

L6. Infraestructuras y redes

Roadmap 2050

- Laboratorio de Urbanismo Sostenible -

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IF YOU THOUGHT THE EUROPEAN ENERGY
GRID WAS JUST A DREAM...

...THINK AGAIN.



INTER-REGIONAL TRANSMISSION REQUIREMENTS



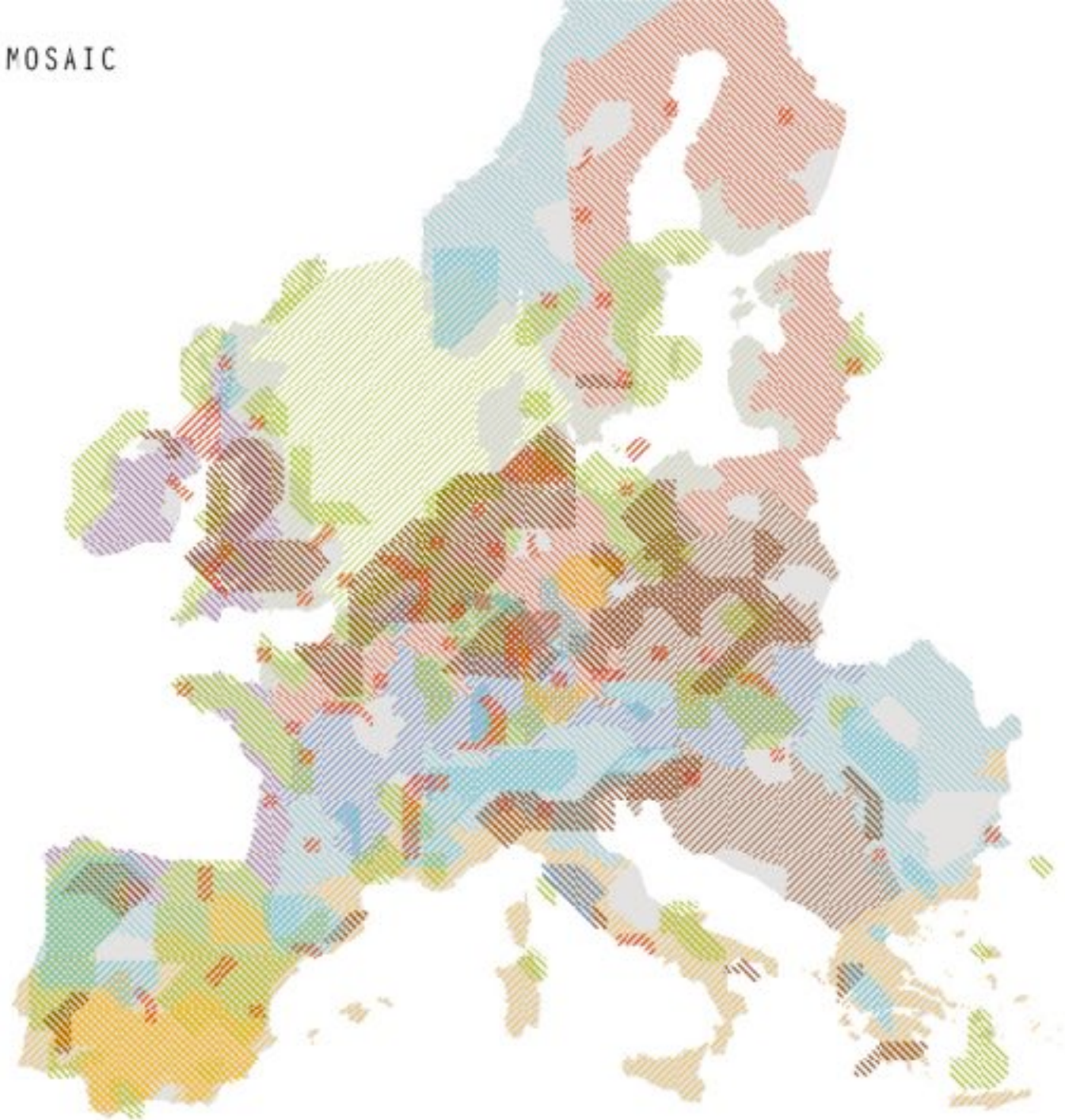
2010
Existing Capacity



2050
Total Transmission Requirements
Assuming 80% RES & 20% DR¹



EU ENERGY RESOURCE MOSAIC





SOLARIA



ISLES OF WIND



TIDAL STATES



BIOMASSBURG



VRANIA



HYDROPIA



ENHANCED GEOTHERMALIA



EU ENERGY NETWORK



EXISTING EUROPEAN GRID

EXISTING POWER DISTRIBUTION

- SOLAR POWER
- WATER POWER PLANTS
- △ BIOMASS PLANTS
- ✦ WIND POWER
- GEOTHERMAL
- ✧ COAL OIL-GAS
- NUCLEAR POWER PLANTS



GRID PHASING

EXISTING POWER DISTRIBUTION

- SOLAR POWER
- WATER POWER PLANTS
- △ BIOMASS PLANTS
- WIND POWER
- GEOTHERMAL
- * COAL-OIL-GAS
- + NUCLEAR POWER PLANTS



COMPLETE GRID

DECARBONIZED GRID POWER DISTRIBUTION

- SOLAR POWER
- WATER POWER PLANTS
- △ BIOMASS PLANTS
- WIND POWER
- GEOTHERMAL
- ✱ COAL-OIL-GAS
- ✚ NUCLEAR POWER PLANTS



EU 2050



Wind Farm



Nuclear Power Plant



Tidal Power



Biomass Plant



EVs in transport



C.C.S. Plant



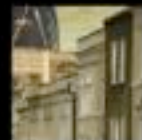
Energy Network



Solar Farm



Technology Breakthrough



Solar Rooftops



THE NEW ENERGY GRID
CAN BE COMBINED
WITH TRANSPORT
AND DATA LINKS
TO PROVIDE AN
EFFICIENT POST-
CARBON DISTRIBUTION
SYSTEM





ENDESA

**ES LA EMPRESA QUE MÁS
CO₂ PRODUCE DE ESPAÑA**
#AhoraYaLoSabes

ROADMAP 2050: A practical guide to prosperous. Low-carbón Europe. OMA

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