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Programme



INTERNATIONAL URBAN COOPERATION
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INNOVATIVE FINANCING MECHANISMS

INTERNATIONAL URBAN COOPERATION PROGRAMME

INTRODUCTION

This third publication of the International Urban Cooperation (IUC) financial series aims to give an overview on innovative financing mechanisms.

While traditional forms of municipal finance retain their importance, the role of new financial instruments and the engagement of the private sector become vital.

Still, as experience show even when creditworthiness is not an issue, most of local and regional governments are either not aware or are afraid of using unconventional tools of financing.

The aim of this booklet is to collect the most frequently used innovative financing schemes also applied in emerging economies, illustrated with case studies.



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1. INNOVATIVE FINANCING TOOLS

Innovative financing means “new or novel ways to generate predictable, additional and sustainable finance” and “the raising of funds from unconventional sources or mechanisms to make existing funds ‘go further’”.¹

Before deciding on the most suitable mechanism, the local government needs to have a clear understanding on the technical requirements of a project and quantify the related financial needs. Once there is a solid financial assessment ready defining the costs, a first step is to check if there are own sources, liquidity and/or asset, available to invest.

In most of the cases, and particularly for large scale projects, relying purely on own sources is not enough and external support is needed.

External finance, as already discussed in the previous publications, can come from public or private sources. Innovative schemes are generally related to private sector engagement, but usually finance is a mixture of different tools and comes from various sources.

Some innovative mechanisms using own sources to attract developers for sustainable projects, like land-value capture, tax advantages, subsidies and equity, were already described in detail in the publication: “Overview of financial sources at national level”.

Depending on the local governments’ capacity of co-financing, raise private capital, level of creditworthiness and the projects revenue generation potential, a local government can choose among the tools presented below.

1.1. ENERGY PERFORMANCE CONTRACT (EPC)

DEFINITION

An EPC is a contract where an array of services is agreed and the provider of the services is able to guarantee that a minimum of energy savings and/or sustainability value will be achieved. An Energy Service Company (ESCO) implements a customized energy service package, consisting of planning, building, operation & maintenance, optimization, fuel purchase, (co-) financing and user behaviour.²

ADVANTAGES

- This model can be suitable for local governments that lack the financial and technical capacities as it offers a “no risk, no investment” approach, where the municipality does not have to raise upfront costs, unless it is the preferred option. EPC contracts can guarantee that a certain percentage of savings will be achieved, with the risk taken by the ESCo; if the guaranteed performance is not achieved, the ESCo would pay back the local government.
- Costs for maintenance are saved during the contractual period, and there is the guarantee that the ESCo – participating in the share of the saving – will keep the system at its best performance.
- This model can bring expertise and give clarity on the viability of the project, building market capacity.
- Smaller municipalities could connect with neighboring municipalities with similar needs, to engage a single ESCo that aggregates these similar projects to lower transaction costs and facilitates financing.

DISADVANTAGES

- Provided that the contractual length is long enough to reach payback for the ESCo (i.e. 7 years) and includes maintenance services, the local government is committed for this period of time to the ESCo.
- The model might not be applied in locations where an enabling environment is lacking, such as in the case of emerging countries. Municipalities might need to provide bank or state guarantees.

1. Innovative Financing Recommendations, International Commission on Financing Global Education Results for Development Institute, 2016, Amy Bellinger, Arushi Terway, Nicholas Burnett

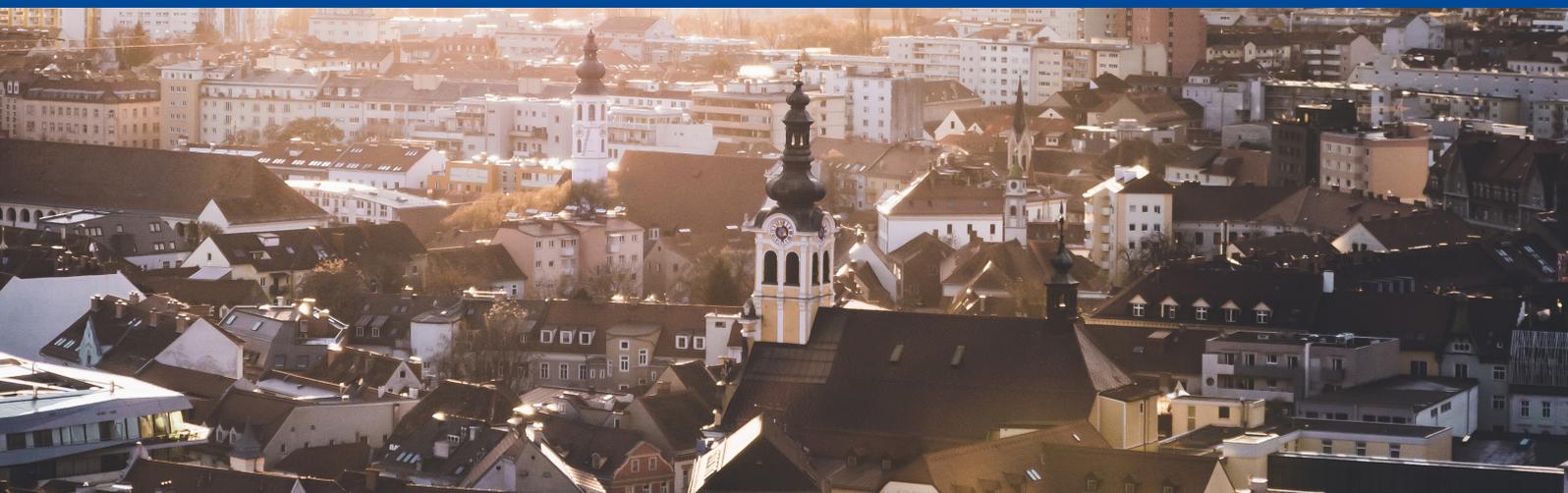
2. Standard EPC documents , European Energy Service Initiative, 2010



Financing resilience measures through energy performance contracting, Boston, USA

Boston has launched the Renew Boston Trust (RBT) in an effort to improve energy efficiency and resilience upgrades in the city’s building stock by using a self-funded financing model. The system builds upon the idea of energy performance contracting, in which energy savings are used to finance investments. With RBT, operating savings from energy efficiency and renewable energy measures pay not only for those investments, but excess savings pay for resilience investments, which traditionally do not produce operating savings by themselves. While the current program primarily targets municipal properties, RBT is working to apply innovative financing models to the institutional and non-profit sector as well. When implemented, the expanded RBT is expected to achieve a 10-fold increase in funding for energy efficiency and resilience projects and accelerate achievement of the city’s Climate Action Plan emissions reduction goals.

From: https://www.mm.dk/pdf/CITIES100_2016.pdf p.106



Boosting Energy Efficiency Actions in the Municipal Buildings of the City of Graz

The City of Graz has agreed on reducing its own energy consumption by 30% until 2020. The implementation of energy efficiency measures would last around 30 years with the current limited public resources. This project aims to boost energy efficiency and renewable energy measures in public buildings of Graz. Measures will include investments in the installation of an effective energy management and controlling (EMC) system covering nearly all of the 337 public buildings; energy-efficient refurbishment of 18 identified public buildings through Energy Performance Contracting; and ensuring high energy efficiency standards for 7 new public buildings. The action will lead to around EUR 19.000.000 investment into energy efficiency measures; 5420 MWh energy savings and 902 tCO₂e per year in Graz.

From: <https://ec.europa.eu/energy/intelligent/projects/en/projects/beam-graz>

1.2. PUBLIC PRIVATE PARTNERSHIP (PPP)

DEFINITION

Public Private Partnerships (PPP) are typically long-term cooperative arrangements between one or more public entities and a private organization, where there is an allocation of risks between the partners. The aim of this relationship is to use public policies and regulations to leverage private sector financing, who will receive payments from the public entity for providing a defined service.

ADVANTAGES

PPP enables local governments to access financing and technical expertise, and to benefit from operational efficiency, while shifting performance and technology risks to the private sector.

DISADVANTAGES

- The model has relatively high transaction costs.
- If one party feels they are losing some of the control they may work on adopting more rules and regulations throughout the process instead of working together.
- Different actors work with different timelines: non-profits long-term, for-profit organizations short-term, government agencies' timeline is heavily influenced by elections.
- Small and medium cities might find difficulties in accessing these arrangements.



A public-private partnership to finance tree planting, Bologna, Italy

Bologna, like many Southern European cities, is facing drought, extreme temperatures and water scarcity as a result of climate change. The city decided to create the “green areas inner-city agreement” (GAIA) based on a public-private partnership model to finance tree planting.

The GAIA mechanism is based on the idea to use financial compensation for the carbon footprint of businesses as a main driver for action. The financial compensation is used to purchase plants and maintain trees throughout the city. Participation of the town council and local businesses in the GAIA initiative is on a voluntary basis. The aim is to enable local enterprises and firms to decrease their carbon footprint and, at the same time, generate environmental and social benefits for the community.

A business that is interested in participating in GAIA can request an easy-to-use tool from the project website. This tool allows businesses to calculate the quantity of carbon dioxide involved in their processes and services. Next the businesses can select the type of partnerships they would like to purchase to neutralize their carbon footprint. The number of trees required to compensate the company’s carbon footprint is calculated according to the amount of carbon dioxide which will be absorbed. This is an indicative number; the company makes the final decision on how many trees it wishes to purchase to compensate its emissions.

During the three years of the project, 24 private companies have been involved and 1405 trees have been planted in the Bologna city area. The city has developed a Toolkit to help the replication of GAIA in other cities.

From: GAIA website

1.3. REVOLVING FUND

DEFINITION

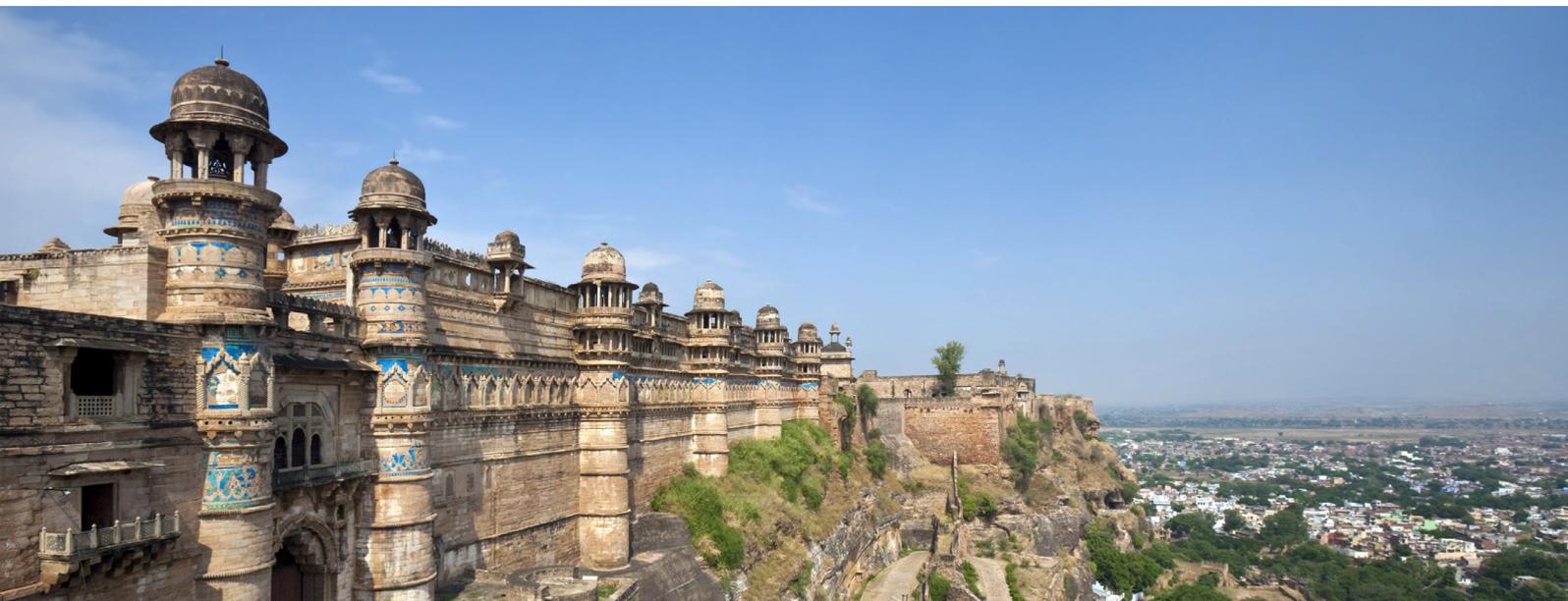
Revolving fund is a fund set up for specified purposes with the concept that repayments to the fund may be used again for these purposes.

ADVANTAGES

- Once implemented, the revolving fund model can be self-sustaining.
- The repayments can be utilized to finance additional projects.
- A revolving fund builds market capacity.
- There is no fiscal year limitation.
- Revolving funds might provide a solution for locations where there is an underdeveloped public/municipal credit market, when there is a credible and capable fund manager and the ability to enter into multi-year contracts.

DISADVANTAGES

- Recovering operating costs in early years can be difficult.
- The repayment periods may be long (typically 5–8 years or even more).
- The Fund may vary from year to year, due to financial sources mobilized and the return of investments.



Revolving Water Fund, Gwalior, India

A Revolving Water Fund (RWF) has been created as a pilot demonstration project in Gwalior. The Revolving Fund is being managed by the Municipal Corporations (MC). The RWF not only makes finances available for meeting the capital cost of the scheme upfront, but ensures the ownership and participation of the community in execution as well as the operational maintenance of the scheme. The community is provided a loan from the fund to meet the infrastructure development cost, which could be paid back by the community to the MC in easy installments matching with their paying capacity thus demonstrating a pro-poor governance approach. MC will replicate and upscale these scheme in others slums of the city.

From: Guidelines on revolving funds for and in madhya pradesh, India community managed water supply schemes construction of household toilets in urban slums, UN-Habitat and Government of Madhya Pradesh, 2006

1.4. CROWDFUNDING

DEFINITION

Crowdfunding is an alternative source of income for local governments. It is guided by the principle that citizens can voluntarily invest a certain financial amount into a proposed project.

ADVANTAGES

- Particularly suitable for funding small projects.
- Fast way to raise finance with no upfront fees.
- Good way to test the public's reaction to the project idea.
- Also ideas that may not appeal to conventional investors can often get financed.
- Investors can become loyal customers.

DISADVANTAGES

- Requires lot of work in building up trust and interest.
- There is no guarantee to reach the required funding target.
- Failed projects risk damage the reputation.



Crowdfunded bike lane, City of Denver, USA

The Downtown Denver Partnership, a non-profit business organisation dedicated to plan, manage and develop Denver's downtown area, was trying to push the City of Denver into implementing the 2007 Downtown Area Plan to build bike lanes and develop the downtown area. To speed up the implementation process and make it more public, the Downtown Denver Partnership decided to take the initiative using a new financing mechanism.

After acquiring US \$120,000 from private sector donors the Partnership decided to collect the remaining \$35,000 using crowdfunding.

With contributions from around 250 individual and small businesses, the project definitely achieved its full goal. Through crowdsourcing, citizens give not only their dollars, but also their votes for an action they find very important.

From: https://pocacito.eu/sites/default/files/BikeLane_Denver.pdf



Pedestrian bridge from crowdfunding, Rotterdam, Netherlands

The 390 m wooden bridge for pedestrians in Rotterdam is one of the biggest civic crowdfunding projects successfully completed so far. It reconnects a distressed area with the city centre of Rotterdam. Originally planned by the city council, this project was supposed to be completed in 30 years. An architectural firm called ZUS decided to bypass this delay by opening "I Make Rotterdam", a crowdfunding website dedicated to funding the bridge. Using the slogan "the more you donate, the longer the bridge", ZUS started the crowdfunding reward-based campaign in February 2011 giving people the opportunity to buy a plank for the bridge with their name on it. The campaign rapidly raised EUR 100 000. In 2012, the firm won the first EUR 4 million Rotterdam City Initiative for the revitalisation of the city with over 20 000 votes. The grant played the role of catalyst and ZUS decided to build a longer and more ambitious version of the bridge along with a park and rooftop gardens. The completed Lutchsingel pedestrian bridge was officially opened in August 2014.

From: <http://dx.doi.org/10.1787/b3f7a1c5-en> p.12

1.5. MUNICIPAL (GREEN) BONDS

DEFINITION

A green bond is a bond specifically earmarked to be used for climate and environmental projects. They are often verified by a third party, which certifies that the bond will fund projects that include benefits to the environment. (Green) bonds can be issued by development financial institutions (e.g. World Bank, European Investment Bank), commercial banks, state/municipalities or corporations (e.g. SNCF). Based on this, local governments have two options to benefit from the (green) bonds:

a) Issuing own (green) bonds

The issuer of a municipal bond receives a cash purchase price at the time of issuance in exchange for a promise to repay the purchasing investors, or their transferees, (the bond holder) over time. Repayment periods can be as short as a few months (although this is very rare) to 20, 30, or 40 years, or even longer. The issuer typically uses proceeds from a bond sale to pay for capital projects or for other purposes it cannot or does not desire to pay for immediately with funds on hand.

b) Align investment plans with other issuers

ADVANTAGES

- Green bonds can enhance an issuer's reputation - showcasing their commitment towards green growth and sustainable development. Governments may want to make a political statement and demonstrate their commitment to certain environmental (e.g. combating climate change) and/or sustainability objectives (e.g. stimulating green growth or shifting to a green economy).
- Green bonds provide issuers with improved access to a specific set of global investors who may have mandates to invest in green/sustainable ventures. Attracting new investors is often an important benefit of issuing a green bond and many green bonds issued to date report being oversubscribed.
- The issuance of green bonds can create new market demand - domestic bond issuances help strengthen and in some cases create domestic capital markets.³

DISADVANTAGES

- The necessary preparatory work (institutional set up, verification) takes time and costs money.
- Many times it is determined by national regulations if a local government can issue bonds or not.
- To make municipal bonds successful on the market, it needs a highly detailed, structured, skillful and diligent management process.
- (Green) bonds typically fund large-scale, capital-intensive (green) infrastructure projects such as energy efficiency projects, transit, or renewable power, among others, that can be repaid from steady, modest, long-term cash flows.⁴

3. <https://www.globalgreenbondpartnership.org/>

4. <http://www.gogreenbonds.org/>



Green bonds, City of Malmö, Sweden

The City of Malmö has developed a Green Bond Framework under which it issues green bonds since 2017. Proceeds of the bonds are used to finance a select pool of ‘Eligible Projects and Assets’ targeting climate change mitigation and adaptation as well as the protection of the environment and its ecosystems. Specifically the following categories: • Clean Transportation; • Climate Change Adaptation; • Green and Energy Efficient Buildings; • Energy Efficiency; • Environmentally Sustainable Management of Living Natural Resources; • Pollution Prevention and Control; • Renewable Energy; • Sustainable Water and Wastewater Management.

From: https://www.sustainalytics.com/wp-content/uploads/2017/11/Green-bond-Framework-City-of-Malmo_Second-Opinion-by-Sustainalytics_Final.pdf

<https://malmo.se/download/18.578ac132166b2bd8d60130eb/1542717002200/1%20pager%20eng%20ny.pdf>

2. CONCLUSIONS

Innovative financing mechanisms are important market catalyzers requiring collaboration between the public and private sectors. Such partnerships lower the financial risks of the project and create a strong common focus on timely delivery and bringing results.

Although there is a growing investor interest in deploying capital towards sustainable development, a huge untapped potential exists. National governments and International Financial Institutions could play an important role in capacity building and mobilize private capital.

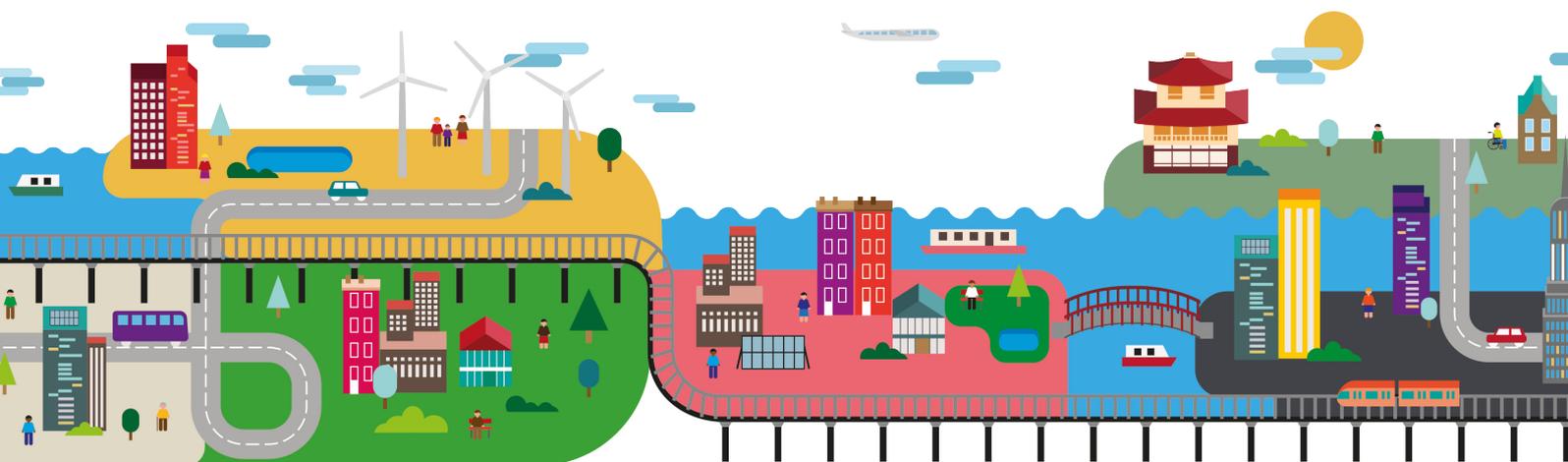
De-risking instruments are important to leverage capital, but there is also need to take certain risks, understanding the urgency of development needs and transformative changes.

Local and regional governments on the other hand shall also be more open to explore innovative options, exchange experience and lessons learnt with other subnational actors.

THE IUC PROGRAMME

The International Urban Cooperation (IUC) programme enables cities in different global regions to link up and share solutions to common problems. It is part of a long-term strategy by the European Union to foster sustainable urban development in cooperation with the public and private sectors, as well as representatives of research and innovation, community groups and citizens. Through engaging in the IUC, cities will have the chance to share and exchange knowledge with their international counterparts, building a greener, more prosperous future.

The IUC programme is an opportunity for local governments to learn from each other, set ambitious targets, forge lasting partnerships, test new solutions, and boost their city's international profile. Its activities will support the achievement of policy objectives as well as major international agreements on urban development and climate change, such as the EU Urban Agenda, the UN Sustainable Development Goals, and the Paris Agreement.



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