Landscapes of Climate Finance as a Step Towards Unlocking Private Support

Presentation at EESC

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In partnership with :

Climate-KIC is supported by the EIT, a body of the European Union

I4CE – Institute for Climate Economics

A think tank
providing public and private decision-makers with expertise on economic and financial issues related to the energy and ecological transition

Agriculture, Forest and Climate

Industry, Energy and Climate

Cities, Infrastructure and Climate

Finance, Investment and Climate

I4CE is an initiative of Caisse des Dépôts and Agence Française de Développement and is also supported by Morocco's Caisse de Dépôts et Gestion.

Presentation structure

Landscapes of Climate Finance as a Step Towards Unlocking Private Support

- Decision-makers need climate finance tracking to mobilize the private sector efficient low-carbon strategies
- The Landscape of climate finance methodology shows the contribution and investment needs of state and non-state actors
- I4CE supports emerging climate finance tracking initiatives in the EU and beyond

Decision-makers need climate finance tracking to mobilize the private sector efficient low-carbon strategies

Context

Decision makers need to know and track international and domestic climate finance

The Paris Agreement makes greening financial flows an objective of itself

"**Making finance flows consistent** with a pathway towards low greenhouse gas emissions and climate-resilient development."

Art. 2 of the Paris Agreement (2015)

France's energy transition act mandates tracking and mapping climate finance flows

The government is to present an annual report to the Parliament which "**quantifies and analyses public finance**, **assesses private finance**, and **measures their adequacy with the financial requirements** to achieve the objective and transition pace of the law".

Art. 174 of the Energy transition for green growth act (LTECV, 2015)

Context

Landscapes of climate finance allow reporting and supports decision-making

- Reporting to decision-makers on the status of climate-related investment and financial flows in a coherent manner;
- Measure the gap between current financial flows and investment needs to achieve climate objectives
- Identify policy factors behind investment successes and setbacks, recommend solutions to reduce the investment gap
- Provide national strategies with a tool to plan how to raise and reorient public and private flows towards climate investment

From I4CE and EEA policy brief *Landscapes of domestic climate finance in Europe : supporting and improving climate and energy policies for a low-carbon, resilient economy* (2016)

The Landscape of climate finance methodology shows the contribution and investment needs of state and non-state actors

What is a landscape?

Tracking investment and financial flows in domestic low-emission tangible assets

4-step methodology

1. Measure capital expenditure in low-emission projects
2. Identify the project managers involved
3. Understand which financial tools they used
4. Map public and private channels supporting these tools from capital source

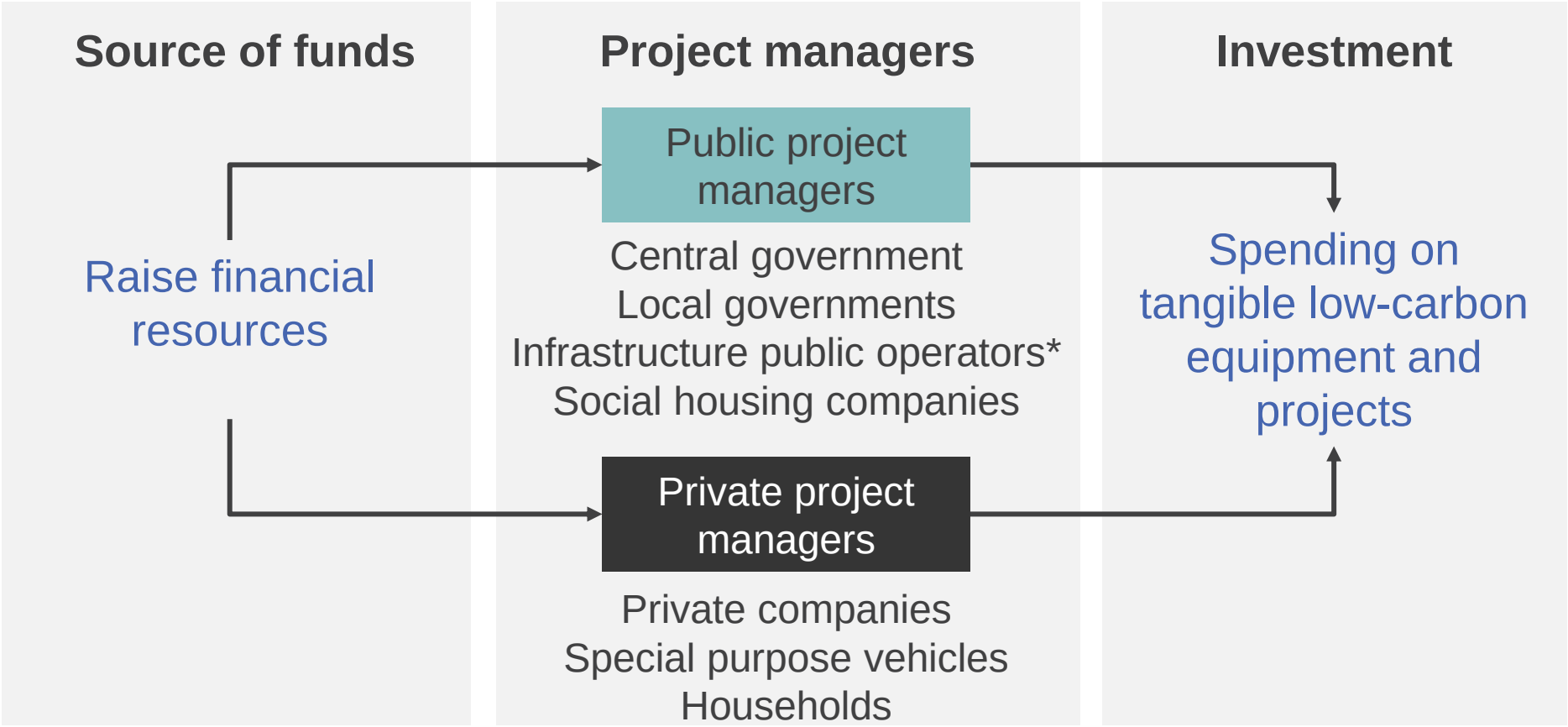
5 key low-carbon domains

ENERGY EFFICIENCY	RENEWABLE ENERGY	SUSTAINABLE INFRA-STRUCTURE	NUCLEAR	GHG EMISSIONS OUTSIDE FUEL COMBUSTION

A project-oriented approach

Project managers raise funding to cover their low-emission investment spending

Project managers = direct owners of the equipment into which investment is made



* Operating in regulated markets to manage and upgrade publicly-owned infrastructure such as rail, electricity or gas networks

A project-oriented approach

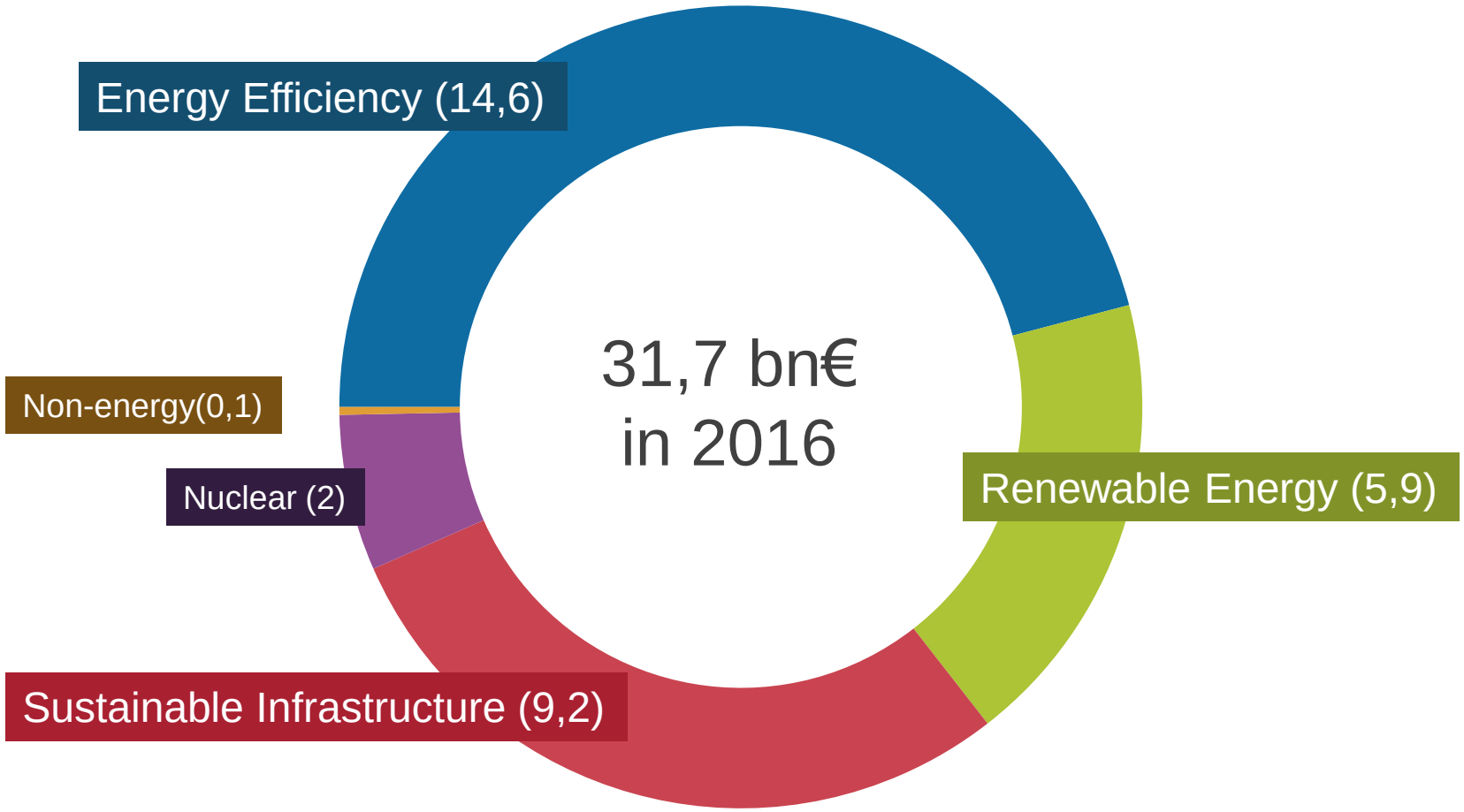
Better understand public support for project managers

- Household paying for thermal retrofitting of their house
- Municipality government conducting a project to create a tramway line (AOT)
- A special purpose vehicle (SPV) created to fund the construction of a wind farm
- Industrial company acquiring more energy efficient machinery
- Service company buying electrical vehicles
- Central government paying for the retrofitting of one of its buildings

Application in France

31,7 billion euros invested in low-emission areas in France in 2016

Climate investments in France by end use
In billion euros, in 2016



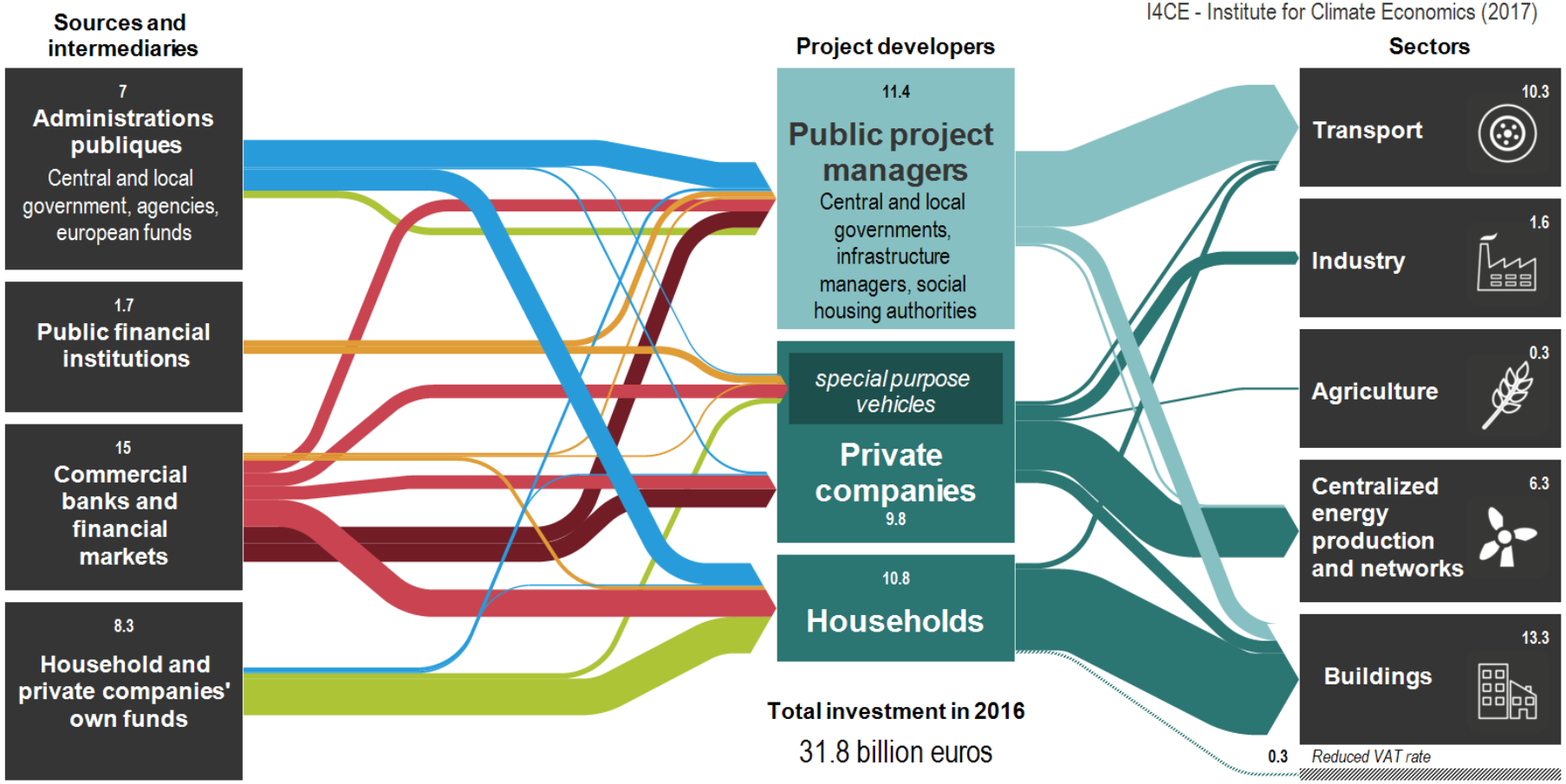
Application in France

Landscapes capture contributions from public and private, state and non-state actors

Landscape of climate finance in 2016

in billion current euros

I4CE - Institute for Climate Economics (2017)



Financing instruments

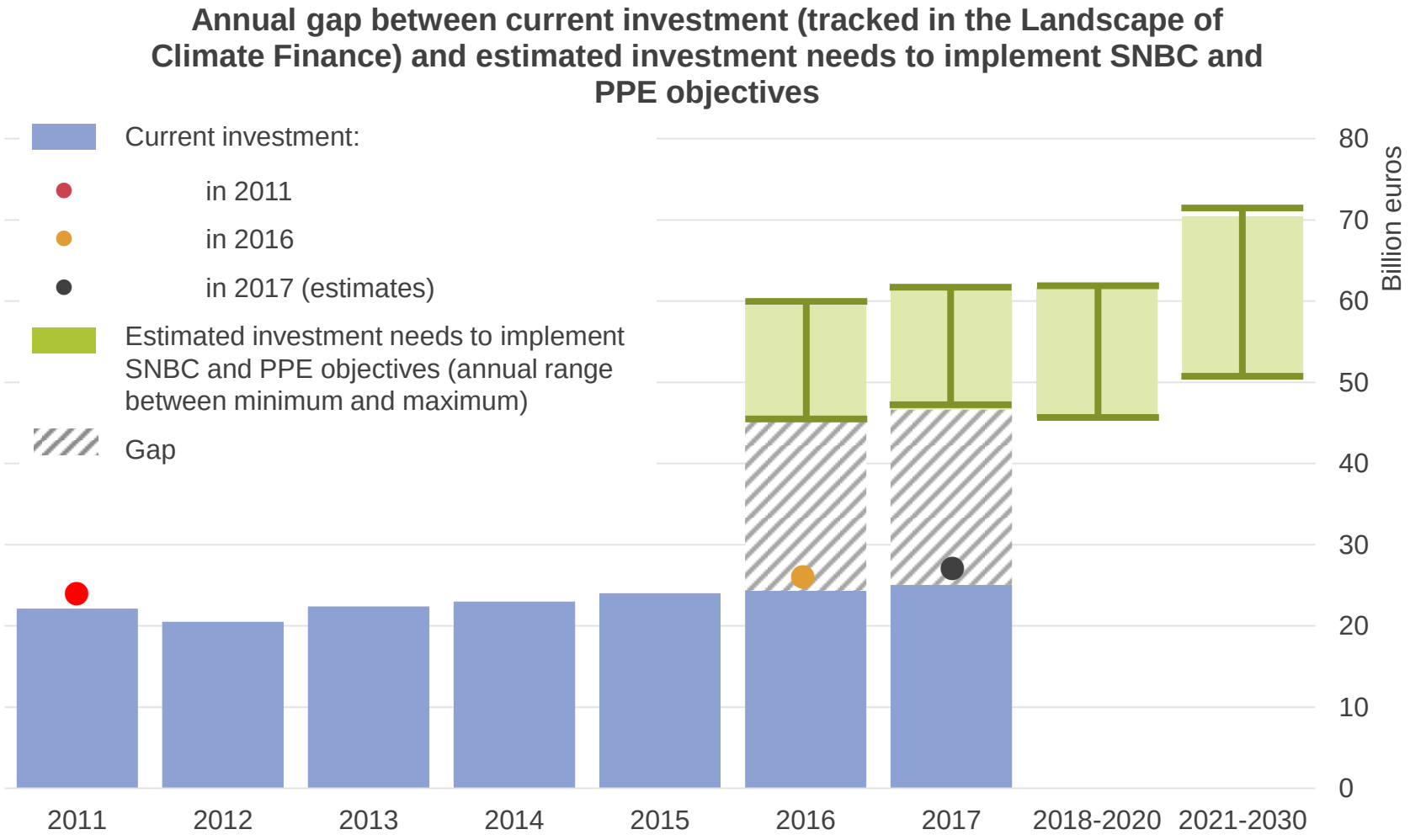
- 7.2 Grants, subsidies and transfers
- 2.7 concessional debt*
- 7.9 commercial debt*
- 4.2 bonds*
- 10.1 own funds* and equity

Investments

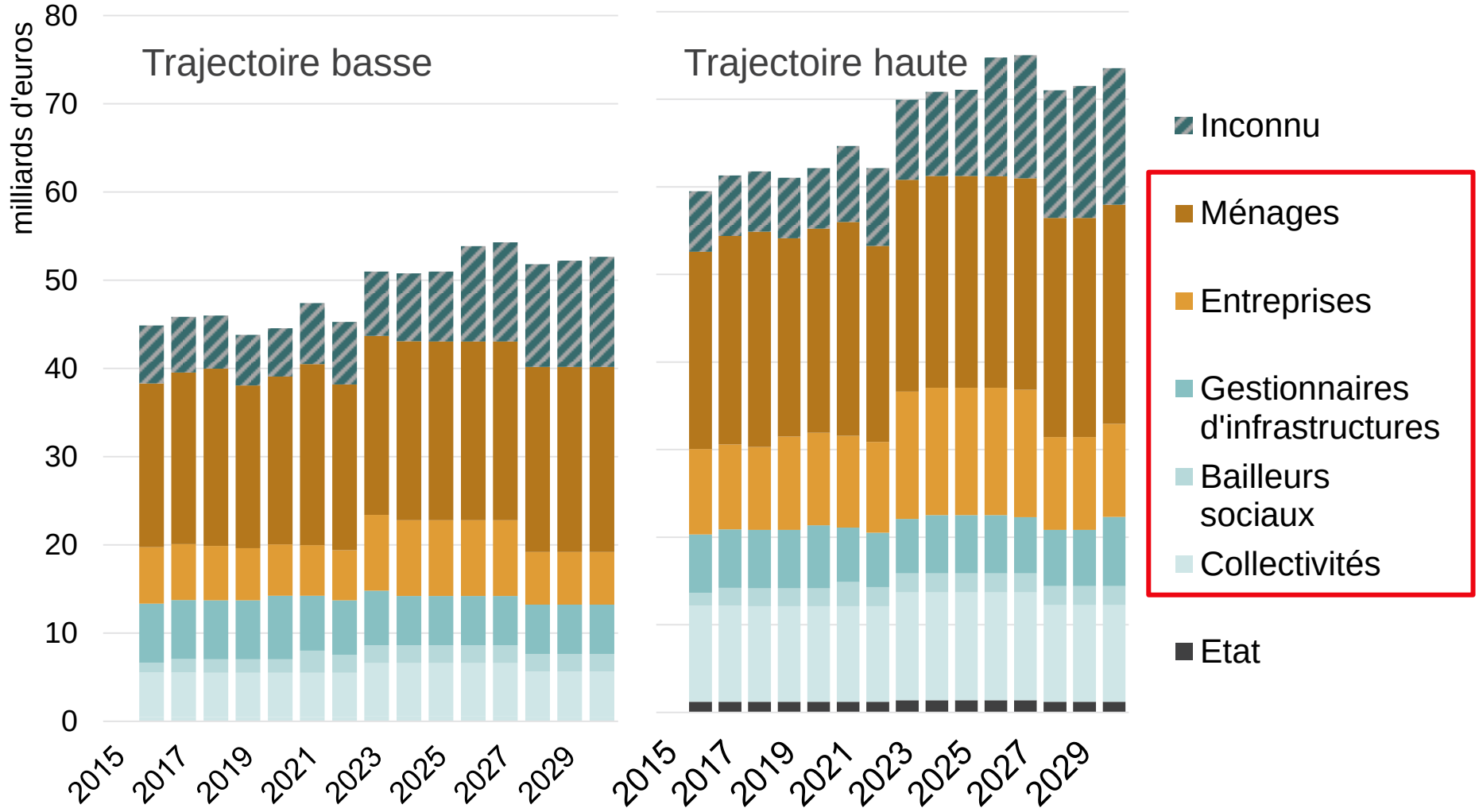
- 11.4 Public investments
- 20.3 Private investments

* including balance-sheet financing in companies

In France, in 2016 and 2017, the gap between current investment and needs reaches €20 to €40 billion

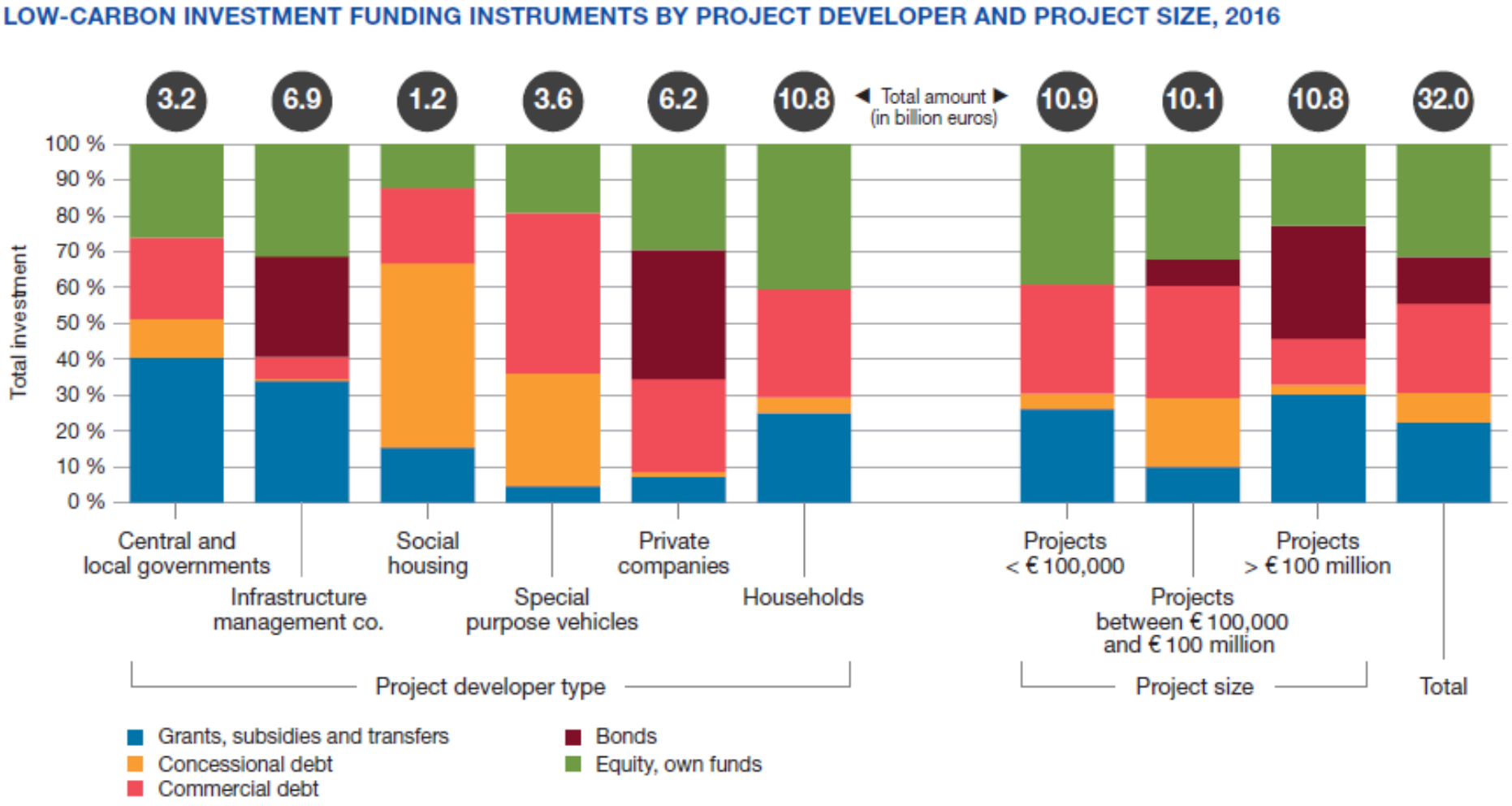


France's low-carbon strategy : non-state actors have the largest share in investment needs



A project-oriented approach

Access to climate finance : funding models and leverage vary



I4CE supports emerging climate finance tracking initiative in the EU and beyond

Contribution for policy making

Landscapes have been conducted in three european countries so far

COMPARISON OF THE SCOPE AND RESULTS OF LANDSCAPES OF DOMESTIC CLIMATE FINANCE IN EUROPE

	Germany	France	Belgium
Authors	Climate Policy Initiative (CPI, 2012)	I4CE (CDC Climat, 2014; I4CE, 2015c)	Trinomics, Ernst & Young (Trinomics, 2016)
Partners	-	MEEM, ADEME	Federal Public Service for Health, Security of the Food Chain and Environment
Year covered	2010	2011 to 2015	2013
Scope			
Mitigation	*covered*	*covered*	*covered*
Adaptation	*not covered*	*not covered*	*partial coverage*
Investment	(in 2010)	(in 2014)	(in 2013)
Total	**€37 billion**	**€32 billion**	**€6.4 billion**
% of GDP	1.4%	1.4%	1.6%
% of GFCF[2]	7.3%	6.4%	7.3%
Financing	The study indicates that 95% of finance comes from private sources, of which half is in the form of concessional loans issued by government-owned institutions.	The public sector supported more than half of finance (55% in 2014). The main instruments are direct grants and subsidies to project developers.	The principal financial tools are equity capital and bank debt. Concessional debt represented only 3% of total finance. However, public investments represented 34% of the total

Source: I4CE, CPI, Trinomics, according to comparison Table designed by I4CE for the EEA workshop "Domestic Landscapes of Climate and Green Finance in Europe" of 25 October 2016, Eurostat

(1) Separate coverage in the context of this edition: the amounts invested in R&D are not included in total investments.

(2) Gross fixed capital formation (GFCF) is a national accounting indicator that describes the investment expenditures during a given year. The GFCF takes into account for investment expenditures on some intangible capital.

(2) La :016)

Climate finance tracking becomes a key component of the Energy Union governance regulation

"**Member States shall provide a general overview of the investments needed to achieve the objectives**, targets and contributions set out in the national plan, as well as a general assessment on the sources of those investments.

(Impact assessment of planned policies and measures)
"Overview of investment needs: **existing investment flows and forward investment assumptions with regards to the planned policies"**

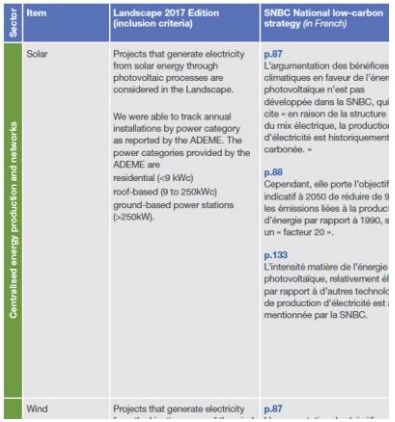
Proposal for the regulation for the governance of the Energy Union, 2018
Article 7, Annex I section 5

I4CE aims to support methodological convergence and provide insights from our experience in France

Open invitation to discuss how we could support similar assessments in other countries

Develop methodological guidance	Connect green finance with the real economy	Support similar work engaged in other countries
Workshop held with the EEA, bringing together researchers and government representatives interested in Landscapes (2016)	HLEG, EU Sustainable Finance Action Plan and Observatory	Morocco (CDG/I4CE) Germany (IKEM), Poland (Wise Europa, NCI, I4CE) Latvia and Czech Republic (IKEM)

Further documents and readings

France 2017 Results Executive Summary	Full report Five years of application in France	Article on Methodology in International Economics	Annex comparing low-carbon asset taxonomies
			
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Thank you for your attention!

Questions and comments welcome at

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Annexes

The *Climate Action in Financial Institutions* Initiative, a network of public and private institutions exchanging experiences to mainstream climate change in their operations

A coalition of 42 public and private financial institutions

Supporting Institutions

As of 13 September 2018, the *Climate Action in Financial Institutions* Initiative is comprised of 42 public and private Supporting Institutions:

Mainstreaming Climate Action in Financial Institutions

Guided by 5 Voluntary Principles, the Initiative aims to make climate change considerations a core component of how financial institutions conduct business, parallel to and in addition to the necessary development of appropriate regulatory and enabling environments at the domestic and international levels.

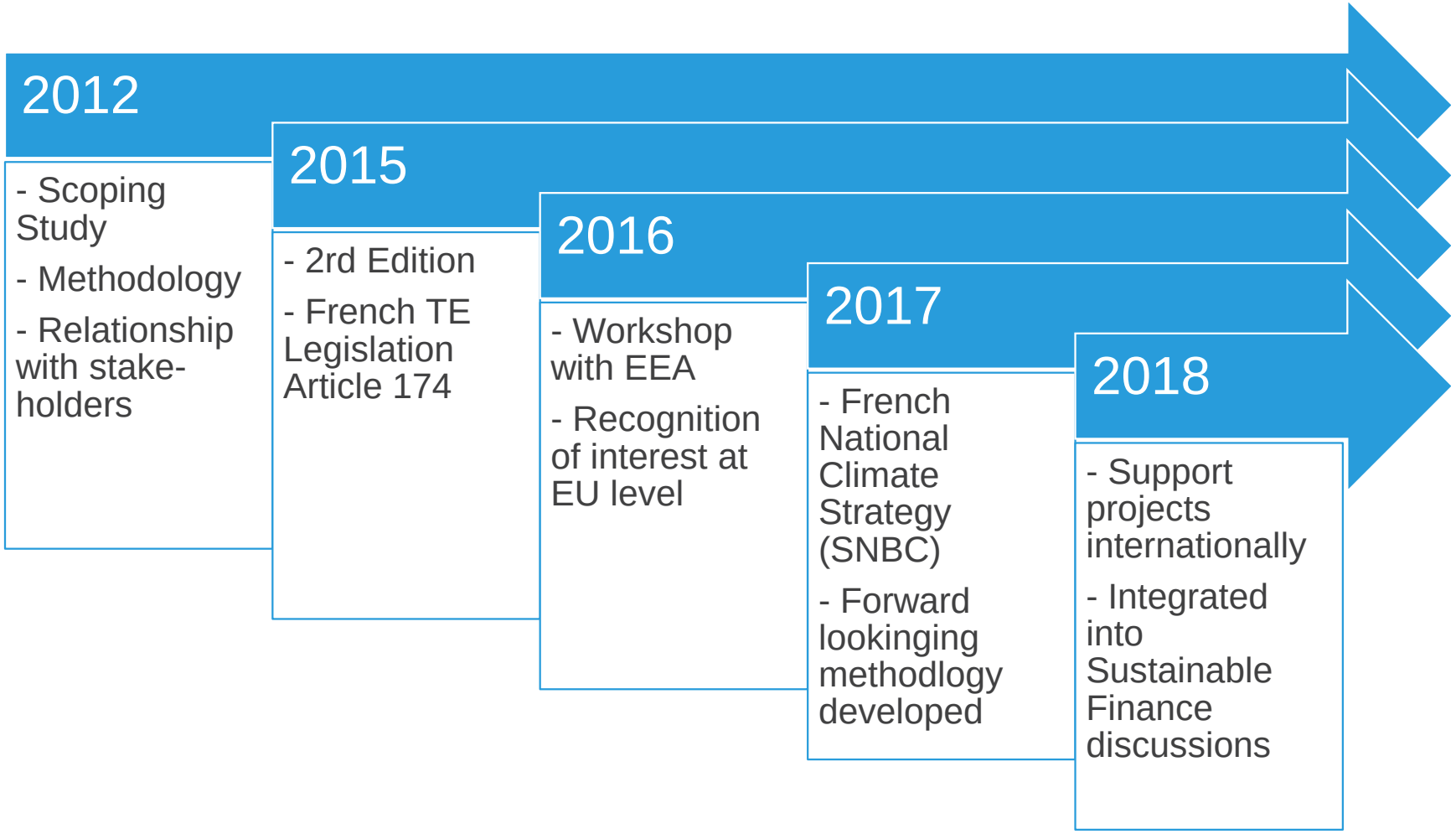
Launched in 2015, the Initiative aims to provide public and private financial institutions an opportunity to **disseminate good practice and lessons learned and to collaborate** on areas of common interest.

Sharing expertise, knowledge and practices

- The Climate Action in Financial Institutions Initiative helps financial institutions **face the concrete challenges of the integration of climate considerations into their different activities and operations.**

- The Initiative aims to provide an opportunity for financial institutions to:
  - **Foster the implementation of the voluntary Principles for Mainstreaming Climate Action and learn from each other;**
  - **Ensure that lessons learned around good practice are disseminated;**
  - **Support the development of new approaches for mainstreaming climate change.**

Timeline of French Project



Key Project Stakeholders in France and beyond.

Avec le soutien de:

ADEME

Agence de l'Environnement et de la Maîtrise de l'Energie

Liberté • Égalité • Fraternité
RÉPUBLIQUE FRANÇAISE

MINISTÈRE DE LA TRANSITION ÉCOLOGIQUE ET SOLIDAIRE

European Environment Agency

OECD
BETTER POLICIES FOR BETTER LIVES

Caisse des Dépôts GROUP

bpifrance

ÉLYSÉE
PRÉSIDENCE DE LA RÉPUBLIQUE
LIBERTÉ ÉGALITÉ FRATERNITÉ

CAN-France; European Climate Foundation; IDDRI; CPI; Climate-KIC; CBI; …

Business: SER; EPE; French Banking Association

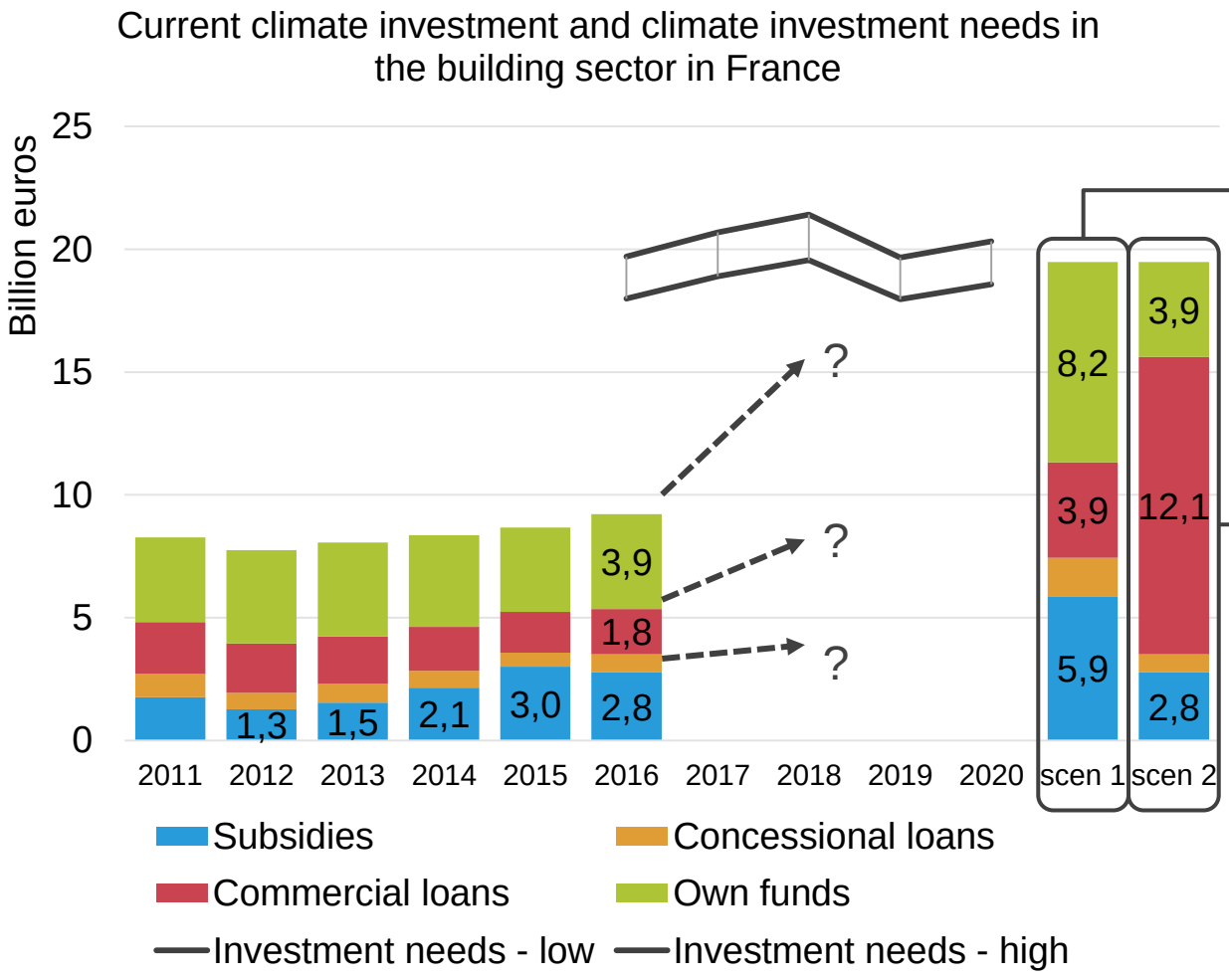
Among others…

Methodology

Combining approaches to estimate low-carbon investment needs

Top-down or « macro » In France : SNBC-1's economic assesment	Bottom-up or « micro » I4CE's Landscapes
Macroeconomic modelling	Low-carbon investment mapping
In a simulation of the economy as a whole, a set of climate policies and measures results in private agents re-allocating labour, capital and energy along their production functions.	Tracking investment needs from public and private developers in a set of low-carbon equipment. Analysing for each item how investment was financed through public and private channels.
Best suited to compare between two future scenarios	Best suited to compare between current situation and near to medium future
• Allows observations on GDP, employment, trade balance, capital availability • Takes into account overall changes in wages, productivity, cost of capital, etc.	• Allows closer monitoring of policy factors leading to investment successes or setbacks; • Finer description of financing structures, of specific or innovative equipment and of shifts in capital stocks of specific sectors
• Simplified production functions may over or under-estimate the investment challenge • Little sectorial or item disaggregation may mask important transformations	• Intensive in data collection • Sensitive to the definition of low-carbon assets

In France, in 2016 and 2017, the gap between current investment and needs reaches €20 to €40 billion



Scenario 1

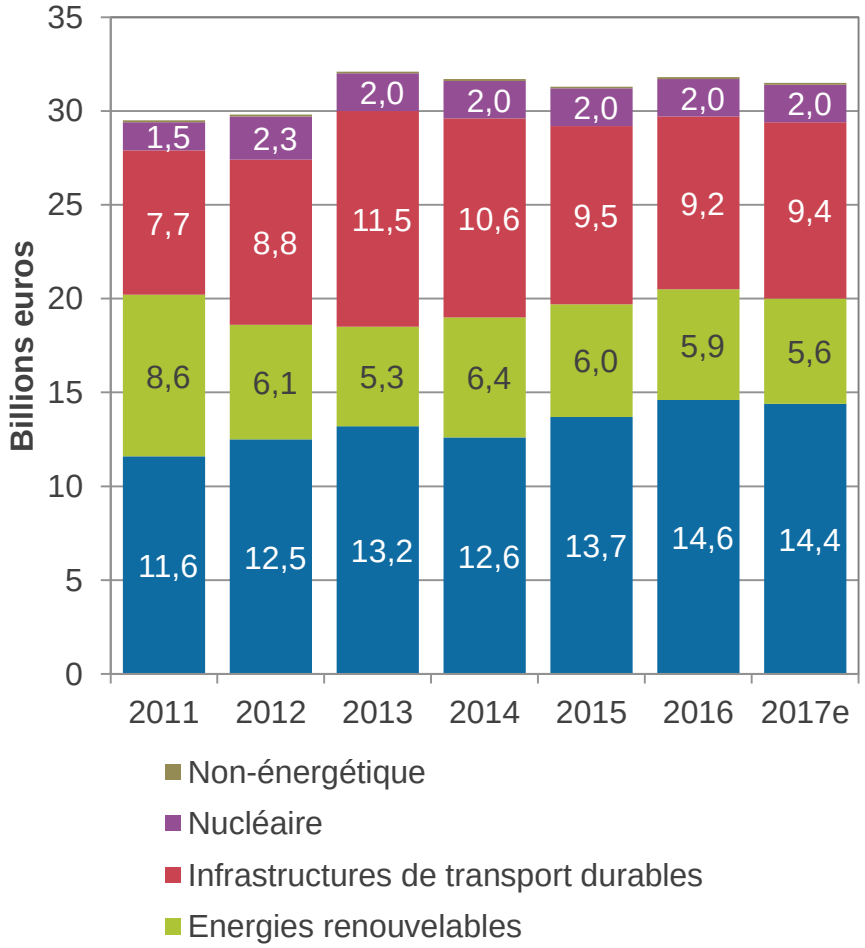
- No significant change in project profitability or cost
- Investment objectives achieved through increase public funding with matching private cofunding
- Constant leverage

Scenario 2

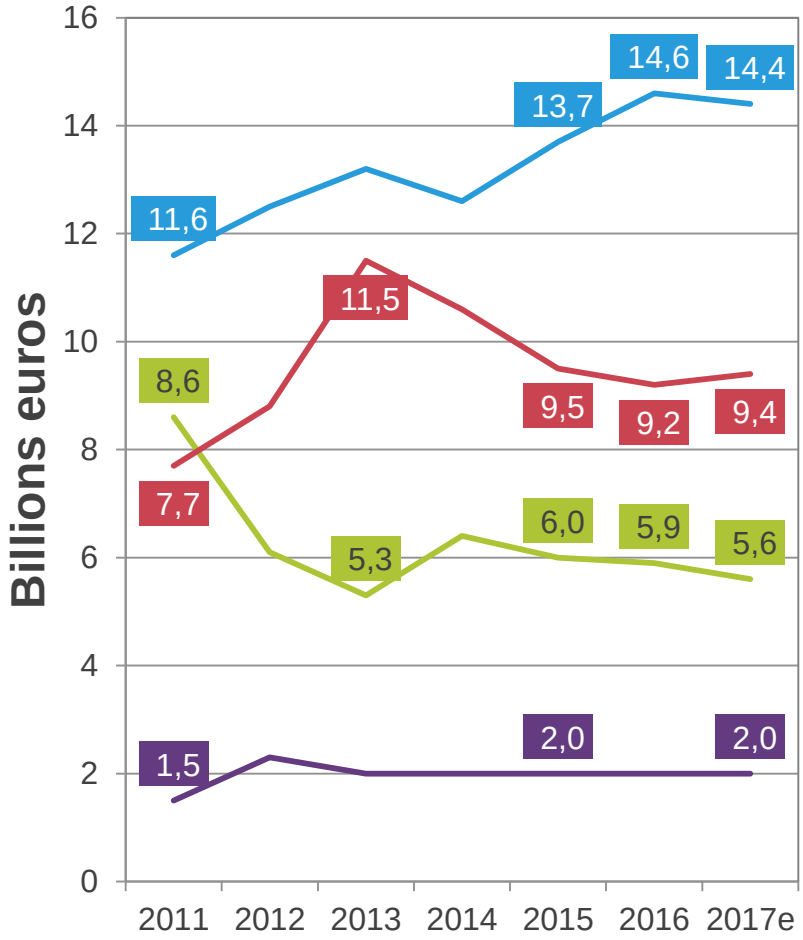
- Increase in project profitability and reduced costs and risks
- Involvement of third party private finance (loans)
- Increased leverage
- Constant public funds

Overall results: stable investments since 2013, but variations across end investment areas

Overview



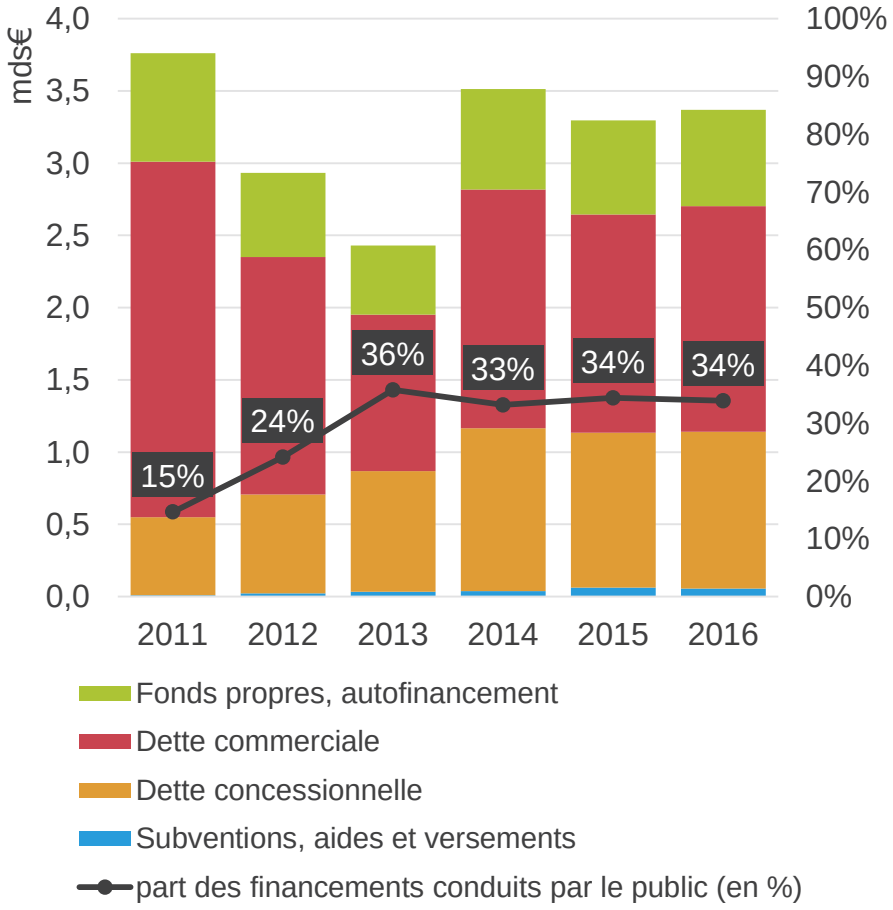
Detail by domain



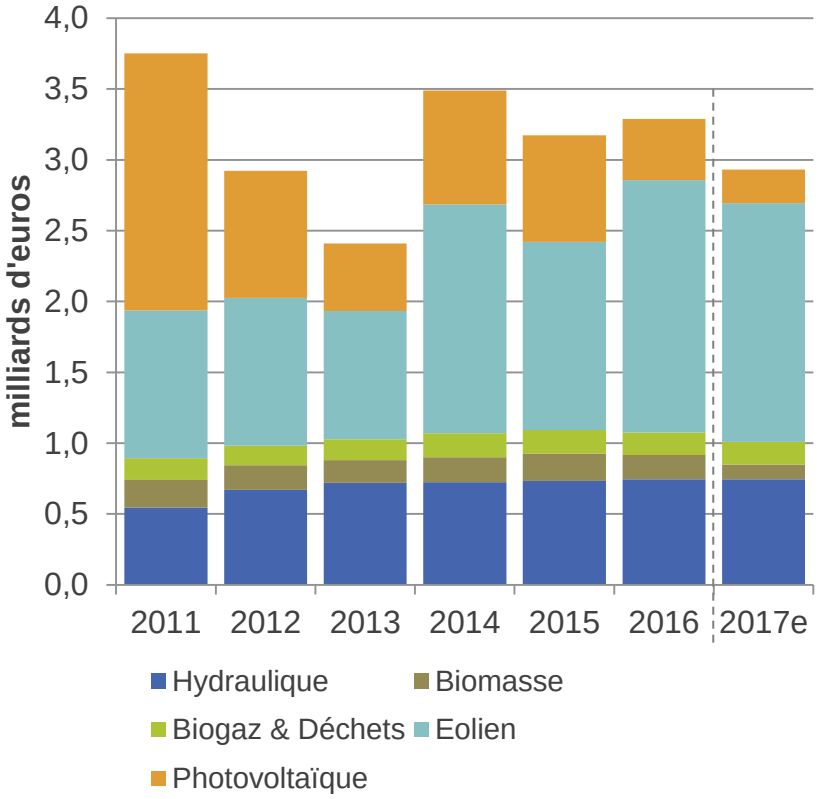
Note: In this edition, the year 2017 is estimated (e), but not definitive data

Production d'électricité renouvelable* : stabilisation des investissements et du rôle des institutions financières publiques

Financement des investissements dans la production d'électricité renouvelable centralisée



Investissements dans la production d'électricité renouvelable, par filière



* Hors PV sur toitures