ENTSO-E's Ten Year Network Development Plan

- TYNDP process - Improvements and steps forward
- New role of TYNDP under the Regulation (EU) 347/2013 and PCIs process

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ENTSO-E Stakeholders' Workshop
Regional Group North Sea
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Reliable Sustainable Connected

Content

1. ENTSO-E in a nutshell
2. TYDNP and Regulation 714/2009
3. TYNDP and regulation 347/2013
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International TSO cooperation: we are ENTSO-E

- 41 TSOs from 34 countries
- Founded on 19 Dec 2008 and fully operational since July 2009
- A trans-European network
  - 525 million citizens served
  - 828 GW generation
  - 305,000 km of transmission lines
  - 3,400 TWh/year demand
  - 400 TWh/year exchanges
- Replaces former TSO organisations: ATSOI, BALTSO, RTSO, NORDEL, UCTE, UKTSOA

System Development

System Operation

Electricity Market

Research and Development

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ENTSO-E association

Key activities set out in Regulation 714/2009 part of the 3rd Internal Energy Market Package)

- Deliver **network codes**
- Deliver **Ten Year Network Development Plan** including an system outlook and adequacy reports
- Deliver crucial aspects of **market integration** ("market coupling")
- **R&D Plan** (fully included in EEGI – European Electricity Grid Initiative, part of the SET Plan)

Through its members deliver the **infrastructure** to:

- enable markets to function,
- secure energy supply,
- meet climate change objectives through connecting RES

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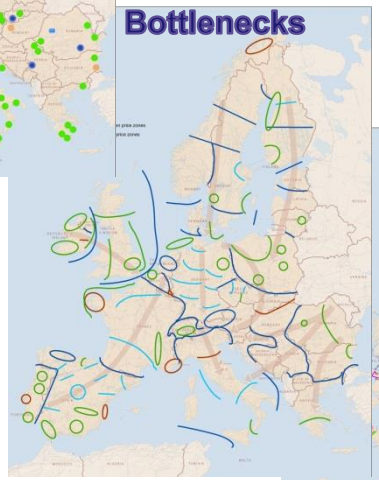
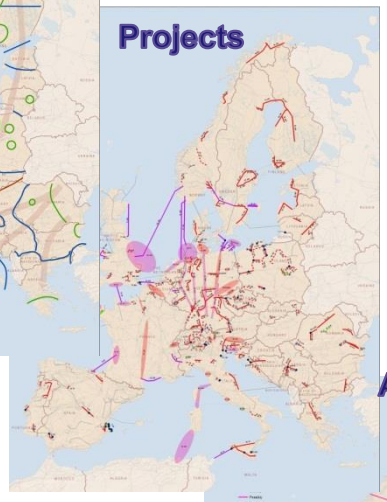
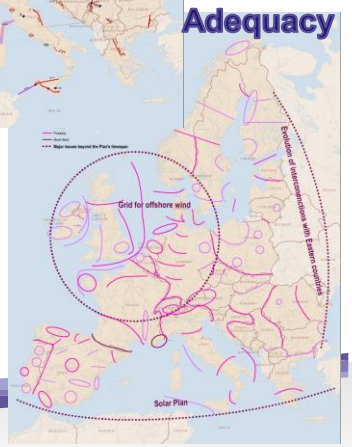
Why a European Ten-Year Network Development Plan?

Regulation (EC) 714/2009 – "In order to ensure greater transparency regarding the entire electricity transmission network in the [Union], the ENTSO for Electricity should draw up, publish and regularly update a non-binding [Union]-wide ten-year network development plan"







Transparency

TSO cooperation platform

Stakeholder involvement

Inform EU policy and investment decisions

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The 3rd Package defines the TYNDP

Non binding
Every 2 years

Regulators check consistency

Binding
Every year

EU-TYNDP

- Generation adequacy outlook 5 yr up to 15yr (→ 2025!)
- modelling integrated networks
- Scenario development
- Assessment of resilience
- Based on reasonable needs of system users
- Identify investments gaps
- Review barriers to increase cross border capacities arising from approval procedures

Build on nat. gen. adequacy Outlooks and invest. plans

Take into account

Nat. TYNDPs

- Existing and forecast supply demand
- Efficient measures to guarantee adequacy & SoS
- Indicate main transmission infrastructure to be built
- Based on reasonable assumptions about evolution of generation
- Supply consumption and exchanges

Non binding
Every 2 years

Regional Investment Plans

Take into account

Take into account

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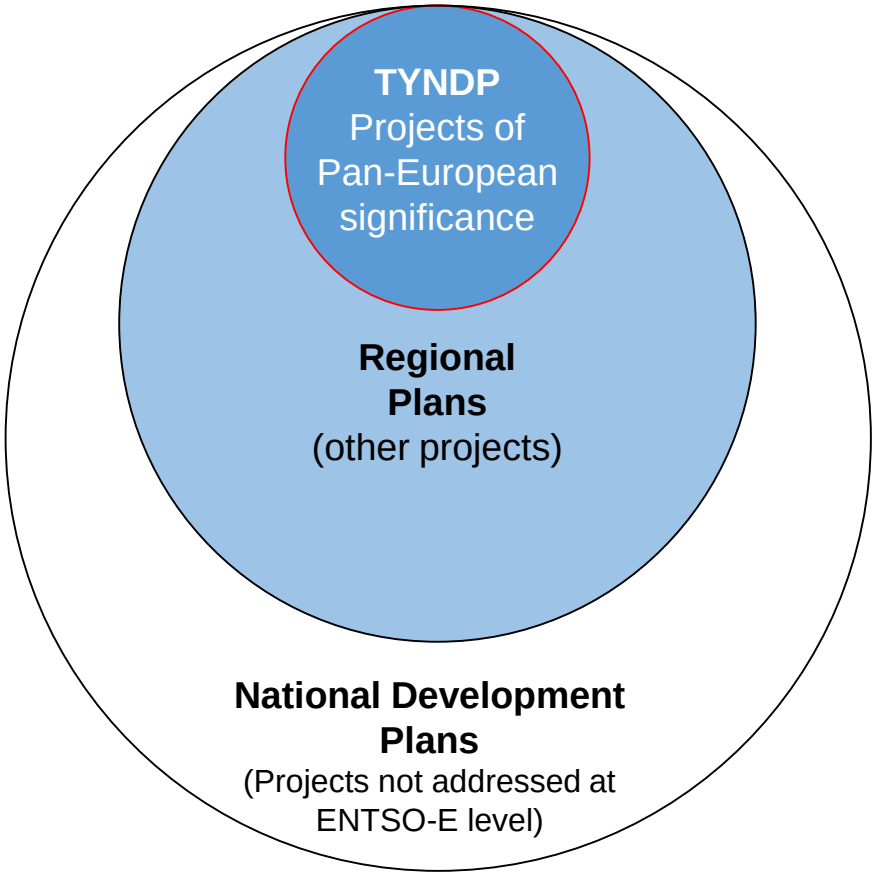
What cover the projects of Pan-European significance?



Definition of Projects of Pan-European Significance

- Meeting the EU energy targets: RES, SoS, IEM
- Voltage & capacity thresholds

From TSOs & 3rd parties

- Non-discriminatory procedure

Basis for further selection of Projects of Common interest

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Regulation (EU)347/2013 - main benefits

1. Define the PCI list

2. Speed-up the permitting procedure
   - 3 ½ years + 9 month if necessary

3. Improve the regulatory framework: New CBA methodology which will be used to:
   - Assess TYDNP projects(including the PCI projects)
   - Base for the CBCA– only in the case of disagreement between the parties
   - Be the base for the incentives calculation

4. Financing of some of the PCIs

Main impact on the TYNDP

1. **Inclusion of the 3rd party projects** in the TYNDP
   - The new procedure for including 3rd party projects in the TYNDP

2. **Inclusion of storage** in the TYNDP – starting with TYNDP 2014
   - The storage projects shall be assessed starting with TYNDP 2014

3. **New CBA methodology** – applicable starting with TYNDP 2016
   - The final version submitted to the EC on 16 November 2013

4. **Consistent and interlinked electricity and gas market and network assumptions**
   - By 31 December 2016

PCI projects subset of the TYNDP projects

TYNDP projects

Projects of common interest

- Accelerated permit granting
- Cross-border cost allocation
- Regulatory incentives
- Financial instruments and grants for studies

Grants for works, if:

- *Positive externalities*

&

- *No commercial viability*

PCI process

ENTSO- E	Project promoters	NRAs *Electricity*	EC Regional Groups	ACER	European Commission
• Prepare TYNDP for electricity	• Submit projects for EC • Criteria • CBA	• Check application of criteria • Cross-border relevance	• Evaluate projects • Rank • Adopt regional lists	• Opinion • Cross-regional consistency	• Adopt Union-wide list of projects of common interest (no ranking)

General criteria

Priority corridor implementation

Economic viability

Crosses border or has cross-border impact

Specific criteria

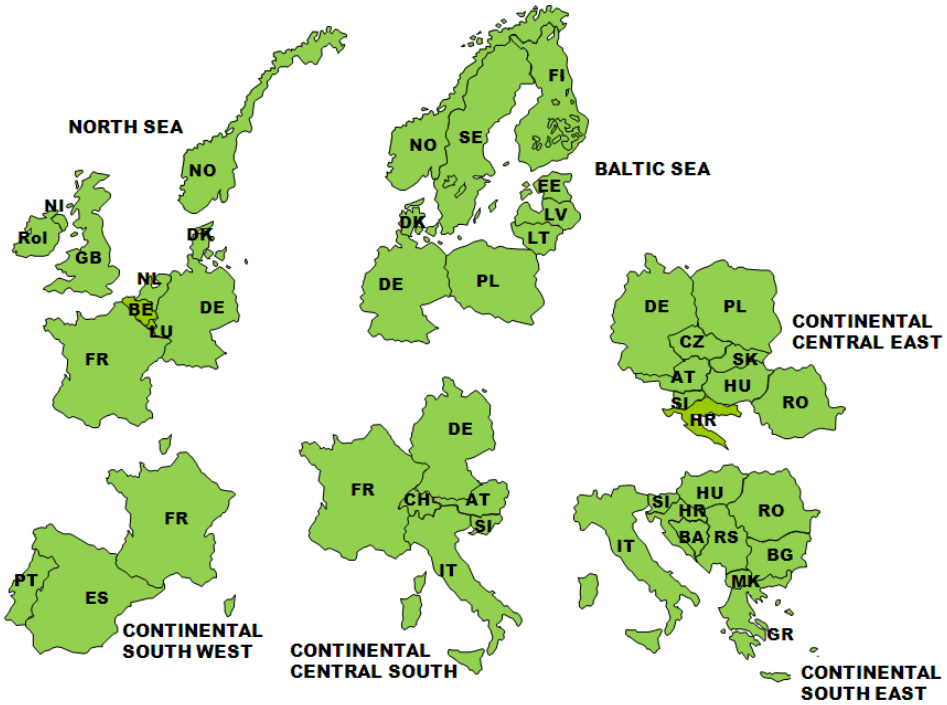
Market integration

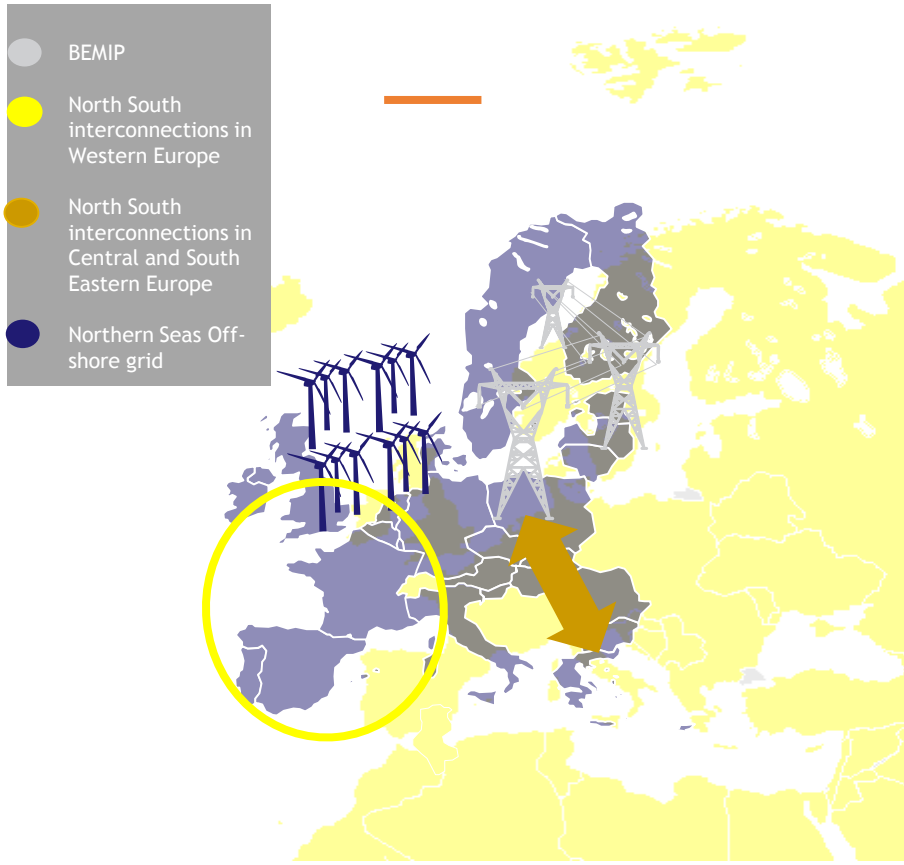
Security of supply

Sustainability

→ Cost-benefit analysis

TYNDP and EC regional Groups





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Four advantages of being in the TYNDP

1. Be part of the pan-European relevant projects list

2. Increased visibility of the project at European and regional level

3. Eligible for the PCI label application:
    1. Short permitting process
    2. Financial instruments and possible grants for studies and work

4. Assessed using the common pan-EU CBA methodology

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TYNDP – from the first plan to today

TYNDP 2010

-ENTSO-E proactively publishes the pilot TYNDP

- Bottom-up approach

- 2020 scenarios

- No 3rd party projects incorporated

- ENTSO-E significant effort to create and run the TYNDP process with all its 41 members

TYNDP 2012

- First official TYNDP package

- Bottom-up and top down approach

- 2020 scenarios

- First call for the inclusion of the 3rd party projects (transmission) in the TYNDP

- First assessment of the projects using the CBA methodology

- Supports the discussions on the new energy infrastructure legislation

TYNDP 2014

- Second official TYNDP package

- Bottom-up and top down approach

- 2030 scenarios

- Second & Third call + new procedure for the inclusion of 3rd party projects(transmission and storage) in the TYNDP

- Improved CBA methodology

- Sole base for the 2015 PCI list

- Intermediate update of the TYNDP 2012 table of projects

- Creation of the Long-Term Development Stakeholder Group

Conclusions

1. **TYNDP is the most comprehensive and up-to-date European-wide reference for the transmission network development**

   - looks unbiasly at all the different drives which lead to grid development (e.g. RES, coal, gas, nuclear etc.)

2. **TYNDP supports the decision making process at regional and European levels**

3. **TYNDP forms the sole basis for the selection of Projects of Common Interest (PCIs)**

4. **TYNDP is a continuous improving process**

Please support the TSOs on financing/regulation and on permitting/public acceptance!