# Focus Study & Interlinked Model Conclusion workshop





# **Workshop Agenda**

10:00 Welcome & coffee 10:30 Introduction to the Interlinked Model and the Focus Study (ENTSOs) 11:00 Focus study: Outcomes of the study (Artelys) 13:00 Next steps (ENTSOs) 13:30 Closing remarks 14:00 Lunch



1. Introduction to ENTSOs Interlinked Model





# Joint ENTSOs Scenario Development

- For the first time for TYNDP 2018 ENTSOG and ENTSO-E engaged in joint scenario development
  - Combining their expertise and sectoral knowledge
  - Being a focus point for gathering inputs from a wide range of stakeholders interested in the energy sector
- Joint scenario development captures highly relevant interlinkages between both sectors...
- ... and ensures the consistent assessment of the two key energy networks of Europe against the same futures.

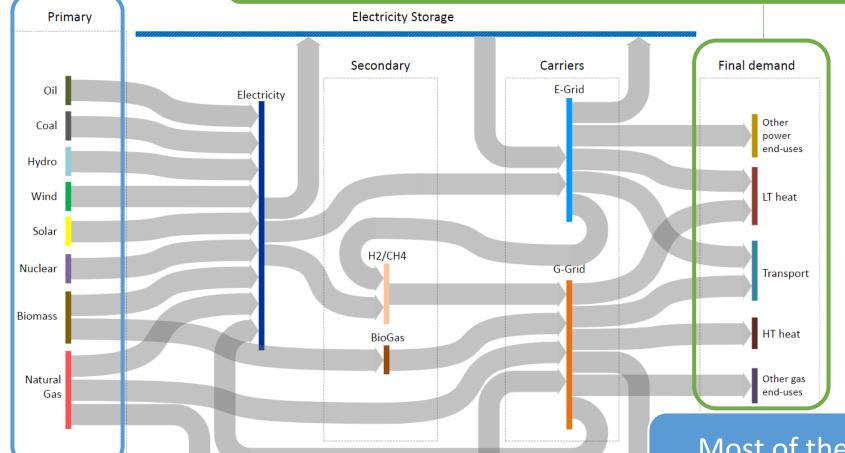
A key step in interlinking gas and electricity TYNDP

TYNDP 2020 scenarios will go further into the interlinkage and consider total energy scenarios



# Joint Scenarios capture main interlinks

Development of the different technologies (incl. hybrid) are assumptions made at scenario level impacting the way the energy system can be used



Gas Storage

Most of the interactions depends on the assumptions made in the different scenarios

# Towards further interlinkage

- In December 2016 the ENTSOs submitted their "ENTSOs draft consistent and interlinked electricity and gas model" (the draft Interlinked Model), based on TEN-E Regulation and interactions with EC and ACER
- It was focused on joint scenario building, identified as capturing the main interlinkages between electricity and gas
- It was applied for the first time ever to TYNDP 2018 and was welcomed by the stakeholders. For TYNDP 2020 the ENTSOs went one step further with scenarios based on the total energy system
- Based on ACER opinion and input from EC, the ENTSOs recognized the need to investigate the relevance of further interlinkages through a specific Focus Study



# Towards further interlinkage

Is further interlinkage needed? Since both systems are interlinked, what is the impact of a project on both systems?



2. Introduction to the Focus Study





# Focus Study goal in the context of the ENTSOs interlinked model

#### Goal

- Conceptually assess which electricity and gas interactions are relevant from a TYNDP perspective, including potential interactions between projects
- The study outcome will be used by ENTSOs for further adaptation of the Interlinked Model and application to relevant projects



# Study purpose

- With the focus study, the ENTSOs aim at better understanding which interlinked elements are relevant and are worth considering in methodologies or tools, and make the best of the joint ENTSOs TYNDP scenario building process.
- The study aims at investigating all possible interactions between
  - Gas and electricity systems
  - Gas and electricity projects

# Study purpose

- To have substantiated elements and comprehensive analysis of synergies and competition between both energy systems
- Simple questions do not necessarily come with simple answers
  - Can you avoid building a new infrastructure by considering the existing infrastructure in both systems?
  - Can a project in gas or electricity compete with a project in the other sector..?
- They require a deep understanding of the context in which projects are to be built
  - How much it depends on the areas they are connected
  - How specificities of the infrastructure in these areas influence on the interactions between the 2 systems

# Study purpose

- Objective for the ENTSOs
  - To amend their interlinked model in view of its submission for Commission's approval, in line with the opinions received from ACER and Commission and in line with the regulatory process as set by Art 11.8 of Regulation (EU) 347/2013.
  - To improve their interlinked model
    - By performing a comprehensive assessment of all possible interactions
    - By focusing on the <u>relevant</u> gas and electricity infrastructure interactions
  - To keep on improving their TYNDP and delivering thorough and comprehensive assessment of both energy systems and projects

# **Focus Study Tasks**

 Generic mapping of all potential interactions between gas and electricity

 Qualitative analysis of potential interactions between gas and electricity infrastructure

Quantification of interaction parameters

 Propose recommendations on screening approach to identify projects to be retained for gas/electricity interaction assessment



**Conclusions** 





**Next steps** 



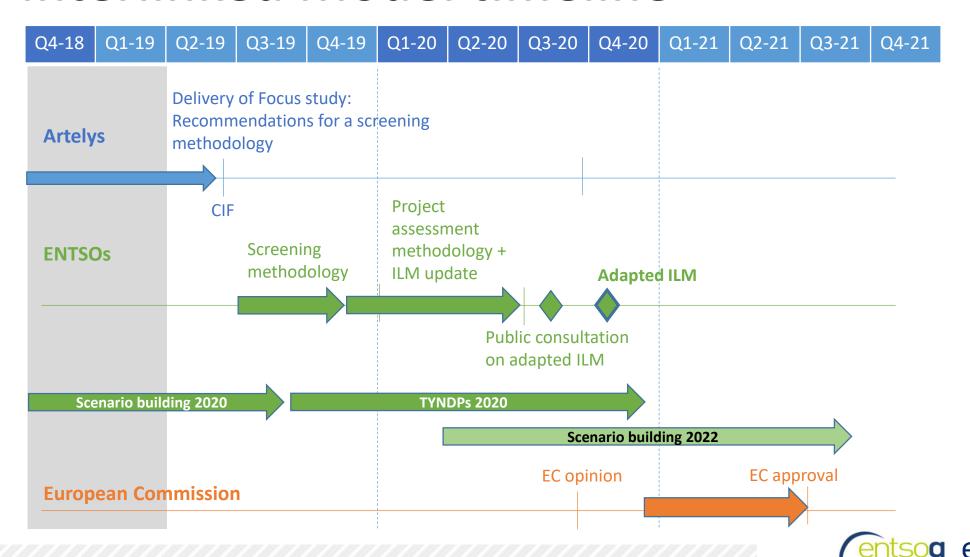


# Next steps

- Based on the study output, the ENTSOs will adapt the Interlinked Model in view of enhanced project assessment. It will require the ENTSOs:
  - 1. To elaborate a screening methodology to identify the infrastructure projects requiring a dual system assessment
  - 2. To elaborate an assessment methodology for those projects having an impact on both gas and electricity systems, and implement it to the respective e-TYNDP and g-TYNDP
- Once approved, the Interlinked Model will form part of the CBA methodologies, ensuring a better common perspective in regards to electricity and gas projects assessment



### Interlinked Model timeline



#### THANK YOU FOR YOUR ATTENTION

Contact and feedback:
Please refer to « focus study » in the subject

futuregrid@entsoe.eu

sysdev@entsog.eu



