Do internal carbon prices make a difference on corporate strategies?

INTERNAL CARBON PRICING: THE PILOT PHASE

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1 | Internal corporate carbon pricing can be used to capture asymmetries of information in the 2° business case

Businesses are increasingly adopting an internal carbon price to manage asymmetry of information due to the tragedy of horizons and to consider long term perspectives into and their short term decision making because …

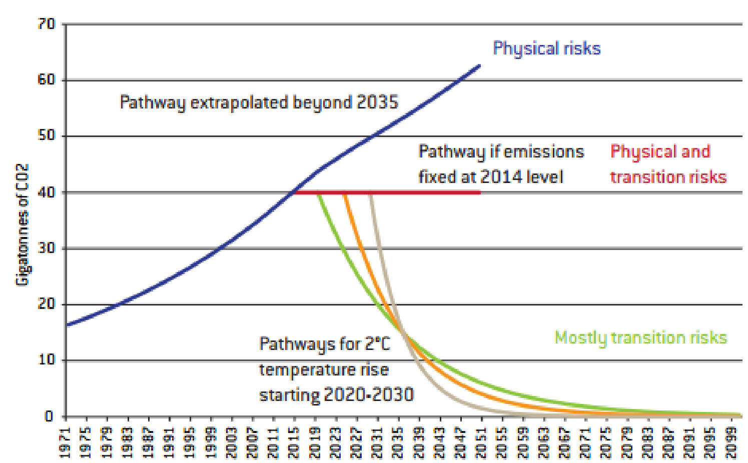
- Very high levels of carbon prices would be required to be consistent with 2°C scenarios
- More than 60% of GHG emissions from energy consumption are still not covered by carbon pricing policies.
- The need to anticipate the future implementation of policies that put a price on carbon and steer the allocation of capital to low-carbon investments;

2 | Internal corporate carbon pricing can be used as an accounting and risk management tool

Businesses are increasingly adopting an internal carbon price to manage their climate-related risks and to overcome many market and behavorial failures …

- **Physical risk** - increase in the intensity of extreme climate events (floods, drought etc.) which could negatively impact company assets, disrupt supply chains and increase resource scarcity.
- **Regulatory risk** - posed by national and subnational carbon pricing policies and other environmental regulations
- **Risk of depreciation of tangible assets** - where decarbonisation policies decrease the value of certain assets (“stranded assets”)
- **Legal liability risk** – requests for compensation from companies that are believed to be knowingly negligent in preventing the economic impact of climate risks

Figure 1: Possible carbon emission trajectories



Source: UK Prudential Regulation Authority (2015).

3 | Internal corporate carbon pricing in a competitive game

Options to implement a corporate carbon price depends on companies'objectives

- There are several ways an internal carbon price can be implemented and the choice and design of pricing instrument: taxes, shadow prices, implicit carbon prices

- The range of internal corporate carbon prices is huge from $0.3 to almost $900 t/CO2e according to the objective defined by companies

Conclusion | Internal carbon pricing: The pilot phase

- The initiative of internal carbon prices is supposed to have a positive impact on corporate strategies because it provides potential benefits:
  - Materializing economic and financial risks related to climate change
  - Stimulating and “de-risking” the low-carbon business case
- The question of its effectiveness remains to be addressed with the increasing experience of companies.
- Next challenges to advance voluntary carbon pricing among businesses over the next 4-5 years:
  - Over-arching climate and energy policies from governments will be necessary to continue to provide the necessary impetus to transition to low-carbon practices.
  - Indicative social carbon values could be used as a main anchor among a benchmarking of carbon pricing values.

Annex: methods depend on the needs of the organisation

Carbon Tax

(explicit carbon price - calculated ex-ante)

Method: tax applied on (Scope 1, 2 or 3) GHG emissions associated with a company's operational activities

Objective: short-term impact

- Reduce corporate emissions to meet internal/external targets
- Generate internal revenues to finance further emissions reductions
- Offset corporate GHG emissions
- Incite further low-carbon engagement from employees

Shadow Price

(explicit carbon price - calculated ex-ante)

Method: integrate carbon costs in all investment decisions without monetizing GHG emissions

Objectives: medium and long-term impact

- Develop climate resilient investment practices
- Analyze the sensitivity of investments to different carbon price scenarios
- Guide financial flows towards low-carbon investments
- Increase awareness and consideration of the internal carbon price signal among collaborators

Difficulties: selecting the most appropriate scope for the carbon price relative to corporate activities

Implicit carbon price

(implicit carbon price - calculated ex-post)

Method: ex-post evaluation of GHG emission reductions costs within a defined scope, without monetizing GHG emissions

Objectives: **Provides information**

- Estimate the cost of GHG emissions reductions
- To inform an ex-post assessment of an investment decision (i.e. a new technology, policy etc.)
- Raise awareness within the organization of the cost of GHG emissions reductions

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December 2015 :
Exploring the EU ETS beyond 2020: A first assessment of the EU Commission's proposa for Phase IV of the EU ETS (2021-2030)
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September 2016:
Internal Carbon Pricing: a growing corporate practice (only in French)

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