

Wereldwijde kansen voor integrale oplossingen met Marine Renewable Energy

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Onderwerpen

1. Introductie
2. Beleidsimpulsen voor integrale oplossingen
3. Marktimpulsen voor integrale oplossingen
4. Rol van EWA
5. Online e-learning



Over BLUESPRING



1.25MW dam-geïntegreerde turbines in
Oosterschelde Stormvloed Kering



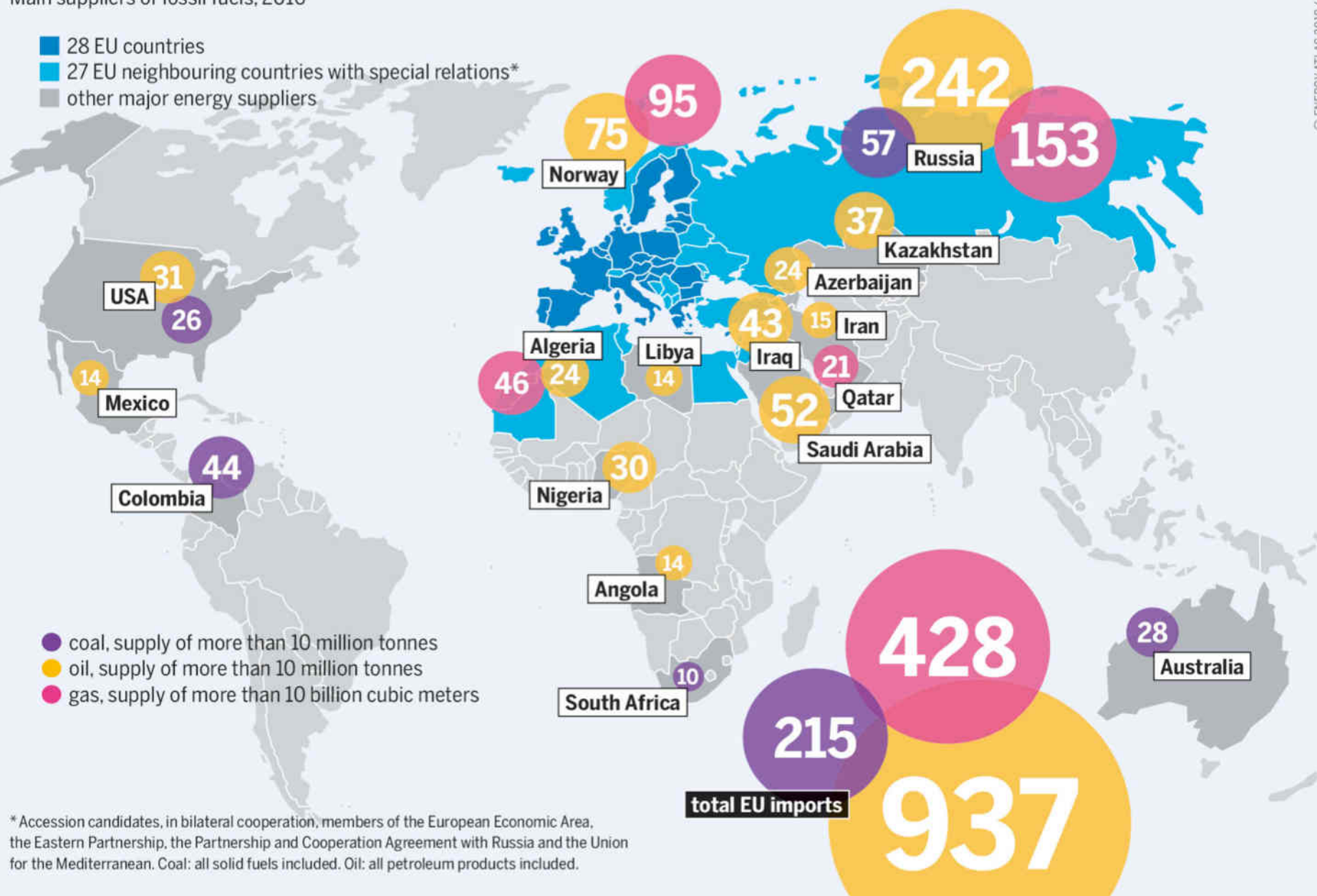
200kW drijvend platform bij Texel

beleidsimpulsen

WHO SUPPLIES EUROPE? THE GLOBAL CONCERNS OF EU ENERGY IMPORTS

Main suppliers of fossil fuels, 2016

- 28 EU countries
- 27 EU neighbouring countries with special relations*
- other major energy suppliers



* Accession candidates, in bilateral cooperation, members of the European Economic Area, the Eastern Partnership, the Partnership and Cooperation Agreement with Russia and the Union for the Mediterranean. Coal: all solid fuels included. Oil: all petroleum products included.

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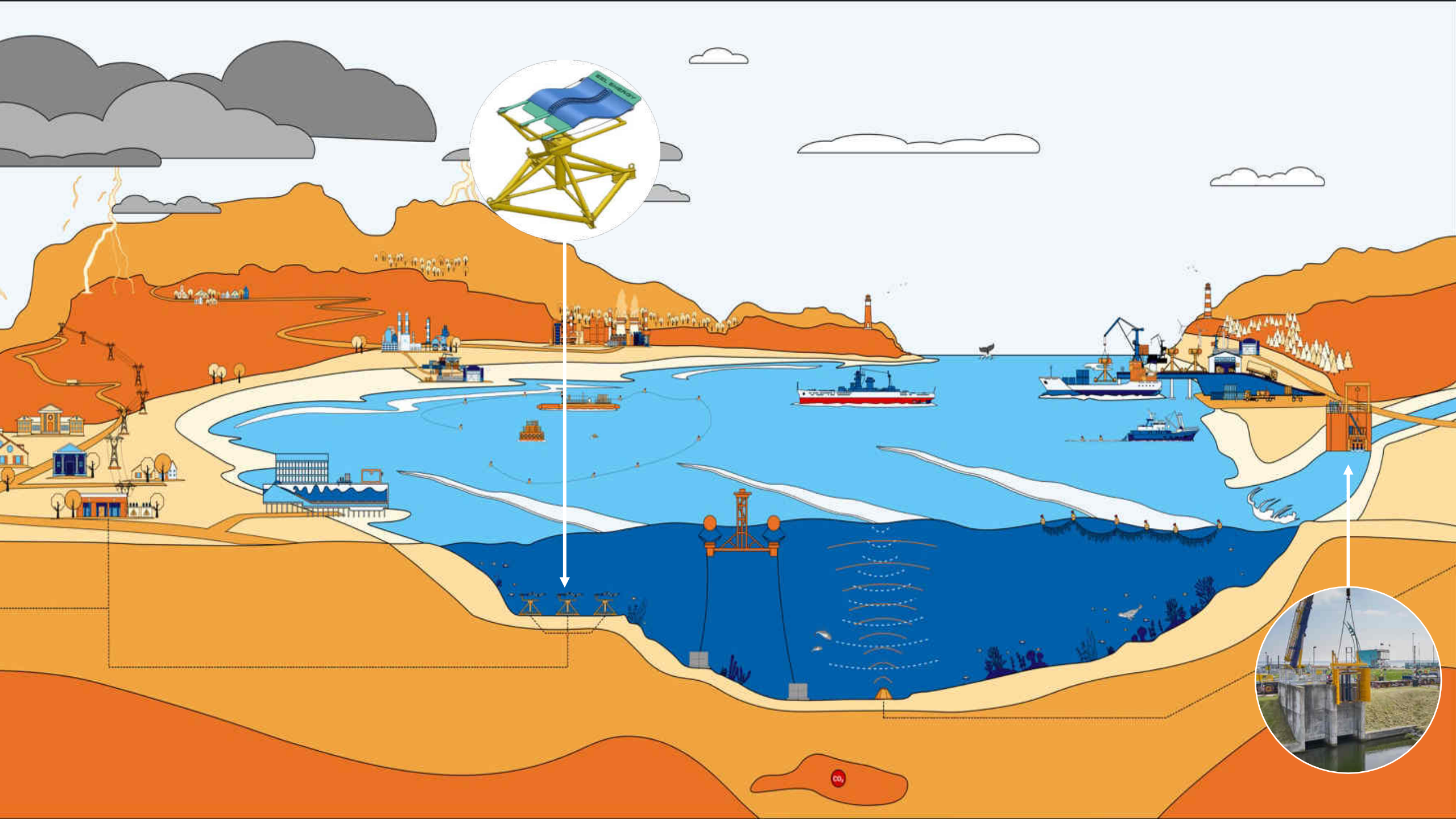
"Holding the increase in the global average temperature to well below 2 °C above pre-industrial levels and pursuing efforts to limit the temperature increase to 1.5 °C above pre-industrial levels, recognizing that this would significantly reduce the risks and impacts of climate change"

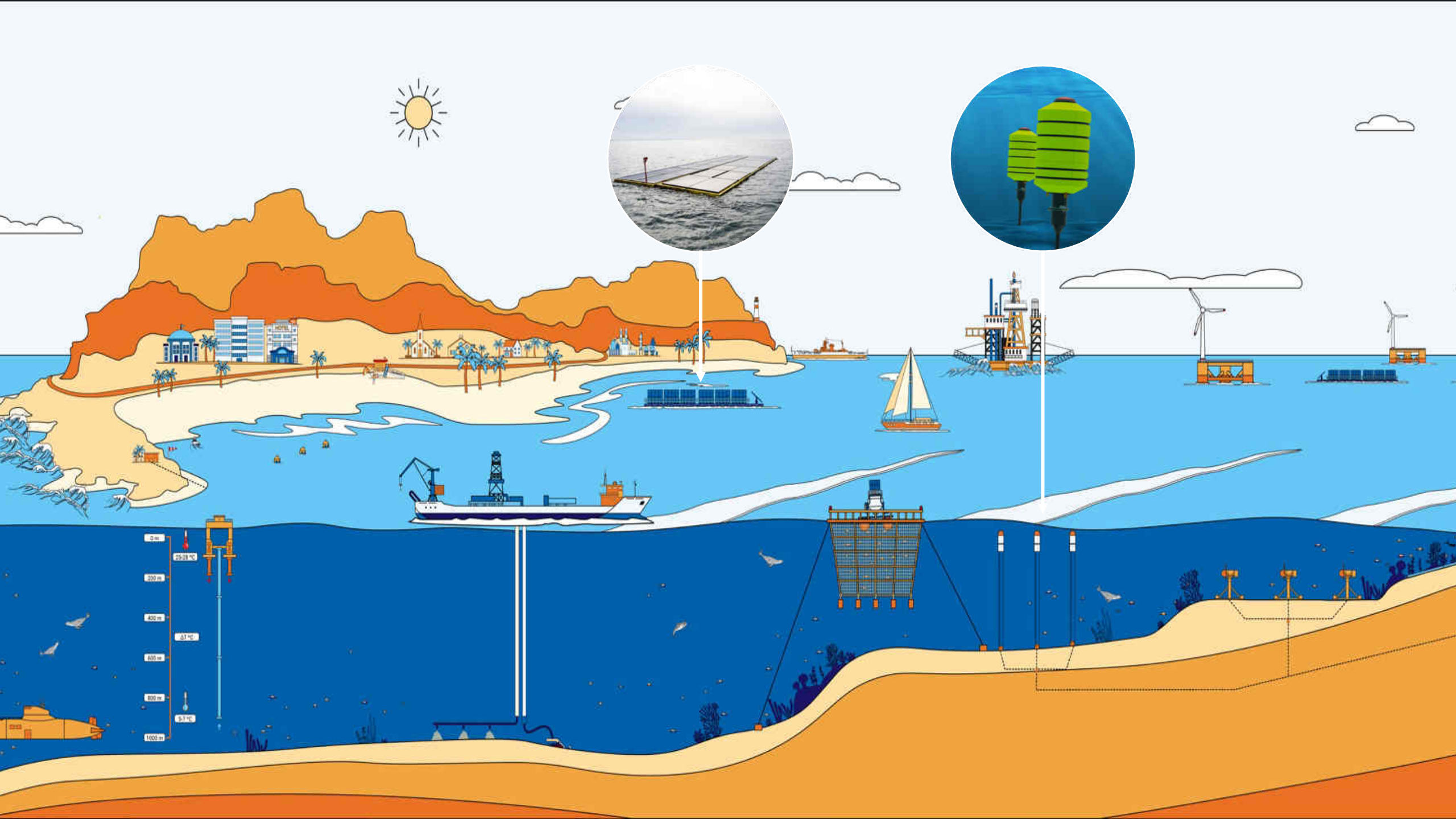
- The Paris Agreement



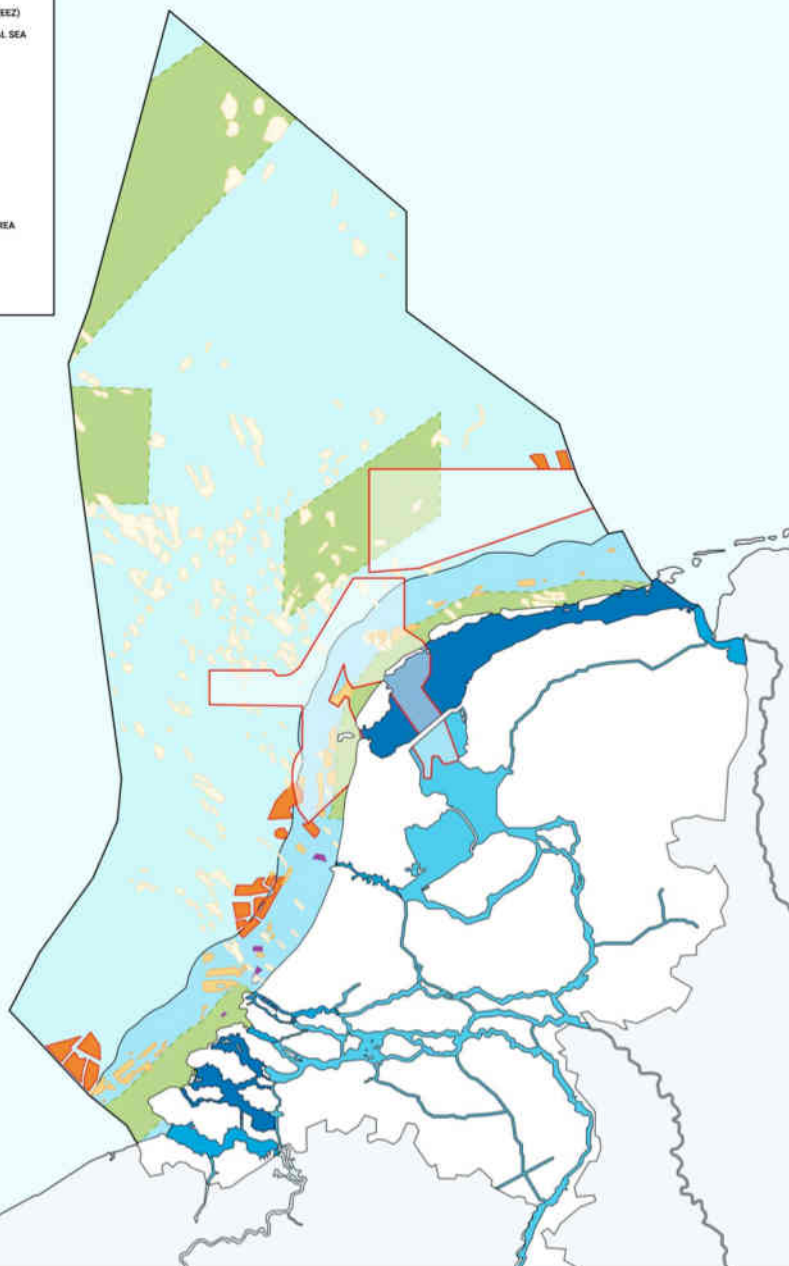
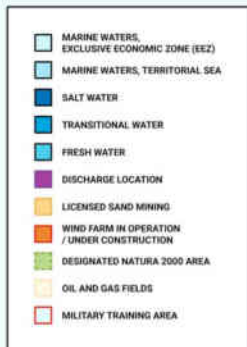
The offshore energy transition

- European Green Deal
 - Climate neutral continent by 2050
 - Combat loss of biodiversity
- Offshore Renewable Energy Strategy
 - WIND: 12 GW (now), 60GW (2030), 300GW (2050)
 - OCEAN: 13MW (now), 100MW (2025), 1 GW (2030), 40GW (2050)
- SET Plan targets for ocean energy
 - high- and low-growth scenarios,
 - Mapping supply chain
 - recommendations on policy actions





NORTH SEA PROGRAM



N Noordzeeprogramm



a

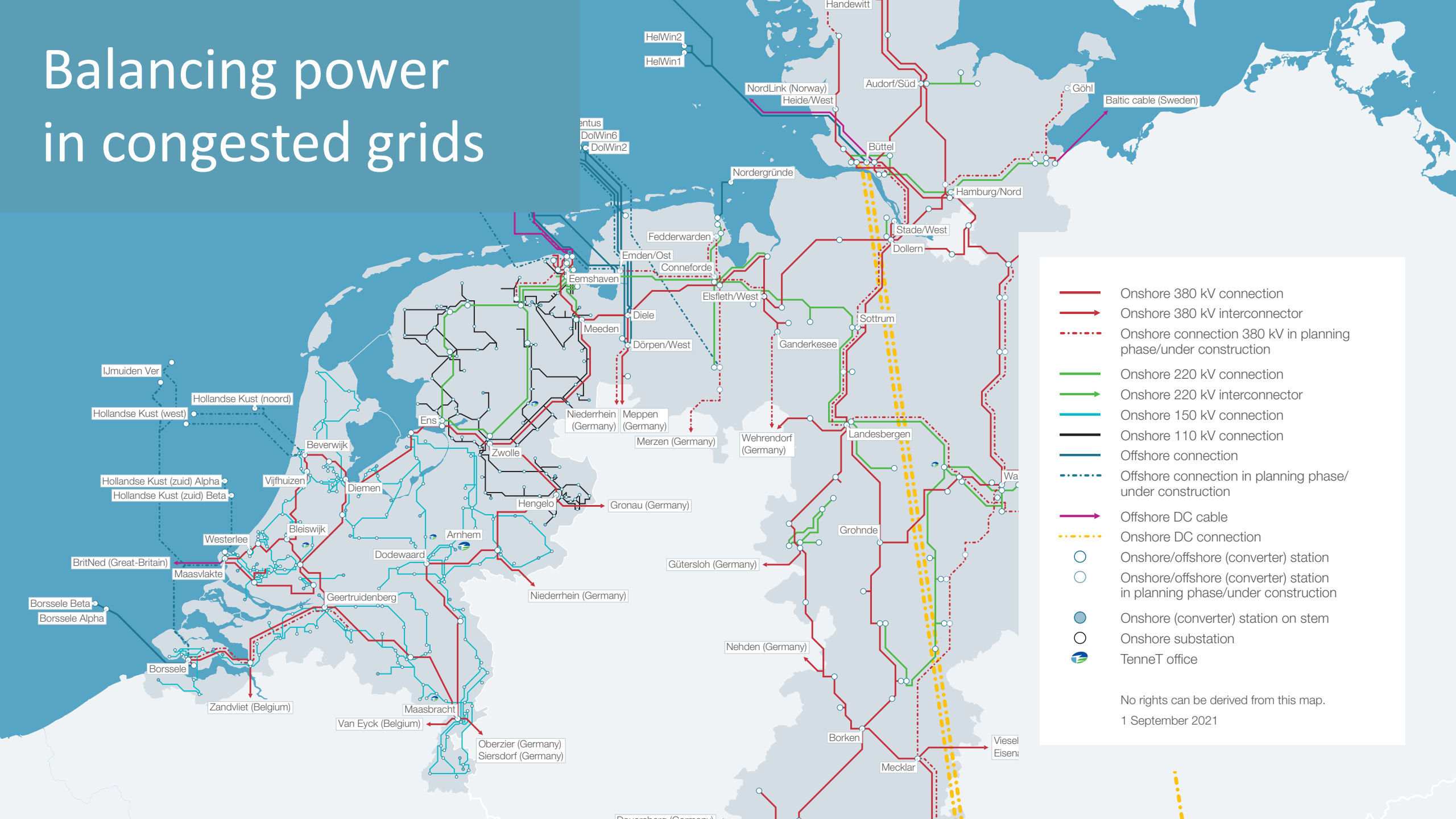
- **2,5 GW** offshore wind gebouwd of in ontwikkeling
- Doel 11GW verdubbeld naar **21GW** in 2030. m.a.w. 8x meer in komende 8 jaar
- Projecties van 38GW-72GW in 2050
- Ruimtelijke inpassing: 18% van de Noordzee

Samenvatting van beleidsimpulsen

- Geopolitieke spanningen -> zelfvoorzienend
- Paris Agreement
- UN SDG's
- European Green Deal
- Offshore Renewable Energy Strategy
- SET Plan targets for ocean energy

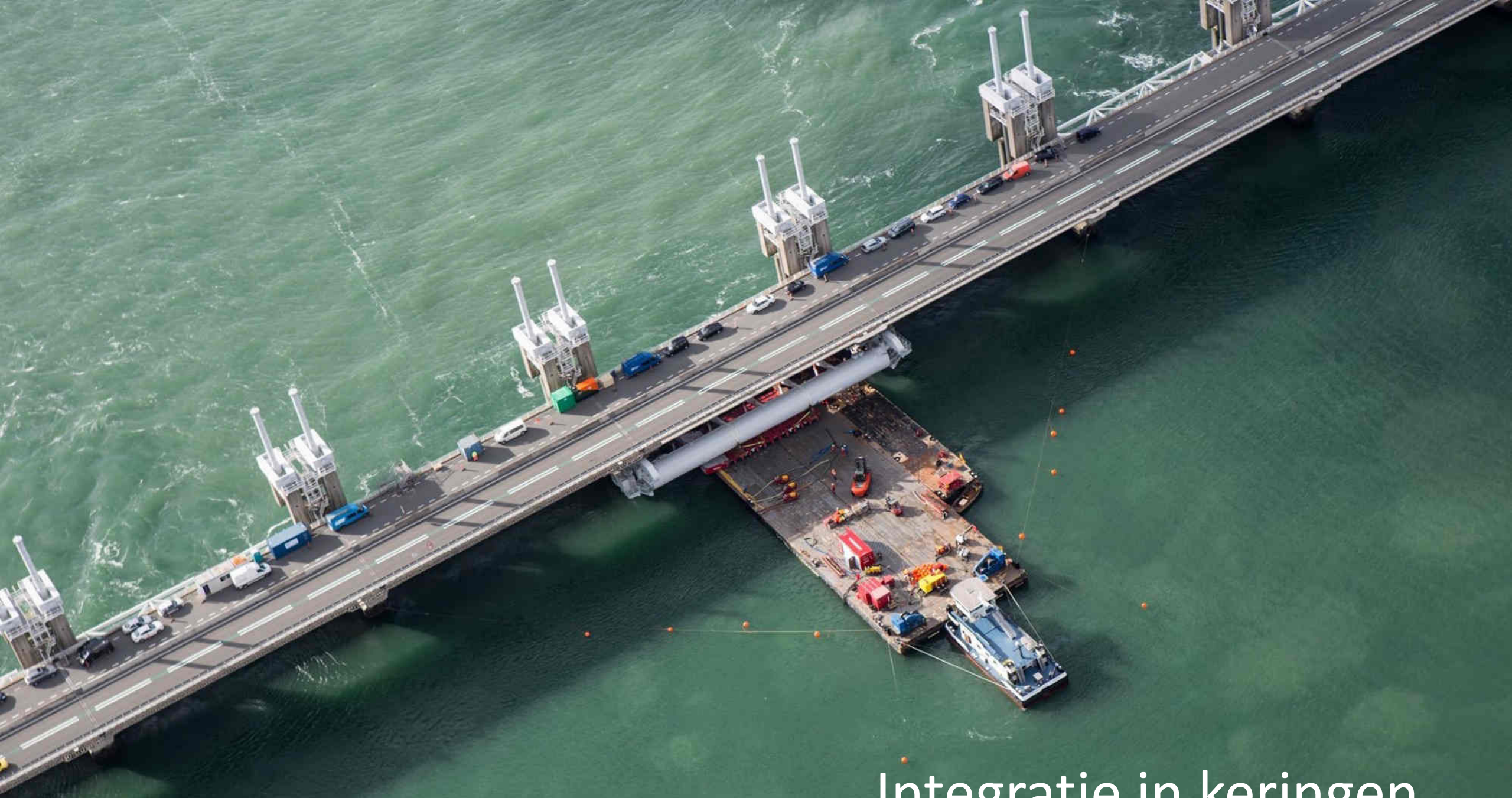
marktimpulsen

Balancing power in congested grids



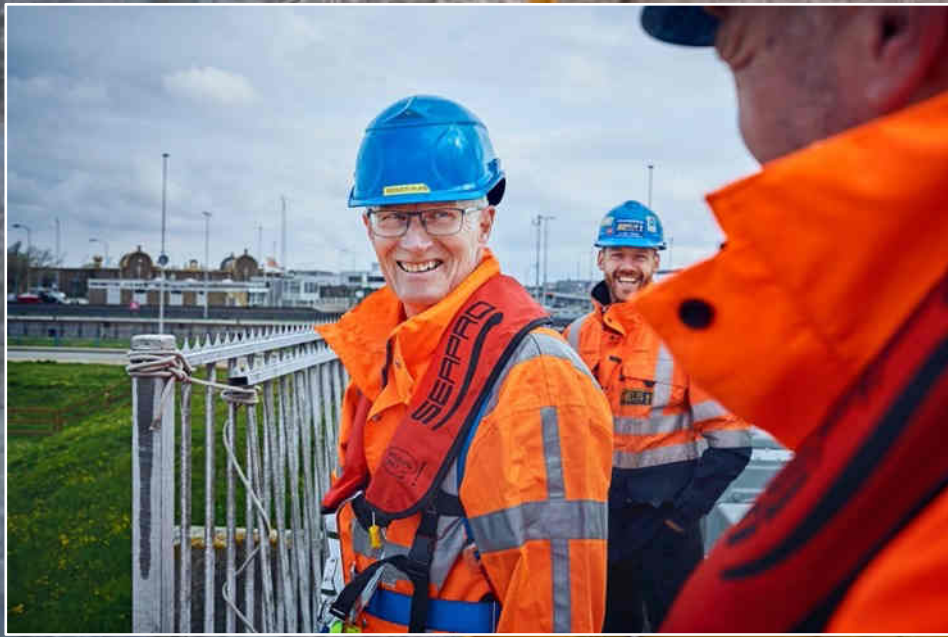
- Onshore 380 kV connection
- Onshore 380 kV interconnector
- - - Onshore connection 380 kV in planning phase/under construction
- Onshore 220 kV connection
- Onshore 220 kV interconnector
- Onshore 150 kV connection
- Onshore 110 kV connection
- Offshore connection
- - - Offshore connection in planning phase/under construction
- Offshore DC cable
- - - Onshore DC connection
- Onshore/offshore (converter) station
- Onshore/offshore (converter) station in planning phase/under construction
- Onshore (converter) station on stem
- Onshore substation
- 🌐 TenneT office

No rights can be derived from this map.
1 September 2021



Integratie in keringen





Powering ports



...integratie in sluizen

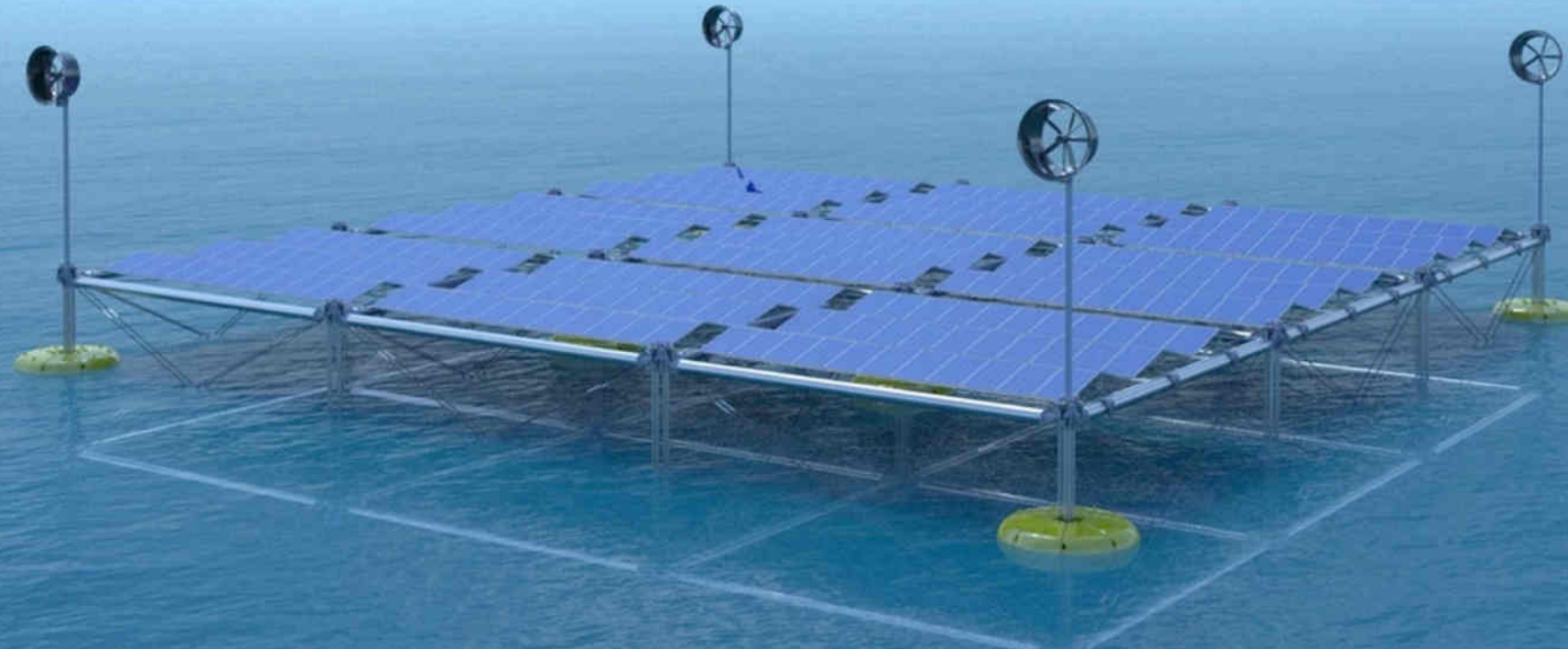
Powering ports



...integratie in golfbrekers

SINN Power (D)

- Ocean Hybrid Platform
- Modular design
- Floating Point absorber buoy
- Wave height >12m





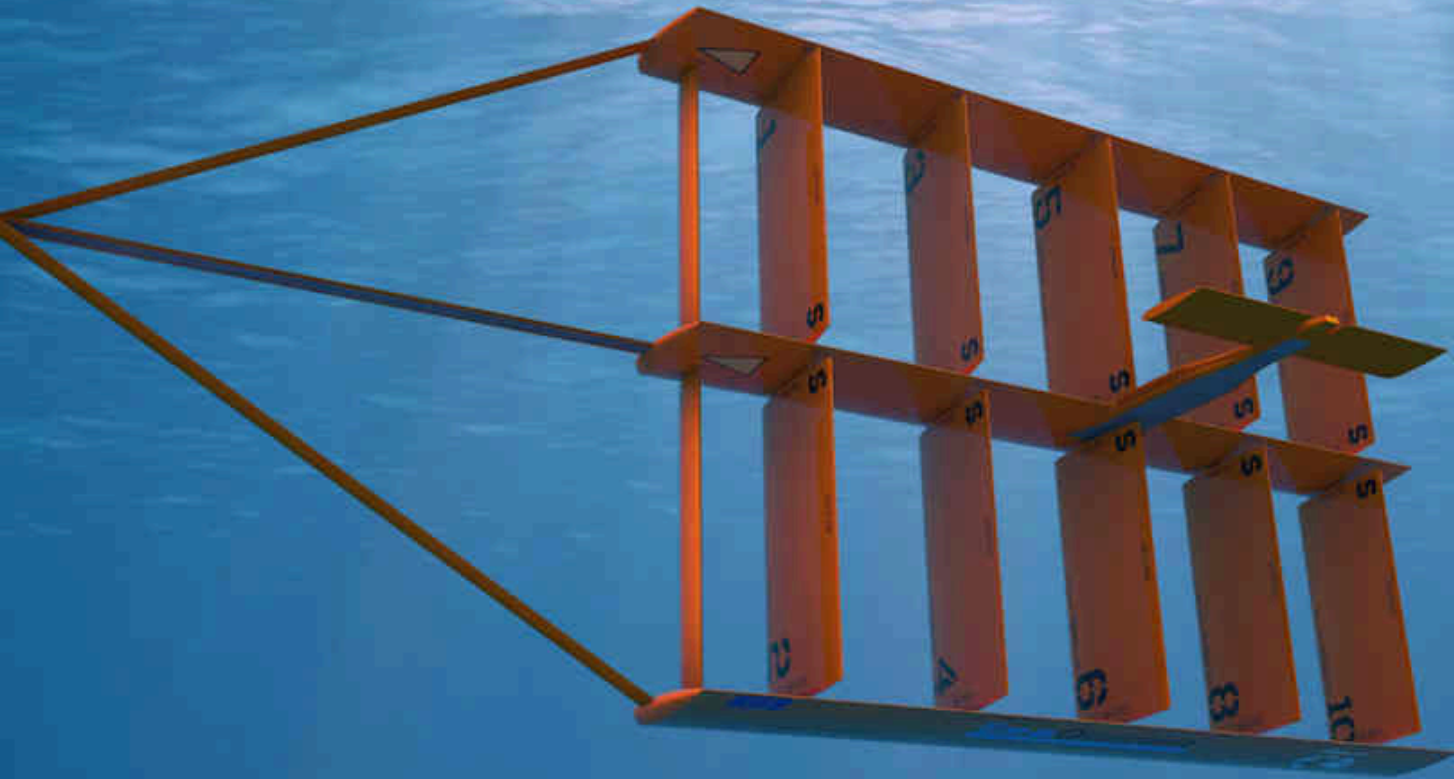
WaveBoost
wave energy

Powering aquaculture & offshore data hubs



Multi-source offshore energy farms

SeaQurrent
release tidal energy



The next generation tidal energy plants
based on the principle of kiting

TIDALKITETM
Powered by Nature



Symphony

Wave Power

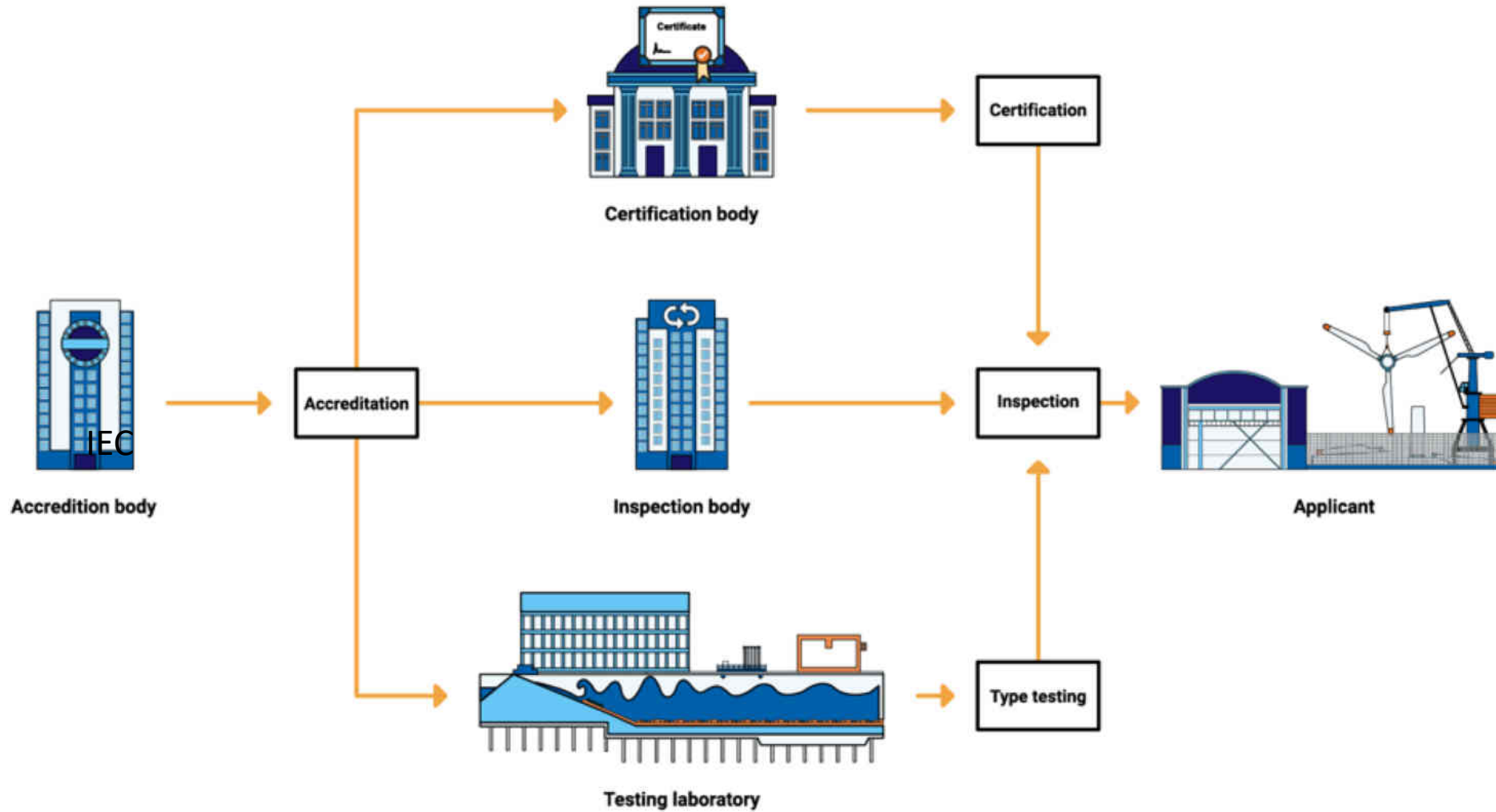
Samenvatting

- Klimaatmitigatie + klimaatadaptatie
 - Getijdenenergie in sluizen, dammen en keringen (460+ locaties wereldwijd)
 - Golfenergie in golfbrekers van havens
- Autonome toepassingen
 - Powering “Offshore data hubs”
 - Powering aquaculture
- Multi-source offshore energy farms
 - Combinatie met drijvende zon, golfenergie of getijenergie met vliegers

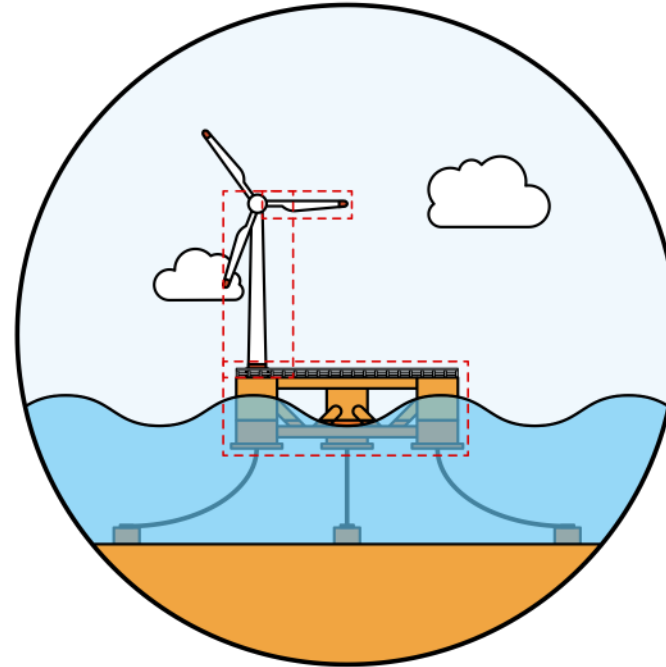
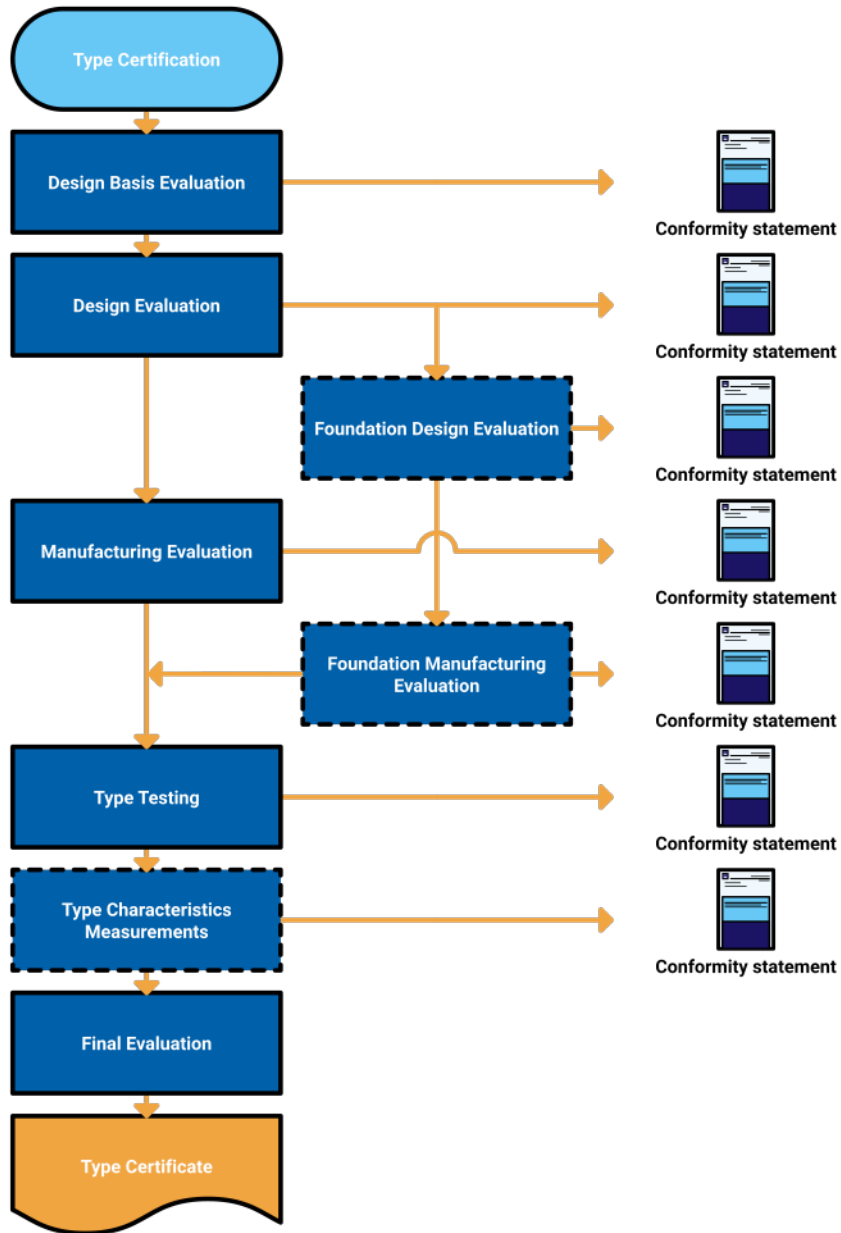
Uitdagingen van de sector

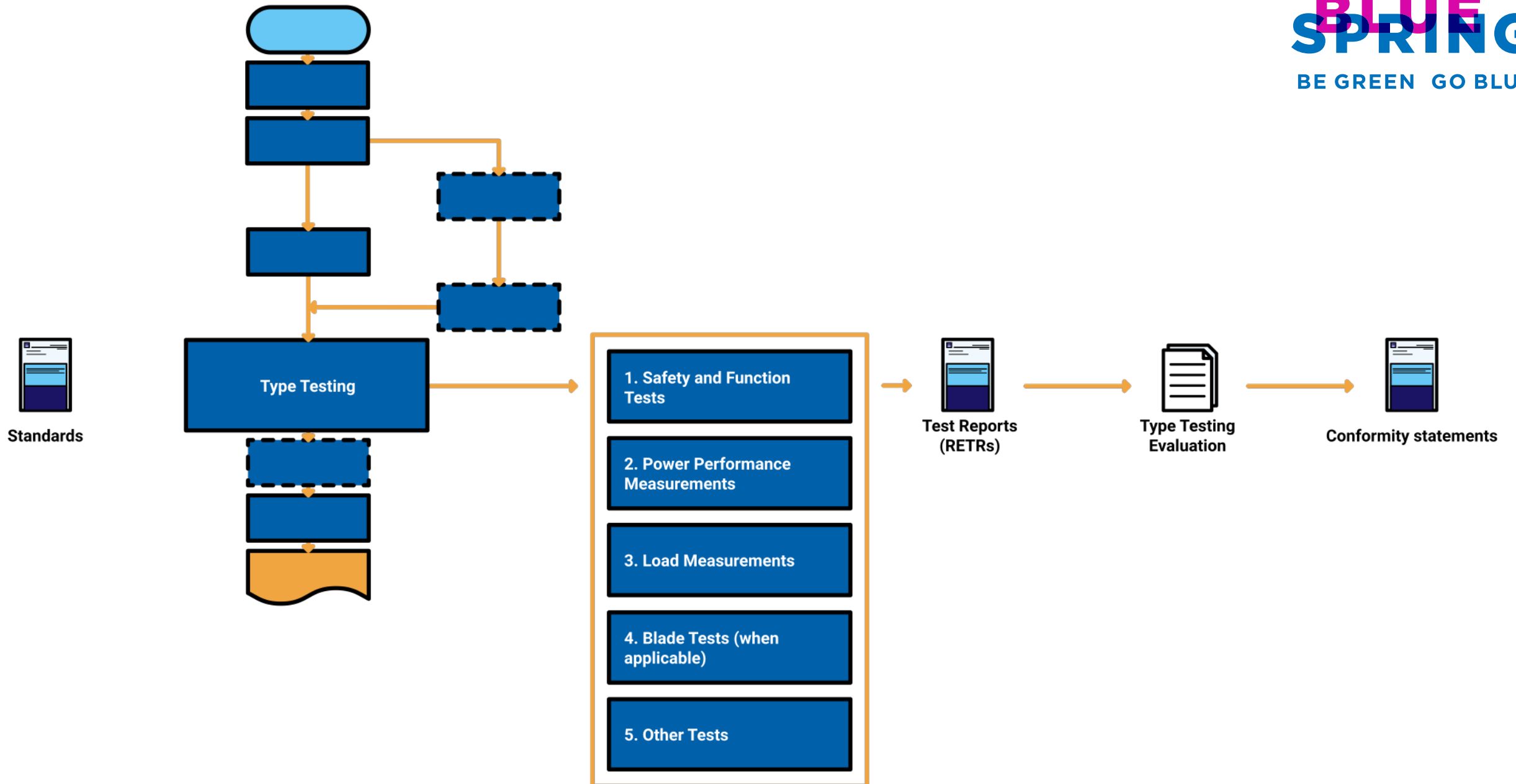
- Lagere CAPEX en OPEX
- Vergroten van betrouwbaarheid
- Prestatiegaranties
- Uitdagende locaties
- Complexe vergunningverlening
- Gebrek aan (voldoende) terugleveringvergoeding
- Falen van technologie, faillissementen
- Lange ontwikkelingstijd (10 jaar +)

Certificering




--- Optional





Onderwijs & training



Interested? Send an
email to:

encore@deftiq.com

Online E-learning

EWA
Dutch
Energy from
Water
Association



www.energieuitwater.nl

EWA Doelenstellingen 2022-2024

1. Positionering van de sector
2. Verbeteren van condities voor Nederlandse EuW innovaties
3. Koppelkansen voor de sector
4. Routekaart voor energie uit water
5. Kennis delen over energie uit water
6. Kennisleemtes
7. Netwerken: OOE, NVDE, DMEC, NWP, IRO
8. Actualiteit
9. Verbreden draagvlak EWA

Voordelen lidmaatschap

1. Zichtbaarheid van je bedrijf bij de doelgroep van ontwikkelaars (20 leden, 80 directe stakeholders, 300+ LinkedIn volgers)
2. Kansen voor nieuwe samenwerkingen
3. Inbrengen van belangen
4. Regelmatige informatie voorziening per email over actualiteiten, dossiers, marktkansen
5. Exclusieve informatie alleen voor leden o.g.v. overheidsdossiers en events
6. Regelmatige bijeenkomsten (ALV) en online meetings op thema's

Dank voor uw aandacht



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