
Siemens Energy: The North Sea could become Europe's largest climate-neutral energy system

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This summer, 150 countries gathered in Stockholm for the UN Environment Conference to gather power for the environment and the climate. The ambition was to contribute to increasing the pace of the transition, and the conference landed on ten points which, among other things, pointed to the importance of speeding up system-wide transitions in the sectors where there is the greatest effect to be gained, for example the energy sector. According to Siemens Energy, this is a central focus area for striving towards climate neutrality, and it therefore proposes an extensive investment in the transformation of the North Sea.

According to the organization Swedish Wind Energy, the assessment is that the Swedish need for electricity will triple by 2050 and amount to 370 TWh per year. Sweden is also facing an almost 50 percent increase in electricity demand already within this decade.

The North Sea can be decisive in Europe's quest to switch to renewable energy and reduce the need for coal and oil. By 2050 at the latest, the area can become Europe's largest climate-neutral energy system. But extensive cooperation between companies, industries and the countries around the North Sea will be required for it to become a reality.

For decades, the North Sea has played a key role in supplying energy to Europe through its oil and gas fields, and now a huge investment potential is emerging that is expected to transform the North Sea into a climate-neutral energy system by 2050. An energy transformation that will require large-scale and coordination. A successful conversion will lead to new industries being attracted to the area, jobs will be secured and it will lead to a reduced dependence on fossil fuels, according to Siemens Energy.

Industry organization Swedish Wind Energy commissioned a study that shows that in 2050, offshore wind power can account for 167 TWh of Sweden's electricity production, which corresponds to 45 percent of the total electricity demand. The same investigation shows that offshore wind power can create 1,500–4,000 annual jobs in Sweden in 2030 and up to 10,000 annual jobs in 2050.

It will be a long journey to get rid of carbon dioxide emissions, but the UN IPCC report that was recently released clearly shows that it is time to act now and Siemens Energy wants to be involved and contribute to that development. We have already contributed 400MW of renewable energy to the UK from offshore wind, so we know we have the capacity.

The North Sea has a history of storing natural gas, which gives the area good geological conditions to be a place to bury carbon dioxide that has been released. The existing infrastructure needs to be modernized and the area has good conditions for becoming a test bed for new technology.

If Europe is to manage to become climate neutral by 2050 at the latest, offshore wind power must increase its capacity tenfold, from today's 29 GW to well over 300 GW. For this to be possible, the restructuring of the North Sea is absolutely necessary.