

The Role of Gas in the EU's Green Deal

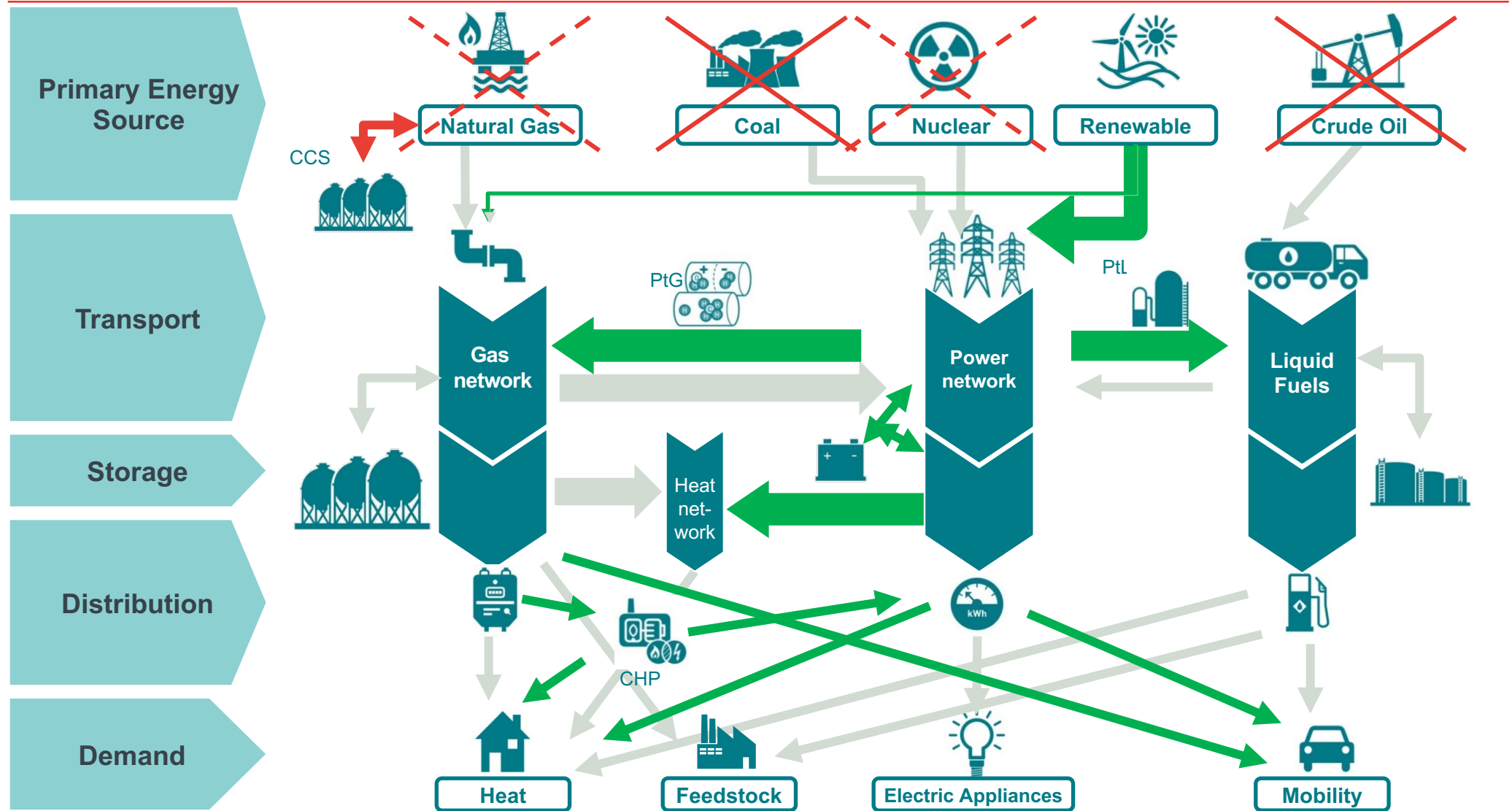
1st Annual European Gas Dialogues Conference

Matthias Janssen, Frontier Economics

11 March 2021



The multiple pillars of the energy system are an important asset to move to 100% renewable ...

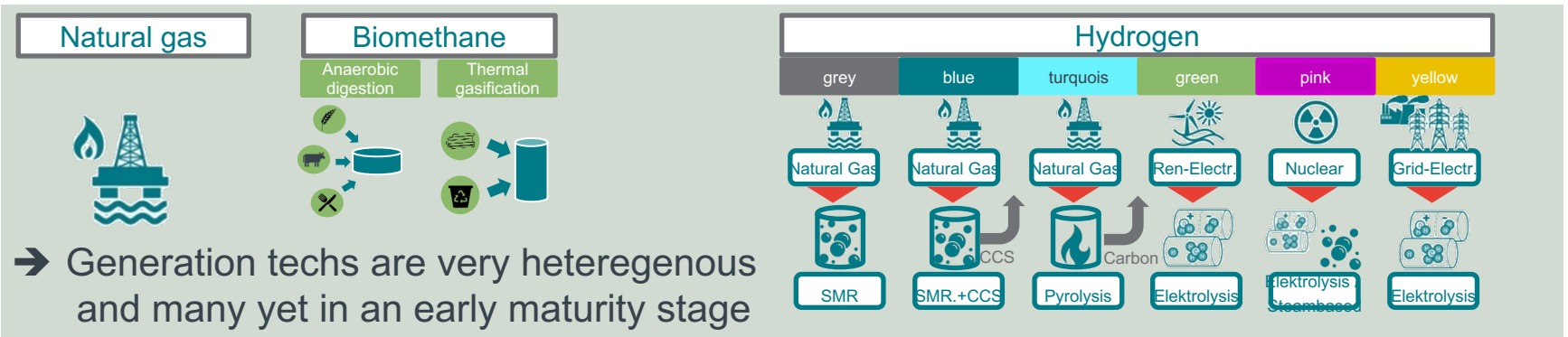


... with PtX and H2 becoming an important cross-cutting technology!

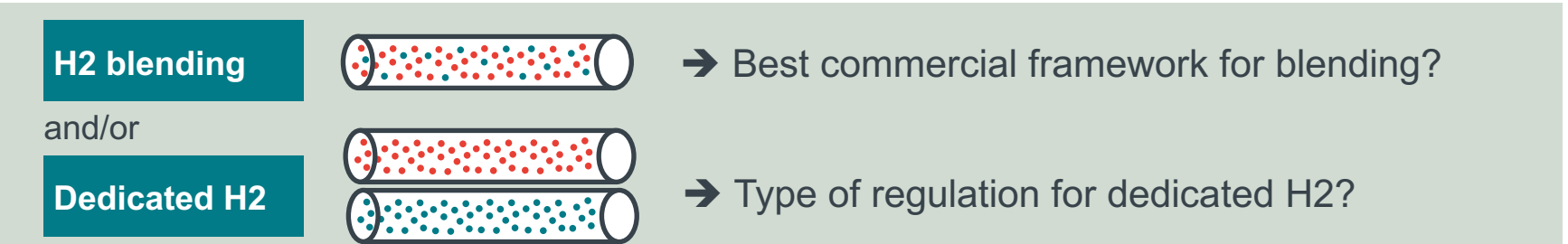
Technology neutrality is a key paradigm to secure an efficient tech mix that reflects heterogeneity and uncertainty on each stage of the value chain

Example: gas / H2

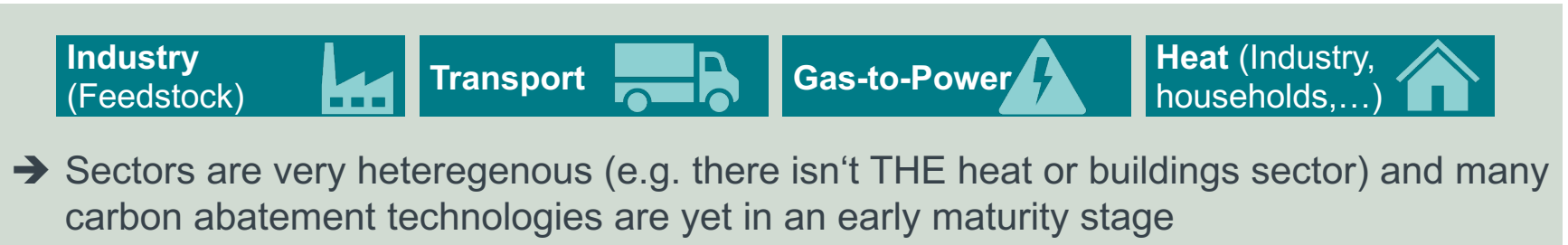
Generation



Infrastructure



Consumption

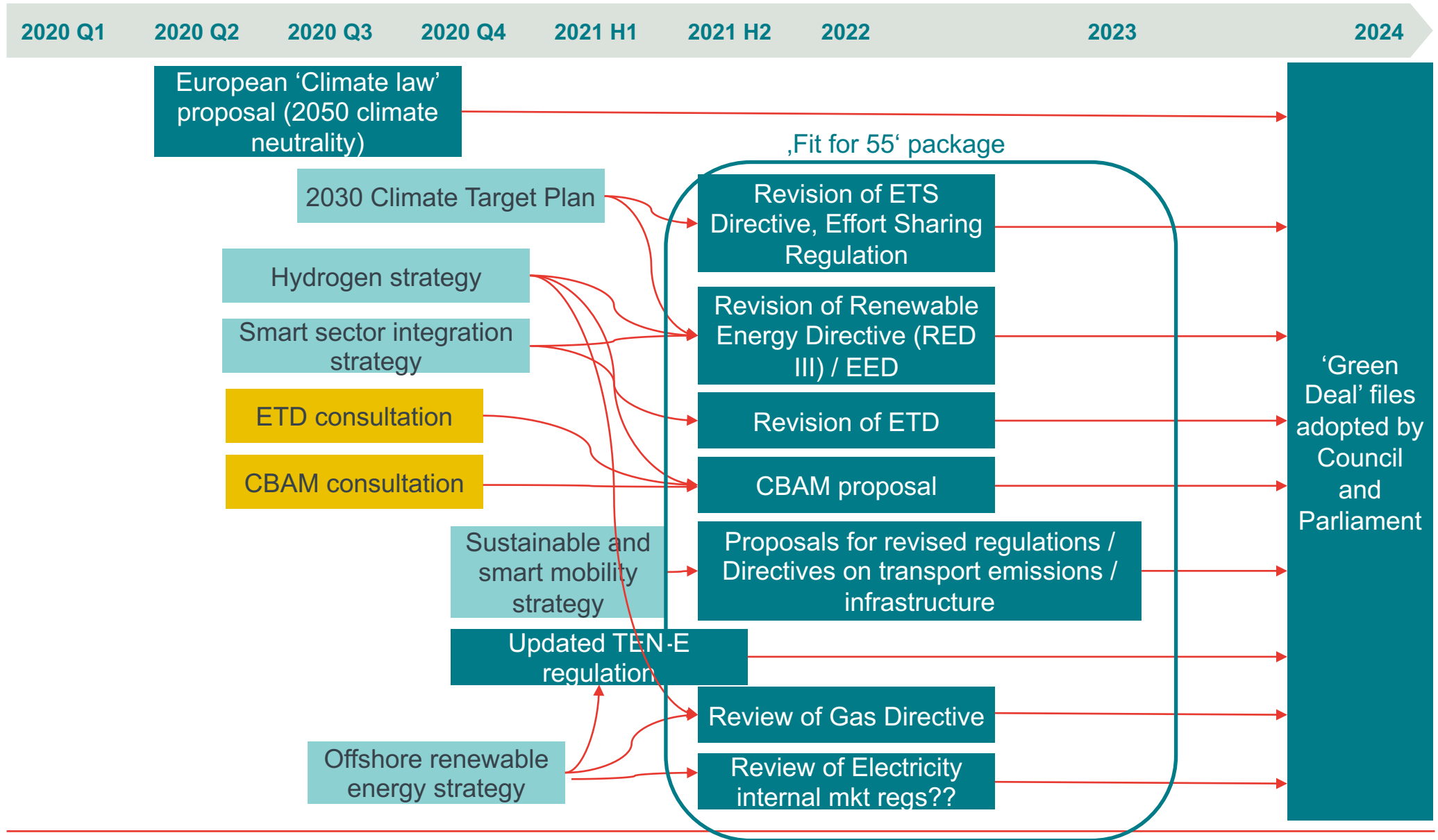


Heterogeneity requires differentiated mix of technologies

Freedom of choice has an important value for users

Huge uncertainties require to keep options open

Is the EU's Green Deal likely to provide this technology neutrality?



Thank you!



Dr. Matthias Janssen



+49 221 337 13 117



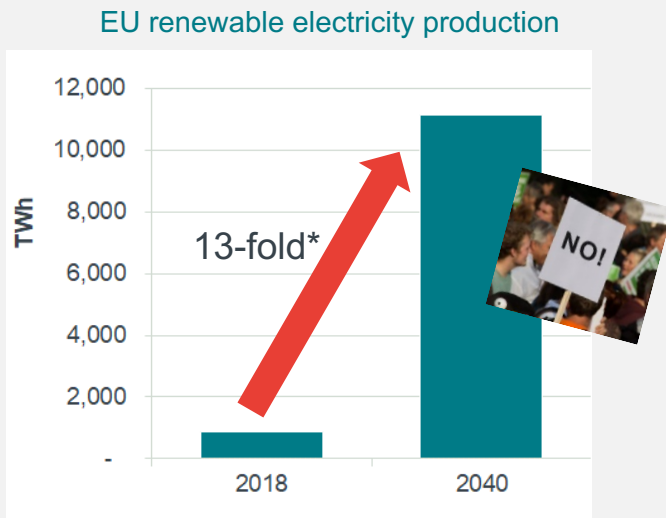
matthias.janssen@frontier-economics.com



www.linkedin.com/in/matthias-janssen-80bb069b/

There is no way around hydrogen and other chemical energy carriers to enable a 100% renewable and secure energy supply – for 3 reasons:

Challenge of REN supply

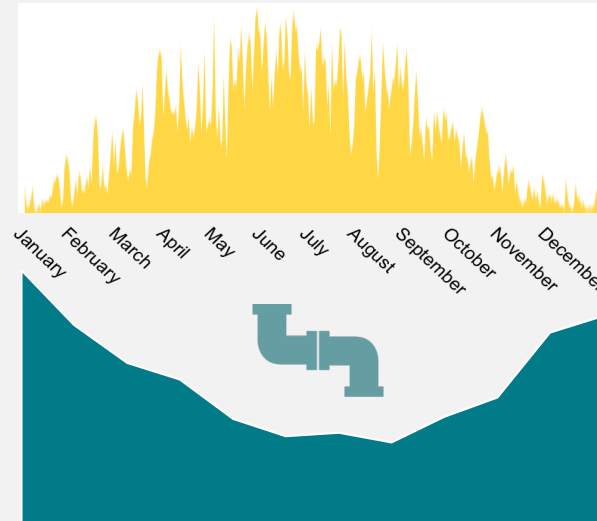


Need for renewable energy generation will be substantial, creating the challenge of finding appropriate and accepted **generation locations** within Europe

Challenge of energy storage



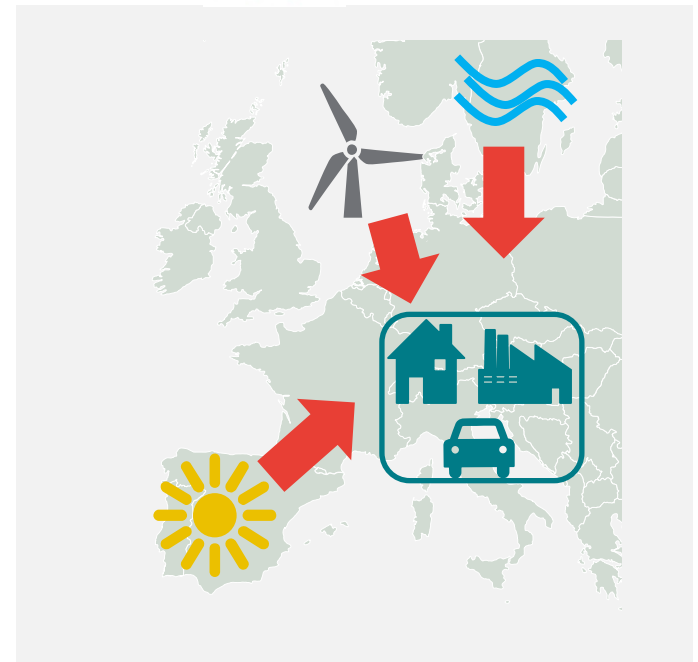
Schematic annual profile of PV generation



Monthly average gas load in 8 countries analysed

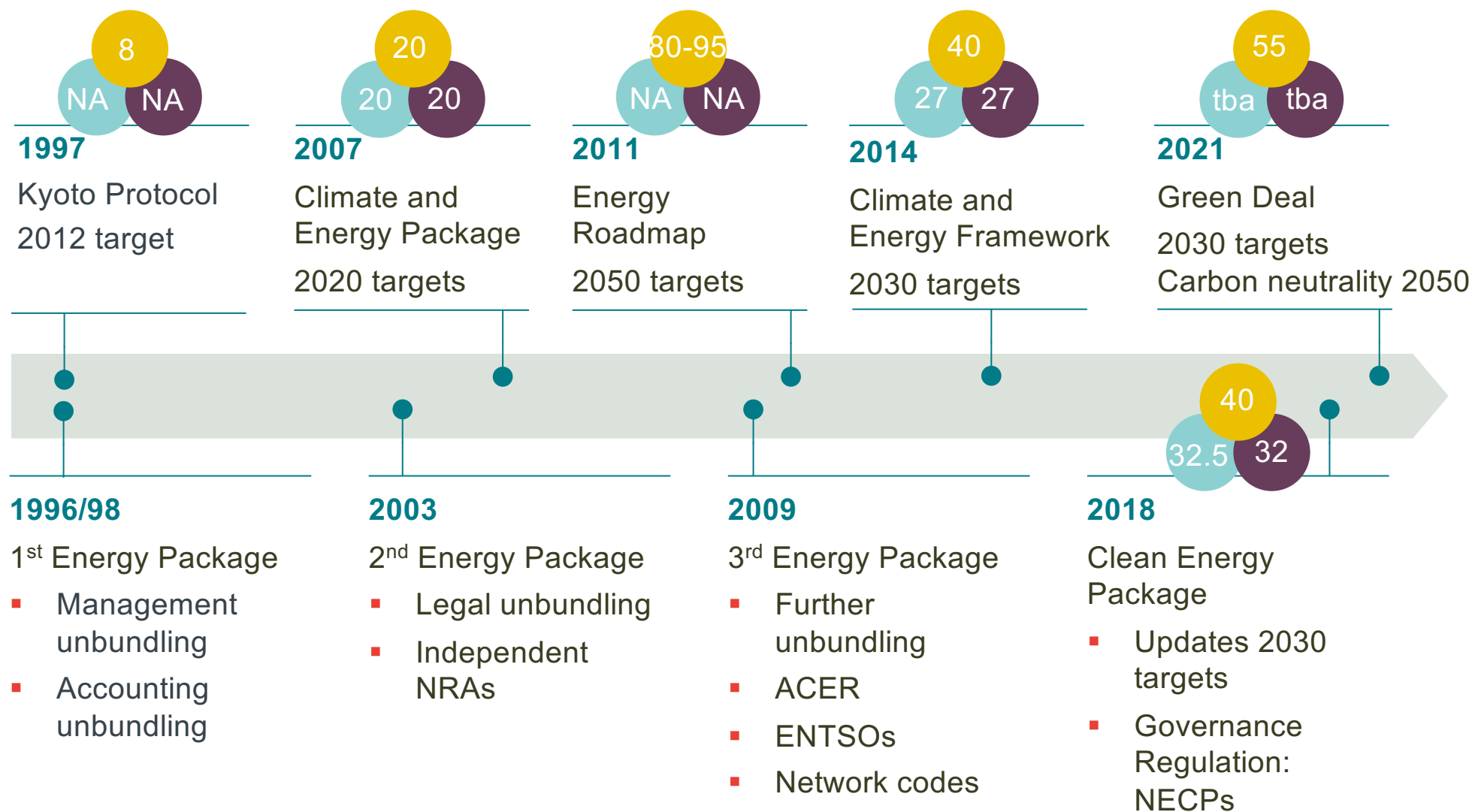
Intermittent renewables and seasonal heat demand **require vast seasonal energy storage**

Challenge of energy transport



Effective **energy transport and distribution** is crucial when exploring more and more renewables

Over time, the focus of EU energy policy shifted from market liberalisation towards achieving carbon neutrality by 2050





Frontier Economics Ltd is a member of the Frontier Economics network, which consists of two separate companies based in Europe (Frontier Economics Ltd) and Australia (Frontier Economics Pty Ltd). Both companies are independently owned, and legal commitments entered into by one company do not impose any obligations on the other company in the network. All views expressed in this document are the views of Frontier Economics Ltd.