

### **EDF complimentary comments on some questions**

To which extent would you support the following options that allow reducing the energy consumption and related CO<sub>2</sub> emissions in buildings?

EDF uses more than 1500 office buildings, (4,5 millions square meters). By mid 2017, EDF energy savings in buildings is 22 % compared to 2006, with an objective of 30 % by 2020.

Installing heating and water boilers that run on renewables?

Heat pumps delivering heating, hot water and even cooling, can be a very convenient solution in terms of energy efficiency, low carbon emissions, and renewable energy shares.

Installing heating and cooling equipment and use electric appliances with the best energy performance label?

In case of renovation, EDF selects the best performant equipment in terms of final energy consumption and greenhouse gas. EDF has launched a program to replace existing lighting equipments by LED.

Buying carbon free electricity or generating your own renewable electricity?

More than 95% of electricity produced in France is carbon free thanks to the French electrical mix based on nuclear and renewable solutions (hydro, wind, solar)

Having a smart meter and consuming electricity mostly when prices are low?

All our large scale office buildings are already equipped with smart meters. For small sites, the current smart metering roll-out of Linky meters will provide us detailed information by 2021.

What would make you increase the separation of waste (paper, plastics, glass, metal, glass, organic...)?

All our facility management contracts include requirements regarding the separation and recycling of office wastes. Building management teams communicate increase awareness about this issue

What could affect your job most in the future?

Transition will create jobs in low-carbon generation (nuclear, solar, wind and hydro) and in services to customers (energy efficiency, district heating ...). It will also reduce the employment in some other areas. As a result, we expect a positive balance.

**How can opportunities and challenges (in particular related to carbon intensive sectors or regions) be addressed? What key economic transformations should the EU pursue to achieve a low carbon and resilient economy?**

The energy transition must be cost effective, with an affordable decarbonized electricity. One of the main challenges is to succeed in locating the production of low-carbon technologies in Europe, which are assets for potential growth because of significant productivity gains and goods for security of supply as well as the trade balance. It means :

- More public support to R&D in non-emitting generation (renewable, nuclear), as well as energy uses (industry processes, heat pumps, electrolyzers...);
- A equitable/fair transition with a clear directly benefit to EU workers and citizens,
- An improvement of the present market based mechanism ETS,
- No promotion of energy efficiency measure that increases the GHG emissions,
- Description of standards to differentiate a product based on its GHG impact (H2-mobility is very low carbon if H2 produced by electrolysis with low-carbon electricity);
- Support of these measures internationally.

Europe can become a net exporter of clean technologies.

What would be the preferred route to reduce these emissions in your sector?

Electrification as such generates more efficiency: heat pumps and electric engines are far more efficient than boilers and combustion engines.