



EU Clusters Talk "REPowerEU: Energy solutions and industrial competitiveness"

The European Cluster Collaboration Platform organised this meeting for the European industrial stakeholders to speak about the faster deployment of renewable energies on 13 April 2022, 8:30 – 10:30 CEST. The aim of the Talk was to inform the cluster community about the REPowerEU plan, learn from clusters and associations about their activities to accelerate the uptake of renewable energy, and to discuss bottlenecks and solutions.

Agenda of the meeting

Moderation: Chris Burns

- 1. News from the European Cluster Collaboration Platform
- 2. "From Our Own Correspondent": Cluster of Hydrogen Technologies
- 3. REPowerEU and its impact on industry: Joint European action for more affordable, secure, and sustainable energy
 Luca Demicheli, Policy Officer for Green and Circular Economy at Directorate-General for Internal Market, Industry, Entrepreneurship and SMEs (DG GROW), European Commission Ricardo Renedo Williams, Policy Officer for Infrastructure and Regional Cooperation at Directorate-General for Energy (DG ENER), European Commission
- 4. Panel debate: How can the industry implement REPowerEU?
 José Ignacio Hormaeche, General Manager, Basque Energy Cluster
 Krzysztof Brzozowski, CEO, Centre of Energy Technology Cluster
 Simon Ducasse, General Director, Altansun
 Thomas Nowak, Secretary General, European Heat Pump Association
- 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 join the "EU Clusters Support Ukraine" forum
- 2. State Aid: The European Commission adopted a <u>temporary crisis framework</u>.
- 3. The European Commission published <u>a recommendation</u> on the recognition of academic and professional qualifications for people fleeing Russia's invasion of Ukraine.
- 4. The European Commission issued <u>guidance to the Member States concerning direct</u> investment from Russia and Belarus.
- 5. Registration for the <u>Clusters meet Regions and matchmaking event in Vilnius</u> is open until 20th April.
- 6. Final deadline to answer the <u>survey on disruptions in supply chains</u> is 25th April.
- 7. Open survey for Clusters of Social and Ecological Innovation to define a social economy cluster
- 8. Invitation to register on the Supply Chain Resilience Platform
- 9. Upcoming events:
 - a. Meeting of the European Clusters Alliance with Ukrainian clusters on 20th April
 - b. EU Clusters Talk on solutions for agri-food on 27th April
 - c. EU Clusters Talk on raw materials on 11th May
 - d. $\,\,$ EU Clusters Talk on logistics on 25^{th} May



2. "From Our Own Correspondent": Cluster of Hydrogen Technologies

In the video from our correspondent, Piotr Maksys introduced the Cluster of Hydrogen Technologies, which is composed of 55 enterprises. The cluster began its work in 2016, when not many people believed in hydrogen energy. In the last years, the cluster has increased its number of members and works to build a decarbonized hydrogenized economy in the Pomerania region. Piotr explained that it was time to leave fossil fuel because of two reasons: Firstly, because of the climate change, and secondly, due to the geopolitical situation to reduce the dependency of Russia. Piotr stated that Europe had the potential and gave as an example the company Lottos from Gdansk, which is one of the biggest hydrogen producers in Europe.

Ewa Mazur, the legal expert of the Cluster, explained that we need a fitting regulatory framework to meet the challenges of climate change. This is one of the keys to turn Europe into the first climateneutral continent.

3. REPowerEU and its impact on industry: Joint European action for more affordable, secure, and sustainable energy

Luca Demicheli, Policy Officer for Green and Circular Economy at Directorate-General for Internal Market, Industry, Entrepreneurship and SMEs (DG GROW), European Commission

Starting his presentation, Luca Demicheli underlined that the Green Deal was already firmed before the covid pandemic started. The situation of the last two years required a huge response from the EU, and they decided to link the recovery plans with the Green Deal. Unfortunately, the Russian military aggression against Ukraine has changed the perspective and demands new reactions. For example, the Fit for 55 package was foreseen for a few years – now, the new REPowerEU plan has a shorter timeline. REPowerEU is a challenging plan to decarbonize the economy and to electrify Europe. For instance, in the case of gas diversification, the plan includes reducing and eliminating the gas imported from Russia on the EU market and using more renewable gas.

He explained that the speed of this transition should be high. The time frame points out 2030 and 2050 as key years. It is needed to support the industry to achieve the targets and to protect the internal market. He explained that the first results should be seen at the end of 2022, but that we are still far away from the targets.

While REpowerEU is technically feasible, the regulatory framework needs to be adjusted. For example, the Commission is working on accelerating permitting for renewable energy projects.

Furthermore, Luca Demicheli explained that there were obstacles and critical dependencies:

- For wind energy, permanent magnets import dependencies are extremely critical. About 85% of the material in wind turbines is steel and iron. China controls the productions of these materials.
- In the case of heat pumps, import dependency is very high for refrigerants and chips used in inverters.
- For solar PVs, import dependency comprises the whole upstream part of the value chain. Solar PVs depends on imports mainly from China.

The requirements to implement the plan are:

• In case of the heat pumps installation, the EU industry would have to double from 600,000 in 2020 to 1.3 million this year.



• As for wind energy, in order to deploy 38 GW per year, the EU industry would need 1,500,000 tons of steel, 250,000 tons of iron, 125,000 tons of glass fibre and 23 tons of permanent magnets per year for the EU market.

Moreover, he informed about the Carbon Border Adjustment Mechanism and how it relates to the deployment of renewable energies. The carbon footprint of their materials and production must be within the limits of the Green Deal.

Closing his statement, he underlined that the European Commission is working protect the EU market. He shared the example of the anti-dumping duty on imports of certain utility scale steel wind towers originating in the People's Republic of China.

Ricardo Renedo Williams, Policy Officer for Infrastructure and Regional Cooperation at Directorate-General for Energy (DG ENER), European Commission

Ricardo Renedo Williams underlined that this has already been an intense decade in renewable energy policy, but that we need the deployment of renewable energy faster, with minimizing the risks for the supply chain, and taking the sustainability of the solutions into account. Therefore, REPowerEU looks into the manufacturing capacity and the bottlenecks in the supply chains. He shared that DG ENER is and has been working on the growth rates of these renewable energy sectors. For example, in the previous legacy packet, they set up the clean energy package.

With the example of offshore energy, Ricardo Renedo Williams explained that DG ENER is particularly looking into manufacturing capabilities and long-term criticalities to meet the targets. For the long-term analysis, they created a Clean Energy Industrial Forum to develop recommendations on how to strengthen the industrial basis and the EU value chain for renewable energy technologies in 2018. They also developed an Offshore Strategy for actions to deploy the amount of renewable energy sources needed to decarbonize the economy. One of those actions was the creation of a working group to analyse the supply chains, the skills, and the sustainability for the offshore approach. He underlined that there are synergies of this work with REPowerEU.

Moreover, achieving the target of at least 40% of renewable energy by 2030 and a higher manufacturing capacity are closely linked to raw materials. The European Commission is working on analysing the venues to reduce dependencies. He stressed that it is also important to consider the international standards to achieving a sustainable raw materials value chain.

4. Panel debate: How can the industry implement REPowerEU?

Before the beginning of the discussion, the four panellists introduced themselves and their clusters/organisations:

José Ignacio Hormaeche, General Manager, Basque Energy Cluster

The Basque Energy Cluster was set up in 1996 within the framework of the Basque Government's policy to foster competitiveness in the industrial sector. It is composed by more than 190 members from the renewable energy sector, including energy sector operators, equipment and component manufacturers, engineering firms, service companies, research entities and public agencies. The two strongest value chains are wind power and smart grids. José Ignacio Hormaeche explained that they are collaborating with EU clusters in an alliance on blue energy.



Krzysztof Brzozowski, CEO, Centre of Energy Technology Cluster

The Centre of Energy Technologies Cluster (PL) was formed in 2008. It is formed by 130 members and 80% of the members are SMEs. Krzysztof explained that the cluster is working on renewables energies in mainly two directions: heat pumps and photovoltaics.

Simon Ducasse, General Director, Atlansun

Atlansun is a solar network in Western France, and it works to increase the use of solar energy in the regions of Brittany and Pays de la Loire. It is composed by 200 members, including 150 companies from the entire solar value chain and 20 local authorities. They impulse the collaboration between the public sector and private enterprises.

Thomas Nowak, Secretary General, European Heat Pump Association

The European Heat Pump Association is a sector association formed by 161 members, including heat pump manufacturers, component manufacturers, national associations, consultants and research institutes. The main goal is to push heat-pump technologies as the number one heating and cooling solution, and to provide perspectives to the Europeans as heat pumps can be deployed in many installations – from residential buildings and commercial buildings to the industry.

Open Dialogue

During open dialogue, the difficulties of achieving clean energy goals were discussed.

José Ignacio Hormaeche explained that there are obstacles in the wind energy industry such as the need for qualified workers and the dependency on raw material. However, as José Ignacio Hormaeche points out that it is a market in great growth and that Europe is the leader of the wind energy market. He emphasised the need to keep the technology lead and invest in innovation. With regards to offshore wind, floating solutions will become more relevant in the coming years. Offshore wind will make up nearly 25% of the new energy sources. However, we are not only facing technological challenges, but the dependencies in raw materials, permitting, and needed improvements in regulations.

Krzysztof Brzozowski explained that the enterprises need partnerships with the local government to integrate clean energy solutions into construction. His cluster is involved more than 40 agreements with the local governments, which operate most commercial and public buildings. It is technically more difficult to increase the energy efficiency of those buildings. The collaboration is the good way to increase the acceleration of modernized buildings. Another way is using R&D centers to join experts from different fields to come up with model designs for new and existing buildings.

Ricardo Renedo Williams informed that the European Commission is organizing an U.S.-EU high-level B2B forum on offshore wind. The aim is to put in contact and share knowledge between the United States and the European Union, as both have announced ambitious offshore wind power deployment targets for 2030. José Ignacio Hormaeche confirmed that it would be a great opportunity to establish links.

Sean Finley, Director of Geoscience Ireland, brought up the topic of geothermal energy. He said that we should not overlook its potential in the discussion of renewable energies, but it needs easier permitting and stronger supply chains. Luca Demicheli agreed that while geothermal energy is not on the top priority list of the Commission, they are working on it and see the potential. There are strong linkages with heat pumps. Thomas Nowak added market numbers to this discussion, saying that 120,000 geothermal heat pumps were sold across Europe. While it is a significant contribution, it is often difficult to get a permit, which in turn has an impact on the contribution of buildings. There are significant differences between the municipalities to get permits. He stressed that we need to look at the administrative processes on the ground. Marek Przeor from DG GROW, European Commission, added that it might be interesting to bring together clusters working on geothermal energy.



With regards to the EU Solar Energy Strategy, Simon Ducasse stressed that the European market has to change for a wider deployment of solar energy. At this moment, we don 't talk about the consumer. We should rely more on peer-to-peer communication and not depend on plans made by states to bring growth to the solar energy market. Furthermore, we should work on the network integration to accelerate the solar power usage.

The next discussion point was skills. Thomas Nowak confirmed the importance of building technical skills. He expressed his concern that we are looking at the different targets and sectors independently and that there will be shortages of personnel to implement REPowerEU. We need the work force upskilling very fast, and it should be a top-level priority. Ricardo Renedo Williams referenced the Pact for Skills, which was launched two years ago. There is a cooperation with the industry on the needed skills for the renewable energy sector. Simon Ducasse added that skills is the major bottleneck in the solar sector – and in general the green energy sector – in France. On the one hand, there is not enough trained staff, and on the other hand the young people are not informed about green jobs and how to get into this area of work.

Talking about competitiveness, José Ignacio Hormaeche highlighted that the sector is also suffering from raw material shortages, but that the long-term trend towards green energy will be positive. So, they are also working on stabilising the supply chains. Krzysztof Brzozowski confirmed that alternative energy is becoming more and more competitive because of the prices of fossil fuels. They are already economically viable in market conditions, and there are enough instruments to implement them. There are other problems, especially administrative burdens for photovoltaics.

Answering a question about net metering, Krzysztof Brzozowski said that this was stopped in Poland a week ago, and Thomas Nowak added that while this disputed practice might not be a good business case for the state, it might be very helpful for the energy transition. We should think about how to electrify buildings and turn consumers into prosumers to make him or her benefit directly from the changes in energy supply and demand.

Concluding the discussion, Simon Ducasse agreed that turning consumers into prosumers is the biggest step to accelerate the energy transition. José Ignacio Hormaeche stressed that we need incentives and regulations that push and award innovation and sustainability to give advantages to the European industry. Krzysztof Brzozowski said that clusters might play an important role in the design of policies to avoid artificial divisions between administrative levels. Thomas Nowak affirmed that the European Commission needs to continue the communication on a high level to make the CEOs and investors invest in new technologies. Secondly, we should implement existing legislation and stop the subsidy of fossil fuels. And thirdly, we have to invest in skills.

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:

- <u>Technological interfaces between solar fuel technologies and other renewables;</u> Forthcoming call opening on 26th May
- Demonstration of innovative materials, supply cycles, recycling technologies to increase the overall circularity of wind energy technology and to reduce the primary use of critical raw materials; Deadline: 26th April
- Interoperable solutions for flexibility services using distributed energy storage; Deadline: 26th
 April



From cluster partnerships:

- EU-Catalyst Partnership <u>Call for Pioneering Green Technologies</u> for projects in the fields of clean hydrogen, sustainable aviation fuels, direct air capture, and energy storage; Deadline: 13th May
- GreenOffshoreTech: <u>First call for proposals</u> to boost cross-sectoral innovation among groups of SMEs using key enabling technologies for offshore projects; Deadline: 6th July
- Opportunities within biomasses and hydrogen in Canada with Andion and Xebec: <u>applications for 1:1 meetings</u>; Deadline: 29th April