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Assistance with the analysis to support the implementation of the Efficiency First Principle in decision-making

24 February 2021

Objectives of ‘Analysis to support implementation of Efficiency First principle in decision-making’

- **Problem:** **Decision-making in EU** does **not yet fully and effectively consider and incorporate energy efficiency** related concerns and potential in both energy and other sectors .

- **Objective:** to provide practical contributions and clear guidance for operationalisation and implementing the Energy Efficiency First principle :

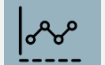
Task 1: To develop a decision-making tool for EEF

- Relevant policy areas
- Design decision-making tool
- Real-life examples

Task 2: To develop library of relevant information for the EEF tool

Task 3: Policy recommendations for future activities related to EEF principle

Relevant policy elements for energy efficiency first principle

KEY POLICY AREAS		SELECTED POLICY ELEMENTS	POLICY DESIGN	SYSTEM PLANNING	INVEST-MENT
	Energy markets	Network tariff design	√		
		Market access of demand resources	(√)	√	
		Transmission & distribution network planning	√		
	Energy supply and energy system integration	Integrated district heating/cooling planning		√	
		Power generation planning		√	
		Energy storage	(√)		√
		Hydrogen infrastructure	(√)		√
	Energy demand	Public procurement rules	(√)		√
		Efficient manufacture, use and disposal of industry materials			√
	Governance	Security of supply planning for trans-European infrastructures		√	
		Preparation of National Energy and Climate Plans (NECPs)	√		
		National and European long-term strategies	√		
	Digitalization	Construction of data centers			√
		Deployment of 5G networks			√
	Transportation	Energy efficiency of passenger vehicles	√		
		Energy efficiency in transport goods		√	(√)
		Energy efficiency in transport planning		√	(√)
	Water	Water treatment		√	

√: primary category; (√): relevant as well

Decision making tool

PHASE	POLICYMAKERS	REGULATORY AUTHORITIES	MARKET ENTITIES
Inception	(P1) Define policy targets (P2) Define regulatory framework (P3) Policy impact and alternatives analysis	(R1) Define market access rules for energy efficiency or demand-response solutions (R2) Compliance check of business / project goal with policy targets and market access rules	(M1) Define business/project goal
Preparation		(R3) Define CBA method in principle	(M2) Define CBA method for concrete application (M3) Information collection (M4) Energy service demand forecast (M5) Identify other cost and risk (M6) Systematic assessment based on EEF principle
Validation		(R4) Check the implementation plan and if relevant, approve it	(M7) Propose the implementation plan
Implementation			(M8) Implement the plan, e.g. provide designed service, adopt energy-efficiency technologies, make investment decisions, etc.

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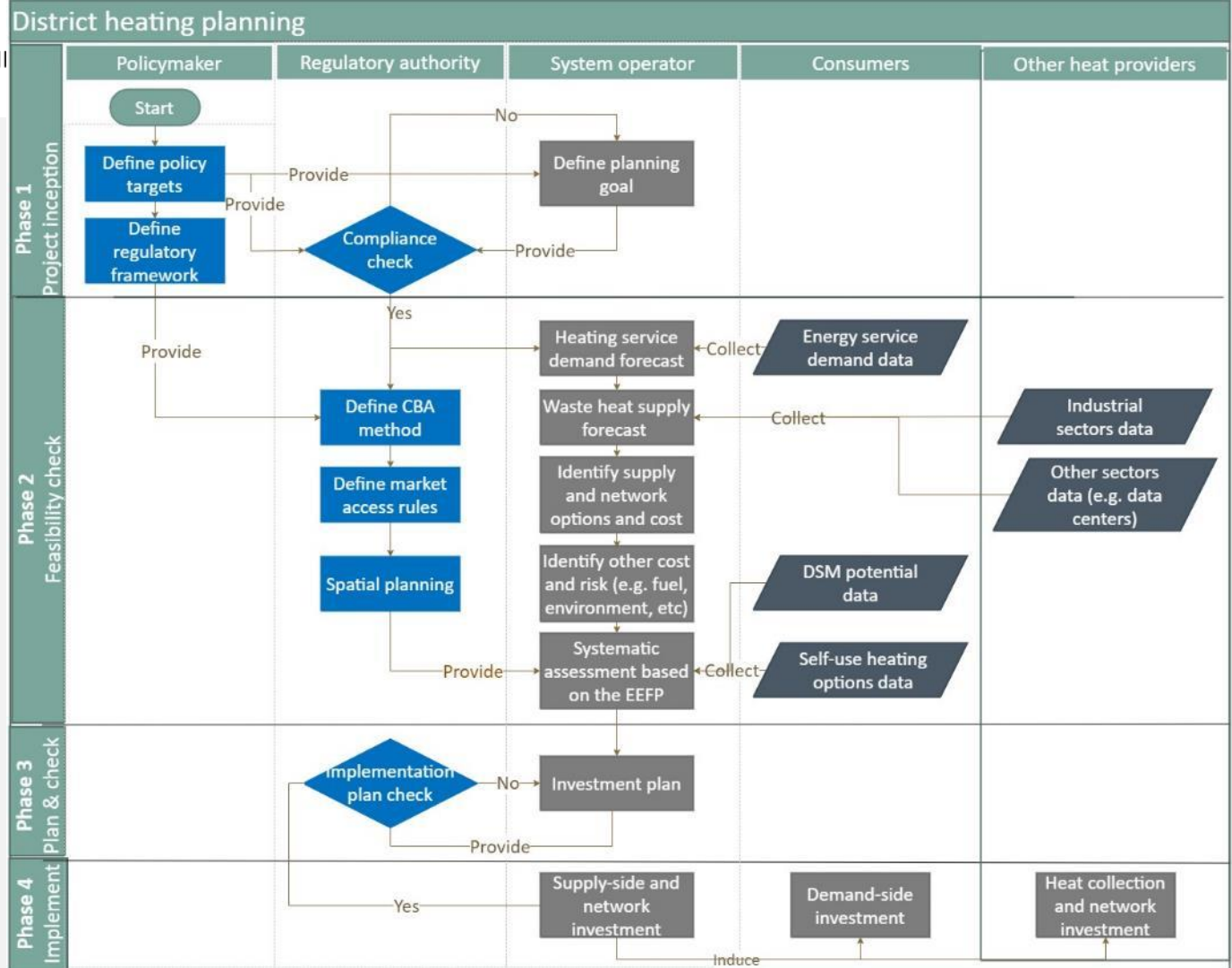
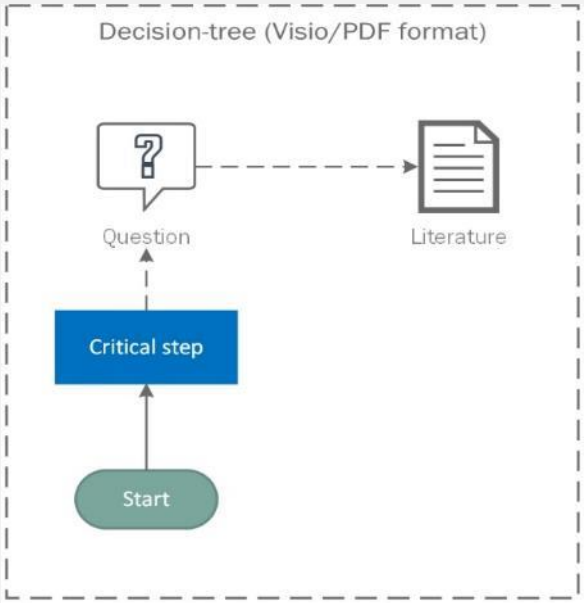
Real life example District heating

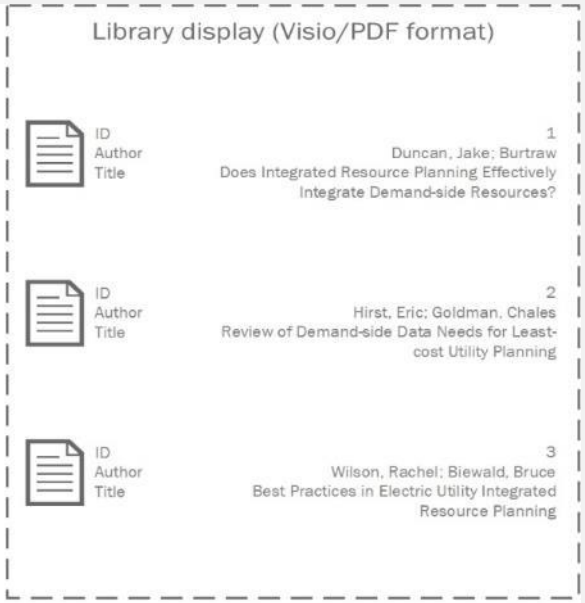
4 layers of the tool:

1. Matrix of phases, players and actions
2. Actions assembled in real-life example decision-tree
3. Questions attached to actions
4. Literature attached to questions



Library





Library database (Excel format)

ID	Author	Year	Title
1	Ducan, Jake; Burtraw	2018	Does Integrated Resouce Planning Effectively Integrate Demand-side Resources?
2	Hirst, Eric; Goldman, Chales	1990	Review of Demand-side Data Needs for Least-cost Utility Planning?
3	Wilson, Rachel; Biewald, Bruce	2013	Best Practices in Electric Utility Integrated Resource Planning

Library characteristics

- Title
- Authors / Institute
- Year
- Category & subcategory
- Policy area & element
- Country / region
- Level (EU, national, local)
- Type of decision
- Public source?
- Source location
- Decision step
- Description

1. Recommendations for developing the EEFP decision tool

2. Recommendations for operationalisation of the EEFP

3. Recommendations for embedding EEFP in EU decision-making

Recommendations for developing the EEFP decision tool

- **Usage of the decision tool**

  1. Most useful for **energy policy sectors** (planning and investment decisions)

- **When developing further the decision tool**

  2. Prioritise **clear visibility** and user-friendliness of the decision tool

  3. Use either a **Java or HTML** format

  4. Identify energy and non-energy sectors have reached **common European harmonised rules** & identify which sectors have **more national peculiarities**

- **When developing further the library of information**

  5. Undertake **research** explicitly on the **application of the EEF principle** to specific policy areas and policy elements

Recommendations for operationalisation

- **General level**

6. Use A **three-step approach** for better operationalising the EEF principle:
   a. Require relevant players to apply the EEF principle;
   b. Provide them with specific tools and guidance for cost-benefit assessments;
   c. Additional specific requirements/incentives based on the decision being taken.

- **Operationalisation in Policy Decisions**

7. **EEFP impact analysis** for each policy associated to the implementation or decision

- **Operationalisation in Planning Decisions**

8. Creation of a **simplified modelling tool** should be encouraged/promoted to encourage supply-side decisions

- **Operationalisation in Investment Decisions**

9. Encouraged in **ERDF** funding Operational Programmes.
10. Specific calls for funding in the **Horizon Europe**

Recommendations for embedding EEFP in EU decision-making

- **Integrating the EEF principle into the EU Better Regulation Guidance and Principles**

11. Chapter 3 of the EU Better Regulations Guidance and Principles on Impact Assessments.

- **Taking stock of the EEF principle in NECPs and recommendation for improvement**

12. Member States break down more clearly how the principle is implemented in all decision-making steps and how this will be **ensured and monitored**

- **Better integrating the EEF principle into the EU Legislation**

14. European Commission guidance coupled with better integration of the principle in the Energy Efficiency Directive to achieve transposition, enforceability and clarity of the Principle .

Thank you

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