

The TYNDPs: What are they? Why do they matter?

What are the TYNDPs?

The electricity and gas TYNDPs – the Ten-Year Network Development Plans – are the only pan-European assessments of energy infrastructure projects. The revised TEN-E Regulation¹ aims to align the energy infrastructure with the climate objectives, i.e., climate mitigation and adaptation. Furthermore, it provisions a comprehensive set of rules that govern the TYNDP process, involving directly EU Agency for the Cooperation of Energy Regulators (ACER) and European Scientific Advisory Board on Climate Change (ESABCC), as well as public consultation for various stakeholders. The plans are completed every second year jointly by the two main European bodies for energy infrastructure, the European Network of Transmission System Operators for Electricity (ENTSO-E) and for Gas (ENTSOG). It encompasses among others the following categories:

- electricity
 - o transmission infrastructure
 - o offshore grids
 - o storage facilities
- hydrogen
 - o transmission infrastructure
 - o electrolyzers
 - o storage facilities
- carbon dioxide
 - o transport
 - o storage
- smart grids for electricity and gas.

The TYNDPs assess infrastructure projects in a range of possible futures, or scenarios. The scenarios are common for the electricity and gas TYNDP and rely on

¹ <http://data.europa.eu/eli/reg/2022/869/oj>

a number of assumptions about the future (e.g. how many electric vehicles in 2030? What will be the share of wind in electricity generation in 2040?).

Why are the TYNDPs and scenarios so important?

The TYNDPs have a strong guiding function for decisions about future grid infrastructure investments and serves as a benchmark for candidate projects for the status of Project of Common Interest (PCI) which are identified by a European Commission-led process. Projects with the PCI label enjoy accelerated planning and streamlined permit granting processes. On top, some PCIs are entitled to financial support from the EU's Connecting Europe Facility (CEF). Only a project which is part of the TYNDPs can become a PCI. From the perspective of project developers, national authorities and politicians, the inclusion of a project in the TYNDP serves as confirmation that a project has European relevance.

Moreover, the scenarios are often used as a starting point for other modelling exercises, by the ENTSOs and by other institutions. Scenarios have therefore a strong influence in describing and planning for the future energy sector.

How do the TYNDPs function?

The TYNDP process starts with the development of scenario storylines – qualitative descriptions of different possible futures. These are translated into quantified scenarios. Infrastructure projects are then assessed in each scenario, with a cost-benefit analysis (CBA)² based on market modelling and network modelling.

The overarching aim of the TYNDP and PCI processes is to identify cost-efficient solutions that optimise the interconnectivity of both European electricity and gas markets. Well-connected national markets are expected to improve protection against supply disruptions and foster the integration of renewable energy sources. In addition, cross-border competition and diversification of supply is expected to lower consumer prices.

² Read more about the CBA and guidelines: <https://tyndp.entsoe.eu/cba>
<https://www.entsog.eu/methodologies-and-modelling#2nd-cba-methodology>

The documents of the current and past TYNDP cycles are accessible here: <https://tyndp.entsoe.eu/>. This page on ENTSO-E's website groups all information on scenarios: <https://scenarios.entsoe.eu/>

What is the special interest of NGOs in the TYNDP?

Many environmental NGOs believe that the ENTSOs scenarios should plan for a 100% renewable energy supply and be aligned with the 1.5°C target of the Paris Agreement. From this perspective it is important that the lack of energy infrastructure does not become a bottleneck for the quick growth of renewable energy sources. As well as avoiding the development of fossil gas infrastructure which could deepen Europe's dependency and increase greenhouse gas emissions.

What are the most important steps in the TYNDP processes and how can you get involved?

There are a number of ways that external parties and groups can get involved in the TYNDP processes. The timeline on the next page describes the steps of the process for the TYNDP for electricity, and when in this process stakeholders are formally consulted.

Beyond the formal consultations, the ENTSOs also organise public workshops to share information and receive input on their respective TYNDP modelling exercises. One way of finding out about upcoming consultations and workshop events for the current TYNDP is the landing page of ENTSO-E <https://www.entsoe.eu/> - scroll down to the section on consultations and on future events. You can also receive regular updates if you subscribe to the [ENTSO-E](#) and [ENTSOG](#) newsletters.

ACER is responsible for drafting new framework guidelines on scenarios regulating future network development planning, in accordance with the recast TEN-E regulation. These guidelines shall be adapted in January 2023, and on that front, technical workshops and a public consultation are organised in 2022.

You can also contribute to discussions and provide feedback to the TYNDP via the PAC project – for more information please visit the PAC project website at <http://www.pac-scenarios.eu/>

