

APREN Conference focused on energy transition

The "Portugal Renewable Energy Summit 2022" has gathered about 70 national and international experts to talk about energy transition.

The anual conference from <u>APREN – The Portuguese Renewable Energy Association</u> filled in the large auditorium from Culturgest, in Lisbon, on November 16 and 17. The "Portugal Renewable Energy Summit 2022" gathered, in the same room, more than 70 national and international experts. "Energy transition: from plans to action" was the theme for this year.

If the energy transition is increasingly an emergency, not only in environmental terms, but also in economic and financial terms, it is also an imperative for reasons of energy autonomy and security of supply, as highlighted by APREN CEO Pedro Amaral Jorge at the opening ceremony. Renewable energies are a key piece in this chess of decarbonization.

The benefits generated by green energy are undeniable. "To the 2,600 million direct economic over-gain generated by renewable power plants under guaranteed remuneration, is added to the effect induced by the order of merit, which is expected to exceed EUR 5 billion in 2022, stressed Pedro Amaral Jorge. It is this financial cushion that has made it possible to halt the increase in tariff prices for individuals and companies.

Portugal accelerates on the road to decarbonisation, with demanding targets on the horizon, but still has several challenges to overcome, such as, the modernisation of public institutions responsible for the permitting.

"It's not about replacing people. We must change the processes. We need to reorganise and empower. We must be able to rapidly develop the electronic platform foreseen in Article 15 of DL 15/2022. APREN is available to support this project and contribute to having the platform set up and running, as soon as possible," said Pedro Amaral Jorge. He recalled that it is also in this spirit that APREN is developing a renewable project permitting guide, in collaboration with central government bodies.

"REPowerEU" – the new European ambition":

"REPowerEU – the new European ambition" was one of the major topics on the table. The geopolitical situation generated by Russia's invasion of Ukraine has brought to the agenda the urgency of Europe's energy autonomy and security of supply.

In a recorded presentation, the Director-General of the Internal Market, Industry, Entrepreneurship and SMEs - GROW, of the European Commission, Kerstin Jorna, underlined the need to accelerate the energy transition and diversify the sources of supply. "Portugal is in a privileged position in this race because of its location", highlighted, by remembering all the possibilities that are open for green hydrogen.

In the debate on this European package, the heads of industry associations at European level were present. WindEurope CEO, Giles Dickson, noted that investors are wary given the international situation, and the bottlenecks in the supply chain need to be relieved.

The MEP and member of the ITRE - Committee on Industry, Research and Energy, Nicolás González Casares, presented a less incisive reading. He defended regulatory stability, but also called for some care in measures to avoid the population's sense of rejection of renewables. "We want the citizens involved in this transition," he said.



The truth is that an energy transition should be able to count on the participation of consumers, who can install solar panels from the roofs of their homes, as recalled by the CEO of Solar Power Europe, Walburga Hemetsberger. "Panels can be installed in just one day, but permitting takes six months," she said.

The design of the European electricity market:

ERSE's Director of Markets and Consumers, Eduardo Teixeira, considers that the moment we live in is exceptional and therefore the measures that are now being taken do not necessarily have to be replicated in the future.

For the president of the NEMO committee, Rafael Gómez-Elvira, we are moving towards a market that will have the price changing every 5 minutes. "Volatility is the new normal," he stressed. The legislation will act as a guarantee of stability, as pointed out by the representative of DGEnergy - European Commission, Tom Howes.

European model for containing electricity prices:

For the president of the OMIP platform, Martim Vasconcellos and Sá, the implementation of the Iberian mechanism, which limits electricity prices in Europe, has had a sudden brake on volumes traded in the wholesale electricity market.

The opinion was shared by Carlos Miguel Urro, who represented the EEX European Energy Exchange on the same panel and who left the note that the instability has generated much nervousness among the partners. "The level of uncertainty is very high," agreed the CEO of the Asociación Empresarial Eólica (AEE), Juan Virgílio Márquez.

"Iberian Green Hydrogen - opportunities and threats":

The topic was introduced by Christian Pho Duc, CTO of Smartenergy, who underlined Iberia's strategic position to ensure green hydrogen, not only for its own consumption, but also for export to the whole of central Europe. Anna Momotova of the Renewable Hydrogen Coalition said that it is urgent to overcome the constraints that still exist, particularly in terms of permitting.

Ana Quelhas, Director of Hydrogen at EDP Renováveis, opened the debate by noting that "there is still no demand". For Nuno Ribeiro da Silva, an energy expert, the risk is not to keep the store empty. The problem is the ability to supply given the constraints in the supply chain. Efacec wants to position itself as a reference partner in this area, assured Nuno Silva.

João Cunha from Smartenergy also ensured that he wants to move from theory to practice. The path is long, given the objectives outlined, as the CEO of Madoqua Renewables, Rogaciano Rebelo pointed out, but the great challenge is to achieve the renewable capacity necessary for hydrogen production, which will allow to achieve the goals, as emphasised, on the other hand, Sérgio Goulart Machado, from Galp.

Secretary of State of the Sea opened the second day of conference:

The second day of the conference opened with the intervention of the Secretary of State of the Sea, José Maria Costa. His intervention served as a motto to launch the discussion on "Ocean Renewables": "We want to build a development model that follows the best trends in Europe. This relationship of the offshore energy industries with onshore projects, namely with the development of ports, with the industrial sector and with the technology-related component, will enhance future mobilizing and development agendas of our country", he emphasized.



Lizet Ramirez of WindEurope, André Couto of the Directorate-General for Natural Resources, Safety and Maritime Services and Ana Andrade of the Directorate-General for Energy and Geology have left a note of the projects that are being developed in this area.

The challenges that could hinder the 10 GW offshore wind target in 2030, remembered by Benoît Gilbert da Vestas, were addressed in the debate. This capital-intensive sector requires planning, said Alexandra de Marichalar of TotalEnergies, but not only. It requires a value chain that does not yet exist, added Marianne Beck Hassl, from Ørsted. Also, the lack of human resources can be a problem, as stressed José Pinheiro of Ocean Winds.

Network capacity and access and interconnections:

The topic "Network capacity and access, and interconnections" was introduced by Vincent Thouvenin (RTE - Réseau de Transport d'Electricité de France) and Ana Barillas (Aurora Energy Research).

The debate gathered REN, E-Redes and DGEG. The administrator from REN, João Conceição, stated his concern about the difficulties in permitting energy infrastructures in Portugal. He also pointed out that "Everyone wants to have low energy costs, but no one wants to have an infrastructure in their backyard". In the manager's opinion, "network planning will have to be increasingly dynamic" to optimise the grid needs.

The Director General of Energy and Geology, João Bernardo, agreed that the challenges of planning the electricity grid "are immense", advocating "a dynamic management of the grids" and the need for "flexibility in accessing them". In the future, he said, "flexibility services will play a key role in a more digitised and distributed grid".

José Ferrari Careto, President of E-Redes, pointed out the need to invest in the training of specialised personnel. "Right now, there are no human resources to work on the projects we have," he stressed.

Permitting of renewable projects:

The "Permitting of renewable projects" was another central theme at the conference that featured two moments. The first part was dedicated to the review of the "environmental simplex".

The final version of this proposal is not yet known, but for the CEO of APREN, Pedro Amaral Jorge, it is a first step on the path of simplification of processes. "The initiative already has some important measures in reducing the time of the various steps required," he stressed.

The tacit approval, provided for in the package, can be a good tool to expedite processes, although it is already used by the administration, as recalled by the president of the APA, Nuno Lacasta. "Tacit acceptance is anything but new for those who already deal with environmental impact assessment", he said.

Contrary to what has already been made public, the president of ICNF, Nuno Banza, assures that Nature Conservation "has no great reservations about this regime" that proposes to streamline the processes without neglecting environmental values. "But we have to have more resources within the Administration to give priority to what is truly important," he said.



The second part the panel concerned "Onshore Renewable Project Permitting Guide", a document that is being developed by APREN together with the two public entities that manage and are responsible for these processes - the Portuguese Environment Agency (APA) and the Directorate-General for Energy and Geology (DGEG), as informed by Susana Serôdio, of APREN.

"If the projects already come to us well instructed and allow us a sustained and speedy decision, surely everything will be easier," acknowledged Maria do Carmo Figueira, from APA.

Miguel Mascarenhas, CEO of Bioinsight, the company that provides environmental consulting, for the guide, recalls that this is another tool to facilitate the investigation of processes. An opinion shared by Filipe Pinto, director of electricity services at DGEG: "It will help the parties to reach an understanding and will ease the communication".

The clarification that the document brings is the great added value for Ana Guerreiro, from Generg. "We're going to get back the time we've invested in permitting by making it faster," she said. "It is very useful for all stakeholders involved," said Timóteo Monteiro of EDP.

Energy communities, individual and collective self-consumption:

The issues related to the "Communities of energy, individual and collective self-consumption" were also under analysis this year. The presentation by Jan Osenberg of SolarPower Europe served as the motto to open the panel discussion.

The CEO from Elergone, Carlos Sampaio, has no doubt that permitting needs to be easier, to deploy self--consumption and energy communities. This is also the vision of Ricardo Meireles (Rewatt) and Carlos Jordão Coelho (Greenvolt).

"Self-consumption is a cost avoided, but the surplus must be treated efficiently. One option is to sell it to the market, which can only be done by big power plants. Energy communities can solve this in a simple way, but for this to happen it is necessary that energy communities exist", summarized Carlos Sampaio.

Filipe Pinto, from DGEG, highlights the need to start with the computer platform for collective self--consumption, which is already being developed. This will have to be flexible, allowing to leverage distributed production indicators. The platform will be dedicated to energy communities, which will allow us to understand, for example, how many people participate in them and the installed power.

The president of ADENE, Nelson Lage, considers that the possibility of creating energy communities can be an opportunity for charities, municipalities and all those who need to see their energy bill reduced.

Technologies and the energy matrix of the next decade

After a presentation from Jinko Solar, "The central technologies for meeting the decarbonization goals" were under analysis.

Onshore and offshore wind, carbon sequestration, hydrogen, electric mobility, photovoltaic solar and storage were some of the technologies highlighted by Miguel Lobo, Lightsource BP, Alexandre Kisslinger, Acciona Energia and Carlos Relancio, Director of Renewable Energy at Galp. The importance of interconnections has also been underlined.



The transition, supported by technology, must also be fair, recalled Pedro Almeida Fernandes of Endesa. For João Amaral, Group CTO & Country Manager Portugal of Voltalia, "legislation is the central technology and requires the creativity of promoters".

"The Portuguese energy matrix in the next decade" was another of the themes highlighted. The CEO from Finerge, Pedro Norton, sustained that renewables are more than ever the solution to the problem of energy security and independence, and also solve the question of the price of electricity for the consumer.

Bertrand Fauchet, CEO of Movhera, regrets that in France, as in Portugal, administrative processes are complex and stop renewable expansion. Álvaro Brandão Pinto, CEO from Generg, also pointed out the permitting difficulties, which is added to the shortage of human resources, mentioned by Rui Maia, COO of Ventient Energy.

The conference ended with the participation of the Secretary of State for Environment and Energy, João Galamba, through a video message, taped for this purpose. "The success of the path to carbon neutrality is not only compatible with economic growth, but also involves the reindustrialization of the country, including the development of a green hydrogen production chain that opens up good prospects for export," he said.

APREN Award distinguished two theses

The APREN conference also held the award ceremony of the APREN Prize 2022 - an initiative aimed at disseminating academic master's and doctoral dissertations related to electricity of renewable origin.

The winning doctoral thesis was prepared by Mário Couto: "Islanding Operation and Black Start Strategies for Multi-Microgrids using the Smart Transformer".

Rodrigo Afonso is the author of the master's thesis, also distinguished, which is entitled: "Evaluation of the Impact of Demand on the Frequency Stability of Electrical Systems with Reduced Inertia".

The APREN conference was sponsored by Smartenergy, Galp, Jinko Solar, Lightsource BP, Acciona Energia, EDP, Efacec, Endesa, Enercon, Finerge, Generg, Huawei, Movhera, Trustwind, Ørsted, Repsol, Ventient Energy, Vestas, Abreu Advogados, DNV, Eurowind Energy, Gerbasto, Hidroerg, Mainstream Renewable Power, Neoen, Tecneira, Voltalia, Anywind, Bureau Veritas, Cambenerg, CMS, CorPower Ocean, Dos Grados Capital, Energetus, Enerparc, ESDEC, Greenvolt, Helukabel, MCA, Morais Leitão, Galvão Teles, Soares da Silva & Associados, Nordex, Acciona Windpower, PLMJ and Statkraft.

For more information, please refer to:

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About APREN:

The <u>Portuguese Renewable Energy Association (APREN)</u> is a non-profit association founded in October 1988. Its mission is to coordinate and represent the common interests of its members, promoting renewables energies in the electricity field. APREN works closely with the government and other official entities, both on a national and international levels. It participates actively in the definition of energy and environmental policies, valuing natural resources for electricity production, namely hydric, wind, solar, geothermal, biomass, biogas, and urban solid waste.