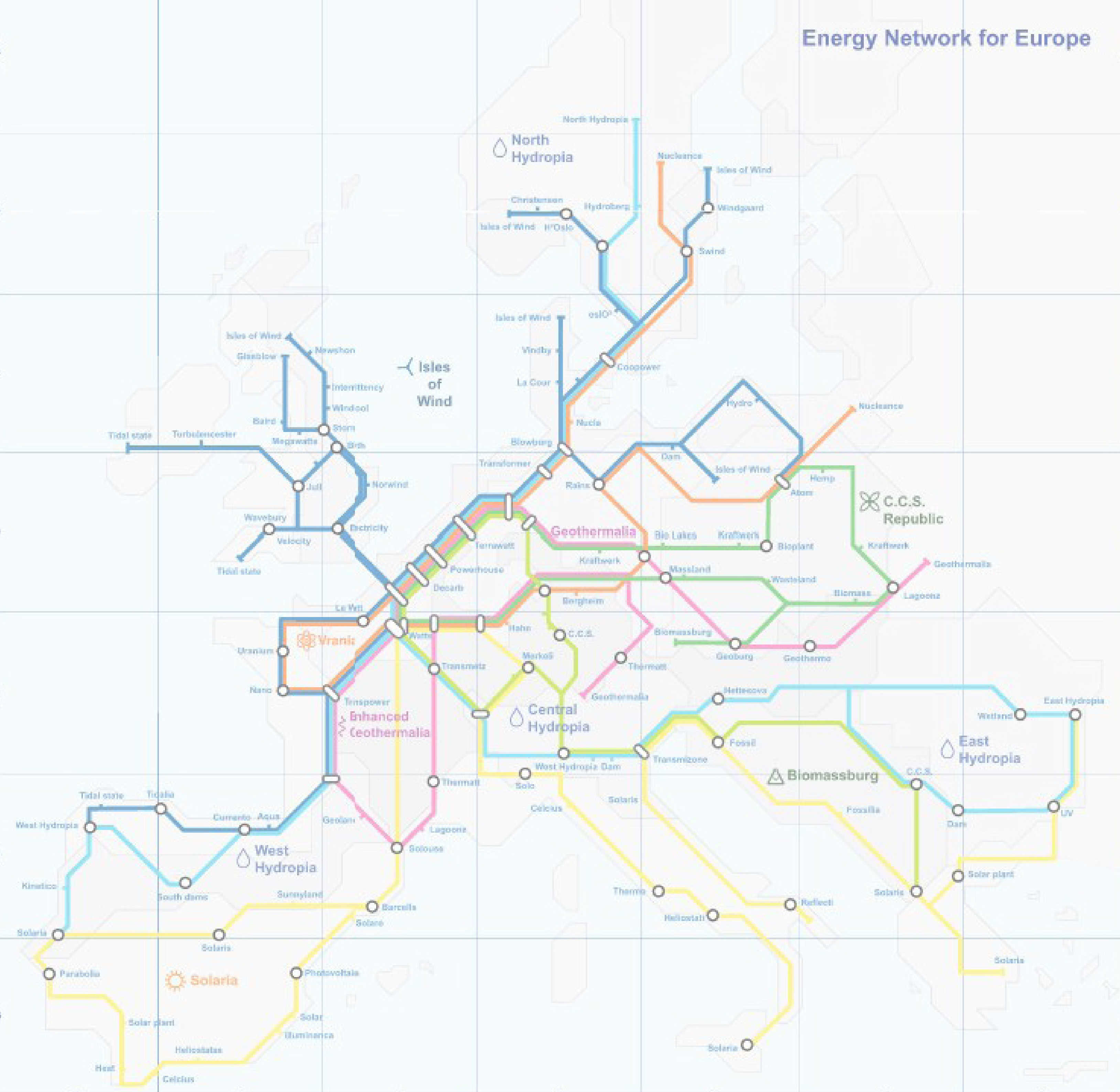
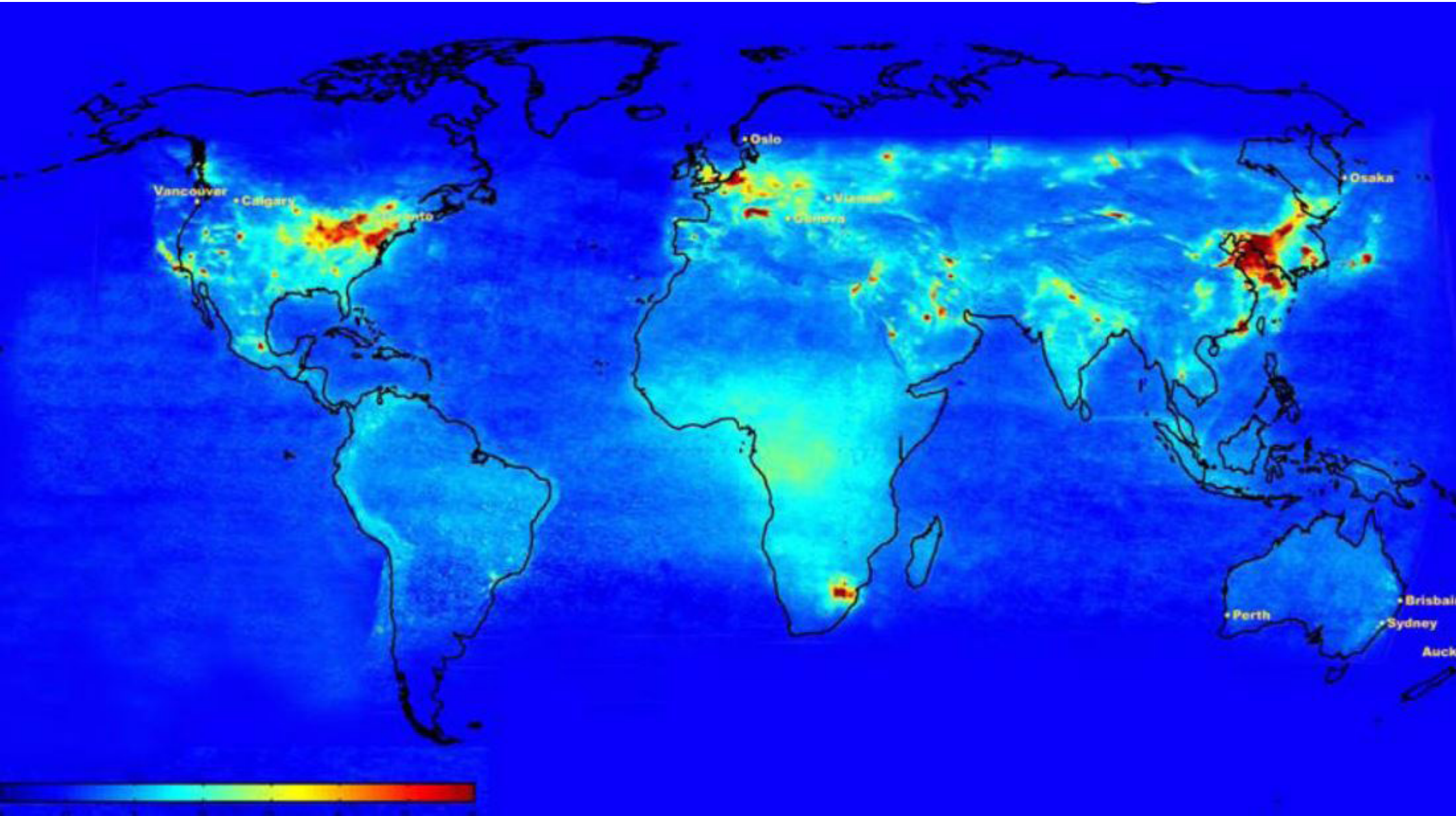


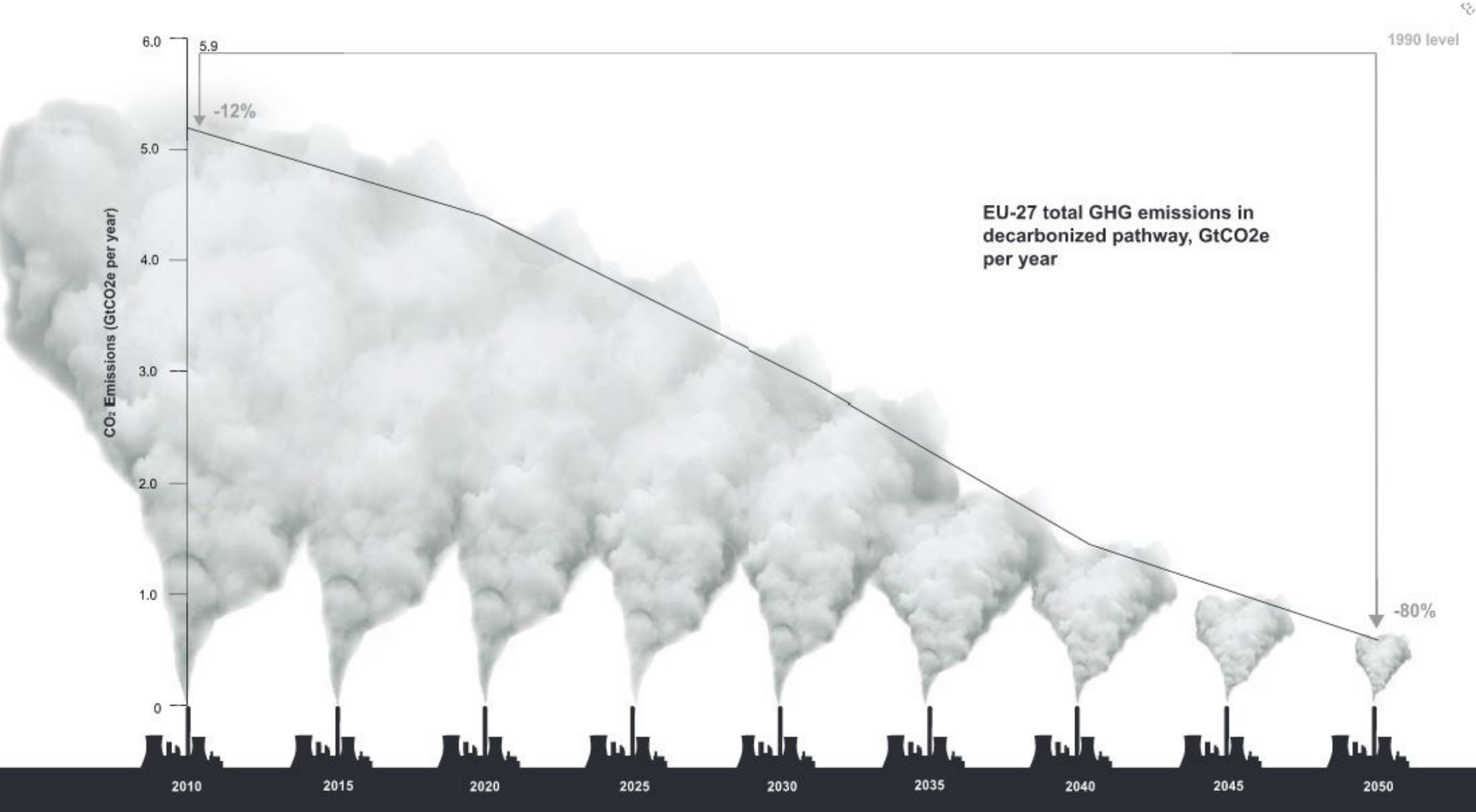
Road Map 2050

Low-Carbon Europe- OMA

María Espejo Jiménez · Victoria Casanovas Moreno-Torres

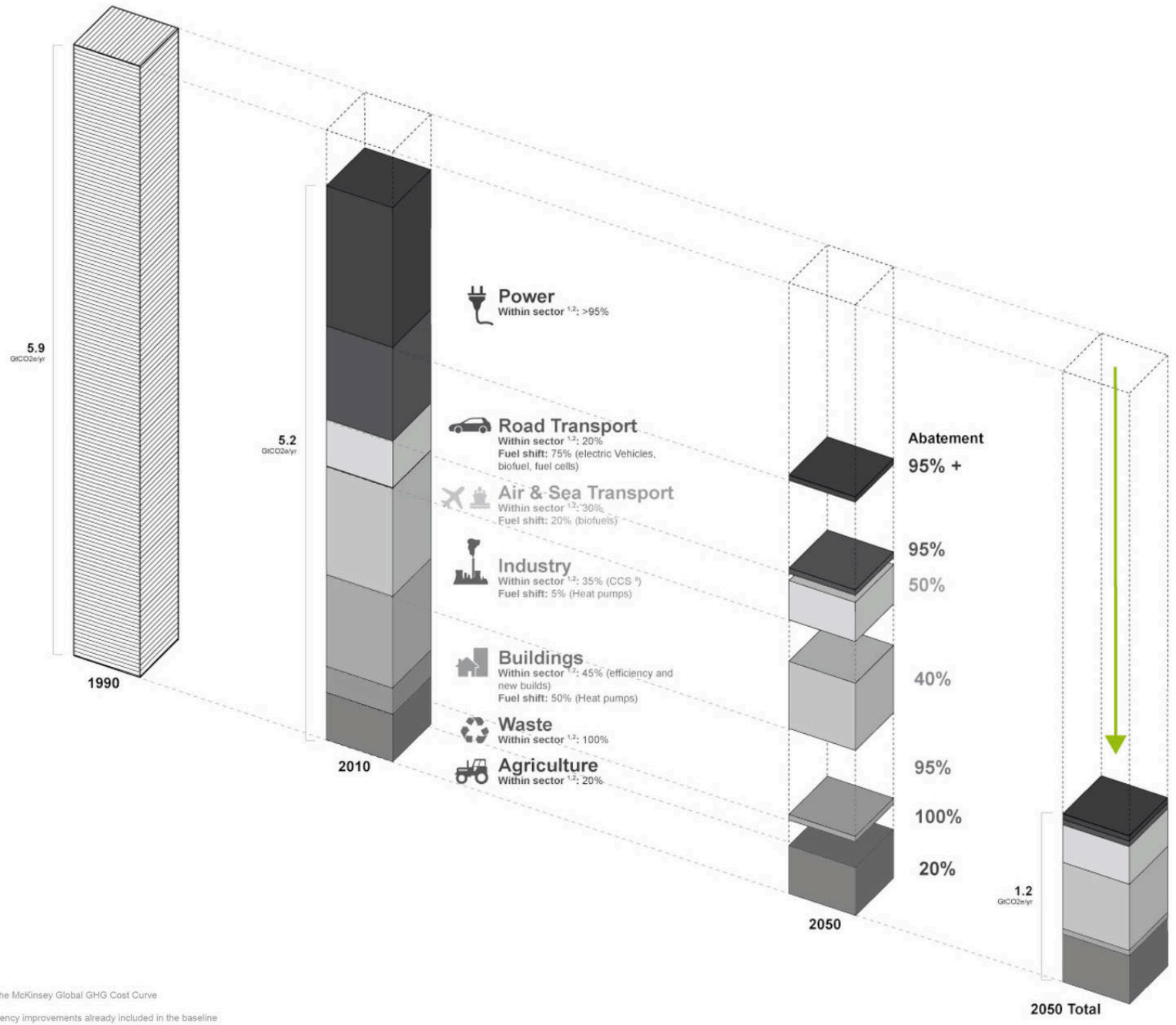

Vancouver
Calgary
Oslo
Osaka
Perth
Sydney

Objetivos


6.0
5.9
1990 level
-12%
5.0
4.0
3.0
2.0
1.0
0
CO₂ Emissions (GtCO2e per year)
EU-27 total GHG emissions in decarbonized pathway, GtCO2e per year
-80%
2010
2015
2020
2025
2030
2035
2040
2045
2050

Reducción del 80% de las emisiones de CO2

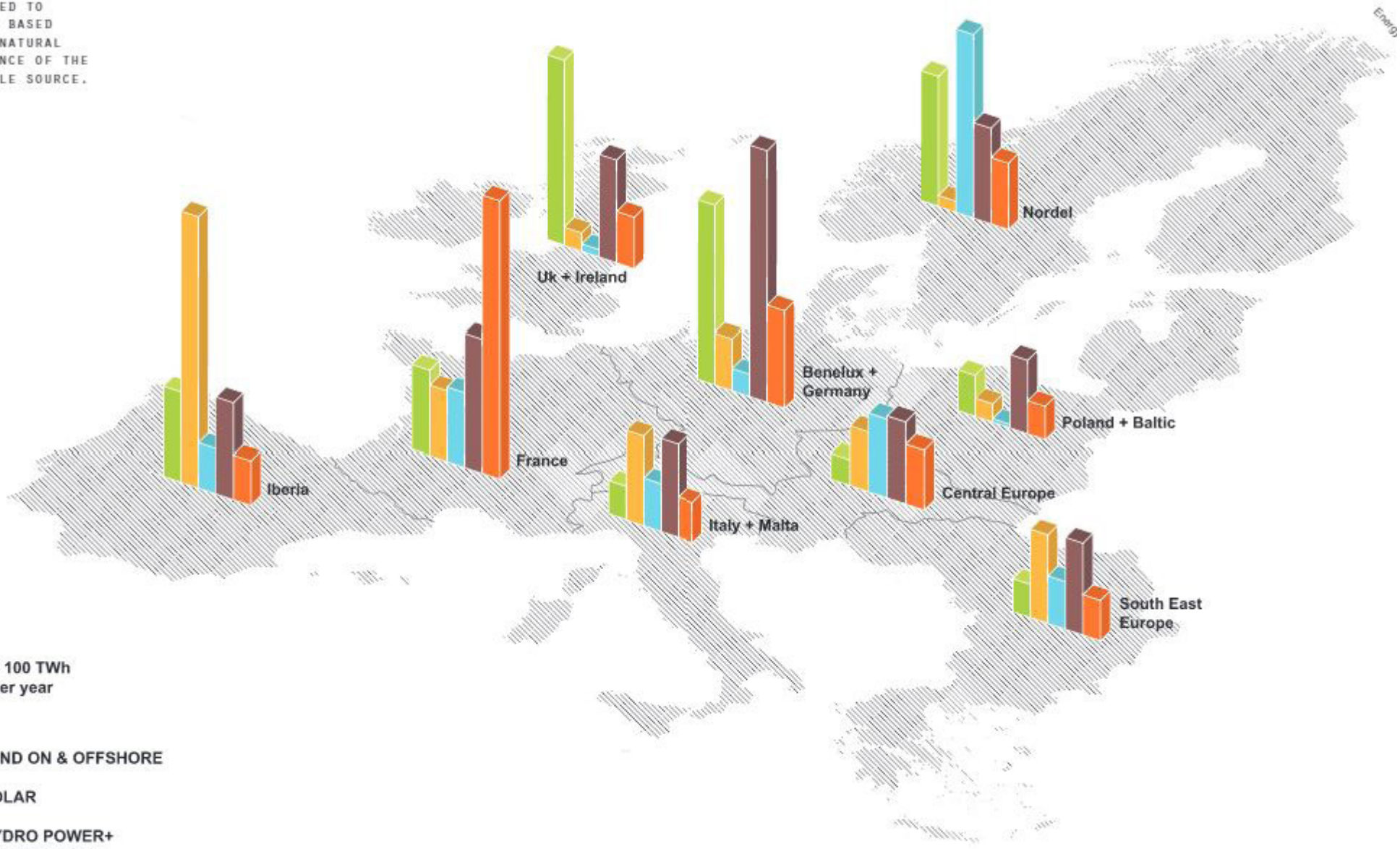
THE 80% CO2 REDUCTION OVERALL IMPLIES 90-95% REDUCTION IN POWER, ROAD TRANSPORT AND BUILDINGS. THIS COULD BE ACHIEVED BY MAXIMUM ABATEMENT WITHIN AND ACROSS SECTORS. NOTE: THAT THE MOST INFLUENTIAL SECTORS WILL BE POWER AND VEHICLE TRANSPORTATION. THIS LEVEL OF DECARBONIZATION IS DEPENDENT ON ACHIEVING AGGRESSIVE 2% YEAR ON YEAR ENERGY EFFICIENCY SAVINGS, WITHOUT WHICH THIS LEVEL OF ABATEMENT IS NOT POSSIBLE IN THIS MODEL.



1 Based on the McKinsey Global GHG Cost Curve

2 Large efficiency improvements already included in the baseline

R' :WABL.
[.CHNOLOG..S ARE
ALLOCATED TO
REGIONS BASED
ON THE NATURAL
OCCURRENCE OF THE
RENEWABLE SOURCE.




NORTH HYDROPIA
ISLES OF WIND
TIDAL STATES
GEOTHERMALIA
C.C.S.R.
(Carbon Capture & Storage Republic)
VRANIA
ENHANCED GEOTHERMALIA
EAST HYDROPIA
CENTRAL HYDROPIA
BIOMASSBURG
WEST HYDROPIA
SOLARIA
Boundaries:
Biomassburg
C.C.S.R. (Carbon Capture & Storage Republic)
Enhanced Geothermalia
Geothermalia
Hydropia
Isles of Wind
Solaria
Tidal States
Vrania
Map of
ENEROPA
Scale 1 : 20000000
100 0 100 200 300 400 500
Miles
Meridian of Greenwich


ISLES OF WIND


VRANIA

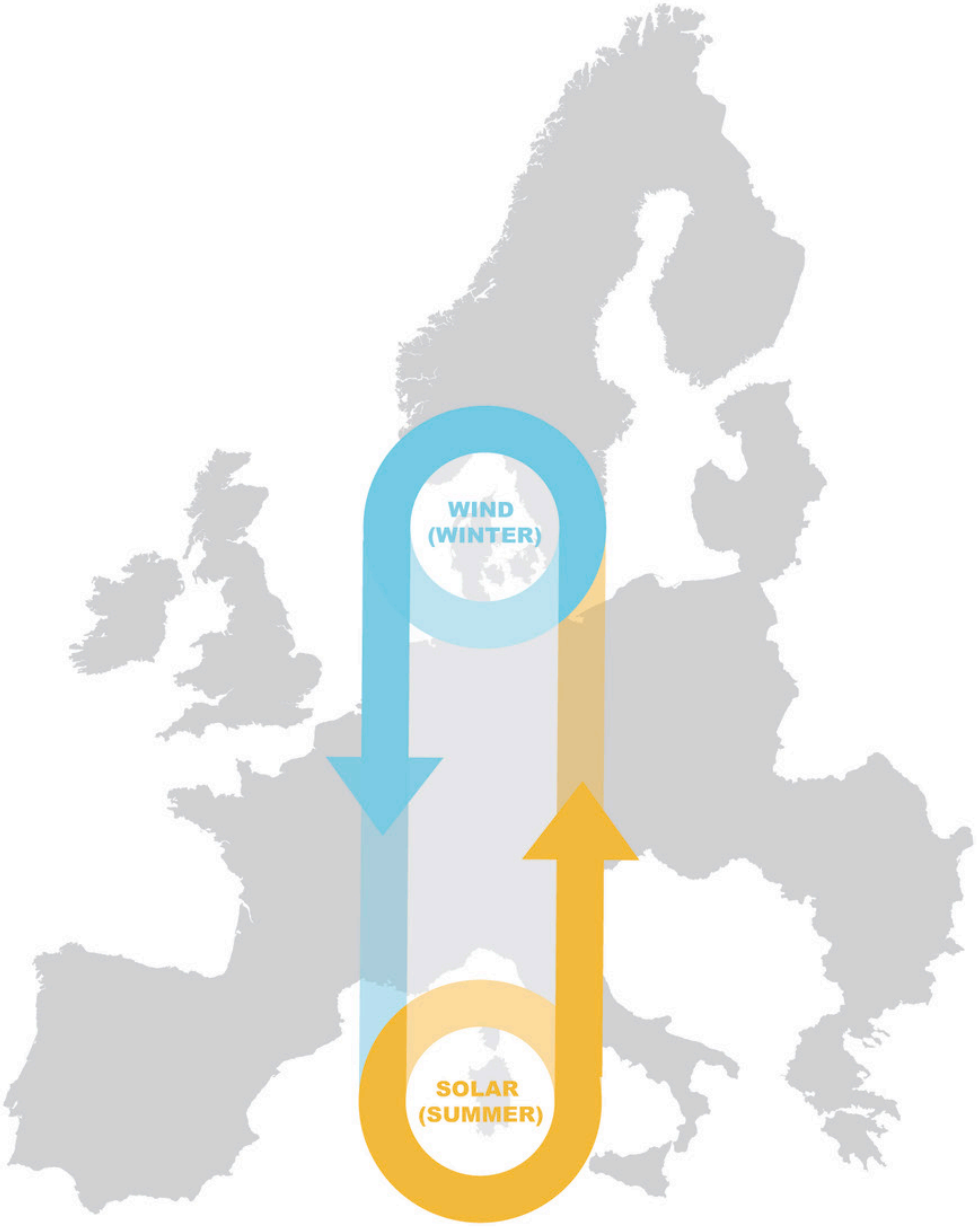

TIDAL STATES

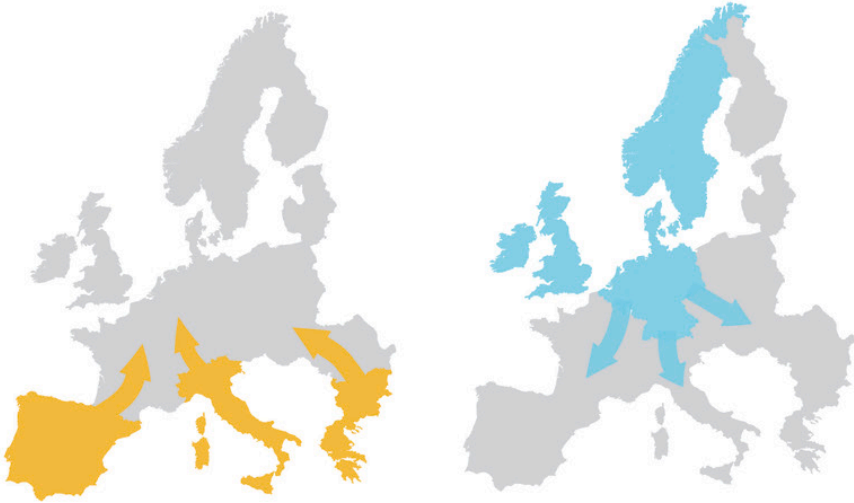

HYDROPIA


SOLARIA

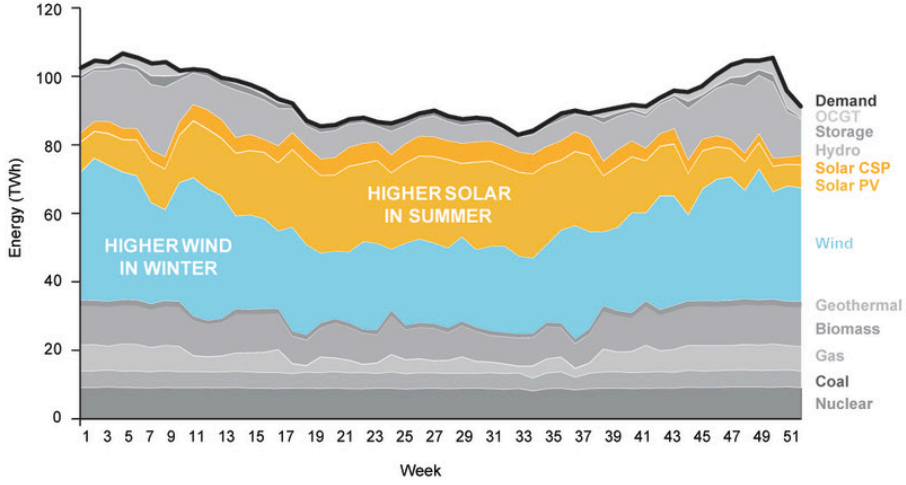

BIOMASSBURG


ENHANCED GEOTHERMALIA

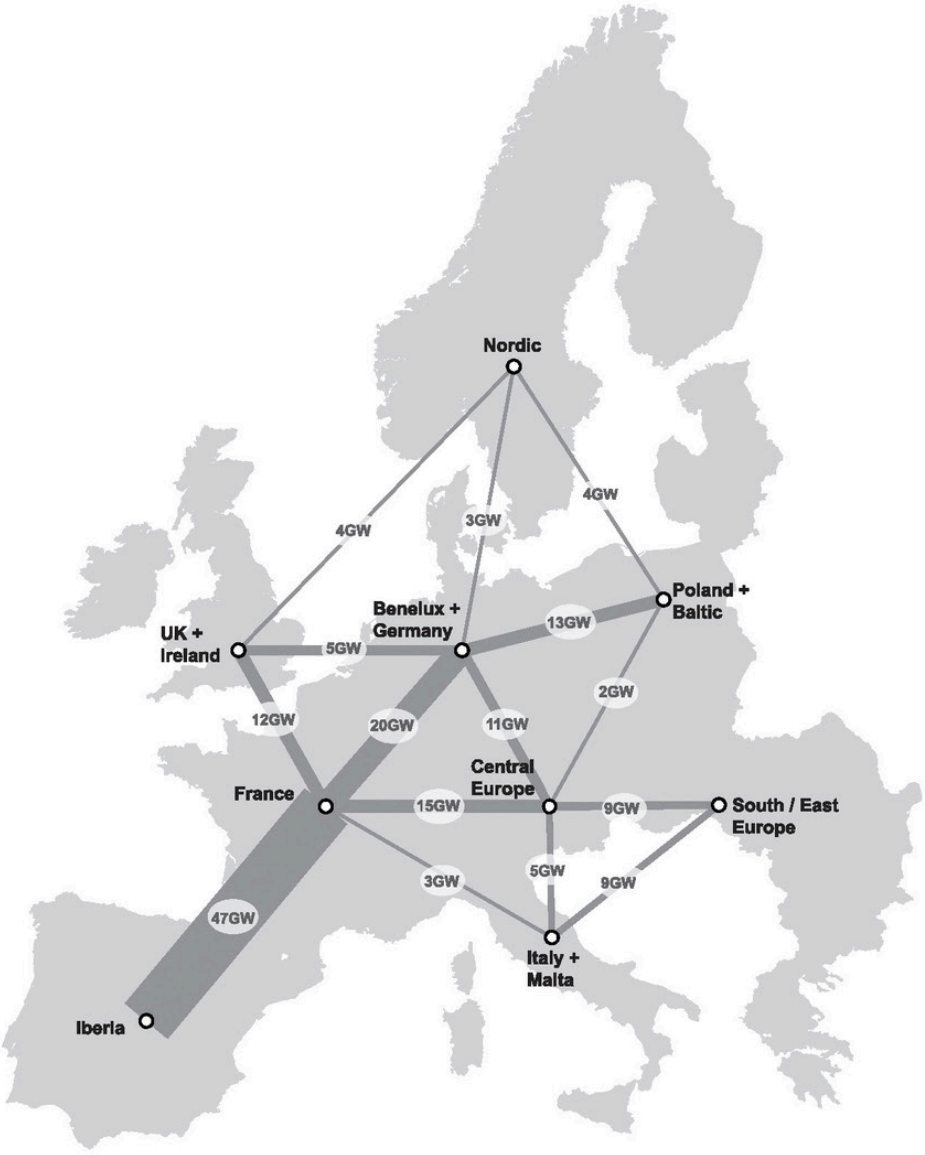




Overview of yearly energy balance, 80% RES pathway (TWh per week)

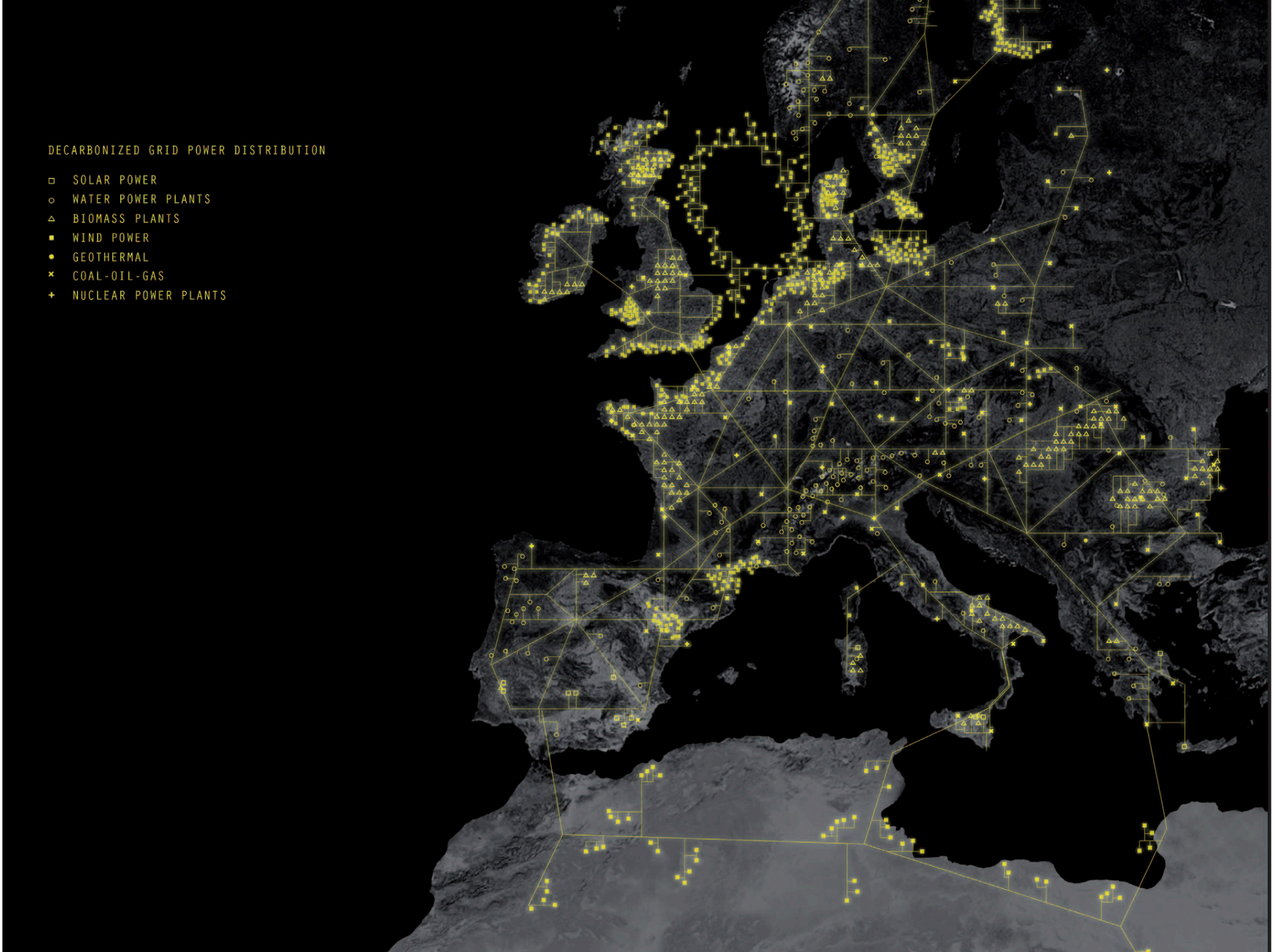


2010
Existing Capacity



2050
Total Transmission Requirements
Assuming 80% RES & 20% DR[1]

1GW
10GW
20GW


DECARBONIZED GRID POWER DISTRIBUTION
SOLAR POWER
WATER POWER PLANTS
BIOMASS PLANTS
WIND POWER
GEOTHERMAL
COAL-OIL-GAS
NUCLEAR POWER PLANTS

Referencias

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