

November 14th, 2023  
Brussels, Belgium



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# PUBLIC PERCEPTION AND BUSINESS MODELS JOINT EVENT

Organised by the Carbon Capture,  
Utilisation and Storage (CCUS) &  
Alternative Fuels Horizon 2020/  
Horizon Europe CLUSTER projects

Supported by CINEA - European Climate,  
Infrastructure and Environment Executive Agency

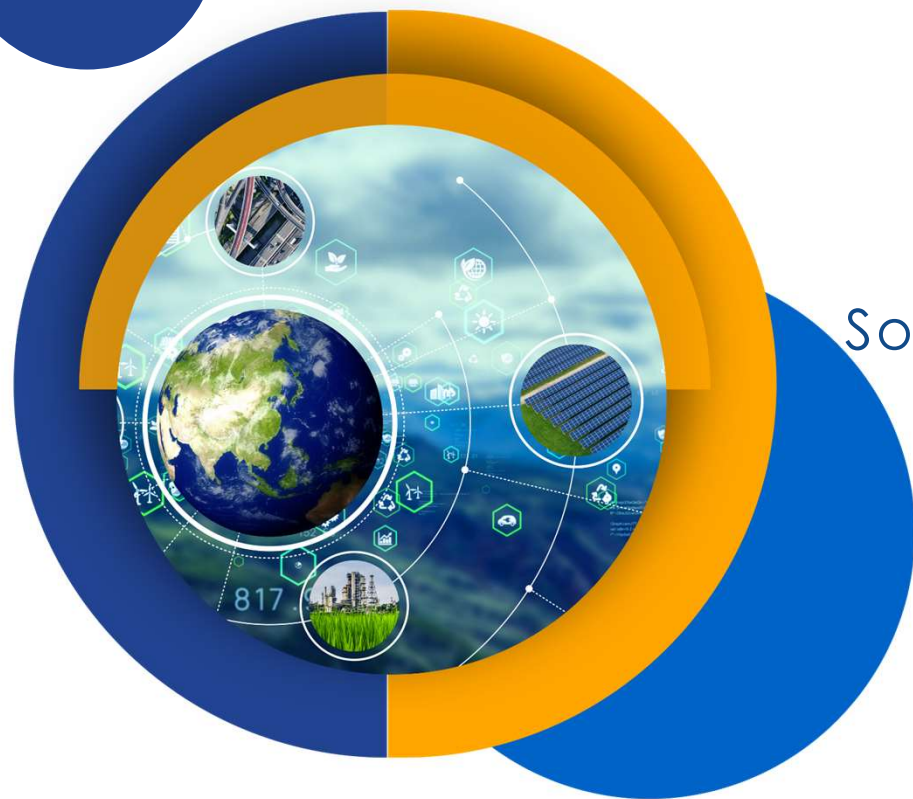
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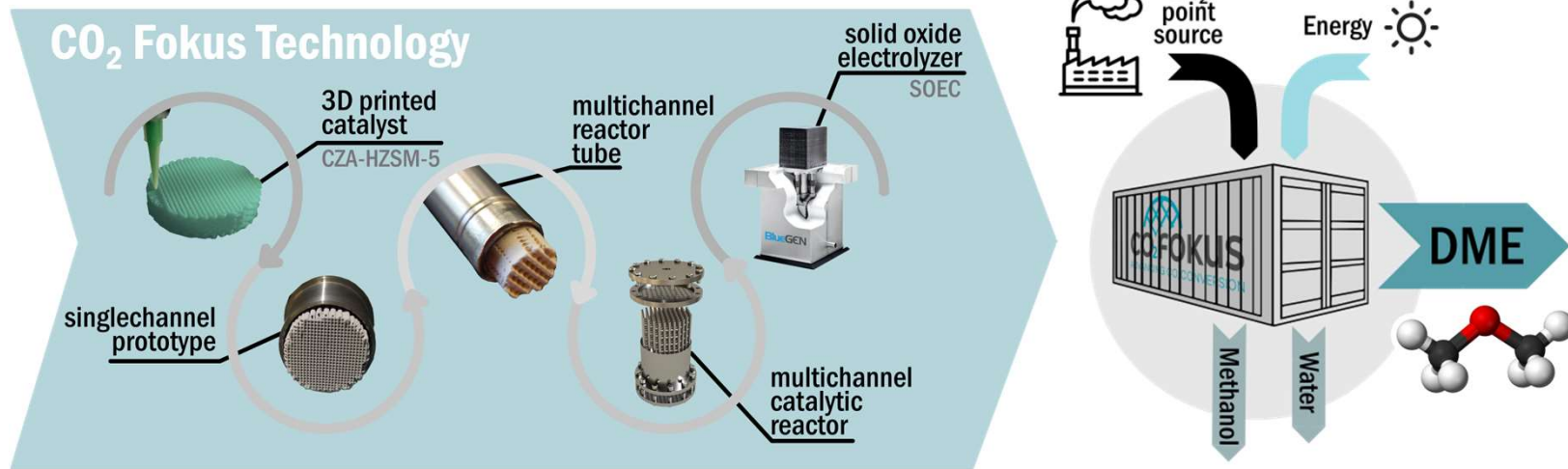
Societal acceptance for CCU technologies  
aimed at DME production

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Dr. Adriana Díaz Triana

# Baseline - CO<sub>2</sub>FOKUS project

Aim is to produce Dimethyl Ether (DME) by the direct catalytic conversion of CO<sub>2</sub> from point sources.



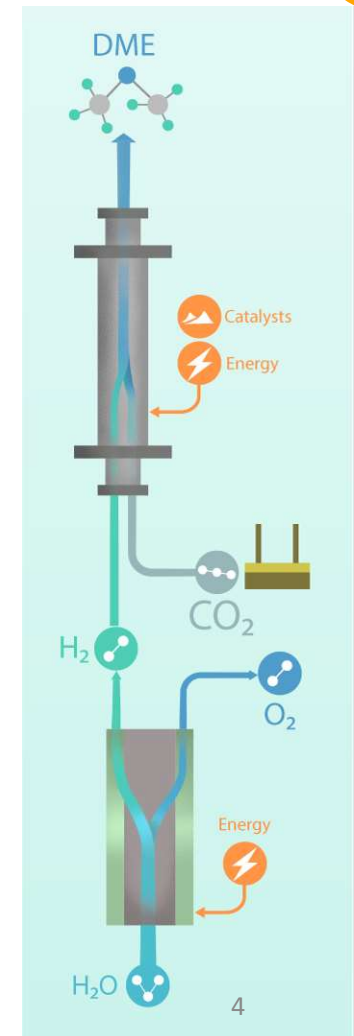
DME is an added-value gas for the chemical industry, used in the energy sector and as a low emission and efficient fuel e.g., for heavy duty vehicles.

# Methodology of Societal acceptance and readiness

## Approach of CO<sub>2</sub>Fokus:

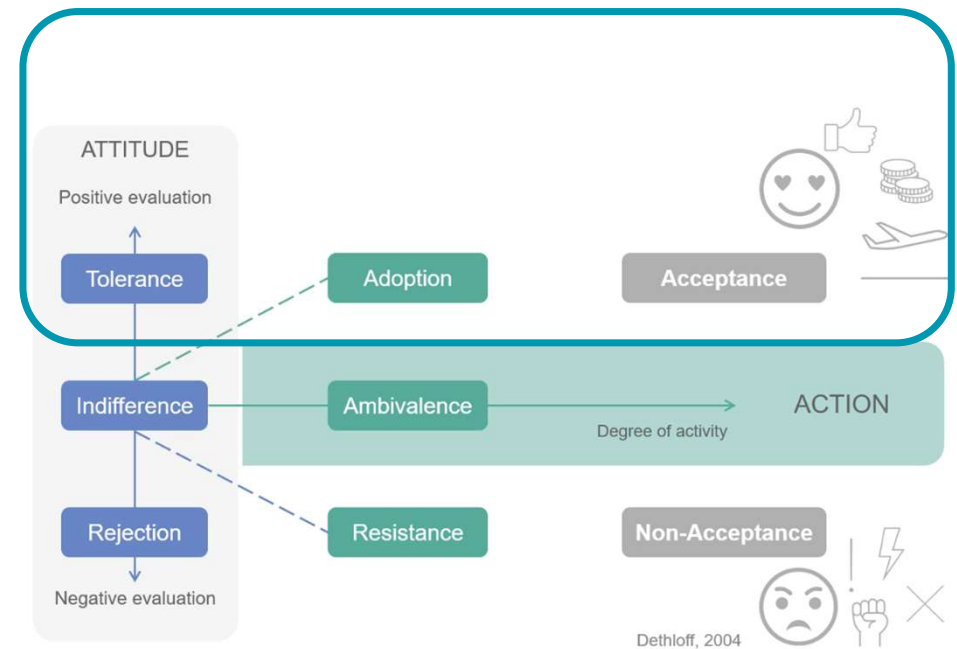
- Literature review of selected studies to get insights for CO<sub>2</sub>Fokus.
- Conduct a survey to get **impressions, concerns and to identify clusters of topics/risks**, e.g., on safety, cost, and environmental:
  - ✓ 500 respondents in 11 EU countries
  - ✓ Age groups from 18 to over 54 years,
  - ✓ Various education levels and ethnic groups.
- Rank the degree of concern and readiness.
- Derive conclusions for further communication and exploitation activities.

**Social acceptance is an integral component of technology development, a decisive factor for demand and for the success of new and innovative products.**



# Summary - CO<sub>2</sub>Fokus Social acceptance

- The topic is very technical and **hard to comprehend**.
- Majority of answers have been **positive and optimistic**.
- People are very **looking forward to new technology** to tackle climate change, so are willing to **accept some risks for the purpose**.
- Various perceived risks, most **refer to the feasibility of the technology**, followed by health and safety, environmental issues and other topics.



Graph: "Engelmann, L. (2021). *Perception of CO<sub>2</sub>-based fuels and their production in international comparison*. Presented at International workshop on CO<sub>2</sub> capture and Utilization at TU/e Eindhoven: <https://www.tue.nl/en/our-university/calendar-and-events/16-02-2021-international-workshop-on-co2-capture-and-utilization>

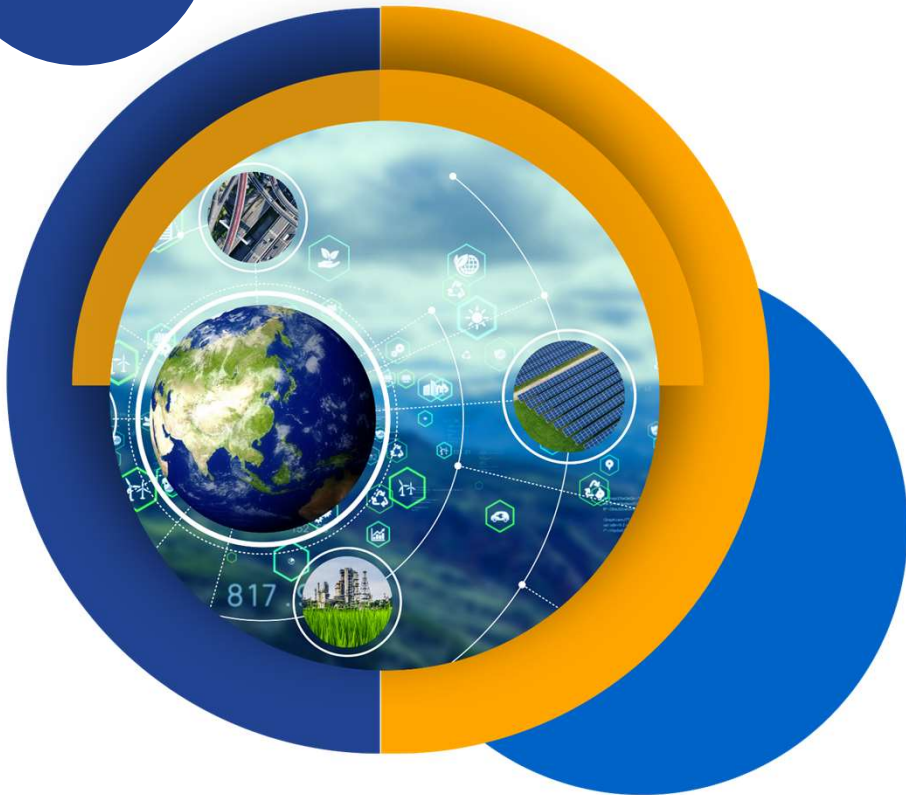


# The policy impact

- **Increase information level to avoid rebound effect** of little information → increased concerns → higher perceived risks → more disinformation.
- Create **opportunities for active** discussion and engagement of stakeholders at different project phases.
- Address concerns/ perceived risks **on the feasibility of the technology**, health & safety, and environmental issues.
- **Align the communication and dissemination strategies** of CCU projects.
- Keep in mind that **Social acceptance is an integral component of technology development**, a decisive factor for demand and for the success of new and innovative products.



# Thank you



Web: <https://www.co2fokus.eu/>

CO2Fokus YouTube video:

<https://youtu.be/H2wwVGx9NzI?si=ZiLaNp1zSApKbVvJ>

LinkedIn: <https://www.linkedin.com/company/co2fokus/>

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