## **h** NEGEM

## **Commercial Potential**

178April 2024 NEGEM Final Meeting

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This project has received funding from the European Union's Horizon 2020 Research and Innovation Programme under Grant Agreement No. 869192.



## Fundamental principles of financing models for negative emissions

#### Who benefits from negative emissions?

Future generations & climate-vulnerable communities & ecosystems

Fossil fuel users and consumers of greenhouse-gas-generating products

Fossil fuel producers & investors in the fossil fuel industry

## Who is responsible for the need for negative emissions?

Fossil fuel users and consumers of greenhouse-gas-generating products Fossil fuel producers & investors in the fossil fuel industry

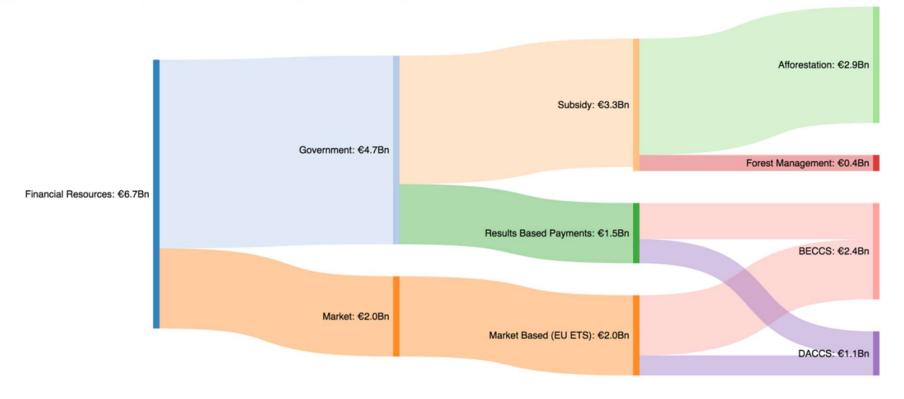
## Who can afford to pay for negative emissions?

Fossil fuel producers & investors in the fossil fuel industry



# Financial flows to negative emissions under the 1.5 Tech scenario – 2030 NEGEM Deliverable 2.1

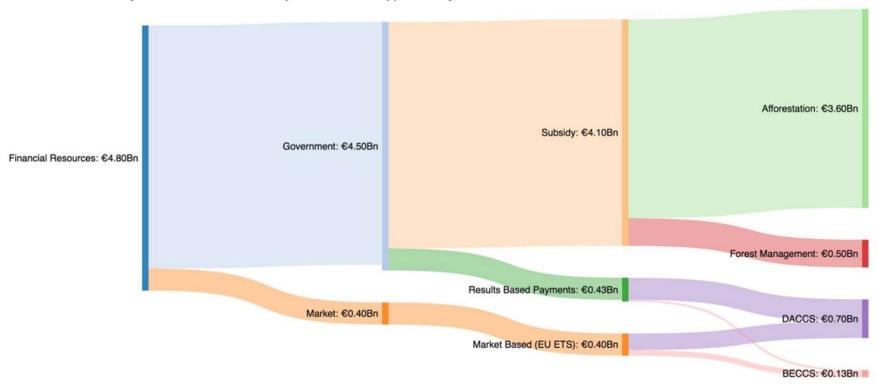
Figure 2 Distribution of Financial Resources by Mechanism Type 1.5 Tech Scenario 2030





# Financial flows to negative emissions under the 1.5 Life scenario – 2030 NEGEM Deliverable 2.1

Figure 4 Distribution of Financial Resources by Mechanism Type 1.5 Life Scenario 2030





# Financial flows to negative emissions under the 1.5 Tech scenario – 2050 NEGEM Deliverable 2.1

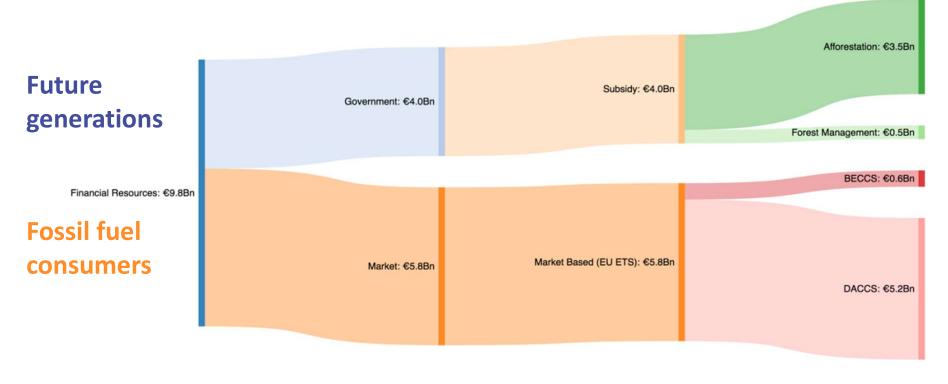
Figure 3 Distribution of Financial Resources by Mechanism Type 1.5 Tech Scenario 2050





# Financial flows to negative emissions under the 1.5 Life scenario – 2050 NEGEM Deliverable 2.1

Figure 5 Distribution of Financial Resources by Mechanism Type 1.5 Life Scenario 2050





## A new development: Article 18 of the Net Zero Industry Act (NZIA)

#### The Article 18 Injection Capacity Obligation (ICO):

Requires, for the first time, oil and gas producers in the European Union to contribute towards 50 million tonnes per year CO<sub>2</sub> storage injection **capacity**, with contributions calculated pro rata on the basis of their oil and gas extraction within Europe over the period 2020-23.

#### Justification:

Recognising the need for storage injection capacity for both CCS and engineered NETPs (BECCS and DACCS), allocates responsibility on be basis of ability to pay and capacity to deliver. "Emergency response" framing analogous to US 1950 Defence Production Act.





# Waking a Grumpy Giant: could Article 18 be a route to Extended Producer Responsibility?

#### The objectives of Article 18 are deliberately limited:

Deals with lack of geological CO<sub>2</sub> storage capacity in the EU & assumes CO<sub>2</sub> will be available for storage through capture incentivised by the ETS. NOT a direct incentive for NETPs. Oil and gas producers are only obligated to provide storage injection capacity.

#### But it opens the door to the principle of upstream responsibility:

Costs of climate mitigation are primarily imposed at the point of emission (ETS). Revenue in the fossil fuel value chain is primarily generated at the point of extraction. Application of the principle of **Extended Producer Responsibility** to fossil fuels would reallocated costs of mitigation, especially NETPs, more efficiently

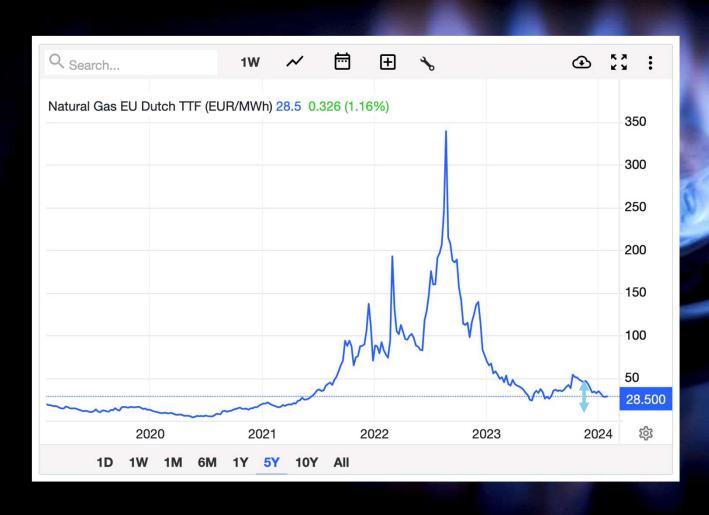
And there is an opportunity here...







# Who could possibly afford the cost of durable negative emissions?



Cost of at-scale DACCS @ €250/tCO<sub>2</sub> Who could possibly afford the cost of durable negative emissions?

The royalties and profit element in what we paid for gas since 2020 were enough to capture every single molecule of CO<sub>2</sub> that gas generated back out of the atmosphere and pump it back under the North Sea.

Who could possibly afford the cost of durable negative emissions?

The royalties and profit element in what we paid for gas since 2020 were enough to capture every single molecule of CO<sub>2</sub> that gas generated back out of the atmosphere and pump it back under the North Sea. Twice over.





## Let's think about that...

#### Project Partners

































