Designing public sector interventions to mobilise private participation in low carbon development: 20 questions toolkit

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<th>Description</th>
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</thead>
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<tr>
<td>4 Ls</td>
<td>Long, Loud, Legal and Light</td>
</tr>
<tr>
<td>ADB</td>
<td>Asian Development Bank</td>
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<tr>
<td>AECF</td>
<td>Africa Enterprise Challenge Fund</td>
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<tr>
<td>AGF</td>
<td>UN Secretary-General's Advisory Group on Climate Change Financing</td>
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<tr>
<td>AMC</td>
<td>Advanced Market Commitment</td>
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<tr>
<td>BNEF</td>
<td>Bloomberg New Energy Finance</td>
</tr>
<tr>
<td>CDM</td>
<td>Clean Development Mechanism</td>
</tr>
<tr>
<td>CIF</td>
<td>Climate Investment Fund</td>
</tr>
<tr>
<td>CP3</td>
<td>Climate Public Private Partnership</td>
</tr>
<tr>
<td>CTF</td>
<td>Clean Technology Fund</td>
</tr>
<tr>
<td>DBCCA</td>
<td>Deutsche Bank Climate Change Advisors</td>
</tr>
<tr>
<td>DFI</td>
<td>Development Finance Institution</td>
</tr>
<tr>
<td>DFID</td>
<td>Department for International Development</td>
</tr>
<tr>
<td>EPC</td>
<td>Engineering, Procurement and Construction</td>
</tr>
<tr>
<td>EC</td>
<td>European Commission</td>
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<tr>
<td>ERBD</td>
<td>European Bank for Reconstruction and Development</td>
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<tr>
<td>FDI</td>
<td>Foreign Direct Investment</td>
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<tr>
<td>GDP</td>
<td>Gross Domestic Product</td>
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<tr>
<td>GEF</td>
<td>Global Environment Facility</td>
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<tr>
<td>GET FIT</td>
<td>Global Energy Transfer Feed-in Tariffs Programme</td>
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<tr>
<td>GHG</td>
<td>Greenhouse Gas</td>
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<tr>
<td>IADB</td>
<td>Inter-American Development Bank</td>
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<tr>
<td>IFC</td>
<td>International Finance Corporation</td>
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<tr>
<td>IFI</td>
<td>International Financial Institution</td>
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<tr>
<td>IISD</td>
<td>International Institute for Sustainable Development</td>
</tr>
<tr>
<td>JBIC</td>
<td>Japan Bank for International Cooperation</td>
</tr>
<tr>
<td>KfW</td>
<td>German Development Bank</td>
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<tr>
<td>LCD</td>
<td>Low Carbon Development</td>
</tr>
<tr>
<td>LEDS</td>
<td>Low Emission Development Strategy</td>
</tr>
<tr>
<td>MDB</td>
<td>Multilateral Development Bank</td>
</tr>
<tr>
<td>MDB-ECG</td>
<td>Multilateral Development Banks Evaluation Cooperation Group</td>
</tr>
<tr>
<td>NAMA</td>
<td>Nationally Appropriate Mitigation Action</td>
</tr>
<tr>
<td>NAPA</td>
<td>National Adaptation Programme of Action</td>
</tr>
<tr>
<td>NBS</td>
<td>Network for Business Sustainability</td>
</tr>
<tr>
<td>NEXI</td>
<td>Nippon Export and Investment Insurance</td>
</tr>
<tr>
<td>NGO</td>
<td>Non-governmental Organisation</td>
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<tr>
<td>ODA</td>
<td>Official Development Assistance</td>
</tr>
<tr>
<td>OECD</td>
<td>Organisation for Economic Co-operation and Development</td>
</tr>
<tr>
<td>OPIC</td>
<td>Overseas Private Investment Corporation</td>
</tr>
<tr>
<td>PPP</td>
<td>Public–Private Partnership</td>
</tr>
<tr>
<td>R&amp;D</td>
<td>Research and Development</td>
</tr>
<tr>
<td>RD&amp;D</td>
<td>Research, Development and Demonstration</td>
</tr>
<tr>
<td>RDB</td>
<td>Regional Development Bank</td>
</tr>
<tr>
<td>REACT</td>
<td>Renewable Energy and Adaptation to Climate Technologies</td>
</tr>
<tr>
<td>SMEs</td>
<td>Small and Medium Enterprises</td>
</tr>
<tr>
<td>TLC</td>
<td>Transparency, Longevity and Certainty</td>
</tr>
<tr>
<td>UNEP</td>
<td>United Nations Environment Programme</td>
</tr>
<tr>
<td>UNFCCC</td>
<td>UN Framework Convention on Climate Change</td>
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<td>WEF</td>
<td>World Economic Forum</td>
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</table>
Executive summary

There has been an increased focus on the importance of the private sector in low carbon development (LCD) and the need for public sector interventions to mobilise the private sector to become involved in this respect. This Working Paper lays out a ‘20 Questions Toolkit’ for those in the public sector who are involved in designing interventions at the project and programme level, to assist them in effectively engaging the private sector.

The 20 Questions Toolkit is laid out in stages (A through E) so it can be applied in sequence during the design phase of a given intervention (see figure below). Where good practice exists for addressing a given question, specific examples and resources are provided.

The Working Paper is a first step in a planned work stream to develop the framework further, through its application to existing interventions, for possible benchmarking purposes, and to assist in the design of new projects and programmes going forward.
1 Introduction

There is growing agreement on the need for public and private sector collaboration on low carbon development (LCD). This paper begins by outlining the goals of LCD, the role of the private sector within this and why public sector interventions are required to mobilise the private sector. It then lays out a ‘20 Questions Toolkit’ for those involved in designing public sector interventions at the project and programme level who are looking to engage the private sector. This would include representatives of the international financial institutions (IFIs), donors and national governments in developing countries. The Toolkit builds on a literature review of public–private initiatives to stimulate LCD to provide a framework to strengthen understandings of good practices that can inform future interventions.

Why low carbon development?

There are various reasons why countries are increasingly seeking to pursue sustainable LCD paths that decouple emissions from economic growth, apart from to tackle climate change. These include efforts to improve energy security and access to energy; to reduce local pollution; to access resources through carbon markets and donor climate funds; to promote new technologies; and to improve resilience to climate impacts. In many cases, developed country governments are supporting these LCD approaches within developing countries under the United Nations Framework Convention on Climate Change (UNFCCC). They are doing this through multilateral and bilateral channels of ‘fast start’ climate finance, tools such as the Clean Development Mechanism (CDM) and the establishment of low emission development strategies (LEDS), nationally appropriate mitigation actions (NAMAs) and national adaptation programmes of action (NAPAs).

The following sectors play a central role in LCD strategies (Patel, 2010):

- Energy (new clean sources and increased efficiency of generation, transmission and use);
- Transport (both freight and passenger);
- Built environment (improving the energy efficiency of buildings);
- Waste management (including use of waste for energy);
- Infrastructure (promoting low carbon lifestyles and patterns of urbanisation, and resilience); and
- Agricultural land use and forestry (carbon sequestration).

It is within these sectors that LCD will be fostered most actively and where progress towards LCD will be tracked most closely.

3 Why private sector participation?

The private sector is made up of local and foreign-owned enterprises operating at different scales, from large corporations, to small and medium enterprises (SMEs), to microenterprises operating in the informal sector. Private actors in developing countries currently play a role in all of the sectors identified above as critical to LCD, sometimes taking a leading position and sometimes partnering with the public sector.

The private sector is often seen as having significant resources and capacity for investment, and may also have high levels of efficiency, managerial capability and operational power which can be harnessed to achieve LCD goals. Given the scale of change required for countries to move onto LCD paths, successfully catalysing and harnessing this potential will be crucial.
Public sector resources are very small by comparison, but can nevertheless play an important role in catalysing increased private sector engagement and activity. It is currently estimated that limiting global warming to 2°C will require energy investment flows of up to $570 billion per year to non-Organisation for Economic Co-operation and Development (OECD) countries by 2030 (Stadelmann, 2011). This is a significant level of additional capital mobilisation, as this figure is roughly equal to total foreign direct investment (FDI) currently flowing to developing countries across all sectors (ibid.). As public sources are playing a growing role in fostering LCD, it will be necessary to find the correct mix of public and private finance to allow for a significant overall increase in capital deployment (EC, 2011).

4 Why public interventions to mobilise the private sector?

Private sector involvement is critical to LCD, but these actors are often unable to achieve the returns necessary to attract them to enter new high-risk low carbon sectors or the higher-risk investment climates present in developing countries. The UN Secretary-General’s High-Level Advisory Group on Climate Change Financing (AGF) and the G-20 Finance Ministers, among others, have carried out extensive work on the barriers to investment in LCD and on approaches the public sector can take to improve the attractiveness of investment for the private sector, through reducing risks and increasing rewards and returns (Glemarec, 2011) (see Table 1). It is also important to recognise that an enabling environment for LCD may not take hold if the broader investment climate is not conducive to private sector engagement.

One fundamental mechanism for stimulating private sector investment and innovation in a way that contributes to LCD is a robust regulatory framework. In countries with good governance or the appropriate risk mitigation tools, this can be achieved through a strategy for achieving LCD which sets out the policy levers (rules and incentives) that will be used and a timetable for progress. The OECD is in the process of developing a Policy Framework for Low-Carbon, Climate-Resilient Investment, and developing countries are increasingly generating such strategies under the auspices of LEDS, NAMAs and NAPAs. If private markets consider such strategies credible, they will respond accordingly, for example by investing in greater energy efficiency or developing new technologies which may enable them to derive commercial advantage when the promised new policies and regulations are enacted.

Within the framework of a clear government strategy, the public sector can undertake a variety of well-documented interventions which engage directly with individual private sector players to mobilise increased investment and innovation for LCD (Table 1).

Table 1: Barriers to private sector participation in LCD and potential public sector interventions

<table>
<thead>
<tr>
<th>Barriers to private sector participation in LCD</th>
<th>Potential public sector interventions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Business conditions: unstable political climate, weak enforceability of contracts and agreements, absence of intellectual property rights and capital controls</td>
<td>Assistance in establishing a strong investment climate and regulatory framework</td>
</tr>
</tbody>
</table>
| Regulatory environment: lack of well-established and resourced regulator | • Building awareness and capacity of regulators  
• Provision of political risk insurance |
| Network effects: limited availability of the networks necessary for many technologies (e.g. grid capacity) | Clear decision making on future technologies and investment in associated infrastructure |
| • Uncertain demand from consumers  
• Information gaps and asymmetries | • Creation of new markets and boosting demand (through government procurement policies, energy off-take agreements, advanced market commitments (AMCs), feed-in tariffs, carbon trading schemes, price floors)  
• Building data and information bases; public support for information services, awareness |

1 Global government research, development and demonstration (RD&D) expenditure on renewable energy grew 121% from 2009 to 2010, whereas corporate RD&D fell 12% (UNEP and BNEF, 2011).
<table>
<thead>
<tr>
<th>Barriers to private sector participation in LCD</th>
<th>Potential public sector interventions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Technology risk: uncertain returns from specific technologies</td>
<td>Public support to research and development (R&amp;D), multi-stakeholder R&amp;D collaboration, demonstration projects, due diligence and feasibility studies, local information/technical expertise centres</td>
</tr>
<tr>
<td>Start-up costs, which are often higher for low-carbon technologies than conventional ones</td>
<td>Standards and regulation, carbon markets, subsidies and partly publicly funded partnerships with the private sector</td>
</tr>
<tr>
<td>Cost recovery: returns to investment not realised by the initial investor (agency problem)</td>
<td>Removal of any distortionary government policies such as fossil fuel subsidies and/or subsidising of production in order to make investment more attractive (directly through subsidies or concessional loans or indirectly through tax holidays for investors)</td>
</tr>
<tr>
<td>Externalities: social gains from an investment greater than private gains</td>
<td>Measures to promote financial sector development and better financial regulation, as well as direct interventions, for example direct investment (including subordinated debt and equity instruments) in private enterprises, insurance, guarantees, finance at concessional rates including start-up capital or patient capital, capacity building for financial intermediaries</td>
</tr>
<tr>
<td>Technology cost gap: technology costs higher than ‘high-carbon’ alternatives</td>
<td>Removal of any distortionary government policies such as fossil fuel subsidies and/or subsidising of production in order to make investment more attractive (directly through subsidies or concessional loans or indirectly through tax holidays for investors)</td>
</tr>
<tr>
<td>Price controls: subsidies and government interventions that deviate price from market</td>
<td>Training, SME development programmes in relevant sectors, concessional funding for turnkey construction contract providers</td>
</tr>
<tr>
<td>Capital restrictions: restrictions by investment type—corporate vs. household</td>
<td></td>
</tr>
<tr>
<td>Incomplete financial markets: lack of liquid and deep domestic equity and debt markets</td>
<td></td>
</tr>
<tr>
<td>Mispriced risk: lack of information and incorrect risk-adjusted return estimates</td>
<td></td>
</tr>
<tr>
<td>Lack of insurance: no protection against climate-related damage (e.g. natural disasters)</td>
<td></td>
</tr>
<tr>
<td>Implementation barriers: lack of capacity in the local workforce and of established engineering, procurement and construction (EPC) contractors</td>
<td></td>
</tr>
</tbody>
</table>

Sources: Brown et al. (2011b); DBCCA (2011a); de Nevers (2011); Liebreich (2011); Lyon et al. (2011); Patel (2010); and Sierra (2011).

Through this range of interventions, the public sector (from an international or domestic perspective) can substantially leverage private sector investment and establish powerful collaborations. Interventions need to be designed and implemented in a way that provides an appropriate balance between accountability and financial returns and between long-term goals and short-term efficiency. Such collaborations can potentially enable a deeper understanding between the public and private sectors, leading to greater sustainability of selected interventions and more effective achievement of LCD.

5 The 20 Questions Toolkit

This Toolkit presents 20 questions that need to be taken into account in designing the specific interventions detailed above.
Several approaches exist for evaluating public sector interventions that directly target the private sector in developing countries, both within and outside of the low carbon space. They are particularly well established within the private sector operations of the multilateral development banks (MDBs), and also include individual frameworks for evaluation established by development finance institutions (DFIs) (MDB-ECG, 2006). The 20 Questions Toolkit incorporates elements of these frameworks, alongside components of other approaches that existing research has highlighted as forming good practice in mobilising the private sector in developed as well as developing countries.

The questions within the Toolkit should be applied during the design of interventions that seek to target the private sector directly at the project or programme level to ensure:

- Achievement of specified goals and relevant co-benefits;
- Effectiveness and value for money for the public sector;
- Uptake by the private sector;
- Lesson learning for improved effectiveness going forward;
- Coordination between the public and private sector; and
- Coordination across different interventions.

Interventions at the project level include the provision of individual grants (for technical assistance, demonstration projects, etc.); loans, guarantees or insurance; and the purchase of carbon credits from CDM projects. Examples of interventions at the programme level include funds and facilities that are structured to provide support for either a range of projects or, in the case of ‘fund of funds’, a range of different underlying investment vehicles.

### Table 2: Examples of interventions at the project and programme level

<table>
<thead>
<tr>
<th>Project-level interventions</th>
<th>Programme-level interventions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Loans, guarantees or insurance provided by DFIs such as the United States Overseas Private Investment Corporation (OPIC), the Japan Bank for International Cooperation (JBIC), the German Development Bank (KfW), etc., to private companies in developing countries</td>
<td>Clean Technology Fund (CTF) (World Bank and regional development banks, RDBs), including underlying private sector interventions such as those of the International Finance Corporation (IFC)</td>
</tr>
<tr>
<td>Export credit insurance provided by the United States Export–Import (ExIm) Bank, Nippon Export and Investment Insurance (NEXI), etc., to private companies in developing countries</td>
<td>European Bank for Reconstruction and Development (EBRD) Sustainable Energy Finance Facility</td>
</tr>
<tr>
<td>Individual CDM projects</td>
<td>The CDM or joint implementation under the UNFCCC</td>
</tr>
</tbody>
</table>

The questions in this Toolkit are intentionally broad to allow for the tailoring of interventions to:

- The local context (upper-middle-income, lower-middle-income and low-income countries), in terms of current market conditions (maturity) and policy frameworks;
- The degree to which private sector participation is required (whether the aim is low, medium or high mobilisation); and
- The type of private sector actors targeted (large companies, SMEs, etc.).

Where good practice exists for addressing a given question, specific examples and resources are provided.

The questions in this Toolkit are outlined in five steps so they can be reviewed in sequence during the design phase of interventions (see Figure 1):

A. Baseline assessment
B. Goal setting
C. Structuring  
D. Monitoring, reporting and consultation  
E. Continuous improvement and exit

Figure 1: 20 Questions Toolkit

A. Baseline assessment

At the outset of the design process of any intervention, it is critical to understand the context within which it will be deployed. This can be achieved through the combination of a diagnostic process and stakeholder consultation.

1. **Diagnostic: has a detailed review of the context for the intervention been completed?**
   - Developing countries, low carbon markets and private sector actors are heterogeneous and therefore, particularly where it is foreign actors (donors or representatives of IFIs) who are designing an intervention, it should be based on a ‘local diagnostic’ to match the local policy environment and levels of market and technology maturity (AGF, 2010; Brown et al., 2011b).
   - This process should provide evidence of the baseline in terms of how the private sector ‘acts’ in a given country without assistance of the public sector (who are the actors and where are they active), and where gaps and barriers exist. Several tools to this end exist already. For example, within its proposed Global Energy Transfer Feed-in Tariffs Programme (GET FiT), Deutsche Bank Climate Change Advisors (DBCCA) outline a tool for reviewing local barriers, particularly in terms of constraints to renewable energy market development. DBCCA’s regularly updated Global Climate Change Policy Tracker is also useful for a diagnostic process.
Any diagnostic should also incorporate a review of the policy context. This would cover existing and emerging regulatory frameworks, including LEDs, NAPAs, NAMAs and local climate funds, etc.

In cases where the intervention is intended to be global, the diagnostic and consultation will have to take place at a global level. However, even if a global consultation and diagnostic has been completed, this process should be repeated at the local level for individual underlying projects.

2. Stakeholder consultation: have relevant stakeholders been consulted at the initiation of the design process?

Communication with the key stakeholders in the project or programme should take place early on in the design process, to ensure their requirements, goals and potential contributions are recognised, understood and incorporated from the outset. Consultation will also enable relevant stakeholders to develop an understanding of the proposed intervention(s).

Examples of stakeholder processes within the low carbon space are those of the Gold Standard for the CDM and voluntary carbon projects, as well as those of the Climate Investment Funds (CIFs). The latter have sought to incorporate consultation at both the programme (fund design) and project level, involving government officials, private industry and other stakeholders, including civil society and non-governmental organisations (NGOs). Lesson learning on CIF approaches to consultation has recently been conducted through the 2011 Partnership Forum (IISD, 2011).

Outside of the low carbon space, the IFC has extensive guidance on stakeholder consultation around private sector projects within its ‘Good Practice Handbook for Companies Doing Business in Emerging Markets’. This is available in several languages and could be adapted for low carbon interventions.

3. Private sector involvement: how are private sector actors engaged in designing the intervention?

It is important that those the intervention supports also work with the public sector to design interventions. This should help ensure longer-term sustainability of the project/programme.

An example of private sector involvement in intervention design is the Critical Mass Initiative of the World Economic Forum (WEF), which convened stakeholders during the development of the Climate Public Private Partnership (CP3) fund announced in 2012, co-financed by the government of the United Kingdom and the Asian Development Bank (ADB), to mobilise private investment in low carbon development (WEF, 2011).

In terms of stakeholders in the private sector, consultation should include the full range of actors: large corporations, local SMEs and local and foreign investors (Lyon et al., 2011). Where foreign entities are designing the intervention, public and private sector representatives from the target country/region should be involved to encourage local support and replication (Brown et al., 2011b).

B. Goal setting

Following on from, or in parallel with, the baseline setting and consultation process, is the establishment of the specific goals of the intervention. These goals then become criteria for selecting between a number of different projects or programmes.

4. Co-benefits: have the non-financial benefits and goals of the intervention been identified?

Co-benefits go beyond the financial returns to the private sector and can include reducing greenhouse gas (GHG) emissions, avoiding locking-in high emissions paths and other local economic, social and environmental improvements, including:

- Job creation;
• Contributions to gross domestic product (GDP)/tax revenues/balance of payments;
• Reduced exposure to volatile energy prices (energy security);
• Access to energy;
• Innovation;
• Public health benefits;
• Broader development impacts (education, etc.).

• A wide range of approaches has been established within the development and climate change communities of practice for incorporating and capturing the co-benefits listed above within the design of projects and programmes. These include the Gold Standard and Climate, Community and Biodiversity Standards for the CDM, and the procedures of regional and bilateral development banks such as the ADB and JBIC for operationalising co-benefits through official development assistance (ODA).

5. **Market transformation: does the intervention seek to achieve market transformation?**

• Private financial flows to LCD will depend largely on developing countries’ ability to create a general business environment that is attractive to domestic and international investment (EC, 2011), and so market transformation will often be an element of the intervention under development.

• If market transformation is a goal, some of the indicators to include within the design of the intervention are:
  - Achievement of a system-wide reduction in costs/risks?
  - Elimination of non-financial barriers?
  - Achievement of an investment grade rating for the sector/country?
  - Intervention demonstration of scalability/replicability?

• In the case of market transformation, interventions could be climate specific or more generic, in the latter case without direct LCD objectives but with broader market efficiency objectives (AGF, 2010).

6. **Cost–benefit analysis: has a cost–benefit analysis been completed to determine which intervention is the most cost-effective way of filling the identified gaps in private sector activity?**

• Given the limited availability of public funds, it is critical that interventions are provided on a cost-effective basis, so public funds can be applied to support the widest range of private sector actors, thereby having the broadest possible overall impact.

• A review of the cost effectiveness of the intervention (in comparison with alternatives) could include, among others, measures of GHG reductions, KWh saved or GWh generated per $1 spent.²

• As an example, DFIs such as OPIC apply economic analysis frameworks for their investments which include cost–benefit analyses at the project level.

• Is there an appropriate assessment of risks to project success, and also of any possible unexpected negative impacts of projects and ways to ameliorate these? Are there groups which will lose out from these interventions? Are there trade-offs that need to be managed?

C. **Structuring**

Once a specific project or programme has been selected, it will be necessary to design and structure specific elements of the intervention. This includes ensuring additionality, a desirable balance of private and public sector involvement, coordination with other interventions and acceptable levels of risk and failure. Where underlying projects make up a wider programme, the questions within this

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² Use of this metric may not be appropriate where the goal is the introduction of new technologies that may have an initially high cost/GHG reduction and public sector intervention helps to reduce the cost curve.
section of the Toolkit should be applied at both the project and the programme level, as they may lead to different design responses.

7. **Balancing priorities: given the resources available and the goals of the intervention, what level of detail and effort is reasonable in terms of structuring the interventions and evaluating outcomes?**
   - This Toolkit contains several elements which may need to be considered or addressed at only a relatively superficial level. The depth of such a diagnostic will also be contingent on the level of resources available for a given intervention, as such analysis entails time and costs. Deciding which aspects of the Toolkit should be emphasised will require cost–benefit analyses, to make it possible to navigate these trade-offs throughout the structuring process. Multi-criteria analysis is one tool that can be used to take into account and balance priorities.
   - This is particularly true for baseline setting, monitoring, reporting and auditing (see Questions 14 and 16), which can be costly and time-intensive processes.
   - Although no element within the Toolkit should be overlooked, simple and manageable systems will be needed that incentivise and facilitate the design of creative projects and programmes (Nakhooda, 2012).

8. **Additionality: will the selected intervention be additional? Would private sector mobilisation occur without the public sector intervention?**
   - As a general rule, scarce public money should be used to support projects and programmes for which private funds are not readily available, and not to substitute for private finance.
   - Ensuring additionality in terms of public sector interventions will also help avoid crowding out private sector activities.
   - Some specific additionality tests that can be applied to the selected intervention are as follows:
     - Does the intervention cover only the incremental costs between a less costly, more polluting option and a costlier, more environmentally friendly and/or climate-resilient one (GEF, 2010)?
     - The incremental cost can be calculated as the ratio of expected capital investment to the incremental cost of financing for a clean project (Brown et al., 2011a). Such a calculation can be based on marginal abatement cost curves, if they are available.
     - Are there barriers to the project/programme obtaining sufficient financing from private sources on appropriate terms? Metrics for appropriate terms include pricing, term, grace period, currency and timeliness (MDB-ECG, 2006).
     - Does the intervention target countries/technologies where the private sector is not providing investment at all, thereby allowing for first-of-a-kind investments (AGF, 2010)?
     - Does the intervention redirect financing that is already available away from high carbon sectors to low carbon sectors (Brown et al., 2011b)?
     - Does the intervention contribute to (i) the fairer or more efficient allocation of risks and responsibilities between the public and private sectors; and/or (ii) improvement in the business, developmental, transition, social or environmental performance of the project/programme (MDB-ECG, 2006)?

9. **Market distortions: if funds, guarantees, insurance and lines of credit are provided on a concessional basis, has the level of concessionality been set in a manner that will avoid moral hazard effects?**
   - This is linked to Questions 1 and 8, in that public interventions should fill only the gaps that exist in private sector activities. Determining the exact size of these gaps is critical. If levels of support are set too high, this can lead to moral hazard, whereby a party insulated from risk behaves differently (i.e. less carefully) from how it would if it were exposed fully to the risk (EC, 2011). If not closely managed, this can also lead to broader market distortions.
   - Efforts have been made to incorporate this principle into the private sector operations of the CTF which has established the important principles of (i) minimum concessionality; and (ii)
avoiding distortions and crowding out (the private sector), which must be addressed within all investment proposals and subsequent decisions (CIF, 2010).

- Including competition between private actors as part of the intervention can also help in determining the correct level of concessionality, by allowing for price discovery. This is often put in place through challenge funds such as the Africa Enterprise Challenge Fund (AECF) Renewable Energy and Adaptation to Climate Technologies (REACT) Window and the Ideas Energy Innovation Contests, as well as the tendering process by governments for public–private partnerships (PPPs).
- Supporting particular firms and technologies through concessional finance may also generate unfair competition, and thus undermine dynamic market processes that would otherwise identify the most efficient solutions/technologies over time. Thus can be ameliorated by supporting a diverse range of potential solutions, and more than one enterprise in a particular market.

10. Coordination: how will the intervention be consistent with other activities at national, regional and local levels? What tools are available for coordination with other interventions?

- In a number of cases, packages of interventions and combining financial resources within a given country have proven more effective in addressing climate change than multiple isolated single interventions (AGF, 2010; Brown et al., 2011b, Hosier et al., 2010; NBS, 2011). The findings of this research provide significant justification for a focus on coordinating the different interventions within the same country/region that would be identified under Question 1.
- This could include decisions on how best to combine a number of the instruments in Table 1 most effectively (climate finance tools like the CDM, concessional loans, equity, guarantees, insurance, etc.).
- These packages of interventions can involve either simultaneous or sequential implementation, but it is important to understand and communicate the linkages between interventions as part of ongoing assessment (see Question 15) (Lyon et al., 2011).
- The combination of financing packages can sometimes be communicated in terms of leverage. If a leverage figure is used, the assumptions and method for calculation should be shared to ensure there is no double counting between providers of finance (Brown et al., 2011a).

11. Predictability: how will the structure of the intervention allow for long-term planning by the private sector?

- Private sector actors operating in the clean energy/low carbon space have repeatedly emphasised the need for the 4Ls (long, loud, legal and light) or TLC (transparency, longevity and certainty) as key elements in public sector interventions (DBCCA, 2011b).
- There is a need to implement both financial and policy interventions (regulations, incentives, etc.) over timeframes that are significant enough to influence private sector decision making and actions, while also incorporating elements of flexibility into changing market and regulatory conditions (see Question 17).
- The private sector will be sensitive to the possibility that, under adverse economic conditions or for other reasons, such as changes in political climate, the public sector intervention could be cancelled or funds withdrawn (Atteridge, 2011).
- Market-pull mechanisms such as AMCs to increase demand, and tools such as political risk insurance to lower general country risk, may provide additional predictability and security for the private sector.
- It is also important to incorporate elements into the structuring of interventions such as clear exit clauses which limit the susceptibility of funds to withdrawal, within a given investment horizon.
12. Local capacity: how is the capacity of local private sector actors supported as part of the intervention?

- If one of the long-term aims of LCD is self-sufficiency of low- and middle-income countries, this can be maximised by ensuring that, where possible, local private sector actors manage and hold funds provided.
- Capacity building of the local private sector should be part of the intervention so that, over the long term, there is an exit strategy for the public sector (eventually the intervention can be discontinued) (see also Question 20).
- Carefully designed incentives to use local inputs and local staff in projects implemented by international businesses can also help to build local capacity.

13. Failure: in the case of a programme or portfolio of interventions, what will be the acceptable rate of failure of underlying projects?

- There is a natural and healthy rate of failure for private investments and enterprises. Where innovative new technologies and business models are being sought, failure in a subset of interventions is inevitable.
- In practice, it appears that failure of even a single project or investment is poorly tolerated, which makes developers of future public sector interventions more risk averse. This is exemplified by the case of United States Department of Energy loan guarantees to clean energy companies, which were called into question when one of the recipient companies (Solyndra) filed for bankruptcy.
- If an intervention is designed in a manner to ensure additionality (see Question 8), this is likely to imply that higher risks are being taken on than the private sector is willing to bear itself, which in turn implies the risk of failure may be relatively high.
- In addition to the metrics identified in the baseline, at the outset all interventions should incorporate metrics to determine the level of acceptable failure within a programme of interventions. These should be established on the basis of broad consensus, potentially as part of the stakeholder consultation process, and communicated widely.
- As an example, the United Kingdom Department for International Development (DFID) considers that its contribution to the IDEAS Energy Enterprise Innovation Contest for the Caribbean (a portfolio of innovative renewable energy and energy efficiency business ventures) will be a success if at least 65% of the ventures supported are able to sustain and grow their businesses beyond the life of the intervention, ‘a metric which is almost double the expected success rate of new [...] SME ventures after 3-4 years’ (DFID, 2011).

D. Monitoring, reporting and consultation

14. Monitoring: what standards for monitoring and reporting apply throughout the lifetime of the intervention? What baselines and metrics will be used?

- Monitoring and reporting should at a minimum be completed against the baseline scenario identified in Question 1; the success in addressing gaps/barriers identified in Question 1; and additional relevant goals identified in Questions 4 and 5.
- Although policymakers have not agreed on a single best practice approach, there are a number of monitoring and reporting standards for low carbon projects and programmes and for private sector interventions. Taken together, these can provide the basis for a range of baselines, metrics and reporting templates. In addition to the Multilateral Development Banks Evaluation Cooperation Group Good Practice Standards, these include the Global Environment Facility (GEF) Monitoring and Evaluation Policy 2010, the Results Frameworks of the CIFs and the approaches of the United Kingdom’s Carbon Trust and of Sustainable Development Technology Canada, which have been recommended by the United Nations Environment Programme (UNEP) Sustainable Energy Finance Alliance (Brown et al., 2011b).
15. Communication: how will the details and outcomes of the intervention be communicated to stakeholders?

- It is critical to share the details and results of interventions in a transparent, comparable and comprehensive manner to allow for assessment of effectiveness, lesson learning and improvement over time (see Question 17).
- More fundamentally, research based on 204 academic articles and government reports on the effectiveness of environmental policies (including regulatory and expenditure policy instruments) shows that, even when all other necessary elements are in place, ineffective communications can lead to systemic policy failure (NBS, 2011).
- Communications should include information on both the public and the private components of the intervention, in terms of goals, design, expectations of levels of failure and observed results. Approaches to stakeholder consultation often include guidance on communicating relevant elements of a project or programmes (see Question 2).

16. Auditing: will a third party audit reports from the intervention and with what frequency?

- This is critical to ensure accountability to the providers of public funds (normally taxpayers). Where it is cost effective given the scale of the intervention, some level of funding should be allocated to cover the costs of third party review of the intervention’s reported results.

E. Continuous improvement and exit planning

17. Flexibility: is the intervention designed in a manner that is flexible and allows for correction over time?

- Adaptive management is an approach that entails incorporating flexibility into the design of an intervention, in a manner which allows the programme/project to integrate experience from early projects and new information such as on changes in local policies and technology costs (AGF, 2010; Brown et al., 2011b; Milford et al., 2011).
- It has been found that flexibility is often more effective than rigidity in the design of environmental policies. Flexible policies give private sector actors different avenues to achieve the same goal, and flexibility can also imply changing the terms of the intervention as circumstances evolve (NBS, 2011).
- Incorporating flexibility into the design of an intervention, through the use of a variety of instruments or milestones for adjustment (see Question 19), should also help to avoid creating path dependency on a particular set of technologies or approaches (Brown et al., 2011b).
- Combining continuous assessment with policy predictability is a delicate balancing act. Adaptive management must be applied while maintaining consistency with goals of predictability under Question 11.

18. Continuous consultation: will local stakeholder consultations (including with private sector actors) take place throughout the life of the intervention?

- In order to allow for continuous improvement over time (see Question 17), it is important that consultation take place beyond the design phase of the intervention.
- There are many different approaches available for stakeholder consultation in the context of LCD (see Question 2). The IFC guidelines include processes for iterative or continuous consultation, as does the Gold Standard for voluntary and compliance carbon projects.

19. Milestones: will the intervention incorporate performance milestones for private sector actors?

- It is important to assess interventions on a continuous basis, taking into account relevant priorities (see Question 7), in order to ensure the level of support is optimal (Kalamova et al., 2011).
Where the requirement for upfront financing is not a barrier, to ensure efficiency, some level of financial support could become due only when performance milestones have been met, with payments being made over the lifetime of the intervention (Liebreich, 2011). These milestones could also be subject to audits under Question 16.

Under the Inter-American Development Bank (ADB) IDEAS Energy Innovation Contest, disbursement of funds is made on attainment of project milestones fixed with the project implementers (ADB, 2012).

20. Exit strategy: what is the exit strategy for the public sector intervention and how is this communicated? How will the private sector activity become self-sustaining over the medium to long term?

• Predictability (under Question 11) should not be mistaken for permanence. It is important to ‘sunset’ many interventions to support private sector participation in LCD. In the majority of cases, the aim should be that, with time, financial markets price risk efficiently and public sector support is no longer required (Kalamova et al., 2011).

• It is important at the outset of a project to communicate the expectations of success of a given intervention, along with specific milestones to clarify when the intervention is no longer required (Lyon et al., 2011). This will prepare the private sector for the eventual withdrawal of public support.

• This is incorporated into the operations of the CTF under a principle of ‘financial sustainability’, whereby ‘CTF programmes are to be developed to maximize the probability of long-term financial sustainability once the CTF funds are no longer available/have been used. Projects and programmes should not be approved if they are likely to be dependent on a continuous flow of CTF funds’ (CIFs, 2010).

6 Conclusions and next steps

This Working Paper has proposed 20 questions for the design of public sector interventions to mobilise private participation in LCD. This is a first step in a planned work stream to develop the framework further, through its application to existing case studies, for possible benchmarking purposes, and to assist in the design of new projects and programmes going forward.

Our understanding of existing interventions suggests quite a wide range of adherence with the principles set out in this paper: some initiatives attempt to address all these issues; others do not explicitly consider many of these points, although detailed information on this count is often not consistently available. Therefore, as a next step, we will seek to consult individuals and institutions involved in the design and implementation of LCD initiatives in order to review the applicability of these guidelines and identify further examples of good practice. We will then seek to work with representatives of donors, IFIs and local governments in developing countries to apply these principles in the design phase of a series of interventions to mobilise the private sector in LCD.

We would greatly appreciate feedback on the list of questions, and suggestions of additional examples of good practice that can be added to the Toolkit. There are a great many actors working within a variety of sectors and countries who have extensive experience designing, reviewing and implementing public sector interventions to mobilise the private sector, whose knowledge is vital for the refinement of this Toolkit. This includes representatives of the private sector, the development finance community and governments, along with researchers and academics. We would also welcome the opportunity to trial the 20 questions approach with governments and development organisations that are currently in the process of designing interventions.
References


