NVDE
NEDERLANDSE VERENIGING DUURZAME ENERGIE

2025 Waterbouwdag

Energie(on)afhankelijkheid

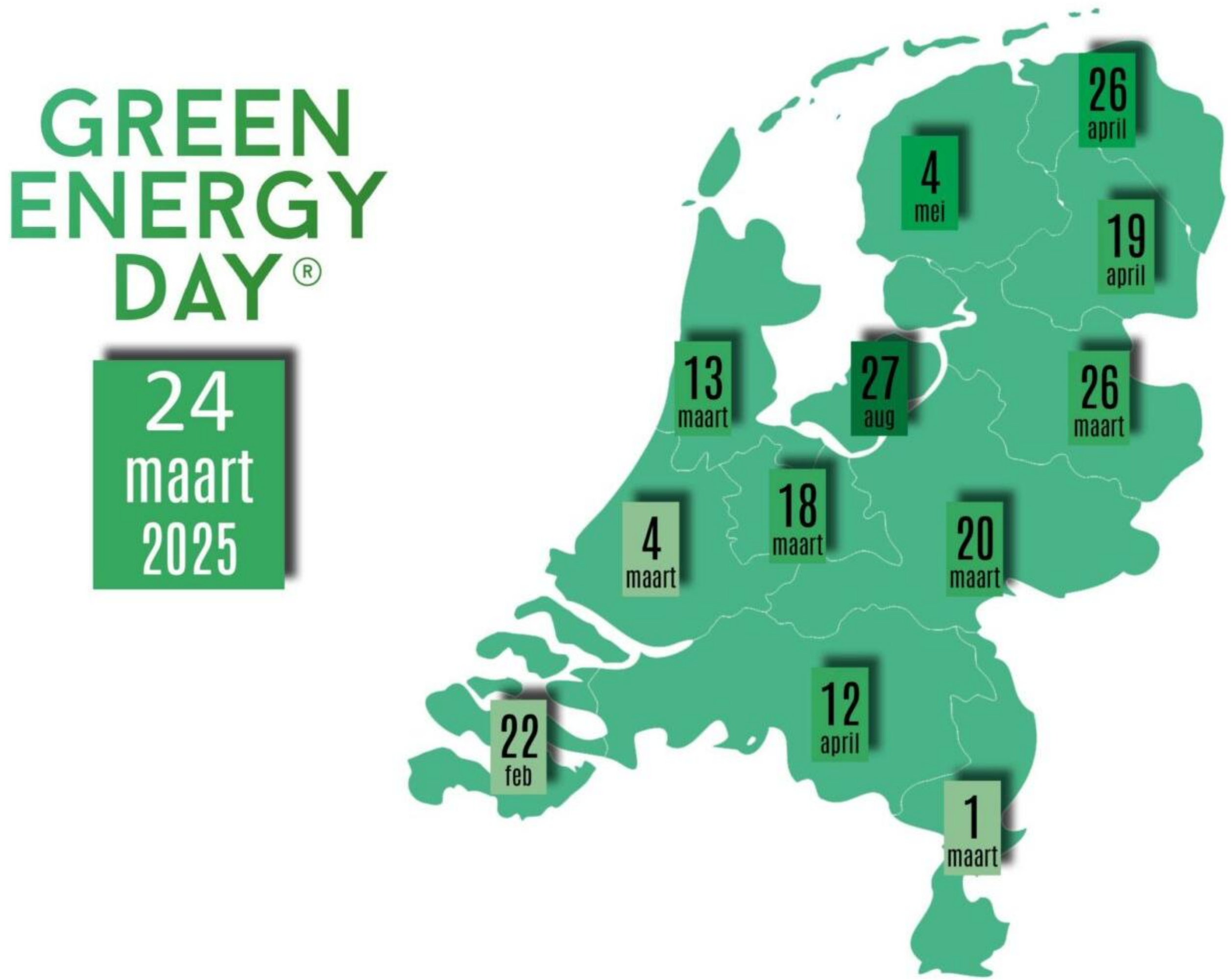
Olof van der Gaag | 9/10/25
Voorzitter NVDE

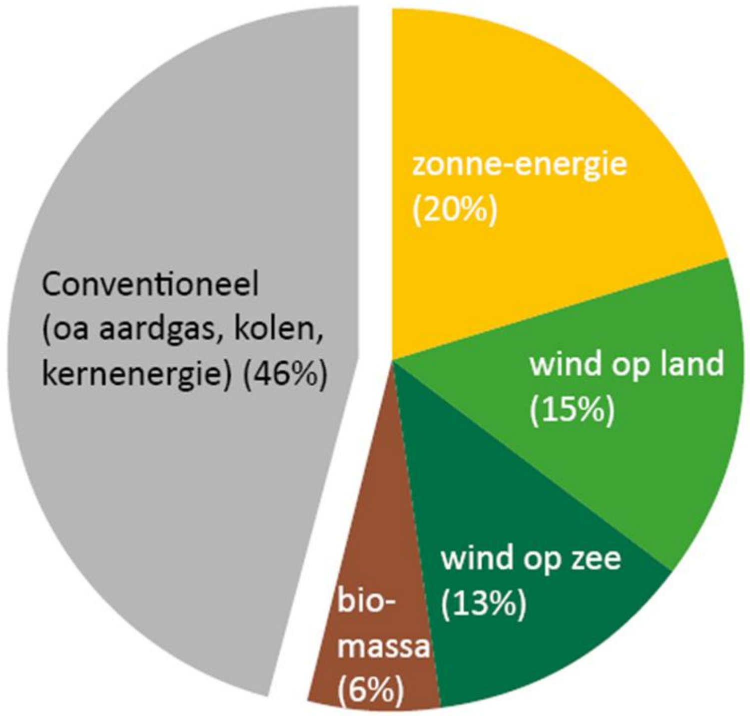
2023 = 1964

uitstoot NL

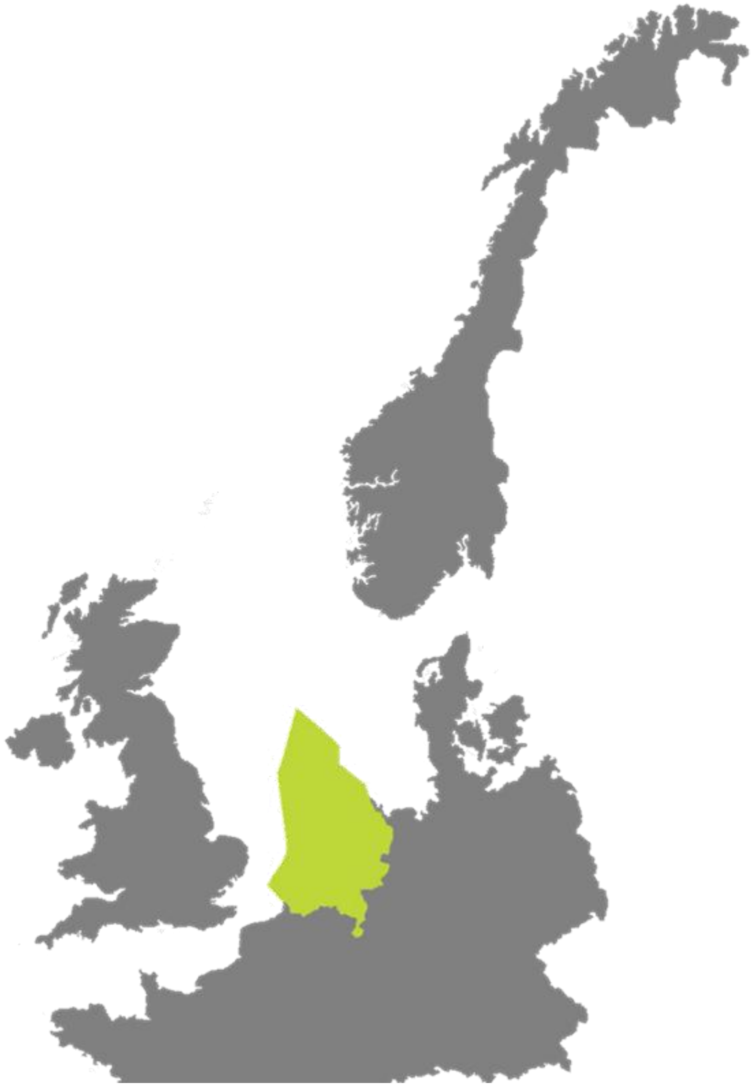
-1/3e sinds 1990

Duurzame energie x5 in 12 jaar





Noordzee



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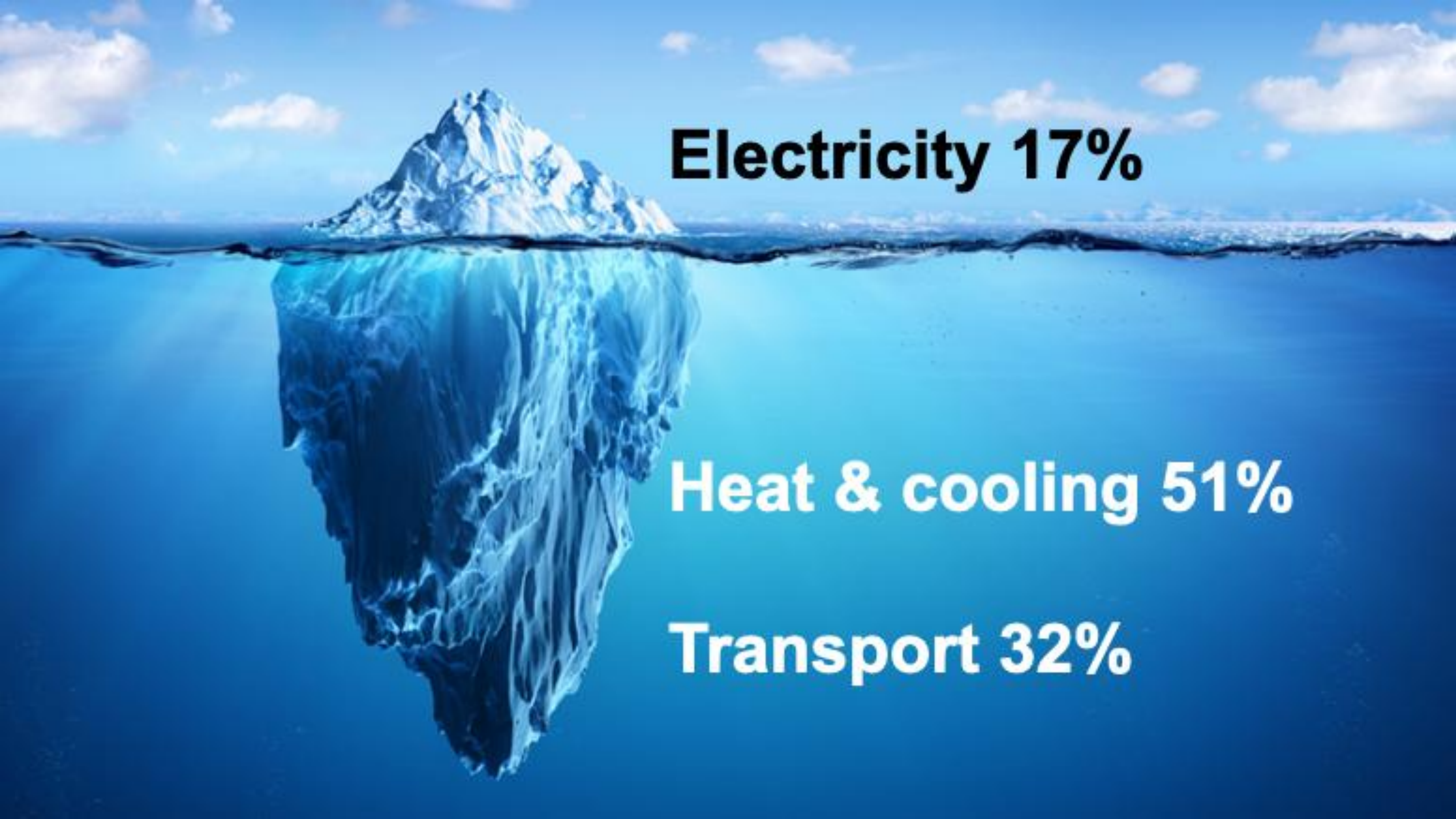
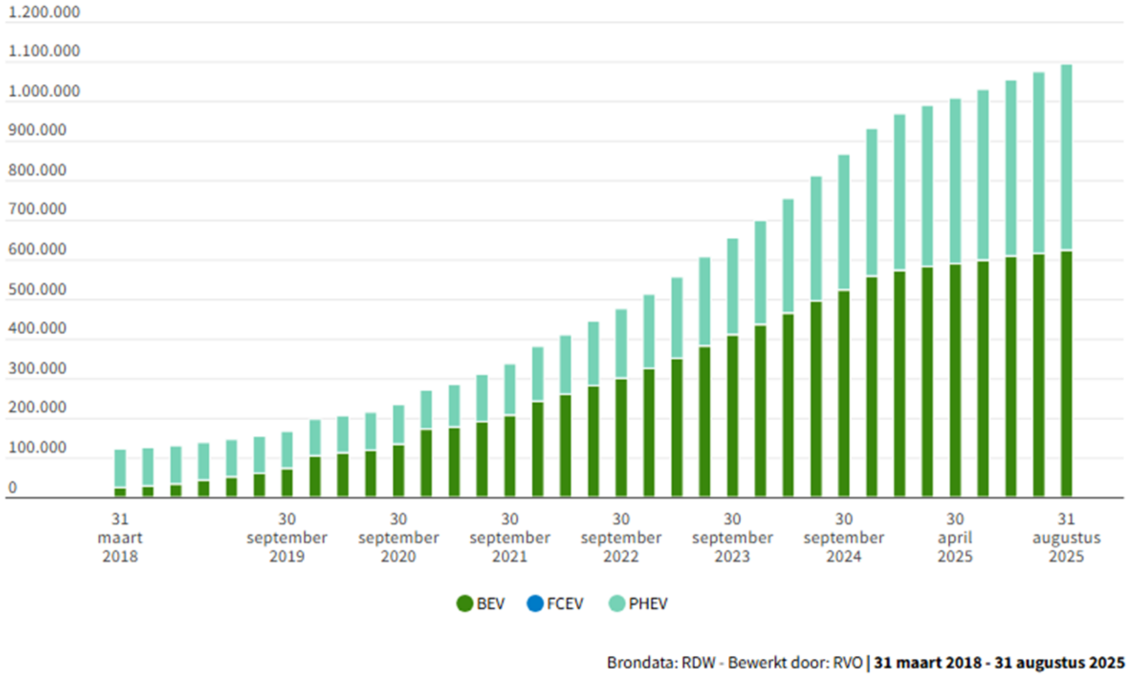
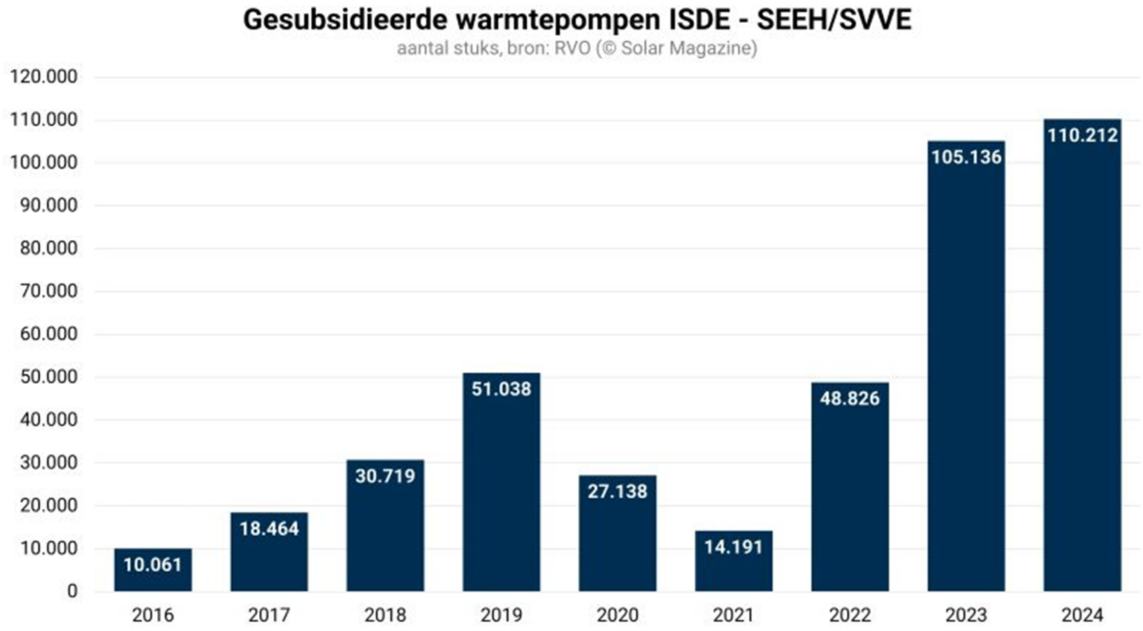
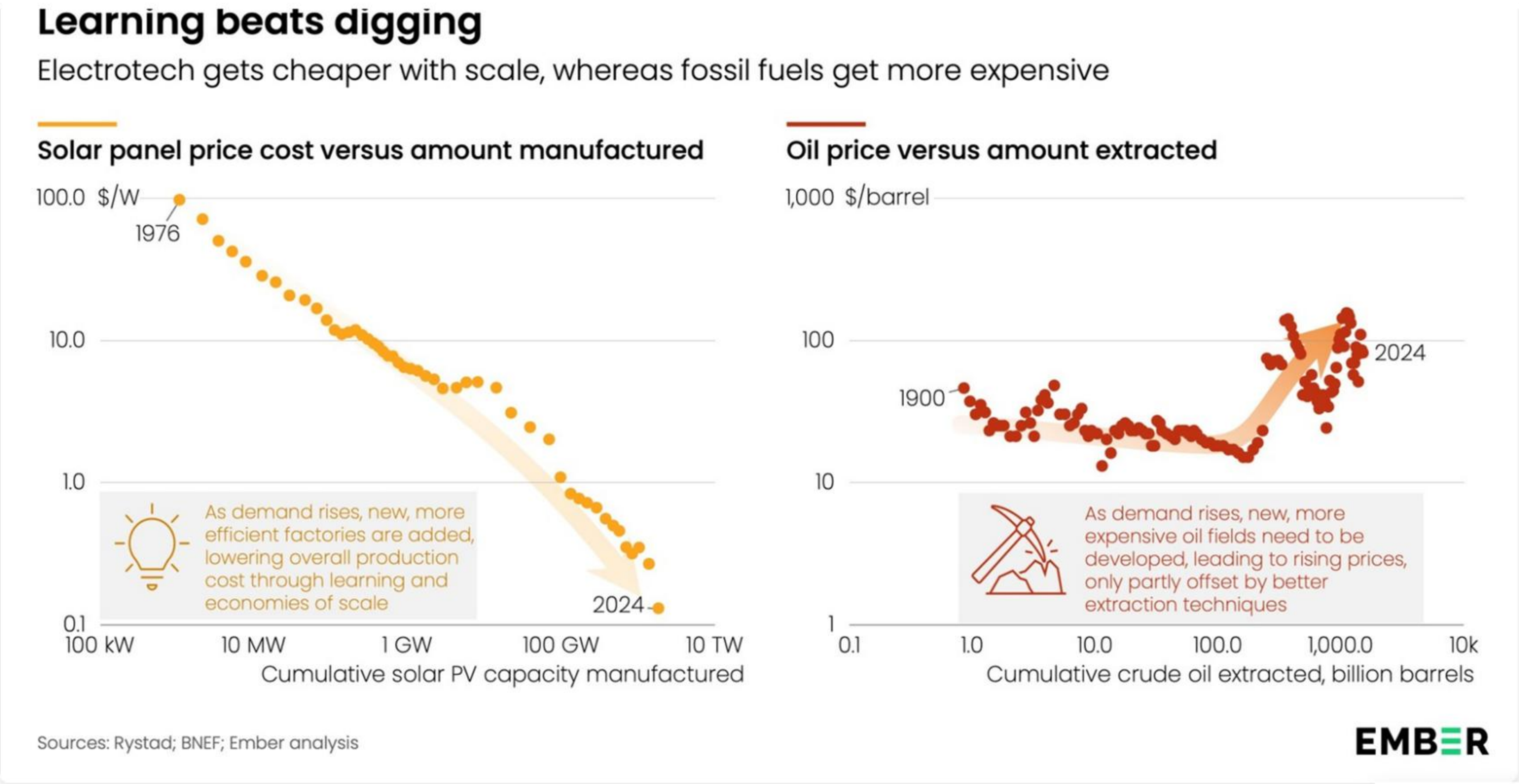

Electricity 17%
Heat & cooling 51%
Transport 32%

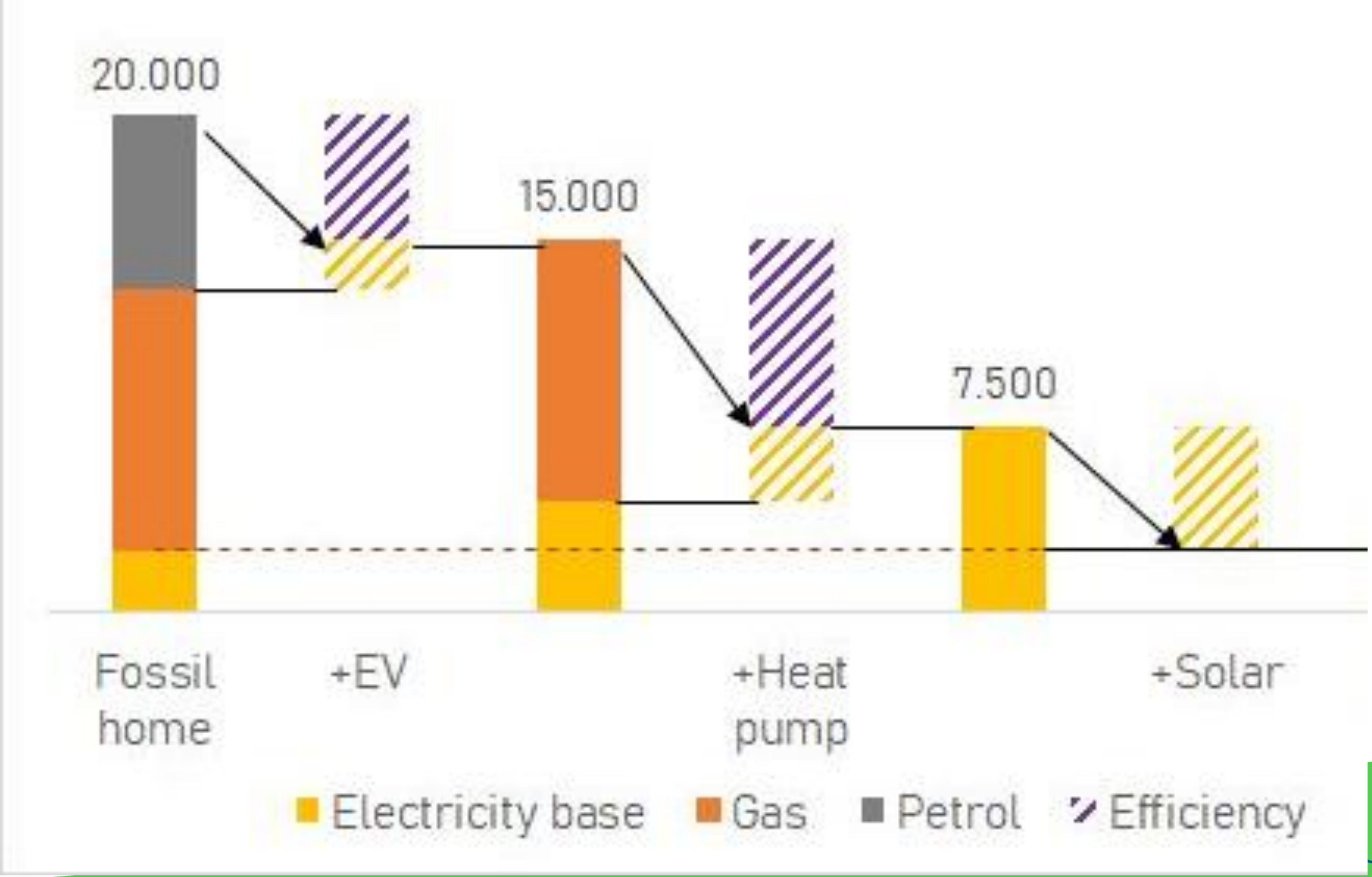
Elektrische auto's en warmtepompen






Learning beats digging
Electrotech gets cheaper with scale, whereas fossil fuels get more expensive
Solar panel price cost versus amount manufactured
100.0 $/W
1976
10.0
1.0
0.1
As demand rises, new, more efficient factories are added, lowering overall production cost through learning and economies of scale
2024
100 kW
10 MW
1 GW
100 GW
10 TW
Cumulative solar PV capacity manufactured
Oil price versus amount extracted
1,000 $/barrel
100
10
1
1900
2024
As demand rises, new, more expensive oil fields need to be developed, leading to rising prices, only partly offset by better extraction techniques
0.1
1.0
10.0
100.0
1,000.0
10k
Cumulative crude oil extracted, billion barrels
Sources: Rystad; BNEF; Ember analysis
EMBER

Efficiency!



20.000
15.000
7.500
Fossil home
+EV
+Heat pump
+Solar
Electricity base
Gas
Petrol
Efficiency

Vooruitgang

Vrijheidsenergie, oranje-groen

Bron: Factsheet Oranje-groene energie en banen, NVDE, maart 2021. Update CBS 2024, PBL 2023. Visualisatie NVDE

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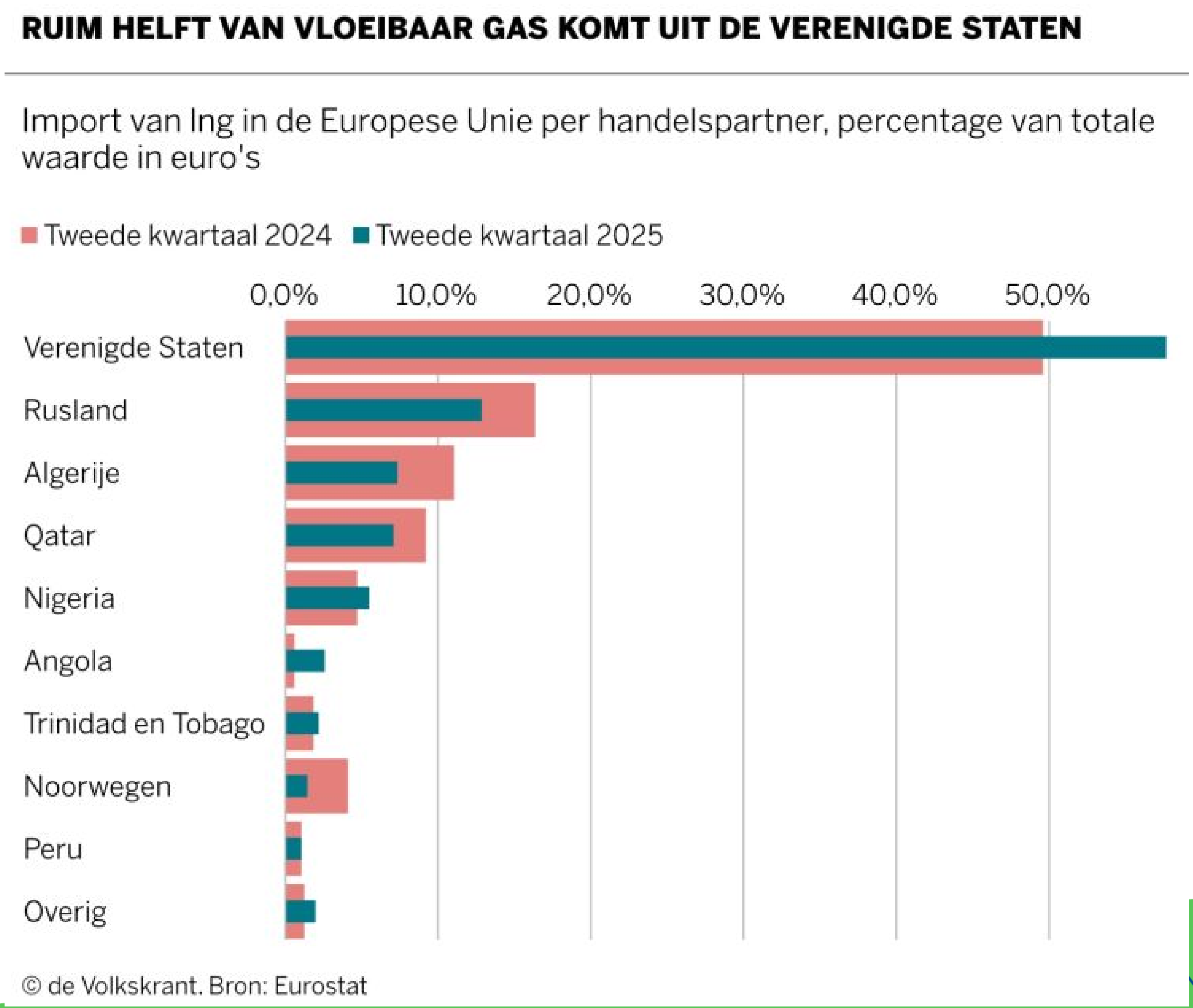
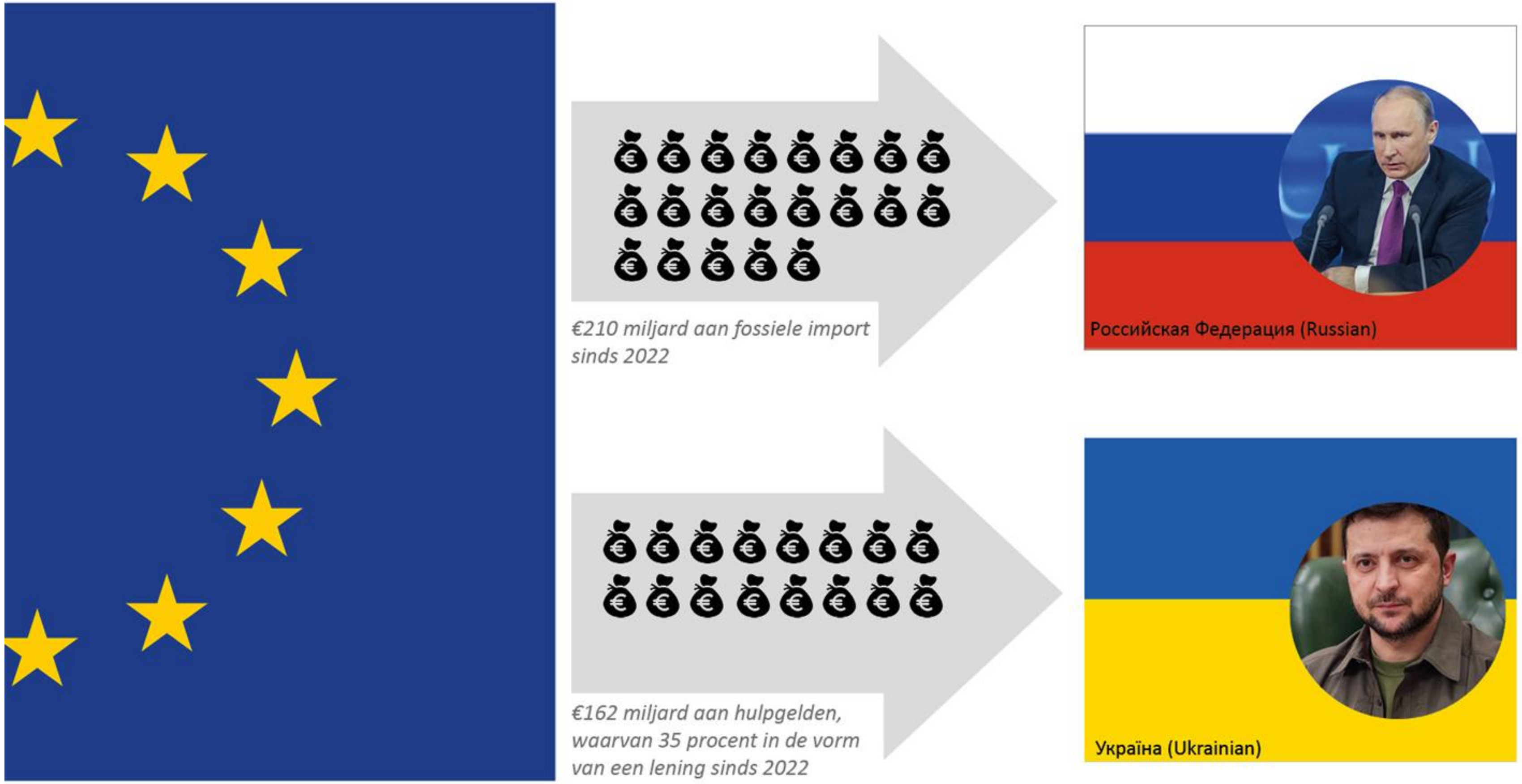
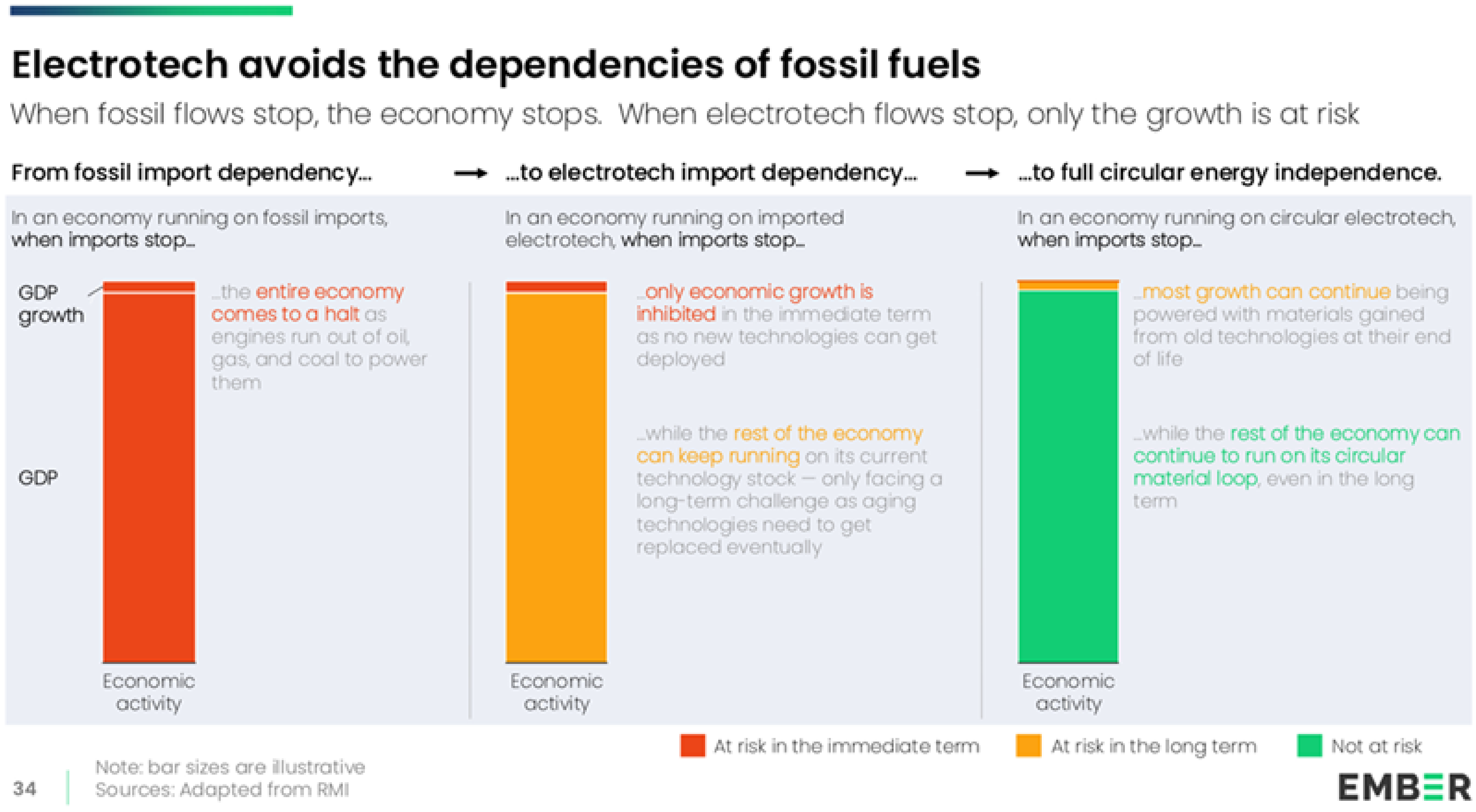

RUIM HELFT VAN VLOEIBAAR GAS KOMT UIT DE VERENIGDE STATEN
Import van lng in de Europese Unie per handelspartner, percentage van totale waarde in euro's
Tweede kwartaal 2024
Tweede kwartaal 2025
0,0%
10,0%
20,0%
30,0%
40,0%
50,0%
Verenigde Staten
Rusland
Algerije
Qatar
Nigeria
Angola
Trinidad en Tobago
Noorwegen
Peru
Overig
© de Volkskrant. Bron: Eurostat

Bestedingen van de EU aan hulp aan Oekraïne versus brandstofaankopen in Rusland



bron: EEAS - EU Assistance to Ukraine (juni 2025), CREA - Financing Putin's war: Fossil fuel imports from Russia during the invasion of Ukraine (juli 2025). Visualisatie NVDE

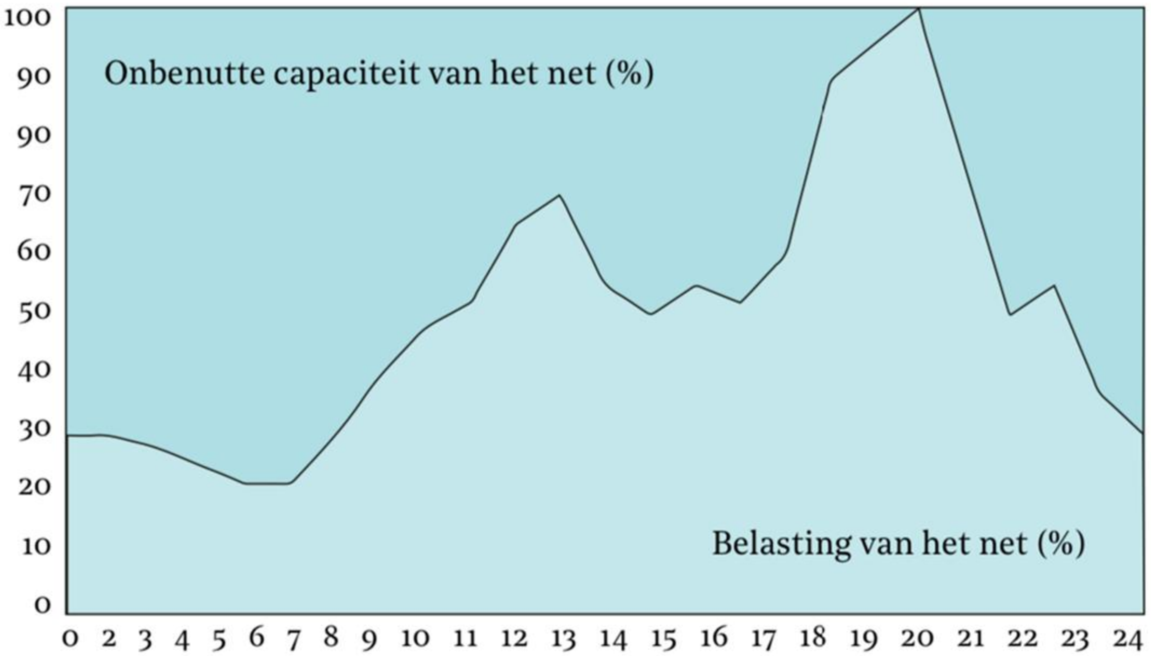
Duurzamer = onafhankelijker

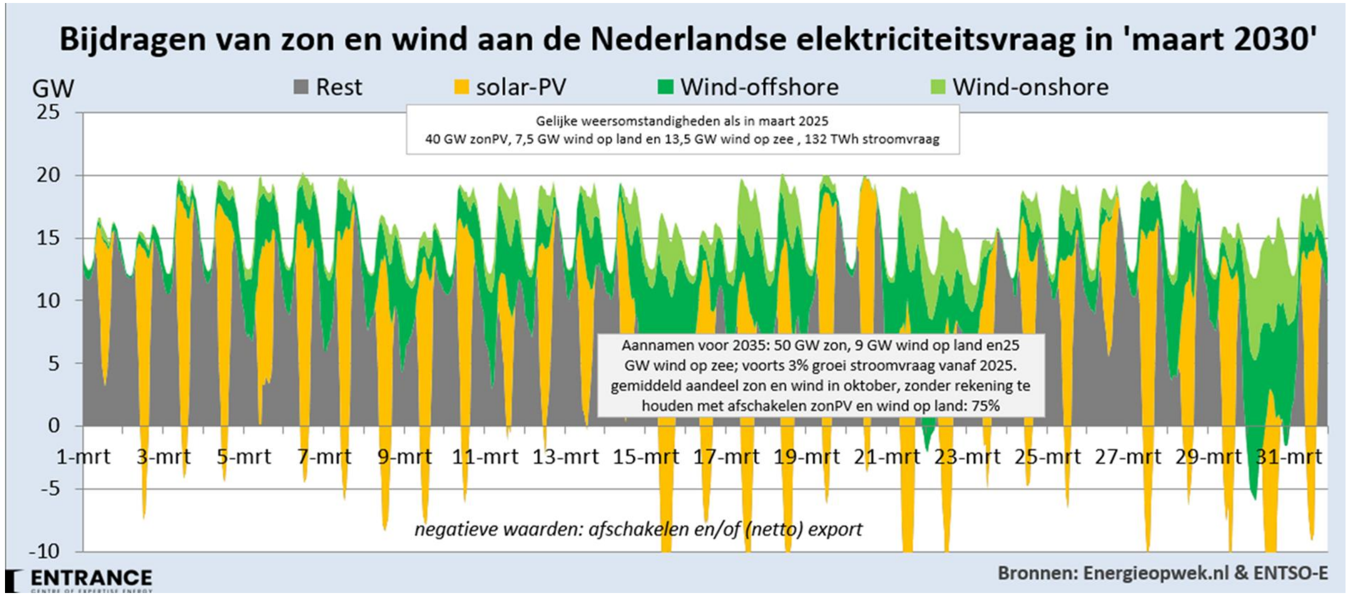


NERGIE

Flexibiliteit

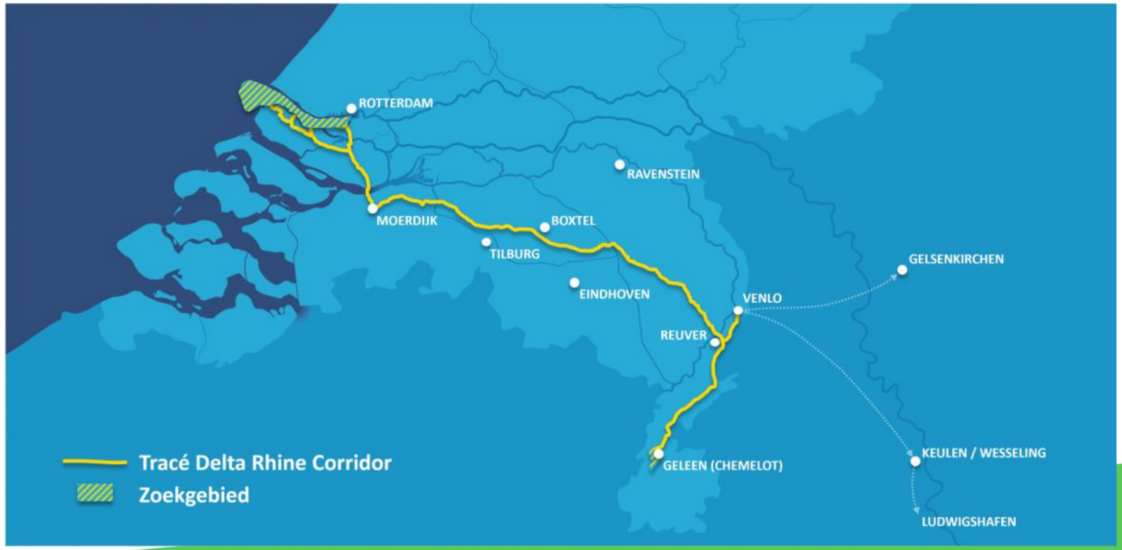
Figuur 3. Belasting van het net gedurende de dag afgezet tegen de onbenutte capaciteit.





Procedures


Door de hoge energiedichtheid zijn olie en gas makkelijk te transporteren met schepen en verborgen pijpleidingen.
De nieuwe bronnen vragen om meer oppervlakte.


ROTTERDAM
RAVENSTEIN
MOERDIJK
BOXTEL
TILBURG
GELSENKIRCHEN
EINDHOVEN
VENLO
REUVER
GELEEN (CHEMELOT)
KEULEN / WESSELING
LUDWIGSHAFEN
Tracé Delta Rhine Corridor
Zoekgebied