



Task Force 7
Infrastructure Investment and Financing

Policy brief

LOCAL GOVERNANCE OF INFRASTRUCTURE FINANCING TO PROMOTE SUSTAINABLE AND INCLUSIVE CITIES

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ABSTRACT

A green and just recovery starts with cities. The focus on urban infrastructure is key to promote sustainable development and address climate change challenges. However, cities are currently facing public budget constraints, requiring a further effort in mobilising private resources to meet the greater demand for infrastructure investments. This policy brief aims at proposing policy recommendations which combine and tackle these two essential aspects.



CHALLENGE

Despite harbouring over 50 per cent of the global population and occupying only 3 per cent of land surface, cities account for 60 to 80 per cent of global GHG emissions and consume 75 per cent of the planet's natural resources, according to the United Nations Environment Programme's Global Initiative for Resource Efficient Cities (UNEP, 2017). Although the production-based approach to measuring GHG emissions distributes the calculation of emissions associated to infrastructure among several sectors, including energy, transport and industry, the network of C40 cities estimates that emissions from building and infrastructure construction will form the single largest category of consumption-based emissions between 2017 and 2050, producing 21 per cent of consumption emissions in these urban centres. These numbers indicate that transforming urban infrastructure design is critical to promote resource efficiency and tackle climate change mitigation and adaptation.

Challenge 1: Urban infrastructures account for a large part of GHG emissions. Yet, cities are not empowered to manage infrastructure investments in a sustainable way. Since it encompasses housing, water and sewage treatment and public transport policy, alongside the logistics that enable the provision of other key social services, urban infrastructure is fundamental to address the rising social inequality in most cities by ensuring basic living standards to people in vulnerable conditions. Even though urban governments have been provided with a key responsibility for infrastructure provision, they have not received an adequate and corresponding decentralisation of finance while the COVID-19 crisis has depleted public budgets. Sustainable infrastructure is not just about emissions, it means developing infrastructure that supports social, economic and environmental sustainability in the long run.

Challenge 2: Cities have not fully tapped private resources. To counterbalance the consistent decrease of public fiscal budget allocated to municipal governments, exacerbated by the COVID-19 crisis, there has been an effort in leveraging private capital into infrastructure investments to fill the existing financing gap. According to a survey of the OECD, only 7 per cent of subnational governments – mainly large metropolises and regions – have reported a solid increase of private participation in infrastructure investments since 2010 (OECD, 2016). In its 2015 “Lessons Learned from OECD Investment Policy Reviews” (OECD, 2015), the OECD however stressed that revenue risks and sub-sovereign risks could be greater at a local level as management capacity could be weaker. Municipalities tend to suffer indeed from constraints in subnational borrowing and low public budget. It is no surprise that, according to experts of the World Bank, most public-private partnerships (PPPs) are allocated to larger and sovereign-backed projects, rather than to local infrastructure projects (Pilkington, 2019). This calls for active local finance policies which aim at developing innovative financing instruments to attract private investors.

Challenge 3: Cities have not fully tapped private expertise and capacity building in their infrastructure investment decisions. Poor technical capability in planning and managing infrastructure projects adds risks and uncertainty for private and public financing (Delmon, 2019). To mitigate these issues, and therefore maximise the impact of the investment, effort should be put into improving the project preparation of infrastructure projects and attracting private investment and PPPs.



PROPOSAL

1. G20 COUNTRIES SHOULD WORK WITH CITIES TO ADVANCE SOCIAL, ENVIRONMENTAL AND ECONOMIC OUTCOMES IN INFRASTRUCTURE INVESTMENTS

Local governments play a central role in investing in and maintaining key infrastructure assets that shape the daily life of their constituents, from water sewage to roads, public transportation, broadband and energy supply.

In the long term, infrastructure investment represents an opportunity to address equity and sustainability challenges. Research shows that we are lagging on achieving the UN 2030 Agenda and that “business as usual” policies will leave behind hundreds of millions of people, especially historically marginalised populations (Kharas, 2018).

Infrastructure investments need a systemic change and local governments are exploring creative ways to dual-track: filling the financing gap, and improving their infrastructure investment decisions. As more and more cities have been using the Sustainable Development Goals (SDGs) to inform their policy making, the UN framework provides an opportunity to shape infrastructure investments that advance equity and sustainability.

1.1. Apply the SDGs locally to drive infrastructure investments towards equity and sustainability priorities

Cities need to apply a framework that connects their infrastructure investments to the SDGs. Around the world, a growing movement of cities is localising the SDGs to improve local policy making and, in the post-COVID recovery, mainstream the principles of equity and sustainability to resist a “dash for growth” that leaves communities behind.

The SDGs imply many improvements to the quality of infrastructure: SDG 9 (resilient infrastructure), but also SDG 5 (gender equality), SDG 6 (availability and sustainable management of water and sanitation for all) and SDG 10 (reduced inequalities). The underlying principles of the SDGs, such as the interconnectedness of goals, and the commitment to “Leave No One Behind,” can help cities connect infrastructure to the three major issues below:

1. *Equity and social participation.* Financial flows must be directed toward infrastructure investments that address inequalities in terms of income and access to basic services, such as transportation, broadband and sanitation. Socioeconomic impact indicators and participatory governance mechanisms must be factored into decision-making processes that determine priority investments in urban infrastructure. For instance, before the 2016 Olympics in Rio de Janeiro, money flooded into projects like the cable car in Complexo do Alemão, an expensive and currently inoperative asset that brought no improvement to the living standards in this vulnerable community (Campos, 2018). Cities can prevent this situation by improving participatory mechanisms and transparency through public hearings and consultations, sustainable procurement, participa-



tory budgeting and e-government portals. Municipal procurement for instance, as a major source of public spending and driver of market transformation, must prioritise regional value chains and use competitive bidding to ensure cost effectiveness. Requesting socio-environmental risk disclosure from infrastructure companies involved in PPPs can also inform local decisions.

2. *Economic outcomes.* Infrastructure investments have a powerful “multiplier” effect in terms of job creation and workforce qualification. The potential to generate this positive effect must be measured and taken into consideration in the prioritisation, valuation and cash flow planning of infrastructure projects. Cities must not only consider infrastructure investments in terms of new infrastructure, but also factor in their long-term maintenance and its potential to create good-quality jobs in the long run. For instance, in the United States, research shows that clean energy jobs are linked to higher wages than other jobs, but they also lack racial diversity. Maintaining and operating infrastructures should prioritise local hires and workforce training that benefit communities traditionally left behind.
3. *Sustainability.* Green infrastructure builds resilience and helps mitigate the effects of climate change. Infrastructures are particularly vulnerable to environmental impacts and must therefore be planned through a meticulous project pipeline with clear directives to map and mitigate possible socio-environmental risks. For example, in 2018, flooding and landslides following heavy rains cut road circulation on islands in Hawaii and isolated communities for months before repairs enabled access to basic services. In order to avoid similar situations, the localisation of the SDGs and the development of a socio-environmental risk matrix can guide infrastructure investment.

1.2. Promote the standardisation of metrics used by financial institutions to evaluate the socio-environmental risks of their investments

Pricing socio-environmental risks. Although several banks and investment funds have begun considering climate-related risk assessment in their operations, there is less consensus surrounding how to measure biodiversity risks and factor this evaluation into the financial planning of an infrastructure project, to determine credit rate and rate of return, for example. The G20 can play a major role in promoting the standardisation of the socio-environmental metrics and evaluation processes that are being used by different financial institutions – including the International Finance Corporation, the Interamerican Development Bank and the Asian Infrastructure Development Bank – to create a unified socio-environmental risk matrix for infrastructure projects.

An interesting methodology to develop such a matrix is to review the environmental impact reports of major infrastructure investments and categorise these impacts to create a socio-environmental risk taxonomy for each type of infrastructure asset. Once these risks are listed, an objective scoring method should be employed to classify them based on the magnitude, duration and reversibility of their potential socio-environmental impact (Escolhas, 2021). These risks must then be priced and included as costs in cash flow forecasting and in the estimated internal rate of return, which will determine whether a project is funded or not (Escolhas, 2021b). The G20 should play a role in the standardisation of the metrics



used to price these risks and in promoting the implementation, by member countries, of regulation that makes socioenvironmental risk assessment and disclosure mandatory for infrastructure projects in all kinds of financial institutions.

Monitoring and reporting on the SDGs. To act on their commitments and achieve their SDG priorities, cities need to develop their capacity to develop specific local indicators and monitor the implementation of the SDGs. For instance, mirroring the reporting of their country to the UN, cities have been producing Local Voluntary Reviews, for example Buenos Aires. These are often based on data dashboards, such as in Los Angeles, to transparently report their progress on each SDG. This also requires better connecting their SDG strategy to the professionals designing, building and maintaining infrastructure, and to build institutional capacity to monitor the implementation of targets such as *Target 9.1: Develop sustainable, resilient and inclusive infrastructures* and *Target 9.4: Upgrade all industries and infrastructures for sustainability* at the local level.

2. G20 COUNTRIES SHOULD WORK WITH CITIES TO ACTIVATE AND ORIENT PRIVATE INVESTMENT TOWARDS SUSTAINABLE INFRASTRUCTURE

2.1. Improving the enabling environment to mobilise private resources at the local level

1. *Regulation:* Small and medium cities often lack administrative capacity to run regulatory bodies that define the “rules of the game” and enforce compliance by contractors in PPP arrangements. The establishment of common regulatory bodies for consortiums of cities and even states can be a cost-effective solution to mitigate regulatory risks and improve efficiency in such arrangements. Local authorities can voluntarily adhere to such bodies, which support them in the management of contracts within their jurisdiction without giving up their legal and administrative autonomy.
2. *Project Preparation:* The mobilisation of private capital to finance sustainable infrastructure at the local level also requires a greater availability of high-quality bankable projects. Cities often lack the operational and human resources necessary to build a strong pipeline of infrastructure projects. In this sense, project preparation facilities can be a powerful tool to transform local infrastructure demands into technically feasible, economic viable and environmentally sustainable projects (Bhattacharya, Romani and Stern, 2012). Just like the pooling of small loans, those facilities can be run by Public Development Banks that operate at the territorial level by themselves or in partnership with Multilateral Development Banks, serving the municipalities under their geographical coverage. Such facilities may also play an important role to showcase available projects, reducing information asymmetry between cities and potential funders, which can accelerate and enhance mobilisation of private capital, especially in developing contexts.



2.2 Support the development of innovative financial instruments

Closing the financial gap for sustainable infrastructure investments requires not only a better regulatory environment and the availability of projects, but also a more robust framework of financial instruments that are appropriate to mobilise resources at the necessary scale. In this sense, it is imperative to go beyond traditional instruments and look for innovative solutions that are better aligned with the nature and requirements of such investments.

1. *Sustainable Development Bonds (SDBs)*: An SDB differs from a traditional bond by establishing explicit commitments by the issuers with projects that generate a positive, measurable and auditable sustainability impact. Because of the value added related to the final use of the resources, SDBs are often better suited for impact investors and funds that need to meet investment targets related to environmental, social and corporate governance, and are associated with better financial conditions to the issuer. Therefore, the G20 must encourage and stimulate the development of SGB markets to provide a new source of adequate funds to finance sustainable investment projects.

However, so far, only large and the most creditworthy subnational governments have been able to properly leverage municipal bonds, because issuing them is an extremely complicated financial operation that requires high expertise, making the fixed costs too high for small volumes (Liu, 2017). To make SDBs at a local level more attractive, one solution could be pooling small issuance of bonds, which would reduce transaction costs and attract private investors, such as the Priority School Building Programme in the UK (UK Education, 2016). The pooling can be done through mobilisation of Subnational Development Banks – institutions with the local expertise and operational capacity to identify and organise local demands and connect them to available funds at the global level (Suchodolski et al., 2020).

2. *Public-private partnerships (PPPs)*: The gap of PPPs at a local level is remarkable as these arrangements require specialised experts and can have high administrative sunk costs. Often, small-scale PPPs could have high transaction costs and risk profile, disincentivising private investors. Furthermore, these projects tend to lack standardisation of costs and structure. To ease the development of PPPs, the development of standard models of bidding and contractual documents can help in lowering costs and risks. For example, the World Bank's Scaling Solar programme which provides national – and potentially local – governments with a standardised package that includes document templates, competitive financing and insurance products has supported the implementation of PPPs. Moreover, subnational governments could benefit from bundling PPPs. Central PPP units can support local governments throughout the different phases of a PPP project, with a focus on local capacity building throughout the entire project cycle. The Local Finance Initiative (LFI) has also developed an interesting form of PPPs, Public-Private-Community Partnerships, in which local communities and villagers are concurrently a partner and a beneficiary of the partnership (UNCDF, 2017). This arrangement ensures that local needs and interests are safeguarded during all phases of the project.



3. CALL FOR SME-CENTRIC FINANCIAL INSTRUMENTS

Whether for SDBs or PPPs, the priority should be given to blended finance instruments supporting political goals such as climate change and innovation without excluding support to traditional SMEs, particularly in the infrastructure sector.

Such instruments should indirectly serve two purposes: injecting money into the local economy and fostering more inclusivity and sustainability among enterprises. For these two reasons, the main beneficiaries of this type of instrument must be SMEs.

Indeed, an ecosystem of robust SMEs leads to better economic resilience, job creation and more inclusive economic growth. However, SMEs have many disadvantages compared to large companies. Most SMEs are promising in terms of job creation but struggling to attract private capital (Wapshot, 2018), with limited access to finance due to their smaller size (Kersten, 2017). Moreover, the pandemic has hampered the business momentum and has shaken confidence in their capacity. They are also less likely to be in close contact with senior officials and less able to influence the policy-making process, which means financial instruments elaborated by policy makers often do not target them enough. As a result, their ability to access blending instruments may prove to be weaker since most of them are ill-equipped to access financial instruments (OECD, 2020).

For the above reasons, direct blended finance instruments could aim at implementing an SME-driven approach as SMEs tend to invest their earnings into the local economy. In this sense, financial instruments such as SDBs could contribute further to sustainable local economic development by supporting competitive small businesses and small-scale entrepreneurs.

The most appropriate inspiration would be the US public procurement framework through its establishment of quotas. The Small Business Act (1953) in the United States sets the following quotas for SMEs: 23 per cent for direct contracts and 40 per cent for subcontractors – the issue of subcontractors is particularly sensitive in the context of infrastructure projects. The same approach in terms of quota may enable blended finance to bloom. In short, innovative financial instruments should target SMEs through the establishment of quotas when it comes to the beneficiaries.

CONCLUSION

Infrastructure investments that work towards equity and sustainability will make or break the capacity of cities to build resilience and mitigate the effects of climate change. Applying the SDG framework to infrastructure investment could help city leaders orient their scarce resources to better outcomes. The localisation of the SDGs can also increase the alignment of local policies to the national and international agendas, paving the way for cooperation and access to international funds focused on sustainable development.

Cities need the resources and expertise from the private sector to achieve these goals. An environment enabling the emergence of innovative financial instruments, including Sus-



tainable Development bonds and Public-Private Partnerships, and empowering SMEs to take action will provide the foundation for this agenda. To incentivise private capital in urban – and also small-scale – sustainable and inclusive infrastructure projects, an effort should be made, on the one hand, to increase the range of financial instruments and mechanisms made available by national governments and Multilateral Development Banks so as to empower local finance and, on the other hand, to promote capacity building and improve the regulatory environment and human capital to enable quality infrastructure projects at the subnational level.

Cities have demonstrated their global leadership in the recovery from the COVID-19 crisis and the Paris Climate Agreement. The G20 should work with cities to empower local leadership on the SDGs, especially in the context of the newly created, full-fledged G20 sustainable finance working group.



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