

# Landscape of climate finance in France 2011-2014

2015 Edition – Executive Summary

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November 2015

IN 2013, UP TO €36BN OF INVESTMENT CONTRIBUTED TO CLIMATE MITIGATION IN FRANCE.

The Landscape of Climate Finance surveys investment in tangible (physical) assets contributing to climate change mitigation and resulting directly or indirectly in greenhouse gas emissions (GHG) emission reductions – generally referred to as climate investments. This total is made up of investments of €17.6bn in energy efficiency, €5.1bn in renewable energy and €12bn for sustainable transport infrastructure. Investments in new nuclear plants and GHG reductions outside of energy consumption (agriculture, forestry, industrial processes, etc.) totaled an estimated €1.4bn. An increase in investment was noted in low-emission new buildings and sustainable transport infrastructure, while investment in renewable energy decreased over the same period.

## THE STUDY IN BRIEF...

The Landscape of Climate Finance is a comprehensive study of financial flows in favor of climate and the broader energy transition in France. The study maps the flows supporting investments leading to greenhouse gas mitigation across the French economy. The results discussed in the report present trends seen between 2011 and 2014, with a detailed focus on 2013<sup>1</sup>. Findings are contextualized in two ways: first, they are compared with the general characteristics of the financing of the French economy; second, the volumes identified are assessed in comparison to existing projected investment needs to achieve GHG emission reduction targets and energy transition objectives. The final objective of the study is to contribute to the public debate on the role and relevancy of public and private finance in support of climate mitigation.

This French Landscape of Climate Finance is based on the aggregation of a large number of often-fragmented sources and estimations. All results reflect explicit methodological choices made by the authors based on existing national and international approaches and should, thus, be understood as orders of magnitude including a varying degree of uncertainty.

**38% of investment made  
by households;  
50% in the building sector**

In France, households initiated €13.6bn or 38% of total climate investment in 2013. To finance their investments – most of which occurs in the housing sector – households primarily mobilized their own equity (€8.3bn) and commercial debt (€5.5bn). They benefitted from €1.4bn of public grants and subsidies.

The building sector concentrated 50% of total investment, of which €13.5bn was initiated by households and €3.2bn by public housing authorities, while actors investing in non-residential commercial buildings totaled only €1.4bn. Transport was the second-largest sector of investment, with most of the investment dedicated to sustainable infrastructure projects (€11.8bn).

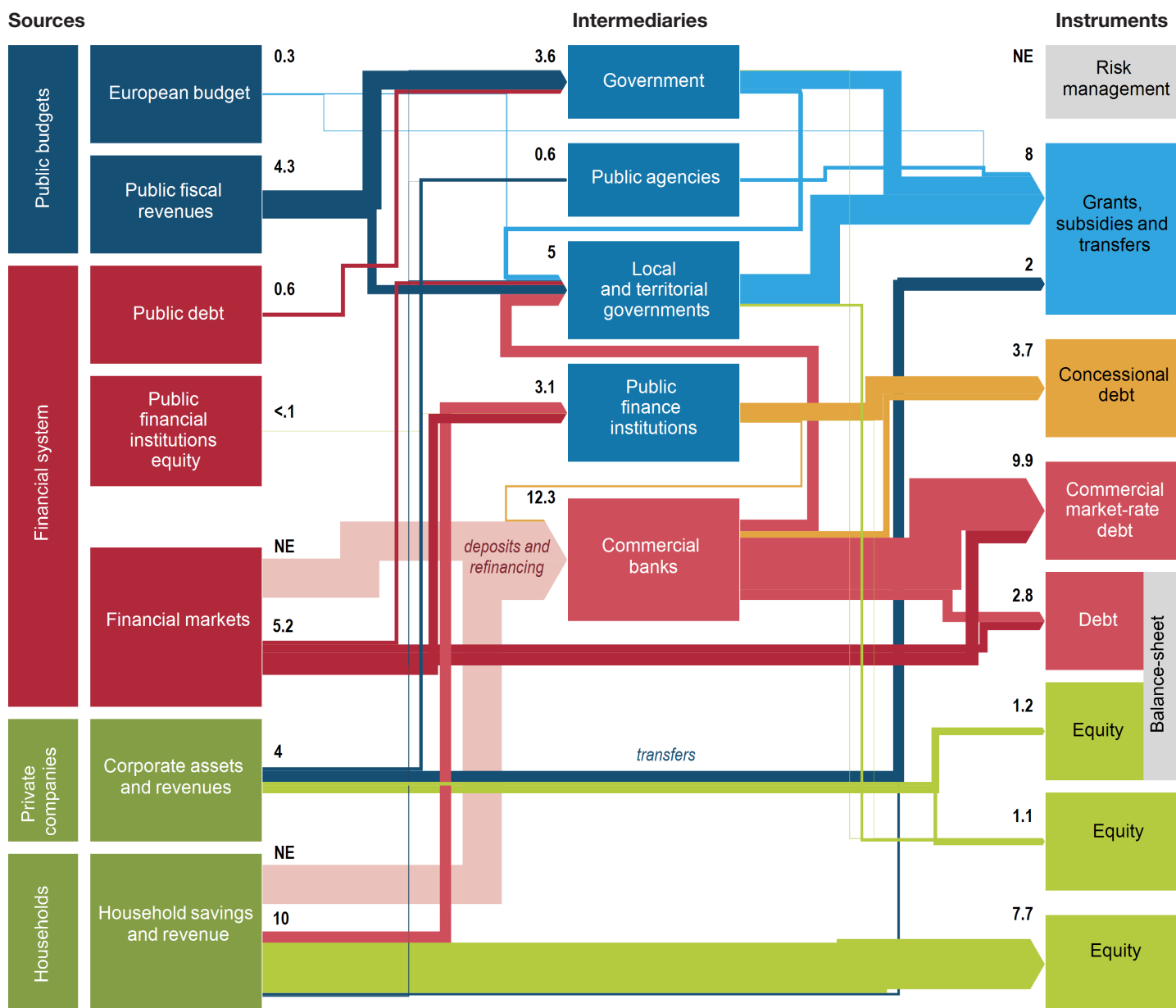
In total, grants, transfers and subsidies account for €7.4bn towards public project developers, and €2.7 towards private project developers, thus totaling €10bn. Commercial debt, whether from the banking sector or from capital markets, was the principal instrument used by private companies to finance their investments, particularly in the case of large-scale renewable energy projects. Concessional debt – primarily issued by public financial institutions and featuring preferential conditions in terms of volume, interest rate or maturity – was principally oriented towards public housing.

**Between 2011 and 2013, total annual  
investments contributing to GHG  
mitigation increased by €6bn.**

<sup>1</sup> The 2015 Edition looks at financial flows in the period 2011-2014, updating the figures for financial flows in the year 2011 found in the 2014 Edition, and providing provisional estimates of financial flows in year 2014.

# The French Landscape of Climate Finance in 2013

(In billion current euros)

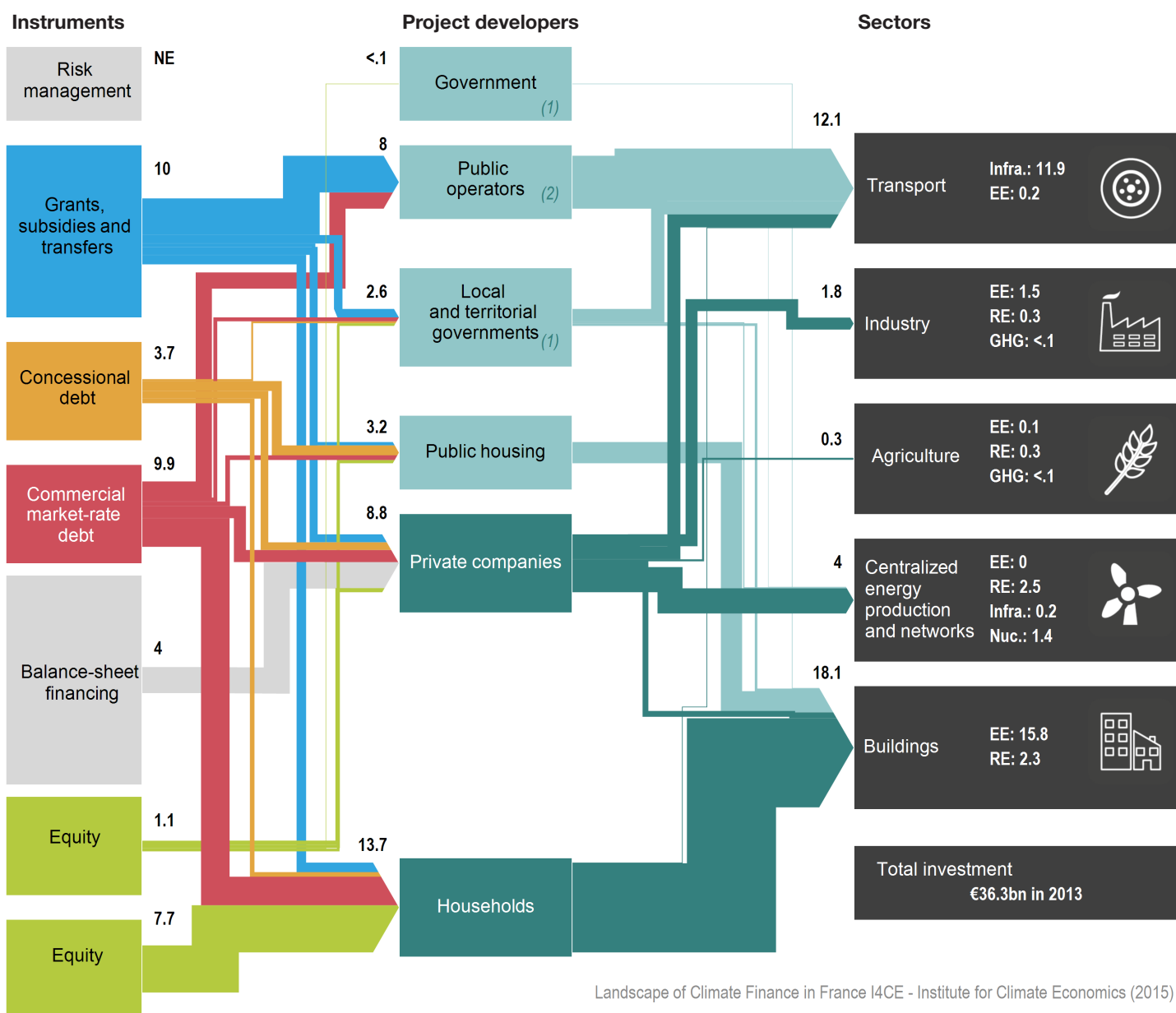


In 2013 in France, investment contributing to GHG mitigation is estimated at up to €36.3bn across the five sectors displayed on the right side of the diagram. This investment was initiated by public and private project developers, who were most often considered to be the end-owners of the assets created. For example, **households** realized a majority of their investments in the residential (building) sector, whereas **private companies** invested primarily in transports and energy production.

To finance these investments, project developers resorted to four principal types of instruments: 1) **grants, transfers and subsidies**; 2) **concessional debt** at interest rates, tenure or volume preferential to typical market conditions; 3) **commercial market debt**; 4) and **equity** or **own funds**. **Balance-sheet financing**, which is used by private companies, is represented as a combination of company-wide commercial debt and equity. Financial flows such as VAT reduction for energy efficiency in buildings, or feed-in tariffs for renewable

energy, are not represented in this diagram even though they are discussed in the report.

These four types of instruments are used to channel financing to project developers, either through public or private intermediaries or directly from the sources of revenues and capital on the left side of the diagram. **Public intermediaries**, such as the State, public agencies and local governments mainly provide grants and subsidies - whereas **commercial banks** and **public financial institutions** provide market-rate and concessional debt.



Intermediaries mobilized capital and savings from sources grouped into categories of the national economy. **Public fiscal revenues** financed the State, public agencies and local governments. Banks were refinanced through household savings through deposits and **capital markets**. A share of **households' savings and revenues** was directly invested in projects in the form of **equity or self-financing**.

- (1) Represented here as project developers, i.e. investing in their own buildings and/or in durable goods. Local governments include public transport authorities ("autorités organisatrices des transports", or AOT).
- (2) Public operators include Réseau Ferré de France (RFF, which became SNCF Réseau in 2014), Voies Navigables de France (VNF) and RATP for investments in public transport infrastructures in the Île-de-France region.

#### List of acronyms:

**NE** = not estimated, **<.1** = amounts of less than €100 million

**EE** = energy efficiency, **RE** = renewable energy, **Infra** = sustainable infrastructure, **Nuc.** = nuclear, **GHG** = Greenhouse Gas emissions excluding fuel combustion.

The Landscape of Climate Finance maps investment in tangible (physical) assets producing direct or indirect reductions in GHG emissions. This includes construction and material acquisition, limited durable goods as used in national accounts (i.e. vehicles), but excludes research and development, preparatory studies, operating costs, administrative costs and public procurement. Debt includes both loans and bonds issued by or to project developers, but does not include the reimbursement of previously borrowed funds. All amounts are expressed in billion euros in the current value of the years covered in the Landscape.

## €18.7bn, or 51% of climate investment, was driven by the public sector

Out of the total financial flows in the Landscape, 51% depended upon public action to foster the channeling of finance towards project developers<sup>2</sup>, whether in the form of: direct public investments from State and local governments and public institutions (€5.8bn); public grants and subsidies (€8.7bn); concessional debt for specific beneficiaries (€2.9bn) or transfers between private actors through publicly-established mechanisms (€1.3bn).

The role played by the public sector in climate finance is twofold:

- **traditional uses of public finance in France**, such as support for public housing, for home ownership or investment in urban public transportation. Accounting for €14.8bn in 2013, these financial flows are linked with the greening of public policies and as public operations take into account climate change and the energy transition;
- **public incentives to reorient private finance to support a low-carbon economy and the energy transition**. This form of public support represented €3.9bn in 2013. In addition to these public financial incentives, the integration or 'mainstreaming' of climate into investment decisions occurs through the strengthening of regulatory framework more favorable to energy transition, thus shaping the risk-return profiles of investments. Carbon price signal, energy efficiency regulations in new equipment, and more broadly, coherent low-carbon economic and industrial policies.

Between 2011 and 2014, the share of public incentives to reorient private finance in favor of climate investment remained stable, between 11 and 13% of total investment.

## Variations in the role of public incentives reflect the general evolution of sectorial climate policies in France

The apparent stability of public incentives to reorient private finance, representing between 11 and 13% of total investment, hides diverse trends across sectors:

- for the construction of new buildings, the implementation of a new energy efficiency regulation (RT2012) led to an increase of mobilized private finance;
- for building retrofitting, public support in favor of climate investment increased in 2013 and 2014, after a dip in 2012, totaling 22% of total climate investment over the entire period;
- for renewable energy, particularly large-scale electricity generation projects, private actors were responsible for the majority of investment with limited up-front public support. Nevertheless, the financial equilibrium of these projects remains highly dependent on the contribution of publically-mandated mechanisms, such as feed-in tariffs, to secure future revenue streams.

## While increasing, current investment flows remain below the levels estimated as needed to reach medium-term climate objectives

Comparing the investments covered in the Landscape with those estimated as needed to implement the National Low-Carbon Strategy (SNBC) is challenging given differences in perimeter and calculation methods. In considering in the residential retrofitting and energy production sectors, investments of about €10 to 15bn euros per year would be needed, on top of the already realized €16bn covered in the Landscape, to reach the average annual levels estimated as needed in the SNBC. This gap highlights the need for the continued reorientation of current investments towards climate actions. In a context of limited capacity of public finance, this further accentuates the question of how to best allocate public resources to reorient private finance in support of the low-carbon energy transition.

The 2015 edition of the *Landscape of Climate Finance* was made possible with the support of the Agence de l'Environnement et de la Maîtrise de l'Énergie (ADEME) and the French Ministry of Ecology, Sustainable Development and Energy (MEDDE-DGEC).



<sup>2</sup> New in the 2015 Edition, the term "project developer" is used in a broad sense and refers principally to the owner of the asset in question. This includes households, project SPVs (special purpose vehicle), public operators, and local governments, among others.

