

EERA DEEPWIND'2021

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EVP Sustainability SINTEF and President EERA

One of Europe's largest independent research organisations

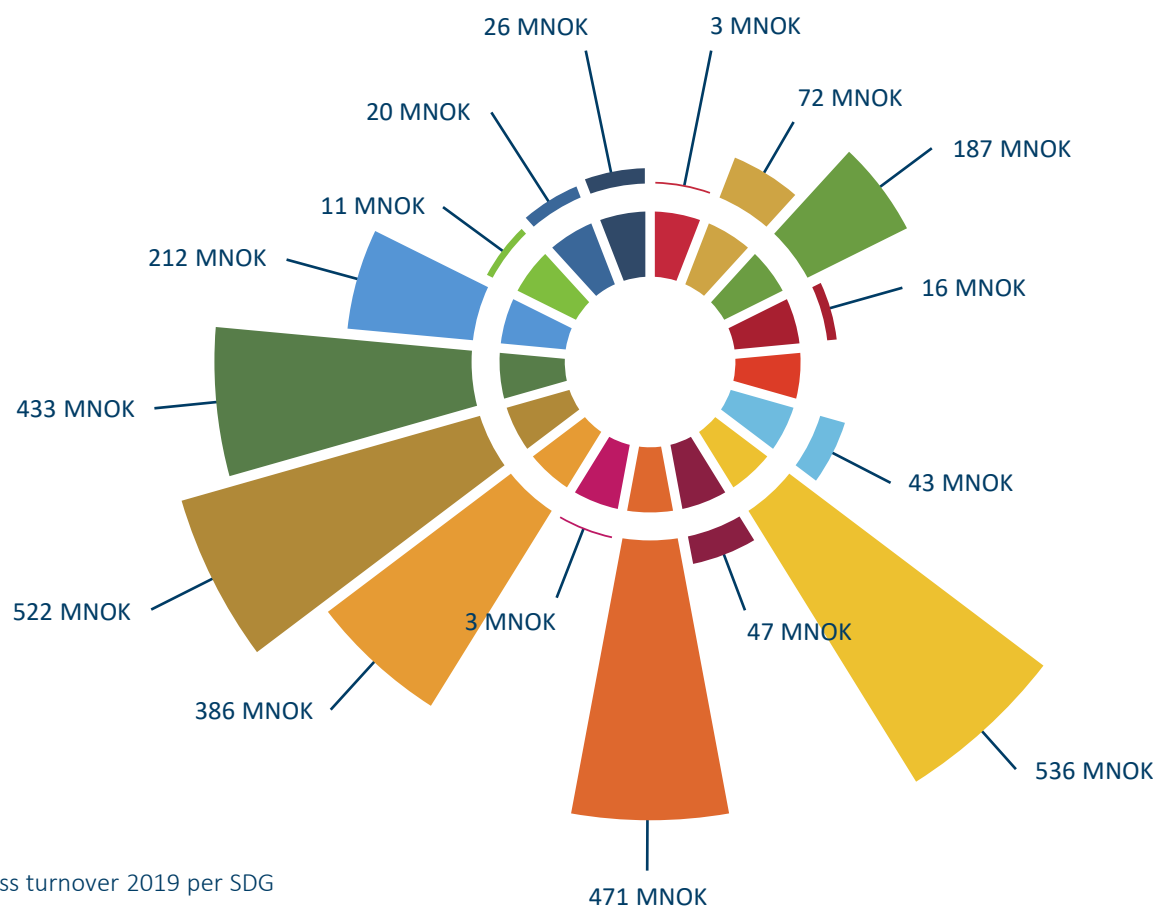


NOK 3.5 billion
Revenues

NOK 480 MILL
International sales

Technology for a better society

- measured by our contribution to the Sustainable Development Goals



-  1. No poverty
-  2. Zero hunger
-  3. Good health and well-being
-  4. Quality education
-  5. Gender equality
-  6. Clean water and sanitation
-  7. Affordable and clean energy
-  8. Decent work and economic growth
-  9. Industry, innovation and infrastructure
-  10. Reduced inequalities
-  11. Sustainable cities and communities
-  12. Responsible consumption and production
-  13. Climate action
-  14. Life below water
-  15. Life on land
-  16. Peace, justice and strong institutions
-  17. Partnerships for the goals

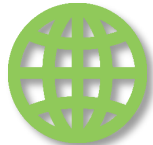


► **EERA**
in a nutshell

EERA brings together public research centres and universities that represent thousands of energy experts from the whole of Europe



250+ organisations



30 countries



50,000+ experts



17 Joint Research Programmes (JPs)

EERA is a flagship example of successful long-term pan-European collaboration.

EERA's revised strategy embraces the systemic nature of the energy transition and is fully aligned with EU 2050 climate targets



vision

To be
#1 energy research authority
in Europe



mission

Catalyzing European energy research to achieve a
climate neutral society by 2050

The world needs new energy solutions

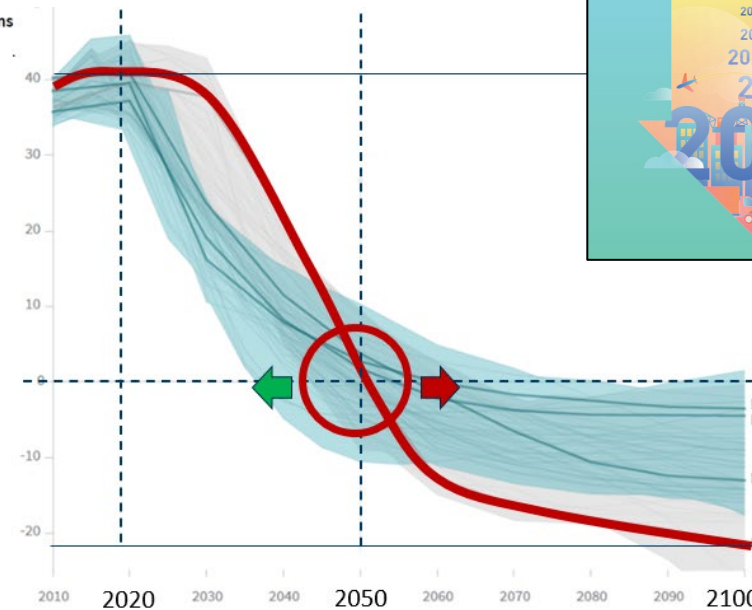


Graphic is courtesy of northseawindpowerhub.eu (Energinet, Gasunie and TenneT)

Net zero emissions in 2050- strong restructuring signals



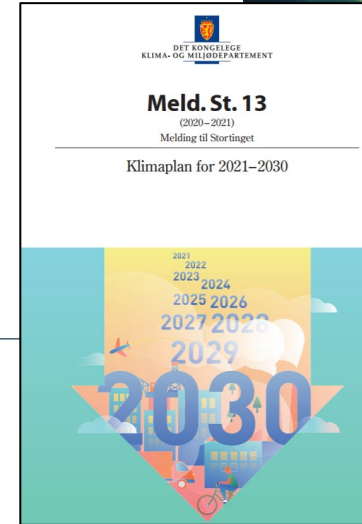
Global total net CO₂ emissions
Billion tonnes of CO₂/yr



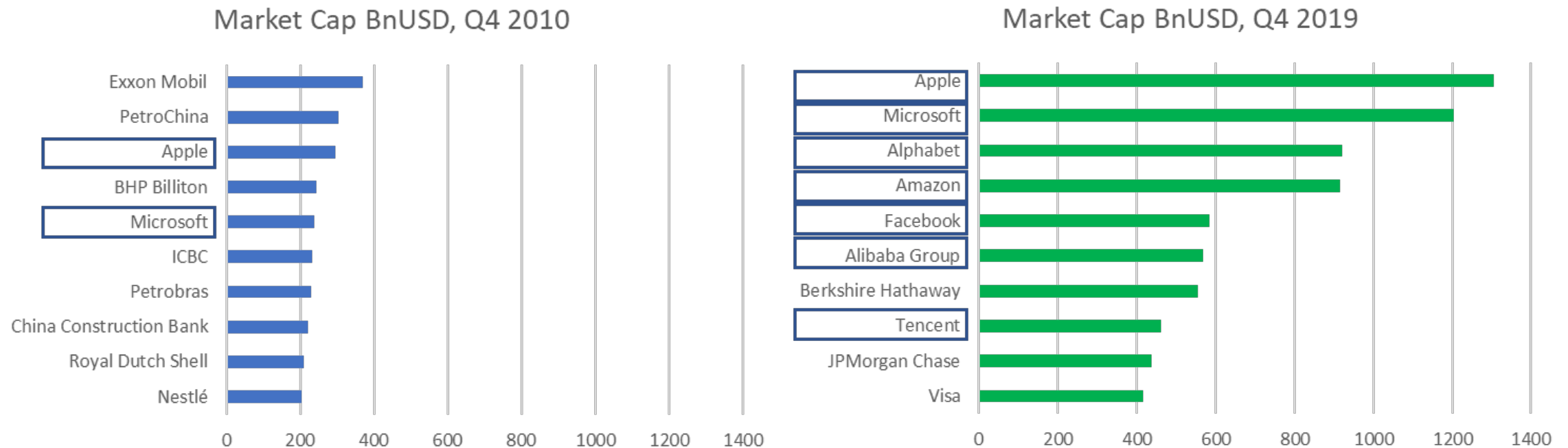
Net zero
CO₂-emissions

Removal of CO₂
from atmosphere

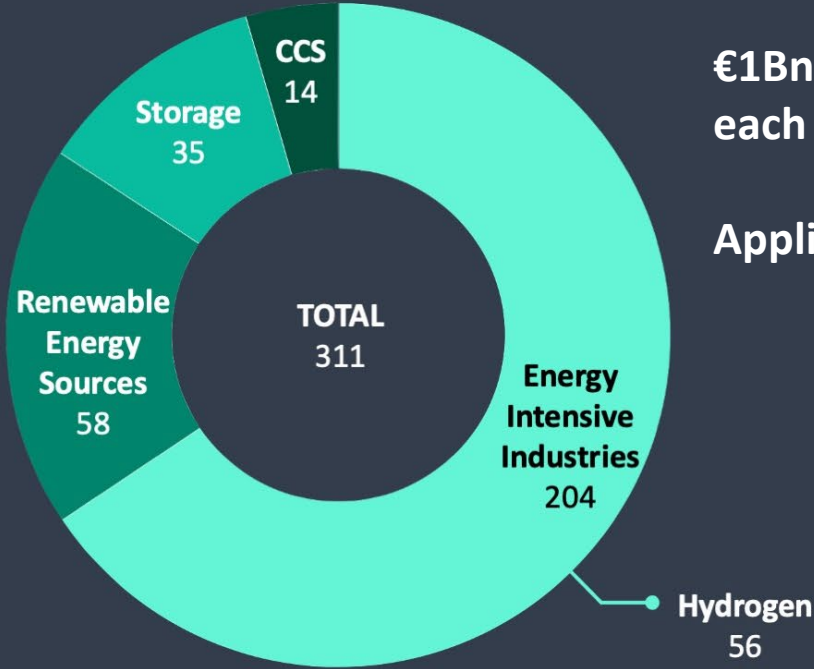
SINTEF



Stronger and higher competition in future, value creation from data (sharing)

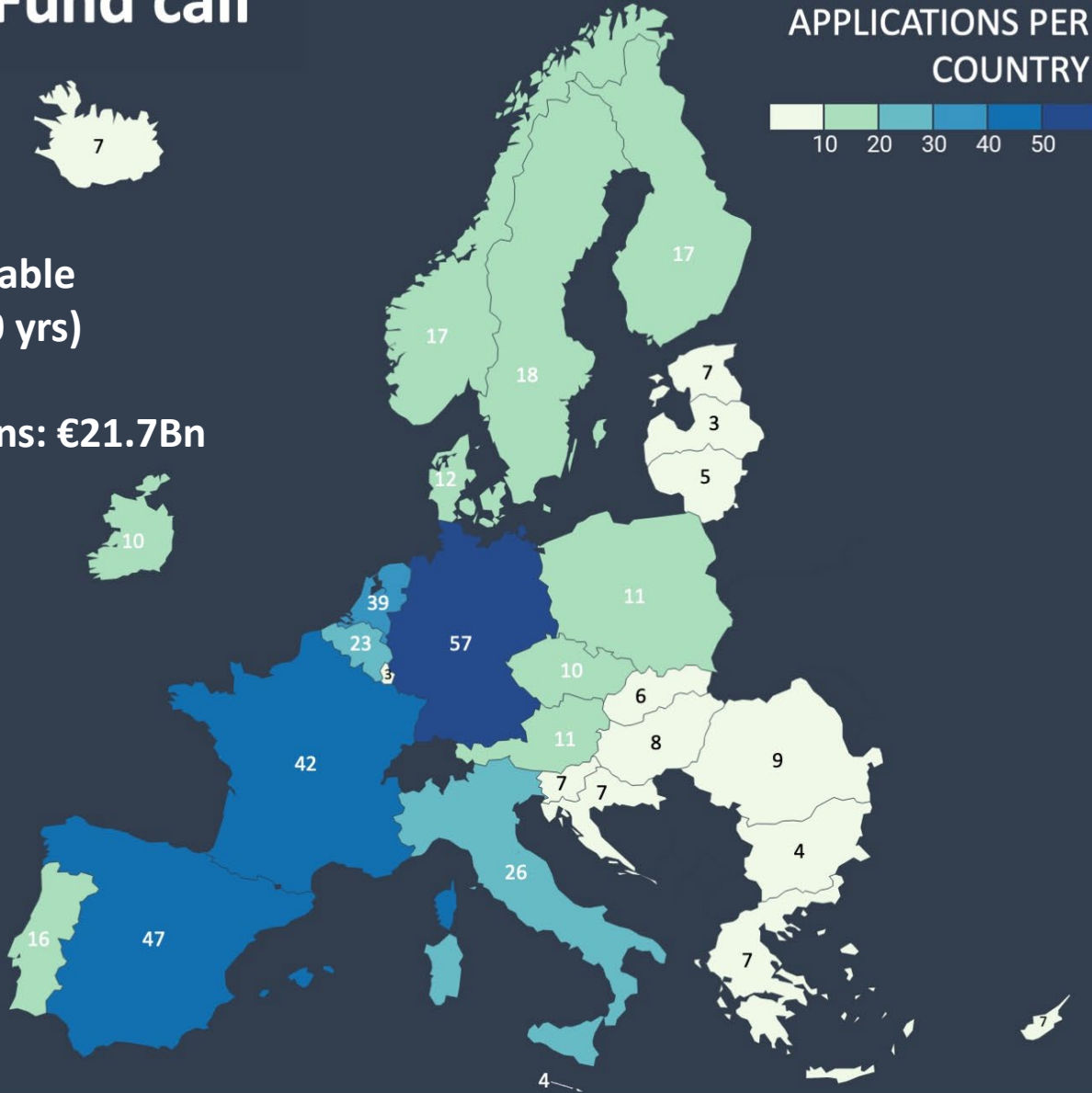


Applications to first Innovation Fund call

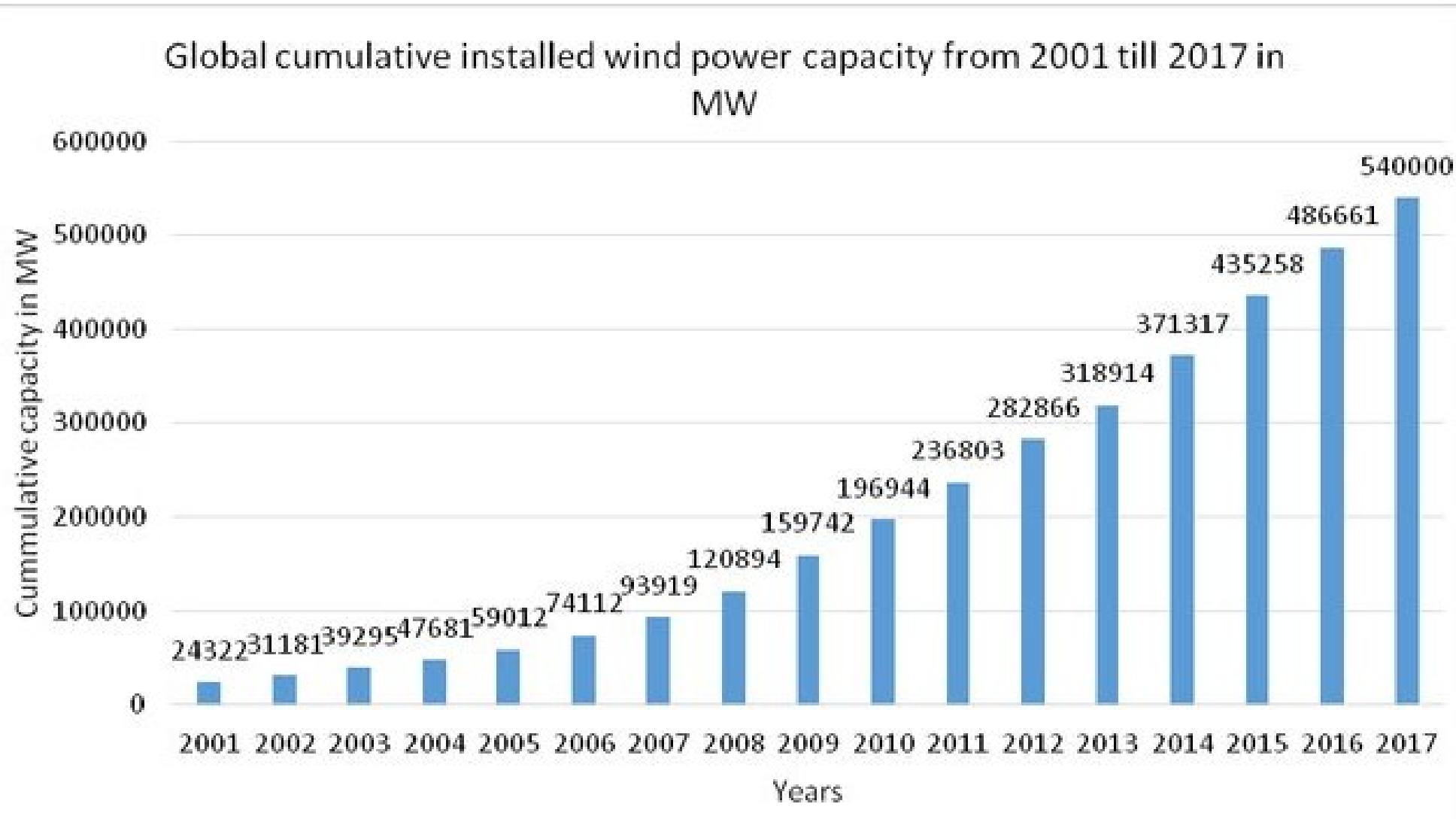


€1Bn available
each yr/10 yrs)

Applications: €21.7Bn

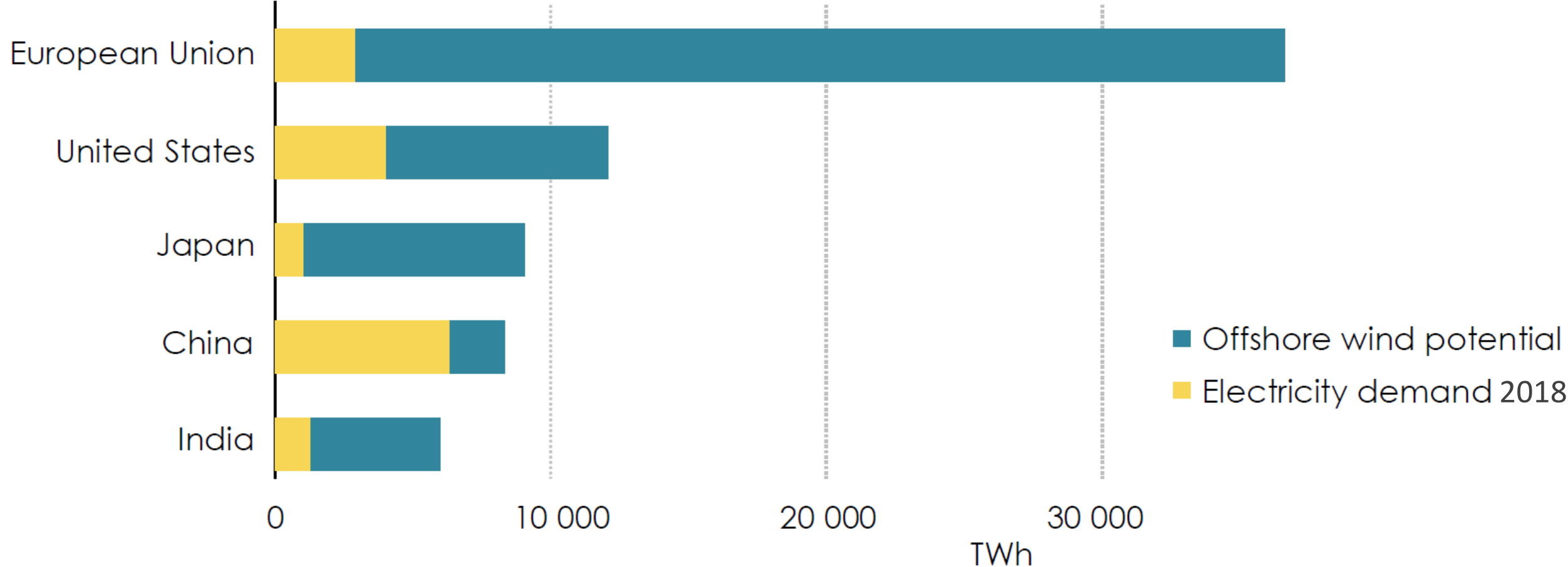


Offshore wind today is what on-shore was in 2002



Source: Statista

Huge untapped offshore wind potential can supply 18-times the global electricity demand





2050 vision:

450 GW

OF OFFSHORE WIND

85
GW

Atlantic Ocean

212
GW

North Sea

83
GW

Baltic Sea

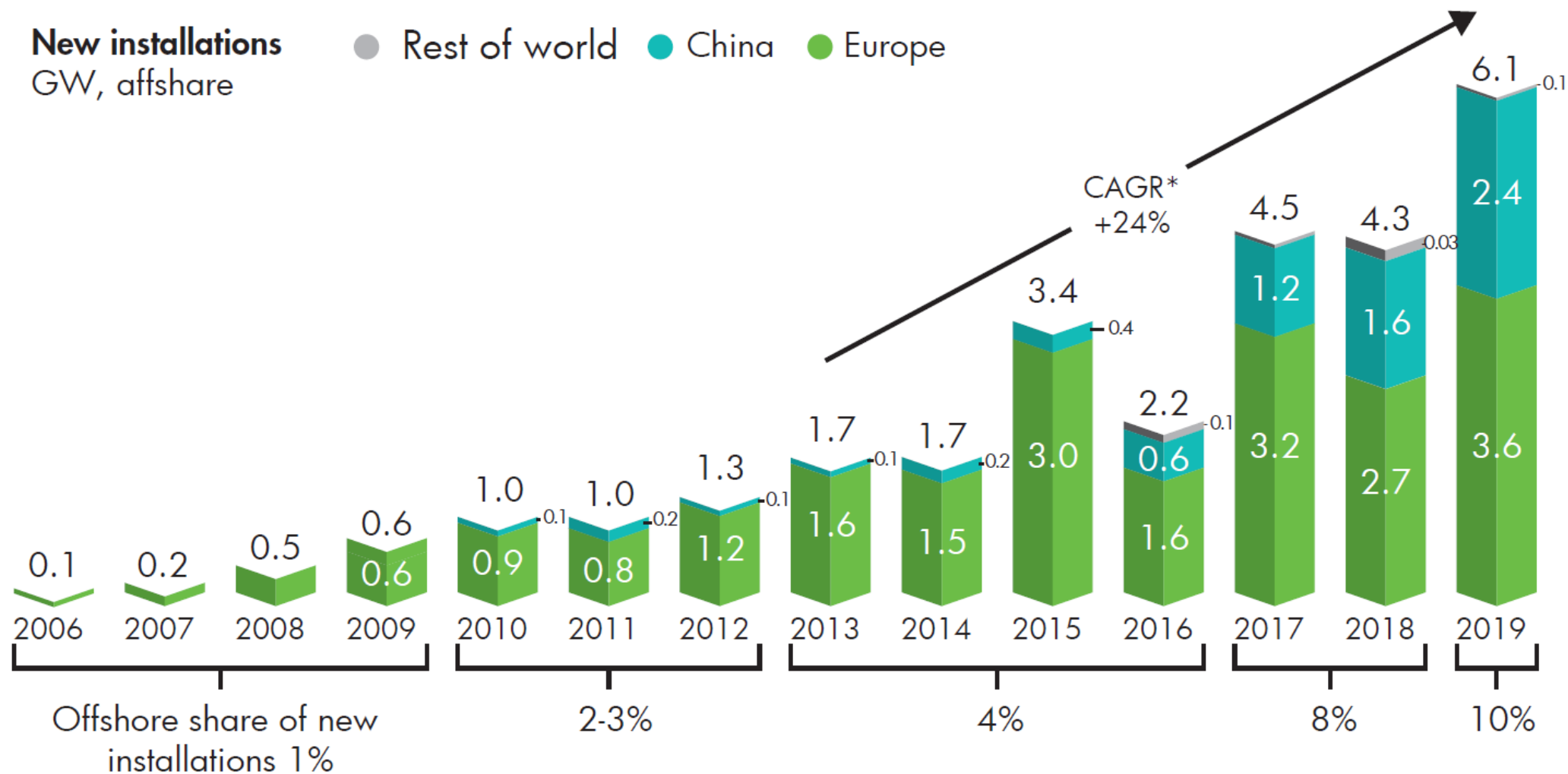
70
GW

Southern European waters

**Excellent opportunities for offshore
wind in the North Sea**

New installations
GW, offshore

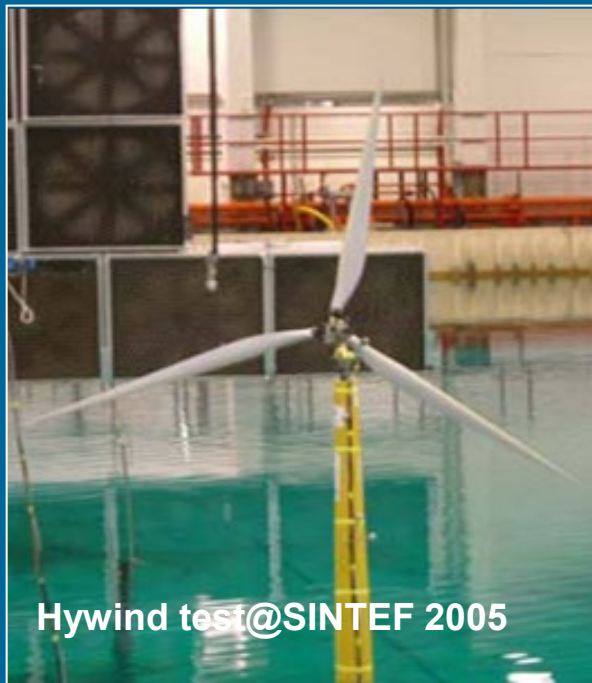
● Rest of world ● China ● Europe



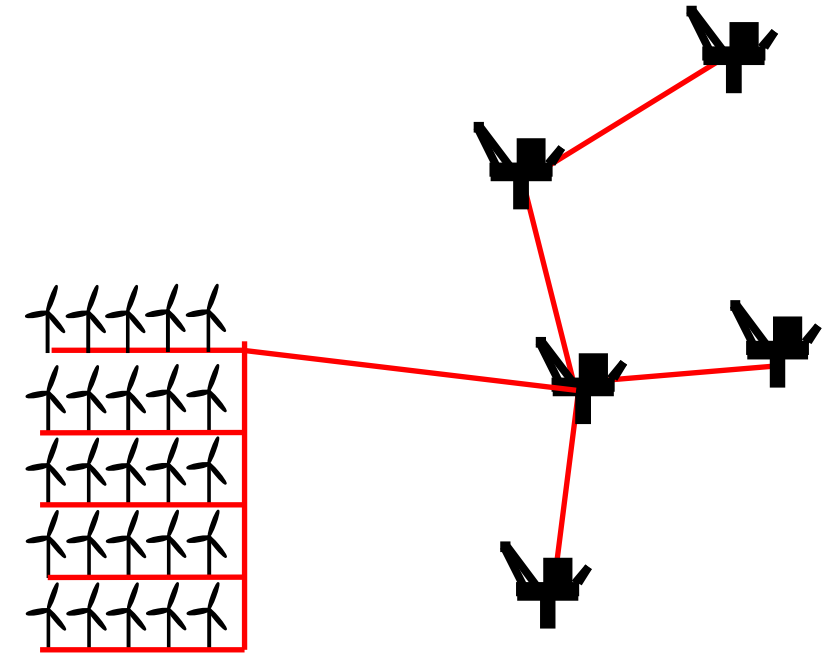
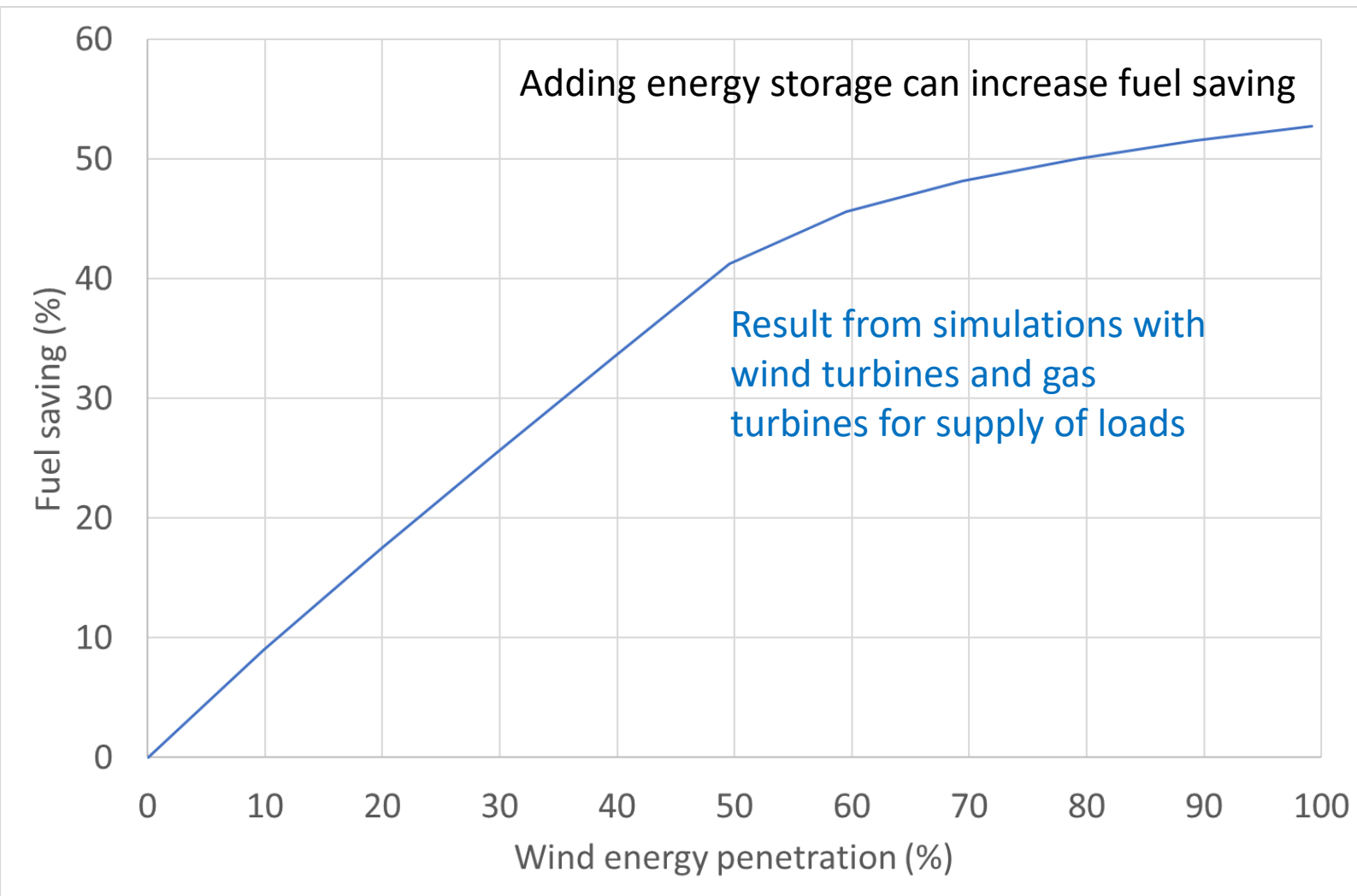
* Compound Annual Growth Rate

Source: GWEC Market Intelligence, March 2020

Exciting development of floating wind



Offshore wind can reduce emissions from oil and gas platforms



CLEAN POWER AT SEA

Firm electric power

**Clean
Power
Hub**

Variable renewable
generation

Carbon-free fuel



Technology for a better society



**Catalyzing European energy research to achieve a
climate neutral society by 2050**