



Carbon Contracts for Difference

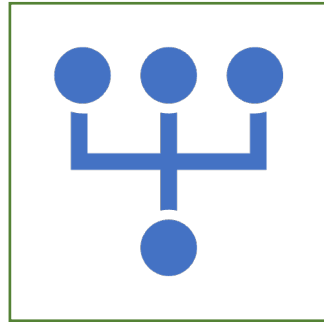
Brussels, April 28th, 2021

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ERCST

Roundtable on
Climate Change and
Sustainable Transition

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

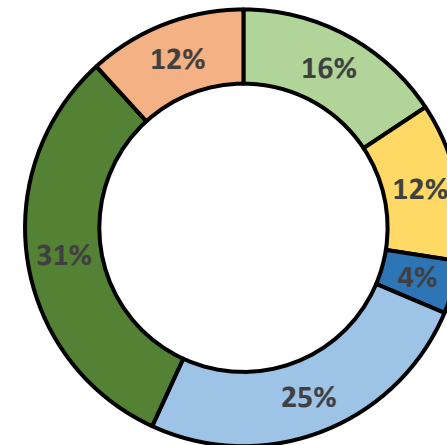
Policy Framework around the EU

- **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

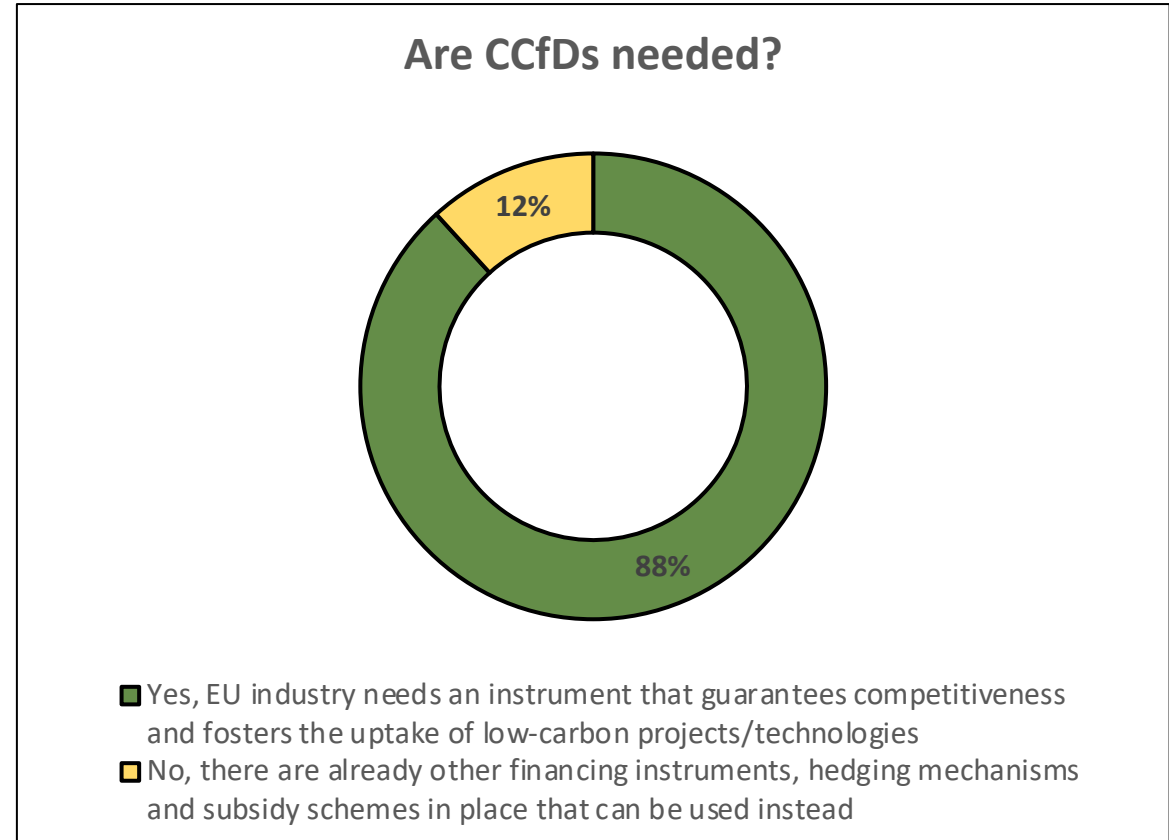
- **52 responses from ERCST's stakeholders network**
- **Including private sector, public sector, ARTT, NGOs, business associations and others**
- **Information for the questions' selection and design comes from different sources.**
 - **Incl. A literature review, SED ++, Eckpunkte Pilotprogramm für Klimaschutzverträge, Industrial Carbon Capture Business Model UK, France 2030 decarbonisation of industry.**

Participation information



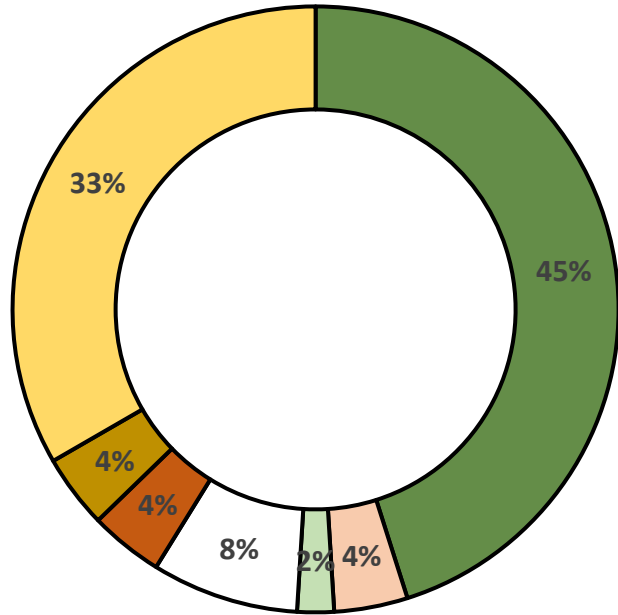
Are CCfDs needed?

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



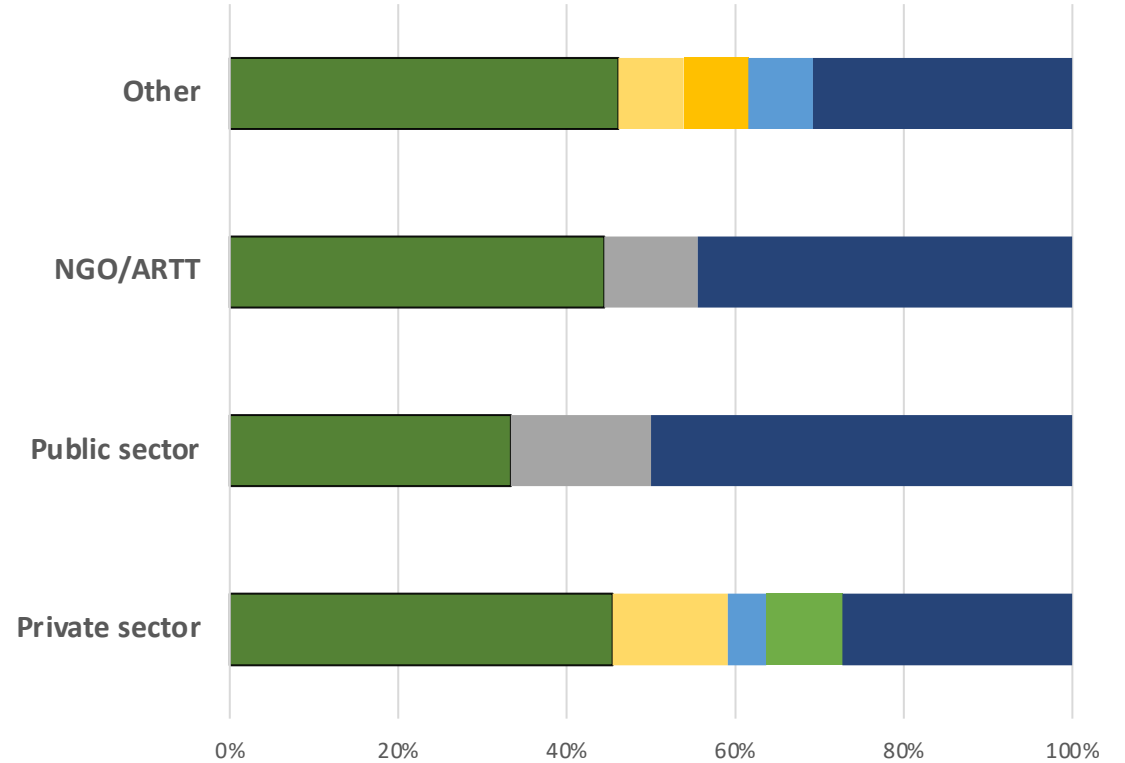
What should CCfDs' main goal be?

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- Foster the uptake of low-carbon technologies/products
- Foster innovation
- Increase projects' bankability
- Preserve EU industry competitiveness
- Avoid Carbon Leakage
- Other
- All of the above

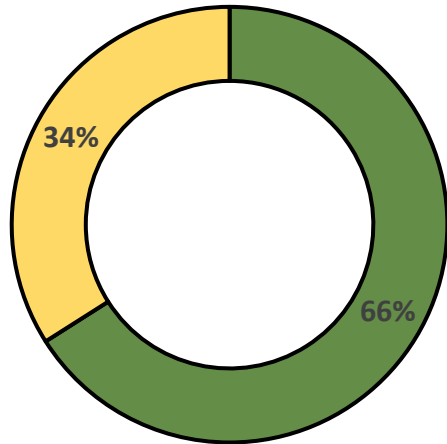
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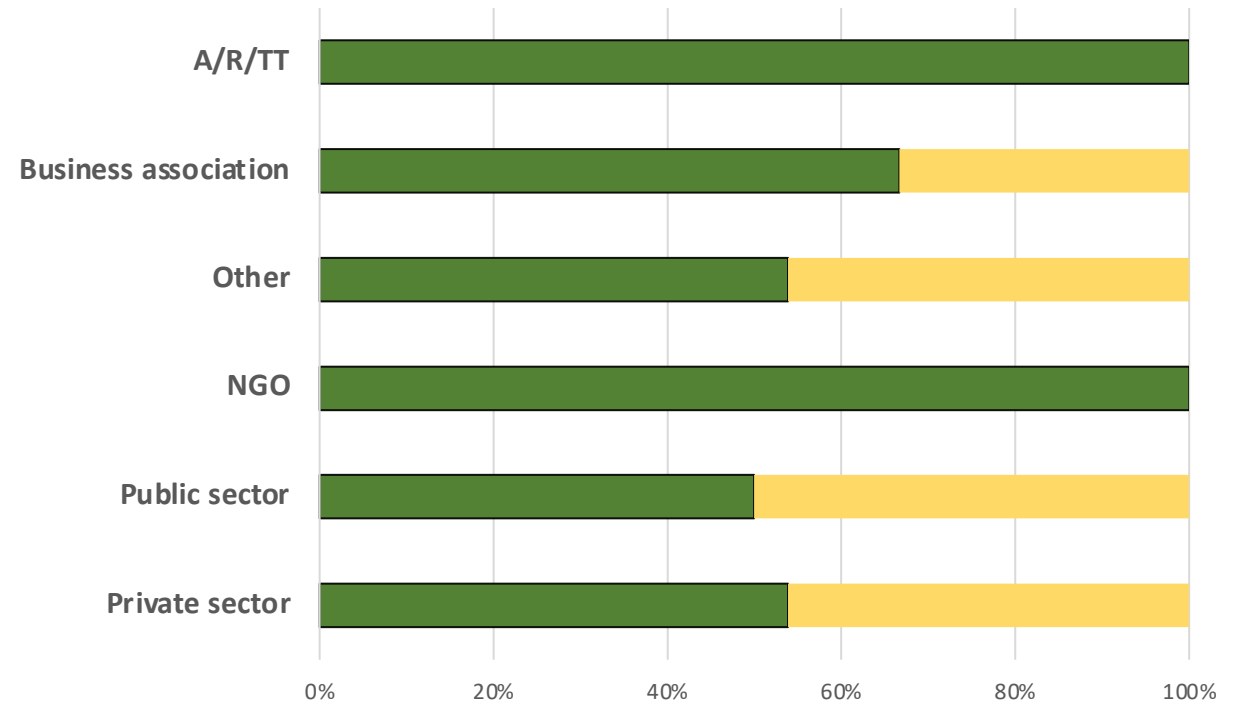
CCfDs considered as a subsidy vs. hedging tool ?

What should be CCfDs' rationale



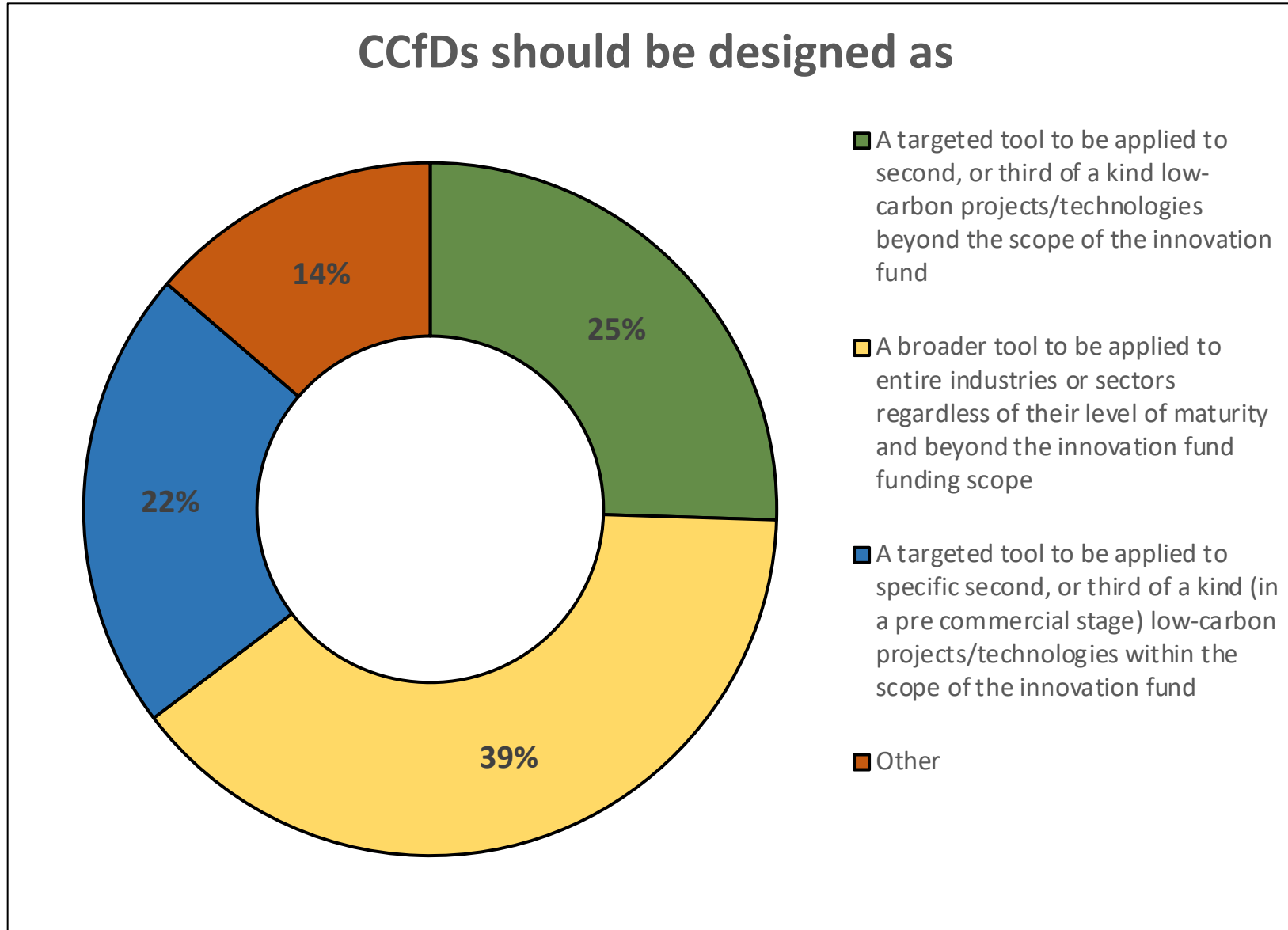
- CCfDs should be considered as a broader tool, following the approach of CfDs in the electricity sector and thus, not just act as a hedging tool against volatility in the carbon price but also as a subsidy.
- CCfDs should not be considered as a subsidy but as a hedging tool protecting against volatility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

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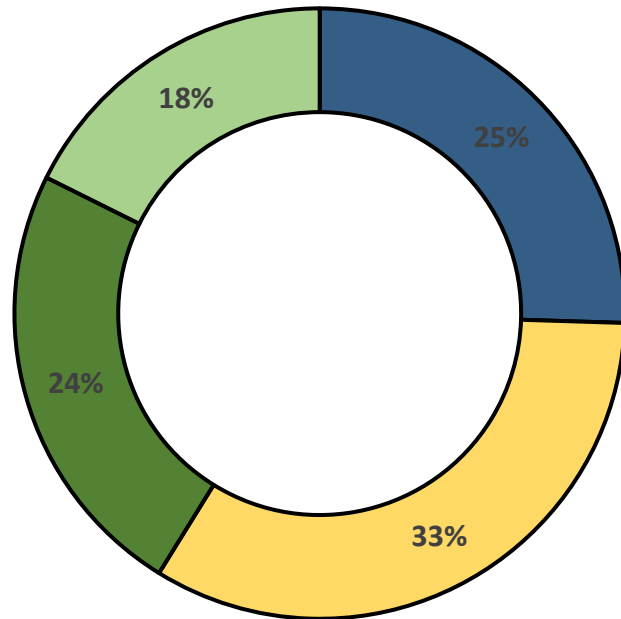
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CCfDs should be designed as:



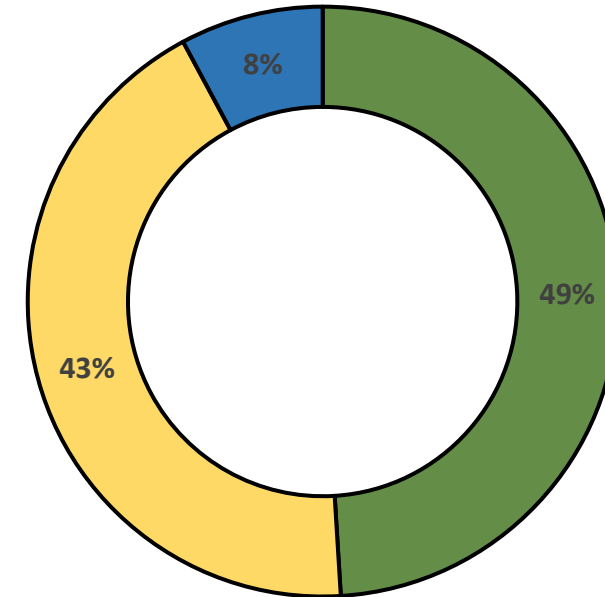
On the reference price and strike price

Reference price



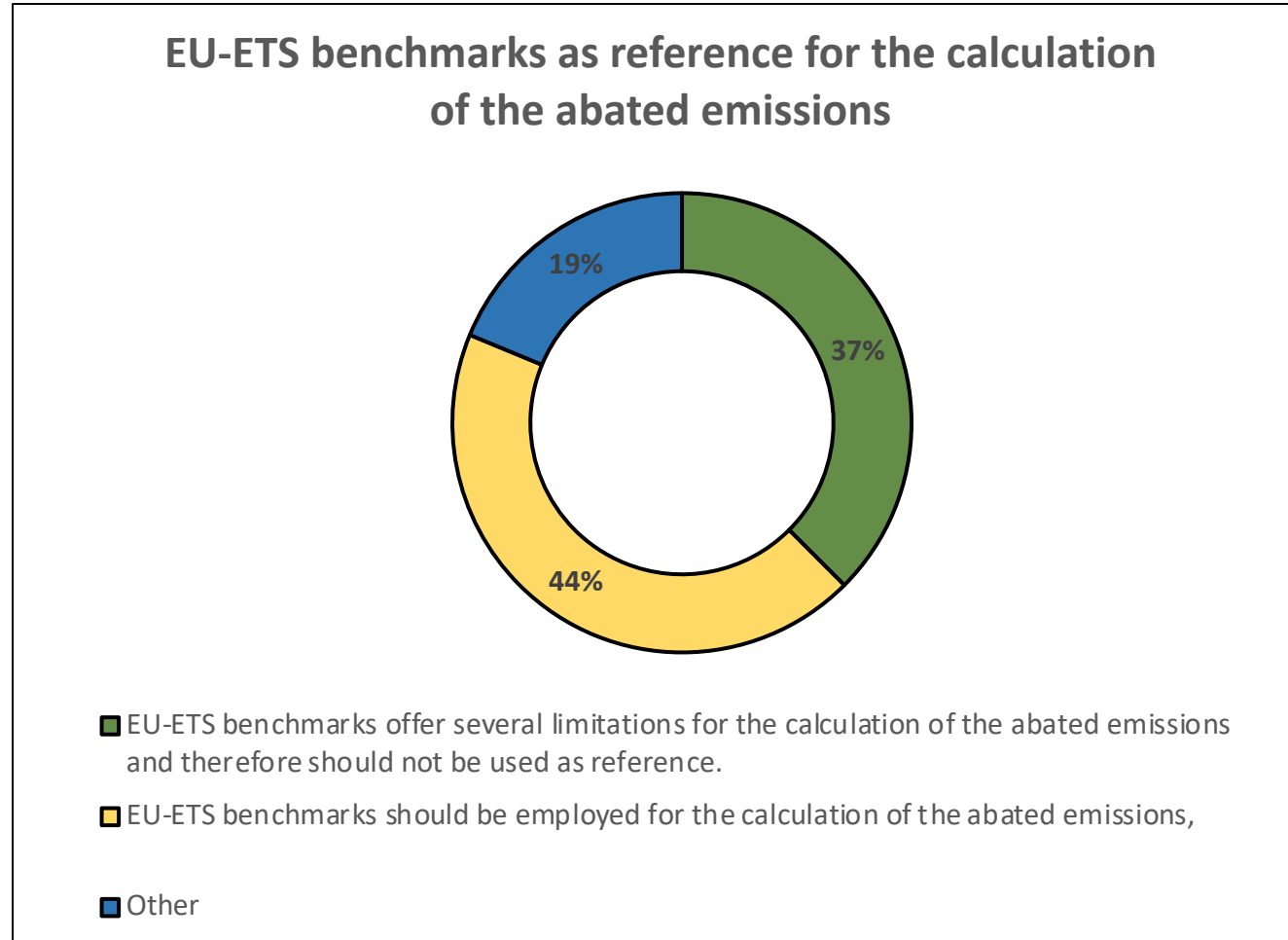
- The reference price should be set based on the EU-ETS price trajectory.
- The EU-ETS price should be used as the reference price
- The reference price should be set based on an average allowance price in relation to a specific time period e.g. 1 year
- Other

Strike price



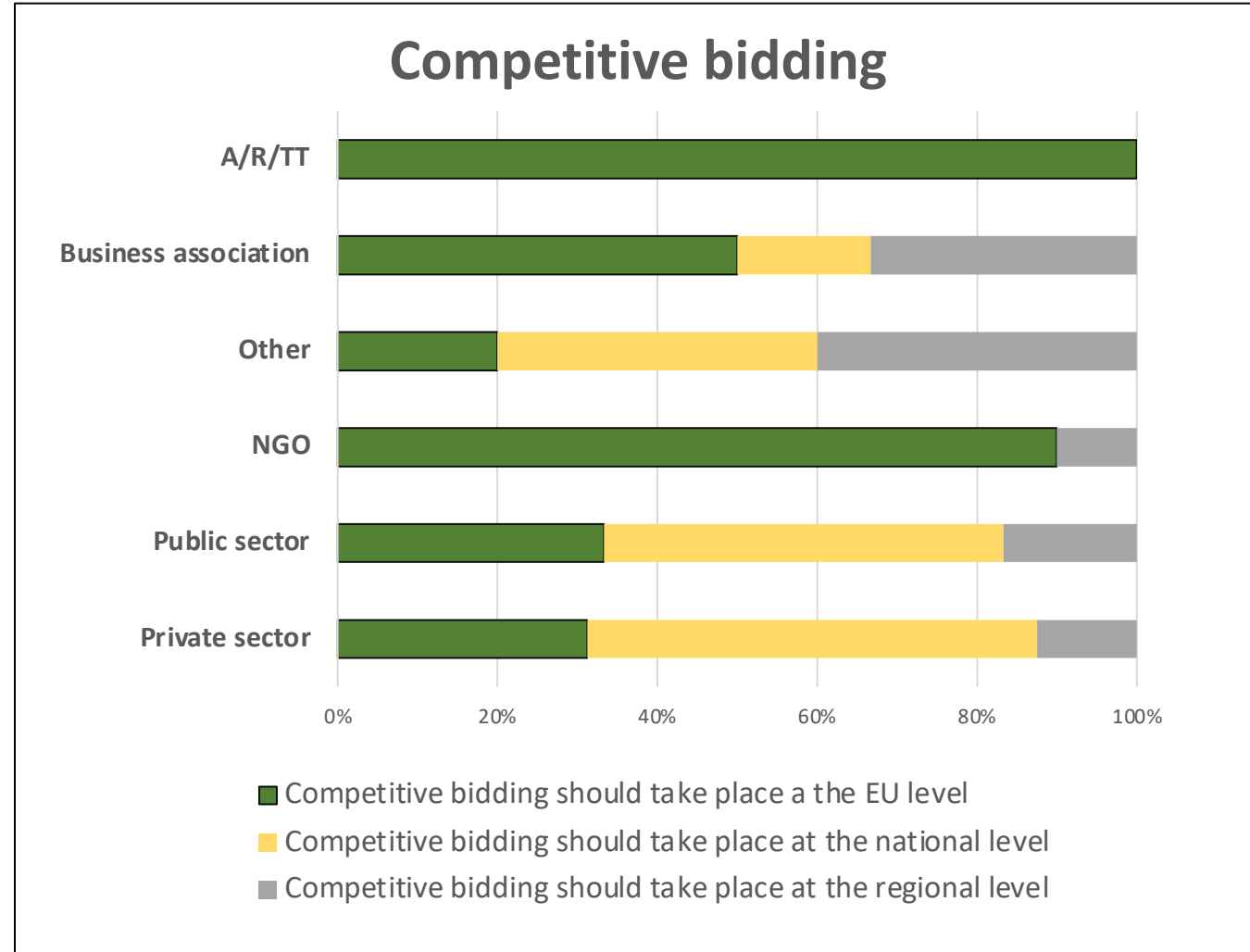
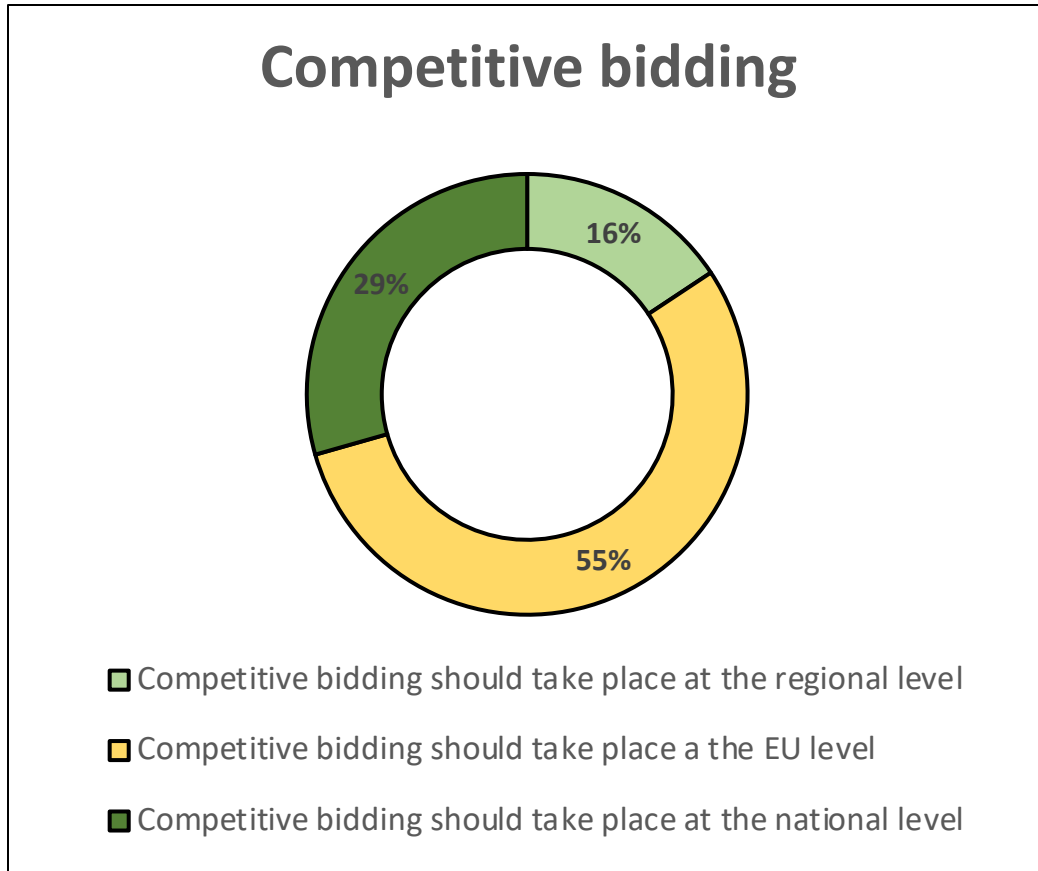
- It should factor in not just operational but also investment costs
- It should factor in the operational abatement costs per ton of CO2 attached to the carbon revenue stream
- Other

On EU-ETS benchmarks



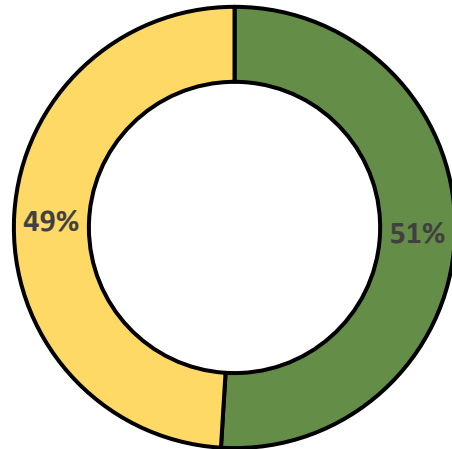
Yearly support = (strike price- av. ETS price)*(ETS benchmark - actual em.) * annual production

Competitive bidding



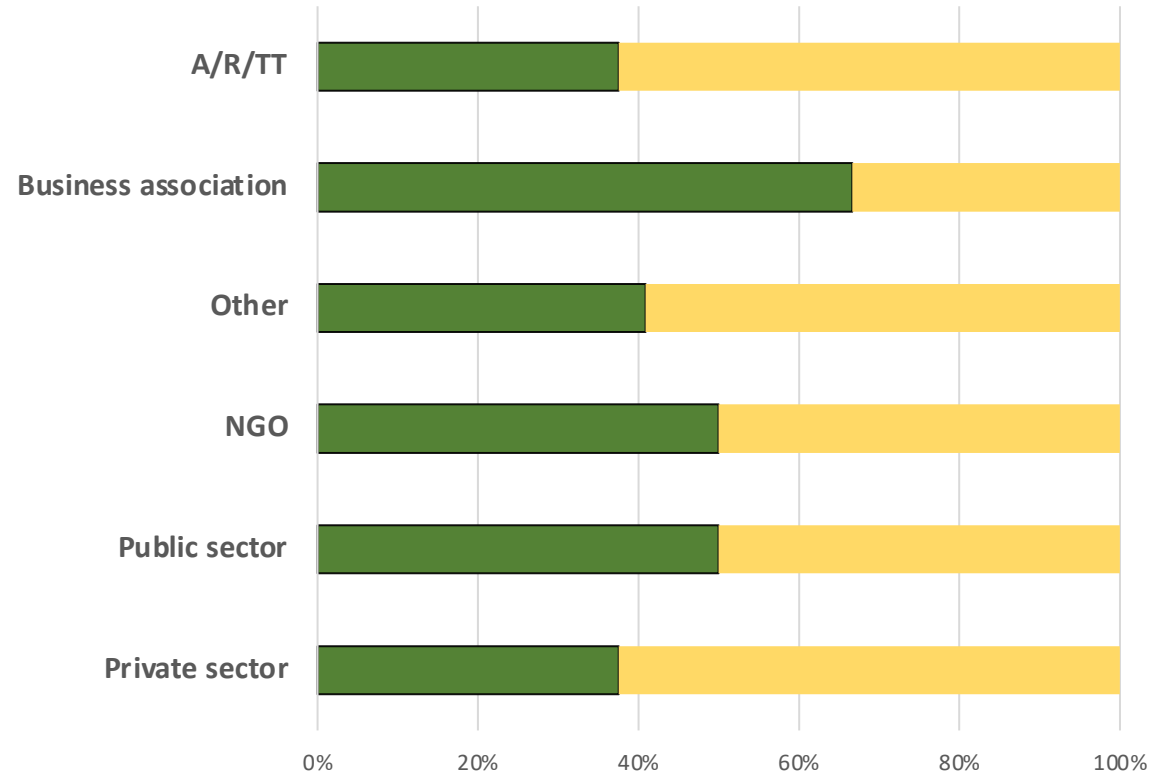
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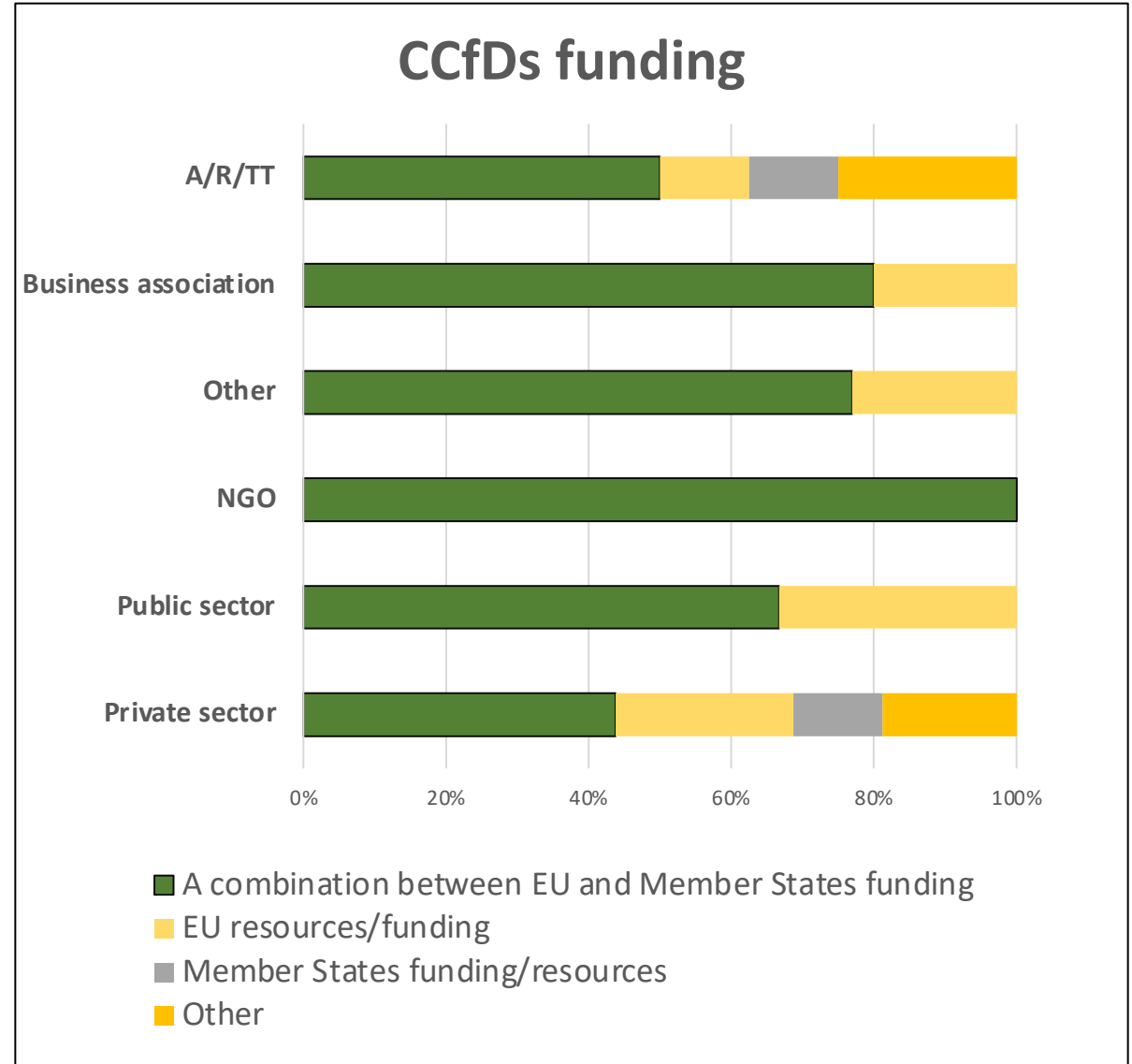
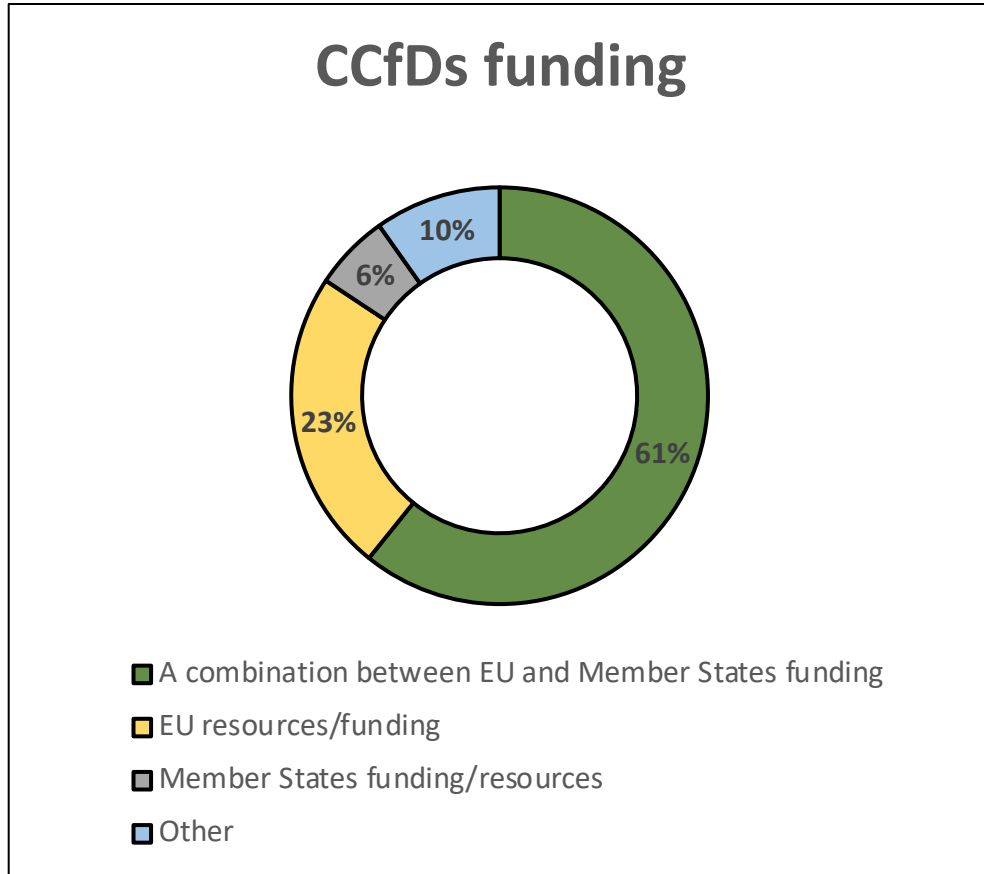
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CCfDs Funding



Impact on the EU-ETS

