



Highlights of the EU Energy Days (4-5 December 2023)

By Andrea Montanari, ECECP junior postgraduate fellow, 7 December 2023

On 4 and 5 December 2023, the European Commission organised the annual EU Energy Days at the COP28 held in Dubai (UAE). The two-day side-event, attended live by conference participants in Dubai and streamed online, featured nine high-level panels, focused on accelerating the clean energy transition. EU China Energy Cooperation Platform (ECECP) organised live re-casting of the two-day side-event with simultaneous interpretation for audience in China.

The main findings of the discussions are given below.

Working together to power the clean energy transition

‘Energy represents about 75% of man-made greenhouse gas emissions. With energy representing such a large part, we need to transform our energy system.’

With these words, **Ditte Juul Jørgensen**, the European Commission’s director general for energy, inaugurated the 2023 EU Energy Days. The event coincided with a pledge - launched by the EU and promptly signed by more than 120 countries - to triple the deployment of renewables and double the global rate of energy efficiency improvements by 2030.

Renewable energies are gaining momentum in Europe. As reiterated by **Walburga Hemetsberger** (CEO at SolarPower Europe) and **Giles Dickson** (CEO at WindEurope), the initiatives launched by the European Commission over the past years - such as the Green Deal and REPowerEU - have propelled the clean energy transition.

However, many hurdles remain that are preventing the rapid deployment of renewables. For solar energy to achieve the 600 GW anticipated in the Commission’s Solar Strategy, the pledges agreed so far must be put into concrete policy and investment plans. Furthermore, the engagement of cities and communities needs to be prioritised via a widespread communication campaign, to encourage the switch to solar energy. According to Dickson, the main bottlenecks to wind energy deployment are permitting and grid capacity/connections. New EU rules establishing the concept of *overriding public interest* are intended to allow permitting to move faster. It is now easier to obtain permits for new wind farms, and to win legal actions against such projects. Meanwhile, obtaining grid connections is still taking too long. The EU needs to help both transmission and distribution system operators to have more freedom to invest without reference to the national regulator. Due to the large volume of connection applications, granting more freedom to prioritise projects with high potential could be crucial.

Grammenos Mastrojeni (Deputy Secretary General for Energy and Climate Action - Union for the Mediterranean) stressed that ‘renewables are not only about decarbonisation, they’re also about sovereignty’. The unequal global distribution of particular natural resources means that continued reliance on fossil fuels creates dependencies, and these dependencies can be weaponised. By contrast, renewables are more ‘democratic’: each country has a different mix of solar, wind, and

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wave energy. 'If you're based on renewables, you build structures of core development, you build partnerships'. Meanwhile, the conflict in Ukraine has underscored the need to sheer away from fossils.

The EU is already building new partnerships. **Kadri Simson**, EU Commissioner for Energy, emphasised how the Global Gateway Initiative, which mobilises EUR 300 billion in infrastructure investment, is helping developing countries in their path towards decarbonisation. For example, the EU-Africa Green Transition Initiative aims to support the deployment of at least 50 GW of clean electricity in Africa by 2030, thus bringing power to 100 million people who are currently not connected to any power grid. Another example is the Water, Energy, and Climate Team Europe Initiative in Central Asia, where EU financial institutions and eight Member States will invest more than EUR 710 million to address the challenges preventing Central Asian partners from transforming their energy systems.

Another crucial partnership for the EU concerns Ukraine. The EU and its Member States have been supporting Ukraine both in its war efforts, and in its journey towards a green reconstruction. Ukraine's energy minister, **German Galushenko**, stressed that international partners should not wait for the conflict to end before starting to invest in Ukraine. A new Clean Energy Partnership - launched at COP28 – offers a platform to facilitate discussions. **Alfonso Garcia Mora** of the International Financial Corporation differentiated between the short- and medium-term possibilities for financing Ukraine's clean energy transition. In the short term, the focus is on captive generation and modular solar and battery storage, which can operate within the situation provoked by the Russia-Ukraine conflict. In the medium- and long-term, the key issue is how to create bankable projects. With a reform agenda, Ukraine's energy sector will offer exciting investment opportunities.

The path to build energy efficiency

Energy efficiency is a crucial solution to reduce the usage of fossil fuels. **Kadri Simson** highlighted this as one of the most effective EU responses to the energy crisis following the outbreak of hostilities between Russia and Ukraine. Currently, the EU is building a framework intended to raise energy efficiency by adopting a series of measures:

- A revision of the Energy Efficiency Directive, including a new binding EU target that will see energy consumption cut by 11.7% across the 27 Member States by 2030.
- An ongoing revision of the Energy Performance of Buildings Directive.
- The launch of a European energy efficiency finance coalition, bringing together Member States and financial institutions to unlock additional private finance for energy efficiency investments.

The effort to improve energy efficiency extends beyond the EU. According to **Fatih Birol**, executive director of the International Energy Agency, three out of four countries worldwide have introduced or strengthened energy efficiency policies in the past two years. There are three main reasons for this. First, after Russia's seizure of territory in Ukraine, many countries realised that energy efficiency is connected to energy security. Second, many energy efficiency policies have been introduced as climate mitigation measures. Third, and most importantly, the driving factor has been the sudden spike in energy prices, which prompted households to invest in more efficient energy consumption.

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Today, however, much of the pressure on energy prices has now dissipated. This represents an obstacle to energy efficiency measures because, as **Ann Mettler** of Breakthrough Energy observed, low fossil fuel prices make it difficult for clean technologies to scale up and become competitive. She outlined four lessons from recent events:

1. To some extent, the pain of high fossil fuel prices is needed, in order to have the stimulus to switch to cleaner sources. Relieving such pain reduces the pressure to achieve a green transition.
2. There must be a better definition of energy efficiency. The current definition as 'the reduction of energy consumption' does not take into account other factors, such as the relatively mild winter that helped Europe to overcome the crisis.
3. New indicators are needed that consider resource productivity. While labour productivity guided policy choices in the past, the future will look at how to produce more with fewer resources.
4. Energy efficiency offers incredible market opportunities. The ecological and digital transitions have been dealt with separately, but if they are combined, for instance by digitising the grids or by using AI to optimise industrial processes, energy efficiency could be driven to an industrial scale.

The private sector is a key player in delivering investments and innovation to boost energy efficiency. But some conditions need to be established, remarked **Bonnie Brook**, vice president of industry affairs at Siemens. First, there must be clarity and long-term perspectives in the policy targets, to reduce the uncertainty and deleveraging risks. Secondly, appropriate incentives need to be in place, to promote the 'correct behaviour' of economic players, based on priorities set at the political level. In Europe, this means being carbon neutral by 2050. **Giampiero Nacci** of the EBRD further suggested that innovation can be fostered by greater information sharing between actors. For instance, the EBRD's Green City Programme helps cities to understand their environmental performance against international benchmarks, thus supporting innovation. Energy efficiency can also be improved by enabling citizens to make sustainable choices. **Kate Brandt**, Chief Sustainability Officer at Google, shared how, using the fuel-efficient routing offered by Google Maps, drivers have already avoided 2.4 million metric tons of CO₂, roughly equivalent to taking 500 000 cars off the road for a year.

Nevertheless, energy efficiency entails different policies in different contexts. When it comes to Africa, the paramount issue remains how to bring electricity to populations over such an extensive geographical area. Today, around 600 million Africans still lack access to electricity, and 80% of African households use charcoal or firewood cooking stoves. Both **Fatih Birol** and **Amani Abou-Zeid**, Commissioner for Infrastructure and Energy at the African Union Commission, stressed the urgency for provision of clean cooking facilities: burning wood and animal waste for cooking results in half a million women dying prematurely of respiratory disease caused by smoke inhalation. Another issue is the poor condition of the power grids in Africa, which account for 30% to 40% of the electricity waste in the continent, and the problem of affordability. The markets are flooded with low-standard, high-consumption appliances or cars, which represent the only affordable options for most consumers. Despite this, Africa is the largest urbanising and digitising continent, which creates an immense market for investments.





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Challenges and opportunities for methane emissions abatement

Discussions at the Energy Days event also concentrated on methane abatement. Methane has 86% more warming potential than CO₂ and is responsible for around 30% of the increase in global temperatures since the Industrial Revolution. Of all the methane emissions relating to human activities, the energy sector accounts for 40%, making it a key element in the clean energy transition.

According to **Fatih Birol**, the oil and gas industry alone accounts for 15% of global greenhouse gas emissions, and the bottom performers of the oil and gas industry pollute a hundred times more than the top ones. However, minimising total methane emissions by 2030 would require just USD 75 billion of investment, equivalent to roughly 2% of oil and gas industry revenues in the past year (estimated at USD 4 trillion). The EU, together with countries such as Egypt and Germany, has taken important steps to reduce methane emissions.

However, the main obstacle to methane emissions abatement is the lack of data and precise indicators that could enable improved measurement and tracking of emissions. **Steven Hamburg** of the Environmental Defense Fund pointed to the lack of data to provide answers to the basic questions: 'Where are the emissions? How much are the emissions? And how are they changing over time?'. Many of the calculations use a set of assumptions which do not necessarily reflect reality. This creates disincentives for oil and gas companies to act, because improvements in production are not seen in the data, and for policy-makers, because it is hard to regulate the unknown.

Technology sharing is another way in which oil and gas companies can reduce their methane emissions. **Vijay Swarup**, Technology Director at ExxonMobil, pointed out that oil and gas companies operate on a huge scale, in terms of production and geography. Technology improvement is arguably the paramount factor to navigate this complexity and to reduce methane emissions. For instance, satellite imagery coupled with data processing can facilitate the individuation and clearing up of leaks. However, if the green transition is to accelerate, companies must be ready to share the best practices and technologies, especially with oil and gas companies from the Global South. In this way, they would not have to go through the same learning curve of the Global North, thus speeding up the transition towards methane abatement.

Finally, more regulation is needed. **Harry Boyd-Carpenter** of the EBRD stressed that more regulation would set a clearer framework for the companies operating in the sector, while sending the signal that methane abatement cannot be ignored.

On top of the topics mentioned above, **Zubin Bamji** of the World Bank announced the launch of the Global Flaring and Methane Reduction Trust Fund, a new fund focused on helping developing countries cut methane emissions. The main criteria for access to the funds are as follows:

- A long-term strategy to reduce methane emissions.
- Membership of the Oil and Gas Methane Partnership 2.0.
- Membership of the World Bank's Zero Routine Flaring initiative.
- An established methane-intensity target.





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A just transition for communities and younger generations

Nowadays, 78% of global energy consumption occurs in cities. Policies and people come together most closely at the local level, and the local environment accounts for the lion's share of investments in energy efficiency, for instance in buildings and transportation. For this reason, it is essential to focus on small scale projects, not just the bigger picture, to ensure a clean, sustainable, and just transition.

As Warsaw mayor **Rafał Trzaskowski** remarked, cities can be laboratories for innovation, but the right conditions are needed to foster collaboration between the public sector, businesses, and citizens. For instance, setting a clear policy framework can push city-based enterprises towards environmental targets, while investment in public awareness campaigns can increase public participation. It is essential to raise public awareness in order to rally support for clean energy projects, and overcome opposition from NIMBY (Not-In-My-Back-Yard) groups, argued **Malgosia Bartosik** of WindEurope. A reliance on renewables implies that urban areas will be powered by energy production sites located outside cities, and so the communities that would be most touched by the large infrastructure projects need to be 'on board'. Bartosik cited a platform her company built in partnership with tech companies to show how digital tools can help to engage communities.

It is also vital to take account of the interests and concerns of communities to ensure a just transition. **Cristina Lobillo** (Director for Energy at the European Commission) identified three main pillars for the transition: people and workers, green skills, and youth. The transition can only succeed if it is carried out by the people it concerns, but to do so, people need to benefit from the transition, for instance through better job opportunities. Therefore, it is necessary to accompany the energy transition with an upscaling and rescaling of the skills needed for the green job market. It is estimated that the EU will create 3.5 million new jobs in the renewable energy sector by 2030, more than doubling today's renewable energy sector workforce. Addressing the shift in the job market from fossil fuels to renewables, and ensuring that 'no one is left behind', will be high on the agenda for decades to come.

For this reason, the final panel was dedicated to younger generations. Shaping the energy system of tomorrow requires support from all members of society, and youth engagement has been a driving force accelerating the transition, through activism and bottom-up movements pushing for a better future.

