

# REPowerEU: Energy solutions and industrial competitiveness, part 2

Summary

EU Clusters Talks 25 May 2022, 8:30 – 10:00 CEST





# EU Clusters Talk "REPowerEU: Energy solutions and industrial competitiveness, part 2"

The European Cluster Collaboration Platform organised this EU Clusters Talk on 25 May 2022, 8:30 – 10:00 CEST, to speak about the detailed action plan to put **REPowerEU into practice**, talk with cluster representatives about the rapid deployment of renewable energies, energy dependencies and plans to ensure supplies, and hydrogen as a (future) energy source.

#### Agenda of the meeting

Moderation: Chris Burns

- 1. News from the European Cluster Collaboration Platform
- 2. "From Our Own Correspondent": Press Conference on REPowerEU, 18 May 2022
- 3. Perspectives from the European Commission

  Jacek Truszczynski, Deputy Head of Unit at Directorate-General for Internal Market,
  Industry, Entrepreneurship and SMEs (DG GROW), European Commission
- 4. Panel debate: How can we rapidly deploy renewable energies and address energy interdependencies?
  Cédric Brüll, Director, Cluster TWEED
  Katia Ferrari, Cluster Manager, Clust-ER Greentech

Pedro Casero, Head of Innovation Department, Fundación Hidrógeno Aragón

5. Funding opportunities

### 1. News from the European Cluster Collaboration Platform

#### Nina Hoppmann, team member of the European Cluster Collaboration Platform

After the introduction by moderator Chris Burns, the following news items were presented:

- 1. Invitation to fill in the survey "A Solution-Oriented Approach to Supply Chain Disruptions"
- 2. Invitation to participate in the Cluster Collaboration Lab in Cluj-Napoca, 22-23 June
- 3. The European Commission presents the <u>2022 European Semester Spring Package</u> to provide Member States with support and guidance in the midst of Russia's ongoing invasion of Ukraine.
- 4. The European Commission sets out an action plan to establish <u>"Solidarity Lanes"</u> to ensure Ukraine export agricultural goods.
- 5. The European Commission presents plans for the Union's immediate response to address Ukraine's <u>financing gap and the longer-term reconstruction</u>.
- 6. Commission launches <u>consultations</u> on the regulatory framework for renewable hydrogen.
- 7. Invitation to participate in the <u>workshop series "Get digital"</u> to scale digital solutions that decreases European dependence on oil, gas, and external raw materials, as well as increase overall supply chain resilience

## 2. "From Our Own Correspondent": Press Conference "REPowerEU"

The video showed a statement from Executive Vice-President Frans Timmermans, which he made in the press conference on REPowerEU on 18 May 2022. He highlighted that the course of the European history has radically changed. Europe is too dependent on Russia for energy needs, and the answer to this concern is renewable energy and diversification of supply renewables. He informed that by the end of this year, Europe will replace 100 bcm of gas imports from Russia.



REPowerEU is the plan to make Europe independent from Russian gas and find freedom in Europe energy choices.

### 3. Perspectives from the European Commission

Jacek Truszczynski, Deputy Head of Unit, Directorate-General for Internal Market, Industry, Entrepreneurship and SMEs (DG GROW), European Commission

Starting his presentation, Jacek Truszczynski underlined that the REPower EU plan aims to reduce dependence on Russian fossil fuels and to fast forward the green transition. **REPowerEU pursues** this ambition through energy savings, diversification of energy supplies, and accelerated rollout of renewable energy, all under smart investment.

Looking at saving energy, he said that one of the principal problems to face is that the process of establishing policies can be very slow, since 27 countries must agree on it. The EU is working on speeding up the process. Regarding diversifying supplies and supporting international partners, the EU is working with international partners to ensure alternative supplies. Individual member states also have different sources such as the U.S. or the United Arab Emirates. In addition, speeding up the deployment of renewable energy will accelerate the independence. The challenges are to double the production from renewables and to increase the 2030 target for renewables from 40% to 45%. Simpler and faster permitting plays an important role to achieve this goal.

In case of hydrogen, we need to double the target by 2030, including the production in Europe and the import of hydrogen. The **Commission is setting up a regulation framework to define the production of renewable hydrogen to ensure that production leads to net decarbonization**. This renewable hydrogen is environmentally friendly and has additional value for sectors like agriculture.

Following with the supply of raw materials for the energy transition, Jacek Truszczynski explained that there is a risk that we move from a dependence on Russia for gas to a dependence on China for raw materials. Now, 99% of the batteries come from China.

In addition, he highlighted the **need of large-scale skills partnership under Pact for Skills to be able to implement the energy transition, and to have smart investment to finance it**. A large-scale call has been established not only for hydrogen but also for up-scaling innovative technologies. Moreover, Jacek Truszczynski underlined the significance of synergies and complementarities addressed within the cohesion policy.

As a last point, Jacek Truszczynski spoke about preparedness for gas cuts and the Commission's work on contingency planning, achieving bilateral solidarity agreements, and providing guidance for prioritisation criteria.

The purpose of all activities is to make Europe independent from Russian fossil fuels well before 2030. The recent gas supply interruptions to Bulgaria and Poland demonstrate the urgency to address the lack of reliability of Russian energy supplies. Closing his statement and answering a question on collaboration with China on new PV factories, he explained that investments are always welcome and that the aim is to diversify partners to minimise risks and boost European production.



# 4. Panel debate: How can we rapidly deploy renewable energies and address energy interdependencies?

Before the beginning of the discussion, the three panellists introduced themselves and their organisations:

#### Cédric Brüll, Director, Cluster TWEED<sup>1</sup>

The energy cluster TWEED was created in 2008 and diversified in 2022 to create a new cluster base on water due to the relation between the sectors. TWEED is formed by 180 members, 85% of them are companies. The purpose is to develop technologies in the energy and water sector to ensure a global sustainable development. They are partner of two COSME projects: Aewen<sup>2</sup>, a project to create an African-EU water and energy network, and SmartEnergy<sup>3</sup>, a project supporting SMEs in energy sector through digitalisation.

#### Katia Ferrari, Cluster Manager, Clust-ER Greentech<sup>4</sup>

The Greentech Clust-ER was founded in 2017 and has 101 members. 36% of the members are SMEs. The focus areas of the cluster are low carbon economy, environmental sustainability and ecosystem services. They work on renewable energies, smart energy systems and circular economy. Moreover, hydrogen is an important sector for the Greentech Clust-ER. They are partners in two COSME projects. The first one is the Green Small Smart Cities (GSSC)<sup>5</sup> and the second one is the European Green Hydrogen Cluster Alliance for Internationalisation (H2GLOBAL)<sup>6</sup>, which involve countries such as Brazil, Morocco, South Korea, and Chile.

#### Pedro Casero, Head of Innovation Department, Fundación Hidrógeno Aragón<sup>7</sup>

Aragon Hydrogen Foundation is a private, non-profit research centre created to promote the use of hydrogen as an energy vector. The Aragon Hydrogen Foundation was created by the Government of Aragon in 2003. It is formed by 78 members, which include entities from the chemical, energy, and engineer sectors as well as homologation entities. The Aragon Hydrogen Foundation works on supporting the development of strategic projects and promoting knowledge among companies and the society.

#### **Open Dialogue**

During open dialogue, the panellists discussed the challenges of the rapid deployment of renewable energy, the role of hydrogen, and the need for qualified personnel.

Talking about the difficulties in **recycling batteries**, Cédric Brüll informed that they are tackling his challenge in two different ways: Firstly, for changing the manufacturing of the batteries, they help their members to finance innovative projects related to new ways of producing batteries, and secondly, they support the reuse the batteries through new pilot projects in infrastructure. Katia Ferrari explained that they have research centers working on that, for example the University of Bolonia is studying the possibility of using different materials as Lithium. As Katia Ferrari underlined, they believe that investing and research can help to reach the goal. Research centers and

<sup>&</sup>lt;sup>1</sup> https://clusters.wallonie.be/tweed/fr

<sup>&</sup>lt;sup>2</sup> https://aewenproject.eu/2022/01/14/aewen-is-an-european-project-to-create-an-african-eu-water-and-energy-network/

<sup>&</sup>lt;sup>3</sup> https://clustercollaboration.eu/content/grow-faster-energy-clusters-towards-energy-transition

<sup>&</sup>lt;sup>4</sup> https://greentech.clust-er.it/en/

<sup>&</sup>lt;sup>5</sup> https://clustercollaboration.eu/content/green-small-smart-cities

<sup>&</sup>lt;sup>6</sup> https://clustercollaboration.eu/content/european-green-hydrogen-cluster-alliance-internationalisation

<sup>&</sup>lt;sup>7</sup> https://hidrogenoaragon.org/es/



enterprises should work together on that. She highlighted that there are also other clusters working on it, which participate in the S3 Platform pm batteries.

The next discussion point was the **role of the private sector** in making the energy transition happened. For example, in Italy, the government launched a bonus for energy efficiency and qualification of buildings. Furthermore, Katia Ferrari highlighted the need to extend the awareness of energy saving towards the population. About the diversification of energy supplies, she mentioned bureaucratic problems in Italy. The cluster is working with the regional policymakers to set up plans and financial instruments for the deployment of renewable energies.

Pedro Casero explained that in the Aragon region, Spain, they have elaborated a **roadmap with the regional government**, and they have joined forces with their neighborhood regions in order to promote a clear path to produce, use and to distribute **hydrogen** and to reach the targets of ten million tons of hydrogen by 2030. He explained the three pillars to act: increase the capacity of renewable energy source, scale out the production, and store and distribute the energy. The main difficulty is, in his opinion, that everything must be done by the same time. Pedro Casero gave an example of a project in Mallorca named Green Hysland<sup>8</sup>, where they are constructing the plant of 710 megawatts of electricity.

Cédric Brüll explained that his cluster helps its members with **both technology innovation and non-technology innovation**. Firstly, the cluster can support in accelerating the processes and launching operations for technology innovation. The clusters need to integrate the technologies into the markets, so the entities see the clusters as networking partners. They also need a roadmap for technologies. For example, Cluster TWEED developed the roadmap for hydrogen and now they are implementing projects. Moreover, he explained that there are a lot of regulatory barriers. With regards to non-technology innovation, he explained that they are missing the **market**. Even if the companies have the technologies, they need a demand and market for their activities.

Furthermore, he underlined that there is a **skills gap**, and he opened the question on how clusters can help to training facilities. Katia Ferrari explained that they collaborate with the university in the region, trying to up- and re-skill the labor force, especially in the IT sector. The region is trying to promote further activities to attract the talents. Cédric Brüll explained that they are working on a project with a Belgium university and on PHD programs about hydrogen. He underlined the significance of doing collaborative training programs between clusters and universities.

The next question was on how company can **join the supply chain** to support REpowerEU. Jacek Truszczynski identified some key technologies such as solar, wind or heat pumps. The European Commission has specific financing programmes for these. Katia Ferrari said that is very difficult to scale up alone, which is why she recommended to join a cluster or an association in the region. Pedro Casero added that his organisation has initiatives in order to scale up facilities.<sup>9</sup>

Addressing a question on the **future of coal power plants** in Poland, Jacek Truszczynski explained that the future of coal-based power generation is green, and that the government should make the planning decisions accordingly.

The next topic discussed was the **energy interdependencies** and how **the industry is preparing for possible gas cuts**. Cédric Brüll explained that they are facing the challenge in two ways: producing more locally and diversifying the imports. In the case of small countries like Belgium, where a lot of energy is consumed, they collaborate with other countries such as Namibia, Morocco and the United Arab Emirates through partnership agreement to import green hydrogen in the future. Katia Ferrari explained that the decarbonisation can be very difficult for some energy-intensive industries, such as ceramic. For some steps of the production, the producers need gas, it is not possible with electricity. Some companies are trying to have a mix of both energy sources, and other projects are

<sup>8</sup> https://greenhysland.eu/

<sup>9</sup> https://hidrogenoaragon.org/en/training/



using hydrogen. Pedro Casero underlined that the electrification is the hardest point to address. Some industries are replacing natural gas with hydrogen.

Speaking about the energy transition and **infrastructure**, Katia Ferrari underlined that communication action for the awareness in the society is needed. Jacek Truszczynski reminded the objective of having solar panels on private and public buildings. Cédric Brüll highlighted that the renovation of buildings is going too slowly; the industry needs the infrastructure to change the process; the public authorities have to help them to put this infrastructure, the recovery plans of the public authorities through funding should provide a solar panel infrastructure. Furthermore, Pedro Casero explained that in Aragon, they are ready for roll-out of solar energy, but the buildings are old and need renovation.

To sum up, the speakers shared some final thoughts. Jacek Truszczynski underlined the usefulness of hearing about the power of clusters. Katia Ferrari highlighted the importance of collaboration; clusters need to engage with private companies and encourage them to play their role in the energy transition. Pedro Casero and Cédric Brüll also underlined the significance of collaboration and the role of the clusters and organisations in the energy transition.

### 5. Funding opportunities to strengthen resilience

#### Nina Hoppmann, Team member of the European Cluster Collaboration Platform

Closing the EU Clusters Talk, Nina Hoppmann presented the following funding opportunities:

From the European Commission:

- Hydrogen Valleys (large-scale) and Hydrogen Valleys (small-scale). Deadline: 20 September 2022.
- 2. Supporting the clean energy transition of the business sector. Deadline: 16 November 2022
- 3. <u>National Finance Roundtables for sustainable energy investments.</u> Deadline: 16 November 2022

#### From cluster partnerships:

- 1. MIND4MACHINES first open call. Deadline: 29 June 2022.
- 2. <u>GreenOffshoreTech: First call for proposals</u>. Deadline: 6 July 2022