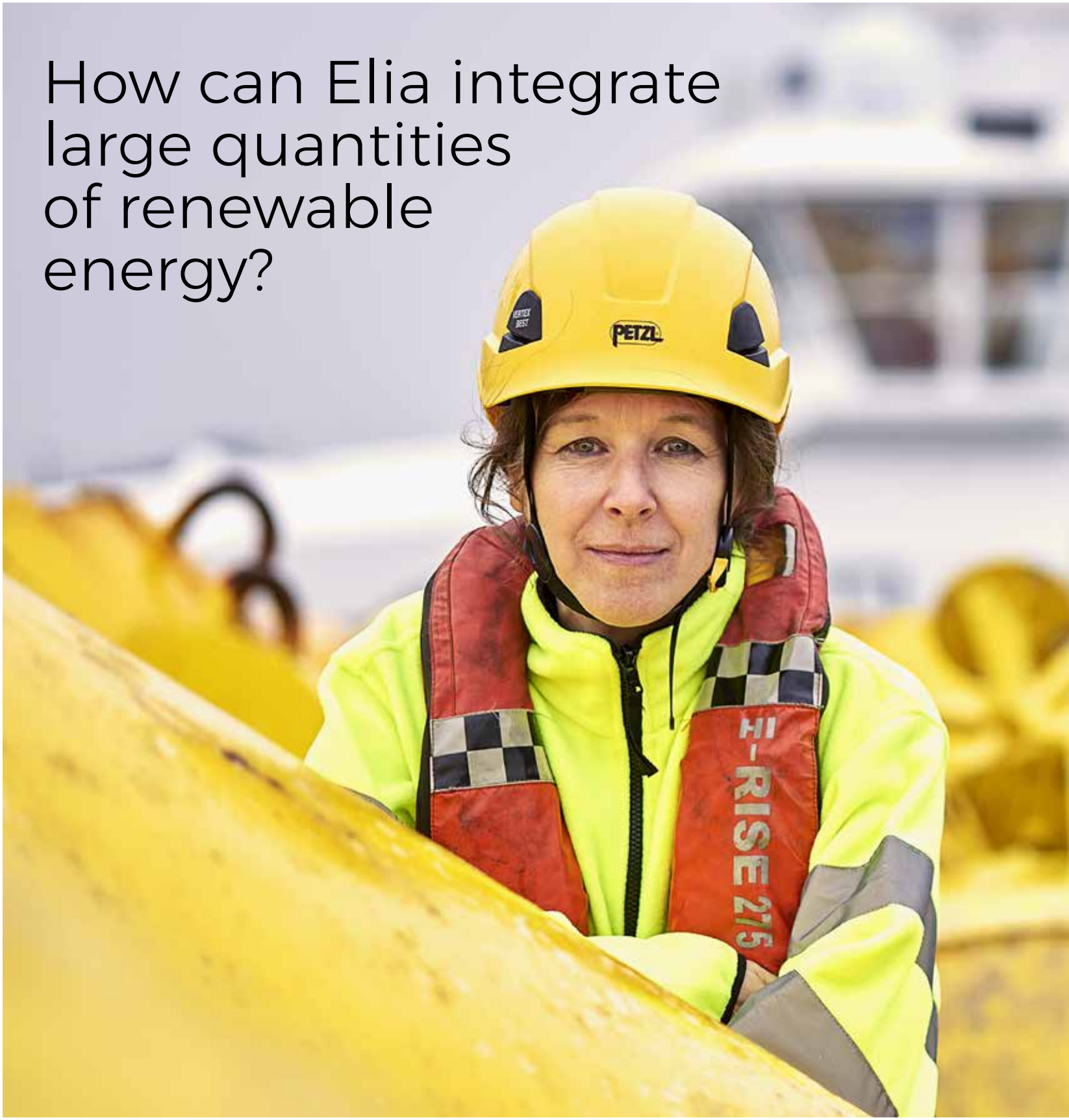
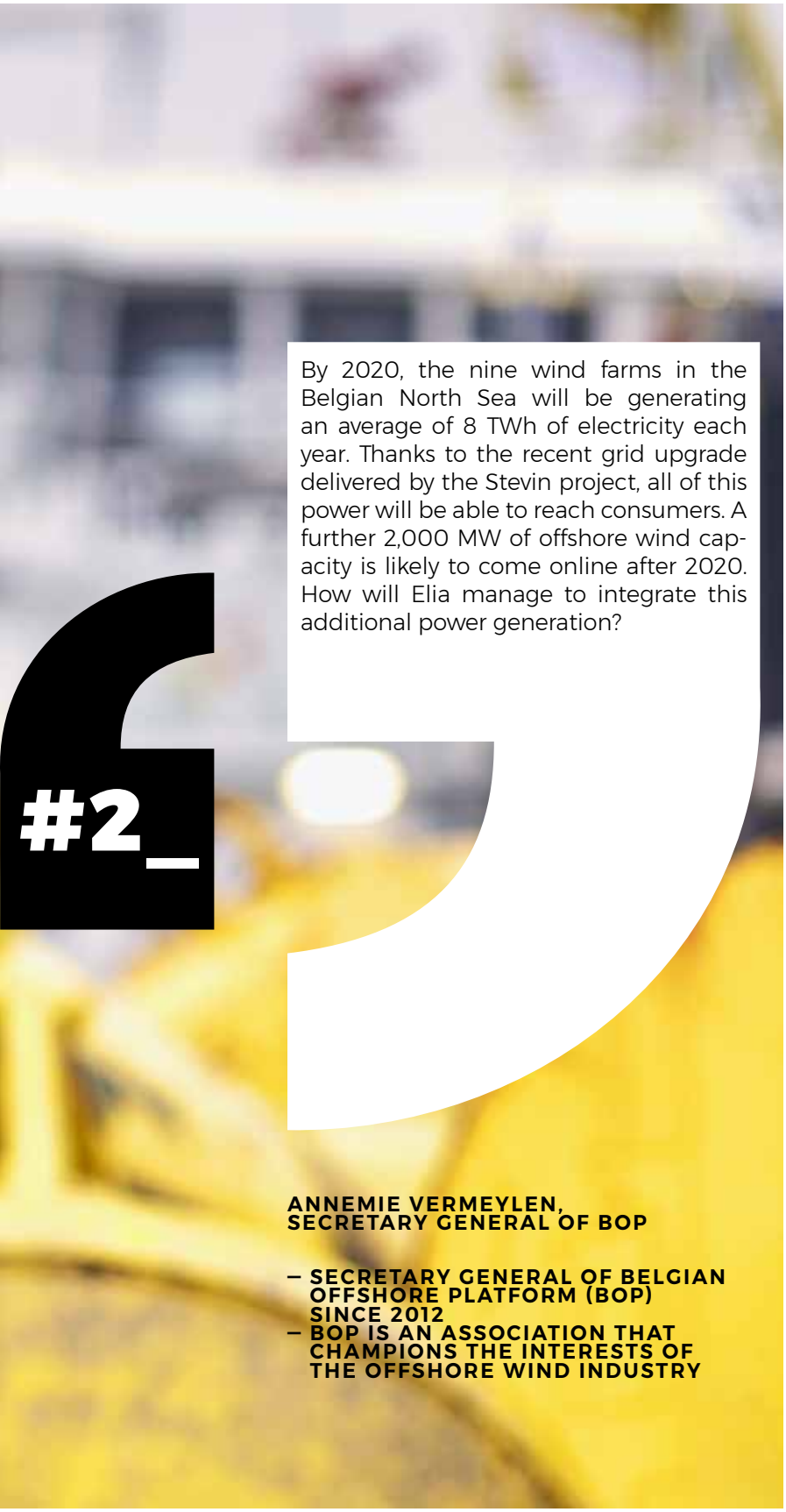
How can Elia integrate large quantities of renewable energy?





#2_

By 2020, the nine wind farms in the Belgian North Sea will be generating an average of 8 TWh of electricity each year. Thanks to the recent grid upgrade delivered by the Stevin project, all of this power will be able to reach consumers. A further 2,000 MW of offshore wind capacity is likely to come online after 2020. How will Elia manage to integrate this additional power generation?

ANNEMIE VERMEYLEN,
SECRETARY GENERAL OF BOP

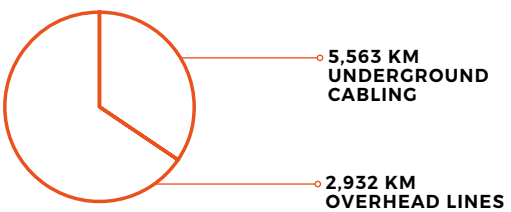
- **SECRETARY GENERAL OF BELGIAN OFFSHORE PLATFORM (BOP) SINCE 2012**
- **BOP IS AN ASSOCIATION THAT CHAMPIONS THE INTERESTS OF THE OFFSHORE WIND INDUSTRY**

TOM PIETERCIL,
MOG PROGRAMME MANAGER AT ELIA

"Elia is actively preparing for the increase in offshore wind generation, which is why we started developing a power grid in the North Sea in 2016. By 2020, there will be a large SwitchYard platform 40 km off the coast of Zeebrugge. This Modular Offshore Grid (MOG) will bundle together the cables from the new wind farms, allowing 2.2 GW of offshore wind energy to be brought onshore.
Should Belgium decide to further expand its offshore wind capacity after 2020, additional grid infrastructure will be needed to prevent bottlenecks. In that case, we will set out our future needs in the Federal Development Plan 2020-2030 to be published in late 2018.
Wind energy is extremely variable, so accurate weather forecasting is key to keeping the electricity system balanced. Elia has developed a whole range of balancing products to offset differences between supply and demand."

8,495 Km

TOTAL LENGTH OF THE NETWORK (BELGIUM)



For a comparison with 2015 and 2016, we refer to the annex.