Carbon Contracts for Difference

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**Structure and background**

**Second stock-take on the topic**

Different elements that can shape a CCfDs scheme.
- Rationale and purpose
- Difference with CfDs
- Policy framework

**Presentation of a survey carried out among relevant stakeholders aimed to:**

- Feel stakeholders’ pulse with regards to CCfDs’ rationale and purpose
- Provide further guidance on CCfDs’ key design and implementation features
Policy Framework at the EU Level

- **EU Industrial Strategy**: The European Commission considered, as part of the proposal for a revised ETS Directive, an EU approach to CCfD using ETS revenues.

- **Fit for 55 package**: ETS revision proposal mentions:
  - CCfD are an important instrument to trigger emission reductions in industry, the scope of the innovation fund is extended to allow it to provide support to projects through competitive tendering mechanisms such as CCfDs.
  - Art 10a(8) establishes that in the case of support provided through competitive bidding, 100% of the relevant costs of the projects may be supported.
  - The Commission is empowered to adopt Delegated Acts to supplement this Directive.

- **State Aid Guidelines**: The revised rules generally allow for aid amounts up to 100% of the funding gap, especially where aid is granted following a competitive bidding process, and introduce new aid instruments, such as Carbon Contracts for Difference.

- **EU Hydrogen Strategy**: Develop a pilot scheme – preferably at EU level for steel and chemicals
Policy Framework around the EU

- **The Netherlands**: adopted SED ++ support scheme, which will operate from 2020 until 2025 and will support not only renewable energy production but also other measures to reduce GHG emissions, such as green H₂ and CCS

- **Germany**: announced as part of its National Hydrogen Strategy the launch of a new pilot project targeting mostly the steel and chemical industries

- **France**: Public Consultation, France 2030 Industrial Decarbonization

- **The UK**: Different updates of the industrial carbon capture business model
Survey participation information

- 52 responses from ERCST’s stakeholders network
- Including private sector, public sector, ARTT, NGOs, business associations and others
- Information for the questions’ selection and design comes from different sources.
Are CCfDs needed?

- **CCfD**: CCfD offset the difference between the market price for emissions allowances and the carbon avoidance costs.

![Chart showing 88% yes and 12% no]

- Yes, EU industry needs an instrument that guarantees competitiveness and fosters the uptake of low-carbon projects/technologies.
- No, there are already other financing instruments, hedging mechanisms and subsidy schemes in place that can be used instead.
What should CCfDs’ main goal be?

- Foster the uptake of low-carbon technologies/products: 45%
- Foster innovation: 8%
- Increase projects' bankability: 4%
- Preserve EU industry competitiveness: 4%
- Avoid Carbon Leakage: 4%
- Other: 33%
- All of the above: 0%

**Private sector**
- Foster the uptake of low-carbon technologies/products: 40%
- Foster innovation: 20%
- Increase projects' bankability: 30%
- Preserve EU industry competitiveness: 5%
- Avoid Carbon Leakage: 4%
- Other: 0%
- All of the above: 0%

**Public sector**
- Foster the uptake of low-carbon technologies/products: 40%
- Foster innovation: 20%
- Increase projects' bankability: 30%
- Preserve EU industry competitiveness: 5%
- Avoid Carbon Leakage: 4%
- Other: 0%
- All of the above: 0%

**NGO/ARTT**
- Foster the uptake of low-carbon technologies/products: 40%
- Foster innovation: 20%
- Increase projects' bankability: 30%
- Preserve EU industry competitiveness: 5%
- Avoid Carbon Leakage: 4%
- Other: 0%
- All of the above: 0%

**Other**
- Foster the uptake of low-carbon technologies/products: 40%
- Foster innovation: 20%
- Increase projects' bankability: 30%
- Preserve EU industry competitiveness: 5%
- Avoid Carbon Leakage: 4%
- Other: 0%
- All of the above: 0%
CCfDs considered as a subsidy vs. hedging tool?

- **66%** should be considered as a broader tool, following the approach of CfDs in the electricity sector and thus, not just act as a hedging tool against volatility in the carbon price but also as a subsidy.

- **34%** should not be considered as a subsidy but as a hedging tool protecting against volatility in the carbon revenue stream and therefore increasing projects’ bankability.

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**What should be CCfDs' rationale**

- **A/R/TT**
  - 100%
- **Business association**
  - 60%
  - 40%
- **Other**
  - 70%
  - 30%
- **NGO**
  - 100%
- **Public sector**
  - 70%
  - 30%
- **Private sector**
  - 60%
  - 40%

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- **CCfDs should not be considered as a subsidy but as a hedging tool protecting against volatility in the carbon revenue stream and therefore increasing projects’ bankability.**
- **CCfDs should be considered as a broader tool, following the approach of CfDs in the electricity sector and thus, not just act as a hedging tool against volatility in the carbon price but also as a subsidy.**
CCfDs should be designed as:

- **25%**: A targeted tool to be applied to second, or third of a kind low-carbon projects/technologies beyond the scope of the innovation fund.
- **22%**: A broader tool to be applied to entire industries or sectors regardless of their level of maturity and beyond the innovation fund funding scope.
- **14%**: A targeted tool to be applied to specific second, or third of a kind (in a pre commercial stage) low-carbon projects/technologies within the scope of the innovation fund.
- **39%**: Other.

Other.
On the reference price and strike price

**Reference price**
- 25%: The reference price should be set based on the EU-ETS price trajectory.
- 33%: The EU-ETS price should be used as the reference price.
- 24%: The reference price should be set based on an average allowance price in relation to a specific time period e.g. 1 year.
- 18%: Other

**Strike price**
- 49%: It should factor in not just operational but also investment costs.
- 43%: It should factor in the operational abatement costs per ton of CO2 attached to the carbon revenue stream.
- 8%: Other.
On EU-ETS benchmarks

EU-ETS benchmarks as reference for the calculation of the abated emissions

- EU-ETS benchmarks offer several limitations for the calculation of the abated emissions and therefore should not be used as reference.
- EU-ETS benchmarks should be employed for the calculation of the abated emissions,
- Other

Yearly support = (strike price - av. ETS price) * (ETS benchmark - actual em.) * annual production
Competitive bidding

- Competeive bidding should take place at the regional level (29%)
- Competitive bidding should take place at the EU level (16%)
- Competitive bidding should take place at the national level (55%)

Graph:

- A/R/TT
- Business association
- Other
- NGO
- Public sector
- Private sector

Legend:
- Dark green: Competitive bidding should take place at the EU level
- Yellow: Competitive bidding should take place at the national level
- Grey: Competitive bidding should take place at the regional level
Competitive bidding processes should be technology neutral, allowing competition between different technologies/processes.
CCfDs Funding

- A combination between EU and Member States funding
- EU resources/funding
- Member States funding/resources
- Other

CCfDs funding

- A/R/TT
- Business association
- Other
- NGO
- Public sector
- Private sector

0% 20% 40% 60% 80% 100%

- A combination between EU and Member States funding
- EU resources/funding
- Member States funding/resources
- Other
Impact on the EU-ETS

CCfDs effects on the EU-ETS

- Yes, they will reduce the amount of revenues accruing to the Innovation Fund: 6%
- Yes, they will reduce the efficiency and liquidity of the market: 7%
- Yes, they will weaken the price signal of the EU-ETS: 20%
- No, CCfDs will not have any negative effects on the EU-ETS market: 67%