



CAN EUROPE'S COMMENTS ON ENTSO'S' INTERLINKED MODEL

Climate Action Network (CAN) Europe is Europe's leading NGO coalition fighting dangerous climate change. With over 160 member organisations from 38 European countries, representing over 1.700 NGOs and more than 40 million citizens, CAN Europe promotes sustainable climate, energy and development policies throughout Europe.

CAN Europe comments and open questions on the presentation of ENTSOs' interlinked model on 28 July 2020:

General remark

CAN Europe is asking both policy makers and grid operators to make the TYNDP fully compatible with the Paris Agreement. European energy infrastructure urgently needs to be prepared for a 100% renewable energy system, making use of all flexibility options in a swift and cost-effective way.

Comments on the interlinked model

CAN Europe followed partly the evolution of the interlinked model in 2019. We unfortunately did not yet have sufficient capacities to scrutinise every single element of the complex modelling. We however would like to share a number of comments and open questions.

We understand the interlinked model as being rooted in the cost-benefit analysis and not in TYNDP scenario building. It has a narrow project-specific perspective looking at quantitative challenges for gas or electricity infrastructure separately, but not taking into account a more holistic vision including the interplay of all potential flexibility options (e.g. a more efficient use of existing infrastructure, demand response, different storage technologies, flexible renewable and non-renewable generation capacities). **We fear that a broader cross-sectoral system optimisation is not possible with this tool alone.**

All assessment of individual projects is only done after separate investment needs have already been settled independently and separately by ENTSG and ENTSO-E. Apparently, no retroactive changes of TYNDP assumptions are intended. It would have been worth assessing how the use of the broad range of flexibility options can contribute to achieving substantially **higher climate ambition**.

CAN Europe criticised in its feedback to the TYNDP 2020 draft scenario report that electrolyser capacities were modelled as (unrealistic) off-grid capacities. It is not clear whether and how the interlinked model brings about a remedy to this issue, mapping the **interaction of electrolysers with the electricity and gas infrastructure** or with different storage technologies.

CAN Europe warns that hydrogen produced with fossil fuels is a menace to our climate target and asks to consider **exclusively hydrogen based on renewable electricity** to be considered. If only little renewable hydrogen shares are assumed, the remaining hydrogen demand could result to a potential bias in favour of further fossil gas imports, be it as so-called “decarbonised gas” (“blue hydrogen”) or for producing hydrogen from fossil gas through steam methane reformation domestically.

The **time dimension in the project assessment** under the interlinked model is not yet clear: When will suggested projects be built and for how many years will they remain operational? What impact will they have on the overall greenhouse gas emissions in the long-term (instead of only looking at the carbon footprint per kWh at one single moment in time)?

The geographical **location of electrolysers** is very important for future adaption of electricity and gas infrastructure and of storage. Will the interlinked model look only at single national nodes? Infrastructure needs related to hydrogen market introduction are not clear: Does hydrogen always need a grid to be fed into or could it just be produced and consumed on the premises, e.g. of a steel factory?

In order to secure a more consistent and interlinked model as requested by legislation, we suggest to detail and update assumptions on the benefits that flexibility options can bring about to all energy infrastructure. In view of fostering sector integration, **EU energy infrastructure planning ideally also would become more integrated**. Instead of looking separately into parts of gas and electricity infrastructure, all networks (e.g. including heat networks) and levels (including the distribution grids) would be assessed under the objective of net-zero emissions in the EU by 2040 in a fully renewable energy system.