

COMPETITIVENESS COMPASS



How:

- Integrate decarbonisation policies with industrial, economic, and trade policies
- Facilitate access to affordable energy
- Strengthen the business case for a clean transition
- Promote competitiveness of clean tech manufacturers



2. A joint roadmap for decarbonisation and competitiveness

This pillar is about integrating decarbonisation policies with industrial, competition, economic and trade policies. They are a powerful driver of growth when they are well integrated.

Flagship Actions Pillar 2

- Clean Industrial Deal and an Action Plan on Affordable Energy
- Industrial Decarbonisation Accelerator Act
- Electrification Action Plan and European Grids Package
- New State Aid Framework
- Steel and metals action plan
- Chemicals industry package
- Strategic dialogue on the future of the European automotive industry and Industrial Action Plan
- Sustainable Transport Investment Plan
- European Port Strategy and Industrial Maritime Strategy
- High Speed Rail Plan
- Carbon Border Adjustment Mechanism Review
- Circular Economy Act
- Vision for Agriculture and Food
- Oceans Pact
- Amendment of the Climate Law



European Strategic Energy Technology Plan (SET Plan)

A main instrument for R&I & Competitiveness for low-carbon technologies

Improving new technologies and bringing down costs through
co-ordinated national research efforts

Helps promote and co-ordinate national R&I activities
among EU countries and associated countries

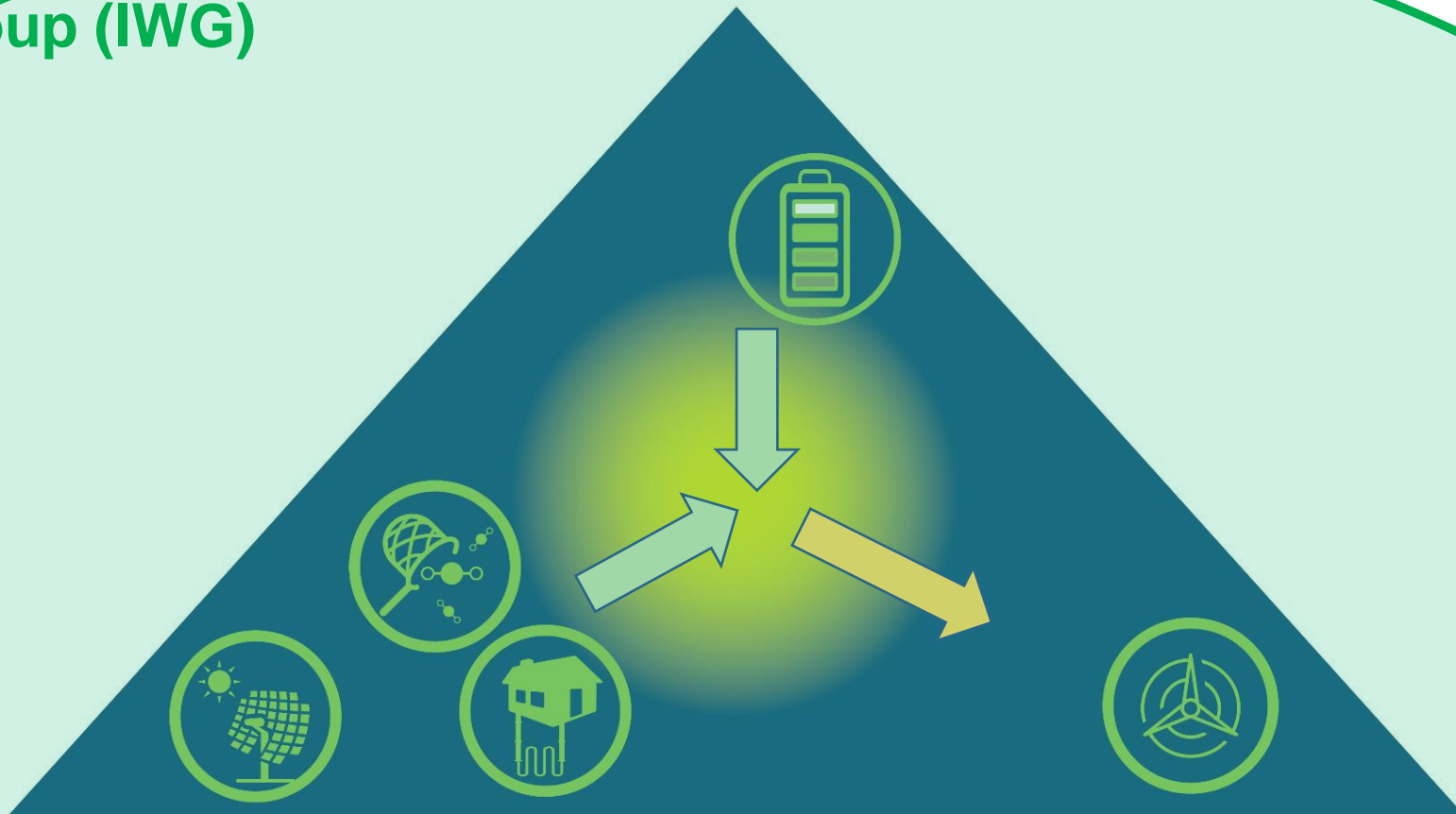
—
as well as aligning national R&I programmes

Co-chairs SET Plan on CCUS



**SET Plan
Implementation
Working group (IWG)**

MS/AC, EU COM
Government

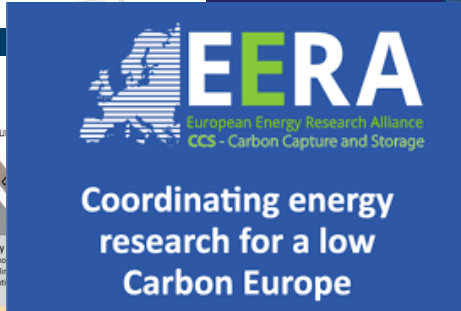
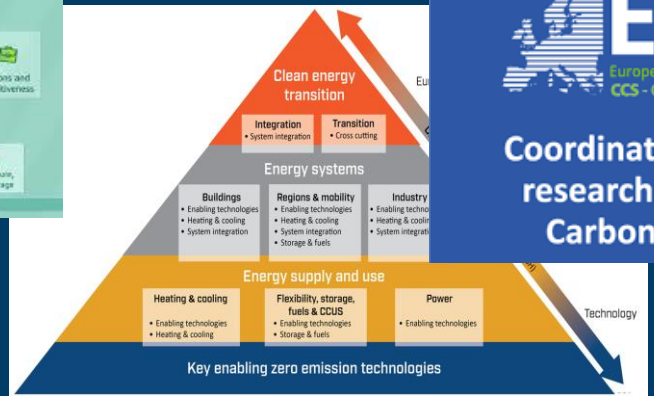
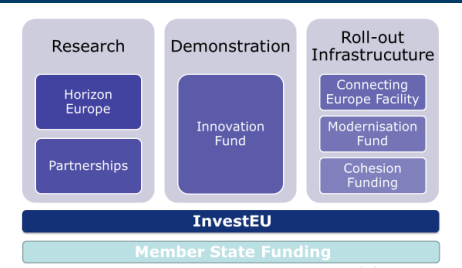
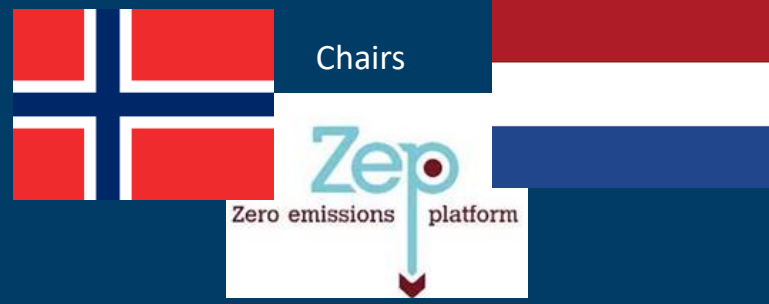


Universities,
Institutes, R&I
EERA JP CCS

Industry
ETIP ZEP



CCUS in SET plan



The SET Plan's key R&I objectives for carbon capture, utilisation and storage (CCUS) are:

- to demonstrate and to deploy on a commercial scale the full CCUS value chain;
- to reduce the costs of CO₂ capture;
- to demonstrate safe CO₂ storage.





What is EERA



The European Energy Research Alliance is the largest energy research community in Europe. It is a membership-based, non-profit association and brings together 250 universities and public research centres in 30 countries. EERA's joint research programmes cover the whole range of low-carbon technologies as well as systemic and cross-cutting topics.



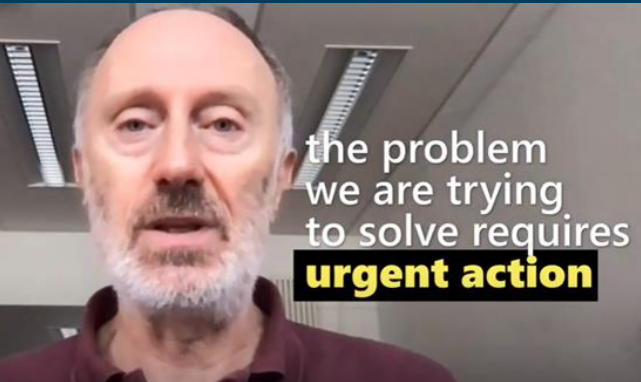
Management Board
SINTEF, TNO, RUB, BGS



50000+
experts

250+
research organisations
& universities

30
countries



There are many benefits for
speaking with one voice
and being a part of EERA JP CCS.

Jonathan Pearce

Towards a European CO₂ Backbone

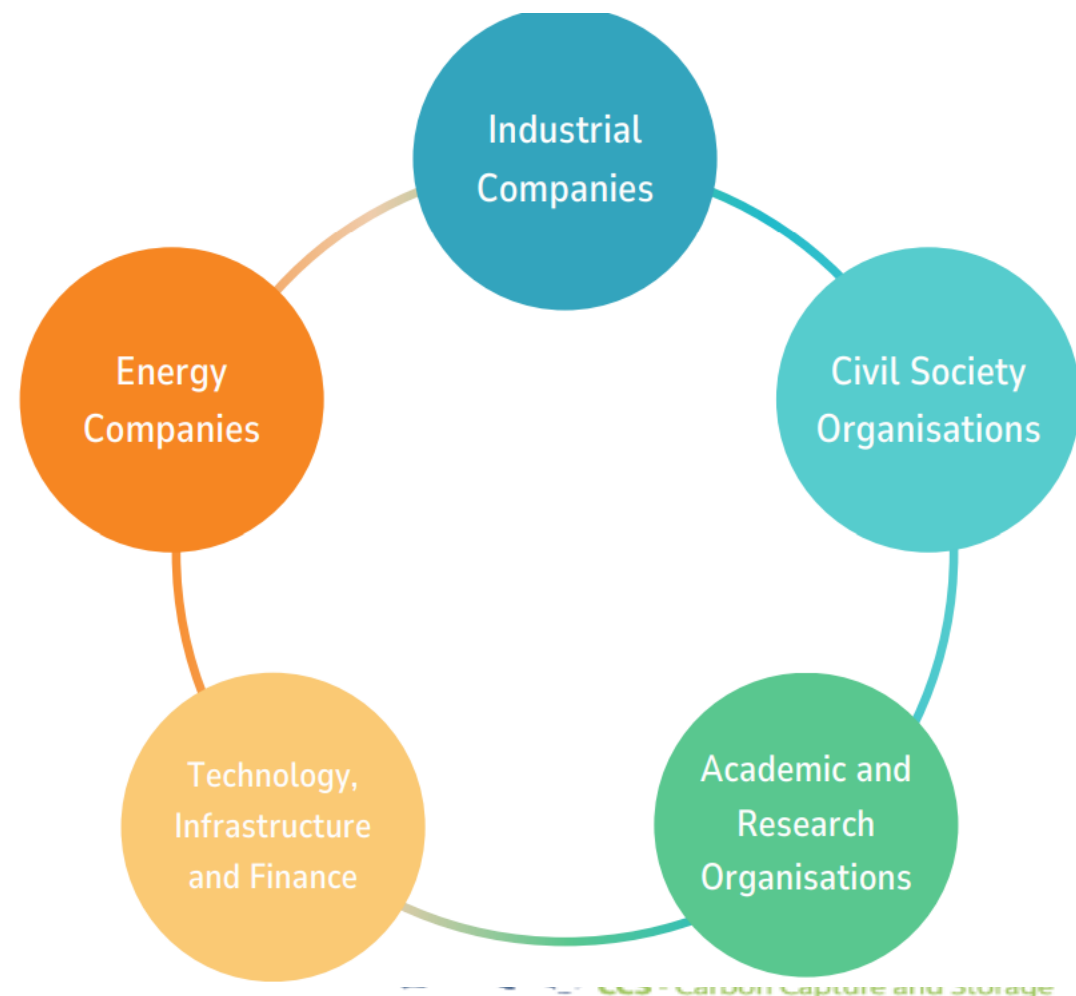
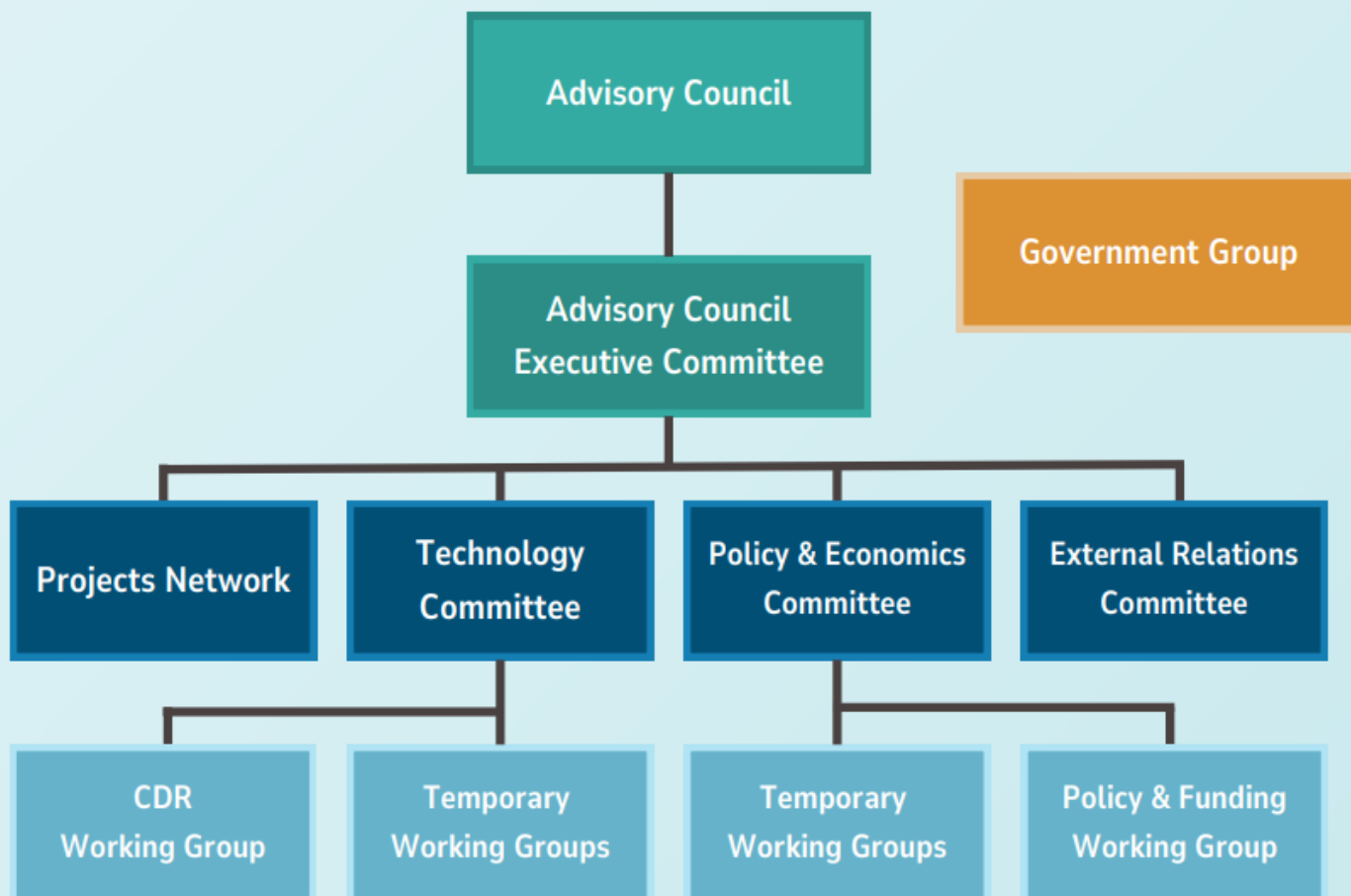
Current Developments and Open Questions:

Roland Span
Sub-Project Leader CO₂ Transport | EERA JP CCS
Chair of Thermodynamics | Ruhr-University Bochum



STRUCTURE

Committees and Working Groups





SET plan on CCS and CCU

2024: Revision of R&I targets and activities

To enable achievement of ICMS ambitions in 2040 and 2050

Longer-term view than previously

Balance between pragmatic, near-term delivery, and longer-term interim targets



D4.1 Report on opportunities for joint programming of R&I funding for CCUS

IMPACTS9
EU Horizon 2020 project No. 842214

Authors:
Marie Bysveen – SINTEF Energy Research

March 2022

Support stakeholders on Carbon Capture Utilisation and Storage of ETIP ZEP and IWG9

Deliverable 1.4 Review of the IWG9 R&I activities and targets

Author(s)/Editor:

Marie Bysveen	SINTEF
Amy Brunsvold	SINTEF
Filip Neele	TBO
Lamberto Eldering	Equinor
Anastasios Perimenis	CO2Value
Jonathan Pearce	British Geological Survey
Eadbhard Pernot	Zero Emissions Platform
María Midón	Zero Emissions Platform

Contents

Review of SET Plan R&I Targets and Activities	
1. Introduction	
2. Cross-cutting targets and R&I activities	←
2.1. Cross-cutting Targets	
2.2. Cross-cutting R&I activities	
3. CO2 Capture	←
3.1. CO2 Capture Targets	
3.2. CO2 R&I activities	
4. Carbon Capture and Utilisation (CCU)	←
4.1. CCU Targets	
4.2. CCU R&I activities	
5. Full-scale projects, clusters and infrastructure	←
5.1. Projects Targets	
5.2. Projects R&I activities	
6. CO2 Storage	←
6.1. CO2 Storage Targets	
6.2. CO2 Storage R&I Activities	



A European Centre of Excellence in CCUS

1. Professional secretariate for IWG9
2. Advisory role for European research priorities on CCUS
3. Leverage and integration of research findings in support of national and European policies on CCUS
4. Commissioning and delivery of specific studies, reviews and papers on knowledge gaps
5. Targeted fundamental research (on shorter notice) not covered by national and/European programmes

SUMMING UP

- European **leadership** in energy R&I needed
- **Strategic collaboration** important
- **Who** must meet to make this happen ?
- European Strategic Energy Technology plan (**SET plan**)
- European Energy Research Alliance (**EERA**)
- Zero Emissions Platform (**ZEP**)
- European Centres of Excellence (**ECoE**)
- **Engage** in Implementation Working Group (**IWG**)