



European
Commission

Coal regions building back better post-COVID 19

Coal Regions in Transition Virtual Week

29 April 2021





European
Commission

Coal Regions in Transition Virtual Week

Updates from START

Paul Baker

Secretariat of the Initiative for coal regions in transition



START Regions



ES

Asturias

Energy transition strategy and project support



IE

Midlands

Pathway plan for transition, project identification and consultation



CZ

**Karlovy Vary
(Sokolov district)**

Strategy advice (skills & employment, renewable energy etc) and capacity development



PL

Malopolska

Project identification and support, and capacity development



EL

**Peloponnese
(Megalopolis)**

Project assessment of options and assistance



RO

**Hunedoara County
(Jiu Valley)**

Project identification, consultation and support



PL

Silesia

Rehabilitation and repurposing of post-industrial area



START general support for Strategy Development

Strategy development

Karlovy Vary

Good practice for regional strategy development

Asturias

- **Advice on logic and structure of the energy strategy document**
- **Critical review of early draft energy strategy document and recommendations for development**
- **Advice on alignment of emerging energy strategy with EU policy environment and priorities**

Midlands

Transition Pathway - mapping transition in the short and longer term

START thematic support for Strategy Development

Employment & skills

Midlands

Good practice for supporting workers affected by transition and employment creation

Karlovy Vary

Assessment of regional employment opportunities and skills requirements

Assessment of sub-regional employment creation opportunities and actions



START thematic support for Strategy Development

Energy transition

Karlovy Vary

Regional opportunities for renewable energy supply and energy efficiency actions

Transition in rural areas

Midlands

Assessment of opportunities and emerging activities in rural communities



START support for Project Development

Project templates and databases

Midlands

Project registration template and inventory development

Asturias

Project summary template and review of strategic alignment of projects

Jiu Valley

Project summary template



START support for Project Development

Project development

Malopolska

Support for definition and development of 4 transition and revitalisation projects

- Training and skills development for workers affected by energy transition
- Involvement of women in just transition/greening of energy industry
- Models and delivery options for establishing an “energy cluster”

Jiu Valley

Formulation of project concepts and development of 8-10 transition projects

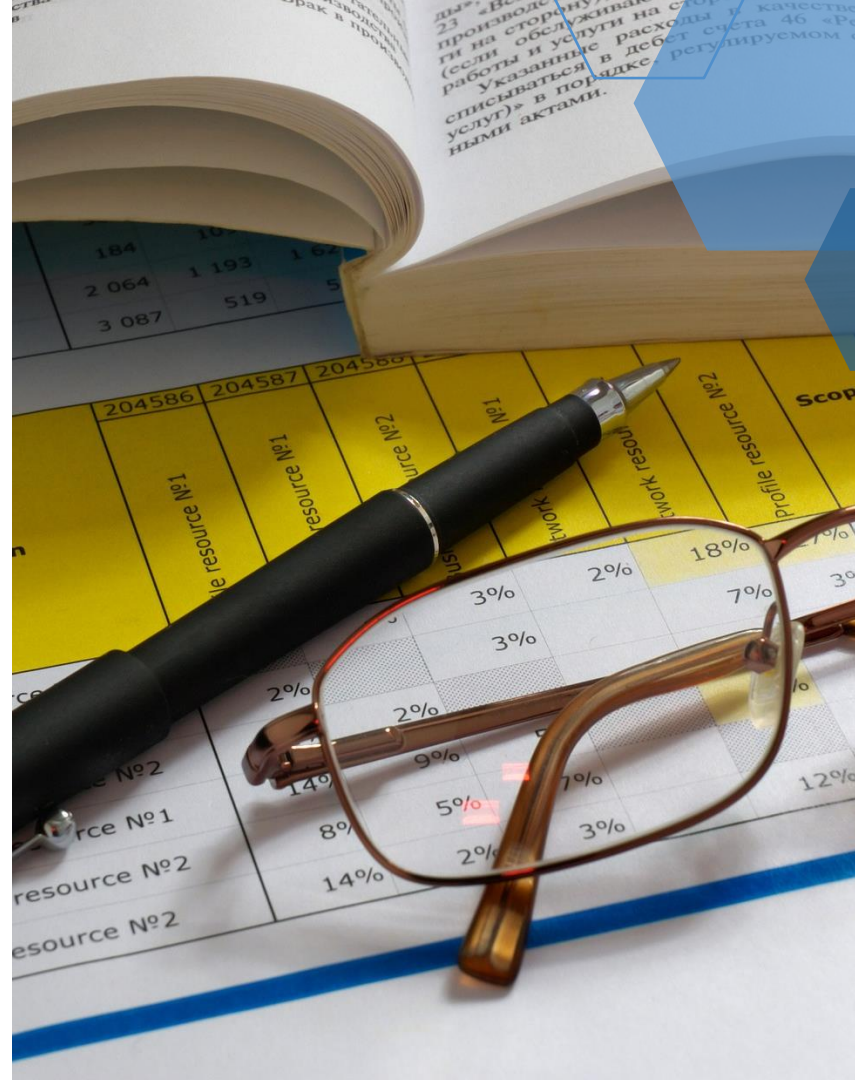


START support for Project Development

Project assessment

Silesia

Development and testing of a tool to assess options for brownfield site regeneration ('Transition options framework')



START support for engagement and dialogue

Midlands

Development of a community/stakeholder engagement approach

Asturias

Meeting of regional and EC representatives on alignment of regional energy strategy to EU technology and policy priorities

Malopolska

EC supported workshop on energy transition and project development for local administrations in Western Malopolska





European
Commission

Coal Regions in Transition Virtual Week

Toolkit on Technology Options

Timon Wehnert

Secretariat of the Initiative for coal regions in transition



Coal Regions in Transition Initiative - Support Materials

Available online: coalregions.eu.

12 current practice case studies

5 toolkits

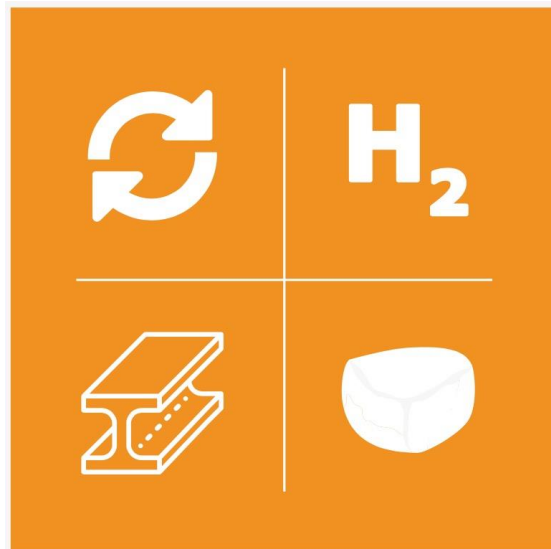
- **Transition strategies**
- **Governance of transitions**
- **Sustainable employment and welfare support**
- **Environmental rehabilitation and repurposing**
- **New: Technology Options**



Technology options for industries in a climate-neutral economy

Re-use of coal-fired power plants

Decarbonising energy-intensive industries



Hydrogen

Non-energy uses of coal

Re-use of coal power plants

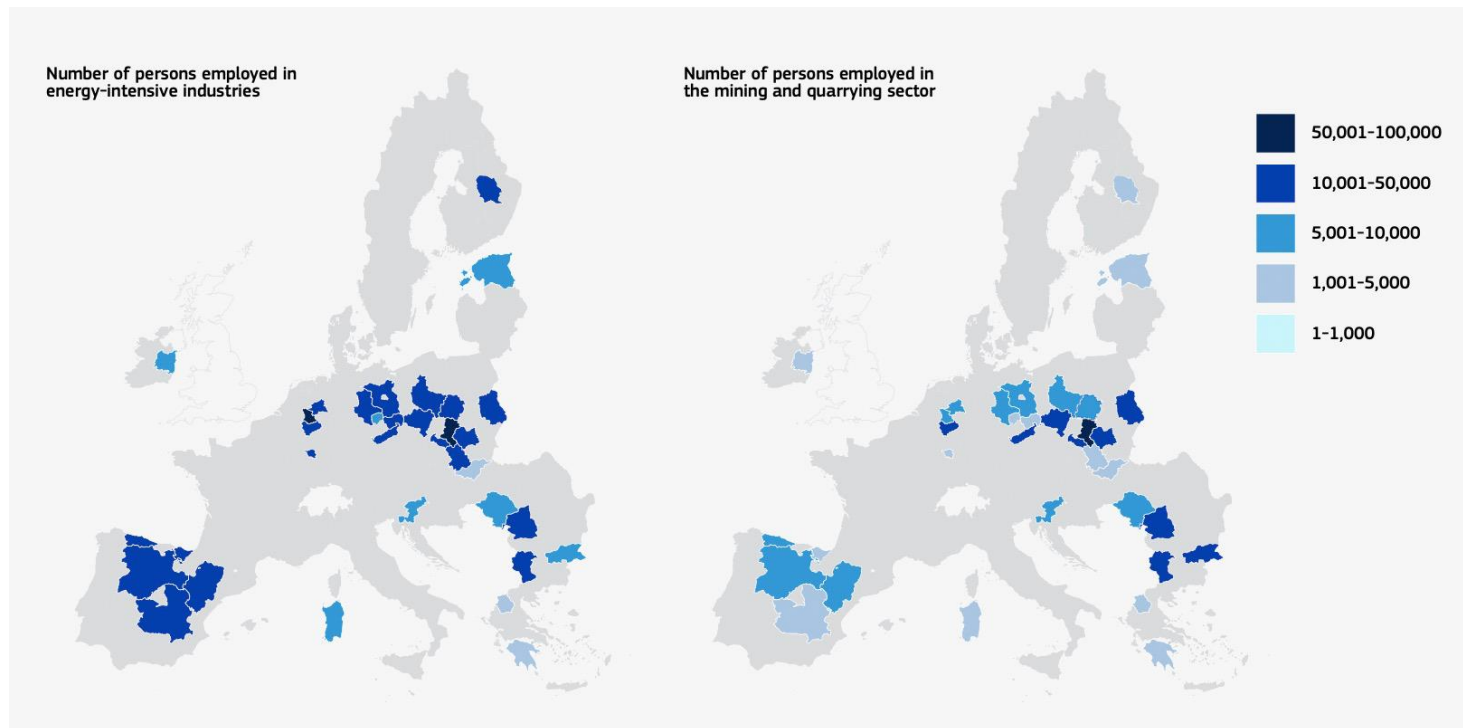
Energy uses



Non-energy uses

e.g. data centres, cultural redevelopment, industrial parks, logistical hubs

Decarbonising energy-intensive industries



Decarbonising energy-intensive industries

Challenges

- **Long investment cycles in many energy-intensive industries**
- **The need for new technologies and production processes**
- **Immaturity of zero-carbon technologies and high potential costs**

Opportunities

- **Significant investments improve the competitiveness of businesses in the mid- to long-term**
- **Industrial jobs remain in the regions**

Decarbonising energy-intensive industries

Steel production

Decarbonising primary steel-making processes requires:

- the development of new technologies
- massive investments in new production facilities
- large amounts of (clean) hydrogen as a feedstock.

Current Practice Cases:



HYBRIT-PROJECT IN LULEÅ, SWEDEN

Direct reduction with hydrogen and smelting in the electric arc furnace (H-DRI)



SIDERWIN IN MAIZIÈRES-LÈS-METZ, FRANCE

Alcaline iron electrolysis (Electrowinning)



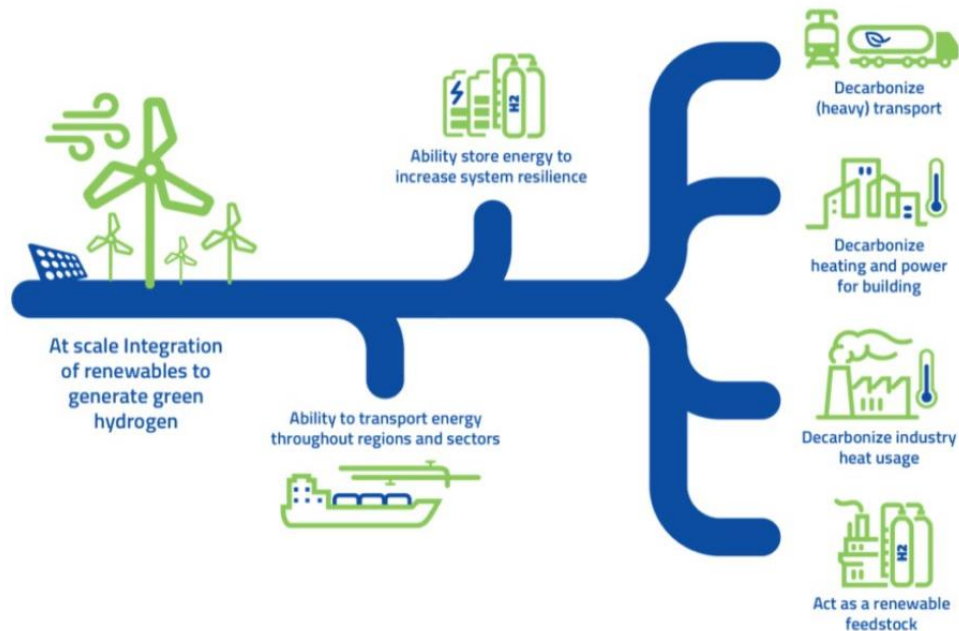
CARBON2CHEM® IN DUISBURG, GERMANY

CCU of waste gases from integrated blast furnaces

Hydrogen

Future Applications

Hydrogen will play an important role in the future energy system; but, due to high production costs, its use is limited to applications for which direct electrification is not a viable option.



Hydrogen

The EU hydrogen strategy

A roadmap to 2050

The EU hydrogen strategy stresses the urgency to scale up hydrogen production and application.

2024

6 GW of renewable hydrogen electrolyzers
Replace existing hydrogen production
Regulation for liquid hydrogen markets
Start planning of hydrogen infrastructure

2030

40 GW of renewable hydrogen electrolyzers
New applications in steel and transport
Hydrogen for electricity balancing purposes
Creation of “Hydrogen Valleys”
Cross-border logistical infrastructure

2050

Scale-up to all hard-to-decarbonise sectors
Expansion of hydrogen-derived synthetic fuels
EU-wide infrastructure network
An open international market with € as benchmark

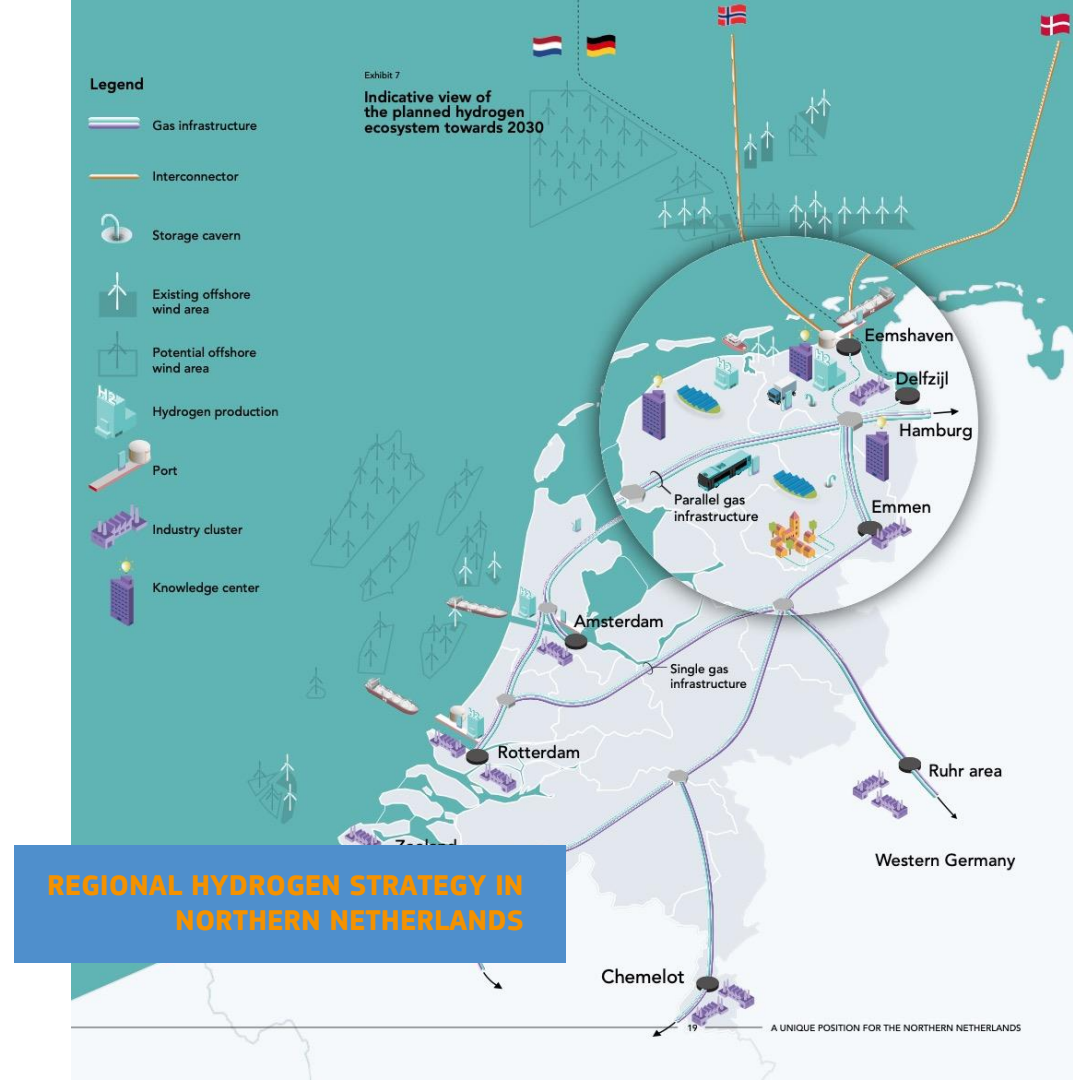
Hydrogen

Regional hydrogen strategy

High investment costs and long lead times require regions to rapidly develop their own hydrogen strategies.

Key questions are:

- **what will be the hydrogen demand in your region?**
- **what is the potential to produce clean hydrogen in your region?**
- **what can future hydrogen infrastructure look like?**





European
Commission

Coal Regions in Transition Virtual Week

Upcoming Toolkit on Finance Options

Maria Yetano Roche

Secretariat of the Initiative for coal regions in transition



Toolkit on financing for coal regions in transition

The toolkit will provide....

- **orientation across the various sources of EU funding relevant to coal regions in transition, indicating how they are relevant to financing projects at the local level;**
- **guidance for the effective mobilisation of EU funds at local and regional level, including examples of successful programmes and initiatives in this field.**



Questions

Question 1:

Which of these EU funds do you think will be most important to finance transition projects in your region/the region that you know best? (you can choose up to 3)

Question 2:

Which of these EU sources of funds would you most welcome guidance on? (you can choose up to 3)

Question 3:

What is the biggest challenge to access EU funds for transition projects in your region?



Step 1:

Go to [Slido.com](https://www.slido.com)

Step 2:

Enter the code: **CRIT4**
or scan the QR code

Finance toolkit: Needs assessment

To find out about...

- **key challenges faced by practitioners**
- **knowledge and capacity gaps**
- **examples of good practice**



Online Survey

<https://ec.europa.eu/eusurvey/runner/financetoolkitsurvey>

Open until: May 12, 2021

Thank you

secretariat@coalregions.eu

coalregions.eu

#CoalRegionsEU

Twitter: [@Energy4Europe](https://twitter.com/Energy4Europe)

[DG Energy's YouTube channels](#)

