

SET PLAN

Um Desafio Estratégico para a Europa

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EU Energy Strategy 2030

Targets for 2030

- a 40% cut in greenhouse gas emissions compared to 1990 levels
- at least a 27% share of renewable energy consumption
- at least 27% energy savings compared with the business-as-usual scenario

Energy Union

Built with the ambition to achieve in a cost – effective way a fundamental transformation of Europe's Energy System.

Smarter, Flexible, Decentralised, Integrated , Sustainable, Secure and Competitive ways **for the consumers.**

Targeted focus

- 4 core priorities
 - Renewables,
 - Consumer,
 - Energy efficiency,
 - Transport
- 2 research priorities
 - CCS
 - Nuclear

Number one in RES

Technology leadership by
developing **highly performant
renewables** technologies and their
integration in the system

Cost efficient key technologies



Number 1 in renewable energy

Sustain technological leadership by developing highly performant renewable technologies and their integration in the EU's energy system:

- competitive manufacturing of the next generation **of highly performing PV**, including the technologies to integrate PV into the built environment
- Maintain EU's current world leader position **in offshore wind, ocean energy and lignocellulosic biofuels**
- Support the development of the next generation of renewables technologies and the improvement of their performance, in particular to **offshore wind, ocean energy, bioenergy, geothermal technologies, solar thermal, and technologies that convert power into chemicals and fuels.**

Reduce the cost of key technologies

- **offshore wind** in the **Northern and Baltic Seas**
- **ocean energy** on the **Atlantic sea**
- **photovoltaic and solar thermal systems, algae and biomass residues** in **Southern Europe**
- **bio-energy and bio-fuels** in **Northern, Central, and Eastern Europe**

Consumer at the centre of the future energy system

Smart homes, smart cities

Resilience, security and smartness of the energy system



Create technologies and services for smart homes that provide smart solutions to energy consumers

- **give consumers** in homes, companies and public administration control to optimise their energy consumption (and production);
- **cities** the opportunity to optimise the use of energy in their infrastructures, through a more interactive/smarter system, relying on smart grid services.

Increase the resilience, security and smartness of the energy system:

- EU needs to develop and demonstrate innovative power electronics, flexible thermal generation, demand response and storage, as well as efficient heating and cooling technologies (such as heat pumps and combined heat and power);
- Connecting the different networks in an integrated energy system, to ensure the stability and security of the electricity system, as well as the protection and privacy of consumer data .

Efficient energy systems

New materials and technologies for energy efficiency solutions for buildings

Continue efforts to make EU industry less energy intensive and more competitive



Develop new materials and technologies for, and the market uptake of, energy efficiency solutions for buildings

- The development of advanced materials and industrialised construction processes to reduce costs;
- Accelerate the large-scale market uptake of **Nearly Zero Energy Buildings** .

Sustainable transport

Become competitive in the global battery sector

Renewable fuels needed for sustainable transport solutions



A forward-looking approach to carbon capture and storage (CCS) and carbon capture and use (CCU)



Increase safety in the use of nuclear energy



- Continue efforts to make EU **industry less energy intensive** and more competitive ;
- Become competitive in the global **battery sector to drive e-mobility** forward;
- Strengthen market take-up of **renewable fuels** needed for sustainable transport solutions;
- Step up research and innovation on carbon capture and storage (**CCS**) and the commercial viability of carbon capture and use (**CCU**);
- *Increase safety in the use of nuclear energy.*

SET Plan fit for the new challenges

New impulse to the partnership

Principles: Targeted focus, integrated approach, new management

Changes:

SET Plan in the Energy Union

Widening to new actors

More joint actions

Transparency, indicators and reporting

Monitoring and knowledge sharing



<https://ec.europa.eu/energy/en/news/integrated-set-plan-fit-new-challenges>