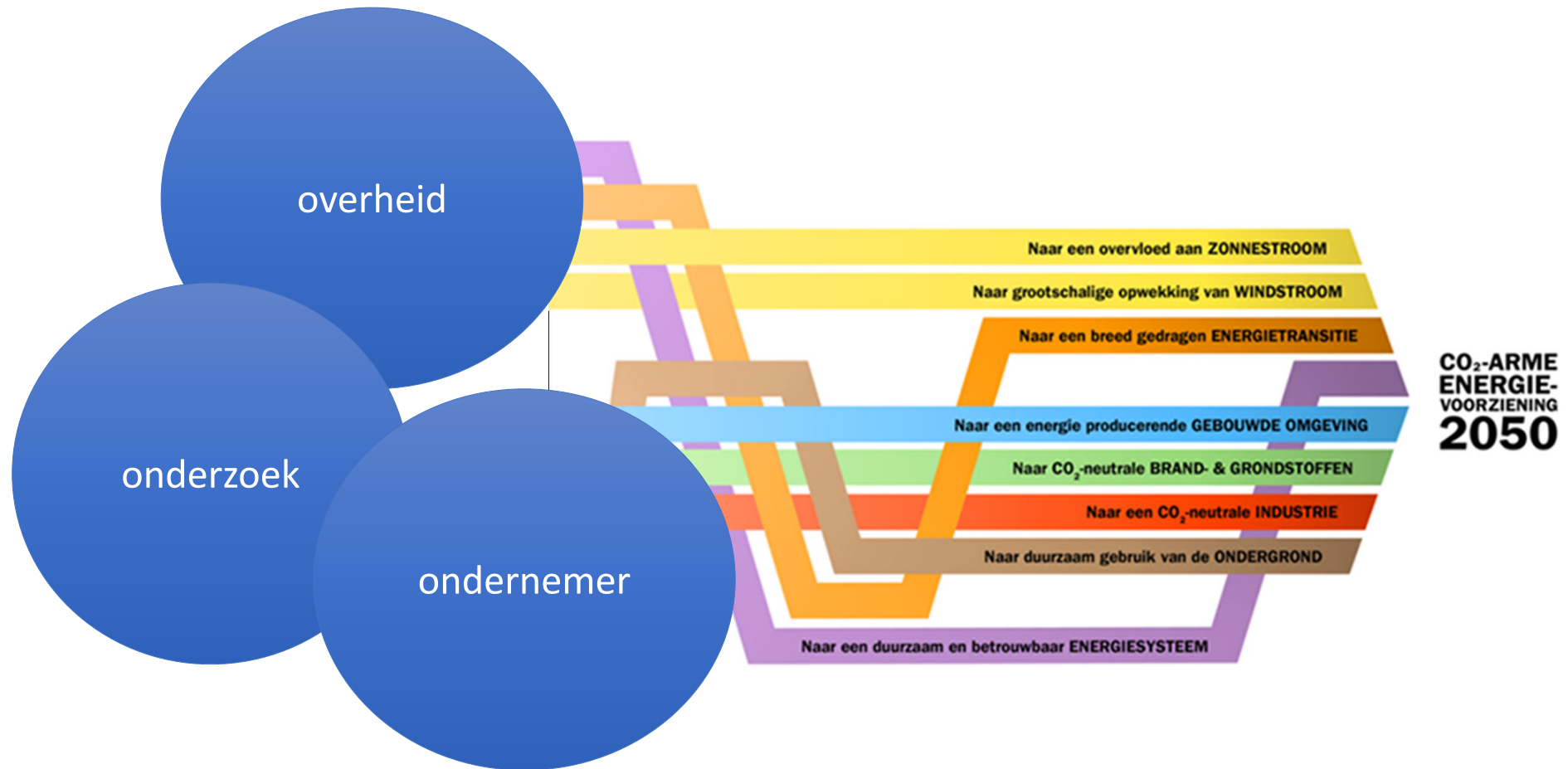
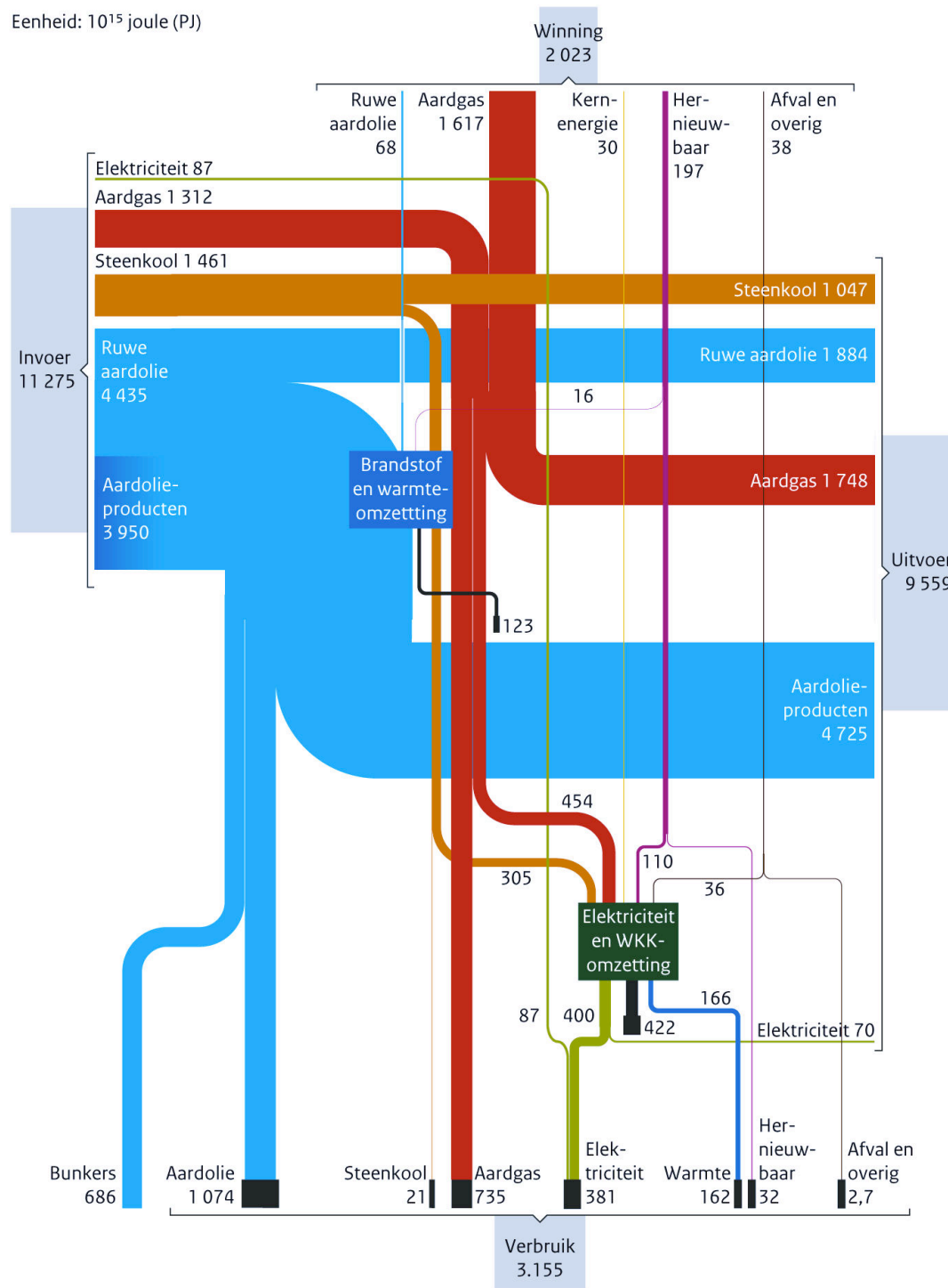


Symphony Wave Power “wave to gas conversion”.



Energiestromen, 2016**

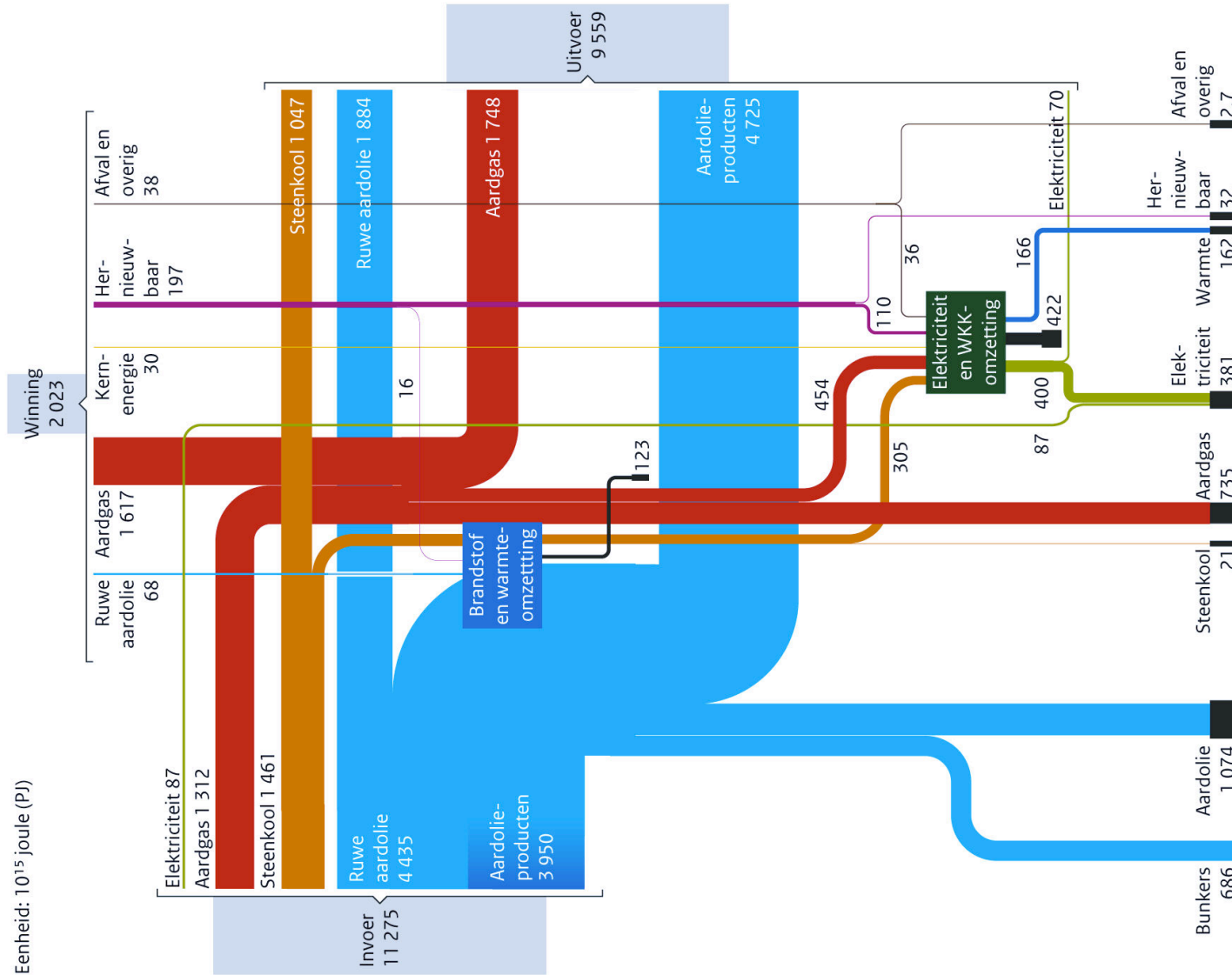
Eenheid: 10¹⁵ joule (PJ)



Energy and commodity flow NL 2016

Energiestromen, 2016**

Eenheid: 10^{15} joule (PJ)



Elektriciteit
413 PJ =
114 mio MWh

Gas
735 PJ =
204 mio MWh

Olie
1500 PJ =
417mio MWh

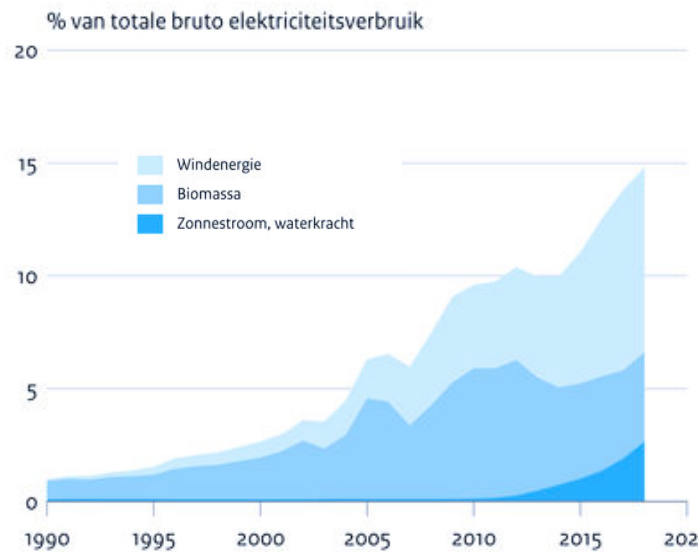
Totaal
725 mio MWh

after efficiency etc 700 mio MWh

Energie uit zon wind en water

Huidige situatie

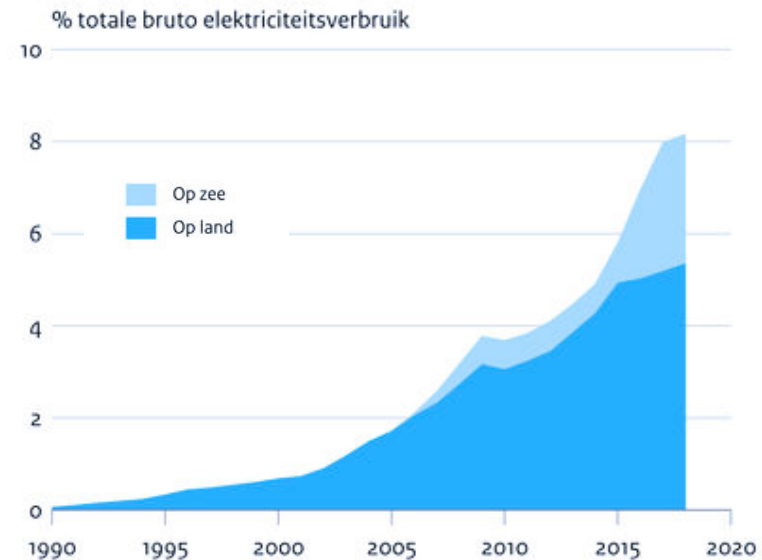
Productie hernieuwbare elektriciteit



Bron: CBS

18 mio MWh

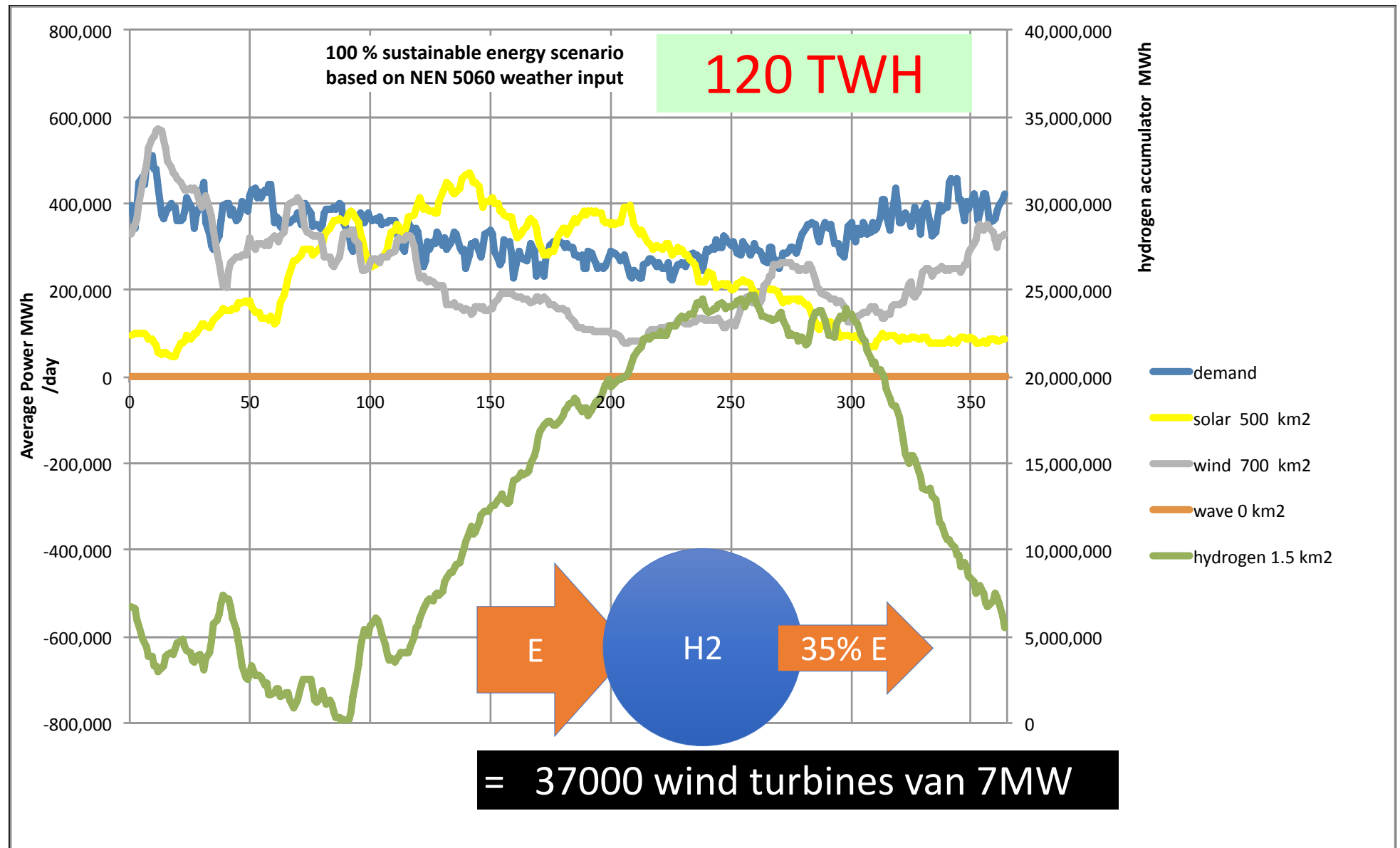
Elektriciteitsproductie uit windenergie



Bron: CBS

10 mio MWh

Effects of the yearly season for electrical energy supply



P2E

to

P2Gas

120 TWh

=

500 km² zon

700km² (x30)

37000

windturbines

7MW

0 km²

Wave energy
pointabsorber

120 TWh

=

250 km² zon

250 km² (x30)

13000

windturbines

7MW

7 km² (x100)

Wave energy
pointabsorber

320TWh

=

250 km² zon

250m² (x30)

13000

windturbines

7MW

25 km² (x100)

Wave energy
pointabsorber

Development of Symphony Wave Power



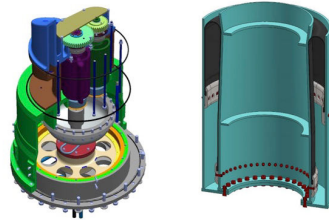
Archimedes wave swing
In Portugal

2004

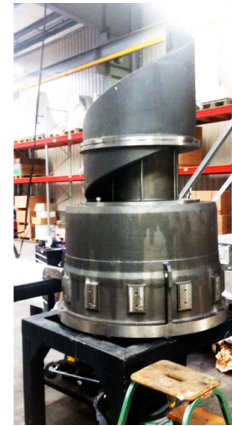


2014

R&D and building of the
Turbine and Role membrane



2017



Assembly and
functionality test
Turbine + control

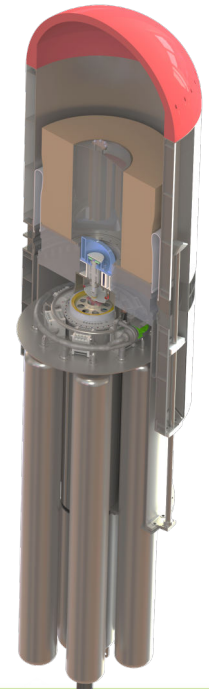
2018

2020



OCEAN GOING
@ MW LEVEL

NORTH SEA
HYDROGEN
UNIT



ANTONIUS

KREBER
PROCESS EQUIPMENT
Tailored to your desires

Van Oord
Marine ingenuity

IMC VUYK

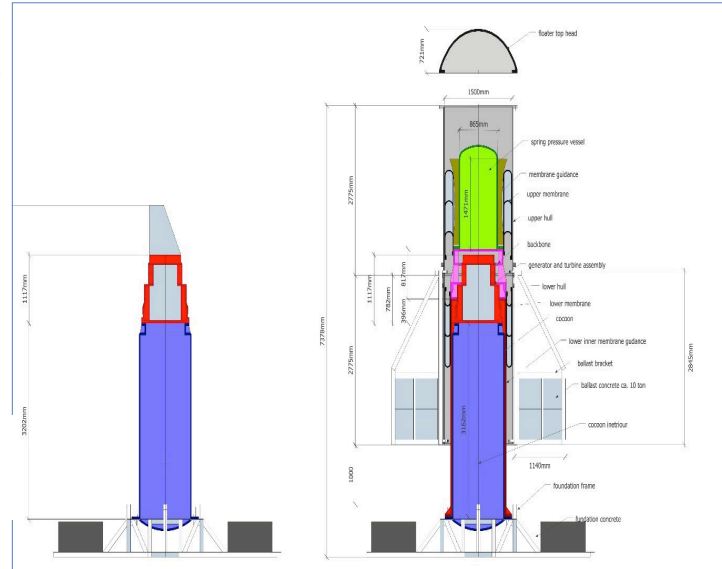
DMEC

holland
university of
applied sciences

TEAMWORK
TECHNOLOGY

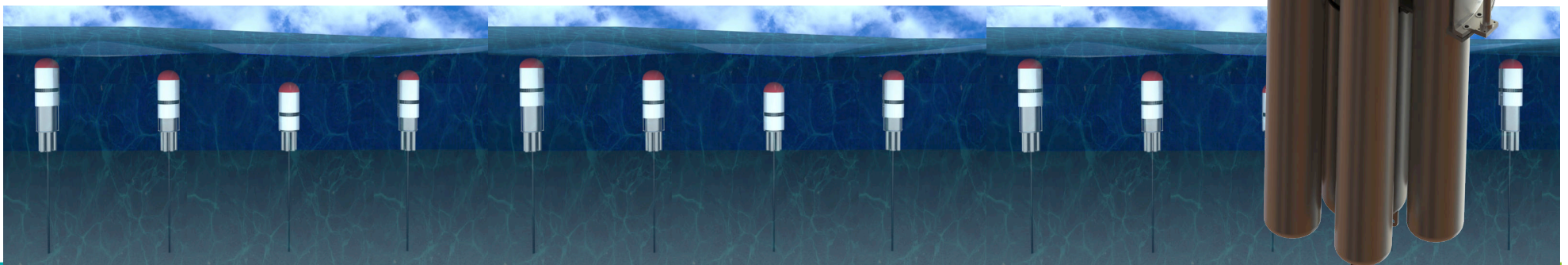
TU Delft

Provincie
Noord-Holland

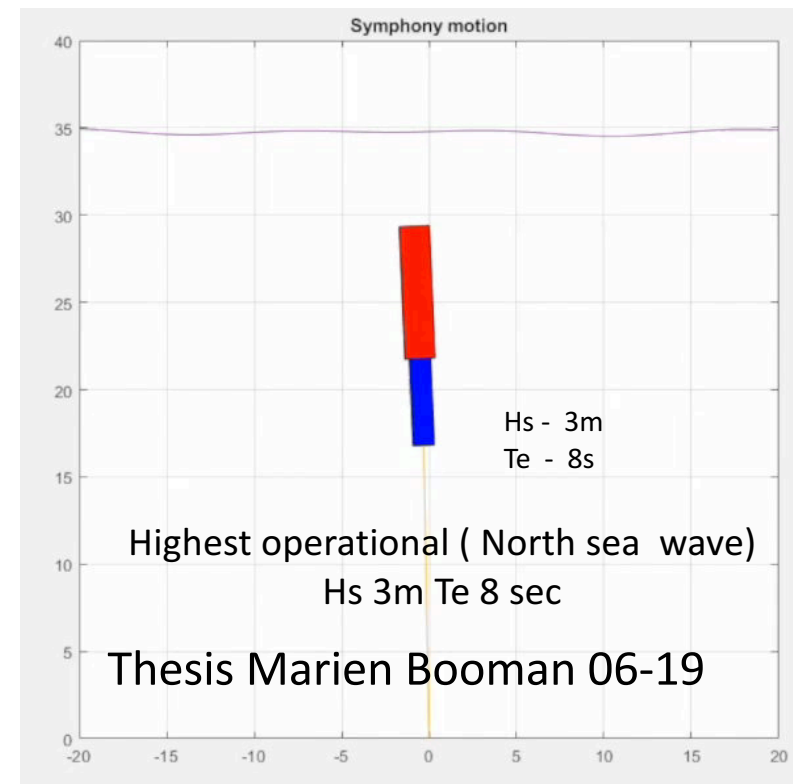
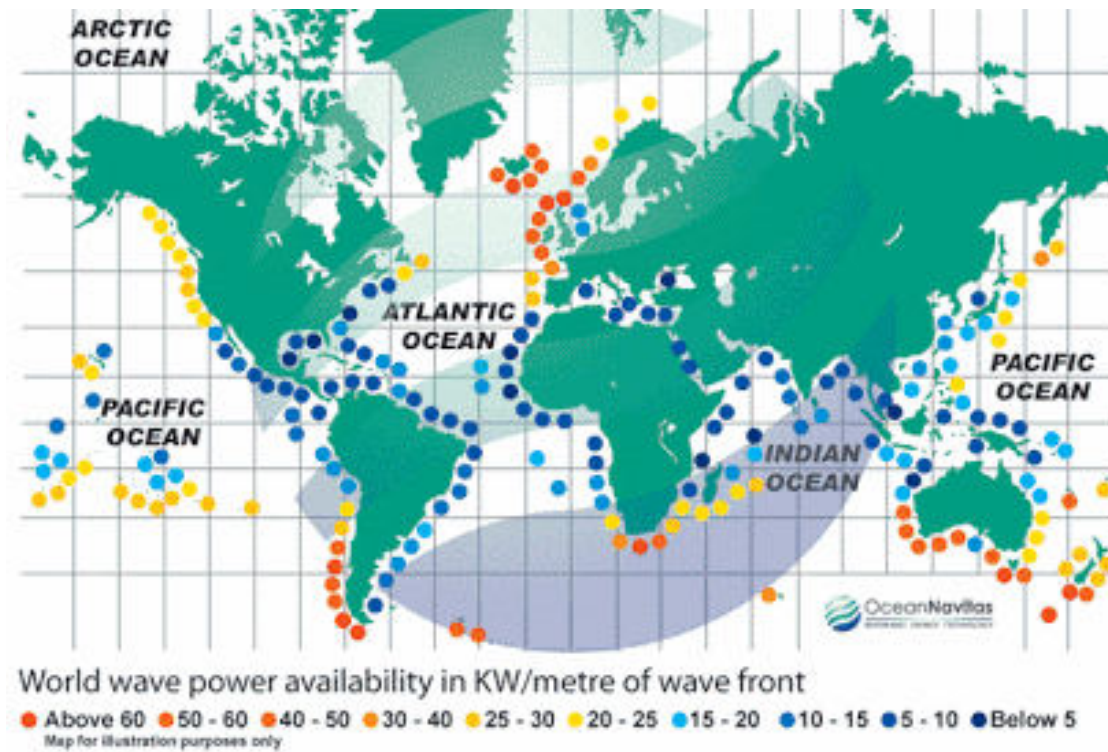
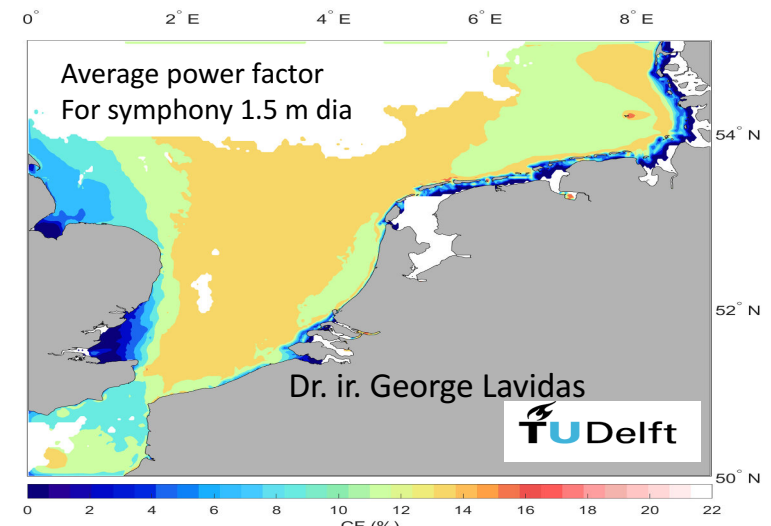


Symphony Wave Power “wave to gas conversion”.

1. No need for E-grid.
2. De-risked design
 1. Single point mooring
 2. “Easy” to install
 3. “Easy” to maintain
3. Fast roll-out fast realization.
4. Possible in remote area's.
5. Rating single unit up to 1 MW.
6. Special design for North-Sea conditions. (LARGER DIAMETER)
7. High survivability at energetic seas.
8. START WITH niche markets (OFFGRID SPECIAL FEATURES)



Area's to be explored



Symphony Wave Power,
amongst others:
“wave to gas conversion”.



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TerraTechnica Kennisonontwikkeling



Innovatie, Vaardigheden, Ondernemerschap



2 july 2019 at OPIN Event