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Policy guidelines to implement Energy Efficiency First in

planning and investment schemes for buildings and related energy systems

Draft report Workshop | 8th October 2021

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Guidelines on policy design options for the implementation of Energy Efficiency First in **planning and investment schemes** for buildings and the related energy systems

Objectives

- Adding an integrated view to the prior ENEFIRST research
- Proposing ways to implement an integrated E1st perspective in energy planning and investment
- Providing guidance for policy design and implementation of selected policy approaches



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Promoting an integrated perspective of E1st

.. to overcome silo thinking in policy making and implementation

.. to help policy officers, market actors and end-users to take other perspectives and consider implications for the whole energy system

.. to show how EU legislation should be better harmonized to enable integrated energy planning of supply- and demand-side options







Structure of the report

Energy Efficiency First as a way to promote integrated approaches..

Chapter 1 ... in energy planning

Integrated energy modelling

Integrated energy infrastructure planning

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

Chapter 2 ... in energy-related investments

Considering **multiple impacts** in investment decisions

E1st in public financing

E1st in end user investment decisions

Energy market regulations

Complementary approaches to implement E1st

+ short analysis of the **Fit-for-55 July** package

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Chapter 3



Integrated energy planning

Integrated energy planning

National Energy & Climate Plans

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)

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- NECPs = umbrella planning & reporting framework, BUT
 - Do the national documents provide real integrated plans?
 - Do the infrastructure plans consider the outcome of forecasting?
 - □ What about the planning at the level of energy companies?

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



Approaches included about integrated energy planning

Integrated energy modelling

Integrated **energy infrastructure** planning

- ightarrow basis for any integrated planning approach
- 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 renovation passports)
- Municipal heat & renovation roadmaps



Integrating E1st in energy-related investment decisions

Integrating E1st in energy-related investment decisions

Large / major investments (in EED recast: > €50 million)

Enhanced CBA = "that allow proper assessment of wider benefits of energy efficiency solutions from the societal perspective" (Art.3 EED recast)

- CBA methodology
- Approval by an entity in charge of verifying that E1st is well implemented

included in the proposed EED recast

Individual / smaller investments (+ behaviours)

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Need for **policies** to **fill the gap** between the *investor*'s and *society*'s perspectives

- what types of approaches to make it happen?
- Multiple impacts in policy design
- **Prioritization** in public funding allocation
- **Incentives or requirements** to promote decisions in line with national objectives



Approaches included about energy-related investments

Considering **multiple impacts** in investment decisions

 \rightarrow basis for a cost-benefit analysis (or other assessment) in line with the E1st principle

E1st in public financing

- Integration of E1st principle into EU funding streams
- Carbon revenue recycling towards energy efficiency

E1st in end-user investment decisions

- Financial incentives for RES linked to energy performance
- Fabric first approach
- Minimum energy performance standards (MEPS)
- Dynamic tariffs

Approaches included about energy market regulations

Creating the conditions for energy companies to consider demand-side resources on a fair basis

Power market rules

Network access for third-party waste heat providers

• Enabling demand-side options to compete on a fair basis with any energy resource on the power market

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• Making it possible for waste heat to be considered a heat source on a fair basis

Energy Efficiency Obligation Schemes

 Requiring energy companies to be involved in energy efficiency programmes, and allocating a part of their revenues to energy efficiency



Complementary measures to implement E1st

Cross-cutting issues to promote the concept of E1st across policy areas and among different stakeholder groups

Increase data availability and digital monitoring Build institutional capacities & raise awareness

Complementary measures to make Energy Efficiency First a reality Overcoming silo thinking in policymaking and professional fields

Educating and empowering the consumer on E1st





Any clarification questions?



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