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CONTRIBUTION TO THE PUBLIC CONSULTATION "PROGRESS TOWARDS THE 2020 ENERGY EFFICIENCY OBECTIVE AND A 2030 ENERGY EFFICIENCY POLICY FRAMEWORK"

Veolia Environnement operates local environmental services in the fields of water, waste management and energy efficiency (including the optimisation and management of cogeneration units and district heating networks) through its subsidiary Dalkia. Veolia and Dalkia are active in several EU Member States both in assisted and non-assisted areas.

Veolia Environnement is identified in the EU Transparency register under number 72103751229-92.

A. ENERGY EFFICIENCY TARGETS AND MEASURES

1. Do you think the right approach in addressing the shortfall is: multiple choices allowed
   - X a) To define energy efficiency target(s)
   - X b) Reinforced implementation of existing legislation, including active policy on infringements
   - c) Proposing new legislation
   - d) other

1.a.1. How should these target(s) be expressed?*
- In terms of energy intensity improvement of the economy and economic sectors
- As absolute energy savings
- X As a hybrid of the two represents a better benchmark upon which to frame a 2030 objective
- No opinion

1.a.2. At what level should they apply?*
- EU
- X National
- Sectoral

1.a.3. Should they be:*
- X Legally binding
- Indicative
- No opinion

Indicative targets should be set **according to energy performance specific to each sector**. For industry it might be energy intensity (or even, as for CO2, with benchmarks for the most energy intensive ones), but for buildings it shall be expressed in primary energy/m2, corrected from weather conditions. The targets shall be expressed in primary energy savings.

Only stable, consistent and binding targets will provide visibility to investors, and thus ensure their confidence and commitment. Those **indicative sectoral targets** should therefore be translated, according to clear and transparent calculation rules into **national binding targets, expressed as absolute primary energy consumption** to make each Member States (MS) accountable for their respect.

Efficiency is more important than absolute consumption levels, a possibility should be provided to MS to update their targets, depending on related indicators (economics, building stock surface…).

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Further comments on b)

A thorough analysis of the assessments sent by MS should be done on Combined Heat and Power (CHP) and district heating networks (DHN) potential (EED art 14) and barriers to the implementation of EE (EED art 18 &19). These assessments should be **challenged** by the commission while **the relevant associations** can provide their support.

Regarding the barriers, associations can provide their knowledge of concrete examples (on rules regarding connection and disconnection to DHN, discriminating tax regimes for ESCO and other forms of energy delivery, on ways to foster EPC…).

Regarding the article 14, at a local level, the first step in evaluating the CHP and DHN potential is to focus on a cost-benefit analysis (CBA) (instead of looking at economic factors only) that includes other benefits than just revenue.

CBA should take into account environmental benefits (emissions more distant to population, better flue gas treatments) and indirect savings (CHP decreases grid losses and reduces the need to reinforce the networks). A **communication** from the Commission should provide some information on the type of benefits to be taken into account.

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B. ENERGY EFFICIENCY SECTORS

2. Do you think that further policy measures are needed at EU level to foster energy efficiency in buildings?

- [ ] Yes
- [x] No
- [ ] No opinion

The Energy Performance of Buildings Directive (EPBD) should be fully implemented before new regulation could be considered.

However, individual or per building solutions are sometimes favored instead of solutions that a cost benefit analysis would suggest. As EuroHeat&Power Heat Roadmap Europe demonstrated, CHP and DHN might deliver renewable and efficient energy to buildings **at optimal cost**. DHN are an asset as they enable the switch to renewable energy sources and the use of waste heat. They also provide **capacity merging** compared to individual solutions, thus decreasing the installed capacity needed and investments costs accordingly. Compared to individual solutions using electricity, they also allow peak hours to be covered through thermal capacities.

Moreover, investments in CHP and DHN are lower than those in new power capacities. EE contracts with high return on investment, like energy performance contracting are also a significant option. A **communication** that promotes the **EN 15603** and imposes a **cost analysis** is strongly needed. It should also help Member States to decide a target for buildings and foster the EPBD implementation.

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3. Do you think that further policy measures are needed at EU level to foster energy efficiency in industry?

X Yes
No
No opinion

Industries have already progressed on EE but their efforts vary from one country to another (depending on sector, size, ETS inclusion…). The Commission could undertake 3 key actions:

- Request the European Committee on Standardization to define standards **for calculating the energy performance in industry** (equivalent and consistent with EN 15 603 for buildings);

- Extend the **benchmark** of energy-intensive industries for ETS to include **primary energy content** (applying the standard);

- Elaborate a regulation (as for electrical appliance or buildings) that will encourage manufacturers to **communicate on the energy content of the products** they put on the market. This regulation should also apply to **energy suppliers**, which should also be obliged to communicate on their energy mix and efficiency.

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4. Do you think that further policy measures are needed at EU level to foster energy efficiency in transport?

Yes
No
X No opinion

5. Do you think that further policy measures are needed at EU level to foster energy efficiency in electrical equipment?

Yes
No
X No opinion

6. Do you think that further policy measures are needed at EU level to foster energy efficiency in generation and distribution?

X Yes
No
No opinion

A large scale development of **smart grids** should further be supported at EU level in order for these technologies to develop in a quicker and broader way and thus aggregate as much capacities as possible.

Electricity and heating infrastructures are ageing. The first grids were designed more than 50 years ago and have not evolved since. Moreover, there is an increasing demand in electricity consumption. Finally, new renewable sources of energy have appeared, but they are scattered around countries and have sporadic production.

Smart grids provide solutions for all the challenges mentioned previously. They will enable new services and the roll out of infrastructures that enable buildings to communicate with their outside environment. Smart grids will have the capacity to **aggregate various facilities** such as water treatment plants, solar energy plants, factories, CHP plants, public an tertiary buildings in order to

create virtual mini-power plants on a large scale (city, region). Thus, smart grids can lead to a reduction of the peaks of consumption and efficiency gains, enhance renewable power production capacity, and create local jobs.

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7. Do you think that further financial mechanisms and instruments are needed at EU level to mobilize energy efficiency investments?

X Yes
No
No opinion

Considering the huge needs in terms of energy efficient investment, obstacles to their financing should be removed and innovative mechanisms to their mobilisation developed.

- Private sector should be encouraged to play a more important role in financing energy efficiency. In order to attract private capital and multiply the effect of public spending, EU and national authorities should **develop appropriate public-private financing mechanisms**; obstacles to PPPs have therefore to be removed

- Innovative financial instruments should favor the development of energy efficient projects, **linking the certified performance of the operator to its remuneration** by a penalties/incentives system.

- In some countries, DHN are in a great need of refurbishment because a long-term under-investment. National State Aid schemes must therefore be designed in such way to **support DHN to become efficient; also they should include the renovation of networks** to best avoid energy losses. In order to optimise the use of public funding, the amount of aid should be based on **primary energy savings.**

- The savings generated by CHP should be better taken into account in users heating bills.

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8. Do you think that further measures are needed to build the capacity of actors in the energy efficiency sector?

X Yes
No
No opinion

No possibility to comment.

9. What are the most promising technology solutions that can help deliver energy savings in the 2020 and 2030 time horizon? How can their development and uptake be supported at EU level?

Apart from CHP and DHN, which are crucial elements in reaching ambitious EE goals, (see the EHP heat roadmap), subsidies should be open to **methanisation initiatives**. By converting waste into biogas, these technologies not only allow the use of CHP downstream (thus ensuring energy savings), but it also improves security of supply and competitive energy prices at EU level.

CHP technologies providing flexibility at a territory level and **heat storage** on DHN alimented by a CHP should also be promoted. Once the value of flexibility will be recognized by the market, heat storage might allow CHP to run in more flexible ways, thus indirectly generating savings.

Any **monitoring technologies** for energy consumption and/or customers' behavior assessment should also be taken into consideration.

Even though not directly linked to EE, **every technology that uses locally produced biomass** will directly impact the security of supply, on competitive energy prices and the creation of local jobs. Therefore it should also be subsidized.

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10. Further comments

A **better recognition of the heat sector at the EU level is essential**. The energy consumption in Europe and elsewhere is essentially thermal: 50% of total (70% in buildings).

A better integration of heating sector within the EU policies requires gathering of more **detailed data** on transformations that take place in this sector within the Eurostat database.

For each sector, Key Performance Indicators that reflect energy performance and are based on primary energy consumption should be defined.

Each project that benefits from public support (because of EE improvement it can guarantee) should be benchmarked using those KPI (before/after) and should be put against the investments made. The results should be published on a public website along with the name of the actors (work contractors, operators…).

Today cities are faced with a greater need for an improved **eco-management of urban lighting**. Controlling spending and improving energy efficiency on street lighting, traffic lights, and artistic lighting should be a top priority for local governments as well as energy efficiency.

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