Third Annual Meeting of the San Giorgio Group: Expanding Green, Low-Emissions Finance

3-4 October 2013, Island of San Giorgio Maggiore, Venice

A joint meeting organized by Climate Policy Initiative in collaboration with the World Bank Group, CLP and the Organization for Economic Co-operation and Development

Summary

On 3-4 October, **Climate Policy Initiative (CPI)** hosted the Third Meeting of the San Giorgio Group (SGG) in Venice to take stock of lessons learned from the second year of analytical work, and to consider where to focus the group's resources in the coming year.

The SGG brings together financial intermediaries and public and private institutions interested in understanding how public policies and private interest can be aligned to support climate-related investment. Through case study-based analysis on what works and what doesn't, the SGG's goal is to learn from the wide range of existing and evolving financing practices, and identify replicable and scalable climate-related financing models.

This year's discussions considered the impacts of public finance and policy action on growth in low-carbon and climate-resilient investment, against the background of what more is needed to achieve the scale of required action. The following themes framed discussions:

- What is the global state of play?
- What is the zone of political tolerance for action?
- What policies and actions are needed to encourage 'system transformation'?

The SGG's main observations are summarized in the rest of this document.

1. The 'baseline' of green, low-emissions finance is dynamic and subject to diverse influences.

Understanding how the global state of climate-relevant investments has evolved and why, is essential to distilling lessons that might inform future policy and investment choices. Policy environments are not static. Instead, they need to respond - sometimes rapidly - to changing political priorities and economic circumstances. Better understanding of the facts and figures behind green and brown investment would create a transparent foundation for creating coherent policy frameworks that align investment with environmental outcomes, and possibly expand the tolerance zone in ways that help support a low-carbon transition. The first challenge is to understand the performance of public resources and policies in order to improve their application, and then to increase their impact. CPI's San Giorgio Group activities, as well as complementary work like The Policy Climate, and the Global Landscape of Climate Finance, have started to document and explain the current variations in approaches to climate finance investments. Key findings based on these studies and complementary work by the OECD, Bloomberg New Energy Finance, the World Bank Group, and Climate Bonds Initiative suggest:

- **A lot of activity taking place around the world in clean energy, modern agriculture and energy efficiency is already addressing the drivers of climate change.** However, it is insufficient, unevenly implemented geographically, and has diverse cost effectiveness outcomes. In the last 20 years, large variations have developed between geographies, investors and costs of actions. Developing economies are, in some cases, moving faster toward system transformation than developed ones, and markets that have led in recent years (e.g. Spain) are being overtaken by new players.
- **The gap between the amount of capital going into clean energy and alternatively into fossil fuel investments has narrowed.** However, fossil fuel incentives still encourage carbon lock-in and despite the many 'green' policy incentives in place, such as subsidies and research and development support, the majority of newly built infrastructure is still not low-carbon. A comprehensive examination of all support schemes, including hidden subsidies for fossil fuel use, might reveal a 'shadow' carbon price that is more expensive than thought, and provide a stronger rationale for supporting clean energy options.
- **Public support for low-carbon energy**

investments runs a risk of over-incentivizing green generation by creating market distortions and inhibiting long-term transformation of the global energy supply. While the private sector provides the lion's share of investment flows, public-backed policies and financial incentives drive low-carbon energy investment decisions. If public investments, including those channeled through DFIs, take on too large a role and over-incentivize generation, the market may face difficulties regulating itself and become dependent on unaffordable subsidies. When subsidies are withdrawn, utilities' business models can become vulnerable to collapse, causing investment to stall. Hence, while public support plays a key role in leveraging private investment in low-carbon options, it needs to be allocated efficiently to trigger an energy transformation over the long-term.

- **New types of investors and business models are needed to grow investment in renewable energy. Even though there is evidence that renewable energy costs are falling, this has not resulted in a comparable growth in investment levels.** One explanation may be that as wholesale electricity prices fall, the balance sheets of utilities are impacted and their capacity to finance the transition from fossil to clean energy is reduced. New investors are needed to accommodate new green investment return profiles and business models.

2. There is a zone of political tolerance that determines the extent of financial and policy choices.

Governments around the world have demonstrated they are willing to pay to remove low-carbon investment barriers, providing savings are realized or additional costs are perceived as reasonable. However, when policies or government intervention threaten to increase costs of current and future investments, resistance from different actors can shrink the 'zone of political tolerance'. Better alignment of financial and environmental policies and objectives could increase the zone of tolerance within which most low-carbon, climate-resilient investments currently occur, and encourage investors to accept green investment that is close to commercial price margins. Relevant policies could include reforming routine investor practices, and redefining business models that make debt expensive and increase risk averseness. Key SGG findings include:

- **Energy Efficiency - While long considered a low-hanging fruit, investment in energy efficiency has proven complex and has been slow to materialize. Investors' uncertainty where the outputs of energy efficiency projects are concerned leads them to require higher returns.** Energy efficiency investments typically face more technical barriers than investments in renewable energy projects. The United Nations Environment Programme (UNEP), the European Investment Bank (EIB), the European Bank for Reconstruction and Development (EBRD), and the Global Environment Facility (GEF) each underlined that although energy efficiency was at face value far less expensive than other green investments, local public budget constraints, difficulties obtaining debt capital from commercial banks, prevailing business practices and market structures related to energy services can frustrate take-up. In many cases, the cure is to tailor capacity building to particular stakeholders, but some challenges remain. Technical assistance and information campaigns can address knowledge barriers in the industrial sector and increase awareness of energy efficiency initiatives' feasibility and potential returns, particularly for banks. There is still uncertainty over the role of ESCOs in driving future investment.
- **Commercial Technologies – Even when considered 'commercially viable', some renewable energy technologies such as onshore wind may not make sense in the absence of incentives or specific support.** Costs of onshore wind are becoming competitive with high-carbon alternatives and capital and financing structures are increasingly available, yet investment at scale in these technologies is still insufficient. Reliance on public support mechanisms to encourage renewable energy investments increases the risk for investors engaging beyond levels that provide marginal diversification benefits. Alternative public support mechanisms, as well as financial advisory services, can help attract financial investors and increase the scale of investment. The Jädraås Onshore Windfarm case study, and insights from IHC Merwede, CLP and Eksport Kredit Fonden (EKF) highlighted that pension funds are eager to invest in renewable energy as long as their risks are covered. Similarly, financial advisory and arranging skills can play a role in overcoming significant barriers to bank lending that result from financial regulation and behavioral inertia.
- **Role of DFIs - Development Finance Institutions (DFIs) are increasingly involved in energy markets, supporting investments in renewable energies and energy efficiency measures by**

addressing market gaps. However, their potential to play an even greater role in promoting low-emission development in countries where they operate is limited by factors ranging from unfavorable regulatory environments and the quality of off-takers, to the availability of bankable projects. According to the Overseas Private Investment Cooperation (OPIC), the World Bank, KfW Development Bank, the Brazilian Development Bank (BNDES), and the Inter-American Development Bank (IADB), a number of ingredients can enable DFIs to scale up low-carbon and climate-resilient investments, as well as maximize the effectiveness of their operations. They include:

  - Increasing donors' funds for technical assistance to offer knowledge and capacity building measures as part of their toolbox of instruments.
  - More flexibility in deploying instruments and adapting loan and guarantee terms.
  - Increasing availability of venture capital guarantee frameworks and/or equity base.

- To maximize outcomes, DFIs should strive to harmonize requirements and procedures to reduce transaction costs for borrowers (e.g. those seeking to combine financing from several institutions). In this context, a better understanding of DFI activities would help ensure effective use of their resources, and help avoid potential crowding-out of private action.

3. System transformation is necessary to secure a low-carbon energy transition.

While narrowing the gap between conventional and low-carbon energy generation costs encourages incremental additions of green infrastructure, fossil fuel assets continue to dominate energy generation and are set to expand further, especially given the rise of unconventional gas. System transformation is necessary but will require measures such as the restructuring of transmission and distribution systems. Without these fundamental shifts, the carbon challenge going forward is more likely to stem from 'old' than from 'new' fossil fuels: in Europe, the cost of using coal has fallen, and in the U.S. the rise of unconventional gas has made it so cheap that the stranding of high-carbon assets may be delayed by 20 years.

There are examples of sectors in which system transformation has been achieved. The shift to mobile devices in the telecommunications industry demonstrates that radical change can happen quickly if risks associated with stranding assets are relatively low. However, further work is needed to understand and properly price the risks of stranded assets, to ensure they don't unnecessarily impede low-carbon investments (which also face a growing risk of being stranded in the absence of system transformation). SGG discussions covered:

- **High-Cost Renewable Energy – Concentrated Solar Power (CSP) can contribute significantly to both emissions reduction and grid stability.** Its storage capacity can deliver baseload supply and has real potential to displace high-emitting sources such as coal. However, high investment costs make it uncompetitive with alternative sources and result in increased perceptions of investment risks. As a result, CSP plants are rarely financed without some form of public support. Examples from the Moroccan Agency for Solar Energy (MASEN), Eskom, Asian Development Bank (ADB) and Climate Policy Initiative show that public support to CSP takes many different forms, including feed-in-tariffs, direct capital contributions, auctioned subsidies, and investment guarantees. Questions remain as to how the efficiency of public support for this technology and the effectiveness of policies designed to make CSP more competitive can be improved, in order to conserve public resources.
- **Climate Resilience – By addressing knowledge gaps and providing tailored incentives, public actors can encourage private investors to mainstream climate resilience into their business plans and development strategies.** Climate Policy Initiative, OECD, German Development Institute, and World Bank Group highlighted that larger companies in developed countries limit investments in climate resilient activities because of the uncertainty about long-term policy frameworks. In contrast, smaller private actors in developing countries, such as farmers and small and medium enterprises, don't fully understand risks and investment opportunities, and face difficulties in accessing finance. The public sector could help improve the flow of finance to climate resilient activities by reframing 'adaptation' as activities to climate-proof assets and operations, promoting insurance products, and providing capacity building and incentives through risk-sharing facilities.
- **Instruments for Addressing Risks - Risk is the most serious barrier preventing capital from flowing into low-carbon investments.** Policymakers and DFIs are extending risk mitigation instruments to climate-related investments, but there is significant room to improve current instruments and increase their market uptake. SGG Case Studies on risk show that the

mitigation of political and regulatory risk should be prioritized. Further, these risks need to be defined in a consistent manner, coverage instruments need to be more transparent, and administrative burdens for investors need to be lower. SGG participants also highlighted the need to better understand foreign exchange risk, which has long been underestimated. Potential options for scaling up risk instruments include:

- Layered structures/funds that offer the client comprehensive risk protection, thus reducing transaction costs and administrative burden (Deutsche Bank);
- A partnership between DFIs to create vehicles able to issue medium-term debt securities suited to commercial lenders seeking refinancing from institutional investors (International Finance Corporation).

Conclusions: Priorities Ahead

Prioritizing improved policies and better alignment with business models will encourage increased low-carbon investment.

- **Policies need to be better designed and help level the playing field by delivering price signals and reducing both real and perceived risks of low-carbon investment.** Although progress is being made to lower fossil fuel subsidies and price carbon, carbon is still priced far below its value and current incentives are insufficient to shift investor behavior toward system transformation. Against the backdrop of fragile economic environments around the world, policies need to do more to set out clearly the benefits of investing in low-carbon and climate-resilient alternatives, by properly pricing carbon, and eliminating expensive and inefficient fossil fuel subsidies.
- **Understanding changing business models is important to encourage investment in low-carbon and climate-resilient alternatives across the full spectrum of investors.** Work is needed to analyse how regulations such as Solvency II and Basel III have impacted the ability to support green infrastructure investments, particularly for institutional investors. Independent analysis of these and similar financial reforms would support consideration by regulators and the financial sector about true investor needs. It would help to provide them with a clear understanding of underlying benefits and returns, and ensure a proper distribution of risks.

Next steps for research

- The newly established **Global Commission on the Economy and Climate (GCEC)** comprises leaders from government, finance, and business from 14 countries, and is chaired by former President of Mexico Felipe Calderón. The Commission is leading the New Climate Economy (NCE) project, made up of experts from a range of leading global and national research institutions, which will produce a comprehensive and unbiased analysis of the benefits of climate action over the coming year. CPI will lead NCE's Investment Work Stream. Seeking to answer investors' questions on green growth opportunities by analyzing the business models, drivers and investment functions of different groups of investors ranging from pension funds to market-based investors, the results of this work will aim to inform governments and investors alike.
- **CPI** remains committed to improving the understanding and transparency of today's climate finance landscape, offering guidance on how to design effective funding mechanisms and how to improve financial intermediation services for green, low-emissions investments at scale.tential to generate multiple benefits for farmers. These include easing access to climate-adaptive farm inputs and technologies, and offering a more secure market for their supplies. Some agribusinesses may in fact promote a contract-farming like arrangement, and/or offer purchase guarantees to ensure the loyalty of trained farmers. By acting as loan intermediaries and/or guarantors, agribusinesses can also facilitate farmers' access to finance. The project estimates that, by improving their agronomic practices, farmers could increase their income by around 20%.