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Online Stakeholder Workshop

Policy guidelines

Breakout group on
integrated buildings and heat roadmaps

Workshop I 8th October 2021

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Welcome

Your team:
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Rapporteur: Mostafa Fallahnejad, TU Wien

Introduction to the breakout group session
+ *quick clarification questions*

Approach 1: municipal heat & renovation roadmaps
TIME FOR DISCUSSION

Approach 2: integrated district heating planning
TIME FOR DISCUSSION

45 min

+ quick polls with **sli.do**

E1st investment decisions in private households

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

Chapter 3 ..in energy market regulations

Chapter 4 Complementary approaches to implement E1st

‚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

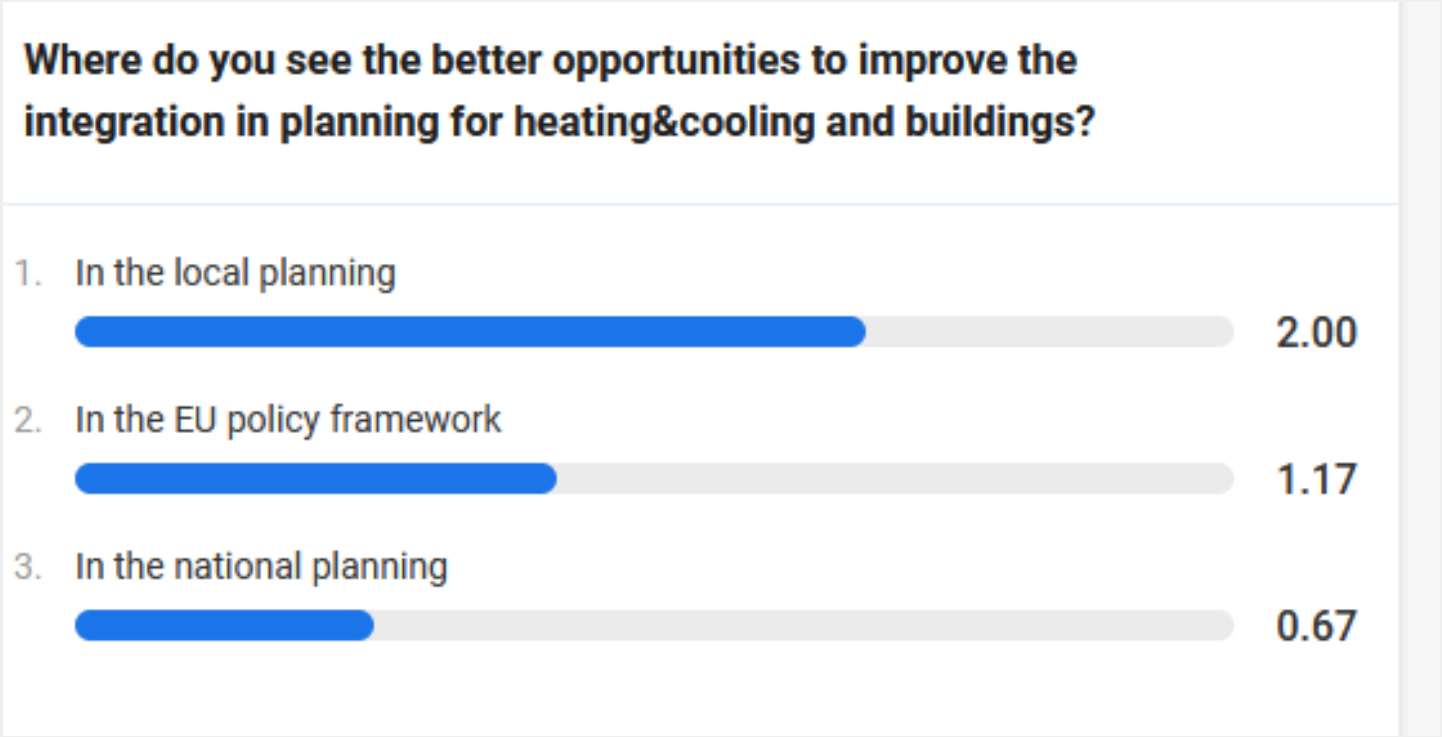
→ what types of approaches can support practices to implement E1st in energy planning?

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**)

Poll 1 ➔ sli.do ; code #5542030



From the EU to the local level

RED
Art.15

EED
Now Art.14
Recast Art.23

EPBD
Art.2a

Assessment of RES potential

Comprehensive heating & cooling assessment

?

Long term renovation strategies (+nZEB)

Local heating and cooling plans
(*cf. EED recast, Art.23(6)*)

?

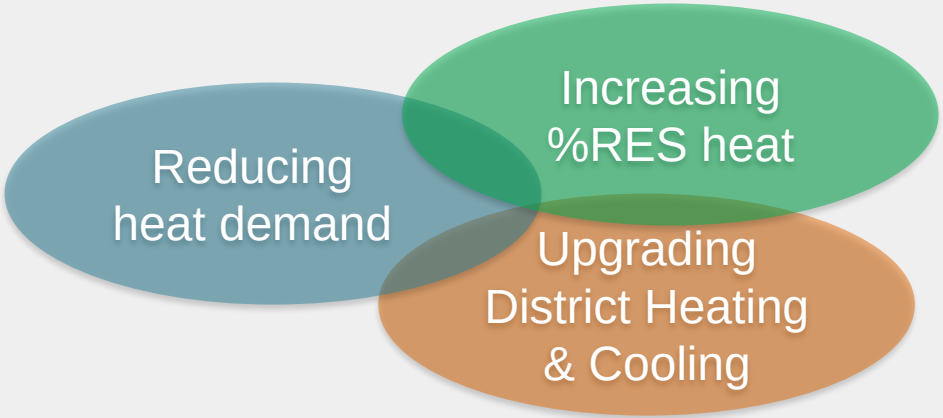
Local renovation plans ?

“Less heat, but for more people”

Paul Voss, Managing Director, Euroheat & Power

28 September 2021 | Commission’s online event launching the *Recommendation and Guidelines on Energy Efficiency First: From principles to practice*

Synergies between:



Policy approach 1

Municipal heat & renovation roadmaps

Local heat and cooling plans / roadmaps ⟷ **Local renovation plans / programmes**

Scenarios to assess and compare → Priorities / balance / combinations between supply-side (e.g., RES) and demand-side (e.g., renovation) options + analysing **INTERACTIONS**

to meet the local, but also national, policy objectives →

- ✓ security of supply
- ✓ affordability of energy
- ✓ RES objectives
- ✓ CO_2 reductions objectives
- ✓ local employment
- ✓ reducing energy poverty
- ✓ improving health conditions
- ✓ …

+ getting results on **short-term** while not compromising **long-term** goals

Framework for **Municipal heat & renovation roadmaps**

Already now	Voluntary commitments / planning	e.g., Sustainable Energy and Climate Action Plans (SECAP)
	Local planning already required in some Member States	e.g., local energy planning, local sustainable urban development plans, local climate strategies
Changes proposed in the fit-for-55 package	Proposed EED recast, Art.23(6): "*Member States shall encourage regional and local authorities to prepare* ***local heating and cooling plans*** *at least in municipalities having a total population higher than 50.000*"	
	+ possibility to link with **municipal renovation strategies/plans** in the revision of the EPBD (under consultation) **?**	

From theory to practice: Municipal heat & renovation roadmaps

Policy Design

- ✓ **Aligning the timelines** for the different local planning exercises
- ✓ Ensuring local outputs is fed into LTRS and NECP process
- ✓ Including a **public consultation** process
- ✓ Ensuring a **legal access for local authorities to the data** needed (from DSOs, EPC registers, etc.)

Policy Implementation

- ✓ Providing local public bodies with **suitable resources** (e.g., staff, financial resources, methodologies or guidebooks, online tools and data frameworks) + **capacity building**
- ✓ Setting up regional or **local energy observatories**, or alike (cf. data sharing / gathering)

Who?

Municipal heat & renovation roadmaps

National authorities

- ✓ Setting the **legal framework**
- ✓ Providing **financial resources / incentives**

National / regional agencies or institutes

- ✓ Providing **technical resources / support**
- ✓ Facilitating **experience sharing**

Local authorities and their bodies / agencies

- ✓ **Leading** the process
- ✓ Organising the public / stakeholders' **consultation**

Making all units / departments work together

Energy companies

Building companies

Asset managers

Citizen

Data owners / hosts

Local research or technical institutes

Poll 2 ➔ sli.do ; code #5542030

According to you, what would be the most important keywords for municipal heat & buildings planning?

(Open question, answered with **keywords**)

- How to address very different types of stakeholders (companies, minicipality, persons...?
- tariff, investment cost
- waste heat utilisation
- integrated, EE1st
- capacity (personal, financial) data cooperation
- holistic views
- Continuous exchange between suppliers and operators and municipalities
- follow the energy hierachy
- wide EPC coverage
- data

TIME FOR DISCUSSION

Policy approach 2

Integrated district heating & cooling planning

Supply-side options
(generation, network, storage)

⟷

Demand-side options
(renovation, flexibility)

Scenarios to assess and compare →

Priorities / combinations / synergies (e.g., low temperature) between supply-side and demand-side options + analysing **INTERACTIONS**

Criteria / constraints set in the mandate of the DHC company →

- ✓ security of supply
- ✓ affordability of heat
- ✓ RES objectives
- ✓ CO_2 reductions objectives / limits

Current: DHC companies rarely consider demand-side as part of their scope of action

E1st: What incentives to make DHC consider and use demand-side resources?

Framework for **Integrated district heating & cooling planning**

Currently

No explicit framework / legal basis for joint planning of DHC and renovation plans. Instead, **CBA focused on supply-side options**.

Urban regeneration or development plans might be opportunities for integrated planning (e.g., building renovations + extension/upgrading of the DHC network)

Key role of regional or local energy planning (when in place)

Changes proposed in the fit-for-55 package

Proposed EED recast, Art.23(1): heating & cooling assessments and RES assessments should inform each other
+ Proposed EED recast, Art.23(6) about local heating and cooling plans
+ possibility to link with municipal renovation strategies/plans in the revision of the EPBD (under consultation) **?**

From theory to practice:

Integrated district heating & cooling planning

Policy Design

- ✓ Promote **joint assessments** of DHC + RES + building renovations
- ✓ **Revise the CBA methodology** in EED Annex IX (to include demand-side options + long term perspective)
- ✓ New regulatory framework and remuneration schemes: "**thermal comfort as a service**"
- ✓ Ensure a **legal access for local authorities to the data** needed
- ✓ Other regulatory or incentive changes: towards 4th generation of DHC, areas with mandatory connection to DHC

Policy Implementation

- ✓ **Technical support** (e.g., guidelines and case studies about upgraded CBA, including examples with demand-side options; data-frameworks and tools)
- ✓ **Capacity building** for integrated modelling / assessment
- ✓ **R&D and pilot projects** to assess and demonstrate the impacts of integrated planning
- ✓ Revise the **criteria** used in public service delegation **contracts**

Who?

Integrated district heating & cooling planning

- National authorities
- National / regional agencies or institutes
- Local authorities and their bodies / agencies
- DHC companies

- ✓ Setting the **legal framework**
- ✓ Providing **financial resources / incentives**
- ✓ Providing **technical resources / support**
- ✓ Facilitating **experience sharing**
- ✓ Organising the public / stakeholders' **consultation**
- ✓ **Leading** the process

- Third-party heat providers
- Building companies
- Asset managers
- Citizen
- Data owners / hosts
- Local research or technical institutes

TIME FOR DISCUSSION

- ✓ Can district heating & cooling companies become “thermal comfort” companies?

- ✓ Should municipalities be the integrator / coordinator (between investments in supply-side and demand-side)?

THANKS A LOT

FOR THE EXCHANGES

!!!

1st step for integration =
getting to know each other