innovation forward

Wind Energy Technology Summit 2022 contributes to energy transition

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Even before the recent developments started to affect our energy supply, the Belgian government had decided to shift up a gear in the production of renewable energy. To this end, they are primarily considering to look at offshore wind in the Belgian North Sea. Technological innovation will play a major role and our response is the second edition of the Wind Energy Technology Summit in June.

After last year's successful first edition, Sirris is now organising the second Wind Energy Technology Summit in partnership with OWI-Lab, Agoria, Blue Cluster and HydrogenNet. This series of events and an innovation masterclass is aimed to inform and inspire Flemish companies and organisations when it comes to technology developments in the (offshore) wind energy sector. We will also be sharingthe prevailing market insights and innovation trends in the industry. Our aim: give established parties a boost with the latest insights, but also give newcomers a better idea of this innovative and rapidly evolving sector. Wind energy on land and at sea is bound to play an important part in the energy mix in Belgium in the years ahead. A good reason indeed to organise this specific thematic summit.

The time is now!

Recent decisions by the federal government favouring more wind energy at sea and on land will give an extra impulse to the industry. The government wants to boost the production of renewable energy and is looking primarily at offshore wind in the Belgian North Sea to achieve this endeavour. The ambition is to quadruple the capacity at sea to 8 GW and to ensure that the first wind turbines in the Princess Elisabeth zone are operational by 2027.

The first and oldest offshore zone will also be renovated by installing new, larger wind turbines. This process is called 'repowering' and means that existing older turbines, which are less efficient, are replaced with more efficient ‘latest generation’ turbines. This would be the first time in the offshore wind sector that this technique is applied - a unique event indeed.

Interconnection of offshore wind farms in Europe is also a major theme: together with its North Sea neighbours, the federal government is aiming for an accelerated development of a network of offshore wind energy.

On land, they are looking at whether the more flexible rules in aviation and defence allow for the installation of an additional 1.5 GW of onshore wind capacity.

Technological innovation is key in accomplishing these ambitions in a cost-efficient and sustainable way.

The Wind Energy Technology Summit is a perfect match these plans. This year's programme includes one masterclass and two thematic events, during which experts from the Netherlands and abroad will share the latest knowledge and insights. Time will also be set aside for networking.

Offshore wind zone Princess Elisabeth

The **'**Masterclass Research, development and innovation potential in the Princess Elisabeth offshore wind zone - Belgium's second offshore wind zone**'** on 27 June this year focuses on innovation themes relevant to the development of the new Princes Elisabeth offshore wind zone.

Researchers working in the OWI-Lab R&D collaboration will share the latest insights from ongoing R&D projects in Belgium's existing offshore wind farms. They knowledge they gathered will be linked to research and innovation themes that are useful in the new planned concessions,while the repowering ambitions will also be discussed. At the end of the day, we will also have a pitching moment for innovative ideas from the industry.

Offshore wind energy and hydrogen production

On 8 June, the thematic event 'Emerging Offshore Technologies: Production of green electrons & molecules' at sea will be organised, just like last year. In this seminar we will look at how the marriage between offshore wind energy and hydrogen production is taking shape in a national and especially international context, but also what the (technological) challenges are for the coming years. Hydrogen is an important part of the European Green Deal. For the European Commission, the development of renewable hydrogen from wind and solar energy is a priority. The aim is to de-carbonise the production of hydrogen. The increasing production of offshore wind energy in Europe, along with other forms of energy production at sea that are still being investigated, offer lots of opportunities to combine and integrate electrolysis. The use of hydrogen will gradually be

introduced in various industries, including offshore.

This event is sponsored by Capgemini.

Cybersecurity in the offshore energy sector

On 29 June, we are organising a second thematic seminar called 'Importance of cybersecurity for offshore (renewable) critical infrastructure'. With the growing number of offshore wind turbines, the construction of interconnection points and an offshore energy island, the importance of cybersecurity for this critical infrastructure will also grow. Cybersecurity in the energy sector is already an important topic in the current geopolitical context. In this seminar, cybersecurity experts will talk about the importance of this topic for developers and operators, while also zooming in on how the entire value chain of an offshore wind farm (e.g. suppliers of all kinds of sensor equipment, software, drones, etc.) needs to pay attention to this topic in view of new standards and developments in the sector.

Interested in contributing to this Wind Energy Technology Summit or becoming a partner in one of the initiatives? Please do not hesitate to contact us!

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