Network access for third-party waste heat providers

Main barriers and solution pathways

Implementation map

Please find detailed information on the policy approach in the ENEFIRST report "Priority areas for implementing Efficiency First"

https://enefirst.eu/reports-findings/

Short introduction to the policy approach

Network access for third-party waste heat providers

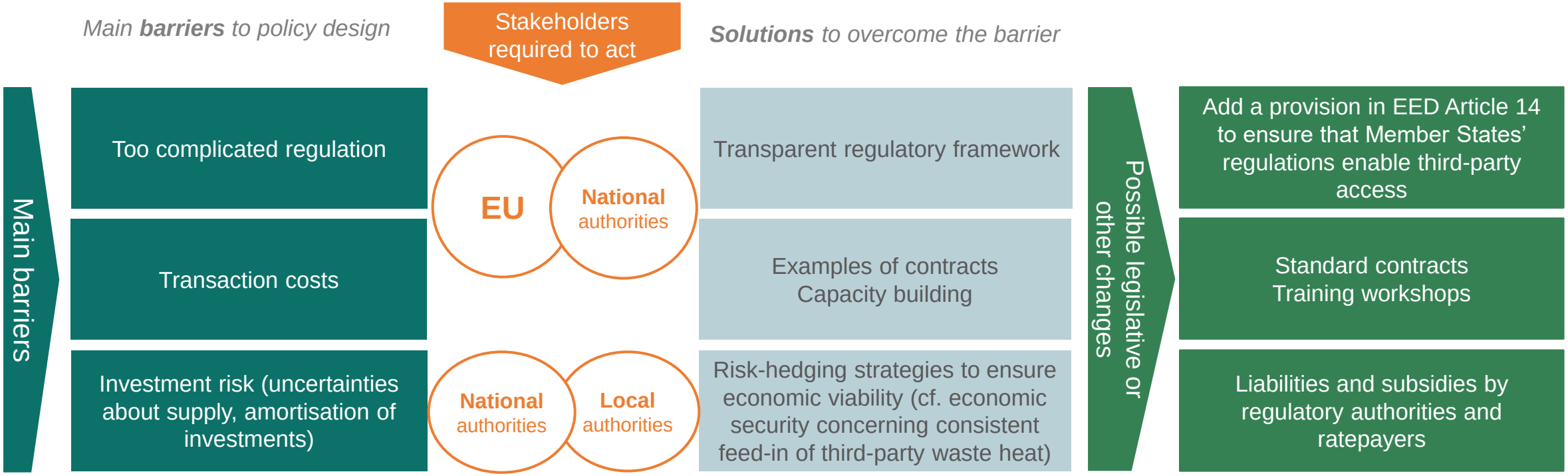
Integrating waste heat in DH systems enhances **supply-side efficiency**, i.e., the amount of primary energy needed to supply a unit of heat delivered to consumers for purposes of space and water heating. To establish a level playing field between third-party waste heat providers and conventional DH generation, adequate **market access regulation** needs to be in place.

Business as usual	**E1st** scenario
Network access negotiated on **voluntary basis**	**Non-discriminatory network access** for third-party waste heat providers
Significant transaction costs in negotiation of third-party network access	**Low transaction costs** in negotiation of third-party network access

Overcoming the main barriers to the design and implementation of E1st

Network access for third-party waste heat providers

I. Policy design



Overcoming the main barriers to the design and implementation of E1st

Network access for third-party waste heat providers

II. Policy implementation

Main barriers

*Main **barriers** to policy implementation*	Stakeholders required to act	*Solutions to overcome the barrier*	Possible legislative or other changes
Technical feasibility (technical conditions that the supplied waste heat shall meet)	**National** authorities or agencies; **DH** operators	Technical requirements that can be met by waste heat providers	Financial incentives for improving DH flexibility. Making DH technical requirements public.
Lack of information (unknown waste heat potentials around)	**National** authorities or agencies; **Local** authorities or agencies	Centralizing information and communication about potentials and examples. Waste heat maps.	Assigning clear roles about centralizing information at national and local level. Funding an online information platform.
Lack of interest and incentives	**National** authorities; **Local** authorities	Incentive about the use of waste heat in the remuneration rules for DH operators.	Revising the regulatory framework for the remuneration of DH operators.
Declining sales for incumbent DH operators		To avoid stranded assets, require DH operators to check for more cost-effective third-party options prior to major system upgrades	Revise Art. 14.5 and Annex IX of the EED to include waste heat for new DH systems or upgrades

Further reading

- ENEFIRST report “Priority areas for implementing Efficiency First”
  - Chapter 3.4.3 Identified policy approaches about district heating

- Suggestions of relevant references:
  - Bürger et al., 2019. Third party access to district heating systems – Challenges for the practical implementation. *Energy Policy*, 132, 881–892.
  - Holzleitner et al., 2019. Energy efficiency in the district heating sector – an analysis of the Renewable Energy Directive regarding alternative feed-in options. Proceedings of the ECEEE 2019 Summer Study.
  - Papapetrou et al., 2018. Industrial waste heat: Estimation of the technically available resource in the EU per industrial sector, temperature level and country. *Applied Thermal Engineering*, 138, 207–216.