



EUROPEAN FEDERATION
OF INTELLIGENT ENERGY EFFICIENCY SERVICES

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Key principles for a low-carbon, efficient and integrated EU energy system

EFIEES welcomes the EU Strategy for Heating and Cooling, showing awareness from the EU legislator for a need to address heat in a dedicated way, distinctly from electricity. EFIEES also highlights that an “**Energy Efficiency first**” principle is key to a successful energy and climate policy, as a prerequisite for energy transition towards renewable energy sources, and a basis for CO₂ emissions reduction. **Cost effectiveness** must be also one of the drivers for prioritising actions, with projects based on a market approach.

Looking forward to the forthcoming legislative proposals on the review of the Energy Efficiency (EED), Energy Performance of Buildings (EPBD) and Renewable Energy (RED) Directives. By making the following recommendations, EFIEES' main messages in each public consultation, available on www.efiees.eu, are the following:

An integrated approach

Energy efficiency actions, enabling a reduction in energy demand and heat in particular, as the latter represents 45% of EU final energy demand, are a key component of decarbonisation of EU economy and a precondition for a successful and affordable transition to renewable energy sources. These actions must be developed throughout **the entire energy chain**: generation, transmission, distribution and final use, and therefore measured on the basis of **primary energy** to objectively compare different solutions.

EU-wide measures for a decarbonised energy system

- In order to increase visibility of investments in energy efficiency measures for economic actors, **a binding target of 1.5% in Art.7 of the EED must be retained for the period after 2020**, as in fact it corresponds to an increase in annual output of this measure with the “easiest” actions being done first.
- It must be fully acknowledged that **a strong carbon price applicable to the entire economy** is one of the most effective incentives to encourage projects based on renewable and recovered energy. Currently only installations above 20 MW are subject to the EU ETS, whereas other installations, mostly less CO₂-efficient and representing the most important part of the heat/heating sector, are not covered by the EU

ETS. Non-ETS sectors should be covered by the EU ETS or by an equivalent mechanism incentivising low-carbon heating systems.

- **Local authorities should be encouraged to make an assessment of their potential by mapping local heating and cooling demand and supply including available renewable energy sources and excess heat¹.**
- **Incentives for improving and expanding District Heating and Cooling networks (DHC) and for building new ones** in areas with a substantial density should be created. DHC is already the main vehicle for energy transition and offers ability to store, in a thermal form, a part of renewable electricity produced during periods of lower consumption. **Specific EU funding programmes should be set to replace inefficient heating systems in households with efficient technologies.**

Buildings as a part of an "energy-efficient territory"

- There is a need for an **"energy-efficient territory"** approach, rather than one based on a given building or use. Otherwise adverse systemic effects occur: promotion of all-electric heat pumps, no access to heating systems using biomass for isolated buildings. **Planning** at adequate level (city, region) should take into account heating, cooling and electricity needs in an integrated and coherent way. The analysis at the level of neighborhood must incorporate contributions of renewable energy, local recovery of heat, and DHC. An energy-efficient territory approach should encompass industry, highlighting the **role of industrial processes for recovered heat**. It should cover, as well, all different networks allowing thermal storage of electricity, and, more generally, all buildings: residential (with a view to energy poverty issues), public, industrial, with a perspective of a circular economy where recovered heat and positive systemic effects must be promoted.
- **Public sector must strongly lead by example. Art. 5 of the EED is currently too narrow**, targeting only buildings owned by central government. It should be modified and cover a much wider scope, with a wider range of actions but only renovation. **The energy efficiency target for public buildings should be expressed as a yearly percentage of energy efficiency or savings in all publicly owned and occupied buildings and cover any energy efficiency actions**, such as (staged) deep renovation, actions on the energy systems, from new heating/cooling systems to daily operation, maintenance and users' behavior. Member States should have flexibility for choosing their own combination of actions on the basis of cost-effectiveness, return on investment, etc.

¹ This exercise can be supported by using already available tools such as the Pan-European Thermal Atlas, which has been developed within [STRATEGO project](#) co-funded by the EU.

- The assessment of energy consumption of a building should not be biased by compensating with the on-site energy production, which may hide poor energy performance of buildings.
- A definition of “a nearly zero-energy building” should be done at district level and requirements for new buildings in the EPBD should include a possibility of supplying renewable heat produced in DHC systems and cogenerations.

Tackling EU and national barriers detrimental to efficient heating and cooling

The following regulatory and non-regulatory barriers to efficient heating and cooling should be evaluated and addressed:

- **Discrimination against installations with a capacity above 20 MW which are subject to the EU ETS**, despite greater energy efficiency and lower emissions than other solutions with a capacity below 20 MW that are not subject to the EU ETS. The EU ETS should be expanded to all energy consumptions.
- **Energy poverty: subsidies to fossil energies should be deleted, and replaced by funding energy efficiency investments.**
- **The regulation of heat tariffs in some Member States** based on the principle of “cost +” , with a price cap, does not incentivise cost optimisation and investments in (more) efficient heating/DHC systems. **Appropriate regulation of heat prices would lead to competitive and transparent environment creating favourable conditions for market-based implementation of improvements in heating and cooling, such as an increased use of biomass.**
- **Interpretations of accounting rules on public debt and deficit for energy efficiency investments under Energy Performance Contracting recently confirmed by EUROSTAT²**, according to which investments, despite being delivered and financed wholly or in part by private sector partners, require capital budget to cover their cost and as a result are recorded as being on balance sheet and counted towards public sector debt.
- **Split incentives between tenants and owners which is the most frequent barrier to energy efficiency identified by Member States in their latest National Energy Efficiency Action Plans³.**

EFIEES represents private companies ensuring an overall management of energy demand to end-user (Energy Efficiency Service Companies, EESCs). These companies provide operational maintenance and management of equipment of their industrial, tertiary and residential customers (collective or individual), public and private, particularly sports facilities, schools, and hospitals as well as District Heating Networks.