



EUROPEAN FEDERATION
OF INTELLIGENT ENERGY EFFICIENCY SERVICES

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Executive summary of EFIEES' response to the public consultation on the EPBD

The European Federation of Intelligent Energy Efficiency Services (EFIEES) represents professional organisations of energy efficiency service companies from twelve EU Member States active especially in buildings.

As a general remark, EFIEES would like to emphasise the necessary coherence that should exist between the Energy Efficiency Directive and the EPBD. Indeed, both directives have the same goal, namely to establish the conditions and rules leading to improved energy efficiency in the economy, for the first Directive, and more specifically in the buildings, for the second one. It is also at the level of neighborhoods and even cities that action must be taken. To improve consistency, readability and impact of these directives one can even put to question the need to maintain two separate texts, rather than one.

In any event, the measures dedicated to buildings are and must remain the key elements of the future EU Strategy for Heating and Cooling, provided further strengthening their impact. Our response to the questionnaire of the public consultation on the EPBD was constructed in order to contribute to the real improvement of energy efficiency (not theoretical one).

Our contribution to the public consultation on the EPBD may be summarised in six points:

1. "Energy Efficiency First"

The European legislation and policies should aim to promote prioritising energy savings.

However, one should not seek to achieve zero energy consumption in existing buildings. Indeed, beyond a certain threshold of reduction of energy demand, it is the best to work on the energy mix of energy supply rather than trying to save the last kWh, the marginal cost of which is too high, as many studies show.

One must therefore work in a balanced and "cost-effective" way, **throughout the overall energy chain: generation, transmission, distribution and consumption** (see further in section 6).

This involves comparing, and therefore **measuring the performance in primary energy**. Indeed, a decrease in primary energy consumption, contrary to the final energy is the only way to objectively

compare the available solutions. It avoids favouring solutions that decrease energy consumption of a building, but that would increase or would have no effect on consumption at the source of production.

It also means not to distort the assessment of energy consumption of a building by compensating with the "on site" production of energy (no offset). The buildings considered as complete systems (building's envelope, energy and hydraulic systems, water systems + user behaviour) should consume less primary energy. **"On site" energy production from renewable energy sources cannot therefore replace or compensate for low energy efficiency of the building.**

This implies that financial resources should be allocated to investments and measures aimed at achieving energy efficiency, rather than to supporting energy consumption (fossil fuels).

2. "It's a Market"

Having a target for the reduction of energy consumption, necessary conditions for the emergence and development of the market for energy efficiency should be put in place. The public sector has a major role to play in this area. However, it would be more impactful, if public buildings were under an obligation to improve their energy efficiency, instead of an obligation of renovation. The latter is one of the actions to be considered among the combination of energy efficiency measures.

To promote development of the energy efficiency market, it is essential to promote long-term contractual relations between the clients (public or private) and solution providers to ensure that suppliers of energy efficiency services can become involved in actions bearing concrete and measurable results. **"Energy Performance Contracts" should be widely promoted to the extent that they result in an obligation to guarantee energy savings that are measured and monitored over time.**

More broadly, adopting cost-effectiveness of energy efficiency measures as one of the basic criteria for the choice of measures to be taken, promotes the development of energy efficiency service contracts (maintenance, systems management, user behaviour) that achieve **substantial energy savings without heavy initial investment**. Such contracts should be considered as one of the important tools of buildings' energy efficiency improvement and the reduction of fossil energy consumption. Finally, the energy efficiency services sector has the advantage of creating local and sustainable jobs.

3. "Real not Theoretical" - closing the gap between designed and actual energy performance of buildings

Regarding the existing building stock of which 75-90% will be standing in 2050 and taking into account that no more than 1% of new buildings are built per year, the reference to the actual or real consumption should be preferred to theoretical calculations. In reality, energy efficiency is measured by the meters and not by theoretical evaluation. The difference between the two can go beyond 50%! In all buildings there is a possibility to count consumed energy and fluids and these calculations may be corrected by climatic variations. The "real" energy consumption of buildings having the "same" EPC certificate may differ depending upon the country, as differ climatic conditions and certification methodologies. Measuring actual energy consumption and informing final users allows to include a behavioural component that, far from being an obstacle to the comparison, allows to value virtuous initiatives.

4. "Nothing but deep renovation?"

The question here is related to the cost - effectiveness ratio. The aim is to improve the actual energy efficiency (decreasing energy consumption). Incentive schemes and building certification must enable broad dissemination of measures to improve energy efficiency. All initiatives leading to energy savings that are tailored to specific cases and will play differently on the different components of the problem (building envelope, improving domestic energy systems, optimised energy management ...) should be encouraged, taking into account their cost and their results in the short, medium and long term. In reality, a payback time of a deep renovation is generally much longer than a payback time of actions on operation that bring considerable savings.

Focus on cost-effectiveness does not necessarily lead to giving up on a "deep renovation ", but rather to enroll in programs of "staged deep renovation". This would help to improve the possibilities of financing the renovation, by first programming actions whose time of return on investment and profits in energy savings constitute a contribution to finance the next stages of renovation.

5. "A Vision at district scale"

Energy efficiency should not always be considered separately for each building, but optimised by taking into account the positive systemic effects, both in terms of energy consumption (between buildings) and production, and with the combination of both.

In many cases, in fact, we must act not on a building alone, but also take into consideration the surrounding buildings when they are interconnected through District Heating or Cooling system. Buildings' connection to existing heating systems, the integration of renewable generation solutions nearby, and the diversity of needs between neighbouring buildings are all opportunities to maximise the expected benefits of an action on a building.

The Energy Efficiency Directive mentions indeed Urban Planning as an important instrument of energy efficiency, the EPBD should therefore also reflect this approach as well as include rules enabling choosing the best solutions for communities.

6. "No Discrimination"

The general regulatory framework applicable to the energy consumption in buildings must favour energy efficiency along the whole energy value chain. As a consequence, it is necessary to remove discriminations related to environmental obligations leading to market distortions. This is the case of the EU ETS mechanism, which penalises installations of more than 20 MW, to the benefit of individual heating or cooling solutions that almost always emit CO₂, but ... are not subject to the EU ETS.

This is also the case of obligations relating to air quality from which de facto the low power plants are exempted.

In some MS, DHN are also subject to fuel taxes which is not the case for individual heating solutions.