



Federal Ministry  
of Education  
and Research



# PHOENIX –

## A European integrated approach to CO<sub>2</sub> valorisation

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ICCDU 19

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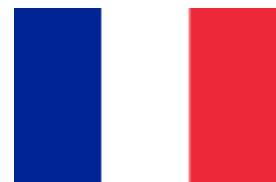
# The PHOENIX Initiative

**founded:** June 2017

**Partner:** Core group from France, Germany,  
The Netherlands, Flanders (since 2019), in close  
collaboration with Cefic

## Objectives:

- European integrated approach to ensure that CO<sub>2</sub> valorisation technology developments can be transformed into real benefits for Europe
- Support fast implementation of promising CO<sub>2</sub> valorisation technologies on European level
- Optimise public and private partnership by involving and connecting **all** relevant stakeholders





# Objectives

**Prioritise in companies:**  
High position on internal  
investment ranking lists



**Improve Investor  
confidence:**  
Supportive regulatory/  
political framework

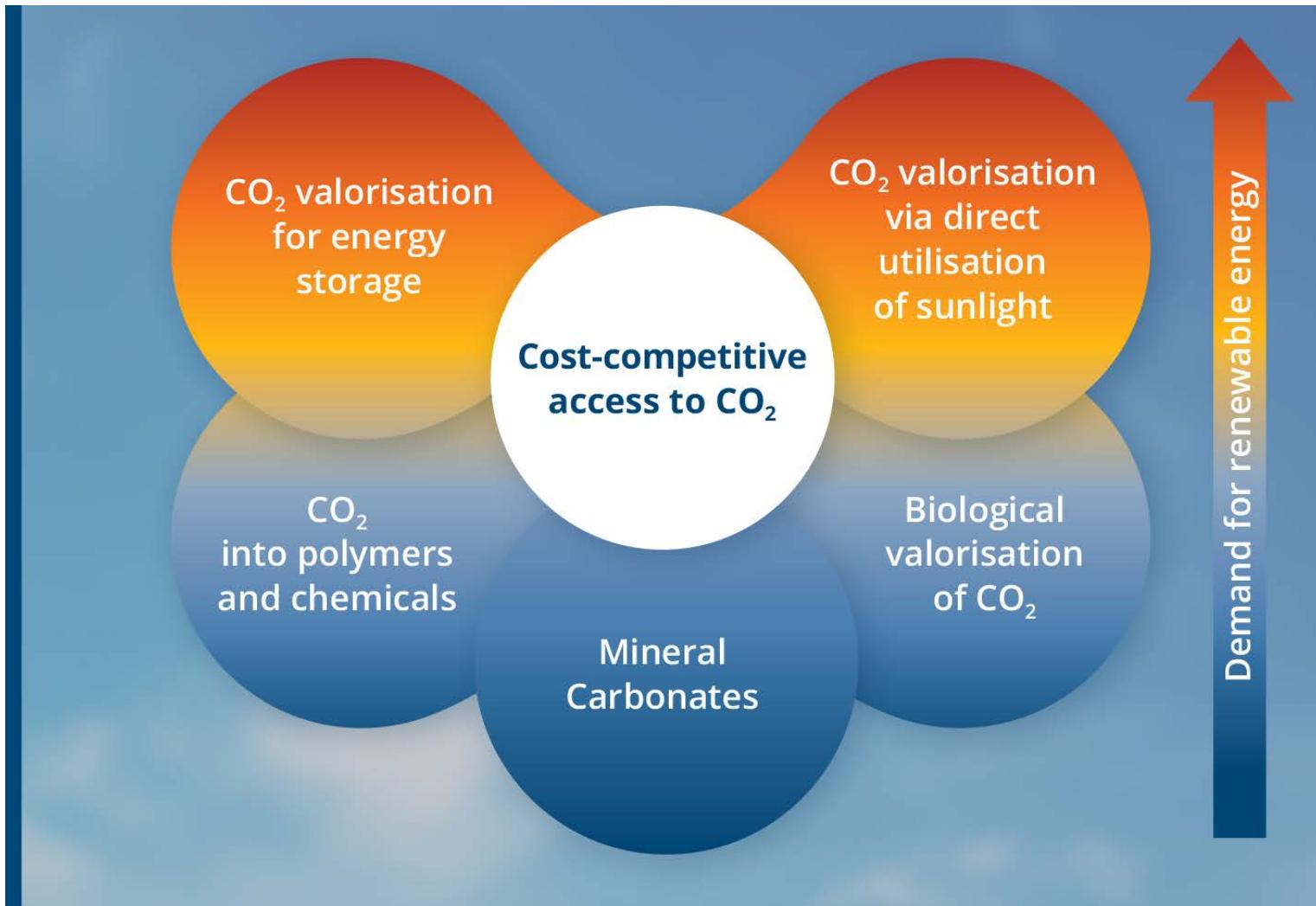
**Close funding gaps:**  
Public and private funding  
of projects >TRL6  
(state aid and IPCEI)

**Improve Synergies:**  
Coordination of RD&I  
funding activities  
on MS and EC level

**Tackle cross-cutting  
challenges:**  
e.g. infrastructure

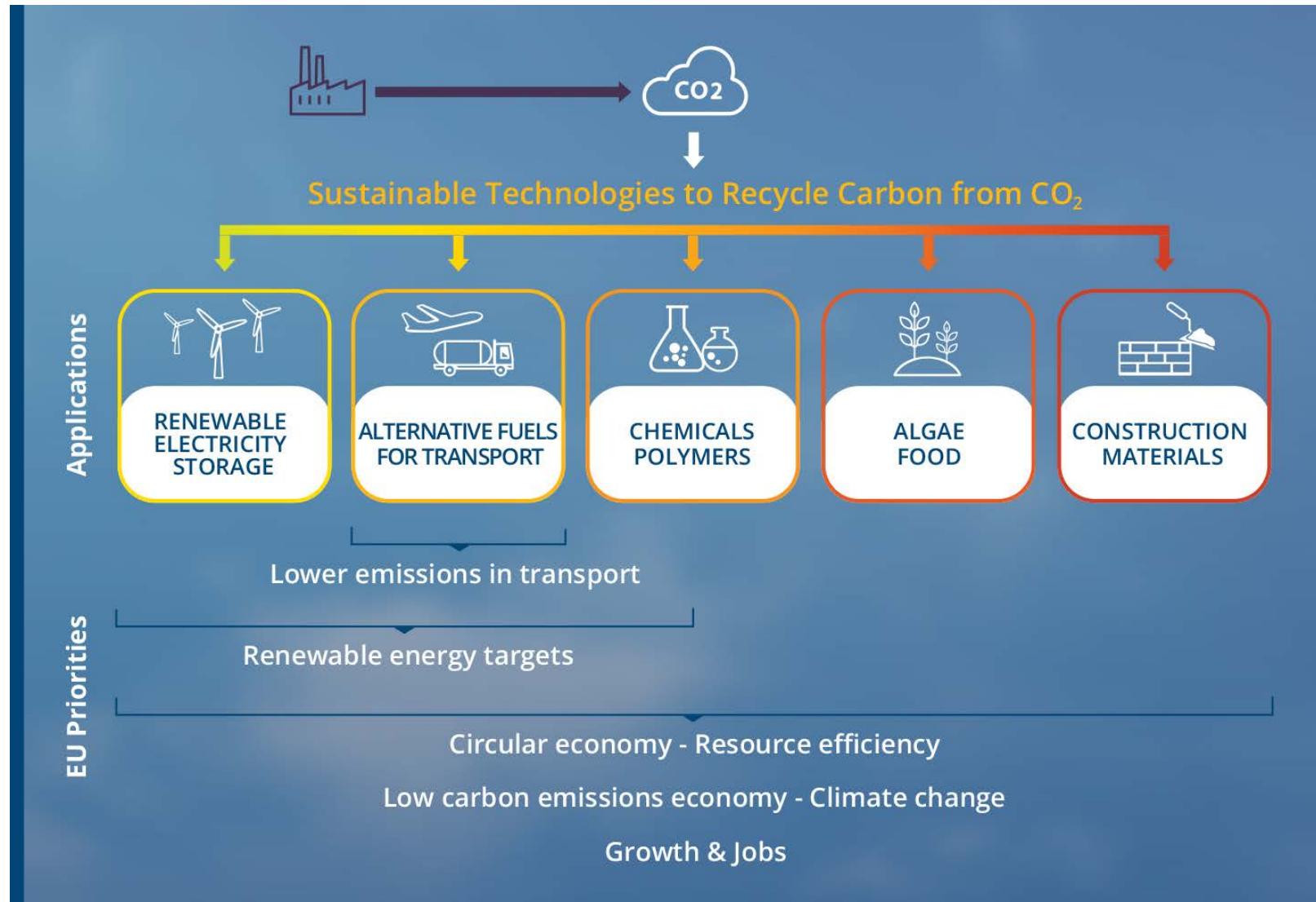


# Technology Fields





# European priorities





# Timeline

## Phase 1, Exploration

- National declarations of intent
- Selecting instruments for formal collaboration
- Interaction with stakeholders

## Phase 2, Preparation

- Definition of formal collaboration
- Interaction with stakeholders
- Preparation of the implementation in national schemes

## Phase 3, Implementation

- Implementation of PHOENIX in national schemes
- Enhanced CO<sub>2</sub> valorisation through PHOENIX



# Public Launch

## Public Launch: EU Industry Day, 22 February 2018, Brussels



### Main focus:

- Public information and networking
- Launch of Webpage: <http://www.phoenix-co2-valorisation.eu/>
- Welcome interested Member States to join the initiative



*Frankfurt, 22 March 2018: ~55 participants from 8 countries*

## Main Focus:

- Networking and Overview over activities (countries and industry)
- Feedback on and for the PHOENIX-Initiative

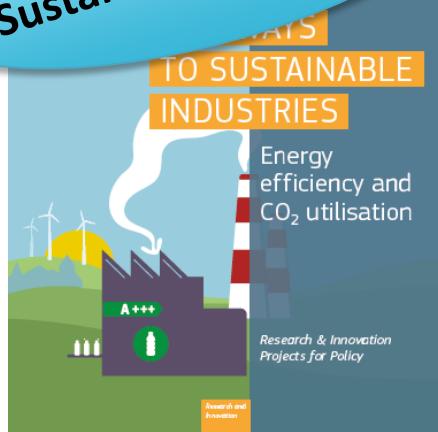
## Workshop (round tables)

- Identification of existing projects and funding demands for higher TRL/demonstration level projects in the technological areas
- → helps PHOENIX to identify funding needs



# Impact assessment – European level

DG RTD - P4P report  
Sustainable Industries



DG ENER – LCA4CCU

DG CLIMA – CCU study  
for ETS IF

**Identification and analysis of  
promising carbon capture and  
utilisation technologies,  
including their regulatory  
aspects**

JRC – Methodology for GHG  
emission avoidance for RED II

DG RTD - CarbonNext  
LCA Methodology for CCU

**CarbonNext**

Generation of Carbon  
for the Process Industry

Global CO<sub>2</sub> Initiative  
LCA & TEA Guidelines

Techno-Economic Assessment &  
Life Cycle Assessment  
Guidelines for CO<sub>2</sub> Utilization



# Harmonisation of LCA Guidelines

## Main Focus:

- Support an LCA-based impact evaluation of CO<sub>2</sub> valorisation in RD&I and consideration for regulation on European level
- Harmonisation of various activities ongoing in Europe to ensure comparability

## Activities

- Contact with responsible DGs (RTD, GROW, CLIMA)
- Contribution to a dedicated session at the HARMONI workshop with respect to different regulatory aspects

→ ***Follow-up workshop planned at the end of the year***



# Revision of ETS Monitoring and Reporting Regulation (MRR)

## Main Focus:

- Currently only very insufficient coverage of CO<sub>2</sub> valorisation technologies in ETS → *little to no incentive*
- Schäfer Kalk court case shows that there are possibilities for additions

## Activities

- Follow up of the HARMONI workshop January 2019
- Additions should be made based on mandatory LCA impact evaluation
- ***Lead by Flanders:*** use current revision round to suggest modifications to the MRR this summer

# Ongoing Activities

## Formalisation

- Final stages of setting up a Memorandum of Understanding

## Enhanced Communication

- Public appearances at conferences
- Establish own workshop series



## Specific Actions

- Standardisation as follow up of HARMONI project
- Revision of ETS monitoring and reporting regulation (ETS-MRR)

## Support of big scale European project initiatives

- Support topic in IPCEI SF developments
- Work together with European consortia for CO<sub>2</sub> valorisation



# Contact and Further Information

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