an ex-ante analysis of delivery and implementation risks to identify implementation hurdles and adjust priorities accordingly. Such detailed assessments indicate that the feasibility of different funding options was thoroughly assessed. In consequence, the likelihood of implementing the proposed actions is likely to be higher.

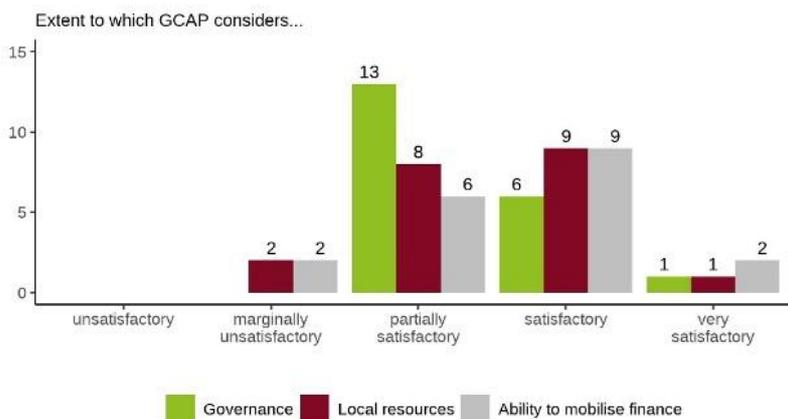
Another good example of outlining the financial context is the GCAP of Balti in Moldova. First, the GCAP does not only assess the (limited) capacity of the municipality to service loans when discussing financing options, but additionally assigns priority sources of funding to the actions depending on their purpose and characteristics. Second, the Balti GCAP provides a timeline that summarizes the actions and their corresponding investment (CAPEX) and operational expenditures (OPEX). The timeline enhances transparency and facilitates determining whether the estimated costs and corresponding financing are likely commensurate over time. Third, the Balti GCAP is the only GCAPs that explicitly considers green municipal bonds for funding and refinancing of green projects. It is an innovative financing option that future GCAPs should take into consideration more often.

Existing Strategies

Another cornerstone of the GCAP development process is a review of the cities’ existing policies, strategies, and plans as well as the regional, national, and international legal framework in which they are embedded. In this regard, Figure 39 highlights that local strategies are overall very well considered. It suggests that the GCAPs provide important coordination platforms between various sectoral plans in the partner cities to improve the environment. Synergies were, in particular, noticeable if a city was developing a Sustainable Energy and Climate Action Plan (SECAP) in parallel to the development of the GCAP. This co-development was, for example, the case in Belgrade which is also a signatory of the Covenant of Mayors for Climate and Energy. The parallel development notably improved the ex-ante assessment and calculation of GHG emissions reductions due to a comprehensive and systematic Baseline Emissions Inventory (BEI). On the one hand, this example underlines that having a clearly defined methodology for the calculation of the GHG emission reduction potential of GCAP actions would improve comparability between GCAPs and enhance the internal coherence between the plans – easing the implementation process. On the other hand, having two (or more) major strategy plans under development in a city runs the danger of establishing and running dual structures and processes. In this case, the added value of both plans – if jointly considered – may be relatively low due to comparatively low cost-benefit ratios in face of the substantive financial scopes of both programs.

National strategies like green growth or climate strategies are considered thoroughly in most GCAPs. In comparison, strategies at the regional level are less often accounted for. While we can only speculate about the reasons, one explanation for this underrepresentation is that environmental policymaking is largely conducted both at the local and at the national level. As a result, there would be little policy-making power at the regional level and, accordingly, no regional strategies to consider. In this case, there is little reason to suspect that the GCAPs duplicate existing initiatives at the regional level.

Figure 39: Consideration of Existing Strategies Across Levels



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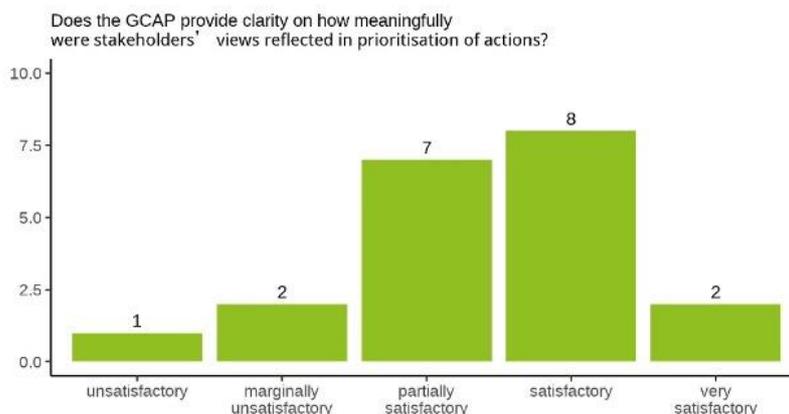
Stakeholder Involvement

A thorough, regular, and meaningful stakeholder engagement process enhances the usefulness of the GCAPs and their implementation chances. It ensures that the views of key partners and local stakeholders are meaningfully reflected in the final GCAP. Importantly, stakeholders should represent various relevant actors including, among others, businesses, NGOs, academia, public agencies/institutions, and public utility companies. The methodology provides specific guidance on this as well as on the suited process.

Stakeholder Engagement Process

Overall, most GCAPs provide a relatively clear outline and discussion of the process through which stakeholders' views were reflected in the prioritization of actions, as shown in Figure 40. Nevertheless, many GCAPs do not describe the preferences of the stakeholders that participated in this process. Therefore, it is often difficult to assess to what extent the input of stakeholders, in particular those representing civil society, is taken into account in the final prioritization of actions. Nonetheless, only a small number of cities provided little or even unsatisfying transparency on this process. This concerns, for example, the GCAP of Sofia. While the GCAP mentions that stakeholders were involved in the prioritization of the actions, it does not provide any details on the process of stakeholder inclusion, such as the number and format of workshops conducted, or which stakeholders were included. In some cases, like Izmir, it seems that the stakeholder process consisted almost exclusively of administrative officials which would then not achieve the purpose of engaging with the urban population. In comparison, Balti and Ulaanbaatar provide good examples of how to document and implement the stakeholder process. Both the Balti GCAP and the Ulaanbaatar GCAP describe not only the stakeholder events themselves but also the purpose and main outcomes of each meeting. Moreover, the process in Balti consisted of 11 meetings, which is substantially more than the five meetings required by the GCAP methodology and is indicative of strong stakeholder involvement. Furthermore, they used an online survey to include the views of the city's citizens in the prioritization process. Overall, GCAPs would benefit from institutionalizing the stakeholder process better, and from making protocols/summaries of the views and concerns raised in the meetings publicly available. Both would raise transparency and accountability.

Figure 40: Stakeholder Involvement



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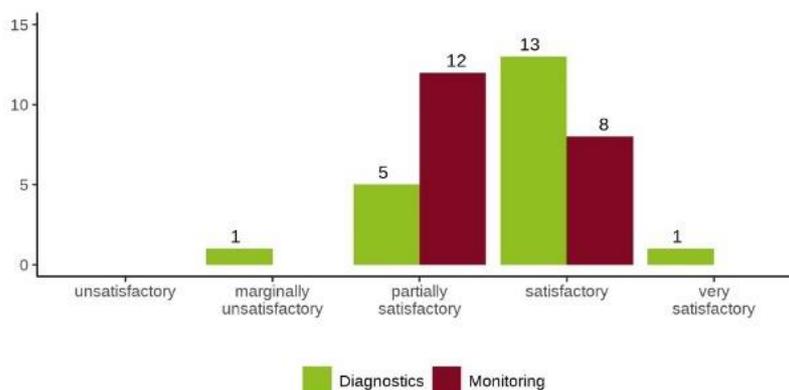
Social Considerations in the Stakeholder Engagement Process

The GCAP methodology encourages the involvement of women and stakeholders from under-represented or vulnerable groups in the GCAP development process. 55% of GCAPs consider gender and 45% of GCAPs consider disadvantaged population groups in diagnostics. These numbers suggest that the GCAP methodology would benefit from clearer guidelines or suggestions on how to incorporate these groups in the stakeholder process. For example, the collaboration with women networks or ambitious gender quotas constitute promising ways forward. In this regard, the GCAP of Balti can serve as a good example, as it dedicated a specific stakeholder workshop to the topic of gender equality.

Quality of Diagnostics and Monitoring

The development and implementation of the GCAP actions is accompanied by two important instruments. First, the diagnostics to establish the baseline as a necessary step to start the prioritization process. Second, the monitoring framework to track the implementation of actions as well as the improvement of indicators. Figure 41 displays the quality of both in the GCAPs examined. The figure reveals that the quality of the former is overall higher than the latter.

Figure 41: Quality of Diagnostics/Baseline and Monitoring



N=20

Quality of Diagnostic

All GCAPs build on the pressure-state-response framework in line with the methodology. Therefore, some form of traffic-light screening is usually presented in the GCAP. Good examples of a structured and transparent presentation of the baseline are Yerevan and Izmir. For each environmental sector, the GCAPs provide a table containing information on the indicators used, their values, as well as a corresponding traffic-light categorization. Importantly, these tables also put the indicator values into local context by discussing the corresponding environmental challenges and outlining where the quantitative indicators fall short of capturing the local conditions.

Nevertheless, detailed information on indicators, let alone their values used to establish the baseline was missing in most cases. Either the referenced appendices were not available or, as it was the case in Skopje, the GCAPs only summarize the assessments of the indicator evaluation. As a result, it is often not clear to which extent the GCAPs fulfill the requirements of the GCAP methodology to collect data on a minimum of 30 core indicators. Furthermore, lacking details on the indicators make it difficult to assess whether the baseline is sufficiently set up to engage in a meaningful, comparative monitoring process over time.

Quality of Monitoring framework

A regular and methodically consistent monitoring process is essential to follow and ensure the successful implementation of the GCAPs. As required by the GCAP methodology, both an implementation monitoring plan and an impact monitoring are usually laid out in the GCAPs to support this process. Although demanded by the methodology, several GCAPs leave open detailed administrative responsibilities as to who coordinates the collection of data with the relevant municipal departments. Moreover, the GCAPs lack information on the indicators that are going to be used to monitor environmental development over time. The GCAP methodology suggests that data should be

collected across all relevant PSR indicators for each action. In addition, having a small but clearly defined set of core indicators required by the GCAP methodology for all GCAPs would certainly benefit comparability across GCAPs. Regarding the monitoring setup, it is also important to ensure that the monitoring reports will not only be communicated with institutional stakeholders but rather be made available to the public in general.

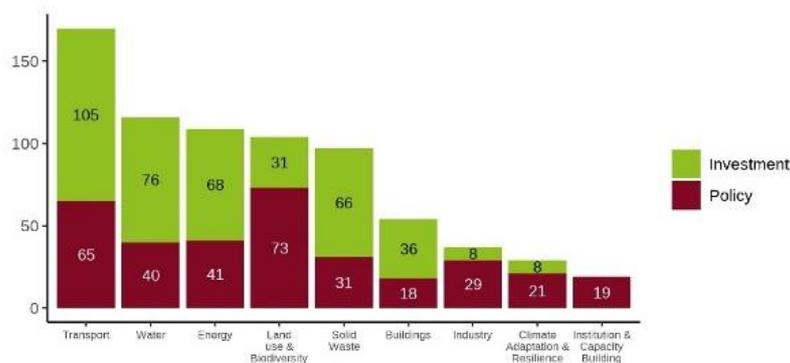
Design for Results: Prioritization, Relevance to Climate Action, and Gender

Ideally, the proposed actions correspond to the priority environmental challenges identified in the baseline. The PSR analyses determined air quality, climate change, and water quality as the biggest challenges in most cities. Nevertheless, both the input of the stakeholder engagement, financial constraints, and political and administrative consideration exert influence on what type of actions ultimately emerge from the GCAP development process. Therefore, the subsequent section engages with the question of whether the actions correspond to the stated priority challenges. A particular focus is paid to the extent to which actions account for climate change risks. In addition, the degree to which gender equality is considered will be discussed.

Prioritization of Action

Figure 42 shows that the largest number of actions is proposed in public transport, followed by actions in the areas of water and energy. At first sight, this suggests a general aggregated correspondence between the actions and challenges, even if in some GCAPs, the match is less than perfect. Also, typically it is not only transport that contributes to air quality but also heating and sometimes power generation as well as industrial emissions. Action on these issues is much less prominent than on transport. Furthermore, most GCAPs (90%) discuss and emphasize the synergies and co-benefits of the proposed actions.

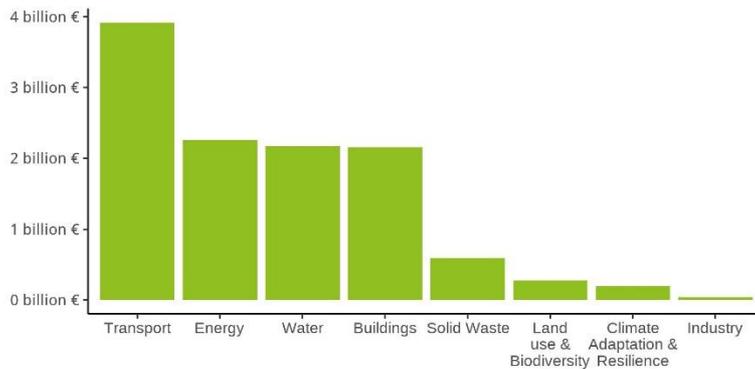
Figure 42: Prioritization of Action



The analysis of the investments actions raises the question of whether public transport is overemphasized despite possible synergies and cross-sectoral benefits with other areas. According to data from the EBRD Monitoring Tool, the sum of CAPEX in the transport sector (3.9 billion Euros), is almost twice as large as the sum of CAPEX in the areas with the second most and third most investments, energy and water (2.2 billion Euros and 2.1 billion Euros, respectively). In comparison, the proposed investments in solid waste, land use and biodiversity, and climate adaptation and resilience are much smaller. This comes despite the fact that challenges related to climate change – and here in fact climate risk and resilience – are the second most mentioned concern in the GCAPs. Likewise (a lack of) green spaces and low biodiversity are often identified as environmental challenges. Both could and should be remedied through investment in green spaces, blue-green infrastructure and land use. In

addition, classifying investments in road infrastructure as green investments, as done in the Balti GCAP, illustrates a somewhat unambitious understanding of what a green city investment should look like. At the very least, GCAP methodology should require that these roads are also serving non-motorized transport and consider charging infrastructure and needs sufficiently. Novel green options for logistics could also be considered here, including overhead lines for electric buses and trucks.

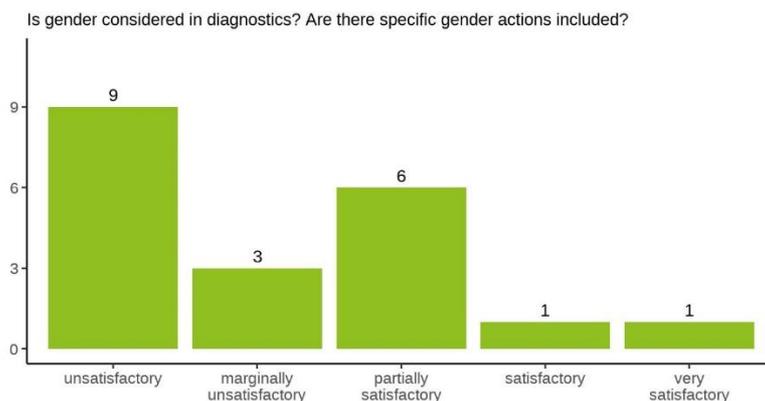
Figure 43: Projected CAPEX by Sector Area



Gender Actions

Almost all GCAPs consider gender in some form, for example, by discussing the co-benefits of selected GCAP actions. However, only two cities (Balti and Sarajevo) included specific gender actions in their GCAPs. Accordingly, the overall assessment regarding the consideration of gender in the GCAPs is relatively unsatisfactory shown in Figure 44. Together, the GCAPs leave the impression that the consideration of gender is in most cases an exercise that the responsible actors feel they must conduct. They often do so without engaging in sincere and ambitious actions that enhance gender equality in a meaningful way. These would, for example, include capacity-building actions specifically for women such as in training of the administration.

Figure 44: Gender Actions in GCAPs

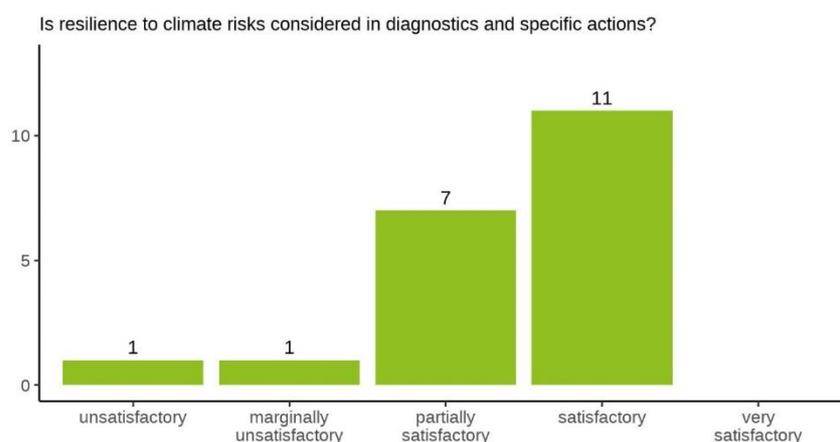


N=20

Relevance to Climate Action

Despite their more general focus on environmental challenges, the GCAPs are overall very relevant to the more specific area of climate action. GHG emissions are usually prominently discussed in the GCAPs and the GHG reduction potential of actions is considered. A general shortcoming is that estimates for the physical impact of GCAP actions (emissions savings, water savings, primary energy savings, etc.) are difficult to compare because the applied methodologies and calculations are not specified. This holds, in particular, for the methodology used to calculate estimated GHG savings but applies to other estimates more generally. Thus, an update of the GCAP methodology would benefit from outlining clear guidelines on how (quantitative) estimates of the physical impact of actions should be calculated.

Figure 45: Consideration of Climate Resilience



N=20

As illustrated in Figure 45, the majority of GCAPs consider climate risks at least to a satisfactory degree. Nevertheless, for example the GCAP of Yerevan illustrates that an update of the GCAP methodology would benefit from more structured guidelines on how to assess climate risks. In particular, the GCAP does not propose any measures to increase resilience even though Yerevan already experienced localized floodings during heavy rains. Other climate risks like heat waves are not considered either. The latter is an issue observable in other GCAPs, too, namely the tendency to focus much stronger on the consequences of floodings in the context of climate change adaptation. One reason might be that several cities such as Yerevan, Balti, or Banja Luka were recently hit by such extreme weather events. Nonetheless, more emphasis should be paid on the consequences of lasting heat waves on, for example, biodiversity, the stability of the electricity grid and the corresponding consideration of energy sources, and public health. In this regard, the GCAP methodology should mention more clearly specifications of the climate risks that are to be considered in the climate risk assessment.

Another major concern with several GCAPs is the potential risk of locking-in fossil-fuel-based solutions. This will take place if long-term investments are taken that require the burning of coal, mineral oil, or natural gas. In total, actions with carbon lock-in risks were found in seven GCAPs. For example, Belgrade proposes the extension of its natural gas network as a green action. The long-term depreciation time of such networks implies that natural gas will still be provided through this network when a net zero emissions should be reached due to the Paris Agreement. Such investments should be seen very critically, and at the very least they should be planned with a decarbonisation plan associated with them. Several cities, including Batumi, Tbilisi, and Yerevan plan to invest in natural gas vehicles as

part of transforming the urban public transport system, and the Pristina GCAP suggests purchasing 24 Euro VI diesel buses to extend their public bus services. While these actions may constitute an improvement in the GHG balance of existing fleets and systems, and while these investments might not be as long-lived as a gas network, more effort and consideration should be paid to zero carbon options. Regarding the procurement of buses, for example, electric buses emit fewer carbon emissions than conventional diesel buses, independent of the grid system.⁸³ What is more, their climate impact can only improve in the future as energy production becomes greener.

Conclusion and Recommendations

The EBRD Green Cities Programme aims to foster sustainable and climate-change-resilient urban development by identifying and prioritizing environmental challenges, which are then addressed by corresponding sustainable infrastructure investments and policy measures. The present analysis leads to the conclusion that the GCAPs provide an important push towards achieving this goal. Their comprehensive approach helps to bring together already existing strategies and plans. In general, most GCAP actions are suited to address the stated objectives and improve the current environmental status quo in the cities. Moreover, the GCAPs constitute a visible political and public reference document. If the public is actively incorporated in both the development process and the monitoring process, as in Izmir, Pristina, or Amman, the GCAPs raise further public awareness of environmental issues and help to garner support for future actions in the cities.

The analysis of the GCAPs revealed several opportunities for improvement. A first important suggestion to push GCAPs towards stronger promoting sustainable urban development is to ban the consideration of fossil fuel-based solutions such as investments in the extension of natural gas grids, CNG, or diesel buses from GCAPs. Instead, much more emphasis should be put on renewable energy systems, including in the context of transport and energy actions. A second potential improvement is the consideration of gender and disadvantaged people more generally. There is a need for more specific actions that promote gender equality. The first necessary, yet not sufficient step is the inclusion of women networks in the stakeholder engagement process. A third suggestion is to provide cities with a defined methodology to calculate the physical impact of GCAP actions, in particular, yet not exclusively with regard to the GHG reduction potential. Finally, requiring a small number of core indicators that all cities need to include in their monitoring would increase comparability and help future evaluations as well as the identification of efficient best practices.

Whether the GCAP methodology is ultimately able to deliver meaningful environmental improvements at the city level depends on several factors. Many of the actions outlined in the GCAPs are very ambitious in their scope. Even if they are embedded in already existing (EBRD) activities, the likelihood of successful implementation still rests on securing enough finance. The financial capacities of the municipalities are often limited, implying a strong reliance on external actors. Yet, if the municipalities are able to obtain this funding, the combination of large-scale investment projects accompanied by corresponding policy measures hold the potential to promote the development of green, sustainable cities through the Green Cities Programme.

⁸³ <https://blog.ucsusa.org/jimmy-odea/electric-vs-diesel-vs-natural-gas-which-bus-is-best-for-the-climate/> (accessed September 16, 2022)

Annex 11. Secondary results overview

This annex presents a summary of internal reporting on secondary TQ results for GrCF projects signed 2016-2018. There are no GrCF framework-level targets for achievements in secondary TQ. Secondary TQ objectives and targets are set and monitored at sub-operation level. This annex presents the internal monitoring available for the achievement of these targets. The scope of this review comprises GrCF operations signed within the first three years of GrCF implementation, where the timing of the achievement of these targets has generally passed by 2021. This represents a total of 15 sub-operations. The source of the monitoring is indicated in each case; this is primarily TIMS monitoring reports, occasionally supplemented by PMM monitoring where more recent information was included there. **Cells with green highlight represent reported result achievement.**

Table 13: Secondary TQ results to date; GrCF sub-operations signed 2016-2018

| Targets at SO level | Monitoring available | Source |
|---|--|---------------|
| 46581 GrCF - Ulaanbaatar Solid Waste Modernisation Project | | |
| Develop the Corporate Development and Institutional Capacity Building in Solid Waste Sector Programme (May 2020) | Partially failed: The tendering and selection of the Corporate Development Plan (CDP) consultants has been substantially delayed and is still in progress mainly due to limited implementation capacity at the City and to political reasons (there were several changes of Mayor throughout the implementation of the project and following these changes, several people in the City including those who were members of the evaluation committee were changed.) The new management at the City stated that the assignment ToR and scope is outdated and should be revised to reflect current situation. The City and the Bank agreed to re-launch the assignment with revised scope. Furthermore, the assignment is being combined with another TC under the project to attract more qualified consultants. | TIMS Nov 2022 |
| City Debt mgmt. TC – not a TI source | City Debt Management TC: The deadline for this assignment was extended in order to account for changes in the Law on Legal Status of the Capital City which was approved in August 2021. Following this change, the Bank and the Client have requested the consultants to update the deliverables to be in line with the new law. However, the consultants claimed to have experiencing difficulties to obtain information from the City that are necessary for producing meaningful deliverables. Eventually, the consultancy contract has been expired, and the consultants concluded not to extend the contract. As for the next step, the Team, after consultation with PPAD, is working to combine this TC with Corporate Development and Institutional Capacity Building (CDICB) TC as described below.- CDICB TC: The assignment was planned to be re-tendered with an updated scope, at the request by the City. The updated ToR is currently being combined with the ToR of City Debt Management TC as the Team envisages more and better qualified bidders for the combined TC. Once the combined ToR is finalised, the tender is planned to be announced in 1Q2023. | PMM Nov 2022 |
| Livelihood Restoration Plan – not a TI source | Livelihood Restoration Plan was developed and approved in March 2020 <i>[this is has not been implemented yet as project is in delay; source of funding for implementation not clear]</i> | PMM Nov 2022 |
| 47582 GrCF - Tbilisi Solid Waste | | |

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| <p>Tbilisi Municipal Solid Waste Strategy and Stakeholder Engagement and Participation Plan will be developed as part of this Project.</p> <ul style="list-style-type: none"> - introduction of recycling and waste reduction measures, - development of PSCs, - private sector participation and tariff reform (end 2021) | <p>The Strategy is completed and is awaiting approval by the City. The SPP will be completed along the physical implementation completion.</p> <p>SPP: The contract was signed in September 2019. The assignment kicked off in October 2019. MSWS: The consultant was mobilised in January 2020.</p> | <p>TIMS Jun 2022</p> <p>PMM 2022</p> |
| <p>Financial and / or operational improvements - equivalent to at least 10 per cent cost savings - are expected as a result of the Project and MSWS. The strategy will also develop KPIs and a monitoring plan to assess the performance of the company and wider sector.</p> | <p>No monitoring</p> | <p>TIMS Jun 2022</p> |
| <p>47899 GrCF - Chisinau Buildings</p> | | |
| <p>PSP: Private sector participation through EnPCs: The Project would specifically enable the private sector to be involved in designing and implementing energy saving projects. The tendering process would ensure the transparency and flexibility to bring optimal private sector expertise to the market. By demonstrating the commercial viability of the EnPC approach, the Project would also promote a replicable financial product and encourage banks to consider lending in the future throughout the country and the region</p> | <p>Following previous unsuccessful tenders, a revised tender was launched in January 2020 with a larger lot of buildings (23 buildings, with completed energy audits) in order to induce the private contractor interest. The tender was completed in September 2020, with only one lot (energy efficiency rehabilitation of 6 kindergartens) out of four tendered lots, being awarded to a consortium of local companies. Subsequently, the first Energy Performance Contract ("EnPC") under the Project (but also in the country), envisaging the implementation of energy efficient and renewable energy measures in 6 kindergartens (amounting to EUR 2.7mm), was signed on 1 October 2020.</p> <p>The remaining 17 buildings were re-tendered based on an updated procurement strategy. Following tender completion, the City has signed on 16 March 2021 two EnPCs envisaging: i) the energy efficiency rehabilitation of 6 Lyceums (amounting to EUR 6.9mm); ii) the energy efficiency rehabilitation of 8 Lyceums (amounting to EUR 5.9mm). Currently the works under all Contracts have started and advancing well.</p> <p>The tender for the implementation of energy efficiency measures in 3 hospitals (under Tranche 1) was re-launched in April 2021, based on an updated tender documentation and updated procurement strategy. The tender submission deadline is set for 30 June 2021.</p> | <p>TIMS Jun 2022</p> |
| <p>48104 GrCF - Batumi Bus</p> | | |
| <p>CDP: Implementation of CDP: Financial and operational performance improvement of the Company will be developed through the CDP which will cover activities for improvement in cost reductions, staffing optimisation, financial management, investment planning, organisational efficiency, and customer relations management. These targets will be quantified and dated in the</p> | <p>The CDP consultant assisted the Company in development of the PSC that was submitted to the Company and the City for review and approval.</p> | <p>TIMS Jul 2021</p> |

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| PSC between the City and the Company, to be developed with the support of the CDP TC. | | |
| PSC: PSC was agreed and signed between the City and the Company in 2010. With the proposed project, the PSC will be revised in line with the latest situation, costs, etc, and reinforced. (2019) | The CDP consultant assisted the Company in development of the PSC that was submitted to the Company and the City for review and approval. | TIMS Jul 2021 |
| A cost recovery tariff methodology within affordability constraints will be developed and adopted under the Project, with support of international consultants. (2021) | The CDP consultants have been assisting the Company in review of the tariff methodology. | TIMS Jul 2021 |
| 48252 GrCF - Sarajevo Water | | |
| PSC: The full owner of the Company is the Canton Sarajevo, which retains control over significant aspects of the Company (including tariff setting). While legislation provides the framework within which the Company operates, there is no binding service contract between the Canton and the Company. Entering into a Public Service Contract (“PSC”) should formalise the respective roles and responsibilities of the Canton and the Company relationship (2020) | The FOPIP consultant was selected and is currently working on the FOPIP and PSC. Completion is expected at the end of 2022 | TIMS Nov 2022 |
| Introducing a cost reflective tariff methodology with clearly defined procedures and tariff adjustment formulae will promote predictable and cost reflective water tariffs for all user groups and ensure sustainable water operations that can have a positive demonstration effect beyond the Company. Consequently it will also eliminate cross subsidies between various consumer groups (2021) | The FOPIP consultant was selected and is currently working on the FOPIP and PSC. Completion is expected at the 2022. | TIMS Nov 2022 |
| Technical cooperation will be mobilised to assist the Company to prepare and start implementing a Financial and Operational Performance Improvement Programme aimed at further reducing costs and moving towards profitability. FOPIP will be developed and adopted by end of 2019. | The FOPIP consultant was selected and is currently working on the FOPIP and PSC. Completion is expected at the 2022. | TIMS Nov 2022 |
| The project will enable the Company to improve the quality of monitoring and reporting on its operations compared to earlier practice. The Company will also have to furnish and publish its financial statements in accordance with IFRS , | The FOPIP consultant was selected and is currently working on the FOPIP and PSC. Completion is expected at the 2022. | TIMS Nov 2022 |

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| audited by an independent international auditing firm acceptable to the Bank, which is expected to improve accounting standards and culture within the Company. (2021) | | |
| 48348 GrCF - Izmir Metro Project II | | |
| Development of CDPs and formal adoption by the respective utility company | Corporate Development Programme is ongoing and expected to be completed by July 2021. | TIMS Jul 2021 |
| | Corporate development programme is completed. Focusing on the Izmir Metro Company, the operator of the metro system in Izmir, management and the performance of the company was reviewed. Key issues effecting the metro development were identified. Izmir Metro Company's KPIs were reviewed. Please note that Izmir Metro Company's KPIs were developed under Izmir Metro Project and publicly reported since 2019. Upon the formal adoption of the previous CDP, the current one wasn't formally adopted but provided a review of existing performance measures and practices as well as formally adopted policies. | PMM Jun 2022 |
| PSCs introduced and successfully implemented between the relevant utility companies and the cities when investments target revenue-generating activities (successful implementation should include annual public disclosure of financial and operational performance measured against KPIs defined in the respective PSCs) | Corporate Development Programme is ongoing and expected to be completed by July 2021. <i>[in fact the BDS notes that "Robust and internationally recognised KPIs and targets for the operator are already introduced under Izmir Metro Project I." so this should not be part of the TIMS monitoring for this project]</i> | TIMS Jul 2021 |
| Tariff increases in line with the adopted PSCs aimed at cost-recovery or improved fare-box ratio | Corporate Development Programme is ongoing and expected to be completed by July 2021. | TIMS Jul 2021 |
| | The public transport tariffs are discussed in the Transportation Coordination Centre (UKOME) General Board Meeting which is organised by IMM Department of Transportation and submitted to Izmir Municipality Council. The tariffs enter into force upon approval by the City Council. The tariffs are only subject to revision with City Council's approval. The ticket revenues of public transportation cannot meet the full cost of metro operations. As of June 2020, 30M Turkish Liras about 20% of the cost of running the metro system is being provided by the Municipality as a subsidy. | PMM Jun 2022 |
| 49161 GrCF - UKT Tirana Water Company | | |
| The Project will benefit from a Financial and Operational Performance Improvement Programme TC assignment and the completion of such FOPIP is covenanted for December 2019 During the due diligence process several areas have been identified where potential cost savings could be made (reduction of non-revenue water, reduction of staff and capacity utilisation, private sector participation, etc.). | The consultants were mobilised and worked closely with the client to devise a FOPIP programme. This was finalized and the client is working to implement it in full. The PIU consultant on the other hand is working closely with the client to implement the ESAP, and this work stream has finalized successfully as well. | TIMS Jun 2021 |

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| By end of 2019, signing of a Public Service Contract by the municipality of Tirana and UKT. | The Public Service Contract was signed between the Company and the City during the second half of 2020. | TIMS Jun 2021 |
| Water Resources Management Plan: The Bank will mobilise technical cooperation to assist the Company in the long-range planning of its water resources and identify the optimal balance of supply and demand of water across the City of Tirana. The WRMP will include an economic analysis of all options envisaged to close the supply-demand of water gap. As a result, the WRMP will provide a basis to identify the best economic and sustainable package of water resources interventions over the next 25 years. | While the Company has expressed interest in pursuing this, the OL has not been able to obtain timely support from support units. The delays were due to the disruption due to Covid and increased workload. The OL will continue efforts to jump-start this process. | TIMS Jun 2021 |
| 49267 GrCF - Belgrade Green Boulevard | | |
| No SO level objectives | | TIMS Sep 2021 |
| 49366 GrCF - Varna Climate Resilience Infra Project | | |
| Operational performance of the client: cost savings Reduction of cost of delivered service of on average 10 percent for the services benefiting from investments under the GrCF As part of the investment, the water loss reduction in the Project area (at a local level) will be reduced by more than 50 per cent. | The Project has been implemented, thus addressing the water losses in the Project area. <i>[No actual data / confirmation of target provided.]</i> | TIMS Sep 2022 |
| 49407 GrCF - Banja Luka District Heating | | |
| Operational performance of the client: cost savings Reduction of cost of delivered service of on average 10 percent for the services benefitting from investments under the GrCF. Conversion from heavy fuel oil to locally available wood biomass shall reduce the cost of production of heat supplied by more than 50 per cent. | The Project resulted in significant cost savings with introduction of biomass as primary source of heat energy. <i>[No actual data / confirmation of target provided.]</i> | TIMS July 2022 |
| PSCs introduced and successfully implemented between the relevant utility companies and the cities when investments target revenue-generating activities (successful implementation should include annual public disclosure of financial and operational performance measured against KPIs defined in the respective PSCs). PSC between the City of Banja Luka and the newly | In November 2019, the City and the DH company signed an agreement referring to mutual rights and obligations. In February 2018, the City signed another agreement with the DH company entrusting them with production and distribution of heating energy. These two contracts serve as a quasi PSC as they contain all the necessary elements of their cooperation and Company's operation. | TIMS July 2022 |

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| created DH Company will be covenanted under this subproject. | | |
| Tariff increases in line with the adopted PSCs aimed at cost-recovery or improved fare-box ratio. New tariff model has been prepared and its adoption and application will be covenanted under this subproject. | Tariff approval is with the City. Since its inception, it has not changed, but is up for review this year due to recent inflatory movements reflected particularly in electricity costs. | TIMS July 2022 |
| Effective private sector participation through incentive based outsourcing- or management contracts: The newly established DH Company is majority privately owned (51%). | Private participation has been secured through majority private ownership of the new DH company. That company procures biomass from various sources, including private companies even though the majority of quantities are from public company - RS Sume (Woods). | TIMS July 2022 |
| 49431 GrCF - Energy Efficient Refurbishment of Zenica Hospital | | |
| Credit Enhancement Programme will be developed and adopted by end of 2019 (covenanted in the Loan Agreement): During the due diligence process several areas have been identified through which the Canton can improve its management and financial planning functions, leading to enhanced credit standing. Technical cooperation for preparation and implementation of a CEP will be mobilised to help the Canton improve the following areas: (i) organizational structure of the Canton's management and division of functions/authority, (ii) financial and budget planning, (iii) financial resources and debt management, (iv) investment planning and asset management, including preparation of the Hospital's Assets Management Plan, and (v) management of the Canton's information systems. | Partially failed <i>[no further information in TIMS]</i> The Credit Enhancement Program for the Zenica Dobož Canton was not tendered out during the 2019-2022 period, as the implementation of the main project itself was uncertain due to local political issues. The PIU also does not have capacity to prepare related tender documents for this TC assignment (subject to public tender), hence after project effectiveness the OL worked with the grant unit to procure additional donor funds to add this task to the existing PIU & procurement support consultancy contract. The consultants with the PIU will start working on the tender of this assignment in H2 2022., however material issues related to the main project still are pending (i.e. how to finance the large cost overrun). [PMM] | TIMS Nov 2021 PMM Jun 2022 |
| HAMP (Hospital's Assets Management Plan) will be developed and adopted by end of 2019 (covenanted in the Loan Agreement): As part of CEP the Bank will task the TC consultants to assist the Canton and the Hospital in the management and maintenance of the Hospital's assets. While legislation provides the framework within which the Canton and Hospital currently manage and finance the assets, there is no binding | Partially failed <i>[no further information in TIMS]</i> | TIMS Nov 2021 |

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| contract between those parties. The HAMP will include an analysis of the procedures and practices currently in place as well as adoption of a new contractual agreement between the parties that will formalise the respective roles and responsibilities of the Canton and the Hospital and ensure efficient management of the Hospital's assets for their optimal performance. | | |
| 49437 GrCF - Lviv Solid Waste | | |
| PSC development and implementation will be covenanted in the loan documentation | PSC for this transaction has been developed with support from the Consultant, reviewed by the Bank, approved and executed by the Company management and the City authorities. | No TIMS PMM Nov 2021 |
| Tariff increases in line with the adopted PSCs aimed at cost-recovery or improved fare-box ratio (2021) | Tariff conditionality will be relevant once both PSC is adopted (achieved) and Mechanical Biological Treatment is operational (construction on-going). | No TIMS PMM Nov 2021 |
| Development of CDPs and formal adoption by the respective utility company | CDP is in preparation with support from CDP Consultant and is expected to be finalised and adopted in 1H 2022. | No TIMS PMM Nov 2021 |
| Reduction of cost of delivered service of on average 10 percent for the services | To be assessed upon completion of investment. | No TIMS PMM Nov 2021 |
| Effective private sector participation through incentive based outsourcing- or management contracts: MSW collection will be to a large degree outsourced to private sector. | To be assessed upon completion of Mechanical Biological Treatment investment. | No TIMS PMM Nov 2021 |
| 49483 GrCF2 W2 - Minsk VK | | |
| The sub-project will include the introduction of the PSC between the City and the Company within 24 months after the subproject loan signing. | Not achieved, project cancelled after signing | TIMS Oct 2022 |
| CDP to be adopted by the Company within 24 months after the subproject loan signing. | Not achieved, project cancelled after signing | TIMS Oct 2022 |
| Maintain full cost-recovery tariff level : The Loan Agreement will include a tariff covenant in line with PSC targeting maintaining full cost recovery levels to ensure the Company's ability to service the loan. | Not achieved, project cancelled after signing | TIMS Oct 2022 |
| 49559 GrCF - Sofia Electric Buses Acquisition | | |
| Tariffs have been increasing continuously and this trend is expected to continue throughout project implementation. (2021) | The tariffs increased by 22.3% in 2020 compared to 2019. For 2021 the tariffs remain broadly unchanged vs 2020. In 2022 tariffs increased by 47% vs 2021. [PMM] | TIMS Nov 2021 PMM Nov 2022 |

