

# Domestic offset projects

## Expanding the means to combat climate change through domestic offset projects

### *Executive summary*

This assessment report was prepared by the Climate Task Force of Caisse des Dépôts at the request of the French government. Many professionals in government, the private sector and non-profit organisations contributed to its preparation and offered valuable input.

## The appeal of domestic offset projects: broadening the incentives for emissions reductions in France

- > Through the Kyoto Protocol, the current international system to combat climate change sets a ceiling on greenhouse gas emissions for industrialised countries and enables them to trade emissions allowances. It also includes a “projects” component, which authorises countries to repatriate for domestic use emissions credits generated by projects that reduce emissions abroad.
- > Each country is then free to choose the means used to reduce emissions on its own territory. Thus several non-European countries have implemented a “domestic offset projects” system that mirrors the project concept articulated in the Kyoto Protocol but is used in the home country. Canada and New Zealand, which ratified the Protocol, have opted for this method.
- > In France, the European CO<sub>2</sub> emissions trading scheme, which applies to leading industrial and power-producing emitters, covers less than 30% of the country’s total emissions. The remaining 70% are not subject to any incentive through carbon pricing, and it is these emissions that are increasing most rapidly in France. An expansion of the allowances system would quickly encounter technological (diffuse emissions, mobile sources) and cost (number of sites) constraints.
- > A system of domestic offset projects, however, would offer the advantage of affecting the most sensitive sectors and the most diffuse in terms of emissions by providing them with pricing signals for carbon. It would help to decarbonise the economy while reducing the overall cost of emissions reductions. If this system were tied to the European emissions trading market, it would increase the market’s liquidity by contributing new assets.

## Potential reductions of between 10 and 15 million metric tons of CO<sub>2</sub> equivalent

- > The Climate Task Force of Caisse des Dépôts, assisted by numerous contributors from both government and the private sector who met in sector-based working groups, assessed the stock of potential emissions reductions that could be exploited in France through a domestic offset projects system. They estimated the range to be between 10 and 15 million metric tons of CO<sub>2</sub> equivalent spread over four sectors.
- **Transport:** In this sector which has the fastest rate of increase for emissions, the potential for reductions is greatest in goods transport (inter-modal), urban passenger transit initiatives (in particular bus fleets) and projects using innovative technologies.

- **Agriculture and forestry:** Substantial reductions could be achieved through projects using bio-combustibles, animal waste management and reductions in nitrogen-based fertilisation. Longer term, the potential for carbon sequestration in forests and changes in agricultural land use are ripe areas for further study.
  - **Buildings:** This sector's potential emissions reductions appear to be substantial, especially through projects to improve the management of service sector buildings, changes in commercial refrigeration systems and the replacement of fossil-fuel boilers.
  - **Industrial emissions not covered by quotas** (non-CO<sub>2</sub> gases, small facilities): These emissions could be substantially reduced, mainly in the area of solid waste and wastewater management. Two other promising sources of reductions include emissions from chemical industry processes and leaks related to natural gas transport.
- > These potential reductions are all theoretical. An effective system will have to be implemented in order to know their actual volume.

## Conditions for implementation

- > Technically, the implementation of a domestic offset projects system in France may be accomplished through different means, depending on the carbon asset that will be offered in exchange for the project-related emissions reductions.
- > Four options are possible, and rely on four types of assets:
- the sale by the State of a portion of its Kyoto allowances (Assigned Amount Units, or AAUs), possibly as from 2008,
  - the use of European allowances,
  - the supply of Kyoto credits purchased by the State in the international market,
  - the establishment of reciprocal agreements with European partners to enter into the framework of Kyoto projects.
- > The final choice will have to factor in the ease of implementation and the asset's liquidity in the European and international markets. Some of these options may be implemented in the current institutional framework, while others would require international negotiations.
- > Moreover, for these projects to contribute real environmental and economic benefits for the public good and to help France achieve its emissions reduction objective, they must complement France's currently planned policies and measures under the Climate Plan. This criterion must be studied on a case-by-case basis and integrated into the methodological frameworks.

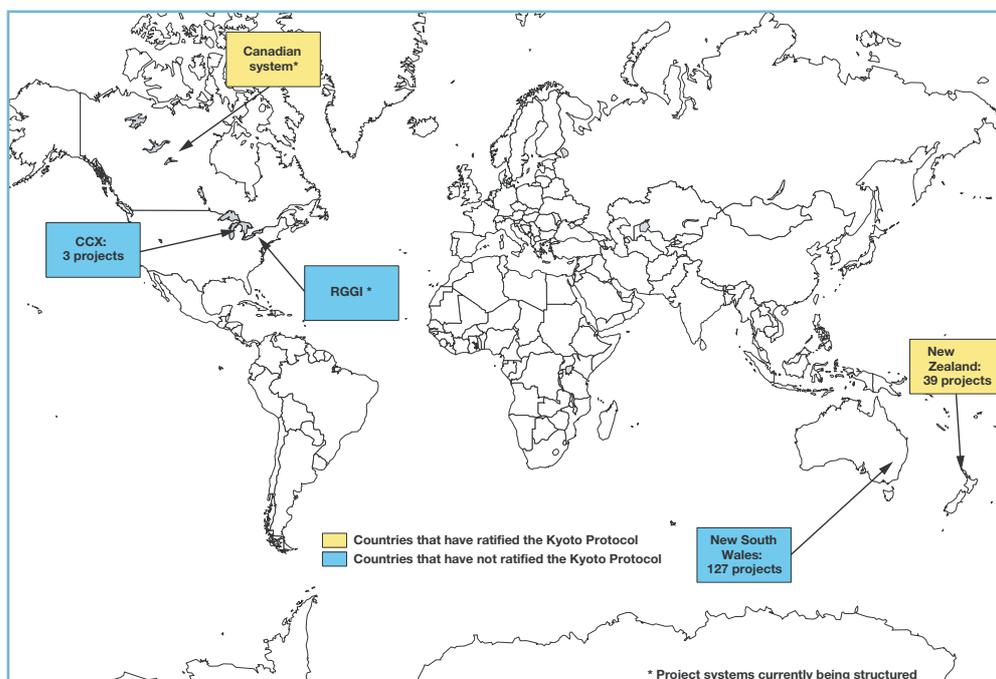
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#### The development of CO<sub>2</sub> domestic offset projects in the world

Four countries around the world have launched systems for domestic offset projects.

Two of them, New Zealand and Canada, have ratified the Kyoto Protocol.



Source: Climate Task Force (Caisse des Dépôts), Research report No. 5

#### Greenhouse gas emissions in France

In France, greenhouse gas emissions covered by the European emissions trading scheme accounted for 27% of domestic emissions in 2003.

Sector	Greenhouse gas emissions in 2003		Change (metric tonnes, millions) 1990 to 2003	Share of emissions under NAP
	tCO <sub>2</sub> eq millions	%		
Energy production	72	13%	- 8	100%
Industry	111	20%	- 31	70%
Agriculture	108	19%	- 11	0%
Transport	149	27%	28	0%
Buildings	102	18%	13	0%
Waste	14	3%	- 2	0%
<b>TOTAL France</b>	<b>557</b>	<b>100%</b>	<b>- 11</b>	<b>27%</b>

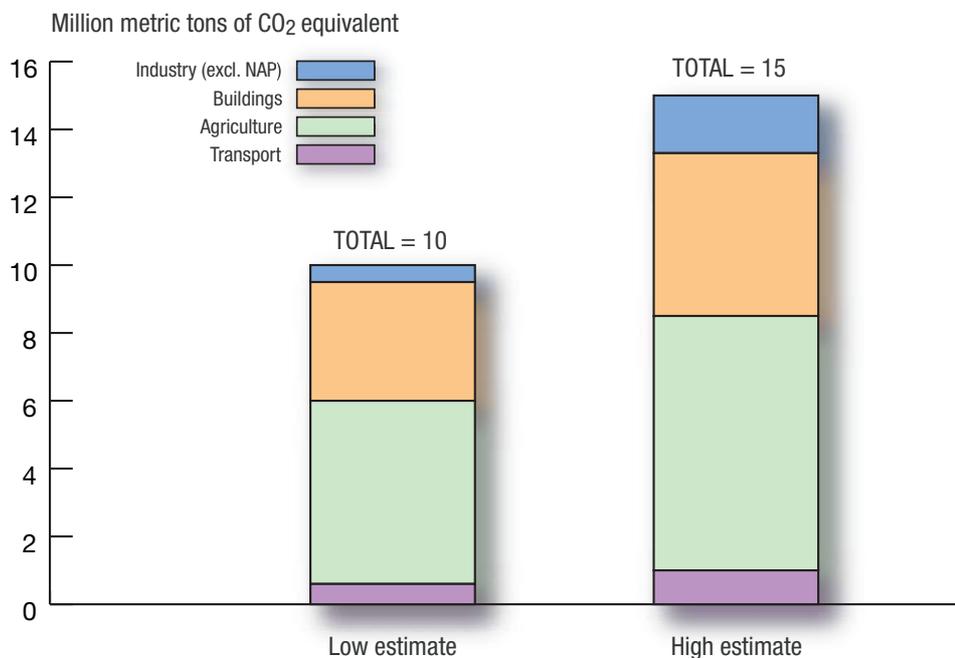
Source: Caisse des Dépôts, according to French NAP, Climate Plan

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### Total potential emissions reductions via domestic offset projects

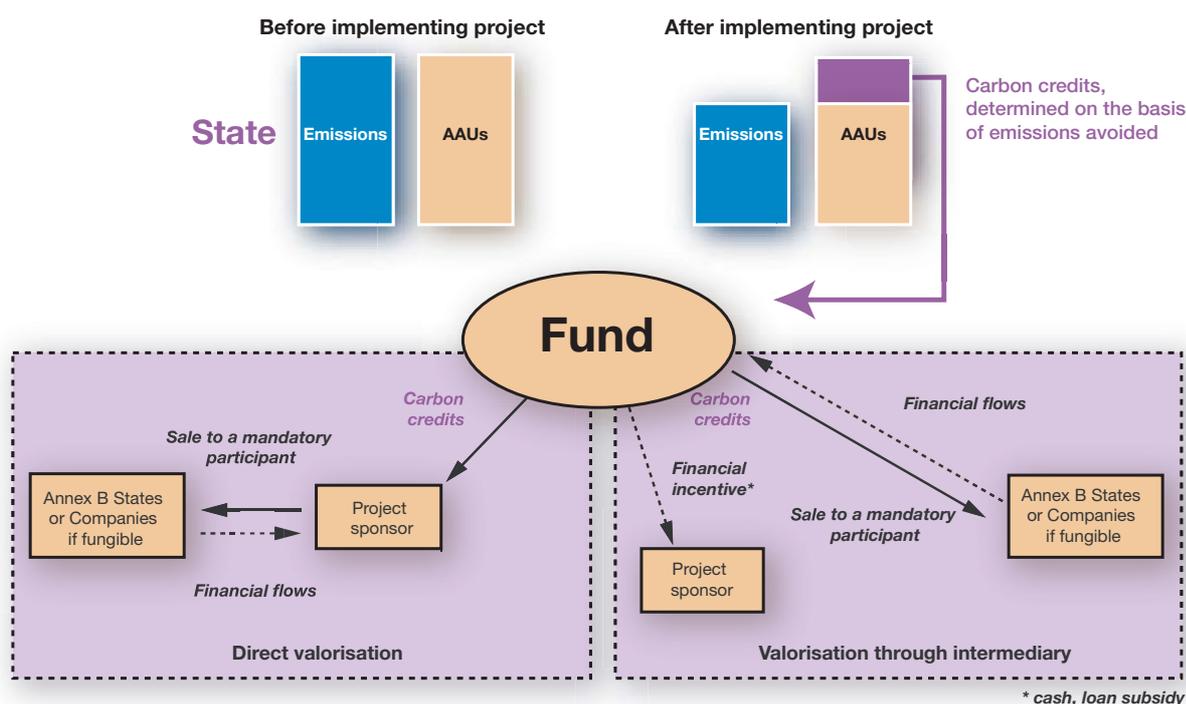
The total volume of potential emissions reductions in France through a system of domestic offset projects is estimated at between 10 and 15 million metric tonnes of annual CO<sub>2</sub> equivalent for the period 2008–2012.



Source: Caisse des Dépôts estimates based on assessment report of domestic offset projects

### Financial structure: credit allocation via intermediary system

The creation of a dedicated fund for domestic offset projects would make it possible to offer project sponsors attractive financial incentives for projects that reduce greenhouse gas emissions.



Source: Caisse des Dépôts, Assessment report on domestic offset projects

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- > Lastly, a domestic offset projects system must be based on a sound and efficient methodological framework. This framework must take the following elements into account:
- simple procedures and sufficient means to ensure their efficiency,
  - the establishment of measuring and monitoring protocols, as well as a certification system,
  - eligibility criteria, which must include additionality, consistency with the national GHG inventory and contributions to the French strategy for sustainable development,
  - the establishment of consolidation points, especially for small projects.
- > The corresponding institutional and financial system could include a public-sector governance authority, backed by qualified technical support. The establishment of a fund would make it possible to send the proper pricing signal to project sponsors by providing them with remuneration through appropriate financial engineering.

## Conclusion

- > **The implementation of a domestic offset project system not only appears feasible in France, but also appears to be of great interest to the relevant parties. Such a system, which is consistent with the long-term strategy to reduce French greenhouse gas emissions, could be tested as from 2006. To begin this test phase, the technical parameters will require close attention, but the determining factor will be the collective will.**

The complete report (in French) may be downloaded from the Caisse des Dépôts web site:  
[http://www.caissedesdepots.fr/FR/espace\\_presse/publications\\_doc/rapport\\_final\\_projets\\_domestiques\\_CO2\\_11\\_05.pdf](http://www.caissedesdepots.fr/FR/espace_presse/publications_doc/rapport_final_projets_domestiques_CO2_11_05.pdf)

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