

ENTSO-E workshop on CBA methodology

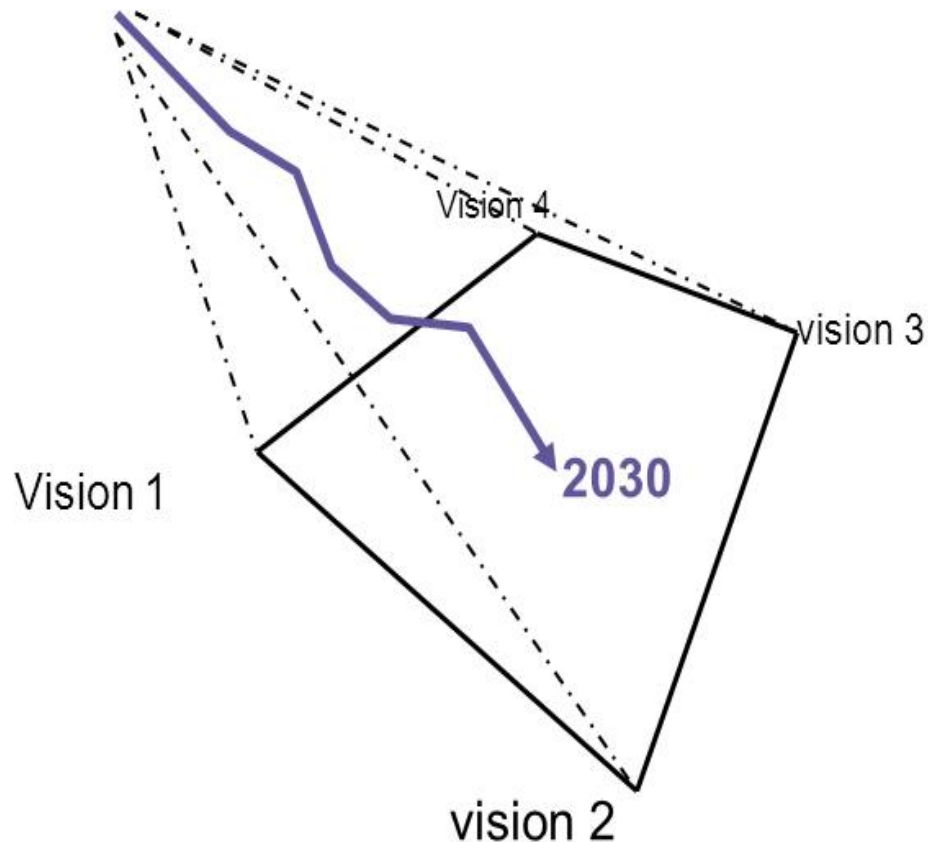
19 November 2012

Building of scenarios and planning cases

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2030 Scenarios:

A bridge between the European energy targets 2020 → 2050



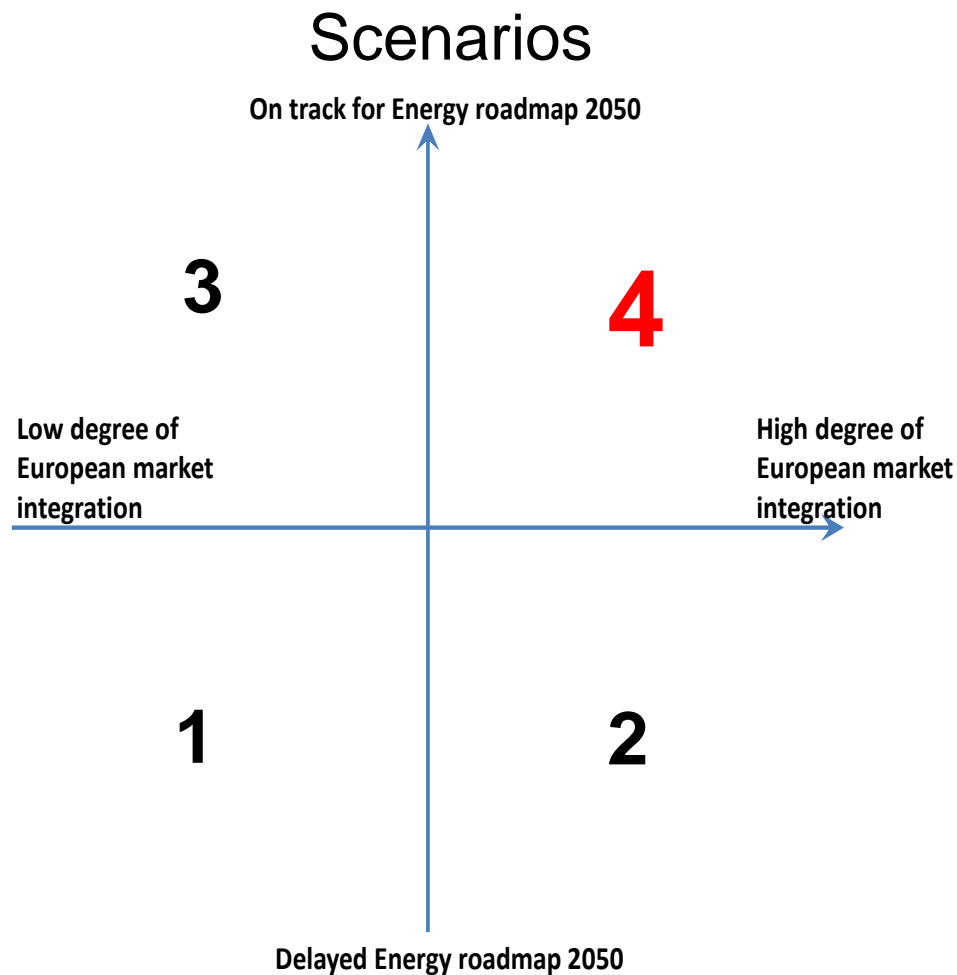
Objectives
for the
scenarios:

- Look beyond what is "decided".
- Differ enough from each other.
- The visions are not forecasts (no probability attached to the visions).

The pathway realised in the future falls with a high level of certainty in the range described by the four described visions

Reference Scenario

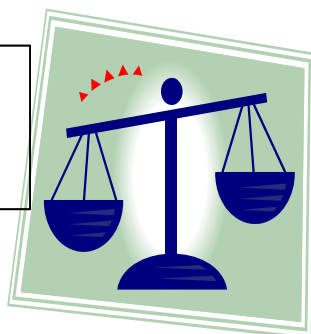
- CBA for **at least two** scenarios.
- One **Reference Scenario**:
The one that best reflects the official European energy politics and goals (**top-down**)
- **Top-down** and **bottom-up** approach
- **Sensitivity Scenarios**:
Other scenarios for sensitivity analysis to provide flexibility



Scenarios - Time Horizon



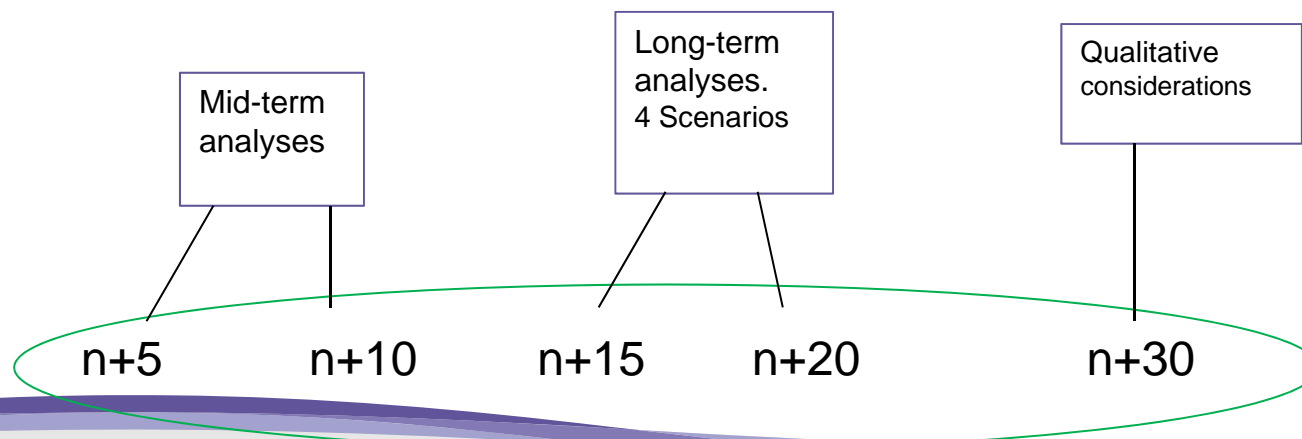
EC/ACER:
N+5, +10, +15, +20, N+30
High quality (useful ?)



Internal TSO's/WG:
Only 2030-analysis
Workload

CBA Methodology:

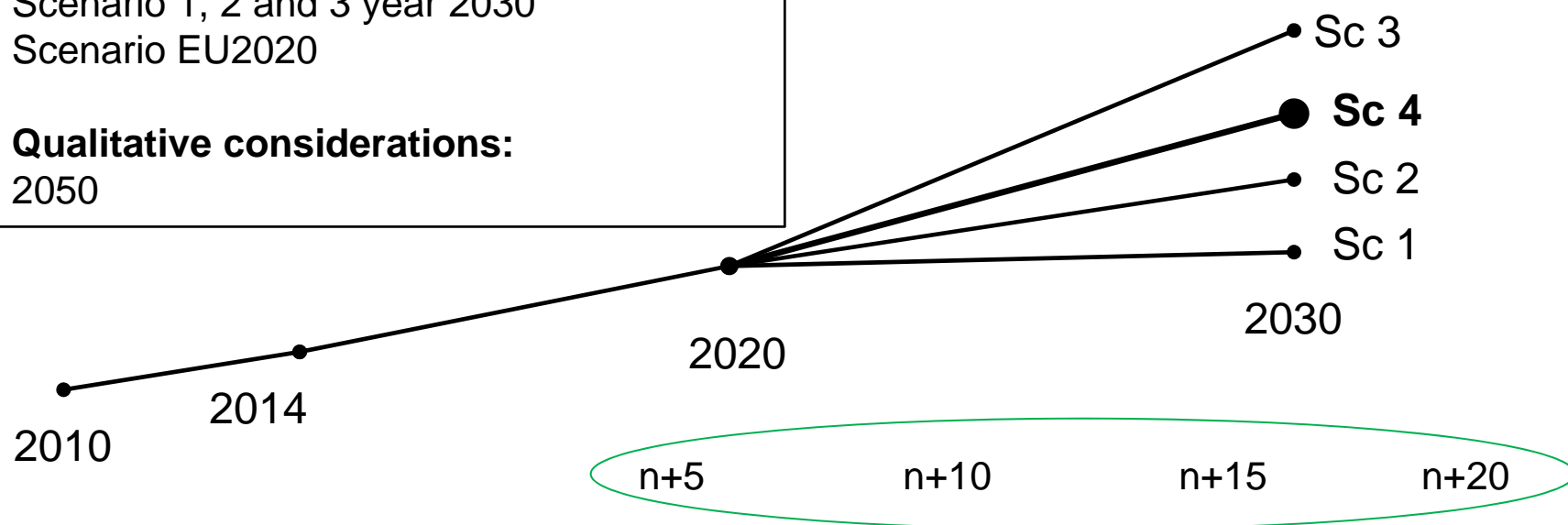
- CBA for **at least two** horizons.
- Several time horizons:
 - Mid-term horizon
- 5 to 10 years (model-analyses)
 - Long-term horizon
- 10 to 20 years (model-analyses)
 - Very long term horizon
- more than 20 years (qualitative)



Scenarios → Analysis

Example: CBA for the TYNDP 2014:

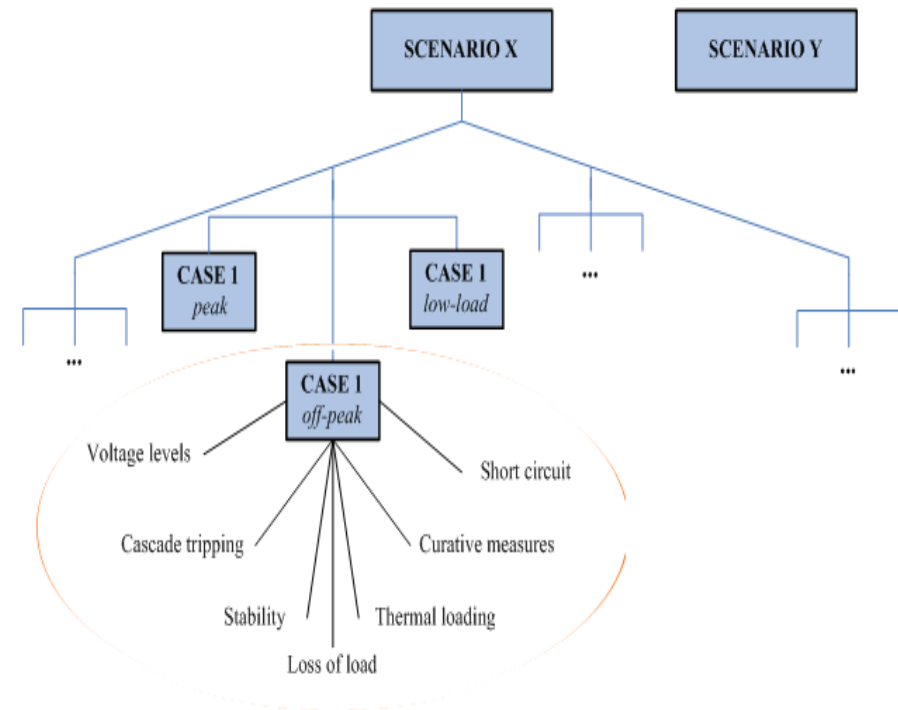
- **Primary analyses:**
Scenario 4 year 2030
- **Sensitivity analyses:**
Scenario 1, 2 and 3 year 2030
Scenario EU2020
- **Qualitative considerations:**
2050



Scenarios → Planning Cases

Planning case selection:

- Snapshot / point-in-time
- Seasonal/demand variation – i.e. summer, winter, peak & valley
- Market output:
 - Generation and demand.
 - Interconnection power flows.
- Planned network
- Regional considerations such as weather variation



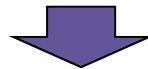
Summary

At least **two scenarios** (one reference) and **two horizons**
- Mid-term (e.g. 2020) & long-term (e.g. 2030)



Market output:

- Generation and demand.
- Interconnection power flows.



Planning case selection:

- Snapshot / point-in-time
- e.g. representing summer, winter, peak & valley



Planned network:

- Based on TOOT

Questions

- ☐ What is the planned network based on?
- ☐ How should the treatment of scenarios be weighted? How do you perform CBA with 4 scenarios? Should all be given the same consideration?
- ☐ What if my project is not efficient in the Reference Scenario but very efficient in another scenario?
- ☐ How do I select appropriate planning cases from the market data?