



WEBINAR

July 23

CCS 101 - Carbon Contracts for Differences in Europe





AGENDA

Welcome from Global CCS Institute

 Ruth Gebremedhin, Strategic Communications Manager, Moderator, Global CCS Institute

Presentation on Carbon Contracts for Differences in Europe (CCfDs)

 Callum Murfet, Policy and Research Lead Global CCS Institute

Moderated Discussion

- Ruth Gebremedhin, Strategic Communications
 Manager, Moderator, Global CCS Institute
- Callum Murfet, Policy and Research Lead Global CCS Institute

Audience Q&A



Download the report on our website or scan the QR code below.





OUR MISSION



TO ACCELERATE DEPLOYMENT OF CCS

WHO WHAT WHERE







FACT-BASED INFLUENTIAL ADVOCACY



CATALYTIC THOUGHT LEADERSHIP



AUTHORITATIVE KNOWLEDGE SHARING

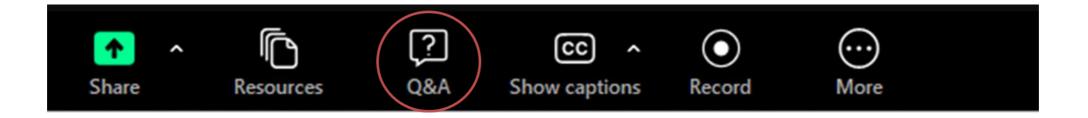




BEFORE WE START



- Please note this webinar will be recorded and made available on our website within a few days.
- We will collect questions during the presentation.
- After the presentation, the moderator will pose questions to the presenter.
- Please submit your questions through the Q&A panel on Zoom.





SPEAKERS





Callum Murfet
Global CCS Institute
Policy and Research Lead



Ruth Gebremedhin

Global CCS Institute

Strategic Communications Manager

* MODERATOR *



CARBON CONTRACTS FOR DIFFERENCES IN EUROPE

Callum Murfet Policy and Research Lead, Global CCS Institute



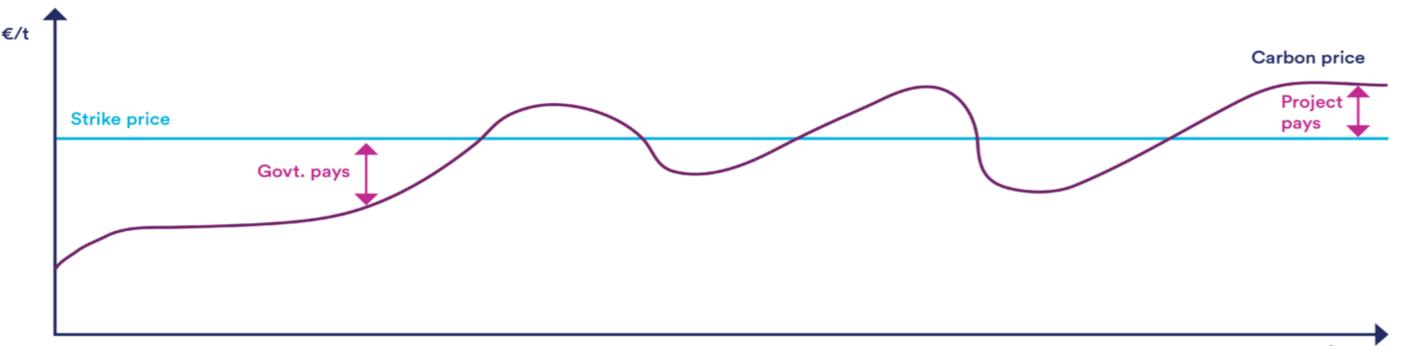




THE GENERAL APPROACH



- The underlying concept of a carbon contract for difference (CCfD) is a long-term delivery contract between signing parties that helps to reduce the regulatory risk of climate policy.
- Industrial decarbonisation projects offer a price and quantity of CO₂ they can cut relative to the business-as-usual and compete
 for funding based on price or other parameters.
- Projects that are awarded a contract are guaranteed to be paid the difference between the offered price (strike price) of reducing CO₂ emissions per tonne and a reference price for CO₂ emissions (usually the EU ETS), across the lifetime of the contract.
- The size of the subsidy is expected to decline over time as the carbon reference price rises. For projects with costs close to the
 reference price, the actual subsidy can be negligible, and the contract serves mainly to provide greater revenue certainty.





THE EUROPEAN CCFD ANNUAL PROGRESS



April 2024

May 2025

- Most recent SDE++ round from Sep to Oct 2024, with a budget of €11.5bn.
- The government will continue exploring adjustments to the SDE++, replacement instruments and prepare a "complete" package of proposals in autumn 2025.
- In **Dec 2024**, the EU Commission approved the French subsidy scheme.
- End of Dec 2024, the official guidance for the CCfD scheme was released.
- Closing the auction phase May 2025.
- Denmark has launched the 3rd round of its CCS fund, requiring a minimum storage of 100kt of CO₂ per annum.
- In May 2025, 10 companies were selected for the formal bidding process.
- The final decision on awarding the contract is expected by Apr 2026.

- In Oct 2024, first round was granted, of up to €2.8bn to support 15 companies.
- CCS expected to be eligible in the 2nd round (although possible lower priority).
- Public consultation on revised guidance concluded in Jan 2025.
- The Commission approved a €5bn scheme in Mar 2025.

- The UK has allocated £21.7bn for business models, with part of this funding expected to cover the ICC.
- Protos Waste-to-Energy CCS Project may be a key recipient of the ICC funding.
- NEP, Net Zero Teesside
 Power and Liverpool Bay
 Storage reach financial
 close.



COUNTRY SCHEME FEATURES



Scheme	General scope features	CCS eligibility requirements
SDE++ - Netherlands (most recent round €11.5 billion)	 Across 5 clean technology categories, with 8 subcategories of CCS. Must be operational within 6 years of contract. Coal and gas electricity power plants are not eligible. 	 CO₂ must be stored in the Dutch continent shelf (stated in the documentation). Must have a formal agreement with a T&S operator for CO₂ offtake.
ICC contract – UK (£21.7 billion for CCUS funding)	 Available to most industrial sectors. CCS technology specific. First round of projects expected to be operational in 2028. 	 Projects must have access to one of the T&S networks developed by the UK's cluster sequencing process. Must be able to meet high capture rates of at least 85%.
CCS Fund – Denmark (€4 billion)	 Any CO₂ is eligible for capture and storage, provided it results in CO₂ reductions in the Danish National Inventory Report. Candidates need to demonstrate adequate financial capacity. 	 Applicants need to demonstrate a project is able to capture and store a minimum quantity of 0.1 Mtpa from 2030. Must deliver a full CCS value chain.
Climate Protection Agreement – Germany (second round €5bn)	 Minimum size of current installation emissions need to be at least 5kt CO₂ eq per year. Must be operational by 3 years after the grant notification becomes final. 	 Connection to the necessary transport and storage infrastructure is sufficiently secured.
France's contracts for difference (€3bn)	 Hydrogen, biomass, nuclear and standalone renewable projects are not eligible. Projects using oil/coal fuel sources are not permitted. 	 CCS projects must be in advanced discussions with T&S operators and to have started Pre-FEED engineering studies.



SELECTION CRITERIA





Most schemes base decisions primarily on price:

 Across most contracts for difference, the subsidy requested per tonne of CO₂ captured/stored has the greatest weight over decisions.



Some schemes score on emissions reduction:

- UK 25% of the score is on the total emissions reduction.
- France 20% of score bonus is on the carbon intensity reduction.



Some schemes score on deliverability:

- UK 30% of the score is focused on deliverability.
- Denmark 20% of the score focusses on project maturity. Ensuring that it can meet its commercial operation date on time and achieve the contracted CO₂ capture and storage targets.



One scheme scores on local economic benefits:

 UK – 20% of the score is focused on the economic benefits of the project including the number of highly skilled jobs supported.



Some schemes score on Innovation:

UK – 10% of the score is on learning and innovation. I.e. deployment of new technologies in novel sectors, demonstrating technologies where there is no similar example.



One scheme scores on recipient status of Innovation Fund:

France — 10% of the score is on whether the project has received funding from the EU Innovation Fund.



STRIKE PRICE CHOICE



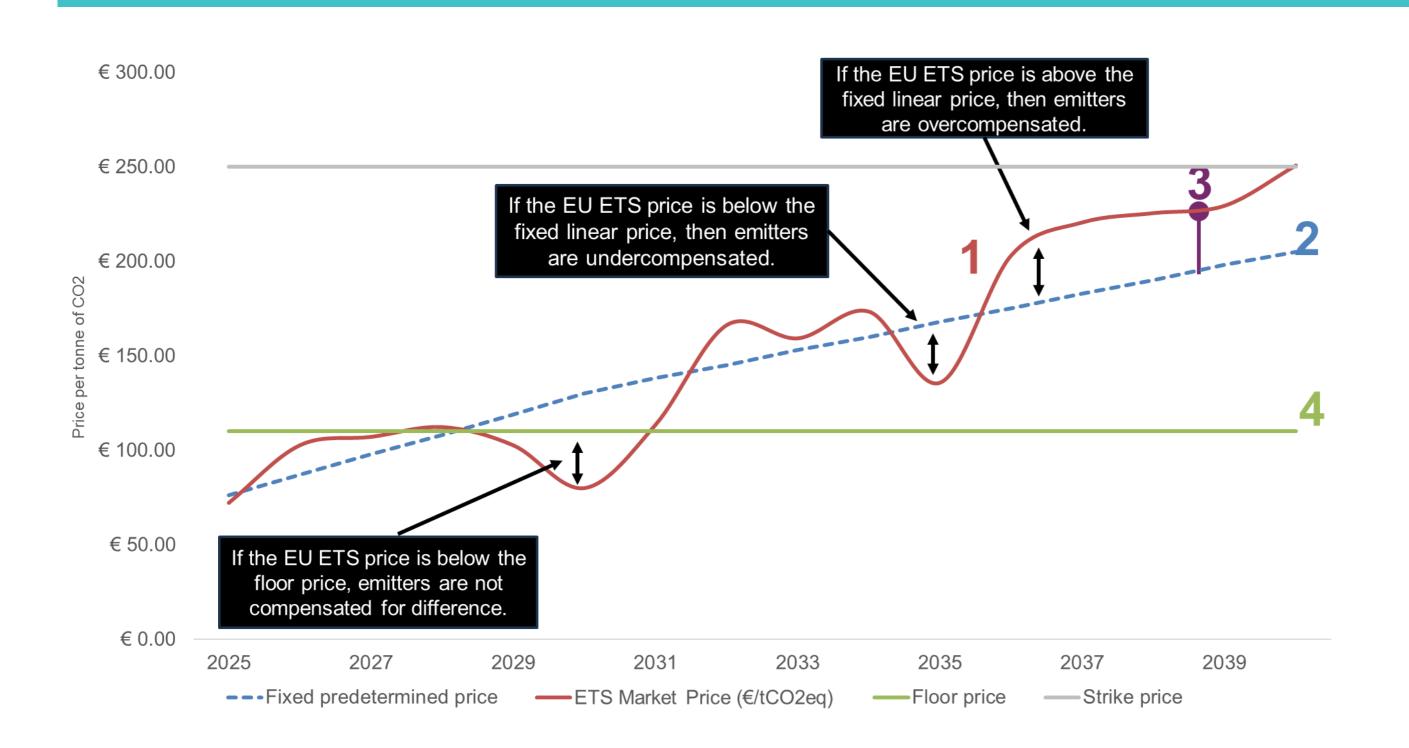
Strike price specifications

- The strike price includes all CAPEX and OPEX of the project (UK scheme separates these out).
- **Germany/France/Netherlands/Denmark** approaches set/ or consider setting a maximum strike price that projects can offer, based on market analysis.
- The **Germany** approach includes a dynamic component to the strike price, where adjustments are made based on real time changes to energy prices. The **UK scheme** has an opex re-opener.
- Revenues from free emission allowances under the ETS must be factored into strike prices.



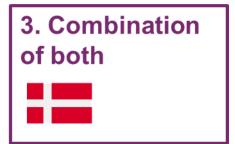
REFERENCE PRICE CHOICE





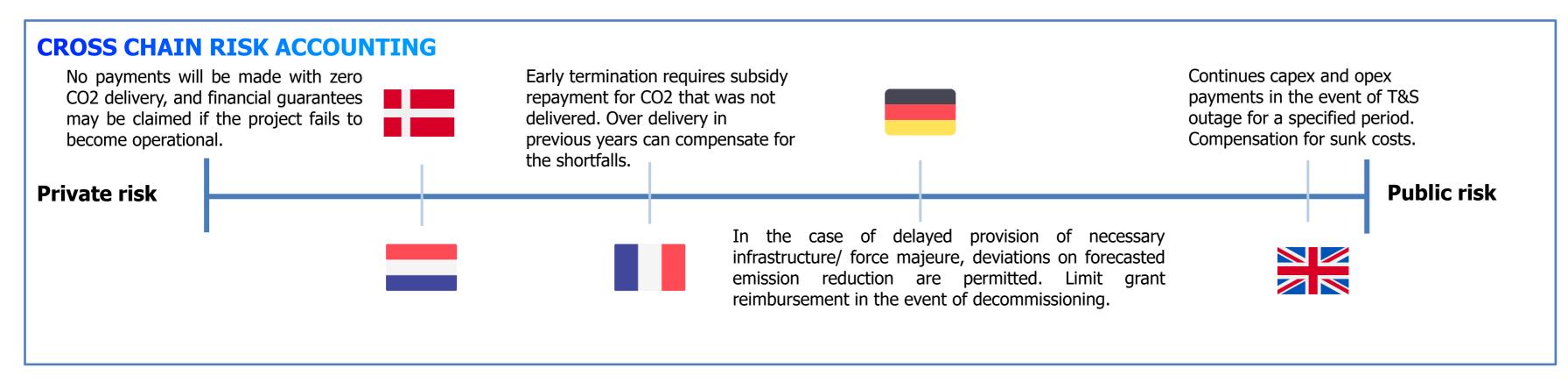


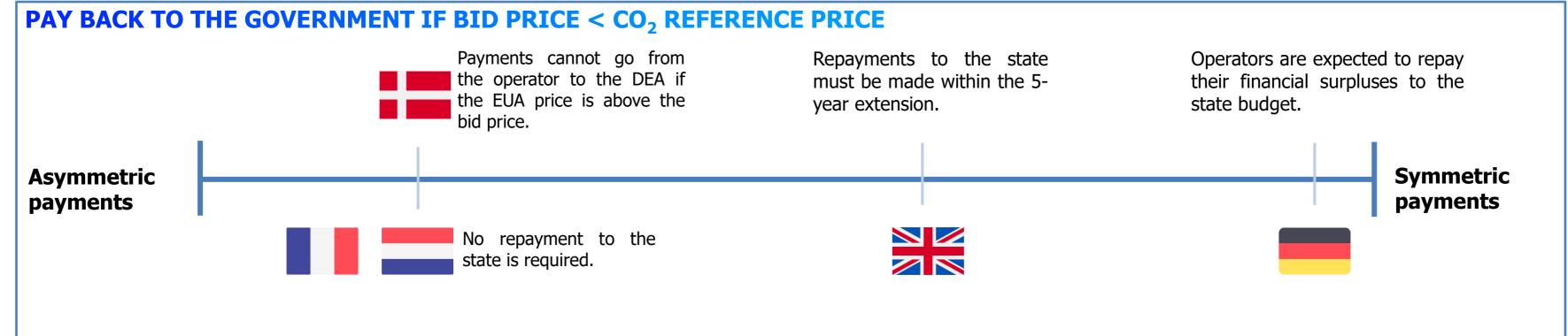














THANK YOU



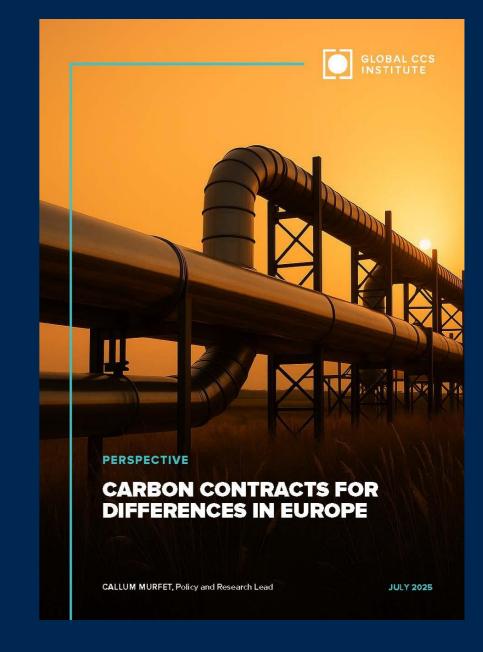
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