

Approach to Multi-Sectorial Planning

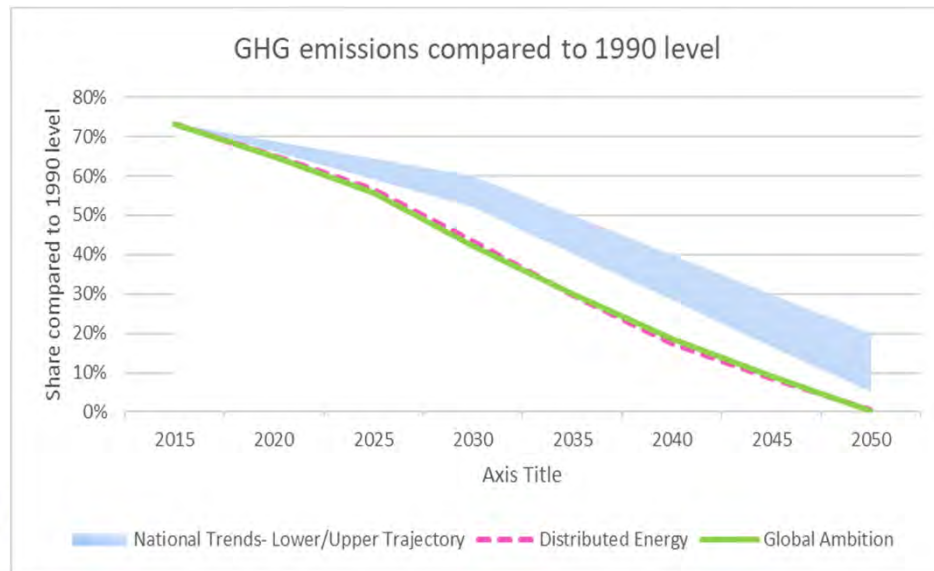
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What ENTSO-E does towards multi-sectorial planning: scenarios

- ENTSO-E and ENTSG develop joint consistent scenarios for the electricity and gas TYNDPs
- Top-down scenarios are developed using a tool that ensures that the annual energy demand for all sectors and fuels and supply is balanced in detail for both gas and electricity
- Scenarios show EU climate neutrality target achievable, but will have to rely on increase of RES, adequate infrastructure, stronger sectorial integration, and innovation
- Innovation: Carbon budget approach considering CO₂ emissions for all sectors

GHG emissions in a 1.5°C scenario



ENTSO-E and ENTSG Joint scenarios for TYNDP2020 show:

- In 2030:
 - Power Sector emissions: 411 instead of 620 MtCO₂eq compared to EU trajectory due to coal phase-out policies
 - EU efficiency targets met in all scenarios
- In 2040:
 - carbon neutral power sector
 - Up to 250Mio electric and plug-in hybrids
 - Up to 60Mio Heat Pumps
 - Up to 180GW P2G
- In 2050:
 - Up to 300Mio electric and plug-in hybrids
 - Up to 100Mio Heat Pumps

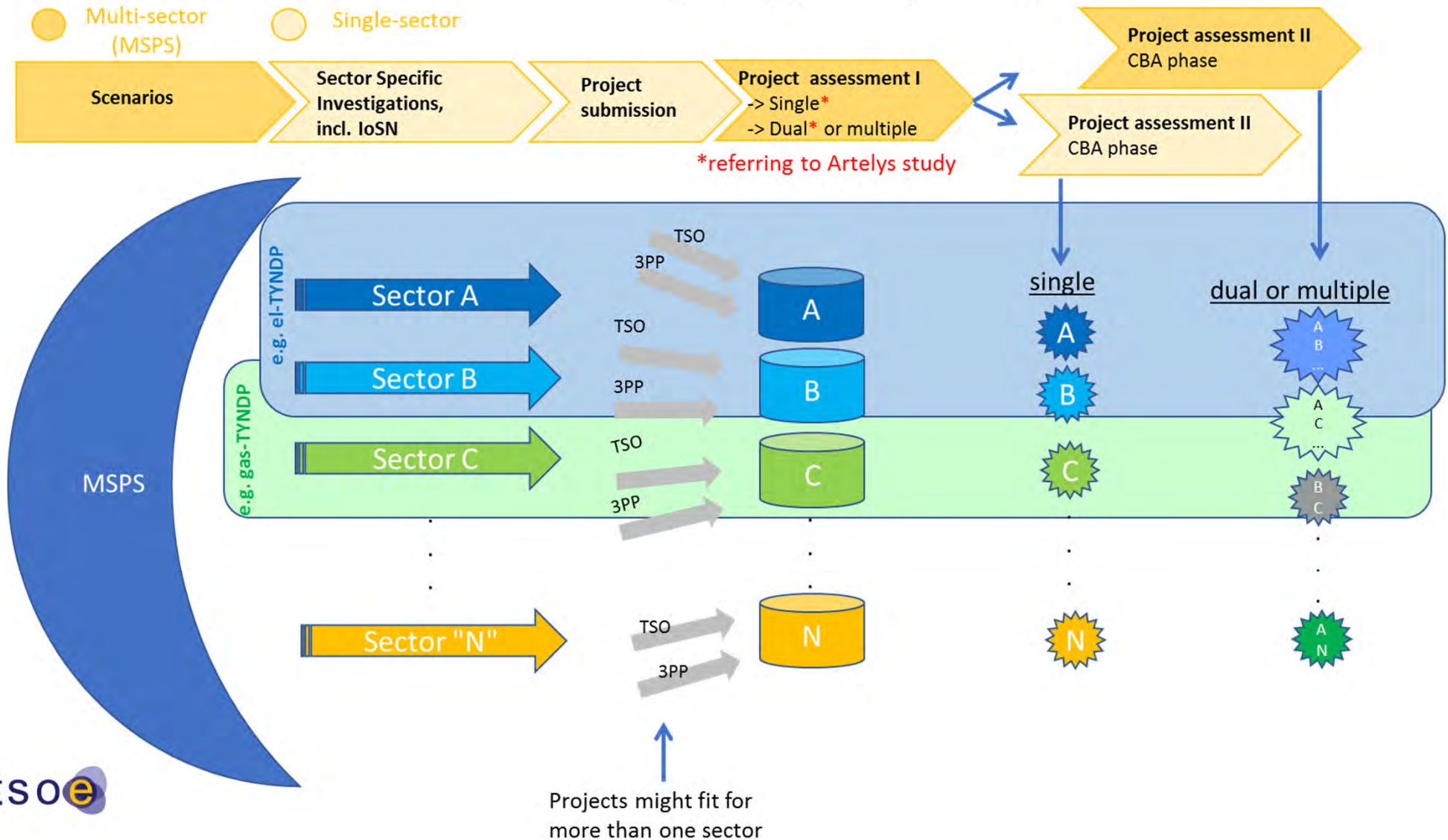
What ENTSO-E does: status of the Interlinked Model

- The Interlinked Model required by the regulation 347/2013 is being improved
- In 2019, ENTSO-E and ENTSG commissioned to Artelys a study with focus on “Interlinkages between electricity and gas systems”. The study outlines a screening methodology for project assessment
- ENTSO-E and ENTSG are currently applying the methodology proposed by Artelys
- ENTSO-E and ENTSG will further refine the screening methodology proposed by Artelys
- ENTSO-E and ENTSG started investigating a dual assessment methodology for electricity and gas

New Improvements of the TYNDP in the light of Smart Sector Integration

- ENTSO-E has published its roadmap for a Multi-Sectorial Planning Support
- The general concept of the roadmap is **to develop a framework to enable higher coordination of the infrastructure planning in different sectors.**
- **It emphasizes the relevance of start introducing additional multi-sectorial elements** in the scenario building and project assessment phases, **while keeping more sector-specific phases in a single sector.**
- **Improve the joint scenarios** by including more sectors.
- **Improve DSOs** involvement in the scenario building process.
- **Develop cost-benefit analysis indicators** that capture the interactions of projects in the different sectors when these interactions are relevant.
- **Stakeholder involvement is key.**

ENTSO-E Multi-Sectoral Planning Support (MSPS)



Key takeaways

- ENTSO-E and ENTSG collaboration on the scenarios is a major milestone accomplished in the smart sector integration efforts
- The TYNDP2020 scenarios represent the neutral, expert-driven, top-down consensus, reconciling national policies and the EU policy and strategy
- The plausibility of the scenarios is crucial in serving their purpose of informing investment decisions
- ENTSO-E and the TSO community have a key role to play as the reference source of information for informed political decisions on sector integration developments.
- ENTSO-E and TSOs scaling up their capabilities in identifying and performing the relevant studies to support the most efficient investments within a multi-sectorial environment
- ENTSO-E and the TSO Community are willing to embrace this increased responsibility by engaging the views and expertise of other sectors.

Thank you for your attention
