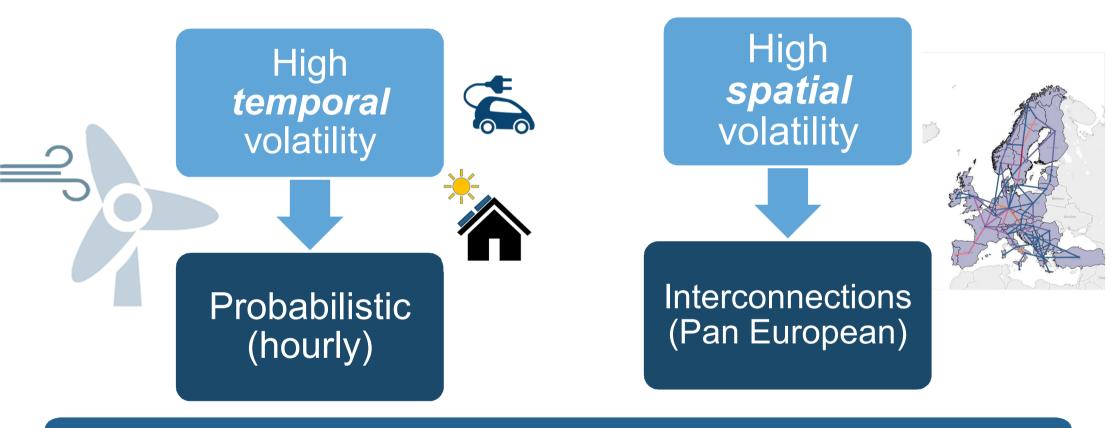
# Resource Adequacy Assessments

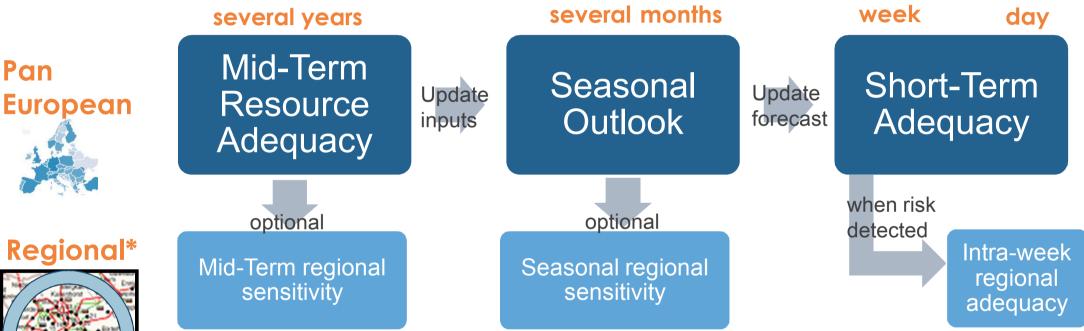
EnC, 14 May 2019

# Energy transition requires a robust methodology



Need to reflect accurately the complementarities of the different technologies (generation capacity flexibility, storage, demand response, energy efficiency)

## Resource Adequacy: Temporal and Spatial Granularity

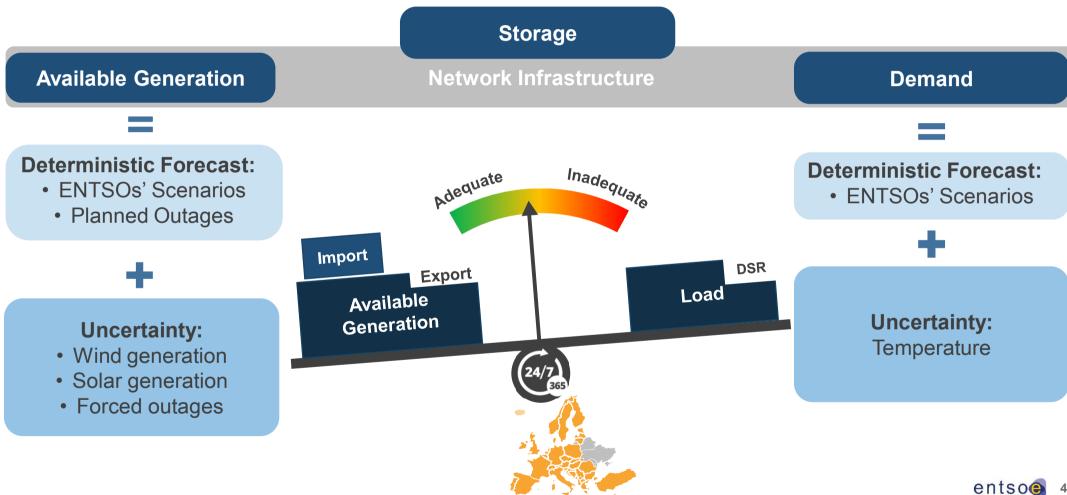


- \*Regional/national studies focus on detailed modelling of a region while:
- keeping large European geographical perimeter,
- retaining a global Pan European probabilistic methodology

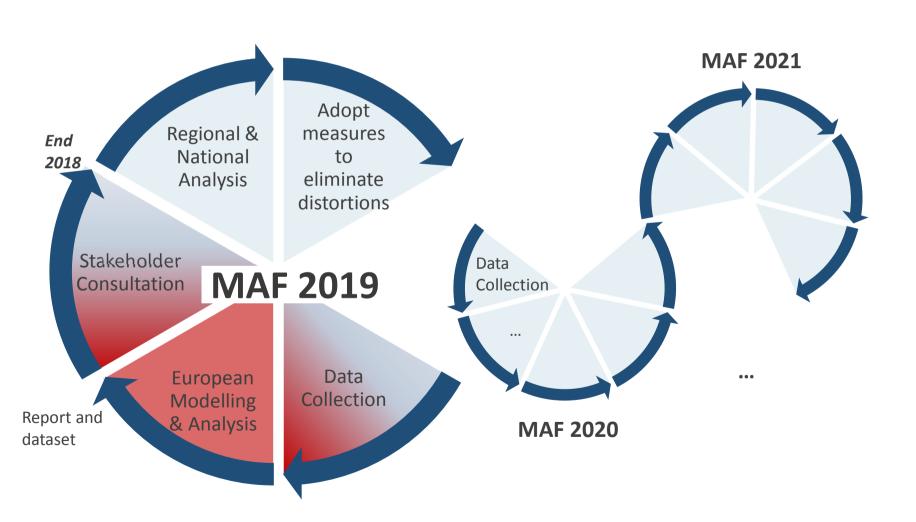




## Resource Adequacy: General Methodology



### Embedding the MAF to unfold its full potential



# EC's view on adequacy and CRM

EU adequacy assessment by ENTSO-E

#### Updated methodology

Contribution of interconnection

Intermittent RES

Probabilistic approach

Appropriate time horizon

Up to 10 year ahead Granularity: yearly

Coverage and granularity

Scope: EU-wide

Granularity: Member States/bidding zones

Scenarios

Central reference scenarios

National adequacy assessments

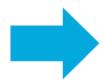
Same methodology

Same central reference scenarios

Additional sensitivities



ACER opinion in case of discrepancy



Necessity of CMs to be based on real needs

# Resource adequacy assessment

#### Greater importance and relevance of ENTSO-E

- MAF, reliability standards and methodologies for cross-border participation are major inputs for national Capacity Mechanisms
- Coal and nuclear phase out needs close monitoring
- Cap. Mechanisms XB participation (& registry) key for generators (and DSR) income

#### ENTSO-E and TSOs have common benefits

- Crucial to have common robust methodology and common databases
- Assumptions data to match MS' Climate & Energy Plans (NCEP) and policies
- Need high resource efficiency to tackle extended scope (e.g. tool focused)

#### Transparency is key to build on trust

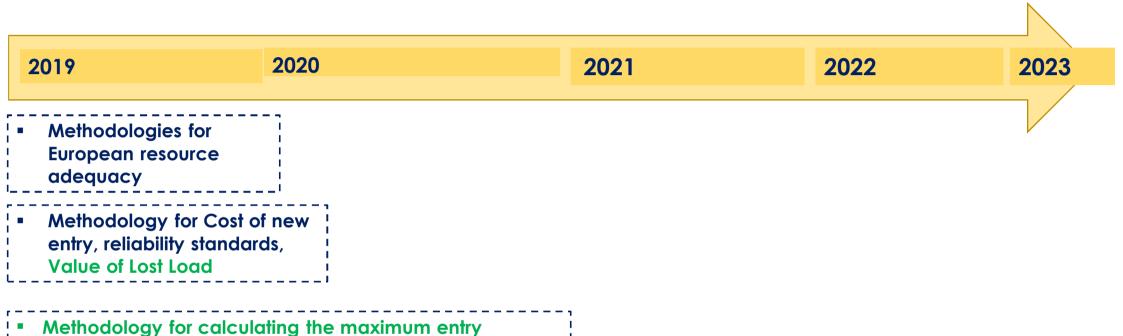
- Stakeholder interactions (EC, ACER, ECG, generators, DSR, NGOs, etc.)
- Extend transparency on methodology and input data

### Resource Adequacy Roadmap 2019- 2023

3 methodology packages **Stepwise implementation** Communication to EC/ACER **Consistency with other products (e.g. TYNDP, scenarios) Timeline for Roadmap preparation:** • Committees' review and SDC approval in May. Board and Assembly approval in June

### Resource adequacy - timelines and priorities

capacity for cross-border participation to CM



Stepwise enhancements to the resource adequacy assessments: yearly granularity; flow-based calculation; generation viability assessment, identification of network and resource constraints; sectoral integration; sensitivities with/without CM

# **THANK YOU** FOR YOUR ATTENTION!

# Interdependent measures to eliminate distortions

#### **Clean Energy Package:**

"Where the European resource adequacy assessment identifies a resource adequacy concern *Member States shall identify any regulatory distortions* that caused or contributed to the emergence of the concern"



Strong Pan-European and technological interdependencies



Need to coordinate and align activities

