

## Key questions for urban institutions / project promoters and project preparation facilities to support the preparation of infrastructure projects that contribute to a sustainable and climate-friendly recovery

Cities, particularly fast-growing cities and megacities with dense populations, are **disproportionately affected** by the COVID-19 pandemic. About 95% of reported cases come from urban areas ([UN Habitat, 2020](#)). For many cities, the pandemic not only represents a health crisis, but threatens to develop into a **crisis of urban access, equality, urban finance, security, unemployment, public services, infrastructure and transport**, disproportionately affecting the most vulnerable in society ([United Nations, 2020b](#)). At the same time, **the climate crisis has not disappeared** and continues to require urgent action at the local level as well.

In order to absorb the medium- and long-term effects of the crisis on the environment, society, the economy and on finance, **infrastructure investments at city level** which may contribute to a sustainable and climate friendly, green economic recovery – **focusing on strong climate benefits as well as economic, environmental and social/health co-benefits** – are **urgently required**.

As governments around the world develop and endorse short term economic recovery measures to overcome the economic effects of the COVID-19 crisis, they aim for measures that are **fast in implementation and delivering real world impacts, are labour-intensive in the short run, and have high short- and long-run economic multipliers** (i.e. returns for every dollar invested). **Initially these may be smaller investment programmes and projects** as they tend to face fewer challenges and can be scaled up rapidly. Infrastructure investments are generally considered to be particularly valuable in this context due to their potential for (short-term) job creation and multipliers estimated to be relatively high.<sup>1</sup> In parallel, governments may prepare for larger medium- to long-term investments, e.g. in larger infrastructure projects and R&D investments which drive long-term productivity.

As a matter of fact, **green (climate-friendly) urban investments often score well on being fast, labour-intensive in the short run and having high multipliers**.



### FELICITY in a nutshell

“Financing Energy for Low-carbon Investment-Cities Advisory Facility” is an initiative of GIZ and the European Investment Bank (EIB) to support low-carbon infrastructure projects in cities that significantly contribute to sustainable development and climate change mitigation.

As a project preparation facility, FELICITY offers technical assistance to cities in designing and structuring their infrastructure investment projects.

FELICITY prioritizes the interest of cities and incorporates the perspective of international financiers.

The following **key questions** aim to **support the development of financially viable projects relevant for a green recovery**, to align urban project development efforts with national (green) recovery programmes where they exist, and make the point for green recovery where there is an opportunity for agenda setting.

<sup>1</sup> See e.g. Bivens, J. (2017). The potential macroeconomic benefits from increasing infrastructure investment. Available [here](#)

## Key questions<sup>2</sup>

### Identifying projects that contribute to a green recovery

- Does the planned project create local employment in the short-term / during construction? Does the project create local employment in the mid-to long-term during operation & maintenance? Note that to rapidly revive employment, infrastructure investments should support all levels of enterprise (including the informal sector).
- What is the expected economic multiplier<sup>3</sup> of the planned project (i.e. the total economic activity generated, including through second-order effects)?
- Is the project consistent with and supportive of existing long-term decarbonization targets and strategies? If such targets and strategies do not exist, does the project contribute to the climate change mitigation targets set out in the government's "Nationally Determined Contributions"?
- Will the planned project increase resilience to natural disasters and climate change impacts? Does it improve the adaptive capacity of the population, that is their ability to reduce negative impacts (such as adapting buildings to improve resilience to extreme temperature) or capture opportunities, e.g. business opportunities, related to improved climate change adaptation?
- How long will it take to fully implement this intervention and to create jobs and activity (including project design, consultation processes, financial structuring, construction etc.)?

### Assessing financial viability in a (post) COVID world

- How are the project's projected revenues affected by the economic slow-down caused by the COVID19 crisis, and by potential changes in consumer behavior and commercial activities? Are the expected project's costs also affected (e.g. labor costs and costs for imported goods)?

- Is the project still financially viable if costs of capital increase due to generally increasing risk premiums, credit-rating downgrades, currency depreciation, etc.?

- How can sufficient equity and debt funding be secured for municipal infrastructure projects? Keeping in mind a context of reductions in own-source revenues for city governments and in budget transfers from the national level and capital outflows from emerging markets. What impact will the project have on municipal debt and its sustainability?

- Have options for off balance sheet financing, such as Public Private Partnerships (PPPs) or through Energy Service Companies (ESCOs), been explored as opportunities for infrastructure development in an environment of fiscal austerity? If yes, are the associated risks and the project's actual liabilities for the municipality taken into account in decision making?

- How would the project be affected by a possible reinstatement of COVID containment measures during project preparation, construction and operation?

### Meeting investor expectations

- How are risk-return expectations and other investment criteria of potential debt and equity investors changing as a consequence of the COVID19 crisis? E.g. national and multilateral development banks may expect all their investments to directly contribute to job creation and economic recovery / growth; investments into public transport may need to demonstrate alignment with public health standards; preferences of private investors may shift to highly liquid, safe assets etc.

- Are there opportunities to access specific national and/or international (green) recovery funds at attractive conditions<sup>4,5</sup>

### Developing a project pipeline

- Are there projects within the existing pipeline that are suitable for fast-tracking in a (green) recovery context? Or project concepts that can be re-shaped/re-

<sup>2</sup> Please note these questions are in addition to 'standard' questions asked in the project development process, including on E&S issues.

<sup>3</sup> Economic multiplier refers to the relationship between government spending and total national income, i.e. how many additional USD gross domestic product (GDP) result from an additional USD in government spending, e.g. in form of a stimulus package. A multiplier of 2 implies that 100 USD government spending would add 200 USD to GDP.

<sup>4</sup> See e.g. [here](#) for a joint announcement by ADB and GCF and [here](#) a publication by CCFLA that analysed economic stimulus packages worldwide.

<sup>5</sup> Note that financing instruments for "green recovery" will likely be issued in an environment where the EU and other governments are expected to issue significant amounts of debt, much of which at relatively low interest rates. Investors will likely be anxious to identify investments (including shares etc.) that will maintain an adequate return on their portfolios. Thus, green investments will need to offer risk/return profiles that will make them attractive to investors in the recovery phase.

designed to have strong co-benefits related to a pandemic recovery?

Are there opportunities for timely development of new projects with a specific focus on green recovery?

Are there opportunities for rehabilitating and / or retrofitting existing infrastructure as contribute to a green recovery?

Specifically, for PPFs:

Are there opportunities for broadening the focus of the PPF and, if needed, adjusting delivery mechanisms? E.g. broadening the focus to supporting natural capital investments, e.g. in parks and other green urban areas.

Specifically, for city governments:

Are there opportunities for engaging with the national government/national development banks on supporting urban infrastructure projects in the context of planned economic stimulus programs?



"Pilot of LED technology around the Cathedral of Maringá

## Annex

The following table shows examples of infrastructure investments at city level which may contribute to a sustainable and climate friendly economic recovery – **focusing on strong climate benefits (mitigation) as well as economic and health co-benefits.**<sup>6</sup>

Sector <sup>7</sup>	Potential investments	Climate relevance	Co-Benefits (economic, health)
<b>Energy</b>	Rooftop solar systems	GHG emission reductions	Job creation <sup>8</sup> in construction, health benefits through reduced air pollution (RE technology)
	District heating and cooling	GHG emission reductions	Economic savings from reduced fuel imports; health benefits through reduced air pollution <sup>9</sup>
<b>Buildings</b>	Renovations and retrofits for energy efficient buildings, incl. improved insulation, lighting, and cooling systems etc.	GHG emission reductions	Large potential for job creation (including in SMEs)
<b>Transport</b>	Infrastructure for non-motorized transport (e.g. pedestrian walkways, bicycle lanes)	GHG emission reductions	Short lead times; job creation in construction; health benefits through reduced air pollution and physical exercise; increased road safety
	Public transport infrastructure (bus lanes, metros etc.)	GHG emission reductions	Economic benefits through reduced commuting times; job creation <sup>10</sup> in construction; health benefits through reduced air pollution; needs to demonstrate alignment with public health standards
	Electro-mobility (e-vehicles incl. charging infrastructure)	GHG emission reductions	Increased long-term competitiveness and economic savings from reduced fuel imports; health benefits through reduced air pollution
<b>Waste</b>	Waste to energy facilities	GHG emission reductions	Job creation in construction; environmental and health benefits
	Water supply and wastewater treatment infrastructure	Increased climate resilience, GHG emission reductions	Job creation in construction; environmental and health benefits (incl. through potential early warning for

<sup>6</sup> Note that the table only shows the most relevant benefits. As there is little systematic and broadly applicable data on the climate and development benefits relevant for a green recovery, the table is mostly based on an expert assessment.

<sup>7</sup> Focus is on sectors with a high mitigation/abatement potential in cities. See e.g. [CUT](#) (2019), Climate Emergency, Urban Opportunity, Table 1.

<sup>8</sup> The Coalition for Urban Transitions estimates that investments in the areas of energy-efficiency buildings, low-carbon transport systems, renewables-based energy systems, and the preservation of natural capital can support the equivalent of at least 87 million jobs by 2030 (mostly from building efficiency improvements) and an additional 45 million jobs in 2050 (mostly transport sector) ([CUT, 2020](#)).

<sup>9</sup> For example, according to the European Public Health Alliance, citizens living in polluted cities face higher risks from COVID-19. Air pollution can lead to high blood pressure, diabetes and other respiratory diseases. Low-carbon urban projects contribute to an improvement in urban air quality.

<sup>10</sup> For example - based on an analysis of the WRI's 2009 "American Recovery and Reinvestment Act" - a \$1 billion investment in (clean) public transportation created 4.2 million hours of work, while the same amount spent on building highways and other private road infrastructure generated only 2.4 million hours of work ([WRI, 2020](#)).

			disease, improved sanitation and hygiene)
	Flood protection	Increased climate resilience	Job creation in construction
<b>Other urban infrastructure</b>	Restoration of green areas, construction of green public spaces	Increased climate resilience	Short lead times, large potential for job creation (including for low-qualified jobs), health benefits (air quality, recreation space, lower population density / social distancing, reduced heat exposure) <sup>11</sup>

## Further references:

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On behalf of:



Federal Ministry  
for the Environment, Nature Conservation  
and Nuclear Safety

of the Federal Republic of Germany



## Imprint

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### Published by:

Deutsche Gesellschaft für  
Internationale Zusammenarbeit (GIZ) GmbH

Registered offices  
Bonn and Eschborn, Germany

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### Layout:

creative republic, Frankfurt, Germany

### On behalf of

German Federal Ministry for the Environment,  
Nature Conservation and Nuclear Safety

GIZ is responsible for the content of this  
publication.

This project is part of the International Climate  
Initiative (IKI). The Federal Ministry for the  
Environment, Nature Conservation and Nuclear  
Safety (BMU) supports this initiative on the basis  
of a decision adopted by the German Bundestag

Bonn & Luxembourg, April 2021

<sup>11</sup> For example, a report by Vivid Economics shows that a US\$6.9 billion capital investment in urban green infrastructure would deliver US\$252 billion in physical health and wellbeing benefits to the most disadvantaged communities in the UK, pointing to high multipliers in tandem with the enhancement of active travel, biodiversity, carbon capture and air quality which green infrastructure provides ([Vivid Economics, 2020](https://www.vivid-economics.com/reports/2020/04/2020-04-20-urban-green-infrastructure)).