

## Analysis relating to climate change and carbon price – November 2015

According to the 5th report of the IPCC (Intergovernmental Panel on Climate Change) published in 2013-2014, significant reductions in greenhouse gas (GHG) emissions are needed during this century in order to limit global warming below 2°C relative to pre-industrial levels, as agreed at an international level. In particular, scenarios consistent with this objective are characterized by 40 to 70% global emissions reductions by 2050 compared to 2010 and emissions levels near zero or below in 2100. Any delay in implementing will result in the need for acting more drastically due to the cumulative characteristic of emissions.

Such a move requires the quick introduction of a price signal that will give a significant economic cost to GHG emissions and guide investments towards the development of a less carbon intensive economy. Aware that delaying the introduction of a carbon price that is high enough and cover a sufficient perimeter increases the risk of a sudden failure in the future, over 1 000 economic private players including Crédit Agricole called in September 2014 governments to set the conditions for establishing a carbon price<sup>i</sup>.

Consistent with this call, Crédit Agricole CIB has decided to progressively introduce an analysis in relation to climate change issues (in particular carbon price) when reviewing credit applications.

A specific methodology has been developed at the initiative of CACIB by the sustainable development Chair of the Paris Dauphine University for counting the financed emissions. This methodology named P9XCA is detailed in a sectoral guide for the financial sector “Understanding the issues around quantifying GHG emissions in the financial sector” published in 2014 by the French Agence de l’Environnement et de la Maitrise de l’Energie, the Observatoire sur la Responsabilité Sociétale des Entreprises and the Association Bilan Carbone. It allows for a first classification of industry macro-sectors and geographical zones according to their carbon intensity measured in tCO<sub>2</sub> / EUR of financing.

The analysis relating to climate change and carbon price is therefore being introduced, as a first step, for structured transactions which tenor is over 2020 and the main clients of the Bank belonging to the following sector and geographic zones for which the carbon intensity is the highest:

- Energy and Industry in China
- Energy and Industry in India
- Energy in Germany
- Agriculture / agrifood in Latin America
- Energy in Eastern Europe

The analysis will consider the aspects that are the most relevant according to the transaction or client’s area(s). For examples, a producer of electricity will be mainly concerned by the risk of introduction of a carbon tax and the water stress impacting the cooling of the plants; an industrial group may face a significant increase of the cost of electricity (depending upon whether it is fossil fuel based) and an agriculture / agrifood group will be mostly affected from its potential link with deforestation or by a fall in agriculture yields.

The content of the analysis will depend upon the context but may cover in particular the following aspects:

- carbon price assumptions used
- consideration of specific risks linked to the location of the asset (high risk area for water stress or affected by rising sea level, expected fall in agriculture yields...)
- consideration of a carbon price by the client when assessing the profitability of its investments or the potential impact on its business model

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<sup>i</sup> <http://www.worldbank.org/en/news/feature/2014/09/22/governments-businesses-support-carbon-pricing><sup>i</sup>