

Enquadramento Político da Eficiência Energética: SET PLAN e “Energia Limpa para todos os Europeus”

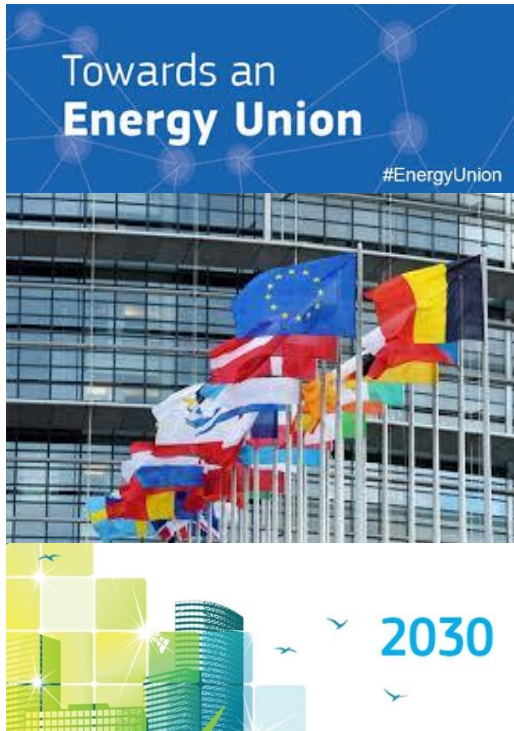
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Delegado Português no Comité de Energia do H2020

4 de Abril de 2017

Atual contexto político energético europeu e financiamento



Energy Union



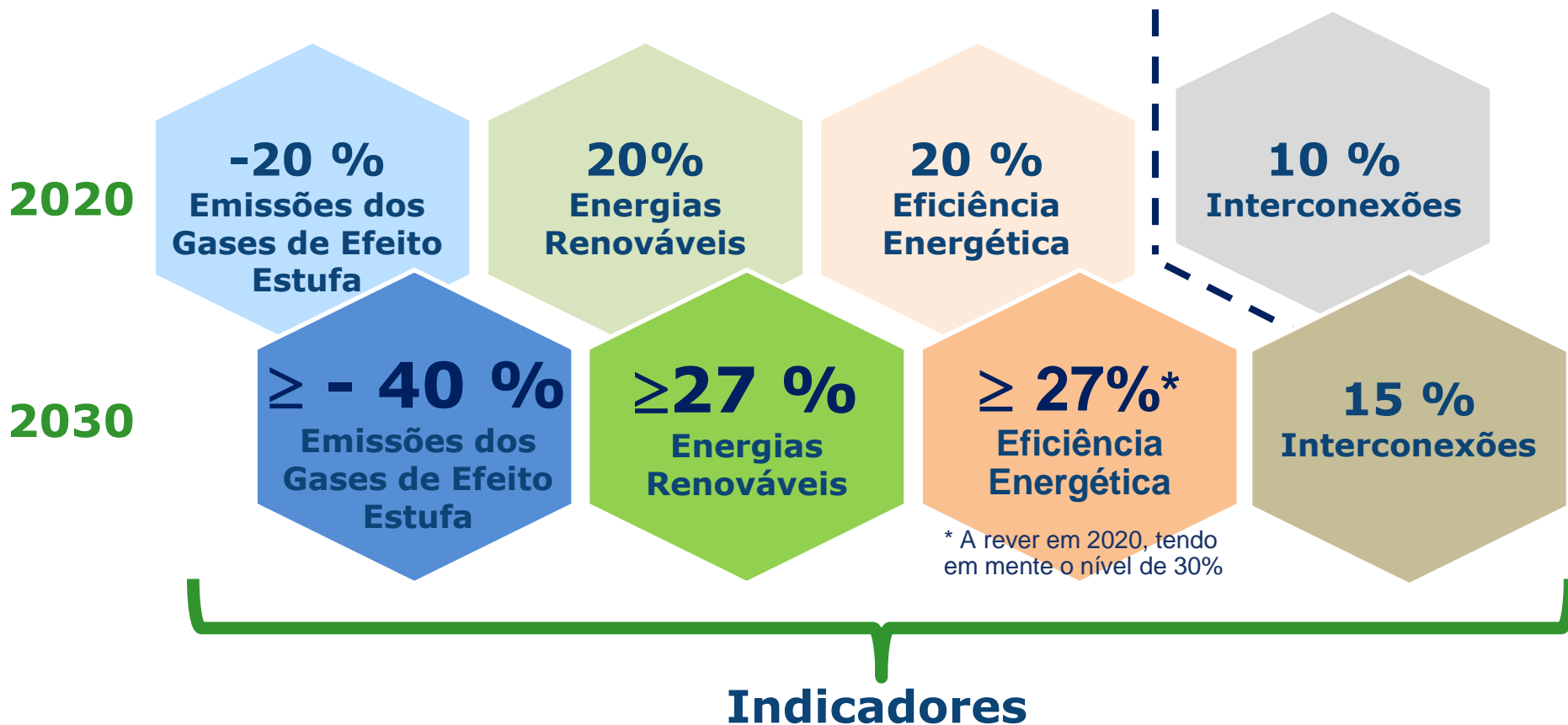
*I want to reform and reorganise
Europe's energy policy
in a new European Energy Union.*

Jean Claude Juncker



Secure supplies
Internal energy market
Energy efficiency
Emissions reduction
Research & Innovation

Objetivos Energéticos e Climáticos



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.**

Towards an Integrated Strategic Energy Technology (SET) Plan:



Accelerating the European Energy System Transformation



Brussels, 15.9.2015
C(2015) 6317 final

COMMUNICATION FROM THE COMMISSION

Towards an Integrated Strategic Energy Technology (SET) Plan: Accelerating the European Energy System Transformation



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

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

1. Sustain technological leadership by developing highly performant renewable technologies and their integration in the EU's energy system:
 - EU can restore and scale-up to competitive manufacturing the next generation **of highly performing PV**, including the technologies to integrate PV into the built environment
 - EU is currently world leader, such as **in offshore wind**, **lignocellulosic biofuels** or **ocean energy**, leadership should be maintained

2 - Reduce the cost of key technologies

- in the **Northern and Baltic Seas** for **offshore wind** energy systems, including deployment and maintenance technologies and techniques, and develop the associated grid systems,
- on the **Atlantic** sea board for **ocean energy**,
- in **Southern Europe** for **photovoltaic and solar thermal systems, algae and biomass residues**,
- in **Northern, Central, and Eastern Europe** for **bio-energy and bio-fuels**.

The future smart EU energy system, with the consumer at the centre

Consumer at the centre of the future energy system

Smart homes, smart cities

Resilience, security and smartness
of the **energy system**



3 - 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.

4 - 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, will be particularly important for ensuring 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



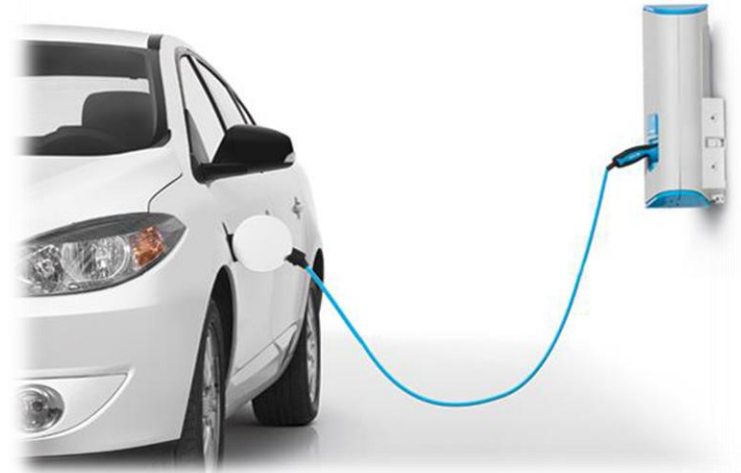
5 - Develop new materials and technologies for, and the market uptake of, energy efficiency solutions for buildings

- 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





The Integrated SET Plan – additional actions (V)

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

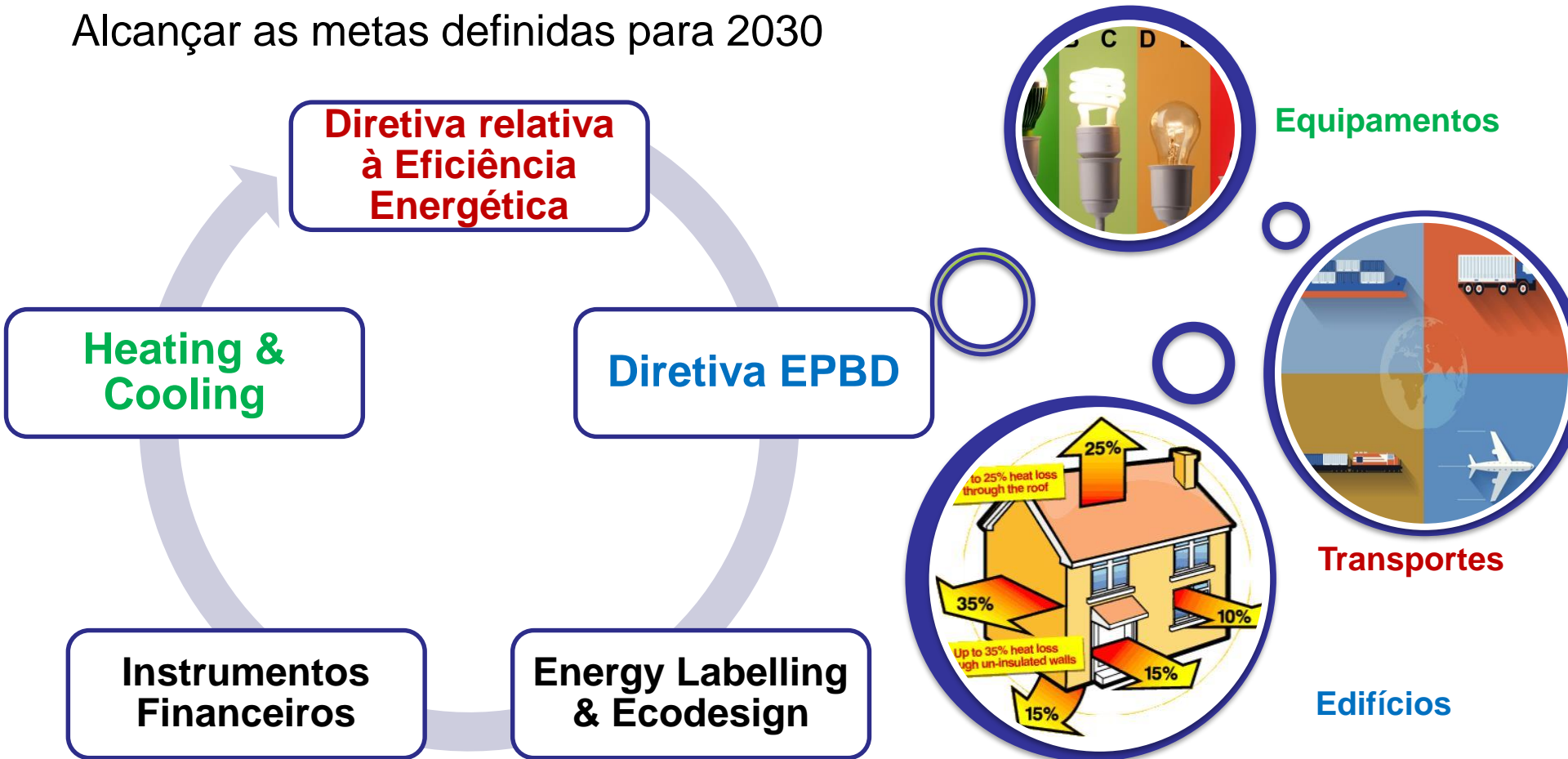


Increase safety in the use of nuclear energy



Eficiência Energética

Alcançar as metas definidas para 2030





European
Commission

Accelerating Innovation for Low-Carbon Energy Technologies



N° 1 in Renewables

70 €/MWh or less for the cost of offshore wind energy by 2030



Energy efficiency in buildings

60% savings of buildings' energy consumption by 2025*



Flexible energy system

25% peak load reduction from demand-response by 2030*



Consumers & smart cities

100 positive energy districts by 2025* and 80% of electricity consumption to be managed by consumers in 4 out of 5 households



Energy efficiency for industry

20% reduction of energy consumption for chemical, pharmaceutical and steel industries by 2025*



Sustainable mobility

70% cost reduction for Li-ion batteries by 2030*

*baseline 2015

A Comissão Europeia vai investir mais de **2 bilhões de euros** no **H2020 em 2018-2020 em Projetos de I&D em 4 áreas prioritárias:**

Decarbonising the EU building stock

Strengthening EU leadership on renewables

Developing affordable and integrated energy storage solutions

Electro-mobility and a more integrated urban transport system

obrigado

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