

STRATEGY FOR SMART SECTOR INTEGRATION

Contribution to Consultation

In order to optimise sector integration, policy-makers need to agree on the main goal that is to be pursued. Decarbonisation and energy efficiency are two different goals that can be associated to some extent but not entirely.

Improving energy efficiency makes it possible to reduce GHG emissions to some extent but it does not make it possible to achieve full decarbonisation. On the other hand, technologies such as carbon capture and storage and nuclear make it possible to achieve full decarbonisation but do not improve energy efficiency.

In view of the Union's climate objectives for 2030 and 2050, we believe the energy policy the EU should aim at improving energy efficiency, while still prioritising GHG-emission reductions. In this perspective, we recommend the following approach be adopted:

1. Reducing energy consumptions and improving energy efficiency

a) achieving energy savings, in particular in the building sector which is the most consuming sector. In view of achieving such reductions, we believe the renovation wave strategy should encourage massive improvements in insulation in the European building stock;

b) improving energy efficiency while still prioritising decarbonisation, through the use of new energy processes that are both more efficient and low-carbon, in particular through:

- the roll-out of heat pumps in replacement of fossil fuel boilers;
- the replacement of combustion engines by electric engines;
- research and innovation in the field of electrolysers and fuel cells in order to develop hydrogen solutions;
- the generalisation of waste heat recovery in the industry, possibly associated with high temperature heat pumps.

2. Increasing the share of clean energies consumption

a) developing the use of decarbonised electricity in the building and transport sectors and in the industry;

b) developing the use of renewable heat (solar, geothermal, biomass, renewable waste, etc.) when economically feasible.

3. developing synergies between various forms of energies and various sectors

a) Hybrid solutions can be a good intermediate step towards full decarbonisation. In particular, we believe the use of the following technologies should be encouraged :

- hybrid heat pumps;
- hybrid rechargeable vehicles.

b) Synergies between the building and the transport sector should be developed, in particular through:

- facilitating the reuse of end-of-life vehicle batteries in buildings;
- increasing the roll-out of charging points and of ducting infrastructure in buildings, possibly associated with the development of self-generation in buildings.

4. developing smart technologies in order to reduce peak power demand

With the development of renewable energies and the progressive electrification of the European economy as planned in the Commission's Long-term strategy, peak power management will play a crucial part in the smooth functioning of the energy system. This will in particular require the following:

a) developing smart energy technologies that can be controlled by consumers and that bring flexibility to the system;

b) developing energy storage: daily, multiday, and or even seasonal energy storage.