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.

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.

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.

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.

(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.

Instruments
- Risk management
- Grants, subsidies and transfers
- Concessional debt
- Commercial market-rate debt
- Balance-sheet financing
- Equity

Sectors
- Transport
- Industry
- Agriculture
- Buildings
- Total investment €36.3bn in 2013
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.

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.