

# Sectoral crediting mechanisms and challenges to linking

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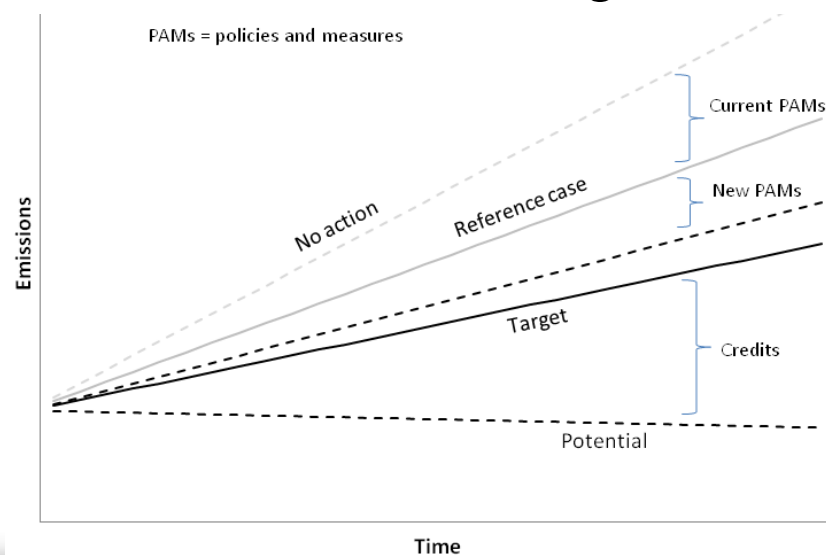
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# Introduction : SA in international discussion

- Sectoral Agreements, second best approach
  - Involvement of Developing Countries (need for deviation/ BAU)
  - BAP : « NAMAs » and conditions for support (finance and technology)
- Idea of registries for DCs :
  - Actions in sectors (eg power, cement...).
  - C&T in DCs not likely in the short-term
- Extending crediting seen as a possible way to scale up financial support to DCs
- For developed countries, current offsets can be used :
  - At government's level in post 2012 commitments, partly covered by offsets, in addition to ETS
  - By private entities, through a link to ETS

# Intro : extension of crediting mechanisms

- CDM type :
  - End of project-based approach
  - crediting at government or company level
- Sectoral No Lose Target :
  - Net contribution to reductions
  - Beyond baseline : issuance of credits at the governmental level
- Other forms can be figured out (eg crediting NAMAs)



## Intro : issues to linking (1)

- Enlarge discussion / issues raised by restrictions and specifications for offsets to link different ETS
- **Issues** to link sectoral crediting mechanisms to the international market (*under unilateral links such as current CDM*)
  - Conditions to make these units compatible
  - If additional volumes :
    - Magnitude of the supply ?
    - Additional demand ⇔ what impact of the various ETS designs ?
    - What impact on credit price ?
  - Issues raised at DC level for implementation
    - Interest in raising revenues by crediting mechanisms
    - Involvement of the private sector in DC & AI ?
    - Endorse any liability ?

## Intro : issues to linking (2)

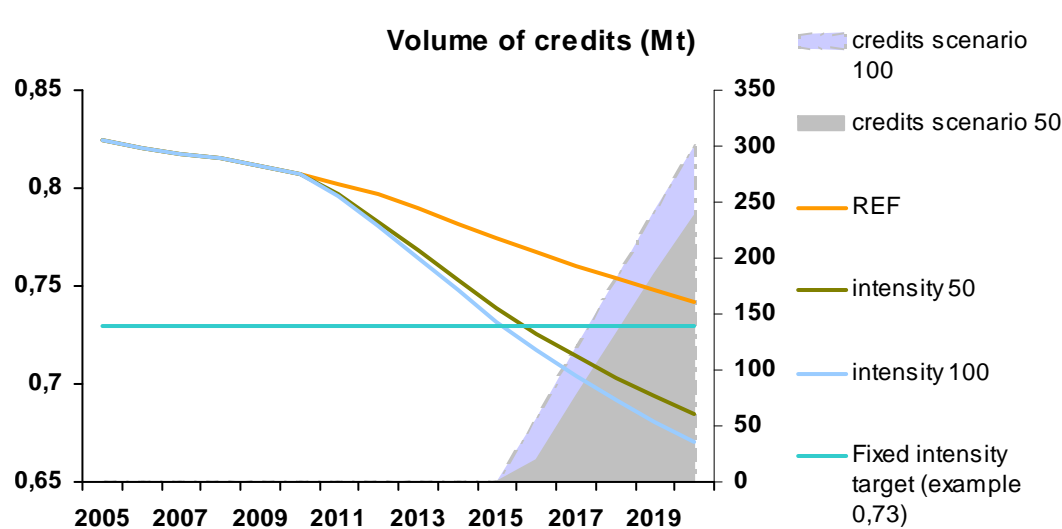
- On the **supply** side (DC)
  - Compatibility of units with ETS : additionality and transparency concerns (MRV issues)
  - Concern for compliance in ETS : Baseline & credit → uncertainty on volumes, if any (eg SNLT)
  - Implementation & link with ETS
    - Internal design : Reported at entity level ? Liability concerns for government?
    - Underlying interest : link with industries in developed countries ?
- On the **demand** side : absorption of additional volumes
  - Reality of additional demand / Uneven approach of offsets in ETS
    - Quantitative restrictions
    - Qualitative restrictions
  - Arbitrages of private sector (risk/price)
  - Implications on the level of effort in non ETS sectors ?

# Compatibility of offsets in ETS

- If **fungibility** with other offsets, will likely increased expectations on additionality and MRV requirements
- Challenges / genuine emission reductions :
  - How to project emissions
    - In DC large uncertainties on growth
    - Power sector is especially critical
  - How to quantify national efforts
    - net contribution of DC (eg SNLT approach)
    - national claims / additional efforts ?
  - And set a **baseline** for crediting
    - Not easy to avoid « windfall crediting »

# Compatibility / volumes at stake

- Quantification of the magnitude of volumes :
  - Illustration on the Chinese power sector only : 650-900 Mt over 2012-2020
  - **Metrics** have an impact (cf targets in intensity)
  - Even higher estimates according to hypothesis and models (a few billions tons over the period, eg GWEC 2008)
  - Other countries & sectors (inc forest)



*Volume of credits for an intensity-based target – after IMACLIM'R results*

# Compatibility / MRV requirements

- Link with domestic schemes will increase the expectations on **MRV**
  - Still a long way to go / Capacities
    - **Example of China :**
      - Little reliability of data : lack of transparency in aggregation, little continuous monitoring, no third party review for any kind of data
      - Coal national data are extrapolated from surveys. These surveys are realised by central government on the basis of local network. Probable bias to large and compliant companies.
      - Top 1000 companies programme is the most reliable GHG data collected in China. Details not made publicly available, difficult to assess actual performance on a sector level.
    - Raises the issue of timeframe
    - Questions the probability to have these type of credits fully fungible with other offsets

# Concerns for compliance in ETS

- SNLT is « no lose » : as **outcomes** are credited, uncertainty on the **issuance** of credits
  - Uncertainty on actual quantity available for compliance in ETS
  - Timeframe : if issued in 2020, not compatible with industrial arbitrages in ETS
- If the mechanism delivers, large uncertainties on the volumes generated (see prev. example)
- Uncertainties may be reduced if the design defines maximum volumes ex ante
  - Eg NAMAs
- Uncertainties on volumes ⇔ uncertainties on prices
- How likely are the developed countries to allow a large part of absorption of these additional volumes through ETS ?

# Different approaches to offsets worldwide (1)

- Constraint and level of offsets allowed balanced against the level of **internal reduction** the ETS aims to achieve
  - **Europe** : ~1.7 Gt in ETS over 2012-2020 (20% goal). Covers 50% of emission reduction effort in ETS.
  - **USA** : reluctance to heavily rely on offsets → reduces the ambition of mid-term goals but focuses on domestic efforts
- **Criteria** on the emission reduction type : likelihood of domestic ETS to buy any kind of credits?
  - cf European climate energy package, qualitative restrictions to be defined
- Volumes in ETS likely to be limited
- Reported at state level ?

## Different approaches to offsets worldwide (2)

- Governmental demand may also be restricted
  - Post 2012 in Europe : 50% of effort, ~780 Mt over 2012-2020
  - Developed countries would need to take additional targets to buy larger amounts of credits
    - Main motives ?
    - Nature of the additional target (binding/ non binding) in relation with risks associated
- Possible **oversupply** of credits compared with global demand
  - Other crediting mechanisms
  - Questions the future of CDM ?
    - Estimates show a potential supply of 5 Gt over 2013-2020 (Carbon Trust 2009)

# Compatibility with industrial challenges (1)

- DC's governments trade the credits
  - **Ex post crediting** / confidence in achieving the target ?
  - To succeed : needs to pass incentives to the DC's private sector
    - A C&T would help to pass the price signal at entity level
      - » Link with other ETS possible
      - » Not likely on the short term
    - Set of regulations / credits at governmental level
    - Rewarding credits to the private sector in a SNLT undermines the incentives if tributary to the global success of the sector
      - » Find a way to disconnect both
    - Forward sales to secure revenues but raises liability concern
  - Policies and measures and possible liability → is it « no lose » ?

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## Compatibility with industrial challenges (2)

- Risk on volumes and transparency requirements on a multilateral basis may put downward pressure on price
  - Questions the interest of credits to fund action in DCs
- DC only interested in selling credits in an international market to generate revenues ? Or involve industries in developed countries ?
- DC may prefer direct bilateral deals with developed countries' private sectors → no linking issues

# Conclusion

- Full fungibility with ETS seems delicate on the short term
  - Little part of the volumes may be absorbed by domestic schemes
  - Additionality, MRV requirements and issuance risk may discount the expected price
- Developed countries may take on additional targets on a multilateral basis to buy the volumes
  - Uncertainty on issuance and price → non binding if fails ?
  - Probable little interest without political/industrial cooperation
- Bilateral deals on volumes and prices, technology cooperation