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Online Stakeholder Workshop

Policy guidelines

Breakout group on E1st in integrated infrastructure planning

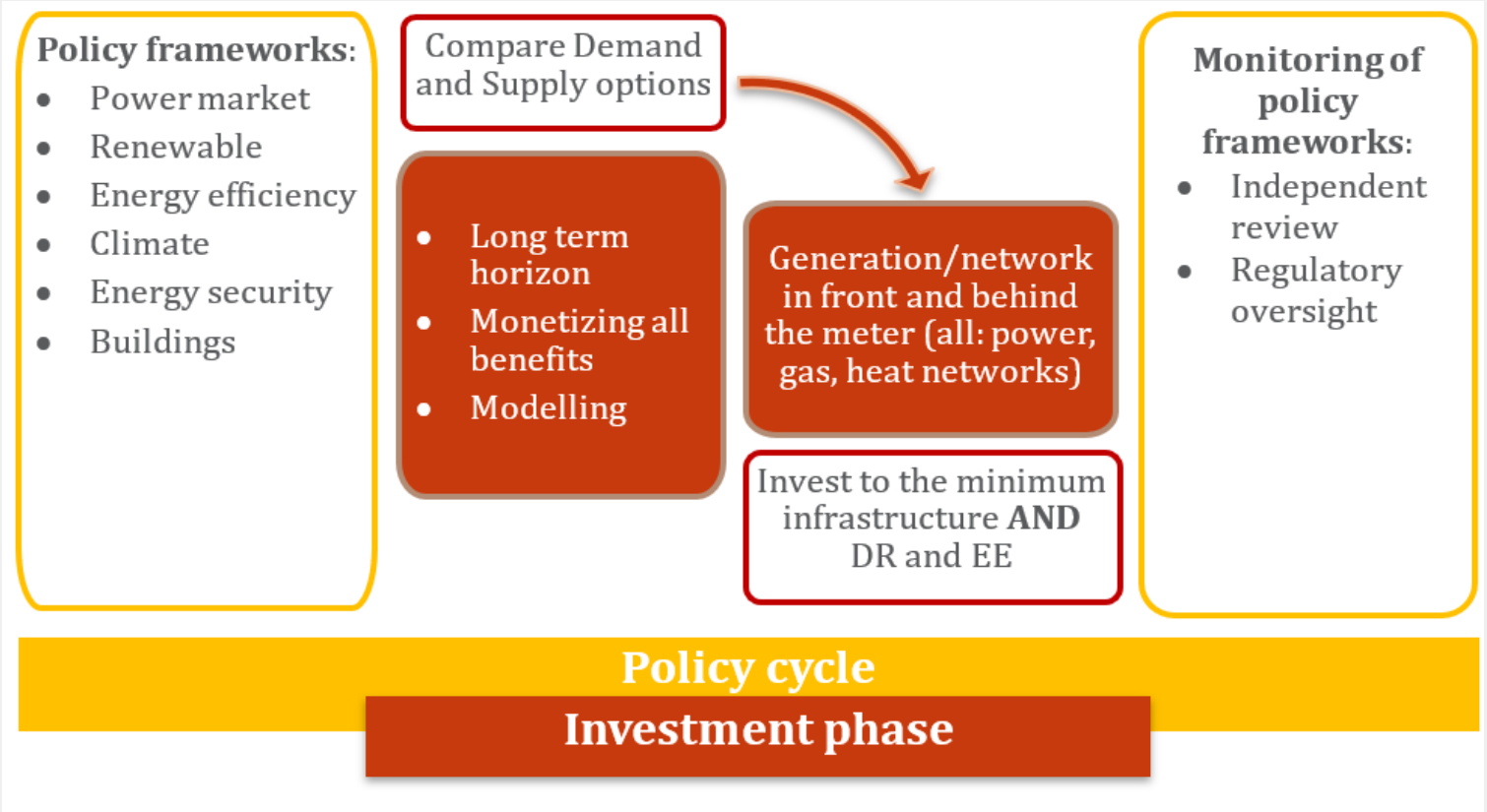
8th October 2021

enefirst.

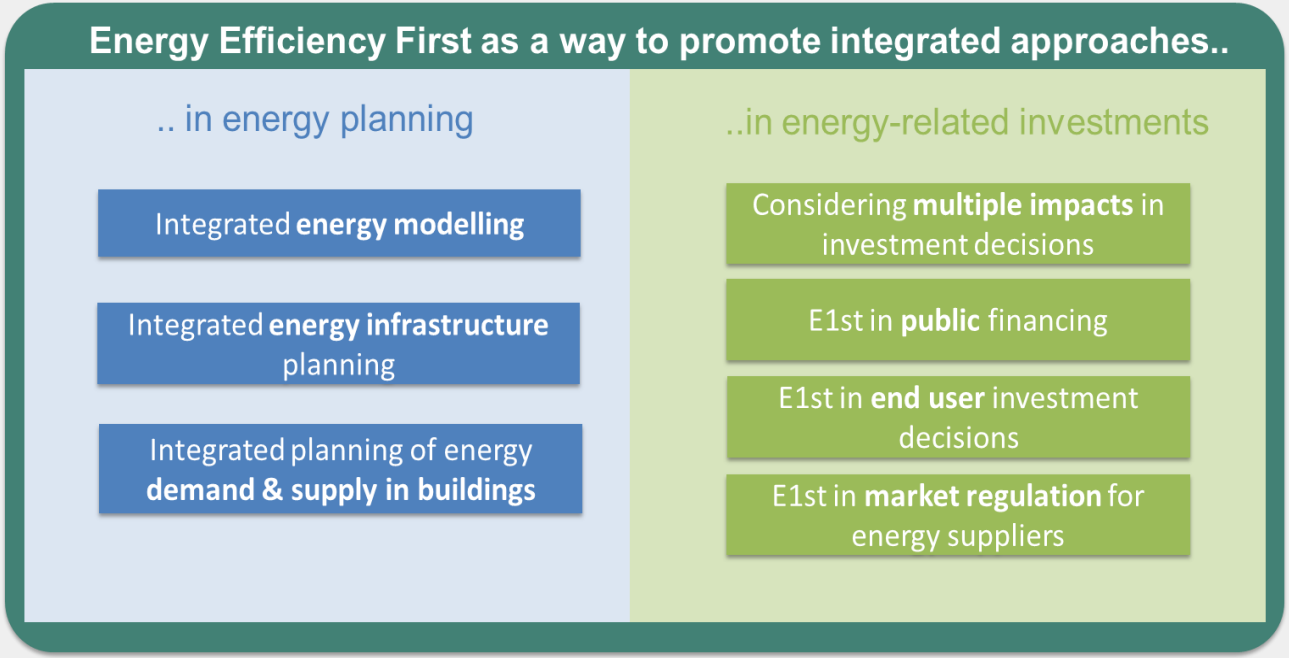
Introduction to the breakout group session

- short intro to the topic of integrated planning
- presentation of the policy approaches to discuss

Investment decisions embedded in the policy cycle



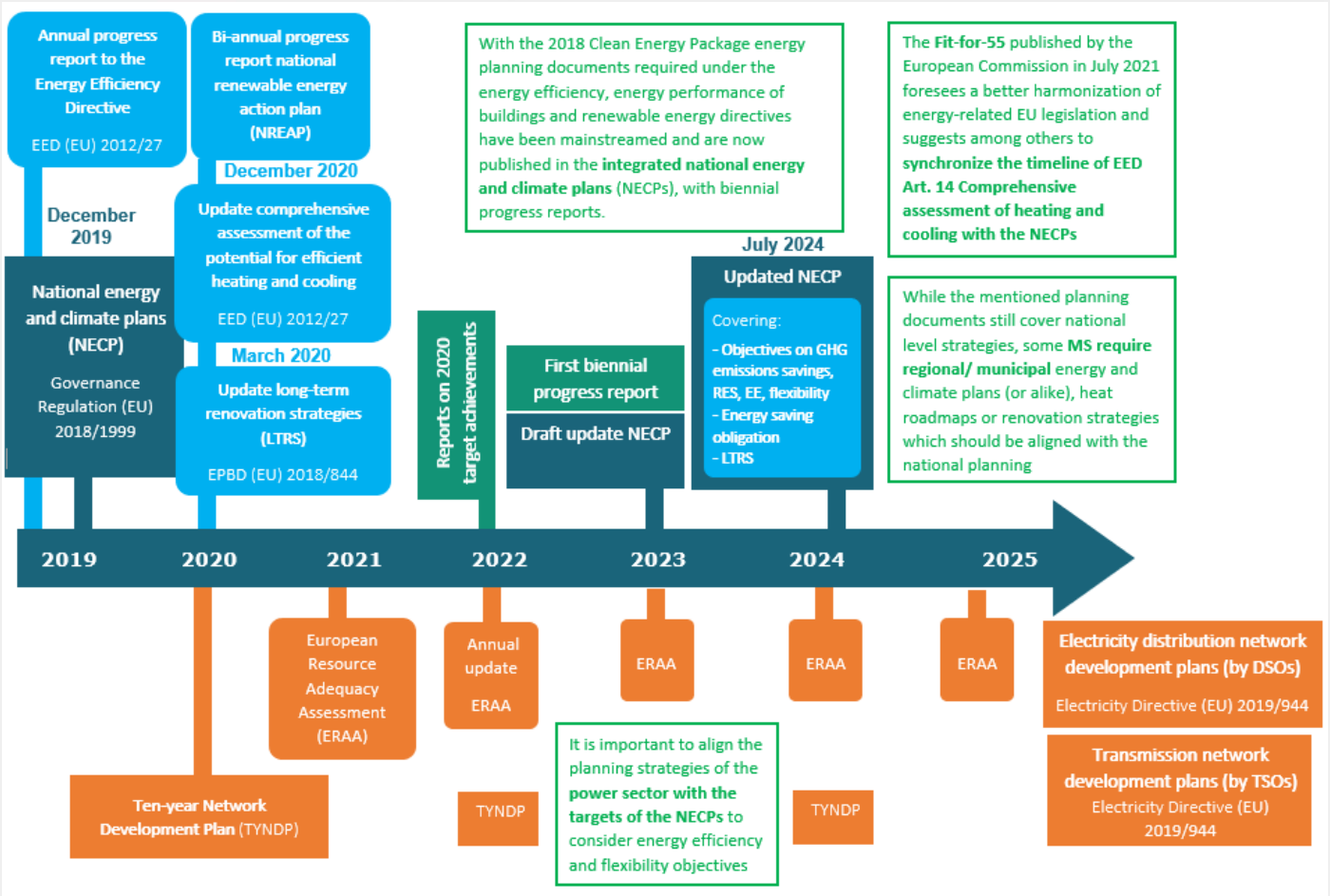
Structure of the report



+ short assessment of the Fit-for-55 July package

+ Complementary measures to implement E1st

Energy planning in the EU



‚Integrated' energy planning

NECP

BUT

Usual trends = working in silos

- energy demand forecasts should include the expected **impacts from energy efficiency policies**
- new energy infrastructures should be assessed against this "**E1st forecast**" (energy efficiency + flexibility potentials)

- are NECPs providing really integrated plans? Or compiling silos into one report? → truth probably in-between
  - Harmonised basic assumptions BUT
  - Infrastructure plans in the NECP are not the outcome of forecasting
- NEPCs = umbrella planning & reporting framework:
  - what about the planning at the level of energy companies
  - what about the decision-making or policy implementation

→ what types of approaches can support practices to implement E1st in energy planning?

Approaches included about energy planning

Integrated **energy modelling**

→ *basis for any integrated planning approach*

Integrated **energy infrastructure** planning

- Transmission and distribution utility provision
- Transmission and distribution company incentives
- Integrated district heating planning and operation

Integrated planning of energy **demand & supply in buildings**

- Individual planning tools in building renovation investments (e.g., building passports)
- Municipal heat & renovation roadmaps

+ at the level of the EU policy framework, need to strengthen the coordination between the comprehensive heating & cooling assessment (**EED**), assessment of RES potentials (**RED**) and long term renovation strategies (**EPBD**)

Approaches for energy infrastructure planning

Carrots and sticks for **network companies**

Transmission and distribution utility provision	Requirement to integrate DERs in network planning
Transmission and distribution company incentives	Providing financial incentives to DSOs/TSOs to consider non-wire solutions
Integrated district heating planning and operation	Considering demand-side options (e.g. thermal renovations in buildings) together with the supply options (generation, network, storage)

Policy approaches to discuss:

- **Power network planning**
- **Building stock planning**

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Short introduction to the policy approach
Distribution utility provisions

Provisions for distribution network companies that require the consideration of demand-side resources in grid planning and operations.

Business as usual	E1st scenario
DSO planning is based on forecasted peak load and a fit-and-forget approach.	DSOs have to assess the potential and the cost of mobilising demand-side resources and **use them as alternatives** to network investment whenever providing more net benefit.
Development plans are not public and only discussed with the NRAs.	Network planning is **public** so that the need for demand resources and their availability can be matched.

Short introduction to the policy approach
Building stock planning

Long term planning of decarbonising the building stock at the national (LTRS) and local levels should be aligned with network development plans.

Key inputs to network development	Building planning coverage
• Level of electricity use • Flexibility potential • PV injection per location (voltage) • Share and location of smart buildings	• Renovation depth • **Heat electrification** • **Building integrated RES** • **Storage** • **EV deployment** • Deployment of smart buildings (smart readiness indicator)

Questions (brainstorming)

- How can electricity demand in buildings be considered in network planning in the future?
- Are two planning streams adequate as they are?
- Should the coverage of building plans be extended as discussed or any alternative ways?
- How to link the national and the local levels?
- How to operationalise data availability and ensure transparency?

We now return back to the plenary

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