

## NEWSLETTER

Joint Programme clean Energy transition for Sustainable Society (JP e3s)

## EU POLICY UPDATE

# Member states gear up for 2040 climate target talks

The European Commission is set to unveil its proposed climate target for 2040 on 6 February. While the bloc is committed to reducing carbon emissions by 55% compared to 1990 levels by 2030 and achieving netzero emissions by 2050, this intermediary target is considered the "legacy" of the EU policymakers currently in charge, and it will undoubtedly shape the direction of climate and energy initiatives for the incoming College of Commissioners and the European Parliament, both taking office in the second half of the year. Early discussions and statements by Commissioners Hoekstra and Šefčovič have suggested a target of 90% aligning reduction, recommendations from the scientific community and environmental groups. However, the European Commission's proposal will undergo the ordinary legislative procedure, with the European Parliament

IN THIS NUMBER

EU Policy update(p.1)

International Policy update(p.5)

News & Opportunities (p.7)

For your agendas (p.8)

and the Council of the EU expected to provide input and negotiate a compromise. On 15 January, EU Environment ministers gathered for their first Council meeting of the year to exchange views on the topic. Ahead of these early talks, Denmark announced its firm support for the 90% emission reduction goal by 2040, and Poland and Bulgaria signalled their openness to discussing such a target. On the other hand, Hungary has long expressed scepticism around climate issues and warned that national specificities should be taken into account when setting this target.



# European Scientific Advisory Board on Climate Change: EU not on track to reach climate neutrality goals

The European Scientific Advisory Board on Climate Change, a panel of 15 climate experts providing the EU with scientific knowledge and advice on climate change, published a report on 18 January detailing the **insufficient progress of the EU towards reaching its climate neutrality goals**. Of particular interest to the EERA community, the report calls for EU policies to play a greater role in incentivising energy and material demand reduction: a policy recommendation that strongly resonates with the findings of EERA's report on Energy Demand Reduction published in late 2023. Moreover, on greenhouse gas emissions, the report emphasises the need to double the current rate of reduction to achieve at least a 55% cut in emissions by 2030 compared to 1990 levels.

## EU Net-Zero Industry Act edges closer to finishing line

The EU is working towards driving forward the Net Zero Industry Act, with rising optimism that an agreement will be secured in the coming weeks. The negotiations between the European Parliament and the Council of the EU, which commenced in December, will continue with two upcoming rounds of talks on the 22 January and 6 February. Regarding the negotiations at present, the Parliament and Council are close to settling a deal on the Parliament's recommendation, which was not present in the initial Commission proposal, to give member states the opportunity to nominate certain geographical regions as 'net zero industry valleys.' This initiative aims to establish clusters and advance the alignment of administrative processes in the development of domestic green technologies. Another area of harmonious views between the two negotiators relates to the inclusion of nuclear energy and carbon capture and storage on the list of technologies benefiting from the Act. However, the wider scope of the full list of technologies is expected to face extensive debate. Moreover, further contentious points persist, among them the issue of obliging authorities to include sustainability and resilience criteria in public procurement and renewable energy auctions due to their potential to place constraints on member states' own decision-making.

# European Commission awards €172 million to Horizon Europe projects in support of EU's energy independence

The European Commission has announced a €172 million investment through Horizon Europe towards 13 projects that will actively contribute to the EU's energy independence goals. The central focus of these projects is on the key objectives of the RePowerEU plan, launched by the European Commission in May 2022, in supporting affordable European energy, ensuring security of supply, and reducing European dependence on Russian fossil fuel imports in advance of 2030. Followings calls in March and April of 2023, the selected projects fall under Horizon Europe Cluster 5 (Climate, Energy and Mobility) and incorporate three broad themes including sustainable, secure and competitive energy supply; efficient, sustainable and inclusive energy use; and clean and competitive solutions for all transport modes.

Read more here



# Norway greenlights deep-sea mining amid mounting criticism across Europe

On 9 January, Norwegian MPs voted in the national parliament to authorize deep-sea mining exploration around the Arctic Archipelago of Svalbard. The Norwegian government sees this move as a means to enhance access to raw materials crucial for developing technologies in the green transition. These materials include copper, manganese, cobalt, and lithium, all designated as strategic raw materials in the recently passed EU Critical Raw Materials Act. Reducing dependence on external mineral supply chains is increasingly a central priority for Europe. However, environmental groups opposing deep-sea mining have warned that this decision could have irreversible effects on the ocean's ecosystem. Moreover, countries such as France and the UK have criticised Norway's stance on deep-sea mining. Approximately 100 MEPs advocated to their Norwegian counterparts to reject the proposal last November, while the European Commission has also raised concerns regarding the potential environmental impact of the move.

Read more here

# JRC modelling exercise points to the need for 70% increase in energy sector investments

According to a new Joint Research Centre (JRC) modelling exercise, substantial investment in decarbonisation this decade is crucial to achieve the 1.5°C target. The results indicate the necessity for a 70% increase in investments in the energy sector, reaching over \$3 trillion by 2030. Specifically, the modelling highlights the need for a significant upswing in investment in clean power generation during this decade. The 1.5°C scenario calls for a sixfold increase in global annual investment in clean energy technologies between 2022 and 2050, escalating from the current \$1.0 trillion to \$5.7 trillion in 2030. Remarkably, the most substantial expansion in clean energy investment is expected in electric vehicle batteries, surging 14-fold due to both a 60% reduction in battery costs and a 29-fold increase in deployment by 2030. Furthermore, the modelling exercise contemplates shifting employment opportunities resulting from changing investment patterns. It anticipates the necessary movement of indirect jobs from the fossil fuel to the renewable sector from 2020 to 2050, primarily in the areas of construction, electrical goods, other equipment goods, market services, and land transport. Globally, by 2050, within the 1.5°C scenario, there would be a requirement for 590 thousand jobs in construction for the power generation sector and another 800 thousand jobs in the 'other equipment goods' sector to develop the equipment for such power generation.



# France and the Czech Republic join forces to promote nuclear power

In a joint press conference on 9 January, France and the Czech Republic renewed calls for nuclear power to be positioned on equal terms with renewable energies across the EU policy portfolio. This comes one year after the inauguration of the French-led "Nuclear Alliance," which has worked towards securing nuclear power on the EU's strategic list of net-zero technologies, along with acting as the driving force behind the Commission's upcoming industry alliance on small nuclear reactors. Speaking at the conference, French Energy Minister Agnès Pannier-Runacher emphasised the need to further develop nuclear power in order to decrease both European dependence on fossil fuels and overall CO2 emissions. This sentiment was boosted by Czechia's Energy Minister Jozef Síkela, who asserted that nuclear plays a key role in advancing decarbonisation measures across Europe. However, nuclear technology has faced much opposition in Brussels due to the associated environmental and safety risks. In 2022, although nuclear power plants made up almost 22% of EU electricity production, the 13 nuclear electricity-producing member states generated 16.7% less nuclear electricity compared to 2021. This can be principally attributed to both reactor maintenance and repairs in France, who continue to be the largest nuclear power producing country in the EU.

Read more here

# Commission recommendations on National Climate and Energy Plans underscore need for enhanced action

In the aftermath of recent COP28 negotiations and global appeals to bolster climate and energy efforts this decade, the European Commission has issued recommendations on the updated draft National Energy and Climate Plans (NECPs) of EU countries. In its comprehensive EU-wide assessment, the Commission has outlined that the recently updated NECPs continue to fall short in cutting greenhouse gas emissions by at least 55% by 2030. The Commission also underscored the imperative need to phase out fossil fuel utilisation in energy generation, specifically highlighting the detrimental nature of fossil fuel subsidies—a significant challenge hindering the progress of the clean energy transition. Amid mounting calls to intensify efforts towards climate neutrality, a decarbonisation agreement was reached by Austria, Belgium, France, Germany, Luxembourg, the Netherlands, and Switzerland under the Pentalateral Energy Forum on 18 December. This accord commits the seven countries to achieving fossil-free power by 2035, five years before the European electricity system is anticipated to be carbon-free by 2040. Additionally, Lithuania has announced new legislation with the primary objective of achieving 100% renewable electricity by 2030. These decarbonisation initiatives coincide with the provisionally agreed EU Corporate Sustainability Due Diligence Directive which establishes rules for large companies concerning the adverse impact of their activities on the environment.



## INTERNATIONAL POLICY UPDATE

## Latest issue of IEA renewables market report published



Read more here

The International Energy Agency's (IEA's) latest Renewables Market Report shows a rapid expansion in global renewable electricity capacity, the fastest in three decades, positioning it to potentially triple by 2030. In 2023, the addition of renewable energy capacity grew by 50%, reaching about 510 GW. Solar PV dominated these additions, contributing three-quarters globally. China led the surge, commissioning as much solar PV in 2023 as the entire world did in 2022, and its wind power capacity grew by 66% year-on-year. Record increases were also seen in Europe, the USA, and Brazil. This report is the first detailed assessment since COP28, indicating that tripling the 2022 global renewable capacity by 2030 would result in 11,000 GW, in line with the IEA's Net Zero Emissions by 2050 Scenario. Under current policies, global renewable capacity is expected to reach 7,300 GW by 2028, significantly contributing to new power capacity but falling short of the 2030 tripling goal.

## IEA: Oil Demand in 2024 will grow higher than was previously forecasted

In its latest Oil Market Report, the International Energy Agency (IEA) forecasts a higher oil demand in 2024, projecting a global increase of 1.24 million barrels per day, up from the earlier 1.1 million. Global supply is expected to hit a record 103.5 million barrels per day, with significant contributions from the U.S., Guyana, and Brazil, despite their leaders' commitments to reduce fossil fuel reliance. Oil demand is still growing but the speed of this growth has been decreasing. The IEA anticipates a decrease in annual growth from last year's 2.3 million to 1.2 million barrels, influenced by factors like electric vehicle adoption and fewer pandemic restrictions. In contrast, OPEC+ predicts stronger demand growth of 2.2 million barrels daily in 2024 and 1.8 million in 2025. Additionally, Middle East tensions, especially Houthi attacks in the Red Sea, pose potential market disruptions. These have not yet impacted oil and LNG production but have led to longer shipping routes, notably around the Cape of Good Hope, adding substantial delays.



# Clean energy has become the main driver of China's economic growth

In 2023, clean energy was the primary driver of China's economic growth, accounting for 40% of the GDP expansion. Investment in clean energy, including renewables, nuclear power, electricity grids, energy storage, electric vehicles (EVs), and railways, surged by 40% to 6.3 trillion yuan (USD 890 billion), representing the entire investment growth in China's economy. The analysis by Carbon Brief, incorporating official figures and industry data, highlighted the significant investment in solar power, EVs, and batteries. Solar power, with a focus on manufacturing capacity for solar panels, EVs, and batteries, led the investments.

This shift, resulting from a contraction in the real-estate sector, positions clean energy as a central component of China's energy, climate efforts, and broader economic policy. However, the potential for overcapacity poses challenges for the sustainability of this investment-driven economic model. The expansion of clean-energy industries not only benefits China's domestic policy but also influences global markets and policy decisions, underscoring China's significant stake in the global transition to clean energy.

Read more here

## Carbon Tracker: Key Climate and Energy questions for 2024

Carbon Tracker outlined some of the key issues to watch in climate and energy in 2024 highlighting that policymakers' decisions in 2024 will significantly impact climate change mitigation. Among the key issues they indicated the following:

- India's June Elections: Transition speed from coal.
- European Parliament Elections: Impact of right-wing populism on climate policy.
- Rosebank oil field development in the North Sea: Influence of legal pressures.
- US SEC's Climate Disclosure Rule adoption: Corporate climate risks reporting.
- UAE's COP Presidency role continuation.
- China's renewables market growth versus coal power.
- Development of East Africa's EACOP pipeline project.
- EU's investigation into Chinese BEV imports.
- Momentum for a fossil fuel non-proliferation treaty.
- UK General Election: Climate on the agenda.
- Impact of a potential El Nino year on global warming.
- OPEC+'s unity under energy transition pressures.
- Brazil's G20 role and upcoming COP30 leadership.
- Financial decisions post-COP28.
- UN Secretary-General's stance on climate and fossil fuels.
- Belgium's EU Presidency: Pushing the European Green Deal.
- Economic outlook's effect on offshore wind supply chain.
- US Presidential Election: Implications for climate policy.



### NEWS & OPPOTUNITIES

### EERA JP e3s application at EUSEW

On Thuesday 25th January, EERA secretariat and JP e3s jointly submitted an application to host a policy session on Energy Demand Reduction during the <u>European Sustainable Energy Week</u>, that will take place between 11-13 June in Brussles. Results will be communicated by mid-March.

#### **EERA ExCo elections**

During the next EERA General Assembly which will take place on 14th May 2024, the new **EERA Excecutive Committee (ExCo) will be elected**. All representatives of Full Members are eligible for membership in the ExCo. A **Call for applications** is open until 11 March 2024.

#### Call for abstracts

A **call for abstract** is open for oral and poster presentations at the <u>IX</u> <u>Symposium on Hydrogen</u>, <u>Fuel Cells and Advanced Batteries</u>, that will take place in **Milazzo** (Italy) from **30 June to 3 July 2024** – Deadline for abstracts submission is 15th February 2024. More information <u>here</u>.

### Call for abstracts to the JP e3s special issue on JET

JP e3s will be editor of the Special Issue "Advancing the Just Transition: Navigating Towards a Sustainable Future" (provisional title) on the scientific journal <u>Frontiers for Sustainable Energy Policy</u>. JP members will be contacted shortly for further details.

### EERA Flagship report on energy demand reduction

The <u>Flagship report on Energy Demand Reduction</u> was launched during the EERA High Level Policy Conference which took place on October 17 in Brussels. Download <u>here</u> the relevant **infographic** with key messages. Watch <u>here</u> the **key takeaways video** in which EERA's Clean Energy Transition Expert and lead author <u>Ganna Gladkykh</u> speaks on the distinctive and timely nature of this report in gathering key perspectives from different disciplines within the research community, including social sciences which, although of crucial importance, are not yet common for this CET field.



## FOR YOUR AGENDAS

7 February 2024

JP e3s <u>Sub-Programme 1</u> kick-off meeting | 16.00 - 17.00 (CET) Only JP e3s members event

13 February 2024

What's on the Horizon? Framing the next 40 years of European R&I

23 February 2024

EERA DAY IN ITALY: R&I collaboration for the Clean Energy Transition

11-12 March 2024

EERA **Joint Programme Coordinators meeting** in Brussels Only-JP e3s members event

20 March 2024

EERA JP e3s General Assembly - online.

Only-JP e3s members event

20-21 March 2024

European Research and Innovation Days (R&I Days) 2024

14-15 May 2024

EERA General Assembly and Annual Strategy Meeting - Brussels.

Only-EERA members event

11-13 June 2024

<u>European Sustainable Energy Week</u>

30 June-3 July 2024

IX Symposium on Hydrogen, Fuel Cells and Advanced Batteries

23-24 September 2024

Day 1 - EERA JP e3s General Assembly in Brussels (EERA Office).

Only-JP e3s members event

**Day 2** - Conference "The future of Hydropower: how can we improve social acceptance and business models and the use of digitalization as an enabler" (title tbc) jointly organized by JP e3s, Hydropower and Digitalization for Energy