

# Responsible Investment in Infrastructure: Recommendations for the G20

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## Abstract

The G20 is calling for much higher levels of financial support for infrastructure development, particularly through public-private partnerships (PPPs). To that end, it is in dialogue with national and international development banks about how they can more effectively serve this goal.

This infrastructure development goal was advanced at the Russian G20 Summit in September 2013, where the Leaders adopted:

- the [report](#) of the G20's Study Group (SG) on "Financing for Investment," which identified three goals for future work, relating to: facilitating project preparation and financing; improving the investment climate; and helping to generate long-term financing for infrastructure investments. The SG, comprised of G20 Finance Ministers addresses the infrastructure investment needs of G20 countries, particularly emerging market economies.
- two reports on the infrastructure needs of low-income countries: the "[St. Petersburg Development Outlook](#)" echoes the SG's call for improving the effectiveness of project preparation facilities (PPFs) (and possibly creating a global network of such facilities) as well as examining the implications for Low-Income Countries of work of the Study Group's agenda on long-term financing of investment. The [St. Petersburg Accountability Report on G20 Development Commitments](#) called for strong follow-up on commitments, including the "stalled" commitment to integrate of environment safeguards in infrastructure work.

Infrastructure is an important component of an overall sustainable development strategy, but we must also ask: What kind of infrastructure is necessary and where? For whose benefit? How should the cost/benefits of infrastructure proposals be assessed? How will proposed infrastructure affect the planet's carbon footprint? How can investment be brought into underserved countries, or continents, such as Africa? How should infrastructure finance be generated? Are PPPs the right modality for infrastructure development?

Understandably, the G20 has devoted considerable effort to the question of how infrastructure finance should be generated. This paper addresses that question and puts it in a larger context. We encourage infrastructure development that achieves a "triple bottom line" (economic, environmental and social co-benefits) and, to that end, recommend a "value for money" (VFM) approach to infrastructure financing. Used properly,

this approach does not create a bias toward public or private financing or toward short- or long- term investment. The VFM approach is defined as "what a government judges to be an optimal combination of quantity, quality, features and price (i.e., cost), expected...over the whole of the project's lifetime."<sup>1</sup>

The VFM approach would require the G20 to relinquish its bias in favour of PPPs<sup>2</sup> in order to weigh this approach with alternatives and, thus, ensure optimal benefits to the stakeholders. The VFM approach should be adopted regardless of the volume of resources at the disposal of investors. For instance, large infrastructure projects are often driven by governments (and state-owned enterprises (SOEs)) of emerging market countries with abundant capital, while at other times, they are driven by cash-strapped low-income governments.

More fundamentally, to achieve a "triple bottom line," the G20's approach to infrastructure should:

- Reinforce "bottom-up" demand for infrastructure in the context of locally- and nationally-owned strategies. The lessons of experience also stress the importance of standards, or safeguards, for public and private finance, as well as for foreign direct investment (FDI), which can help ensure that infrastructure projects contribute to inclusive and sustainable development. Such standards – relating to information disclosure, transparency, social and environmental principles – should not represent peripheral "frills," but rather fundamental components of project identification, design and implementation. Currently, the G20 should resist pressure to diminish standards and compliance with standards and, instead, lead a process of "upward harmonization".
- Require that new waves of infrastructure development rely on renewable energy so that the global community complies with its commitment to arrest global warming and ensure that it does not increase by 2°C by 2100.
- Where appropriate, encourage governments to expand public investment in infrastructure without undermining domestic social spending or taking on excessive fiscal risks (including contingent liabilities) which, if they materialize, could trigger

<sup>1</sup> "How to Attain Value for Money: Comparing PPP and Traditional Infrastructure Public Procurement," p. Burger and I. Hawkesworth, OECD Journal on Budgeting, Volume 2011/1.

<sup>2</sup> A PPP is "an agreement between the government and one or more private partners according to which the private partners deliver the service in such a manner that the service delivery objectives of the government are aligned with the profit objectives of the private partners and where the effectiveness of the alignment depends on a sufficient transfer of risk to the private partners." Ibid., p. 3

debt distress.

- Recommend that governments put a high priority on developing or acquiring the institutional capacity to: negotiate equitable financial arrangements; provide regulation, especially in the sectors where natural monopolies exist; deliver public goods; and prevent corruption.

When it achieves a “triple bottom line,” investment in sustainable infrastructure development can be considered a “public good,” which boosts commerce while creating jobs and protecting the environment and the rights of local communities.

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# Responsible Investment in Infrastructure: Recommendations for the G20

## 1. Background: The G20's Infrastructure Initiatives

The G20 is facilitating a “new consensus” on infrastructure by calling for the mobilization of higher levels of financial support for large, cross-border infrastructure, particularly through public-private partnership (PPPs) modalities, in order to promote regional integration. This consensus is arising due to the appetite for new, profitable markets; the frustrations of many emerging market and developing countries with the status quo; and the belief that large-scale infrastructure holds the promise of growth and development.

The frustrations of many emerging market and developing countries relate to:

### Failures of the multilateral development banks (MDBs)

Some of the criticisms of MDBs are described in “[Infrastructure Development: Meeting the Challenge](#)” by Amar Bhattacharya, Mattia Romani and Nicholas Stern (London School of Economics; Group of 24 (G24), et al.), such as:

- Cumbersome and costly project preparation facilities;
- A risk-averse nature; and
- Inadequate capacity to crowd-in private investment or adequately assess risk-return profiles, deal with uncertainties of revenue streams and hold assets in appropriately diversified, large portfolios.

### Need for a new destination for savings

The aforementioned authors underscore the fact that many emerging market and developing countries are getting very low returns from their investments in developed country bonds. Instead, they need to channel savings in ways that can finance their own unmet development needs, such as infrastructure.

### MDB governance

Pravin Gordhan, South Africa's finance minister, said: *“The roots of the World Bank and IMF still lie in the post-World War II environment. The reforms*

*that have taken place are still inadequate in terms of addressing the current environment. We still have a situation where certain parts of the world are over-represented.”*<sup>3</sup>

## Prospects for a BRICS-led New Development Bank and a Global Infrastructure Facility

Due to such frustrations, the BRICS (Brazil-Russia-India-China-South Africa) announced at their March 2013 Summit in Durban that they would launch a [BRICS-led New Development Bank](#) to finance infrastructure and sustainable development.<sup>4</sup>

The World Bank might be concerned about the prospect of being left at the sidelines. At the Russian G20 Summit, World Bank President Jim Kim announced that the institution is currently working to raise funds from member nations—especially middle-income countries—for a global infrastructure facility. Kim said that the Bank “hopes that layer of official funding will act as a catalyst to help it draw in private-sector investors.”<sup>5</sup>

## The G20's role in Advancing Infrastructure Development

From 2010-2013, infrastructure development was arguably the #1 priority of the G20 Development Working Group. In February 2013, the issue had gained so much prominence that it was put on agenda of the G20 Finance Ministers, who formed a Study Group (SG) on “Financing for Investment” – particularly in infrastructure.<sup>6</sup> The February Communique of the G20 Finance Ministers and Central Bankers announced a long [list of](#)

<sup>3</sup> The Guardian (March 28, 2013)

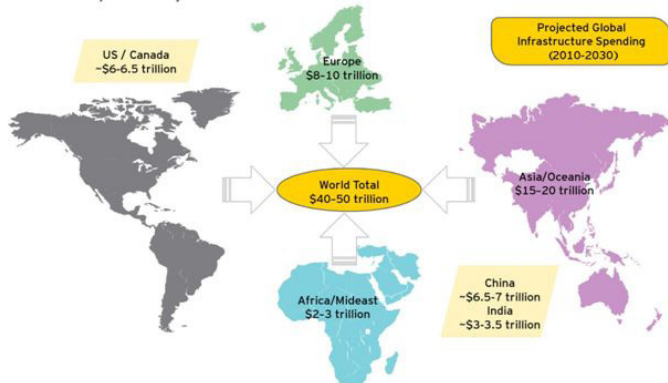
<sup>4</sup> The Financial Times (September 24, 2012) queried whether a BRICS Bank would fill a niche in promoting green technologies or finance projects, such as biofuels, large dams and nuclear power plants, that do not meet the World Bank's social and environmental standards.

<sup>5</sup> Wall Street Journal (September 6, 2013)

<sup>6</sup> The Russian G20 website shows the extensive research by the World Bank (working with 6 other institutions) on how to raise long-term financing - primarily for infrastructure. The G20 FFI work program is located in the annexes of the “Umbrella Paper”.

**BOX 1****Business 20 estimation of projected global infrastructure spending**

An estimated \$40 trillion – \$50 trillion of infrastructure spending will be required by 2030...



"Investments and Infrastructure: Key Task Force Priorities," Presented by Kirill Dmitriev, CEO, Russian Direct Investment Fund, 13 December 2012.

[measures](#) that should be taken to promote "financing for investment."

In the run-up to the Russian G20 Summit, the issue of "infrastructure and investment" featured prominently in the Business 20 [agenda](#) – as well as in the Labor 20

[agenda](#). Business 20 projections for global infrastructure spending appear in Box 1 (left).

At the 2013 Russian G20 Summit, Leaders adopted the [report](#) of the G20's (SG), which identified three goals for future work, including: a) improving the processes and transparency of project preparation and financing; b) improving the investment climate; and c) facilitating greater intermediation of the global savings pool to generate long-term financing for infrastructure investments. It also anticipated expanding the engagement of national and international development banks.<sup>7</sup> The SG, comprised of G20 Finance Ministers, addresses the infrastructure investment needs of G20 countries, particularly emerging market economies.

At the Summit, the G20 Leaders also adopted two reports on the infrastructure needs of low-income countries:

The "[St. Petersburg Development Outlook](#)" suggests

<sup>7</sup> On the topic of the role of development banks, the Russian Sherpa stated: "We are considering the possibility of modifying mandates of national and international development banks, with the goal of focusing the institutions for development on promoting investment, primarily in infrastructure, and supporting public-private partnerships (PPPs) in this area." (March 2013 G20 Sherpa meeting)

**BOX 2****The Challenges of Financing Energy Infrastructure**

A close look at infrastructure financing in the energy sector can improve our understanding of these issues. Access to energy is crucial to economic development and human well-being. According to a global survey of the International Energy Agency (IEA), over 1.3 billion people lack access to electricity and 2.7 billion people lack clean cooking facilities. More than 95% of these people are either in sub-Saharan Africa or developing Asia and 84% are in rural areas. In most cases, the lack of access to modern energy tends to go hand-in-hand with a lack of provision of clean water, sanitation and healthcare. Therefore, financing for infrastructure in the energy sector can not only meet the need of economic recovery, but can also enhance the quality of life in less developed countries.

To fill the wide gap between energy supply and demand, the IEA estimated that investment in energy infrastructure from multilateral development banks and bilateral official development aid (ODA) should average around US\$18 billion per year from 2010 to 2030. There is no doubt that such a scaling up of financing would have significant economic, social and environmental implications.

In comparison with other sectors, infrastructure projects in the energy sector usually require larger investment and a longer construction cycle; they also entail enormous social and environmental impacts. Put simply, four distinct features of infrastructure project in energy sector can be identified as follow:

(1) *Long maturity term.* Large-scale energy infrastructure normally demands a long period of preparation and construction before reaching maturity. For example, a hydroelectric power project may take 5 years to construct and could have a life of more than 50 years.

(2) *Large-scale investment.* For example, a kilometer of oil/gas pipeline or a megawatt of power could cost as much as \$1 million, so each project could cost hundreds of millions U.S. dollars.

(3) *High risks.* Since large sums are typically invested for long periods of time, underlying risks are correspondingly high. These arise from a variety of factors, including demand uncertainty, environmental surprises, technological obstacles and, most important, political, governance and policy-related uncertainties.

(4) *Low real returns.* The scale of these investments and the cascading effect of higher pricing could have serious negative impacts on the rest of the economy, resulting in annual returns that, in real terms, are often very low. However, while real returns could be near zero, they are unlikely to be negative for extended periods of time.

key actions for the period 2014-2017 for consideration during the Australian Presidency, including improving the effectiveness of project preparation facilities (PPFs) (and possibly creating a global network of such facilities) and examining the implications for Low-Income Countries of work of the Study Group's agenda on long-term financing of investment.

The [St. Petersburg Accountability Report on G20 Development Commitments](#) assesses the status of the G20's infrastructure-related commitments,<sup>8</sup> which were featured in the Development Action Plan (DAP), adopted by the G20 Leaders at the 2010 Seoul Summit. Progress on only one of 18 total commitments has "stalled"; it relates to the question of how to assess ways to "integrate environmental safeguards in an effective cost-efficient manner." (See page 22.)

The "stalling" of this commitment may be symptomatic of the fact that both the finance and development tracks of the G20 have avoided most social and environmental dimensions of the infrastructure development challenge.

The commitments of the DAP's infrastructure agenda were intended to serve three primary purposes:

**First**, the establishment of a High-Level Panel on Infrastructure, which would guide the planning of public and private sectors. It delivered the [Report of the G20 High-Level Panel on Infrastructure](#) (October 2011) calling for: (a) promotion of a global network of local public-private partnership (PPP) units,<sup>9</sup> which may report to a central, "apex" PPP institution which would expedite the design, project preparation, and construction of large-scale, cross-border infrastructure operations; (b) regional political bodies to usher the projects from conception to completion; (c) a global system to mobilize financing from numerous sources for public-private partnerships (PPPs) through existing and new institutions; (d) changes in the IMF-World Bank Debt Sustainability Framework (DSF) to expand the levels of allowable borrowing, particularly by low-income countries; and (e) a global infrastructure facility at the World Bank Group/International Finance Corporation (IFC) to provide equity and guarantees for infrastruc-

ture investment. (See Section 5 of this paper.)<sup>10</sup>

**Second**, the Report also identifies eleven "exemplary" mega-projects. (See the list in Attachment 1.) The G20 Leaders declared that the "exemplary" projects "have the potential to have a transformational regional impact by leading to increased integration and access to global markets, with due consideration to environmental sustainability."<sup>11</sup>

In identifying the "exemplary" projects, the High-Level Panel employed six criteria relating to: 1) how the project promotes regional integration; 2) whether the project has political support; 3) the stage of project preparation; 4) institutional capacity to implement the project; 5) attractiveness of the project to the private sector; and 6) transformational impact in terms of a) impact on growth, b) affect on a large number of people, c) sustainability.

**Third**, the G20's infrastructure agenda was to develop plans, including:

- [Infrastructure Action Plan](#), Report to the G20 by the MDB Working Group on Infrastructure, October 2011.

- ["Transformation through Infrastructure: World Bank Infrastructure Strategy Update](#), Fiscal Years 2012-2015, including the supplement, ["Supporting Infrastructure in Developing Countries"](#), Submission to the G20 by the MDB Working Group on Infrastructure. This document posits a staggering \$1.1 trillion annually of infrastructure expenditures in developing countries (6.6 percent of the developing world GDP) through 2015.

These reports and plans were presented to the 2011 French Summit where G20 Leaders declared that investing in infrastructure will "unlock new sources of growth, contribute to the achievement of the Millennium Development Goals and sustainable development."<sup>12</sup>

8 As with the Development Outlook, the Accountability Report emphasizes the importance of project preparation facilities (PPFs). The Infrastructure Consortium for Africa (ICA) completed its [assessment of PPFs in Africa](#) and the African Development Bank (AfDB) is launching 'Africa 50' fund, which aims to "help close the continent's infrastructure gaps by delivering total infrastructure projects amounting to US\$100 billion, financed from both private and public sources..." Similar assessments need to be undertaken in other regions, according to the Report.

9 For instance, in January 2012, African heads of state launched the "Program for Infrastructure Development in Africa" (PIDA), which under the auspices of the African Union and the New Partnership for Africa's Development (NEPAD), is developing a pipeline of bankable projects.

10 According to the World Bank's new infrastructure strategy, the Bank has reformed its operational policy on guarantees "in order to streamline and consolidate the policy and remove restrictions which unnecessarily constrain their use." "Transformation through Infrastructure," p. 27, paragraph 54.

11 Cannes Summit Final Declaration, paragraph 75.

12 Cannes Summit Final Declaration, paragraph 73.



## 2. Public-Private Partnerships (PPPs) in Infrastructure: Value for Money?

*Recommendation: The G20 and the investment community must relinquish its bias in favour of PPPs and, instead, apply a "value for money" (VFM) approach to infrastructure financing to discover which financing option delivers the greatest benefits.*

As noted above, the G20 is promoting Public Private Partnerships (PPPs)<sup>13</sup> in infrastructure. With the encouragement of the G20, the development finance institutions (DFIs) are helping to identify sources of long-term finance as well as ways to use official development assistance (ODA) to leverage private finance for infrastructure by, for instance, providing equity and guarantees to offset political and commercial risks.<sup>14</sup> Numerous "blending" facilities have been created to blend public and private resources and civil society is examining these to determine the extent to which blending will promote public goods.

The UN is also getting on the "bandwagon." There are signs that the UN Secretary-General could stake his legacy on the creation of a new [international partnership facility](#). Moreover, in formulating the post-2015 MDGs, one proposal would reformulate MDG 8: "global partnership for development" to focus on the promotion of PPPs.

The World Economic Forum (WEF) is "leading the charge" toward PPPs, for instance, in its new volume entitled, ["Strategic Infrastructure: Steps to Prepare and Accelerate Public-Private Partnerships,"](#) which is intended to serve as a "roadmap" to direct governments and other stakeholders to the critical success factors in designing country-wide PPP program (rather than taking a project-by-project approach).<sup>15</sup>

Yet there are alternatives to PPPs. For instance, in the water sector, alternative business models include:

- Regional public water utilities servicing a whole county or province
- Municipal water utilities providing water supply, wastewater collection and transportation and wastewater treatment services
- Syndicates of municipalities (e.g., Belgium and France)
  - Inter-communal cooperation in rural areas
  - Multi-purpose utilities (e.g., providing water supply and sanitation, district heating, and municipal

waste management services)

- Service provision by local public administration
- Importantly, different business models require the same conditions for success: principally, strong governance and institutional capacity.

### Challenges in Implementing PPPs

The private sector is diverse and there are many types of PPPs, so it is difficult to generalize about their performance.<sup>16</sup> Writing with Caroline Philippe, renowned infrastructure expert, [Antonio Estache](#), reminds us that, over the past 20 years, much of the PPP debate has been ideological and driven by high profile failures or rejections of the model, but that there is still widespread demand for PPPs. Their main message is that telecom PPPs worked out well, but that in other infrastructure subsectors, where efficiency gains have been achieved from PPPs, "it is not always clear how fairly gains have been shared between the various economic actors. In many countries, regulation was not designed to pass these gains on to residential users. The evidence is quite robust for electricity and water." They write that the road sector is particularly undesirable for PPPs, as evidenced by the high degree of contract renegotiations.<sup>17</sup>

Estache and Philippe emphasize that PPPs should meet four criteria: 1) Fiscal/financial viability—is the public sector really meeting its fiscal objectives, which may include subsidies, and is the operation financially sustainable for the private actors involved? 2) Efficiency—is it cutting cost, are cost minimized and do prices reflect costs? Without competition and regulation, this is unlikely. 3) Governance—do PPPs impact governance of sector policy and its accountability for mistakes, incompetence or corruption? Does it make it worse or better? 4) Equity and poverty alleviation—where "the really bad news...is that providing access to the poor has proven to be not good enough. What is needed is affordable access." In this regard the price levels and the price structure are critical.

Indeed, PPPs do not have a particularly strong record of delivering universal, affordable services, particularly in the water and social sectors. The aforementioned WEF volume states that many PPPs have failed owing to "a faulty appraisal of just one single variable: demand," which fuels an "optimism bias." Others have failed due to inordinate reliance on user charges or direct government payments as funding sources. Still

<sup>13</sup> Eligible procurement methods are divided into build-transfer-operate (BTO), build-transfer-lease (BTL), build-operate-transfer (BOT) and build-own-operate (BOO).

<sup>14</sup> In the spirit of this shift, there is a proposal to, in addition to measuring each donor government's ODA, also to measure its "overall contribution to development" which would specify the volume of private funds it leverages.

<sup>15</sup> Ibid., p. 11 and 66.

<sup>16</sup> "Public-Private Partnerships (PPPs) in International Development: Are we asking the right questions?" CAFOD Discussion Paper, April 2013.

<sup>17</sup> "The Impact of Private Participation in Infrastructure in Developing Countries: Taking Stock of about 20 Years of Experience," Antonio Estache and Caroline Philippe, Université Libre de Bruxelles, ECARES Working Paper 2012-043, p. 12.

others have suffered from delays due to stakeholder opposition and incomplete legal prerequisites (e.g., land acquisition).<sup>18</sup>

The International Institute for Sustainable Development (IISD) writes that,

*Sitting, as it were, on the cusp of a potential large-scale take-up of PPPs around the globe, it is important to assess the extent to which PPP is an appropriate tool for sustainable public procurement and sustainable development at large...IISD is of the view that PPPs are yet to deliver on its potential for long-term sustainability and that a substantial rethinking of the business and contracture models are needed to ensure that it moves in this direction in the future.*<sup>19</sup>

We recommend that: a) infrastructure development be driven by “bottom-up” demand, not supply-driven by the G20 and the development banks; and b) the G20 relinquish its bias in favour of PPPs. Instead, it should ensure that borrowers employ value-for-money (VFM) comparisons between PPP modalities and conventional financing alternatives. (See attachment 2.) According to the OECD, the VFM approach “can be defined as what a government judges to be an optimal combination of quantity, quality, features and price (i.e., cost), expected (sometimes, but not always, calculated) over the whole of the project’s lifetime.”<sup>20</sup>

History instructs us on the wisdom of this approach. From the 1990s onward, in both the water and energy sectors, developing countries were encouraged to use aid, loans, and guarantees to leverage private investment, particularly FDI. However, private investors constantly evaluated their current investments against alternatives and changing risk profiles and, even when a long-term commitment was promised, they often withdrew -- long before the contract expired. After being repeatedly jilted, governments’ initial enthusiasm for these strategies waned.

There is little to show for the substantial efforts by IFIs and donors to promote private investment in water and sanitation. The World Bank/AFD study of Africa’s infrastructure in 2010 found that \$2.5 billion was invested annually by the public sector and aid agencies, while the private sector invested less than \$0.01 billion. In India, central and state governments are responsible for 99.6% of the \$22.3 billion invested in water and sanitation between 2007 and 2012. In more limited investments in water and wastewater treatment PPPs (using Build-Operate-Transfer (BOT) model), authorities have fallen prey to optimism in the forecasting of demand and, then, found themselves liable to pay for

unnecessary volumes of treated water.<sup>21</sup>

In energy, authorities commonly employ the Independent Power Producer (IPP) model and rely on long-term power purchase agreements. Some of these have been associated with corruption – for example the Enron investments in Nigeria and India, and others in Tanzania, Pakistan and Indonesia – which is an intrinsic hazard of such long-term contracts. Some have also been subject to forecast optimism (see the example of Bujugali later in this paper), resulting in much higher prices than initially forecast. The great majority of IPPs have also consisted of gas-fired generators, rather than using renewable energy sources.<sup>22</sup>

A number of lessons can be seen in the experience of Egypt (prior to 2011) in relation to PPPs, especially in energy and waste management.

- **Currency risk:** private electricity generating companies (IPPs) were introduced in the 1990s, resulting in significant new investment. However, this was denominated in foreign currency, and the terms of the PPP led to the cost of electricity doubling, as the Power Purchasing Agreements (PPAs) required the government to carry this risk. The plants have now been renationalised. A new framework for IPPs was created, which effectively transfers currency risk to private partners, and expects private partners to sell some output on the market rather than relying on 100% government guaranteed purchases. No IPPs have been created under this framework, however, and new capacity is now expected to be generated by the national electricity utility (EEHC).<sup>23</sup>
- **Contract specification:** Since 2002, waste management PPPs set up in three Egyptian cities have proven problematic in terms performance and unpopularity, partly because the requirement for recycling was fixed too low (at only 20%) with too much reliance on landfills to replace dumping.<sup>24</sup>
- **Transparency:** PPPs and other forms of privatisation have been unpopular with many because of the perceived secrecy and cronyism involved, as noted by the OECD in a report on the business climate in Egypt:

21 See Financing water and sanitation: public realities PSI-RU 2012 [www.psi.ru.org](http://www.psi.ru.org)

22 Overview of Energy in Africa 2013, and Global Experience with Electricity Liberalisation 2009: [www.psi.ru.org](http://www.psi.ru.org)

23 Public Private Partnerships (PPP) in the Middle East and North Africa (MENA) July 2007 [http://www.pppcentralunit.mof.gov.eg/SiteCollectionDocuments/PPPCUSite/Press/Read%20more\\_1.pdf](http://www.pppcentralunit.mof.gov.eg/SiteCollectionDocuments/PPPCUSite/Press/Read%20more_1.pdf); Eberhard A. and Gratwick K. 2007, From state to market and back again: Egypt’s Experiment with IPPs. University of Cape Town, October 2007 [www.gsb.uc.ac.za/mir](http://www.gsb.uc.ac.za/mir)

24 Sohair Mourad Milik. 2010. Assessment of Solid Waste Management in Egypt During the Last Decade in Light of the Partnership Between the Egyptian Government and the Private Sector [http://dar.aucegypt.edu/bitstream/handle/10526/1527/Thesis\\_final\\_Jan\\_2011\\_New\\_Microsoft\\_Office\\_Word\\_Document%20-%20Copy.pdf?sequence=1](http://dar.aucegypt.edu/bitstream/handle/10526/1527/Thesis_final_Jan_2011_New_Microsoft_Office_Word_Document%20-%20Copy.pdf?sequence=1)

18 Op cit., p. 9.

19 “Sustainable Development: Is there a Role for Public-Private Partnerships? A summary of an IISD preliminary investigation,” Policy Brief, International Institute for Sustainable Development (IISD), Summit Consulting Group, NORAD, October 2011.

20 See footnote 1.

**BOX 3****Findings of the World Commission on Dams**

In 1998, after many disastrous experiences with hydropower projects financed by development finance institutions (DFIs) --especially the multilateral development banks (MDBs) -- the World Conservation Union (IUCN) established the [World Commission on Dams](#) (WCD). The report of the WCD's recommends:

- The need for clear public acceptance, including the provision of reliable information to enable stakeholders to make informed decisions and participate effectively in decision-making. With regard to indigenous people, this must include prior informed consent.
- A comprehensive assessment of all the options ensuring, in particular, that social and environmental aspects are giving equal weight alongside technical factors.
- A post-project review of existing dams, both from a technical and social point of view.
- The development of a basin-wide understanding of the aquatic ecosystem and of ways of maintaining it.
- The recognition that the benefits of dams should be widely shared.
- Checks and balances to ensure that at all stages and procedures comply with agreed standards.
- Special reference to cross-border impacts.

In response, the DFIs set up some standards for infrastructure projects with serious environmental and social externalities:

- Project categorization (A,B,C and F), where all infrastructure projects with serious environmental and social externalities fall to category A. All projects category A (and some projects category B) should go through Environmental Impact Assessments, including mandatory public and stakeholders hearings and discussions;
- Complaint mechanism – When a DFI is alleged to have violated its own policies and procedures, the stakeholders, including local communities, have the opportunity to submit a complaint directly to the mechanism (the Inspection Panel at the World Bank or the CAO at the International Finance Corporation). The complaint mechanism has a line of command that is independent of project staff and management.

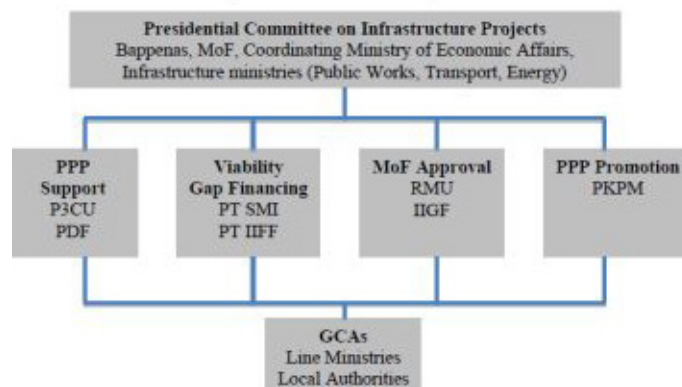
“With regard to the privatisation process itself, an overall lack of transparency is also problematic”.<sup>25</sup>

- **Costs of tendering:** Procurement by PPP projects is more complex and costly than ordinary procurement and so attempts to develop PPPs imposed a significant extra costs on the limited budgets of government departments.<sup>26</sup>

Although PPPs are often promoted as a solution for countries with under fiscal constraints, they can make these problems worse. When a fiscal crisis in Portugal required an IMF/EU rescue mission, it was revealed that the government had signed two large road PPPs which cost €800m each year – more than the government's entire annual transport budget. The IMF/EU has insisted that these PPPs must be renegotiated so that the private partners accept a lower rate of return, and get less benefit from 'captive' sub-contracts, for example. Cyprus, which also required an IMF/EU bailout this year, had the same problems, and the IMF insisted that: “It is essential to conduct systematic cost-benefit analysis and put in place procedures that prevent PPP

projects that do not meet appropriate standards.”<sup>27</sup> This is obviously a good general principle, but it is not clear what these 'appropriate standards' are for developing countries, when they are also attempting to make PPPs attractive to investors. The OECD, for example, encourages the use of public funds to cover the 'viability gap' in Indonesia, but how can governments – and civil society – ensure that this is not just inflating the internal rates of return? Indonesians are aware of this problem in Jakarta, where the water service is currently under two PPPs established 15 years ago, which guarantee an internal rate of return of 22%.<sup>28</sup>

Figure 1. An institutional setup for PPPs in Indonesia



25 OECD 2010 Business climate development strategy Phase 1 Policy Assessment Egypt Dimension I – 2 Privatisation Policy and Public Private Partnerships <http://www.oecd.org/daf/psd/46340470.pdf>; A Postcard from Africa July 9, 2010 Egypt: Privatization Troubles Peak <http://www.thomaswhite.com/explore-the-world/postcard/2010/privatization-in-egypt.aspx>

26 OECD 2010 Business climate development strategy Phase 1 Policy Assessment Egypt Dimension I – 2 Privatisation Policy and Public Private Partnerships <http://www.oecd.org/daf/psd/46340470.pdf>; A Postcard from Africa July 9, 2010 Egypt: Privatization Troubles Peak. <http://www.thomaswhite.com/explore-the-world/postcard/2010/privatization-in-egypt.aspx>

27 see [www.imf.org/external/pubs/ft/scr/2011/cr11331.pdf](http://www.imf.org/external/pubs/ft/scr/2011/cr11331.pdf)

28 OECD Reviews of Regulatory Reform Sept 2012 Indonesia Public-Private Partnership Governance: Policy, Process And Structure <http://www.oecd.org/gov/regulatory-policy/Chap%206%20PPPs.pdf>



Even high-income countries have struggled to manage these dilemmas. The UK is often referred to as an example of a country which has successfully developed a lot of infrastructure PPPs. But there has been widespread public and parliamentary criticism of the excessive costs and rigidities of PPPs, and the Conservative-led government has announced it will end the current scheme and, in fact, it is drawing up plans for a new way of financing infrastructure. Already, over 25% of PPPs in the UK have been terminated.

The problems encountered are summarised in the table below, derived from a series of parliamentary reports.

<b>Public sector alternative</b>	Public sector alternative not properly evaluated
<b>Public borrowing cheaper</b>	Some PPPs have been replaced by public bonds at much lower cost
<b>Government guarantee</b>	Bank loans raised by PPPs are nearly all guaranteed by the government
<b>Risk transfer</b>	Risks of major service failure cannot be transferred to the private sector
<b>Forecasts</b>	Consultant forecasts of demand or efficiency savings have been badly wrong
<b>Operating efficiency</b>	Private companies may not contain costs and/or rely on state subsidies
<b>Competition</b>	Companies award themselves sub-contracts
<b>Incomplete contracts</b>	PPP contracts for operation, maintenance and services are inflexible
<b>Transaction costs</b>	Tendering, monitoring, managing contracts creates additional costs

### The Importance of VFM Approaches

The South Korean experience provides an indication of the capacity required to obtain VFM from a PPP. There, a high percentage of PPPs were renegotiated – especially those of the Build-Transfer-Lease (BTL) type. The Minimum Revenue Guarantee (MRG) system was originally introduced to attract the private sector and prevent the termination of PPP projects or the bankruptcy of concessionaires. However, it transferred excessive risk to the government by drastically decreasing demand risk to the concessionaires (allowing them to estimate excessive demand volume). Ultimately, the MRG was reduced and finally abolished in 2006 for unsolicited projects and December 2009 for solicited projects.<sup>29</sup>

There is an additional aspect to the execution of the VFM principle. Frequently, the “tied aid/credit” ap-

proach to infrastructure development requires recipient countries to purchase goods and services from the donor or creditor country. This approach is highly profitable for the donor or creditor country, but it may not permit the recipient country to bargain for the most economical goods and services. Therefore, “tied aid/credit” may violate the VFM principle. Donors and creditors may place certain restrictions on their assistance, but in doing so, they should not violate this principle or undermine local capacity development.

The G20 should advocate VFM methodologies that are evidence-based and do not rely on rosy assumptions and assurances. For example, the widespread assumption that PPPs are cheaper is not supported by the evidence. A study by the European Investment Bank (EIB) found that the costs of building roads was 24% greater using PPPs than conventional procurement. The costs of arranging and procuring PPPs should also be taken into account, since another EIB study found that, on average, the costs of the procurement process are about 10% of the value of the contract itself.

### 3. Criteria for Responsible Infrastructure Investment

*Recommendation: The G20’s approach to infrastructure should reinforce “bottom-up” demand for infrastructure in the context of locally- and nationally-owned strategies. The lessons of experience also stress the importance of standards, or safeguards, for public and private finance, as well as for foreign direct investment (FDI), which can help ensure that infrastructure projects contribute to inclusive and sustainable development. Such standards – relating to information disclosure, transparency, social and environmental principles -- should not represent peripheral “frills,” but rather fundamental components of project identification, design and implementation. Currently, the G20 should resist pressure to diminish standards and compliance with standards and, instead, lead a process of “upward harmonization”.*

A valid value-for money (VFM) methodology, as described above, should reinforce a “triple bottom line” approach to infrastructure – that is, one that achieves positive economic, social, and environmental gains. This is crucial since economic gains are dependent on social and environmental co-benefits (and vice versa). For instance, as the case study of Bujagali Dam shows (attachment 3), a dam cannot be sustainable if climate change diminishes the water table or if the price of the electricity it produces is neither competitive with other sources nor affordable for consumers.

At the current time, we face a situation in which:

- **the social and environmental standards, or safeguards, of new or emerging Development Finance Institutions (DFIs) may be inferior to the**

<sup>29</sup> KDI Public and Private Infrastructure Investment Management Center, Public Private Partnerships of the Republic of Korea, (undated chapter) and “How to maintain value for Money: Experience from Korean PPPs,” April 2013 PPT.



**standards of the multilateral development banks (MDBs).** Examples of new or emerging DFIs include the China Development Bank, the Eurasian Development Bank, VEB -- or planned DFIs -- such as the BRICS-led Development Bank. Examples of the multilateral development banks include the World Bank, the Inter-American Development Bank, the African Development Bank, the Asian Development Bank and the European Bank for Reconstruction and Development. Other DFIs include Export-Import Banks. All DFIs are managed by governments.

- **the standards and compliance mechanisms of established multilateral development banks also need improvement.** According to the World Bank's 2011 *African Regional Strategy*: "Despite the greater emphasis on the private sector and signs of its dynamism, Africa's private sector growth has not been sufficiently poverty-reducing..."<sup>30</sup> A report by the World Bank's Independent Evaluation Group (IEG), "Assessing IFC Poverty Focus and Results," -- examines a random selection of 481 IFC projects over the past decade and finds that only 13% of projects had objectives with an explicit focus on poor people" and "6% of projects explicitly identified gender issues in project design." These findings are corroborated by independent researchers.<sup>31</sup>

Moreover, according to recent findings of the International Finance Corporation (IFC), not enough is known about whether the high proportion of on-lending through financial intermediaries (FIs) complies with the institution's Performance Standards.

The implication of these findings is that, since the World Bank Group (including the IFC) is playing a leadership role in the G20's "Financing for Investment" in Infrastructure Initiative, it needs to revamp its operations to reach the poor.

- **Compliance of private banks with the "Equator Principles" (EPs) has declined since the global financial crisis.** The EPs are more or less equivalent to the Performance Standards of the World Bank's private sector arm, the International Finance Corporation (IFC).

If the new and emerging DFIs do not learn lessons from the established MDBs, high economic, social, and environmental costs will inevitably be incurred. Where G20 member governments are implementing infrastructure projects, it is essential that they integrate international standards into their governance structure in transparent ways which enable effective monitoring from other G20

countries and civil society.

For example, the BRICS and other emerging market economies may not have fully learned the lessons described by the World Commission on Dams (WCD). (See box 3, page 11.) The WCD described that using infrastructure investment as a key tool for economic and infrastructure development is core part of state responsibility.

Yet, in many cases, affected communities do not have the means to protect their rights and interests. Often, large-scale infrastructure projects do not offer real sustainable improvements to their lifestyles, but rather destroy the social fabric of local cultures, key habitats for native biodiversity, and the natural resources upon which their existence depends. As a result, economic benefits may accrue mainly to big businesses or to more highly developed regions.

In some cases, the success of advocacy by big business may result in major investments for a modest return and high social externalities. For instance, the aluminium industry is seeking to locate large hydro dams on Siberian rivers (Angara, Shilka, Amur, etc.) because low-cost hydropower generation will provide a competitive advantage for Russian aluminium producers as well as exporters of electricity from Russia to China. Under PPP arrangements, the government assumes responsibility for compensating people and mitigating negative effects, but it does not necessarily have the capacity and resources to perform these functions. Meanwhile, large companies drastically reduce their liability, or responsibility, for losses and damages incurred by local people and nature. Without the means to adapt to the realities created by such infrastructure projects, local populations can become marginalized in their own regions and territories.

For such reasons, it is crucial to establish international standards for social and environment responsibility in infrastructure development, including the highest quality levels of transparency, access to information, and public participation in regards to infrastructure projects and energy project planning to avoid typical mistakes and wrong motivation for these kinds of projects.

In conclusion, to ensure that infrastructure achieves a "triple bottom line," the G20 and the global community should avoid a "race to the bottom" in standards. Civil society organizations (CSOs) are appealing to the G20 countries and others to ensure that:

1. *Private investors and public-private partnerships (PPPs) are guided by the Equator Principles and other key standards, including:*
  - the UN Conference on Trade and Development (UNCTAD) has "[Investment Policy Standards for Sustainable Development](#)" that, among other things, encourage responsible Foreign Direct Investment

30 p. 11.

31 H. Mainhardt-Gibbs, E. Bast, S. Kretzmann, World Bank Group Energy Financing: Energy for the Poor? Oil Change International, October 2010; B. Ellmers, N. Molina, V. Tuominen, "Development Diverted: How the International Finance Corporation (IFC) Fails to reach the Poor," EURODAD

- (FDI); and
- the OECD has articulated "[Principles for the Public Governance of Public-Private Partnerships](#)" (May 2012), which among other things, describe how to achieve value-for-money in PPPs, curb corruption, allocate risks, maintain transparency; and involve stakeholders.
- The UN Food and Agriculture Organization (FAO) and the World Committee on Food Security (CFS) have established "[Voluntary Guidelines \(VGs\) on the Responsible Governance of Tenure of Land, Fisheries and Forests in the Context of National Food Security](#)."

Whereas governments should ensure that DFIs enforce responsible environmental and social standards,<sup>32</sup> an independent "third party" should provide regular audits of the execution by private banks of EP obligations.

2. *The criteria for project selection proposed by the G20's High-Level Panel on Infrastructure are revised, since the current criteria neglect the social and environmental dimensions of infrastructure development.*
3. *Established institutions improve their standards.* Now, the World Bank is undergoing a two-year consultation and review of its safeguard policies and observers are anxious that the Bank not only improve upon its policies by, for instance, a) filling "gaps" in these policies related to climate change, biodiversity, land tenure, gender, or human rights; b) ensuring free, prior and informed consent (FPIC) for affected communities; and c) ensuring that safeguards apply not only to project investments, but also to the increasing volume of programmatic loans.
4. *New and emerging banks harmonize their standards with the improved standards of established institutions.* Otherwise, project sponsors could "shop around" to choose the DFI with the lowest or least costly standards.

The process of upward harmonization of standards for private and public banks should inform the OECD's update of its policy framework for investment and the drafting of trade and investment agreements. The G20 and the global community should ensure that the highest standards should prevail and render void lower standards (e.g., the (revised) Guidelines for International Investment of the International Chamber of Commerce (ICC)).

<sup>32</sup> DFIs should not devolve responsibility for audit and compliance to public or private borrowers, as the International Finance Corporation is doing, but rather maintain this responsibility themselves.

## 4. Infrastructure: Scale, Sustainability, and Carbon Footprint

*Recommendation: The G20's approach to infrastructure should require that new waves of energy infrastructure development rely on renewable energy so that the global community complies with its commitment to arrest global warming and ensure that global warming does not increase by 2°C by 2100.*

The World Bank's 2012 report, [Turn Down the Heat: Why a 4 Degree Centigrade Warmer World Must be Avoided](#), states that, even with the current mitigation commitments and pledges fully implemented, there is roughly a 20 percent likelihood of exceeding 4°C by 2100. This is a conservative projection. A series of recent extreme events worldwide highlight the vulnerability of all countries. World Bank Group President [Jim Yong Kim](#) emphasizes that:

*"Climate change is one of the single biggest challenges facing development, and we need to assume the moral responsibility to take action on behalf of future generations, especially the poorest. 4°C warmer world can, and must be, avoided – we need to hold warming below 2°C. Lack of action on climate change threatens to make the world our children inherit a completely different world than we are living in today."*

Governments have committed to measures that prevent the global warming from increasing temperatures to more than 2°C. It is beyond the scope of this paper to describe in detail the "great transformation" of production and consumption processes required to ensure that this promise is met. Developing and emerging countries rightly note that, through their dependence on fossil fuels, advanced countries have created our predicament. Also, advanced nations rightly note that some emerging countries, especially China, have overtaken advanced countries, especially the U.S., in their level of emissions of greenhouse gases. Meanwhile, advanced nations exceed China's emissions of greenhouse gasses when measured on a per capita basis.

In 2015, the UNFCCC Conference of Parties (COP) is scheduled to develop a legally-binding framework to reduce greenhouse gases in a predictable and equitable manner. The G20 needs to promote coherence among economic, environmental, and social goals by supporting the goals and process of the COP.

However, in order to promote coherence, the G20 must ensure that its initiatives promote appropriate scale technology, sustainability, and a small carbon footprint. This is especially crucial because the G20 is promoting infrastructure, particularly in the energy, water, and transportation sectors, where the lock-in of carbon-intensive technologies for generations can doom efforts

to curb global warming. In contrast, commercialization and scaling up of renewable energy technologies can assist with the great transformation necessary to secure the future of generations to come.

**The Potential of Renewable Energy.** The G20 should not underestimate the potential of renewable energy. The potential is vast and there are studies that indicate that, on a global scale, nearly complete reliance on renewable energy is possible by 2050 given the right policy framework.<sup>33</sup> Further, these studies also indicate, that the cost of renewable energy in the short- to medium- run will be far lower than conventional energy sources, primarily due to the increasing price of coal, gas and oil over the long-term.

According to the “Renewables 2012 Global Status Report,” renewables accounted for almost half of the estimated 208 gigawatts (GW) of electric capacity added globally during 2011. Wind and solar photovoltaics (PV) accounted for almost 40% and 30% of the new renewable capacity, respectively, following by hydro-power (nearly 25%).<sup>34</sup>

Strikingly, multilateral and national development banks (led by the European Investment Bank and BNDES) provided US\$17 billion of finance for renewable energy in 2011 – four times the level provided in 2007.

**Incentives for Deployment of Renewable Energy, e.g., Feed-In Tariffs (FiTs).** In 2011, targets for renewable energy existed in at least 118 countries, more than half of which are developing countries. Feed-In Tariffs (FiTs) – also called premium payments, advanced renewable tariffs and minimum price standards – are the most widely used policy type in the electricity sector, having been adopted by at least 65 countries as of early 2012.<sup>35</sup>

The Renewable Portfolio Standard (RPS) or “quota” is another common policy, existing at the national level in 18 countries. More than 20 states in India have “renewable purchase obligations” (RPOs), but a vast majority of them are unable to achieve the targeted “RPOs” – primarily due to poor grid infrastructure.

Projects identified as “exemplary” by the Report of the G20’s HLP on Infrastructure such as the East Africa and West Africa Power Pools should incorporate such incentives for renewable energy in their design. Moreover, such projects should reflect the best available technology for grid construction.

## G20 Countries Using Feed-In Tariffs and Renewable Portfolio Standards (RPS)/Quotas<sup>36</sup>

Country	Feed-In Tariffs		Renewable Portfolio Standards	
	National	Subnational	National	Subnational
Argentina	X			
Australia		X		
Canada		X		X
China	X		X	
France	X			
Germany	X			
India	X		X	
Indonesia	X		X	
Italy	X		X	
Japan	X		X	
South Korea			X	
Turkey	X			
UK	X		X	
US		X		X

## Appropriate scale technology and universal access.

When it comes to the scale of infrastructure technology, bigger is not necessarily better. As Attachment 3 (“the Case of the Bujagali Dam”) describes, planning that does not take environmental, climatic, and social factors into account, is likely to backfire.

Greater leadership is needed to accurately estimate the potential of renewable energies. In the case of India, for instance, official estimates are unrealistically low. The Government of India estimates that the potential for wind energy is only 45 GW, whereas, recent studies done by a number of independent agencies, research bodies and academic institutions of repute, have pegged the potential of wind energy in India to be in the region of 200 GW to 2000 GW.<sup>37</sup> Similarly, the Government estimates that the potential for solar energy generation is only 800 GW by 2031, but the potential is far beyond this level.

With improved technologies and, importantly, improved efficiencies, the actual generation of electricity from these renewable sources could easily meet the requirements of countries.

## What needs to be done to leapfrog carbon-intensive technologies?

- In the short- to medium-term, sufficient finance must be mobilized for countries to scale-up renewable energy, particularly solar, because of the higher costs of generation as compared to fossil fuels.

<sup>33</sup> Greenpeace energy revolution, WWF’s report of 100% Renewables by 2050, Global Energy Assessment: Towards a Sustainable Future, 2012.

<sup>34</sup> “Renewables: 2012 Global Status Report,” p. 13.

<sup>35</sup> Ibid., p. 66.

<sup>36</sup> Ibid., pp. 70ff.

<sup>37</sup> <http://ies.lbl.gov/drupal/files/ies.lbl.gov.sandbox/IndiaWindPotentialAssessmentRevisedFinal03202012%5B1%5D.pdf>



- In a number of countries, additional investment is required to adapt and improve the transmission infrastructure to ensure the uptake of renewable energy.
- Many countries require adequate storage technologies and, therefore, international cooperation on transfer of technologies as envisaged under the UN-FCCC will be crucial.
- Reforms are required in the normative standards of the multilateral and bilateral development banks and new institutions such as the Green Climate Fund and the anticipated BRICS Bank and the Global Infrastructure Facility of the World Bank. The term “normative standards” must be applied to types of infrastructure development as well as social and environmental standards. For instance, while the World Bank and the Asian Development Bank do provide resources to developing economies for strengthening transmission infrastructure, it is primarily for more conventional transmission infrastructure which may not support renewable energy, smart grids or feed-in tariffs (FiTs).

With regard to its infrastructure initiatives, the G20 should promote leapfrogging to renewable technologies, rather than scaling up “brown” technology or approaching green technology as a “niche” business. This entails revisiting the so-called “exemplary” infrastructure projects identified by the G20’s High-Level Panel on Infrastructure (see Attachment 1) and the criteria used to select them (see page 8). The *Report of the HLP on Infrastructure* states that the criteria “imply” sustainability, but what does this mean? Only two of the eleven projects recommended to the Leaders meet basic criteria in this area – the biomass and solar energy projects, although the latter may not contribute to “access for all” since the electricity will be transmitted to Europe.

As far as domestic policies are concerned, many countries require an improved policy framework to ensure faster penetration and deployment of renewable energy technologies. In the case of India, there are fairly ambitious solar generation targets of 20,000 MW by 2022 and also a fairly ambitious Renewable Energy target of 15 % generation from RE sources by 2020. However, India is unlikely to achieve these targets because its key energy sector policy calls for only 6% RE by 2031. Therefore, a number of states, are not taking the solar mission or the RE targets seriously.

However, these problems can be addressed through strong domestic campaigns, including the education of policy makers that renewable energy targets are not only achievable, but imperative to address energy security and access to energy goals.

**Support for universal access to energy.** Achieving universal energy access requires a basket of solutions, including “decentralised renewable energy solutions” -- either in the form of a mini/micro grid or grids with connectivity to remote locations. Further, the decentralized renewable energy options need to take a “technology neutral” approach to encourage the use of the most appropriate and cost-effective technologies.

For instance, in many areas, bio-mass could be the most suitable option, while in other areas, it could be micro- or mini- hydro systems, wind, solar, or hybrid options.

Unfortunately, to date, there are few examples of mini/micro grids in most countries. There are a number of stand-alone systems, but, these have not proven to be sustainable in the long run, largely due to factors such as: lack of proper maintenance, the cost of battery replacements, and lack of adequate training to communities to use the systems.

Further, the stand alone systems seem to be largely supporting only “lighting requirements” and not catering to “energy needs of people,” which a mini/micro grid could potentially do.

The current approach, whether it is by the G8, G20, or the BRICS pushes for large infrastructure and favours the current conventional energy grid systems. These have not proved effective in addressing the need for energy access in rural areas.

Again, taking the example of India, in the last 5 years, close to 40,000 MW of coal fired power plants were installed, but, in terms of household electrification, there has been only a very marginal improvement. Even today, 44% of India’s households do not have access to modern electricity and 80% of households use traditional bio-mass for meeting their cooking and heating requirement. This situation holds for a number of other developing countries as well.

## 5. Sovereign Debt, Fiscal Priorities and Infrastructure Financing

*Recommendation: The G20’s approach to infrastructure should recognize the different circumstances of investors and borrowers. In some circumstances, large infrastructure projects are driven by governments (and state-owned enterprises (SOEs)) of emerging market countries with abundant capital, while at other times, they are driven by cash-strapped, highly indebted governments. In the latter case, governments (especially those undergoing budget austerity) should not jeopardize their domestic social responsibilities by excessive levels of infrastructure investment; or from taking on excessive fiscal risks (including contingent liabilities) which, if they materialize, could trigger debt distress.*



**Infrastructure in an Age of Austerity.** The March 2013 paper by Isabel Ortiz and Matthew Cummins, "[The Age of Austerity](#)" reviews public expenditures and adjustment measures in 181 countries. Among other things, this working paper describes the widespread fiscal contractions underway, especially in the developing world where 68 developing countries are projected to cut public spending by 3.7% of GDP, on average, in the third phase of the crisis (2013-15).

Against this background, Amar Bhattacharya, Mattia Romani, and Nicholas Stern are projecting the need to more than double infrastructure financing by 2020.<sup>38</sup> Their paper estimates that "investment spending in infrastructure (excluding operation and maintenance) in developing countries will need to increase from approximately \$0.8-0.9 trillion per year currently, to approximately \$1.8-2.3 trillion per year by 2020, or from around 3% of GDP to 6-8% of GDP. This includes about \$200-300 billion to ensure the infrastructure entails lower emissions and is more resilient to climate change."

If many developing countries are cutting budgets by 3.7%, as projected by Ortiz and Cummins, and increasing infrastructure spending by 3% to 5% of GDP, as suggested by Bhattacharya et al., it means that (all other things being equal, including growth rates), in many countries, spending on sectors other than infrastructure (health, education, agriculture, social protection) could undergo an unusually sharp contraction. (The envisioned infrastructure is largely cross-border economic and trade facilitation infrastructure, which is intended to boost growth and living standards, but probably not in the near- to medium-term because these mega-projects take many years to implement.)

*It is ironic that – while the UN system is conducting intense discussions on the post-2015 MDGs – the G20 and the IMF are promoting austerity and infrastructure programs that could jeopardize their achievement of these goals.*

Pressure for a rapid expansion of infrastructure spending is endangering the integrity of the Debt Sustainability Framework (DSF), which was established in 2005 as a safeguard against excess borrowing by low-income countries (LICs).<sup>39</sup> Specifically, it is used to identify country-specific debt thresholds and, on that basis, determine whether or to what extent a country has room to undertake more debt in order to finance its development needs. Simplifying, it assumes that, over

and above the debt levels that can be undertaken "safely," countries will need to finance their needs through grants.<sup>40</sup>

Concretely, a "traffic light" system has been established. Countries at a low risk of debt distress receive a "green light" (so are able to finance their requirements through loans). Those at a medium risk of debt distress receive a "yellow light" (can be financed through a 50-50 mix of grants and loans). Those at a high risk of debt distress can only be financed through grants.

Debt, in this framework, is supposed to be brought under the country's allowed threshold through the persistence, over time, of a particular level of grants and loans to fulfill financing requirements.

The 2009 and 2012 revisions of the DSF methodology raised the debt ceiling of LICs. In 2009, the revision sought to address the concern that the DSF was unduly constraining the ability of countries to borrow by providing "greater recognition of the impact of public investment on growth."<sup>41</sup> The idea was that public investment has costs in the short run but benefits in the long run that, if not accounted for, would tend to give the DSF an anti-investment bias. The 2011 Report of the G20 High Level Panel on Infrastructure welcomed the 2009 reforms, but also identified the need for additional reforms to, for instance, address ways that the DSF conservatively evaluates the benefits of debt-financed public investment. This issue was addressed by the 2012 revision of the DSF. In March 2013, the IMF is reviewing its policies on debt limits with an eye to providing greater flexibility for borrowing.<sup>42</sup>

Some relaxations of the DSF make sense. (For instance, it is true that the discount rate has become considerably more onerous in the current low-interest-rate environment.) However, the compounded impact of these reforms is to affect a gradual and continuing trend toward higher borrowing limits. *This trend enables developing countries to undertake greater debt-financed investment on infrastructure. This fits perfectly the needs of excess liquidity facing a depressed economic*

40 The definition of debt thresholds is dependent on three factors: the quality of policy of the indebted country; assessment of actual and projected debt burden indicators based both on baseline and stress test scenarios; and a comparison of the country's debt burden against these indicators, leading to an overall assessment of the country's risk of 'debt distress'. It is on this final conclusion that subsequent financing decisions are meant to be based.

41 IMF 2009.

42 First, instead of evaluating concessionality requirements on a project-by-project basis, the Fund will evaluate the average concessionality in borrowing. This will enable countries to undertake different mixes of borrowing, resorting, for instance, to a mix that may include more "less concessional" or less "more concessional" loans. Second, it will review the discount rate applied to estimate the present value of debt. The staff proposed a longer term average of the discount rates used as benchmark and keep it at that fixed level for a longer period. The practical effect of this reform will be enabling more lending.

38 "Infrastructure for development: meeting the challenge" by Amar Bhattacharya, Mattia Romani, and Nicholas Stern: <http://www.cccep.ac.uk/Publications/Policy/docs/PP-infrastructure-for-development-meeting-the-challenge.pdf>

39 Among LICs, the DSF applies to those that have either never entered, or already graduated, from the HIPC Initiative. Countries in between would have both types of assessments carried out.

environment in Western countries. These capital investors see infrastructure in developing countries as a frontier investment that can enable the pursuit of greater returns. The same dynamic in the 1970s and 1980s gave rise to a significant debt crisis.

So it is fair to ask the question of who will benefit and who will pay for these increased borrowing for infrastructure investment. On the one hand, it is unfair to deny developing countries the chance to ride this trend toward financing much-needed investment in infrastructure. It is true that a weakness of the DSF was its blindness to the purposes of contracted debt. Indeed, debt can be contracted for productive or non-productive purposes, and the destination given to such funding will have great impact on whether it improves or just saddles repayment capacity. Looking at volumes of debt or even at their terms, does not tell us much without this perspective.

At the same time, the lessons of history should not be ignored. The 2009 paper laid out many of the issues that can make the difference between successful and unsuccessful debt-financed investments. In that paper, the Fund stated that the verdict of the literature varies considerably with regard to the impacts of debt-financed investment on growth.<sup>43</sup> For instance, the institutional context in which investment choices are made should be taken into account, including the strength of fiscal institutions; the quality of project evaluation, selection and management; and the regulatory and operational framework.

In addition it cautioned that “High ex-ante rates of return on investment are not sufficient indicators of the appropriateness of scaling up public investment and its growth benefits. Even public investment that has significant positive effects on growth may not be sustainable if governments are unable to realize the fiscal dividends of growth (e.g., because of a weak tax system or poor tax administration).”<sup>44</sup>

Another factor to take into account relates to the level of domestic debt. Expansion of domestic debt was also encouraged by the G20 High Level Panel on Infrastructure. While local currency debt may carry less risk for the borrower (it lacks maturity mismatch risk), the overall level of riskiness will depend on several factors. Usually, for instance, the interest rate on local currency-denominated debt will have to be significantly higher than on debt denominated in a hard currency. And the IMF confesses its tracking of domestic debt continues to be underdeveloped. A recent assessment revealed that the IMF programs for almost all low-income countries included limits on non-concessional external debt, but “no program had a debt ceiling on total public debt

(external plus domestic public debt).”

## 6. Institutional capacity

*Recommendation: The G20's approach to infrastructure should encourage governments to put a high priority on building the necessary institutional capacity to: negotiate equitable financial arrangements; provide regulation, especially in the sectors where natural monopolies exist; deliver public goods; and prevent corruption. Emerging market countries with strong capacity and experience should assist others on the learning curve.*

Without the capacity for regulation (particularly in the case of natural monopolies, such as water systems) corruption is inevitable. Governments, lending institutions, and civil society organizations should ask:

- How can value-for-money (VFM) analysis accurately compare PPPs with traditional infrastructure modalities?
- Where PPPs are indicated, how can one assess a government's capacity to negotiate a contract that balances protections for citizens, affected communities and investors?
- How can one assess a government's capacity to regulate in ways accountable to its citizenry?
- In the case of PPPs, how can a government assure that the financier/builder can efficiently transfer managerial/operational capacity to the relevant local authority/agency where that is called for?
- When governments lack the necessary capacity, what are the options for infrastructure development?

If there was ever a double-edged sword in the debate over reforming services, it's corruption. Private provision proponents argue that front-line government service providers routinely engage in petty bribery and theft of supplies, and portray high ranking officials as perpetrators of massive graft. They have no shortage of evidence. Skeptics, in turn, can choose from a large and growing menu of non-transparent and criminal practices among firms that deliver essential services. Nobel prize-winner Joseph Stiglitz once memorably referred to privatization as “briberization.” But rather than engage in stale debates about which is worse, policy-makers should assess existing or potential accountability mechanisms as they consider which kind of provider is more likely to serve public welfare.

Neither public officials nor private businesses are inherently honest. If not made accountable to service users, both try to get richer or more powerful at the expense of consumers. Information disclosure and external monitoring are therefore essential for both kinds of arrangements. Corrupt governments clean up their act only when they have to answer to citizens. Where policy-makers depend on privileged elites for political sur-

<sup>43</sup> IMF 2009.

<sup>44</sup> Ibid.

vival, or where citizens lack the information they need to evaluate the behavior of those entrusted to serve the public, accountability is hard to deliver. By contrast, private firms refrain from corruption when they have to answer to government – meaning an effective public regulator.

If one accepts the premise that ungoverned profit-maximizing companies are no more philanthropic than their public sector counterparts, then state institutions become the weakest link in fighting corruption regardless of who the provider is. What tends to be lost in the debate over service reform is that regulatory integrity is the key to both effective public and private provision. Critics of privatization often point to a paradox: the same government officials that were too corrupt to deliver services to citizens are expected to be immune to the lucrative inducements of private firms. Public sector managers unable to control the behavior of front-line government agencies must somehow enforce compliance with standards of corporate responsibility.

While public service employees may steal from consumers, supply warehouses and budgets, private providers also have numerous opportunities for corruption and regulatory capture. These include the bidding process for public contracts, the establishment of contractual terms, enforcement of contract compliance (including tariff changes), and anti-competitive collusion. Corporate corruption is not an isolated phenomenon. There are countless examples of corruption in privatizations undertaken developing countries.<sup>45</sup> Moreover, the more money is at stake, the greater the potential for corrupt behavior. For example, according to the World Bank itself, “transnational firms headquartered abroad are more likely than other firms to pay public procurement kickbacks.”<sup>46</sup>

## 7. Recommendations

The G20 is facilitating a “new consensus” on infrastructure by calling for the mobilization of higher levels of financial support for large, cross-border infrastructure, particularly through public-private partnership (PPPs) modalities, in order to promote regional integration. As this consensus takes shape, it is crucial that infrastructure development efforts achieve a “triple bottom line” – namely positive economic, social, and environmental co-benefits. The following approaches will help ensure such positive outcomes.

45 For review of cases and issues, see: Sue Hawley, “Exporting Corruption: Privatisation, Multinationals and Bribery.” The CornerHouse, Briefing No. 19, 2000; David Hall, “Privatisation, multinationals, and corruption,” *Development in Practice*, vol. 9, no. 5, November 1999.

46 J. Hellman, G. Jones, D. Kaufmann, “Are Foreign Investors Engaging in Corrupt Practices in Transition Economies?” *Transition Newsletter* (May-June 2000).

- **Value for Money:** The G20 and the investment community must relinquish its bias in favour of PPPs and, instead, apply a “value for money” (VFM) approach to infrastructure financing to discover which financing option delivers the greatest benefits.

- **Standards.** The G20 and the investment community should reinforce high standards for stakeholder participation at all stages of project development. Identification and preparation of infrastructure projects should occur through “bottom-up” demand in the context of locally- and nationally-owned strategies.

The lessons of experience also stress the importance of standards, or safeguards, for public and private finance, as well as for foreign direct investment (FDI), which can help ensure that infrastructure projects contribute to inclusive and sustainable development. Such standards – relating to information disclosure, transparency, social and environmental principles – should not represent peripheral “frills,” but rather fundamental components of project identification, design and implementation.

Currently, the G20 should resist pressure to diminish standards and compliance with standards and, instead, lead a process of “upward harmonization”.

- **Scale, Sustainability, and Carbon Footprint:** The approach to infrastructure development should require that new waves of energy infrastructure development rely on renewable energy so that the global community complies with its commitment to arrest global warming.
- **Sovereign Debt, Fiscal Priorities and Infrastructure Financing:** The G20’s approach to infrastructure development needs to recognize the different circumstances of investors and borrowers. In some circumstances, large infrastructure projects are driven by governments (and state-owned enterprises (SOEs)) of emerging market countries with abundant capital, while at other times, they are driven by cash-strapped, highly indebted governments. Estimates show that, in the 2013-2015 period, 68 developing countries are projected to cut public spending by 3.7% of GDP, on average.<sup>47</sup> Massive, lumpy capital expenditures for infrastructure (or taking on significant contingent liabilities) would be difficult or impossible for countries in such dire straits.
- **Institutional capacity.** The G20’s approach to infrastructure should encourage governments to put a high priority on building the necessary institutional capacity to: negotiate equitable financial arrangements; provide regulation, especially in the sectors where natural monopolies exist; deliver public goods; and prevent corruption. Emerging market countries with

47 Isabel Ortiz and Matthew Cummins, “[The Age of Austerity](#),” 2013.

strong capacity and experience should assist others on the learning curve.

When it achieves a “triple bottom line,” investment in sustainable infrastructure development can boost commerce while creating jobs and protecting the environment and the rights of local communities.



## Attachment 1

### Eleven Infrastructure Operations Submitted to G20 Summit Leaders for Approval By Continent

#### AFRICA

- West Africa Power Pool (WAPP): a 1400 kilometer transmission line inter-connecting four countries: Cote d'Ivoire, Liberia, Sierra Leone, and Guinea.
- East Africa Power Pool (EAPP) connecting the power systems of Ethiopia and Kenya;
- Inga Hydropower and Transmission in the Democratic Republic of Congo (DRC). The dam could double the capacity of the world's largest hydropower project (Three Gorges Dam) and facilitate the integration the regional power pools in Africa. Construction of associated transmission lines would allow power to reach 16 countries in the Central and Southern Africa Power Pools;
- North-South Corridor runs 4000 kilometers in East and Southern Africa (from Zambia and southeastern DRC to Durban, South Africa with other eastward spurs to Dar Es Salaam, Tanzania and Nacala in northern Mozambique). Through construction of trade-facilitation infrastructure (roads, rail, ports), the Corridor would integrate the three Regional Economic Communities including 26 countries which are negotiating the terms for a new Tripartite Free Trade Area.
- Railways between Isaka, Tanzania and Kigali, Rwanda would extend an existing Tanzanian railway line in order to reach Kigali and, potentially, Musongati, Burundi, as well.

#### MIDDLE EAST/NORTH AFRICA

- Jordan Railway project, including freight links with Syria, Saudi Arabia and Iraq;
- Scaling up Solar Energy in the Middle-East/North Africa (MENA) for Export to European Markets (Desertec). One concentrated solar power (CSP) plant in under construction in Morocco; others are envisioned in Algeria, Egypt, Jordan, Morocco, and Tunisia.

#### ASIA

- Turkmenistan-Afghanistan-Pakistan and India (TAPI) Natural Gas Pipeline will connect the natural gas supplies in Turkmenistan with the energy markets in Afghanistan, Pakistan, and India.
- ASEAN Infrastructure Fund. To construct infrastructure throughout the Association of Southeast Asian Nations, the ASEAN countries and the Asian Development Bank will establish an Asian Infrastructure Fund (AIF) to lend up to \$4 billion through 2020 for long-tenor, sovereign/sovereign-guaranteed infrastructure projects.
- Scaling-Up Clean Biomass Energy in the Greater Mekong Subregion (GMS). This project will use biomass technologies (biogas and biochar) within the GMS countries and establish an Asian Rural Biogas Fund for private sector participation.

#### LATIN AMERICA

- Pacific Corridor, a 3244 kilometer road network between Mexico and Panama.

## Attachment 2

### Need for Value-For-Money Comparators

- PPP proposals are normally compared with some 'public sector comparator' before being authorised, but these comparisons have been the subject of much criticism by academics, auditors and parliamentary committees. UK parliamentary reports have found that these comparisons have been badly done, not exposed to proper challenges and debate, and been systematically biased in favour of PPPs: "The use of PFI [private financial investment] has been based on inadequate comparisons with conventional procurement which have not been sufficiently challenged;"<sup>1</sup> and "we are concerned that the VfM appraisal system is biased to favour PFI. Assuming that there will always be significant cost over-runs within the non-PFI option is one example of this bias. ....The Treasury should seek to ensure that all assumptions in the VfM assessment that favour PFI are based on objective and high quality evidence."<sup>2</sup> Public auditors in the Netherlands and elsewhere have also questioned whether such comparators are adequate.
- Most assessments are flawed because they do not carry out a cost-benefit analysis comparing the proposed PPP, an alternative using normal procurement, and the third option of doing nothing. This requires including the external impacts, for example on employees. But: "as yet, no government has performed normatively appropriate analyses of PPPs... evaluation of PPPs should be performed by arms-length analysts, either inside or outside government"<sup>3</sup>
- In practice, normal public sector procurement is not an option because it would show an increase in government debt, whereas PPPs conceal this. So a PPP becomes the only option. In the UK: "For too long PFI has been the 'only game in town' in some sectors which have not been provided with adequate capital budgets for their investment needs. This problem is likely to get worse in the future with capital budgets cut significantly at the Spending Review. If PFI is the only option for necessary capital expenditure then it will be used even if it is not value for money."<sup>4</sup> In Ireland, the government preference for PPPs: "led local authorities to reject its own VFM assessments or preliminary reports where they were found to favour traditional procurement methods."<sup>5</sup>

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1 UK Public Accounts Committee 44th Report - Lessons from PFI and other projects HC 1201 01 September 2011 <http://www.publications.parliament.uk/pa/cm201012/cmselect/cmpubacc/1201/120102.htm>

2 UK Treasury Select Committee 17th Report - Private Finance Initiative HC 1146 August 2011 <http://www.publications.parliament.uk/pa/cm201012/cmselect/cmtreasy/1146/114602.htm>

3 Boardman A. and Vining A. 2010 Assessing the economic worth of public-private partnerships; in International Handbook on Public-Private Partnerships edited by Graeme A. Hodge, Carsten Greve, Anthony E. Boardman p.238 <http://www.oecd.org/dataoecd/53/59/47814836.pdf>

4 UK Treasury Select Committee 17th Report - Private Finance Initiative HC 1146 August 2011 <http://www.publications.parliament.uk/pa/cm201012/cmselect/cmtreasy/1146/114602.htm>.

5 Reeves E. 2011 The Only Game in Town: Public Private Partnerships in the Irish Water Services Sector The Economic and Social Review, Vol. 42, No. 1, Spring, 2011, pp. 95–111

## Attachment 3

### The Bujagali Dam: A Case of Poor Planning

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As a mature, reliable technology that can supply electricity at competitive costs, hydropower is one feasible solution for developing countries to provide access to electricity for their citizens. The global potential for hydropower generation is estimated at 14,500TWh, more than four-times current production, and most of the potential is in Africa and Asia, where 92% and 80% of reserves respectively are untapped.

A hydropower dam can act as a catalyst for economic and social development by providing energy and water at the same time. Large hydropower projects can help meet multiple needs, such as the alleviation of energy shortage, support for agricultural irrigation and enhancement of tourism potentials.

However, if not designed carefully, they may have adverse environmental impacts on the ecology of the dam-affected area, such as wildlife and habitat loss, rare species protection, and soil erosion. Moreover, global warming and its impact on water tables, river flows and ecology affect a dam's potential. Finally, as dam building will submerge agricultural lands and lands intended for human settlement in water, the social impacts of involuntary population resettlement could be negative as well.

Statistics show that small-scale dams can cause greater damage than large-scale dams, because they are subject to higher levels of inefficiency and evaporation. As a result, developing countries are more inclined to construct big ones. In countries such as South Africa and India, governments actually ban the construction of large numbers of small dams in some areas. Nevertheless, just as every coin has two sides, questions arise as to whether large-scale dam projects can bring about even worse social and environmental impacts, if they are badly designed or financed.

A recent problem case is the Bujagali hydropower project of Uganda, which is a 250- megawatt dam, located near Bujagali Falls on the Nile River, just downstream from two other large dams, namely Kiira and Nalubaale. Construction of the project was completed in July 2012 and operations commenced following its official inauguration in October 2012.

As Uganda faces the rapid growth of demand for electricity, power shortages become the single largest impediment to economic growth. Construction was initially scheduled to begin in January 2003, but was delayed due to protests by environmentalists and local residents. Despite the problems and uncertainties, construction was finally launched in June 2007, with investments from 12 different sources including the World Bank, the European Investment Bank and the African Development Bank. The project was established through a public-private partnership between the Ugandan government and U.S. Blackstone affiliates.

Civil society is concerned about the dam's impact on the health of Lake Victoria, which supports millions of peoples' lives and extensive biodiversity. The lake has suffered a dramatic drop in its water level partially because of the two smaller dams upstream from Bujagali. If the Bujagali dam operates at its potential, it could further reduce water levels in Africa's largest lake. As a result, energy shortages will cause economic disruption since nearly all of Uganda's electricity comes from dams. **The Bujagali project could be a costly mistake if river flows prove insufficient to support its turbines – a situation that could result from climate change.**

It should be noted that **the contractor's cost for Bujagali increased from an initial US\$460 million to US\$860 million, plus another US\$74.7 million for transmission lines. A megawatt at Bujagali costs US\$3.6 million – three times the US\$1.2 million cost of a megawatt at the Three Gorges dam in China.** In the same period, the cost of building a dam in Sudan and Ethiopia was US\$1.3 million and US\$1.1 million per megawatt, respectively. Corruption and mismanagement might be the reason for excessive construction costs at Bujagali. In addition, since Bujagali is a public private partnership project, the pressure to repay the loan is very high, resulting in a soaring electricity price.

Presently, the Bujagali electricity tariff for the end user is 24 US cents/ kwh, over 5 times the cost of the electricity being consumed from the Kiira and Nalubaale dams. Given that the per capita GDP of Uganda was only US\$589 in 2012, according to the IMF this tariff rate means that utility bills can exceed 10% of a family's income. Therefore, Ugandan electricity users have to worry, since decent living cannot be guaranteed without enough remaining income for needs such as housing, clothing, school fees, and transport. Although Uganda needs

more energy, it does not need another economically disastrous dam.

So far, the priority of the G20 under Russia's presidency is to improve the investment environment, which is quite justifiable given the current global economic landscape. However, sustainable large-scale infrastructure development requires regulatory mechanisms to mitigate the risks that arise from social and environmental impacts. In addition, technical assistance from civil society organizations (CSOs) will be essential, since they can utilize their unique flexibility, special expertise, and often their proximity to the infrastructure to promote dialogue, engagement, and support among multi-stakeholders.

Finally, **the case of the Bujagali dam exemplifies the importance of taking social and environmental factors into account when determining the economic feasibility of a project.** If the environmental and social considerations are not addressed properly, it cannot be assumed that infrastructure investment will lead to sustainable economic growth.



## Attachment 4

### The Imperative for Regulation

#### A. Main reasons for regulation

Economic (market failure)	Non-Economic (social/political)
<ul style="list-style-type: none"> <li>• <u>Lack of competition</u>: monopoly, oligopoly, price-setting</li> <li>• <u>Asymmetrical information</u>: Provider withholds or distorts information (about costs, performance) needed by consumers and/or government.</li> <li>• <u>Negative externalities</u>: Provider's activities involve costs borne by broader society, not just individual consumer or producer (e.g., pollution)</li> <li>• <u>Positive externalities</u>: Left to its own devices, private market will not supply (enough of) service to create public goods, whose benefits are enjoyed beyond individual consumer (e.g., public health).</li> </ul>	<ul style="list-style-type: none"> <li>• <u>Re-distribution</u>: Poverty reduction, promoting equity. Society decides that unregulated market does not create outcome of social justice. (e.g., setting tariff and subsidies)</li> <li>• <u>Paternalism</u>: Individuals lack enough information about a particular kind of service to be good judges of their own interest (e.g., medical procedures)</li> <li>• <u>Consumer advocacy</u>. Individual consumers need neutral institution to hear and arbitrate disputes with private provider.</li> <li>• <u>Protection of property</u>. Private firm needs autonomous institution to arbitrate disputes with the government or consumers (e.g., non-payment, violation of contract terms)</li> </ul>

#### B. Requirements for Effective Regulation

- Autonomy. Regulator's decisions cannot be easily overturned by executive. Regulators' job is protected from arbitrary termination (e.g., fixed term).
- Capacity. Regulatory agency has sufficient expertise, equipment, and personnel (front-line workers) to monitor service effectively.
- Authority. Responsibilities and jurisdiction of regulator are clearly defined, do not overlap ambiguously with other parts of government.
- Resources. Regulator must have and routinely be able to count on sufficient budget to carry out activities. (E.g., budget derived from service fees, not subject to annual legislative allocation)
- Stakeholder input. Regulator should regularly receive information and feedback from providers and consumers. (E.g., institutional space for information exchange).
- Transparency. Timely public disclosure of regulatory findings and decisions

#### C. Strategic considerations

- Benchmarking. Is it feasible for CSOs to develop techniques for measuring regulatory quality, or propose standards? If so, which dimensions should be priorities?
- Original research. What are the methodological and field work challenges to gathering empirical information about regulatory capacity? How can these challenges be met?
- Alternatives. Can regulatory findings be used to propose specific and viable policy options other than private provision? Findings can be used not only to discount private participation, but to suggest how private sector can be most usefully involved in service provision.
- Opportunities. What are the most promising venues for undertaking regulatory research and trying to affect the decision-making process (e.g., WB water dialogue, municipal-CSO partnership).
- Communications strategy. How can information and conclusions be disseminated for maximum impact. Can regulatory knowledge empower existing allies, create new constituencies, weaken (or shame) opponents?