

I4CE

INSTITUTE FOR
CLIMATE
ECONOMICS

Une initiative de la Caisse des Dépôts et
de l'Agence Française de Développement

Linking long-term targets with current financial flows

3rd meeting of the Climate Recon Technical Dialogue

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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, supported by Morocco's Caisse de Dépôt et Gestion, the ADEME, Institut Louis Bachelier and the Banque de France

Our mandate : track domestic climate finance and compare it to investment needs

(...) present a 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.

Article 174 of the Energy transition for green growth act (adopted 2015)

(...) it is necessary to present **the milestones of a “business plan” for the ecological transition, assessing investment needs** for each sector, and **giving visibility** on public and private financial commitments

Parliamentary mission on private investment in the ecological transition, 2019

Tracking investment and financial flows in domestic, low-carbon, tangible assets

Low-carbon criteria are derived from national strategies (SNBC & PPE) and international taxonomies such as Climate Bond Initiative, EU HLEG and French TEEC label

Energy efficiency

New buildings and building retrofiting
Industry, electric and NG vehicles

Renewable energy

Wind, solar (large scale & rooftop)
Biomass heating, heat pumps

Sustainable infrastructure

Railways development and maintenance
Urban public transport, cycling lanes

Nuclear

Construction of the EPR (Flamanville)
Replacement of large components of existing plants

GHG outside energy combustion

Forestry, industrial processes
(not covered : agricultural processes outside energy)

Distinguish climate investment and climate finance, today and in the future

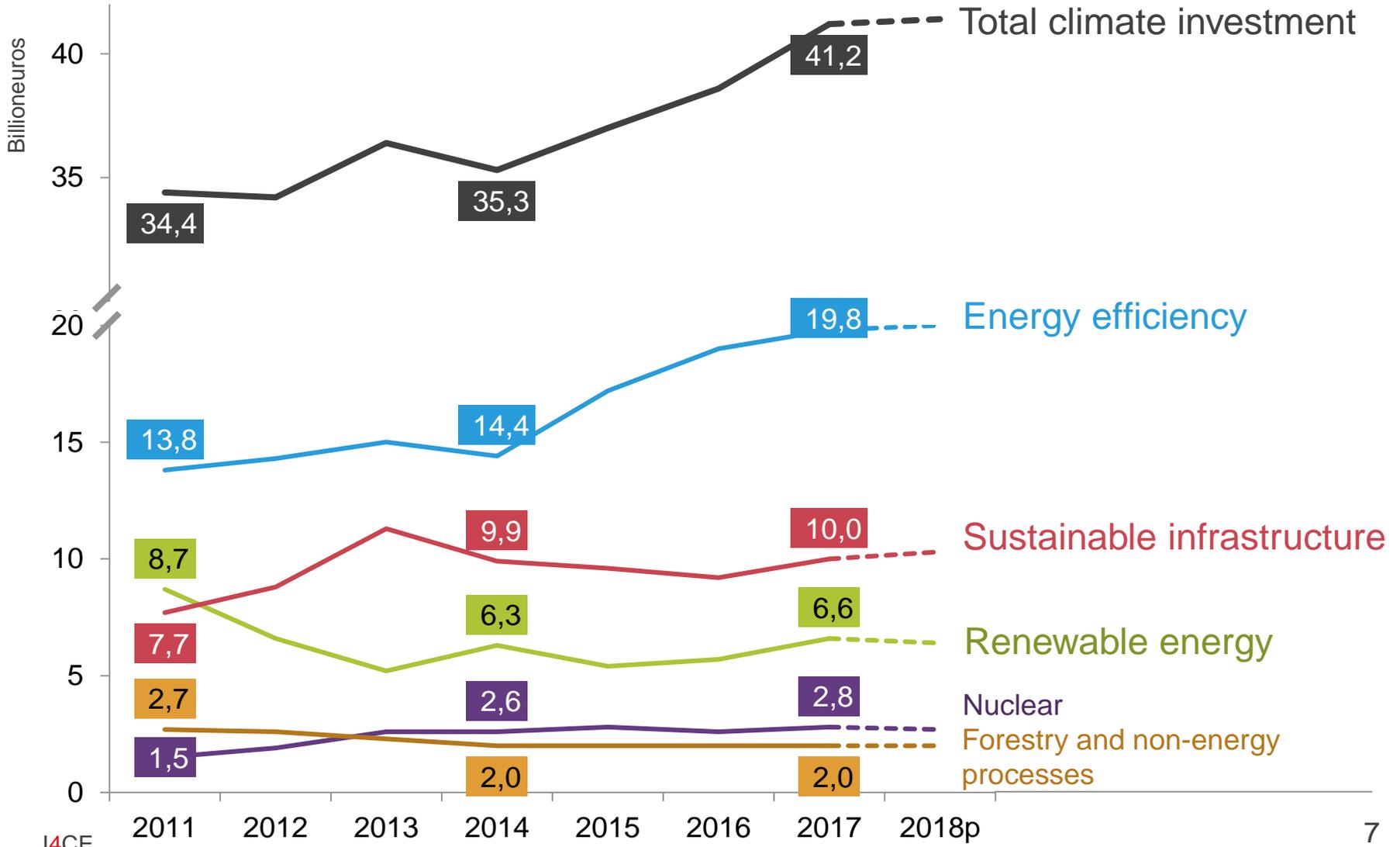
	I4CE Landscape Application in France : 2011-2017	National Plans In France : SNBC 2016-2030
Climate investment	<p>Tracking low-carbon CAPEX e.g. residential retrofitting, low-carbon vehicles, etc.</p> <ul style="list-style-type: none"> Made by households, companies and public institutions Projects emerging under current economic and regulatory condition 	<p>Mapping investment needs e.g. deploy X thousand electric vehicles by 2025, etc.</p> <ul style="list-style-type: none"> Assessed against equipment deployment goals stated in national strategies & I4CE's cost assumptions
Climate finance	<p>Funds used by project developers to cover their investment expenditure</p> <ul style="list-style-type: none"> Provided by public institutions (subsidies), banks and financial markets (loans, bonds) or project developer's own funds 	<p>"Business plans" exploring new public and private finance</p> <ul style="list-style-type: none"> Possible increase of private finance reflecting improved economic and regulatory conditions for low-carbon projects

However, knowledge of investments and financial flows is lacking in some sectors

	Housing	Transport	Energy production	Tertiary	Agriculture	Industry	R&D	Adaptation
Climate investment 2011-2017	✓	✓	✓	partial	partial	partial	×	×
Climate investment needs 2016-2030	✓	partial	✓	✓	×	×	×	×
Investment in fossil fuels	✓	✓	✓	partial	×	×	×	×



**41 billion euros invested in 2017,
 increasing by 17% since 2014**

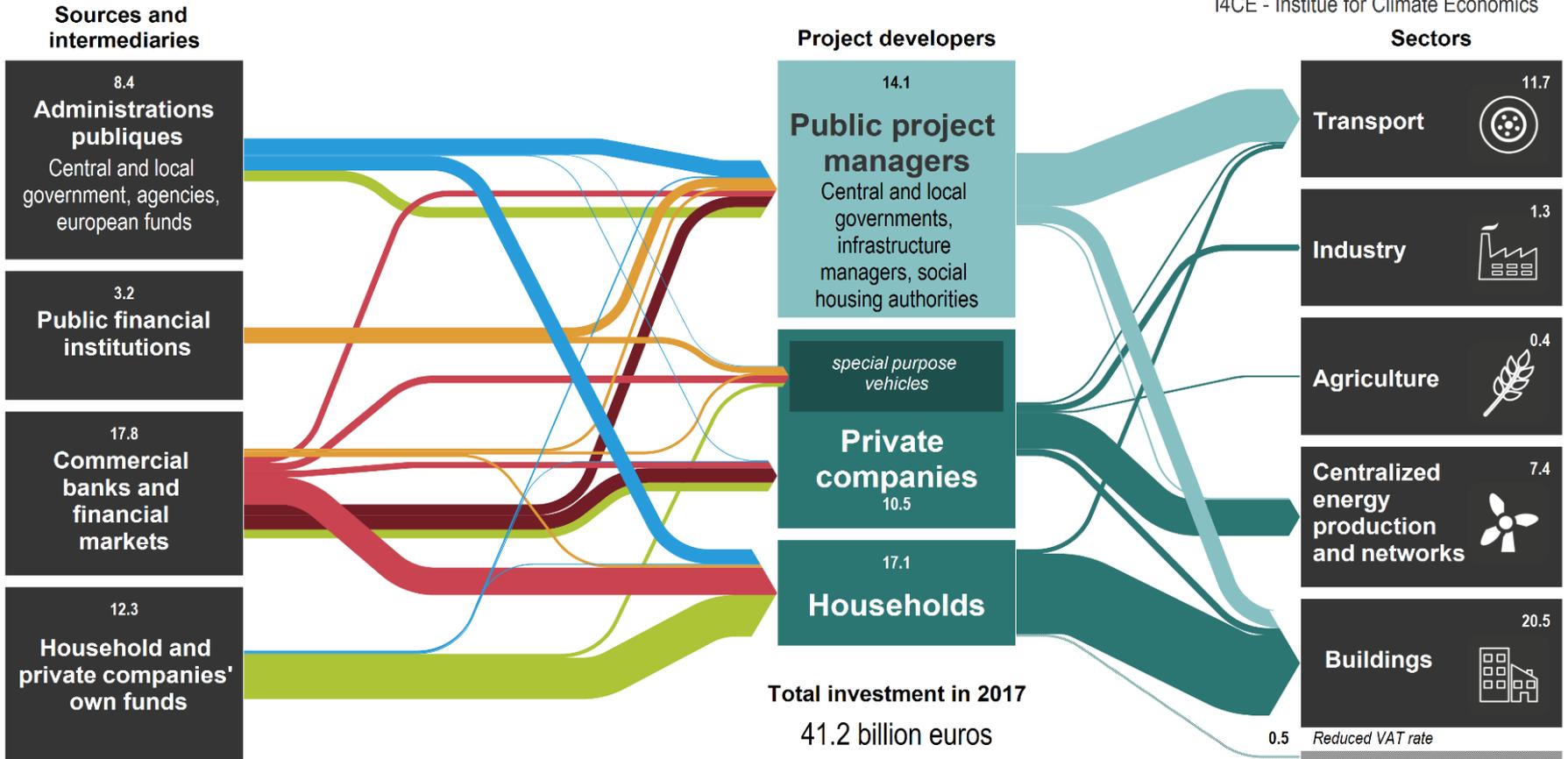


Households and private companies are the principal project developers, followed by public entities

Landscape of climate finance in 2017

in billion current euros

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Financing instruments

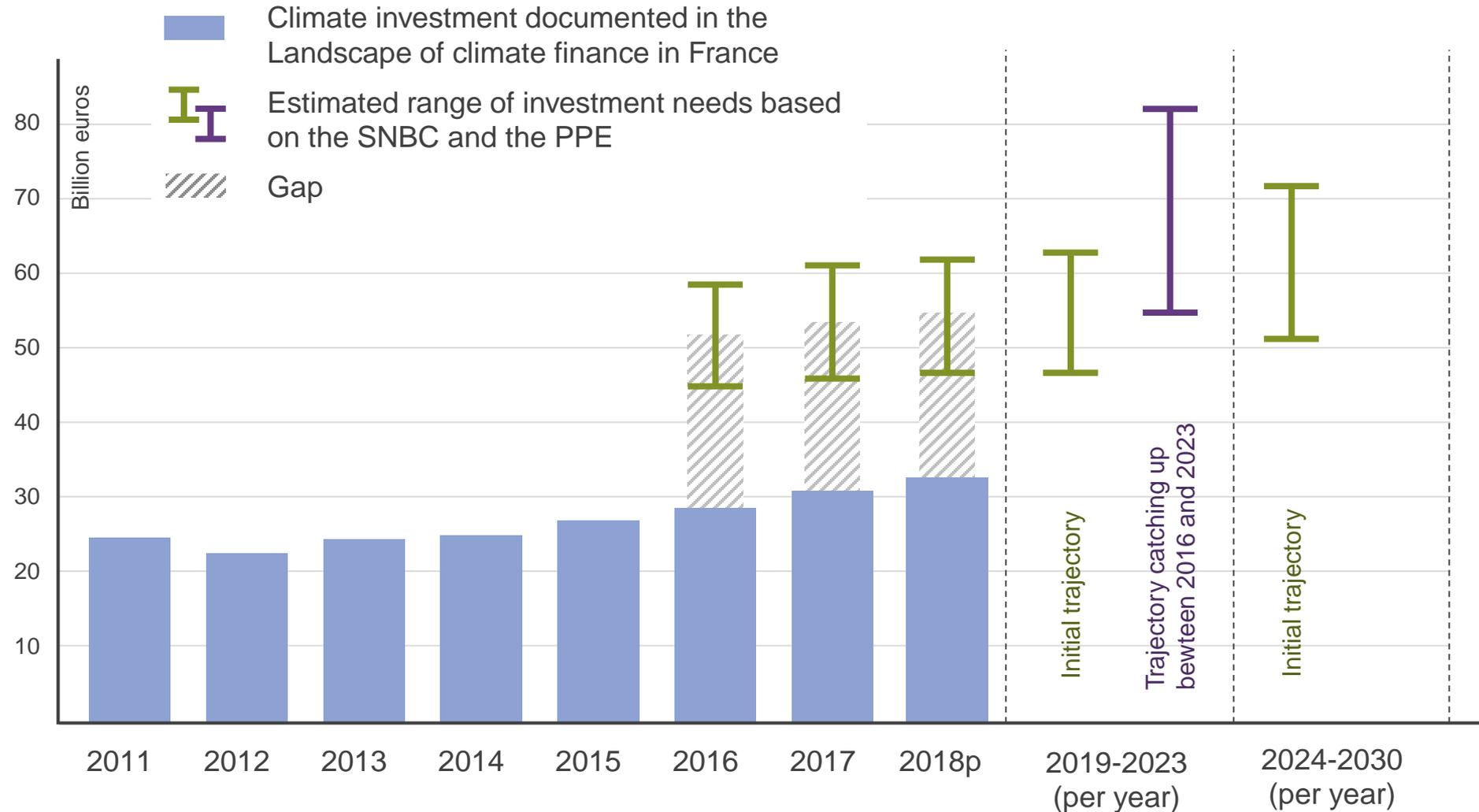


Investments

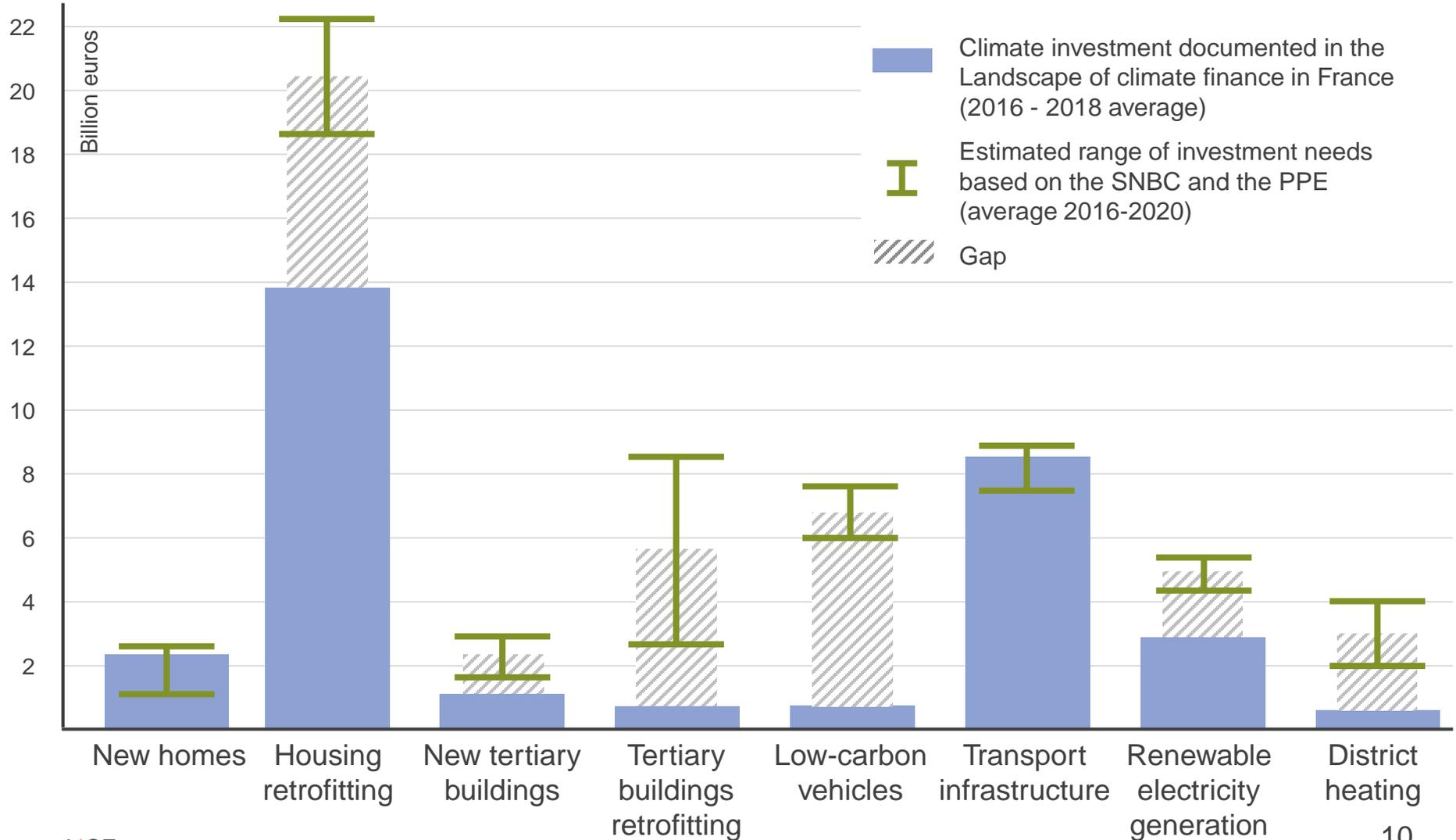


* including balance-sheet financing in companies

A gap of 10 to 30 billion euros per year compared to estimated needs to achieve national climate goals



Investment gaps vary across sectors



Further extensions, challenges ahead

- **Expand scope** and improve coverage
 - Climate investment and finance in industry, agriculture, tertiary buildings...
- **Update investment needs** according to the revised national low-carbon strategy (NECP)
 - Drive projections up to 2050 ;
 - Improve assumptions on units to be deployed, evolution of costs ;
 - Reach beyond the scope of material equipment (behavioural change, R&D priorities)
- **Build “financial scenarios”** that achieve the required investment levels
 - Match financial resources (e.g. subsidies) with economic and regulatory conditions

Conclusion

Climate investment in 2017	Gap with investment needs	Fossil-fuel climate-adverse investments
41.2	+10 - 30	73
billion euros	Billion euros/year	billion euros

To learn more : www.i4ce.org



Executive summary
 of 2018 results
 (EN version)

Edition '18



Full report and
 sectoral analysis of
 2017 Edition results
 (EN version)

Edition '17

Thank you for your attention!

Questions and comments
welcome at

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