International Private Climate Finance:  
Perceptions of Belgian Private Actors  

Samuel Lietaer (ULB)

About the author: Samuel Lietaer is a researcher for KLIMOS at the Centre for Studies on Sustainable Development (Institute for Environmental Management and Land-use Planning) of the Université Libre de Bruxelles (Free University of Brussels) where he studies international aspects of the private sector’s role in climate change adaptation (strategies) in developing countries. His main research interests are situated at the interface between international private adaptation finance and development cooperation. He holds two master’s degrees in Political science, and Law, as well as one LLM in International and European Law from the Vrije Universiteit Brussel (VUB).

For correspondence: Samuel.lietaer@ulb.ac.be

Acknowledgements
Funding for the KLIMOS – consortium is kindly provided by DGD (Directorate General for Development Cooperation; www.dgd.be) through VLIR-UOS (the ‘Vlaamse Interuniversitaire Raad – Universitaire Ontwikkelingssamenwerking’; ‘Flemish Interuniversity Council – University Development Cooperation’; www.vliruos.be) and ARES (Académie de Recherche et d'Enseignement Supérieur).

The author would like to thank Edwin Zaccai, Romain Weikmans, Marine Lugon, Lucas Demuelenaere, Jean-Paul Ledant and Bruno Verbist for their comments on this working paper. Any errors or omissions are the responsibility of the author.

About KLIMOS-ACROPOLIS
KLIMOS is an interdisciplinary and interuniversity research platform aiming at generating capacity to enable the necessary transition to a sustainable society through research for development. Research activities will focus on (1) management of natural resources for multiple ecosystem services, (2) development of sustainable energy systems and urban infrastructures, (3) innovations in governance and institutional reform, and (4) sustainability monitoring and evaluation.

KLIMOS is an ACROPOLIS, an ACademic Research Organisation for POLlcy Support. Copyright This material is considered to be an international public good that can be freely copied for use in a non-commercial context, provided that the source is acknowledged. The opinions expressed in this Working Paper are those of the authors and are not necessarily those of KLIMOS.
Abstract

Most research on international climate finance and the private sector has focused on tracking the private sector’s contribution the ‘100 billion USD goal’ within the UNFCCC context. In recent years, it has become evident that the range of actual and potential contributions of private actors from developed countries to support developing countries is far broader than ‘publicly mobilized’ private climate finance. The research presented here takes a north-south scope focusing on Belgium. In this study, after a brief theoretical framework, we offer qualitative data from interviews assessing the involvement of Belgian-based private entities in climate-relevant activities in developing countries. With an actors-based perspective we first observed some perceived opportunities, and several barriers, such as particular finance access issues for small project developers. Then we found that in both mitigation and adaptation a wide range of private actors in Belgium – from households to small and large companies through the financial sector - already contribute with varying degrees to International Private Climate Finance (IPCF) in different sectors. Hence, they participate to address climate-related investment needs in developing countries.

Key findings

The study on key actors from across different climate-relevant sectors in Belgium found that:

- Larger private actors find their way to public funds more easily than smaller players, thus also to international private climate finance (IPCF) in both mitigation and adaptation sectors, as more barriers remain for small and medium enterprises (SMEs);

- Finance and information gaps exist for Belgian private actors involved in climate-relevant activities in developing countries, in particular for smaller-scale projects and SMEs in both the mitigation and adaptation sectors;

- Private financial institutions, such as banks, seem willing to avail only a limited amount of their capital assets to climate-relevant actors with activities in developing countries. This is mainly due to high risk perceptions, fear for unpredictable and unstable profits, and scarce experience in ‘climate’ funds;

- Public policies and regulation could trigger the private sector further with mainstreamed climate change objectives and ensure quality standards in international private climate finance.
### List of Acronyms

<table>
<thead>
<tr>
<th>Acronym</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>BTC / CTB</td>
<td>Belgian Development Agency</td>
</tr>
<tr>
<td>CCD</td>
<td>Climate-Compatible Development</td>
</tr>
<tr>
<td>CSO</td>
<td>Civil Society Organisation</td>
</tr>
<tr>
<td>CSR</td>
<td>Corporate Social Responsibility</td>
</tr>
<tr>
<td>DAC</td>
<td>Development Assistance Committee</td>
</tr>
<tr>
<td>DFI</td>
<td>Development finance institution</td>
</tr>
<tr>
<td>DGD</td>
<td>Directorate General Development Cooperation (Belgian federal level)</td>
</tr>
<tr>
<td>EC</td>
<td>European Commission</td>
</tr>
<tr>
<td>EU</td>
<td>European Union</td>
</tr>
<tr>
<td>EU ETS</td>
<td>European Emissions Trading Scheme</td>
</tr>
<tr>
<td>FAO</td>
<td>Food and Agriculture Organisation</td>
</tr>
<tr>
<td>FSMA</td>
<td>Financial Services and Markets Authority</td>
</tr>
<tr>
<td>FDI</td>
<td>Foreign direct investment</td>
</tr>
<tr>
<td>FfD</td>
<td>Financing for Development</td>
</tr>
<tr>
<td>GCF</td>
<td>Green Climate Fund</td>
</tr>
<tr>
<td>HLF</td>
<td>High Level Forum</td>
</tr>
<tr>
<td>IEA</td>
<td>International Energy Agency</td>
</tr>
<tr>
<td>IFC</td>
<td>International Finance Corporation</td>
</tr>
<tr>
<td>IFI</td>
<td>International finance institution</td>
</tr>
<tr>
<td>LCCR</td>
<td>Low-Carbon and Climate Resilient (Development and Finance)</td>
</tr>
<tr>
<td>LDC</td>
<td>Least Developed Country</td>
</tr>
<tr>
<td>NBB</td>
<td>National Bank of Belgium</td>
</tr>
<tr>
<td>NGO</td>
<td>Non-Governmental Organisation</td>
</tr>
<tr>
<td>OECD</td>
<td>Organisation for Economic Co-operation and Development</td>
</tr>
<tr>
<td>PA</td>
<td>Paris Agreement</td>
</tr>
<tr>
<td>PPP</td>
<td>Public Private Partnership</td>
</tr>
<tr>
<td>PESTLE</td>
<td>Political, Economic, Social, Technological, Legal and Environmental Private Sector Engagement</td>
</tr>
<tr>
<td>RE</td>
<td>Renewable Energy</td>
</tr>
<tr>
<td>SME</td>
<td>Small and Medium Enterprises</td>
</tr>
<tr>
<td>UNFCCC</td>
<td>United Nations Framework Convention on Climate Change</td>
</tr>
</tbody>
</table>
# Table of Contents

Abstract .................................................................................................................................................. 3
Key findings ............................................................................................................................................... 3
List of Acronyms ...................................................................................................................................... 4
1. Introduction ......................................................................................................................................... 2
2. What is international (private) climate finance? ............................................................................... 4
   2.1. Choosing the Context: north-south climate-relevant finance ...................................................... 4
3. What are the perceptions of private actors on international climate finance? ................................. 6
   3.1. General findings in Belgium on drivers and barriers ....................................................................... 6
   3.2. Findings of Actors-based perceptions on their contribution to IPCF ........................................... 7
4. Analysis of the results ............................................................................................................................ 9
   4.1. Individuals and households .......................................................................................................... 10
   4.2. Small and medium-sized enterprises (SMEs) .............................................................................. 10
   4.3. Large companies ......................................................................................................................... 13
   4.4. Companies (and other private actors) active on the carbon markets ........................................... 14
   4.5. Financial intermediaries (banks and insurance companies) .......................................................... 16
   4.6. Small financial institutions and impact investment managers ...................................................... 19
   4.7. Major private institutional investors ............................................................................................ 20
   4.8. NGOs, foundations and charities .................................................................................................. 21
5. Conclusion ........................................................................................................................................... 23
Annex 1 – Investment opportunities ....................................................................................................... 1
Annex 2 – Financing barriers and instruments ........................................................................................ 3
Annex 4 – Lexicon on International Private Climate Finance ............................................................... 1
Bibliography of the Lexicon .................................................................................................................... 6
Figures

Figure 1 - Private Climate Finance - An Actors-based perspective.................................................................8

Tables

Table 1 – Components of Climate Finance..................................................................................................4
Table 2 – Summary and Typology of key private actors in Belgium.............................................................7
Table 3 – Major public development actors in finance, export and investment and Main obstacles for small and medium enterprises to accede financing instruments..............................................10

Boxes

Box 1 - Remittances, an example of private sector financing from households...........................................9
Box 2 - Case of a major adaptation actor (mainly) from Belgium.................................................................11
Box 3 - Climate bonds: a promising, but underdeveloped tool......................................................................15
Box 4 - Pension funds in Belgium: far from its contribution potential..........................................................17
1. Introduction

How to deal with the financial challenges of post-2020 climate policy was one of the major features on which the 196 member states of the United Nations Framework Convention on Climate Change (UNFCCC) roughly agreed on in 2015 in Paris. Discussions on the role of private actors therein were also omnipresent in the other major international agreements.\(^1\)

This study starts from a crucial provision of the Paris Agreement (PA) in the realm of climate finance stipulating that it “aims to strengthen the global response to the threat of climate change, in the context of sustainable development and efforts to eradicate poverty, including by (...)\: Making finance flows consistent with a pathway towards low greenhouse gas emissions and climate-resilient development” (UNFCCC, 2015a, art. 2.1. (c)).

To deliver the international climate regime’s objectives will arguably require significant finance and investments with transformational impacts in developing countries. More importantly, a major shift in the way both governments and the private sector invest and direct this capital away from business-as-usual investments and towards alternatives that are ‘low-carbon’ as well as ‘climate-resilient’\(^2\) (UNCTAD, 2014; OECD, 2015a; IEA, 2015).

Therefore, this paper takes a broader international private climate finance (IPCF) perspective than the UNFCCC 100 billion USD goal – as it looks into private sources that are not necessarily publicly mobilised.\(^3\) Thus, this study assesses the current perceptions of various private players in the Belgian private sector: why (drivers and barriers) and how do they perceive to contribute in climate-relevant projects in developing countries?

The rest of the paper is organized as follows: Section 1 presents the research aims and the methodology used; Section 2 summarizes conceptual issues and considers available data; Section 3 summarizes the findings of the key private actors’ main motivations and barriers in Belgium for IPCF and how they perceive to contribute to it; Section 4 analyses the results before concluding with the final Section.

\(^1\) In 2015, related to climate finance as well, the global governmental development community also committed to the Sustainable Development Goals (United Nations, 2015a) - see esp. the “means of implementation”: p. 12 et seq., goal 7 (“energy4all”) and goal 13 (“climate change and its impacts”); the Financing for Development Agreements (United Nations 2015b) - see a.o. p. 17-26; and The Sendai Framework for Disaster Risk Reduction 2015–2030 (United Nations, 2015c) - see a.o. p. 15-16.

\(^2\) See the lexicon for a definition of ‘climate-resilient’.

\(^3\) See the lexicon for a definition of ‘mobilised’ climate finance.
Research questions, aims and methodology

To answer the question whether, why and which Belgian private actors perceive to contribute to international private climate finance (IPCF), thereby responding to ‘investment needs’ in developing countries, we proceeded to different sub-questions:

- What is international private climate finance (IPCF)?
- Who are the private actors (investors and/or financiers) and which are the sectors in Belgium?
- How do they perceive to contribute to IPCF?

This study aims to inform (Belgian) policymakers on the current and potential role of the private sector for both its contribution to the UNFCCC finance commitment of the 100 billion USD goal as to support developing countries on their ‘low carbon climate resilient development’ (LCCRD)4 pathway in general. The results may serve as an inspiring basis for policy recommendations Belgian development policy makers, especially as its ‘partner’ countries seek to implement the actions anticipated in the Nationally Determined Contributions (NDCs) under the Paris Agreement (PA).

The paper takes stock of where IPCF stands after the PA by looking from an actors-based perspective at the varied set of “private” climate-related and climate-specific activities (e.g. financing and investments) presently involved in Belgium.

In theory and often in practice, businesses proceed to a PESTLE-analysis to maximize opportunities and minimize risks. The acronym PESTLE stands for "Political, Economic, Social, Technological, Legal and Environmental" (Gupta, 2013). Hence, this research uses this concept both for theoretical background and for the questionnaire survey.

Methodologically, the study is developed through a combination of desk research, and literature review of key academic and public policy documents5, that were ‘tested’ through 54 (semi-structured) interviews of private stakeholders in Belgium (see list Annex 3). The actors-based business case approach leads to brief and illustrative sectoral cases, directed on infrastructure, waste, (waste)water, energy (technology), insurance and finance. Within these six sectors it was perceived that some pioneers are already undertaking climate-relevant initiatives, hence with information being more readily available.

However, as a preliminary study, it does not comprehensively cover all actors and sectors, but rather gives a partial and indicative overview. In addition, due to sensible commercial and confidentiality reasons, some respondents preferred to remain anonymous (as well as the organisation or enterprise they represent) or to answer orally (face-to-face or by phone) rather than providing a written response to the questionnaire.

---

4 See the lexicon (Annex 4) for the definition of ‘low carbon climate resilient development’.
5 Drawing on findings from several recently concluded studies of donor policies and practice and studies commissioned by Belgian public services: a.o. Vaes and Huyse (2015), Bécault, and Marx (2015), Bachus et al. (2015), and Van der Laan et al. (2015).
2. What is international (private) climate finance?

2.1. Choosing the Context: north-south climate-relevant finance

Before starting our analysis, some conceptual clarifications appear to be in order. There are different study levels of climate finance: from the narrow ‘UNFCCC 100 billion USD goal’ to ‘total or global climate finance’ and the broadest ‘shifting the trillions globally’ (Meltzer, 2016; see the lexicon in annex 4 for more extensive definitions).

The reiterated commitment by developed countries to publicly mobilise USD 100 billion per year by 2020\textsuperscript{6} (UNFCCC, 2015a, art. 9.1.; UNFCCC, 2015b, par. 54 and 115) to developing countries is only a relatively small part of what is needed in terms of finance from developed to developing countries for this transition towards a ‘climate-compatible development’ (OECD, 2015a). Therefore, this study takes a ‘third way’ (i.e. broader than the UNFCCC context, but narrower than total or global climate finance).

2.1.1. Working definitions of key concepts

This paper defines international private climate finance (IPCF) as “finance and investment by private actors in / from developed countries\textsuperscript{7} for activities in developing countries whose expected effect is to reduce net GHG emissions and/or to enhance resilience to the impacts of climate variability and the projected climate change.” (Gupta et al., 2014: 1238).

What applies to ‘private finance’ in a broad sense applies in principle, to the narrower concept of ‘international private climate finance’ (IPCF). As we define IPCF simply as private finance that enables investment in climate change related projects or activities in developing countries, then private climate finance “can take as many shapes and forms, and materialise in as many ways as private finance does in the broader sense” (UNEP, 2014: 62).

Table 1 below presents an overview of different definitions and sources of climate finance, with the second row being relevant for our analysis on private actors in Belgium.

\textsuperscript{6} Remind there is no internationally accepted definition neither methodology on what counts as international climate finance.

\textsuperscript{7} Usually defined as Annex II-countries of the UNFCCC plus voluntary members of the OECD Development Assistance Committee (UNFCCC, 2014). However, this official definition is clearly evolving in practice, as even before the Paris Agreement several ‘developing countries’ (or ‘emerging economies’), do not fit into these categories and become more prominent in the field of international climate finance. In 2015 China, for example, has promised around US$3 billion of finance for developing countries to cut carbon emissions and adapt to climate change.
Table 1. Components of Climate Finance

<table>
<thead>
<tr>
<th>Definition</th>
<th>Source</th>
<th>Public Finance (Bilateral, Public Financial Institutions, climate funds)</th>
<th>Private Finance Leveraged by Public Finance</th>
<th>Other Private finance</th>
</tr>
</thead>
<tbody>
<tr>
<td>UNFCCC climate finance 100 billion USD Per year by 2020</td>
<td>International climate finance from developed countries to developing countries</td>
<td>X</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>International private climate finance</td>
<td>International climate finance from developed countries to developing countries</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Total climate finance</td>
<td>International + domestic climate finance from developed &amp; developing countries</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
</tbody>
</table>

Source: Author, based on OECD (2015b) and Meltzer (2016).

2.1.2. Data uncertainty on private climate finance from Belgium

In general, in the global context, only very limited data are available on private climate finance flows from developed to developing countries (Buchner et al., 2015; OECD, 2015b)

This is equally true for the Belgian context: data issues render very difficult to show accurate amounts and shares per country and per sector. Until now there is no comprehensive mapping or database covering climate-related private flows to developing countries (Bachus et al., 2015). Existing tentative numbers come from two incomplete reports looking at publicly mobilised private climate finance, which is a too narrow focus for this paper (National Climate Commission, 2015; Van der Laan et al., 2015).

In the next section, we summarize our findings as to the the ‘opportunities’ (drivers) and challenges (barriers) perceived by Belgian private actors when investing in climate projects in developed countries. This is followed by the actual perceived role that the categorized private actors play in the realm of international private climate finance (IPCF). These conclusions are drawn from interviews and desk research (cf. methodology).

---

8 Van der Laan et al. (2015) concluded that the (main) Belgian climate finance providers mobilised 18.21 million EUR of private climate finance in 2013 and 2014. No data were available on private climate finance mobilised by Belgium through multilateral channels.
3. What are the perceptions of private actors on international climate finance?

3.1. General findings in Belgium on drivers and barriers

The Belgian private climate finance reality proved to be in accordance with theoretical financial insights, such as the classical PESTLE-analysis: climate-relevant finance operates as most forms of private finance, namely on a simple principle of balancing financial costs (risks) and financial returns (rewards).

In practice, the risk-reward paradigm depends on a broad range of factors – among which climate change itself - that determine financial decision-making, the nature and direction of flows. Similarly, climate and traditional investment decisions are intertwined. Scarce capital is allocated depending on the risks and return of different investment opportunities (see Annex 1).

3.1.1. Two main drivers

We identified two main drivers for private actors starting climate-relevant activities in the South. Notably, these drivers are applicable to both mitigation and adaptation actions:

1) Addressing global environmental challenges – and climate change (impacts) in particular – is increasingly being recognized as key to managing business and investment risks and ensuring survival and stable growth in times of changing climate. However, Belgian companies that do not have activities in developing countries and/or ‘climate change’ as their core-business are not eager at all to start climate-relevant business activities in developing countries.

2) Solving climate issues is in the business interest of companies by reducing costs and diversifying business and investment opportunities. Reducing resource use and measuring environmental performance is an opportunity to streamline operations, increase efficiency and competitiveness.\footnote{Illustrative are several smaller and bigger private climate finance actors seeking to form a multi-stakeholder platform (with a.o. academics from Vlerick management school) providing several strategic advantages, such as identifying common interests, knowledge sharing, pooling resources, partnerships, financing, ... Moreover, Corporate social responsibility and sustainable reporting trends are arguably signs of progress.}
3.1.2. Four main barriers

Four main barriers currently hinder Belgian private actors to start with or invest in attractive risk/return projects or funds:

1) Some mitigation and adaptation projects have a higher upfront cost and/or higher risks than their high carbon or non-climate proofed alternatives. Without extra support\(^\text{10}\), these mitigation and adaptation projects do not meet investors’ return expectations.

2) Policy incoherence (e.g. fossil fuel subsidies vs. climate policies), as well as from broader (non-climate) macroeconomic policies (e.g. rule of law, corruption, absorption capacity) in developing countries, especially Least Developed Countries (LDCs) and Highly Indebted Poor Income Countries (HIPICs).

3) While Belgian companies may have the means and already possess technological know-how or may readily achieve it to address considerable local challenges, many are not used to work abroad in developing countries and fear to encounter risks that are hard to manage.

4) Some mitigation and adaptation projects which have potentially attractive risk/return profiles, are inhibited because the necessary capital market and/or public risk mitigation instruments provided by Belgian DFIs are unavailable, insufficient or unknown.

3.2. Findings of Actors-based perceptions on their contribution to IPCF

In the second part of this research key Belgian actors were interviewed on how they actually perceive their contribution to international private climate finance (IPCF).

We found that in both mitigation and adaptation a wide range of private actors in Belgium – from households to small and large companies through the financial sector - already contribute with varying degrees to IPCF, thus ‘helping’ to address climate-related investment needs in developing countries.

To proceed with an actors-based approach, a typology of climate-relevant actors was developed drawn from Whitley et al. (2016), including eight categories: individuals and households; small and medium sized enterprises; large companies; companies and other private actors active on carbon markets; financial intermediaries; small financial institutions (microfinance and retail finance); major private institutional investors; NGOs, foundations and charities (Table 2).

\(^{10}\) For a thorough study with concrete policy measures for policymakers to speed up market enablers, including short-term and longer term measures, see, e.g. Kidney et al. (2013).
Table 2. Summary and typology of key private actors in Belgium, with indicative estimations drawn from literature and interviews on their perceptions of contributing to climate-relevant projects in developing countries, their access to public financial instruments, their willingness to invest in the South and the financial instruments used or provided.\footnote{Notwithstanding that comparing numbers of climate-relevant finance flows between categories would have been meaningful for policy makers, this is not feasible due to the lack of available climate-relevant investments data (private sector confidentiality), and outstanding methodological and definitional issues about the public vs. private nature of recipients (Jachnik and Raynaud, 2015).}

<table>
<thead>
<tr>
<th>Private actors/investors</th>
<th>Private means in climate-relevant projects</th>
<th>Access to Public financial instruments</th>
<th>Willingness to invest in the South</th>
<th>Instruments</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Individuals and Households</td>
<td>Yes (significant)</td>
<td>No</td>
<td>Yes (from low to very high)</td>
<td>-Provide: &quot;grant-like&quot; instruments (remittances); grants (philanthropy). -Use, a.o.: impacting financial services (banks, pension funds, e.g.).</td>
</tr>
<tr>
<td>2. Small and Medium-sized Enterprises (SMEs) – project developers</td>
<td>Yes (significant)</td>
<td>Yes (difficult)</td>
<td>Yes (high)</td>
<td>-Use: own revenues and/or products provided by (development) financial institutions: (concessional) loans, guarantees, private equity, venture capital, climate bonds and other risk-bearing mechanisms.</td>
</tr>
<tr>
<td>3. Large (non-financial) companies (national, MNCs and TNCs) – large project developers</td>
<td>Yes (very significant)</td>
<td>Yes\footnote{They represent the bulk of the EUR 18.21 million of mobilised private climate finance in 2013 and 2014 identified by Van der Laan et al. (2015).} (easy)</td>
<td>Yes (high)</td>
<td>-Some provide: financial services (business-to-business). -Use: invest own resources or access finance from below actors; Balance sheet or debt / equity finance from investors; public financial instruments.</td>
</tr>
<tr>
<td>4. Companies (and other private actors) active on carbon markets</td>
<td>Yes (significant - especially mitigation)</td>
<td>Yes (indirectly)</td>
<td>Yes (from low to high)</td>
<td>-Use and provide: producing or selling ecosystem or carbon credits (e.g. CDM-projects).</td>
</tr>
<tr>
<td>5. Small financial institutions (microfinance and retail finance) and impact investment managers</td>
<td>Yes (significant)</td>
<td>No</td>
<td>Yes (high)</td>
<td>-Provide, a.o.: debt (loans, subordinated loans and equity); Longer term capital with possible concessional terms; technical assistance. -Some use: public agencies.</td>
</tr>
<tr>
<td>6. Financial intermediaries (banks and insurance)</td>
<td>Yes (not significant)</td>
<td>No</td>
<td>-No (majority)</td>
<td>-Provide, a.o.: market rate debt (loans, equity, green or climate bonds). -Use, a.o.: saving accounts and private placements for debt instruments.</td>
</tr>
<tr>
<td>7. Institutional investors (pension funds, other pension assets, insurance companies,…)</td>
<td>Yes (not significant)</td>
<td>No</td>
<td>-No (majority) -insurance companies (low)</td>
<td>-Provide: -Corporate: equity, debt (bonds). -Project: equity (levered or unlevered --whole asset), debt. -Longer term capital with possible concessional terms.</td>
</tr>
<tr>
<td>8. NGOs, foundations and charities (Philanthropic financing initiatives)</td>
<td>Yes (significant)</td>
<td>Yes (Belgian NGOs)</td>
<td>Yes (very high)</td>
<td>-Provide: grants, capital grant to support concessional lending programs. -Use sometimes: public funds.</td>
</tr>
</tbody>
</table>

4. Analysis of the results

As shown in figure 1 below, certain enterprises provide the source of the investment capital in the first place at the financial supply side. They include household savings, as well as major institutional investors such as pension funds, insurance companies, businesses (both domestic and international, large and small in all sectors), private finance institutions, private carbon funds, and philanthropic actors.

At the demand side, Belgian enterprises (e.g. SMEs, project developers, Corporations) demand finance to public and/or private financiers. By doing so, if the project gets financing, they respond to the climate-related investment needs in developing countries.

Figure 1. Private Climate Finance, an actors-based perspective.

Source: adapted by author from Druce et al. (2016).

Notwithstanding the fact that in all cases (except households’ remittances and philanthropic investors) the upstream “investors” will usually expect a financial return — a profit -, other ethical criteria may account alongside profit. Yet, the investors’ interest in how the (climate-compatible) profit is generated — and whether the recipient’s climate-related objectives are achieved — will depend on the context (Atteridge, 2015). These factors will determine the ‘climate-relevance’ to a high degree.

Below we discuss the main findings per category of private actors identified in our typology as actually and potentially playing a role in climate-relevant projects.
4.1. Individuals and households

Individuals and households are likely to contribute significantly to IPCF mainly through their financial behaviour. For example, individuals and households invest in cooperative financing via (climate) impact investment funds (such as Alterfin or Incofin); co-operative company with limited liability (such as Oikocredit, and ‘pure’ renewable energy cooperatives such as Ecopower) by buying shares; in crowdfunding platforms; donations to development NGOs and/or charity funds focused on (ad-hoc) climate-relevant projects in developing countries; through the sending of remittances to their countries of origin (see Box 1).

This indicates a certain willingness from a segment of the Belgian population to somehow participate in tackling climate challenges in the South.

| Box 1. Remittances, an example of private sector financing from households |
| Remittances may have valuable unintended impacts from an adaptation-perspective to climate change. They reach households directly, including those in remote and vulnerable areas, more so than public finance flows (Banerjee, 2011; Bendandi and Pauw, 2016).

The most extreme estimate comes from the World Bank (2016): 4.5 billion EUR remittances from Belgium. This represent *grosso modo* a twofold of the Belgian net ODA for 2015. Yet, it is still unknown how much is dedicated to climate-relevant spending. An innovative way to leverage more remittances would be to start collaborations between (public or private) microfinance institutions (MFI) and private transfer agencies (Western Union, MoneyGram, …). Finally, the transaction costs for money transfers - now 8.22 % on average from Belgium to the DR Congo, for example (World Bank, 2016b) - could be lowered (to less than 3%, UN SDG target 10 c15) by public authorities through regulation. |

4.2. Small and medium-sized enterprises (SMEs)

In Belgium, most climate-relevant SMEs focus on renewable energy (RE) technology as their core-business (Agoria, 2016).

While there are certainly a number of companies with ‘climate-specific’ projects in the pipeline to invest in the South, it remains a minority. Only few of these Belgian SMEs effectively manage to start a project in the South, mostly in the renewables sector. They are not so much refrained by a lack of willingness, but rather held back due to a lack of finance access. Indeed, SMEs encounter a paradox: on the one hand, there seems to be an initial financing issue for small-sized project developers (under 150.000 EUR), while on the other hand finance actors argue that finding well-developed projects eligible for financing (so-called ‘bankable’ projects) is difficult, but that investment capital is available (based on interviews, 2016).

---

13 Individuals are defined as family-level economic entities, high-net-worth individuals, i.e. individuals with considerable capital to invest, and their intermediaries, e.g. family offices investing on their behalf.

14 However, this World Bank number takes into account the salaries of the EU officials, which renders every comparison impossible.

15 Goal 10 c of the UN SDG, 2015 states: “By 2030, reduce to less than 3% the transaction costs of migrant remittances and eliminate remittance corridors with costs higher than 5%”.
Small-sized projects, mostly relying on small FIs and impact funds and in need of innovative financing instruments\(^\text{16}\), seem to find more finance barriers than large-sized projects. While new “concept proven solutions” are available, they do not find the way to financing. This is attributable to some major bottlenecks: financing requires low risk, proven technology; higher perceived risks, administrative and transaction costs (particularly due diligence studies), while not benefiting of economies of scale. Yet, large projects with ‘big tickets’ are difficult to develop at the ‘base of pyramid’ (based on interviews, 2016).

Surprisingly, while Belgian Development Finance Institutions (DFIs), such as BIO, Delcredere-Cucroire and Finexpo, formally dedicate special attention to SMEs, their services are perceived as difficult to access. Especially their specific conditions represent obstacles for smaller project developers, and constraints for medium-sized projects (e.g. 5-10 Megawatt, 10 million EUR), as shown in Table 3.

**Table 3.** Major public development actors in finance, export and investment\(^\text{17}\) and main obstacles for SMEs to accede the financing instruments.

<table>
<thead>
<tr>
<th>Main public actors</th>
<th>Purpose of the agency and climate objectives</th>
<th>Obstacles for SMEs</th>
</tr>
</thead>
</table>
| **Belgian Investment Company for Developing countries (BIO)** | -Provide long-term financial products generally unavailable or inaccessible on the local markets;  
-Support a strong private sector in developing and/or emerging countries, to enable them to gain access to growth and sustainable development with the aim to achieving Sustainable Development Goals (SDGs);  
-**No specific climate change objectives** or mandate to address climate change in the projects. | -Due to commercial logic, SMEs face obstacle of 1 million EUR minimal capital required by BIO for the project;  
-Focus on SMEs in developing countries (partially directly, and indirectly financed through microfinancing/funds and financial institutions - Microfinance Investment Fund (MFIF))\(^\text{18}\).  
-Legal restrictions to access funds for Belgian SMEs (tied aid forbidden by Belgian Law on development cooperation of 2013). |
| **Delcredere-Ducroire**                          | -Belgium's public credit insurer, covering companies and banks against political and commercial risks relating to international commercial transactions;  
-Commercial objective and stable financial returns (in compliance with WTO regulations);  
-Recent special team for SMEs;                                                                                     | -**Case-by-case** selection and attribution of export credits, depending a.o. on technical expertise, the buyer, the country, the equipment and proven capacity of insured company;  
-Ensures balance between risk and premium (**no loss-making**, but no profit target); |

\(^\text{16}\) Therefore, in early 2017 Oikocredit launched with small project developers an initiative facilitated by The Shift for a dedicated fund (the AREA Fund) – likely with public intervention - that could provide the necessary financing to companies to realise the “breakthrough” project that opens access to regular financing.

\(^\text{17}\) Belgium has other regional agencies playing a supporting role companies in developing countries (mostly for all sectors, but without specific climate objectives). Companies based in Flanders could get support from: Flanders Investment and Trade (FIT) and FINMIX (min. 150,000 EUR capital needs for project), Participatiefonds Vlaanderen (PFV) and Participatiemaatschappij Vlaanderen (PMV); in the Walloon (and Brussels) Region: Wallonia Foreign Trade and Investment Agency (AWEX) and Sofinex; in the Brussels Region: Brussels Invest & Export (B-I&E).

\(^\text{18}\) See BIO’s investment strategy 2015 – 2018 in line with the Management Contract signed with the Belgian State in April 2014.
<table>
<thead>
<tr>
<th><strong>Belgian Investment Company (BMI-SBI)</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>- Public limited company (64% state-owned and 34% by banking institutions and private companies)</td>
</tr>
<tr>
<td>Provide medium or long-term co-finance arrangements for investments abroad by Belgian companies;</td>
</tr>
<tr>
<td>- Specific aim to support Belgian SMEs abroad by providing medium or long term co-finance;</td>
</tr>
<tr>
<td>- Respecting the principle of sustainable development and social corporate responsibility.</td>
</tr>
<tr>
<td><strong>No specific climate objectives.</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>Finexpo</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>- Inter-Ministerial advisory committee run by Foreign affairs and Finance Department responsible for examining applications for export support funding. It aims, a.o. to:</td>
</tr>
<tr>
<td>• Offer Belgian companies appealing and competitive financing (esp. for credits granted for the supply of equipment and services) when negotiating a contract and competing with companies from other countries;</td>
</tr>
<tr>
<td>• Allow Belgian companies to conduct projects in developing countries by reducing or stabilising the funding cost linked to export credit;</td>
</tr>
<tr>
<td>- Special attention to SMEs;</td>
</tr>
<tr>
<td><strong>No specific climate objectives.</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>Finexpo</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>- Repayment term is set on a case-by-case basis, when granting discounted interest;</td>
</tr>
<tr>
<td>- Limited budget for loans instrument: projects are approved on a first come first served principle (appr. 5 projects approved per year).</td>
</tr>
<tr>
<td>- Transaction costs (due diligence costs and yearly monitoring reports), although no minimal capital threshold;</td>
</tr>
<tr>
<td>- No state-to-state loans applicable for SMEs in practice (tied aid programme with only few countries eligible: the terms aim for bigger infrastructure projects; demonstrably commercially unviable, max. 10 million EUR for tied aid and max. 20 million EUR for untied aid, priority of the country receiving the goods and services, sufficient level of interest for Belgium, at least 50% of the added value of the investment originates from Belgium (goods or services), while some project developers may have materials from abroad (e.g. solar panels made in China).</td>
</tr>
</tbody>
</table>

**Source:** Author, based on officers’ interviews, interviews of three SME-employees, official documents and official websites.¹⁹

¹⁹ Information retrieved from websites: Delcredere-Ducroire (2016); Finexpo (2016); and BIO (2016).
4.3. Large companies

Large companies (i.e. national, MNCs and TNCs) receive preferential treatment, quantity discounts, can submit proposals for investment funds and other perks that size provides. This is probably due to their potential to finance projects, develop technologies and innovative solutions, and enhance the scale and cost-effectiveness of certain climate measures (Averchenkova et al., 2015; Gardiner et al., 2016; based on interviews, 2016).

Although financial access does not appear so much as a major issue for large Belgian companies – from both mitigation and adaptation sectors (see table Annex 2) - do still solicit public support. Besides mitigating the risks, the Belgian DFIs are considered particularly useful in the context of the strong international competition to win public and private markets. Yet, even with these available public and private instruments, not all climate-relevant larger companies are willing to take the ‘South step’ (based on interviews, 2016).

Investments in adaptation (projects and funds) may also be attractive for private investors, similarly to or even more than investments in private mitigation projects. Though these latter are more often described in literature as ‘stronger business cases’. For example, in several ‘adaptation sectors’, some Belgian companies possess a strong - and globally recognized – expertise, such as Jan De Nul Group and DEME Group. Consequently, bright perspectives and funding are likely for Belgian enterprises in these promising sectors, namely: waste, (waste)water (management), and water related infrastructure.

**Box 2. Case of a major adaptation actor (mainly) from Belgium**

**DEME’s Export and Project Finance department** assembles tailor-made financing packages and negotiates these packages with potential investors, financial institutions and authorities. These structures offer financing possibilities to clients (i.e. a company or public authority) in emerging markets, that may not have the capability to arrange a similar financing solution locally, especially with regard to the credit cost, credit tenor or credit amount. For that purpose, DEME collaborates with Delcredere-Ducoire, the Belgian Export Credit Agency (provides export credit Insurance) and Finexpo (which usually provides interest rate subsidies), the Inter Ministerial Committee for Financial Support of Belgian Export. DEME works closely with these organisations, as well as with a pool of international banks.

Whereas DEME’s financing packages are fully compliant with the OECD regulations (considering economic, environmental and social sustainability) by using ISO 14001 standards, Chinese (state-owned) companies do not have these obligations and have different strategies to gain markets.

Moreover, the above mentioned (public-) private financing services mostly do not apply to lower income developing countries and LDCs (due to higher risks). Highly-Indebted Poor Countries (HIPICs), are utterly difficult countries to finance projects in, because of World Bank restrictions in terms of borrowing. To address this, DEME proposes that Delcredere-Ducoire would increase its ‘risk acceptance’-level by creating a small part of the envelope (e.g. 1/4 of Delcredere-Ducoire’s budget) for risk capital (so-called ‘venture capital’) when it concerns 100% climate-specific projects (based on interviews, 2016).

Finally, some self-financed projects in LDCs are ‘turn-key’ private initiatives (best practice showcases readily delivered from A to Z), illustrating the bottlenecks for international private climate finance (and engagement)\(^{20}\).

---

\(^{20}\) See for example the coastal shores protection project (with alleged positive impact on local biodiversity) in Ghana, that started in 2014 in collaboration with Delcredere-Ducoire and Finexpo (DEME, 2014).
4.4. Companies (and other private actors) active on the carbon markets

Companies – and other private actors such as NGOs, use carbon offset finance\(^{21}\) (and Private Sector Carbon Funds\(^{22}\)) to finance climate-specific projects that contribute to IPCF.

Based on different types of private actors which can be involved in purchasing carbon credits (Alberola and Stephan, 2010), we discuss briefly, from their perspectives, the carbon market’s contribution to IPCF\(^{23}\):

4.4.1. Companies that are subject to national emission reduction requirements (EU ETS)

Virtually all Belgian companies\(^{24}\) active in the mandatory EU Emissions Trading Scheme (EU ETS) in one of the 17 industrial activities participate to finance CDM\(^{25}\) projects in developing countries (Stephan et al., 2014).

While recent data are not available\(^{26}\), for the period 2009-2012 Belgian companies bought for around 80 million EUR carbon credits (CERs) on the secondary market in this period.\(^{27}\)

Not surprisingly, as the private actors seek to compensate carbon emissions through project mechanisms, there appears to be an imbalance between frequent mitigation projects - mostly in Asian emerging countries - and rare adaptation projects (Doda et al., 2015, confirmed by interviews, 2016).

Concerning the carbon offset projects (CDM-projects) in developing, the actual perspectives to finance projects with carbon credits in developing countries are grim since 2012. Besides normative and ethical questions, the very low carbon price raises questions concerning future prospects. With too low emissions caps, and too low global carbon prices, business sectors in the ETS demand a global level-playing field\(^{28}\),

---

\(^{21}\) See the lexicon for a definition of Carbon Offset Finance.

\(^{22}\) Key private carbon funds include the European Carbon Fund (ECF), the Climate Change Capital Carbon Fund, the Luso Carbon Fund, C-Quest Capital, the Asia Carbon Group and the Asian Carbon Exchange, and the Carbon Credit Capital (Marx and Bécault, 2015)

\(^{23}\) International climate finance under the UNFCCC and emissions trading should not be confused. Yet, dealing with international private climate finance, we allow to involve private carbon offsetting, while keeping the risks of double counting by public authorities in mind.

\(^{24}\) Finding the exact number of companies is difficult, as the EU ETS functions with ‘installations’: 268 Belgian EU ETS installations received allowances in 2011 (Brohé and Burniaux, 2016).

\(^{25}\) CDM allows for emissions reduction projects to be implemented in developing countries, but carbon offset prices still vary widely due to a multitude of factors like location and project type.

\(^{26}\) The only data available are for the period 2009-2012. Like other carbon units CERs trade both in a primary and a secondary market.

\(^{27}\) On the primary market (initial transactions from project developers to first buyers), we do not know the amount that has been sold. On the secondary market (subsequent transactions - exchange trading and bilateral trading- mainly for compliance use in the EU ETS), Belgian companies bought for 78,788.055.5 million EUR carbon credits (CERs) in this period (author’s calculation).

\(^{28}\) Implying, a.o. free emission allowances which reduce the financing of CDM-projects on the one hand, and ‘carbon leakage’ compensations with the revenues from the auctioning of allowances rather than international climate finance, on the other hand.
ensuring “competitiveness, clarity and stability” to their businesses in the European Union. (Business Europe, 2015; completed with interviews, 2016).

Whereas the Paris climate Agreement did establish in its article 6 the “internationally transferred mitigation outcomes” (ITMO) for a potential new global carbon market, it did not mention directly the CDM, and effectively postponed revision.

However, it seems unlikely CDM will re-emerge under the same shape as it has been widely criticized by academics arguing the EU ETS is “structurally flawed, breathing on intensive care with effort spent on life-extension” (Verbruggen, 2014: 12; Pearse and Böhm, 2014) taking a similar stance as civil society in Belgium (a.o. 11.11.11, 2013) and abroad (a.o. Friends of The Earth, 2012; Carbon Market Watch, 2016).

The main problem is that many ‘business cases’ are only profitable with a continuous subsidy support and are unable to sustain themselves without subsidies even after a transition period.

4.4.2. Voluntary market private actors

An estimated 100-150 private actors – from large companies and SMEs to NGOs and individuals - in Belgium seek to voluntarily offset their carbon emissions with ‘green’ corporate social responsibility (CSR) engagement in mind (based on interviews, 2016).

Even without any public incentive in Belgium, the last couple of years there seems to be a small, but increasing trend in the voluntary market in Belgium, which is now estimated between 1 and 2 million EUR, particularly in the higher-quality voluntary market segment. This can be explained by multiple factors: the strongly reduced EU ETS-CDM funding since 2012, the Paris Agreement with consequent expectations of higher carbon pricing, the implementation of UN SDGs, corporations taking proactive steps to reduce emissions ahead of expected regulations, more confidence and mimetic in certain sectors, ‘green’ image for less value and ‘window-dressing’ possibilities, … (based on interviews, 2016)

While most Belgian private actors buy carbon offsets for carbon neutrality purposes (e.g. by following the ISO 14064 norm), others take a more holistic approach, including possibilities to turn the carbon credits into alternative finance sources. Indeed, being less carbon-centric, and more diversified attracts new finance into the voluntary carbon markets, as countries and companies use them increasingly to show their commitment to the SDGs. As there is way to capitalize on the co-benefits of carbon offset projects, some standards (e.g. Gold Standard 3.0) have started developing metrics to measure non-carbon benefits (e.g. cookstove projects increasing health, education time, job creation, …) (Goldstein, 2016; complemented by interviews, 2016).

29 Interviews with policy officers from Essencia (Belgian sector association of petro-chemistry and life sciences) and FEB-VBO (Belgian business employer’s association), in line with Business Europe’s position papers before COP 21.
30 Such as the Food and Beverage sector, especially the coffee sector, supermarkets, …
31 The Gold Standard 3.0 is recent evidence of this holistic approach. The standard strives to address climate and development together and specifically mentions tackling the nexus that links climate, energy, food and water.
4.4.3. Financial investors that may purchase emission allowances in the hope of realizing a capital gain

Although theoretically possible and previously feasible\(^{32}\), since the economic crisis and the tremendous low price for EU carbon credits (CERs and ERUs\(^{33}\)) on the European carbon market, there seems insufficient financial and economic incentives for private project developers and financiers to invest in carbon offset commodities (Brohé and Burniaux, 2016). Therefore, a steady move towards the voluntary markets for investments in climate projects in developing countries seems a plausible scenario (based on interview, 2016).

4.5. Financial intermediaries (banks and insurance companies)

Among the more than 200 Belgian financial institutions\(^{34}\), such as banks and insurers, most seem only willing to avail a very limited amount of their capital (‘credit lines’) assets to climate-relevant sectors and actors. This is mainly due to the risks associated with both ‘developing countries’ and ‘climate-relevant investments’, as well as due the credit crisis that started in 2007-2008 and the consequent regulatory measures which reduced the liquidity of debt markets.

Our findings fit unsurprisingly well with Laasch and Conway’s (2014: 492) six paradigms that are deeply built into the DNA of finance – into the concepts and structures of financial management and into the minds of financial managers, i.e. profit, growth, short-run, money superiority (compared to other values), primacy of shareholders, supremacy of positive internalities (i.e increased shareholder value and profit generation) versus negative externalities (i.e external costs).

4.5.1. Banks

While we noted a scarcity of ‘climate’ funds, most banks recognize that there is still room for improvement, especially towards specifically dedicated climate finance in developing countries (based on interviews, 2016). As for now, we did not identify any Belgian bank that specifically focuses its business on IPCF.

However, besides relatively marginal climate-relevant ‘charity’ or ‘CSR’ initiatives in collaboration with NGOs and ‘solidarity awards’, some banks co-finance (indirectly) private climate-relevant projects, mostly as shareholders or through specialised micro-financing institutions.

Strictly given, most of the Belgian banks, including the ‘big four’ holding around 90 % of the households’ savings in Belgium (ING Belgium, Belfius, KBC, BNP Paribas Fortis\(^{35}\)) focus on the domestic market, but

---

\(^{32}\) For example, the now closed carbon desk of BNP Paribas launched in 2006.

\(^{33}\) The acronym ‘CERs’ stands for Certified Emissions Reductions; ‘ERUs’ stand for Emissions Reduction Units.

\(^{34}\) There are 27 banks, 6 savings banks, 2 investment securities banks, active in Belgium operating under Belgian law, 8 branches in Belgium of credit institutions governed by the law of a non-Member State of the European Economic Area, 73 certified insurance companies, and around 200 subscribed private pension funds (see the websites of the NBB and the FSMA).

\(^{35}\) Legally, among these only KBC and Belfius are 100 % ‘Belgian’ legal entities.
participate through other international financial institutions via SICAVs\textsuperscript{36} and (climate-relevant) investment funds. These funds may be set up by development banks to pool capital for climate-purposes\textsuperscript{37}.

Nevertheless, issues remain as to the transparency and social and environmental integrity of many (uncertified) international private climate funds: besides some optional rating agencies, no mandatory criteria exist for the selection of companies (by the banks using the funds to invest in companies) with a questionable track record. Neither do there exist reporting obligations on this matter to their supervisory bodies, i.e. the National Bank of Belgium (NBB) and the Financial Services and Markets Authority (FSMA) (confirmed by interview, 2016). Therefore, a preferably international legislative framework to prevent ‘climate swindles’ and reinforce trust in and effectiveness of private climate funds is a pre-requisite.

We focused on the private issuance of certified climate bonds which appear promising tools that still lack attention from policy makers (Box 3).

\textsuperscript{36} SICAV is an acronym in French for société d’investissement à capital variable, which can be translated as ‘investment company with variable capital’.

\textsuperscript{37} For example, in this recent adaptation-relevant project in Ghana, several Belgian banks and Delcredere-Ducroire were involved: http://www.txfnews.com/News/Article/5407/Bank-club-signs-ONDD-backed-Ghana-port-deal.
Climate bonds\textsuperscript{38} and climate impact bonds (labelled and unlabelled) appear major instruments for international (private) climate finance for both mitigation and adaptation (UNEP, 2016). They can raise capital for either private or public expenditure, nationally or internationally depending on who issues the bonds in the market (development or commercial banks, governments, companies, ...).\textsuperscript{39} Private placement, the sale or issuance of a (climate) bond or other security directly to a limited number of investors, appear to be underdeveloped market tools in Europe, including in Belgium (CBI, 2016).

Indeed, there seems to be a significant potential for low-carbon investment, as a large number of SMEs find it hard to secure bank finance. The alternative of public bond issuance is closed to SMEs as a result of their size: they are simply not big enough to justify the expense of securing a formal credit rating. This is probably a consequence of institutional investors’ low risk-return profiles dominating the bond markets, as well as related to the impact of the past financial crisis.\textsuperscript{40}

Far from the Chinese figures\textsuperscript{41}, in Belgium, we identified the Green Growth Bond issued by the World Bank in which Belgian investors can invest since 2014.\textsuperscript{42} Still, no ‘pure’ Belgian climate bonds were issued by one of the Belgian governments or companies designed for climate-specific projects in developing countries.

Until now there is no standardized approach for the issuance of a climate bond. In order to reduce the perceived risk and increase investors’ demand for climate bonds when low-rated issuers enter the market, governments could put in place policies to strengthen existing voluntary efforts.\textsuperscript{43} Several voluntary frameworks help corporate issuers to figure out whether they are fit to issue climate (or green) bonds. The Green Bond Principles and the Climate Bond Initiative\textsuperscript{44} – two of the most popular among global investors – have not yet really taken off in Belgium (based on interviews, 2016).

\begin{itemize}
\item \textsuperscript{38} Climate bonds with specific purposes have been developed, such as climate resilience bonds (business in adaptation), catastrophe bonds (mostly used by the insurance companies). See the lexicon for a definition.
\item \textsuperscript{39} Initially, supra-nationals and development banks have been the main issuers, but recently more and more local and regional governments, companies and commercial banks have found their way to the impact bond market (Triodos, 2016).
\item \textsuperscript{40} In 2015 Aquafin was the first Flemish company to issue a green bond in Belgium (Maes and Declercq, 2015). However, the revenues of the Green Bond are used only for investments in projects related to Aquafin’s missions for the Flemish Region with environmental objectives (not climate change).
\item \textsuperscript{41} Shilling, H. (2016), “China Bonds Drive Q1 Issuance Record; Global Market Set for New Full-Year High”, Moody’s Investors Group, Global Credit Research, 20 April 2016.
\item \textsuperscript{42} For more information, see: http://forumethibel.org/content/wereldbank_verkoopt_groene_obligatie_aan_belgische_beleggers.html
\item \textsuperscript{43} See, for example: https://www.climatebonds.net/policy/policy-areas
\item \textsuperscript{44} See the websites of the Green Bond Principles (2016) and the Climate Bond Initiative (2016).
\end{itemize}
4.5.2. Insurance companies

Through underwriting economic activity and insurable interests, insurance companies help manage climate risk (transfers to all other sectors of the economy) and the risks associated with the transition to a low-carbon economy (Schanz and Wang, 2014).

There could be various public-private prospects to fill the ‘protection gap’ left by the emerging ‘Loss and Damage Framework’ included in the Paris Agreement (UNFCCC, 2015: article 8; Huq and De Souza, 2016). Nevertheless, Belgian private (integrated bank-) insurance companies do not appear very interested in covering losses incurred by households and business due to climate events in developing countries, as none does consider it as its core-business. Neither do most seem to specialise in insurance products for climate-relevant projects in developing countries, hence leaving these tasks principally to the public credit insurance agency Delcredere-Ducroire (based on interviews, 2016).

4.6. Small financial institutions and impact investment managers

Belgian small credit providers (e.g. Oikocredit Belgium, Alterfin and Incofin) have similar policies concerning private climate-relevant investments. They provide loans, equity, development funds to investors and sometimes technical assistance to their partners in the south and in the north.

Paradoxically, Belgian (small) credit finance institutions find it difficult to find bankable projects, while we found above that small project developers find it difficult to find financiers.

First, they mostly do not concentrate primarily on climate change as their core-business, but seem to increasingly consider this in their portfolios. Especially credits allowed to renewable energy projects started to merit attention with dedicated renewable energy targets of the total portfolio (e.g. 20 % for Oikocredit Belgium). Hence, Oikocredit Belgium, an international cooperative, is now labelling their renewable energy projects as specific climate projects.

The other two Belgian actors (Alterfin and Incofin) do not have climate-specific targets, neither do they label them. This is because projects remain rather financed on an ad-hoc basis (e.g. reforestation by a supported cooperative), indirectly linked to climate change (if locally supported MFIs have clients dealing with climate change impacts, ...) and adaptation-related (e.g. increasing resilience in agriculture, ...).

---

45 In April 2016, a global “Insurance Development Forum” has been established by the UN, the World Bank Group and the private insurance sector.
46 For example, while multinational export credit insurance companies Coface, Atradius or Euler Hermes (representing approximatively 90 % of the Belgian export credit insurance market in Belgium) do take climate risk into account when insuring export credits, they do not offer spontaneously climate-specific insurance schemes. This service could be provided on demand, though.
47 Microfinance institutions and retail finance institutions. These latter relate to the sale of securities to individual investors rather than institutional investors or broker-dealers.
48 They manage funds with capital coming from individual and professional investors that invest in companies and projects with social and environmental objectives.
Second, their minimal loan amounts appear to be a real barrier for Belgian SMEs willing to engage in climate-relevant projects, especially in adaptation.49

An advanced solution by credit providers to tackle the lack of ‘bankability issue’ of smaller projects would be to pool the financing in order to spreading the risk. In other words, package different small projects as one bigger project via an (institutional) investment fund. Thus, the total amount of the project would be much higher and the risks would be spread, hence attracting bigger financiers. For example, Oikocredit Belgium may finance smaller projects (e.g. 200.000 EUR), when it is part of a bigger project (e.g. 1.000.000 EUR) that would be co-financed by Triodos (NL)50 or by BIO (Belgian Investment Company for Developing countries) through a fund (based on interviews, 2016).

4.7. Major private institutional investors

Major institutional investors include pension funds, other pension assets, insurance companies (asset management), sovereign wealth funds, foundations and endowments and institutional investment managers (Kaminker and Stewart 2012; Nelson and Pierpont, 2013). They account for a large share of the capital pools and several global studies showed their huge contributing potential to finance climate projects (e.g. ITUC-CSI, 2012; Kidney et al., 2013; UN, 2015d, CPI, 2015).51

Yet, their actual investments from Belgium in climate-relevant projects in developing countries appear extremely limited, and are still (see Claeyse et al., 2008; Van Liedekerke, 2004) showing little appetite despite recent ‘divestment’ pressure from Belgian civil society (see the case of pension funds in box 4).

Although no specific numbers in this specific realm exist, using the concept of ‘Corporate Social Responsibility’ (CSR) provides an idea of their share of investments going to climate projects in the South, as it represents only a fraction of the Belgian CSR investments. These latter net assets of 126 collective investment institutions amounted to 5,57 billion EUR, representing 3.2% of the total market of collective investments in Belgium (BEAMA, 2016).52 Indeed, IPCF probably comes down to an (almost) insignificant share of total capital, but likely still represents some millions as the ‘CSR capital’ is still relatively massive.

---

49 They consider minimal loans ranging from 120,000 EUR to 5,000,000 EUR (or local equivalent), and the gross loan portfolio of the beneficiary should be at least 500,000 USD (e.g. Oikocredit Belgium, and Alterfin).

50 Note that Triodos’ climate-relevant funds, such as its Microfinance Fund, operate from the Netherlands and is not linked with the Belgian branch of Triodos Bank.

51 Although globally institutional investors account for the largest share of the capital pools - with approximately 92.6 trillion USD in assets under management -, their investments in renewable energy infrastructure projects were limited to 0.3 % (Buchner at al., 2013) with the vast majority being invested in developed countries (OECD, 2015c); Globally, pension funds’ net contribution to financing of climate change projects - among which in developing countries - could potentially reach 3.7 trillion USD for 2013-2030 and 5.9 trillion USD for 2013-2050 (ITUC-CSI, 2012).

52 Only 5 percent of the assets under management carry the “CSR – stamp”. For the methodology and definition used for “CSR investments”, see http://www.beama.be/nl/duurzame-icbs/definitie-en-methodologie-dmvi
4.8. NGOs, foundations and charities

Philanthropic financing initiatives result from companies applying corporate social responsibility (CSR), private foundations, business-related foundations and major environmental NGOs. Philanthropy can play an important leveraging role in financing innovative and riskier projects than the private sector would—while engaging in multi-stakeholder partnerships. Financial resources from philanthropy can be used more flexibly than commercial investment since no profitable returns are required (OECD, 2015d).

Concerning publicly mobilized private finance, Belgian public authorities intended starting in 2016 a data collection exercise (Van der Laan et al., 2015).53

A fortiori, no detailed information is available on the private climate-relevant financial flows of donations (grants) provided by NGOs (which may also work with private for profit sector) and private concessional business initiatives, such as “Corporate Social Responsibility”-programs and foundations. Neither does that information exist on the modalities of these latter flows (e.g. recipients, purposes of the projects financed)(Peters-Stanly and Gonzalez, 2014; Bachus et al., 2015).54

Yet, we identified certain trends regarding private foundations and development NGOs respectively.

---

53Note that the federal government (i.e. DGD) uses OECD-DAC Rio Markers, but with its own specific methodology with varying weighing factors, different from the other regional entities. For explanation on DGD’s methodology, see: Van der Laan et al. (2015: p. 47).

54 This is because data reporting on private grants by NGOs and companies is voluntary and therefore only partially covered in the OECD-DAC database, such as the purchases of voluntary carbon offsets.
First, while Belgian private foundations mostly focus on supporting their own or external environmental initiatives, some specifically target climate change. Notably, ‘unbankable’ adaptation projects are typically chosen as philanthropic initiatives, as the needs and results are very tangible (based on interviews, 2016).

Second, some of Belgian CSOs55, and particularly development NGOs are increasingly willing to specifically engage in the South with ‘climate-related’ and/or ‘climate-specific’ labelled projects56. Besides growing demand from their target groups in the South, this trend could also be understood as an echo of the Belgian priorities regarding international cooperation policies (UNFCCC, Agenda 2030): environmental issues - including climate change – have become a transversal theme within Belgian development policies and thus integrated in the NGO-programmes. Climate aspects are thus considered increasingly important for NGOs willing to access crucial public funding to show their ‘fitness for purpose’ (based on interviews, 2016)57. The vast majority of development NGO-projects are now labeled as ‘adaptation’ or ‘cross-cutting’, thus going against the international trend of the adaptation finance gap (Government of Belgium, 2015; UNEP, 2016). Critically, while climate change is one among other causes of desertification, projects combatting ‘desertification’ are now labelled as ‘adaptation-specific’58 (based on interviews, 2017).

55In 2015, the total share of Belgian CSOs (including labour unions, health insurance funds, interuniversity education VLIR/ARES, VVOB/AFEPE, ITG, ...) in Belgian ODA amounted to 20%. This number was received from Belgian DGD administration, as it had not yet been published in the year report of 2016.
56 ‘Climate-related’ meaning to have a ‘significant’ climate objective (Rio marker 1) and ‘climate-specific’ meaning to consider climate issues a ‘principal’ objective (Rio marker 2) (OECD, 2011).
57 Most Belgian development NGOs rely on public funding, with on average 15 -20 % own funding (20 % needed for DGD, but 10% or even 0% required by other institutional financiers).
58 For example, water and soil conservation projects or emergency projects after climate-induced natural disasters.
5. Conclusion

As climate change impacts increase constantly, so do climate-related ‘investment needs’ in developing countries. Therefore, we assessed the perceptions of the Belgian private actors in their contribution to international private climate finance (IPCF).

From our analysis of the non-profit sector, individuals and households, NGOs, foundations and charities are flexible actors increasingly contributing and willing to tackle climate issues in the South through a wide range of means. Yet, their financial contribution potential is still far from reached.

Concerning the for-profit sector, a general trend became apparent: key actors from across different climate-relevant sectors in Belgium are recognizing the transition to a climate-compatible development in developing countries as providing business opportunities, but also as entailing more risks.

Some findings were not completely in line with our hypotheses drawn from literature arguing that adaptation projects would lack access to finance due to a dearth of business cases, while the opposite would be true for mitigation projects. Besides the profitability rate, a main determinant appeared to be the size: both investments in major adaptation (projects and funds) – often via public markets – and in major mitigation projects in the South may be attractive business cases for private investors. Thus, smaller-scale mitigation projects (e.g. off-grid projects in LDCs) face financing obstacles, while large adaptation projects face bright perspectives.

While small project developers consider it difficult to find financiers, credit providers find it difficult to find ‘bankable’ climate-relevant projects. The reasons are that bigger companies represent ‘big tickets’ and show up with track records and proven solutions. Furthermore, they have less transaction costs, have easier access to public markets, and public-private partnerships. Hence, they find their way more easily to both public support from public DFI agencies and private financial institutions.

Moreover, major private financial institutions, such as banks, seem willing to avail a very limited amount of their capital assets to Belgian climate-relevant actors which are SMEs or not stock market listed. Hence, long-term investments in the real economy and thus ‘real projects’ are hindered by the ‘financialization’ of the economy favoring shareholders’ short-term profits. This mismatch between unrelenting short-term (quarterly) returns as the success measure on the one hand, and long-term finance necessary for climate projects on the other, could be overcome by regulatory policy necessary to realise the financing of ‘climate projects’.

Business federations and organisations like The Shift could play a more important role in bridging the finance gap and the information gap (a.o. information on business-relevant data, insurance, regulatory policies) between the SMEs, financial intermediaries and the public authorities.

Last but not least, issues remain as to the transparency and social and environmental integrity of (uncertified) and publicly unbacked international private ‘climate funds’ and ‘climate bonds’.
6. Bibliography

Note: by clicking on the hyperlinked date the reader will have access to the full online article.

• Laasch, O. and Connaway (2014), Principles of Responsible Management: Global Sustainability, Responsibility, and Ethics, Australia: South-Western, Cengage Learning.


• UN (2015d), “Trends in Private Sector Climate Finance”, Report prepared by the Climate Change Support Team of the UN Secretary-General on the progress made since the 2014 Climate Summit, New York.


## Annex 1 – Investment opportunities

**Table 1.** ‘Adaptation sectors’ and examples of possible adaptation activities and ‘Mitigation sectors’ and future investment opportunities.

<table>
<thead>
<tr>
<th>Adaptation Sector</th>
<th>Examples of possible adaptation activities</th>
<th>Mitigation Sector</th>
<th>Examples of possible mitigation activities</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Water and wastewater management</strong></td>
<td>Technologies in water purification treatment, and capture; water distribution, …</td>
<td><strong>Renewable energy generation</strong></td>
<td>Electricity or heat production from non-fossil fuels (biomass, biogas, solar, geothermal, hydropower - incl. wave, tidal, wind, …)</td>
</tr>
<tr>
<td><strong>Agriculture</strong></td>
<td>Irrigation equipment, technologies, crop diversification options, fertilisers,…</td>
<td><strong>Energy efficiency (demand side) in industry and building</strong></td>
<td>Energy-efficiency improvements through the installation of more efficient equipment, changes in processes, reduction of heat/ hot water losses, and/or increased waste heat recovery;…</td>
</tr>
<tr>
<td><strong>Forestry and Land use</strong></td>
<td>Techniques against soil erosion in basins and slopes,…</td>
<td><strong>Transmission and distribution systems</strong></td>
<td>New electricity transmission systems or new systems to facilitate the integration of renewable energy sources into the grid; Transmission energy efficiency improvements (e.g. retrofit of transmission lines, distribution systems, or substations to substantially reduce energy use or losses, …);…</td>
</tr>
<tr>
<td><strong>Natural resource management</strong></td>
<td>Area protection, migration corridors, sustainable aquaculture techniques, …</td>
<td><strong>Non-energy GHG reductions</strong></td>
<td>Industrial processes emissions in industry; Air conditioning and refrigeration; fugitive emissions (reduction of gas flaring or methane fugitive emissions in the oil and gas industry; coal mine methane capture and storage; etc.); Carbon Capture and Storage (CCS) projects;…</td>
</tr>
<tr>
<td><strong>Climate services</strong></td>
<td>Weather derivatives</td>
<td><strong>Waste and wastewater</strong></td>
<td>Waste management that reduces methane emissions; Waste recycling measures with a demonstrated net mitigation benefit;…</td>
</tr>
<tr>
<td><strong>Infrastructure</strong></td>
<td>New or adaptation components in projects to improve the climate resilience of (non-)existing infrastructure, transport infrastructure, energy infrastructure, riverine infrastructure and human settlements.</td>
<td><strong>Low-carbon technologies</strong></td>
<td>Projects producing components, equipment, or infrastructure dedicated for the renewable and energy efficiency sectors.</td>
</tr>
<tr>
<td><strong>Coastal protection</strong></td>
<td>Additional or improvements in coastal and riverine infrastructures, such as dykes, mangrove planting,…</td>
<td><strong>Cross-sectoral</strong></td>
<td>Financial services (e.g. credit lines earmarked for mitigation activities); Dedicated budget support to national or local authorities for implementation of climate change mitigation policies; Other awareness-raising and technical assistance activities;…</td>
</tr>
</tbody>
</table>
| **(Other) Disaster risk reduction management** | Early warning / emergency response systems to adapt to increased occurrence of extreme events by improving disaster prevention, Preparedness and management; and Reducing potentially related loss and damage; monitoring disease outbreaks, … | **Agriculture, forestry, land use and natural resource management** | • Agriculture: reduction in fertilizer use, rangeland management, low tillage techniques that increase carbon contents of soil, etc.;

• Forest: Sustainable forest management and conservation of forests; Enhancement of carbon stocks; Reducing emissions from deforestation and degradation;

• Land use: Rehabilitation of degraded lands; livestock projects that reduce GHG emissions (e.g., manure management with bio-digestors producing biogas for heating or cooking);
| Industry, manufacturing and trade | Manufacturing (e.g., design of climate-resilient equipment); increased cooling requirement in food processing distribution and retail resulting from more extreme heat events (e.g., increased water-efficiency in processing) | Transport | Transport projects where modal shift is deemed to result in demonstrated GHG emission reductions (a.o. via transport demand management measures,…), Retrofit or replacement of existing vehicles, rail, or boat fleet achieving a substantial increase in energy efficiency (including the use of lower-carbon fuels, electric or hydrogen technologies, etc.); … |
| Policy and national budget support and capacity-building | Dedicated budget support to national or local authorities for implementation of climate change adaptation policies; other technical assistance activities, including awareness raising and capacity-building,… | Other cross-sector activities, such as financial services | Financing opportunities of adaptation issues for finance institutions (banks, insurance companies, asset management,…); incorporation of climate risk assessment in investment appraisal processes,… |

Source: author, based on (CPI, 2015: 5-10) and van Gameren et al. (2014: 82).
# Annex 2 – Financing barriers and instruments

**Table 2.** Financing barriers and instruments the “market” perceives as needed to overcome them in priority sectors.

<table>
<thead>
<tr>
<th>Sectors</th>
<th>Barriers</th>
<th>Instruments</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>RENEWABLE ENERGY</strong></td>
<td>Policy risks</td>
<td>Insurance mechanisms and guarantees</td>
</tr>
<tr>
<td></td>
<td>Mismatch between local currency revenues and repayment obligations</td>
<td>Local currency lending or currency swaps with tenors aligned with contracts</td>
</tr>
<tr>
<td></td>
<td></td>
<td>and payback periods; currency hedging tools</td>
</tr>
<tr>
<td></td>
<td>Limited market liquidity</td>
<td>Early-stage pre-construction and construction financing, e.g. convertible/</td>
</tr>
<tr>
<td></td>
<td></td>
<td>contingent recovery grants or equity for high-risk investment; subordinated</td>
</tr>
<tr>
<td></td>
<td></td>
<td>debt</td>
</tr>
<tr>
<td></td>
<td>Gap between equity required by lenders and availability of equity from</td>
<td>Subordinated debt with concessional sources of finance taking on a portion</td>
</tr>
<tr>
<td></td>
<td></td>
<td>of the first-loss position</td>
</tr>
<tr>
<td></td>
<td>Limited institutional investment capital</td>
<td>Investment vehicles (securitization or bundling)</td>
</tr>
<tr>
<td><strong>ENERGY EFFICIENCY</strong></td>
<td>Lack of capacity to evaluate energy efficiency investments and develop</td>
<td>Grants for technical support/capacity building</td>
</tr>
<tr>
<td></td>
<td>adequate investment/financing approaches</td>
<td></td>
</tr>
<tr>
<td></td>
<td>High risk perceptions/lack of confidence on financial viability</td>
<td>Insurance instruments, partial guarantees or performance-based financial</td>
</tr>
<tr>
<td></td>
<td>High upfront costs</td>
<td>incentives</td>
</tr>
<tr>
<td></td>
<td>Insufficient regulatory frameworks and misaligned incentives</td>
<td>Long-term debt capital and investment subsidies</td>
</tr>
<tr>
<td><strong>LOW CARBON AND CLIMATE-</strong></td>
<td>Unstable regulatory and tax policies</td>
<td>Technical assistance and policy support</td>
</tr>
<tr>
<td></td>
<td>Risk of unilateral changes to concession agreements that alter investors'</td>
<td>Counterparty risk guarantee</td>
</tr>
<tr>
<td><strong>RESILIENT CITIES</strong></td>
<td>returns</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Lack of access to long-term debt for infrastructure projects due to</td>
<td>Credit enhancement with concessional finance, technical support (e.g. to</td>
</tr>
<tr>
<td></td>
<td>lack of creditworthiness and high default risk</td>
<td>issue bonds)</td>
</tr>
<tr>
<td></td>
<td>Inability to integrate climate considerations in investment planning</td>
<td>Technical assistance to support pre-investment vulnerability assessment</td>
</tr>
<tr>
<td></td>
<td>and design</td>
<td>/ project structuring</td>
</tr>
<tr>
<td><strong>CLIMATE-SMART LAND-</strong></td>
<td>Gaps in regulatory frameworks</td>
<td>Grants for policy dialogue and technical assistance</td>
</tr>
<tr>
<td><strong>USE, INCLUDING AGRICULTURE,</strong></td>
<td>Credit default risks associated with farmers’ inadequate</td>
<td>Risk management solutions such as first-loss coverage</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>AND FORESTRY</strong></td>
<td>credit history and collateral</td>
<td>Risk mitigation and transfer mechanisms such as parametric insurance</td>
</tr>
<tr>
<td></td>
<td>Exposure to weather-related risks</td>
<td>Grants to support the collection of relevant data</td>
</tr>
<tr>
<td></td>
<td>Lack of business-relevant information on potential hazards, exposure,</td>
<td>Provision of business-relevant data, impact assessment tools</td>
</tr>
<tr>
<td></td>
<td>and climate vulnerability</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Lack of equity capital to develop adaptation/resilience</td>
<td>Seed private equity funds/patient capital and venture capital with lower</td>
</tr>
<tr>
<td></td>
<td>products and services</td>
<td>returns expectations</td>
</tr>
</tbody>
</table>

*Source: CPI, 2016: 14.*
Interview candidates were identified through a stakeholder mapping exercise that built upon previous work in this thematic area (Whitley, et al., 2016). Besides private companies from six sectors (infrastructure, waste, wastewater, energy technology, insurance and finance), the interviewees also include 3 business associations, 1 multi-stakeholder platform and 2 environmental consultant actors, 4 NGOs. For completion, we used companies’ annual sustainability (CSR) reporting.

The below table lists in alphabetical order all 53 interview participants, their sector, organisation and designation. All interviews were conducted between 10 April 2016 and 25 February 2017.

<table>
<thead>
<tr>
<th>Private/public</th>
<th>Sector</th>
<th>Organisation + function</th>
</tr>
</thead>
<tbody>
<tr>
<td>Private</td>
<td>Sustainable Development NGO</td>
<td>11.11.11, Climate Policy Officer</td>
</tr>
<tr>
<td>Private</td>
<td>Insurance</td>
<td>Acegroup, Officer</td>
</tr>
<tr>
<td>Private</td>
<td>Insurance</td>
<td>AG Insurance, Officer</td>
</tr>
<tr>
<td>Private</td>
<td>Business Association in Technology</td>
<td>Agoria, Head Center of Expertise Environment</td>
</tr>
<tr>
<td>Private</td>
<td>Finance (MFIs)</td>
<td>Alterfin, Sustainable investment manager</td>
</tr>
<tr>
<td>Private</td>
<td>Consulting in Energy, infrastructure, water</td>
<td>Arcadis Belgium, Business Development Manager at ARCADIS Belgium</td>
</tr>
<tr>
<td>Private</td>
<td>Finance, banking</td>
<td>Argenta, productmanager</td>
</tr>
<tr>
<td>Private</td>
<td>Insurance</td>
<td>Assuralia, Insurance sector association</td>
</tr>
<tr>
<td>Private</td>
<td>Finance, export credit</td>
<td>Atradius, Export credit manager</td>
</tr>
<tr>
<td>Private</td>
<td>Finance, pension fund</td>
<td>Belfius OFP, Belfius coordinator sustainability</td>
</tr>
<tr>
<td>Semi-public</td>
<td>Finance, banking, insurance</td>
<td>Belfius, Coordinator Sustainable Development</td>
</tr>
<tr>
<td>Public</td>
<td>Finance</td>
<td>Bio-Invest, Development &amp; Sustainability Officer</td>
</tr>
<tr>
<td>Private</td>
<td>Finance, banking</td>
<td>BNP Paribas Fortis, Director Private Banking at BNP Paribas Fortis</td>
</tr>
<tr>
<td>Semi-public</td>
<td>Finance, banking</td>
<td>Bpost Bank, Director External Communication, Investor Relations &amp; Public Affairs</td>
</tr>
<tr>
<td>Private</td>
<td>Carbon Markets offsetting</td>
<td>Climact, Programme manager</td>
</tr>
<tr>
<td>Private</td>
<td>Carbon Markets offsetting</td>
<td>CO2 Logic Belgium, CEO and Project Directors</td>
</tr>
<tr>
<td>Private</td>
<td>Insurance, export credit</td>
<td>Coface Belgium, Export credit manager</td>
</tr>
<tr>
<td>Private</td>
<td>Finance, banking</td>
<td>Crelan, Credit manager</td>
</tr>
<tr>
<td>Public</td>
<td>Finance</td>
<td>Delcredere-Ducroire, Strategy Manager</td>
</tr>
<tr>
<td>Private</td>
<td>Dredging, environmental and marine engineering</td>
<td>DEME, Director Communications</td>
</tr>
<tr>
<td>Private</td>
<td>Finance, banking</td>
<td>Deutsche Bank, Head of Portfolio and Funds Management</td>
</tr>
<tr>
<td>Private</td>
<td>Environmental consulting</td>
<td>ERM, Social &amp; Environmental Consultant</td>
</tr>
<tr>
<td>Private</td>
<td>Business association, Chemical and Life sciences</td>
<td>Essencia, Energy and Climate policy officer</td>
</tr>
<tr>
<td>Private</td>
<td>Insurance</td>
<td>Ethias assurances, Sustainability manager</td>
</tr>
<tr>
<td>Private</td>
<td>Finance, insurance</td>
<td>Ethias, Product manager</td>
</tr>
<tr>
<td>Private</td>
<td>Finance, export credit</td>
<td>Euler Hermes, Export credit manager</td>
</tr>
<tr>
<td>Type</td>
<td>Category</td>
<td>Organization and Role</td>
</tr>
<tr>
<td>----------</td>
<td>-----------------------------------</td>
<td>----------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Private</td>
<td>Belgian Dredging Federation</td>
<td>Fédrération du dragage belge</td>
</tr>
<tr>
<td>Public</td>
<td>Finance</td>
<td>Finexpo, transfer officer</td>
</tr>
<tr>
<td>Private</td>
<td>Renewable Energy</td>
<td>Green-invest, CEO and co-founder</td>
</tr>
<tr>
<td>Private</td>
<td>Business association in Flanders, Technology</td>
<td>I-cleantech Flanders, CEO</td>
</tr>
<tr>
<td>Private</td>
<td>Finance, Microfinance</td>
<td>Incofin, Sustainable investment manager</td>
</tr>
<tr>
<td>Private</td>
<td>Finance, banking, insurance</td>
<td>ING, Head of Sustainability at ING Belgium</td>
</tr>
<tr>
<td>Private</td>
<td>Dredging, land reclamation, heavy lifting, offshore and environmental services.</td>
<td>Jan De Nul NV (Envisan), Sustainable Development Manager</td>
</tr>
<tr>
<td>Private</td>
<td>Finance, banking, insurance</td>
<td>KBC, Senior Advisor Corporate Sustainability</td>
</tr>
<tr>
<td>Private</td>
<td>Renewable energy</td>
<td>Nguvu utilities, CEO</td>
</tr>
<tr>
<td>Private</td>
<td>Finance, Renewable Energy</td>
<td>Oikocredit Belgium, Director Belgium</td>
</tr>
<tr>
<td>Private</td>
<td>Sustainable Development NGO</td>
<td>Oxfam Belgium, Climate policy officer</td>
</tr>
<tr>
<td>Private</td>
<td>Finance, pension fund</td>
<td>Pensioenfonds Senior Management KBC</td>
</tr>
<tr>
<td>Private</td>
<td>Belgian sector association of pension funds</td>
<td>PensioPlus, Policy officer</td>
</tr>
<tr>
<td>Private</td>
<td>Renewable Energy</td>
<td>Perpetum Energy Belgium, Operation manager</td>
</tr>
<tr>
<td>Private</td>
<td>Sustainable Development NGO</td>
<td>Protos, Coordinator North Desk</td>
</tr>
<tr>
<td>Private</td>
<td>Financial consulting, pension funds</td>
<td>Sigma Consult, Expert in pension fund administration</td>
</tr>
<tr>
<td>Private</td>
<td>Association of Belgian companies and NGOs willing to foster a sustainable transition</td>
<td>The Shift, Program manager</td>
</tr>
<tr>
<td>Private</td>
<td>Renewable Energy</td>
<td>Tiger Power, CFO</td>
</tr>
<tr>
<td>Private</td>
<td>Finance, banking</td>
<td>Triodos Bank (Belgium), Sustainable investment manager</td>
</tr>
<tr>
<td>Private</td>
<td>Finance, private investment banking</td>
<td>Triodos Bank and Triodos Investment Management; Senior Business Development &amp; Investor Relations at Triodos Investment Management</td>
</tr>
<tr>
<td>Private</td>
<td>Finance, pension fund</td>
<td>Unilever Belgium Pension Fund &quot;Union&quot;, investment manager</td>
</tr>
<tr>
<td>Private</td>
<td>Finance, private investment banking</td>
<td>Van Lansschot, Managing Director &amp; Member of the executive committee at Van Lanschot Bankers</td>
</tr>
<tr>
<td>Private</td>
<td>Belgian Bussiness Association</td>
<td>VBO/FEB, Energy and Climate policy officer</td>
</tr>
<tr>
<td>Private</td>
<td>Finance, banking</td>
<td>VDK Spaarbank, manager companies and organisations</td>
</tr>
<tr>
<td>Private</td>
<td>Renewable Energy</td>
<td>Vyncke (Prometheus N.V.), CEO</td>
</tr>
<tr>
<td>Private</td>
<td>Renewale Energy</td>
<td>Wind Vision, Development Director</td>
</tr>
</tbody>
</table>
Annex 4 – Lexicon on International Private Climate Finance

- **Bonds**: can variously be described as IOUs (i.e. informal documents that acknowledge a debt owed), loans or debts. They are similar to bank loans, but generally last longer (from one year to over 30 years). When institutions, companies, governments and other entities want to raise long term finance but do not want to dilute their shareholdings (or can’t issue share capital), they turn to the bond markets. The biggest investors are generally insurance companies and pension funds. They buy bonds to generate return, offset their liabilities, generate income or diversify their portfolios (Veys, 2010).

- **Carbon offset finance**: the general term applied to resources provided to a project to acquire appropriately certified greenhouse gas (GHG) emission reductions. Project-based carbon crediting emerges from domestic carbon caps in developed countries (and hence in Belgium) in which some portion of the cap can be met through an international offset program (EIB, s.d.).

- **Carbon price**: the method of reducing global-warming emissions favoured by economics, charges those who emit carbon dioxide (CO₂) for their emissions. That charge, called a carbon price, is the amount that must be paid for the right to emit one tonne of CO₂ into the atmosphere (Kidney et al., 2015).

- **Climate bonds**: Climate bonds (labelled and unlabelled) are fixed-income financial instruments that are issued by governments, multilateral banks or corporations to raise finance for investments in emission reduction or climate change adaptation (MacKenzie and Asciu, 2009). Thus, climate bonds with specific purposes have been developed, such as climate resilience bonds (business in adaptation), catastrophe bonds (mostly used by the insurance companies)¹. Climate bonds can be seen as a special type of green bonds, which aim to raise finance for environmental projects in general. Because these terms are closely related, they are often used interchangeably (Climate Bonds Initiative, 2016).

- **Climate change adaptation** is defined as an activity that “intends to reduce the vulnerability of human or natural systems to the impacts of climate change and climate-related risks, by maintaining or increasing adoptive capacity and resilience” (OECD, 2011: 4).

- **Climate change mitigation** is defined as an activity that “contributes to the objective of stabilization of greenhouse gas (GHG) concentrations in the atmosphere at a level that would prevent dangerous anthropogenic interference with the climate system by promoting efforts to reduce or limit GHG emissions or to enhance GHG sequestration” (OECD, 2011: 3).

---

- **Climate finance** “aims at reducing emissions, and enhancing sinks of greenhouse gases and aims at reducing vulnerability of, and maintaining and increasing the resilience of, human and ecological systems to negative climate change impacts” (UNFCCC SCF, 2014: 5).

- **Climate finance needs** are often defined simply as the additional investment required for mitigation and adaptation (see, e.g. Haites, 2013).

- **Climate financing gaps**: occur when for some priority needs the required capital is not available (Frankhauser et al., 2015: 1). “Climate finance gap” can be understood differently in function of the context (CPI, 2014).

- **Climate-compatible development (CCD)** safeguards development from climate impacts (climate-resilient development) and reduces or keeps emissions low without compromising development goals (low-emissions development) (CDKN, 2013). Investments that have a positive climate impact are known by many terms; climate-friendly, climate-smart, low-carbon, climate-resilient – to name a few. The problem is that there is no one group of definitions or standards used across climate finance.

- **Climate proofing**: refers to the process of cross-checking that all elements of a programme and its implementation, including specific measures and projects, address climate change issues (Hjerpe et al., 2012).

- **Climate-relevant projects** are projects in renewable energy, energy efficiency, agriculture, transportation, water infrastructure and treatment, adaptation activities, and other sectors that promote greenhouse gas emissions reductions or assist in adaptation to climate change impacts (Venugopal et al., 2012: 4).

- **Climate Resilient Development**: occurs when societies pursue economic growth, poverty reduction and other development objectives, and systematically integrate current and future climate risks into strategies for development. Whilst vision and commitment are important, integrating climate resilience into planning processes is essential (OECD, 2014: 20).

- **Environmental risk**: environmental and social risks associated with the project, often subject to legal requirement for an impact assessment (Kidney et al., 2015)

- **Equity**: an investment in exchange for ownership of a company entitled to the earnings of a company after all other investors (e.g. debt-holders) have been paid (Kidney et al., 2015).

- **Export Credits, Insurance, and other Risk Management Instruments**: used to transfer specific risks away from the project sponsors and lenders to insurers and other parties better able to underwrite or manage the risk exposure (Kidney et al., 2015).

- **Financial instrument**: is an asset of any kind; either cash, evidence of an ownership interest in an entity, or a contractual right to receive or deliver cash or another financial instrument. It is materialised by a real or virtual document representing a legal agreement. In today's financial marketplace, financial instruments can be classified generally as equity based, representing ownership of the asset, or debt based, representing a loan. These instruments may be tradable on
organised markets or over the counter. They include derivatives based on such equity or debt or even currencies. Such instrument may include risk sharing mechanisms. However, it cannot be assimilated to services or grants (Kidney et al., 2015).

- **Guarantee**: This provides investors with a non-cancellable additional level of comfort that the investment will be repaid in the event that the issuer would not fulfil the contractual obligation to make timely payments. It also lowers the cost of financing for issuers because the guarantee typically earns the security a higher credit rating and therefore lower interest rates (Kidney et al., 2015).

- **Investment Grade**: Defined by the credit rating agencies usually above BBB-/Baa3/BBB- respectively. A 'good' investment grade rating is A/A2/A (Kidney et al., 2015).

- **International climate finance**: typically refers to the “financial resources paid to cover the costs of transitioning to a low-carbon global economy and to adapt to, or build resilience against, current and future climate change impacts” (CPI, 2014: 3).

Note that there are no clear and internationally agreed definitions for private and public climate finance, which often makes it difficult to distinguish climate finance from both sources (Haites, 2013; Buchner et al., 2015).

The term has gained prominence in climate policy discussions, due to increased appreciation of the need for and the challenges of mobilizing finance for climate related investments, and the role of the public sector in addressing risks, improving returns and closing knowledge gaps, to incentivize private investment at scale (CPI, 2014).

- **International private climate finance** remains a nebulous concept among climate practitioners and is interpreted differently by different actors. A number of studies provide academic and technical definitions for the concept\(^2\), ranging from official climate-related development finance (OECD, 2013) to global climate finance (UNFCCC, 2014) and ending with a global ‘shifting the trillions’ perspective (Dagnet et al., 2016).

- **International Private climate finance in the UNFCCC context** is the term generally used when referring to the private finance publicly mobilised by developed countries in developing countries in the context of the commitments taken under the UNFCCC. Although no internationally agreed definition exists on private climate finance, recently in 2015 a Joint Statement was made by a group of 19 bilateral climate finance providers, including Belgium, on their ‘common understanding’ of the scope of mobilised public and private climate finance. They consider mobilized climate finance to include:

---

\(^2\) Probably the most frequently used definitions by public (climate and development) policy recommendation reports originate from the OECD-DAC, followed by the multilateral development banks (MDBs) and the Climate Policy Initiative’s (CPI) annual ‘Global Landscape of Climate Finance’ reports.

\(^3\) Joint Statement on Tracking Progress Towards the $100 billion Goal by Australia, Belgium, Canada, Denmark, Finland, France, Germany, Italy, Japan, Luxembourg, Netherlands, New Zealand, Norway, Poland, Sweden, Switzerland, United Kingdom, United States, and the European Commission (Group of 19 bilateral climate finance providers, 2015).
- "Public finance" provided by our governments through a variety of institutions (including through the operating entities of the financial mechanism of the Convention, bilateral aid agencies, development finance institutions, export credit agencies (ECAs) and multilateral entities) and instruments (concessional and non-concessional, including grants, loans, equity, and de-risking instruments), where such finance is identified as climate-relevant using criteria in line with those agreed within relevant international organizations such as the OECD, IPCC, and MDBs. We intend to report transparently on different categories of public climate finance.

- Private finance for climate-relevant activities that has been mobilized by public finance or by a public policy intervention, including technical assistance to enable policy and regulatory reform" (OECD, 2016a).

Hence, these financial flows are relevant towards meeting their financial obligations under Article 9.1. of the PA among which the 100 billion USD goal annually by 2020. Nevertheless, the “modalities for the accounting of financial resources provided and mobilized through public interventions” (UNFCCC, 2015b, par. 57) still have to be developed (OECD, 2016b).

- **International private climate finance** in the broader north-south context is ““finance and investment by private actors in / from developed countries for activities in developing countries whose expected effect is to reduce net GHG emissions and/or to enhance resilience to the impacts of climate variability and the projected climate change” (Gupta et al., 2014: 1238).

These resources target low-carbon or climate-resilient (LCCR) development in developing countries and may be channelled, amongst others, through private banks, development banks, aid agencies, public-private funds, or international mechanisms like the Green Climate Fund.

What applies to ‘private finance’ in a broad sense applies in principle, to the narrower concept of (international) ‘private climate finance’. If one defines private climate finance simply as private finance that enables investment in climate change related activities (in developing countries), then

---

4 Stipulating: “Developed country Parties shall provide financial resources to assist developing country Parties with respect to both mitigation and adaptation in continuation of their existing obligations under the Convention”. (UNFCCC, 2015a, art. 9.1)

5 Remind there is no internationally accepted definition neither methodology on what counts as climate finance.

6 Usually defined as Annex II-countries of the UNFCCC plus voluntary members of the OECD Development Assistance Committee (UNFCCC, 2014). However, this official definition is clearly evolving in practice, as even before the Paris Agreement several ‘developing countries’ (or ‘emerging economies’), do not fit into these categories and become more prominent in the field of international climate finance. In 2015 China, for example, has promised around US$3 billion of finance for developing countries to cut carbon emissions and adapt to climate change.

7 Note that “low carbon development” does not necessarily imply net mitigation effects, but often includes it when involving existing fossil fuel-based infrastructures, for example.
private climate finance can take as many shapes and forms, and materialise in as many ways as private finance does in the broader sense (UNEP, 2014: 62).

- **(International) Private climate finance in the ‘shifting the trillions’ context**: Usually, “shifting the trillions” is understood as overall global financial flows to bring about an incisive decarbonisation and a transformation of energy supply and use (Dagnet et al., 2016).

- **International Private sector engagement (PSE) in climate change action**: Active participation of the private sector from the global North active in the global South (both directly and through intermediaries) in order to deliver climate-related (development) outcomes in developing countries (Di Bella, 2013, Heinrich, 2013).

- **Low-Carbon and Climate Resilient Development (LCCDR)**: Usually split in two terms, namely **Low-Carbon Development (LCD)** on the one hand and **Climate Resilient Development (CRD)** on the other.

- There is no internationally agreed definition of **Low-Carbon development (LCD)**. Despite the discrepancies among the different understandings, there is a common point on low-carbon development: reducing GHG emissions, exploiting low-carbon energy, and ensuring economic growth. It includes: using less energy, improving energy-efficiency, adopting low-carbon energy sources, protecting and promoting natural resources that store carbon (e.g. forests and land), promotion and use of low or zero carbon technologies and business models, and implementing policies and incentives that discourage carbon intensive practices and behaviours (Mudombi, 2013).

- Neither is there an agreed definition on **Climate Resilient development (CRD)**. USAID (2014) states that “climate-resilient development is about adding considerations of climate variability and climate change to development decision-making in order to ensure that progress toward development goals now includes consideration of climate impacts” (USAID, 2014: xiv). For a discussion and figure of the building blocks of CRD, see Miola et al. (2015: 24-25).

- **Private sector**: Sector of the economy that is not controlled by the state; comprises a wide range of actors including individuals, corporations, and private associations (like philanthropies), that engage in profit-seeking activities, and have a majority private ownership (i.e. not owned or operated by the government) (Di Bella et al., 2013; Venugopal et al., 2012).

---

8 In parallel to the activities of multilateral and bilateral institutions, a number of multilateral climate funds (MCF) have been created to channel finance that have a broad mandate for ‘private sector engagement’, a term which means the provision of funds both to and by the private sector.
Bibliography of the Lexicon