

Towards an integrated SET Plan

Accelerating the energy system transformation



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The Energy Union

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

Jean Claude Juncker

Energy Union Strategy



5
GUIDING
DIMENSIONS

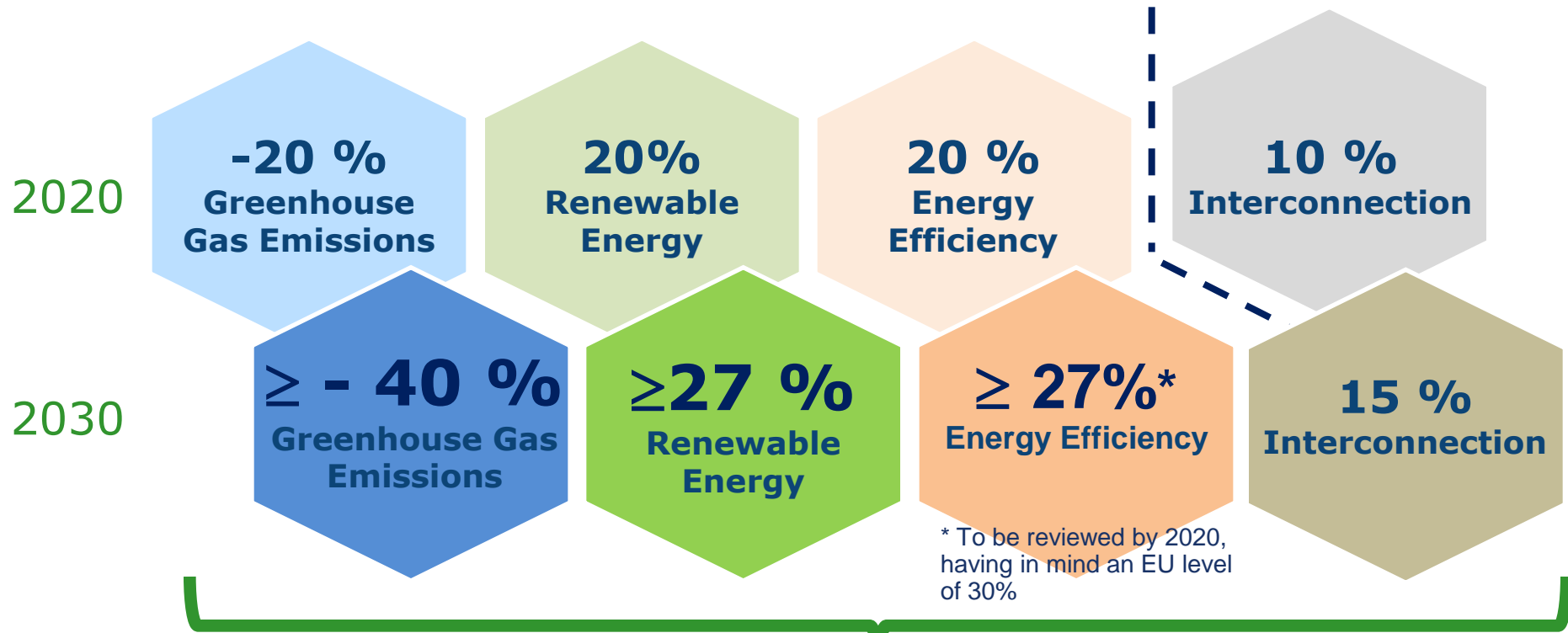
15
CONCRETE
ACTIONS

43
INITIATIVES



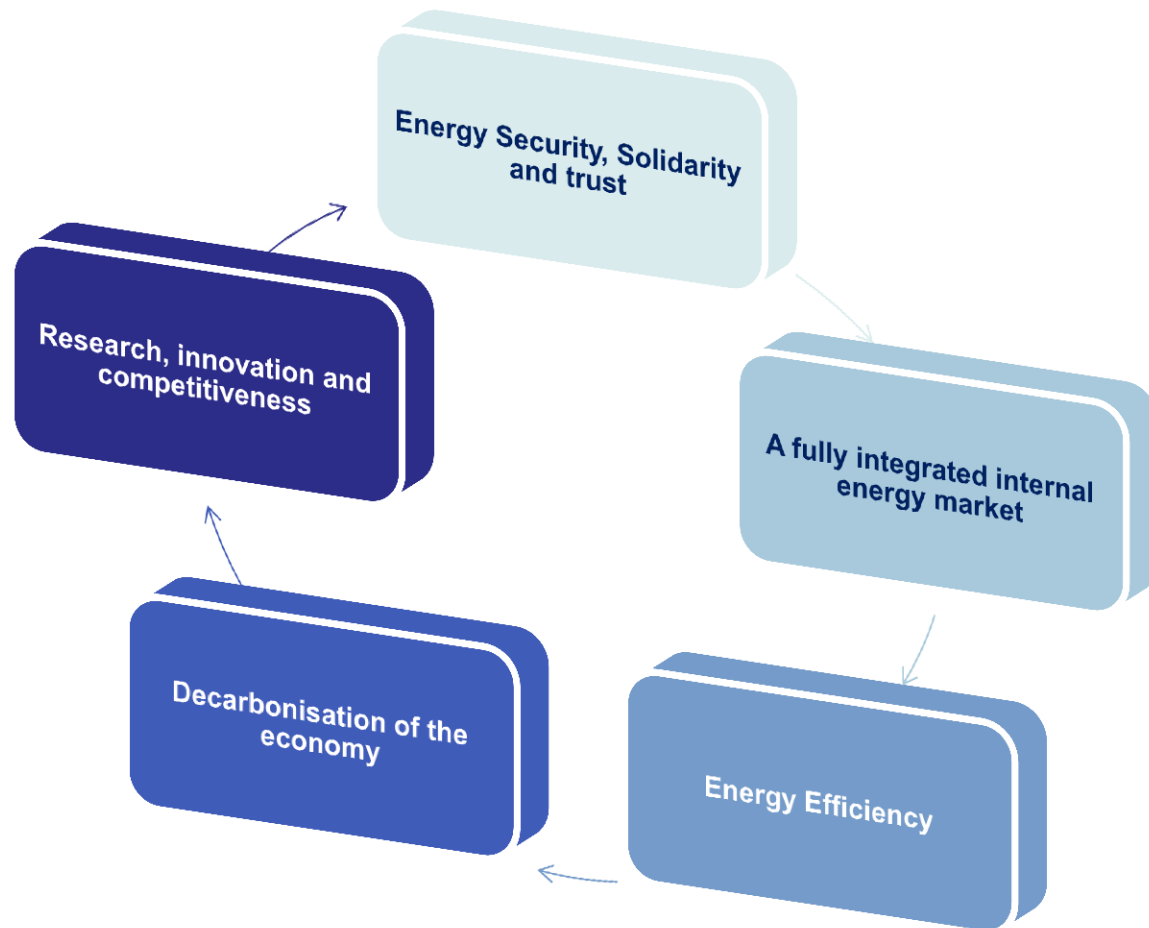
European
Commission

Agreed headline targets - 2014 EU Council 2030 Framework for Climate and Energy



New governance system + indicators

Five mutually supportive and interlinked dimensions



Energy Security, solidarity and trust

Diversify sources, suppliers and routes

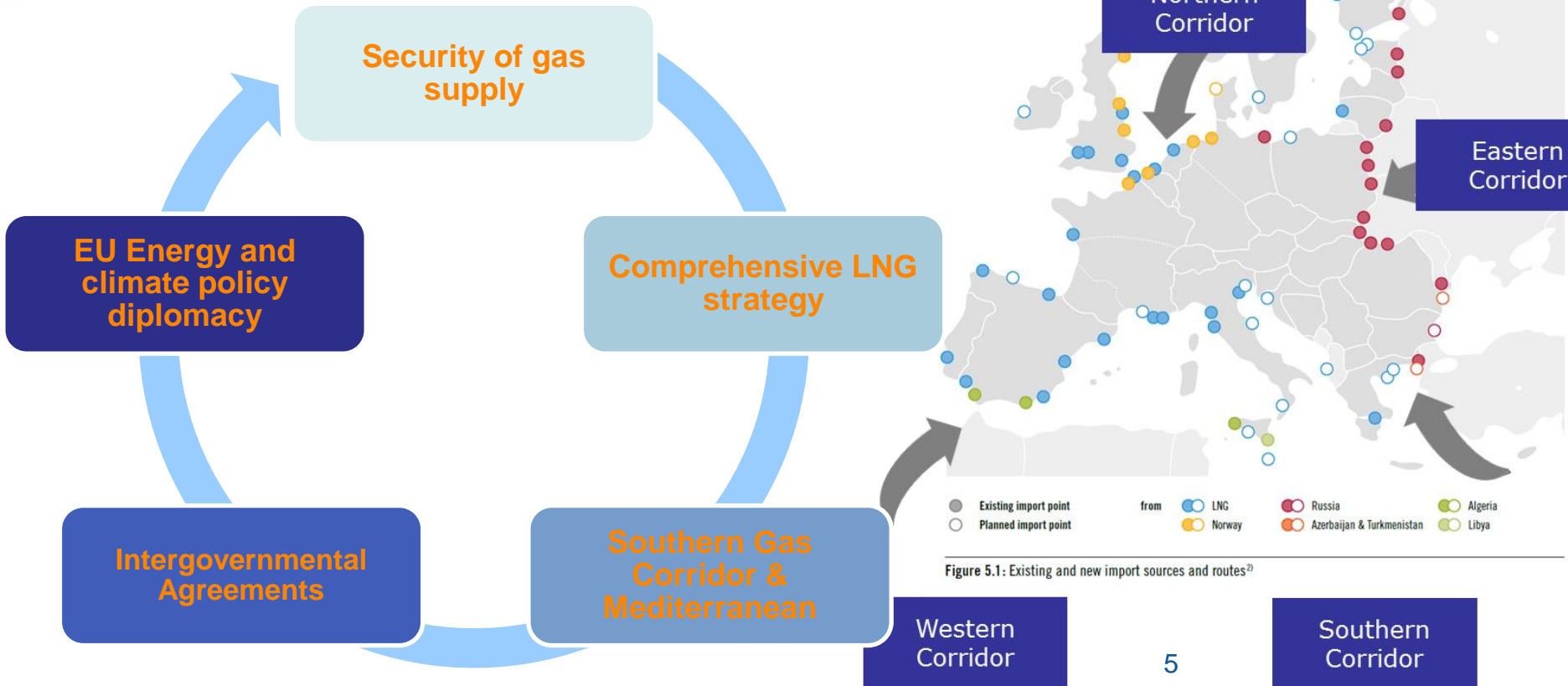


Figure 5.1: Existing and new import sources and routes²⁾

A fully-integrated internal energy market

Connecting markets and upgrading their software

Infrastructures
(PCIs)

Electricity
market design

Regional
cooperation

Energy prices
and costs

Electricity crossing borders

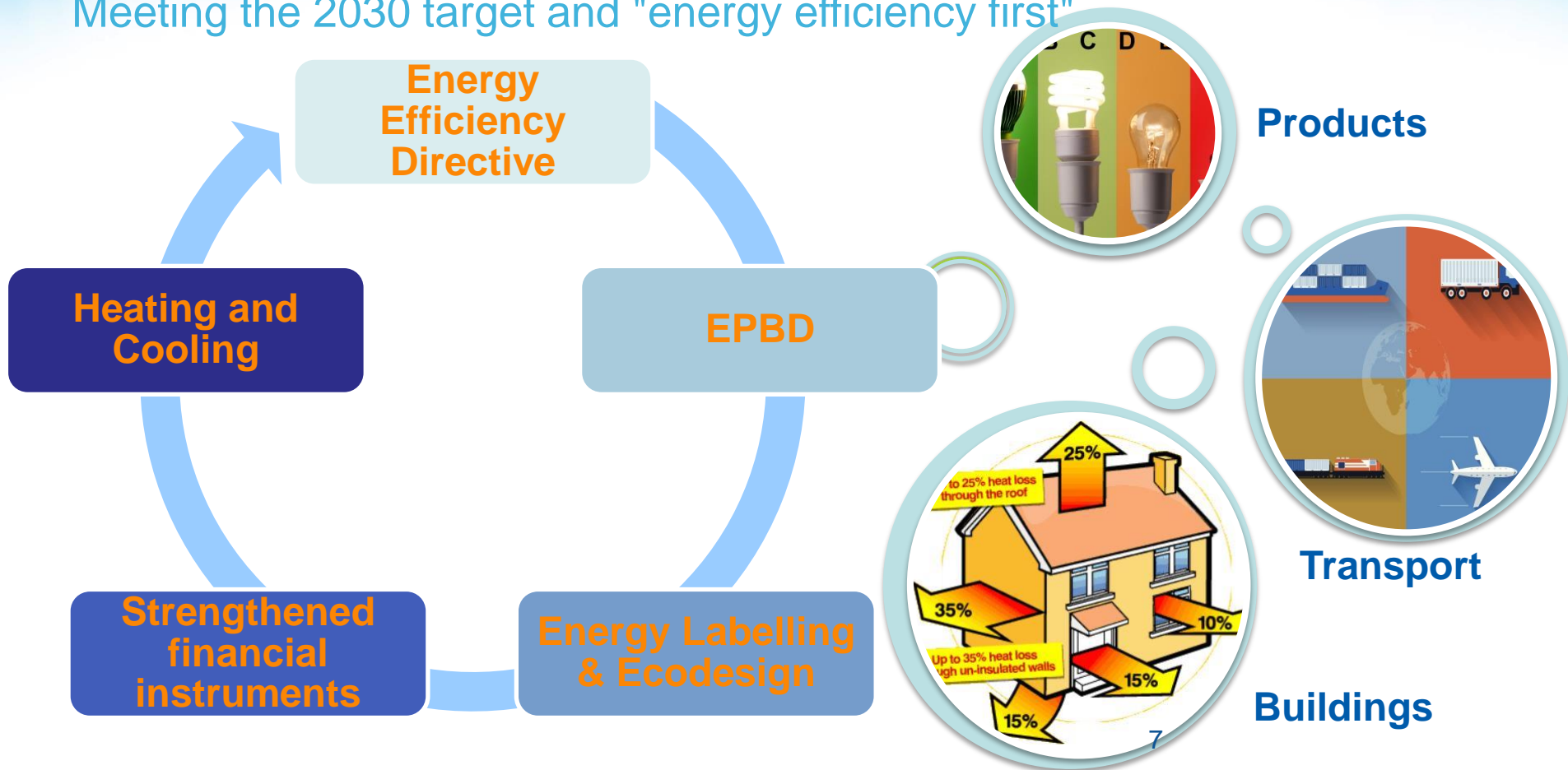
TODAY

POTENTIAL BY 2020



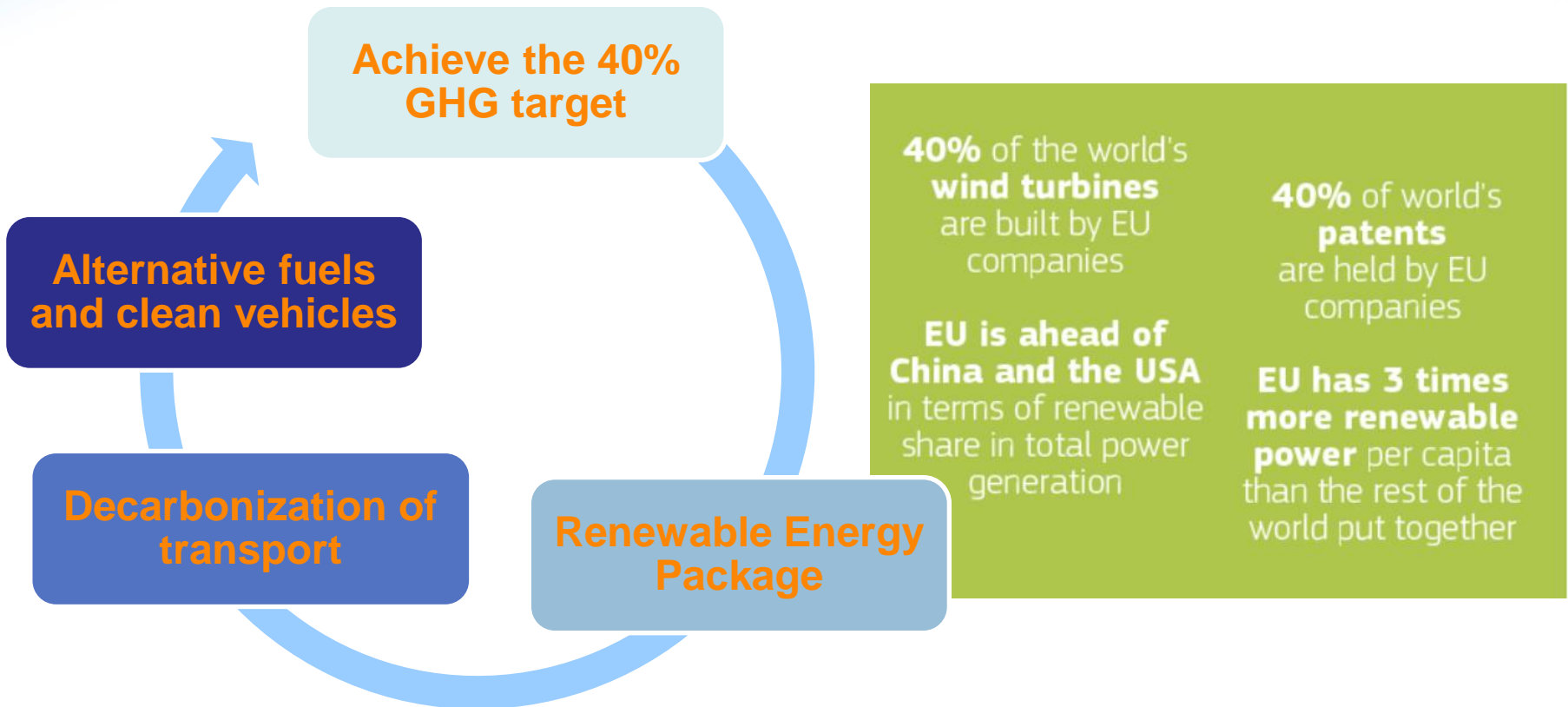
Energy efficiency

Meeting the 2030 target and "energy efficiency first"



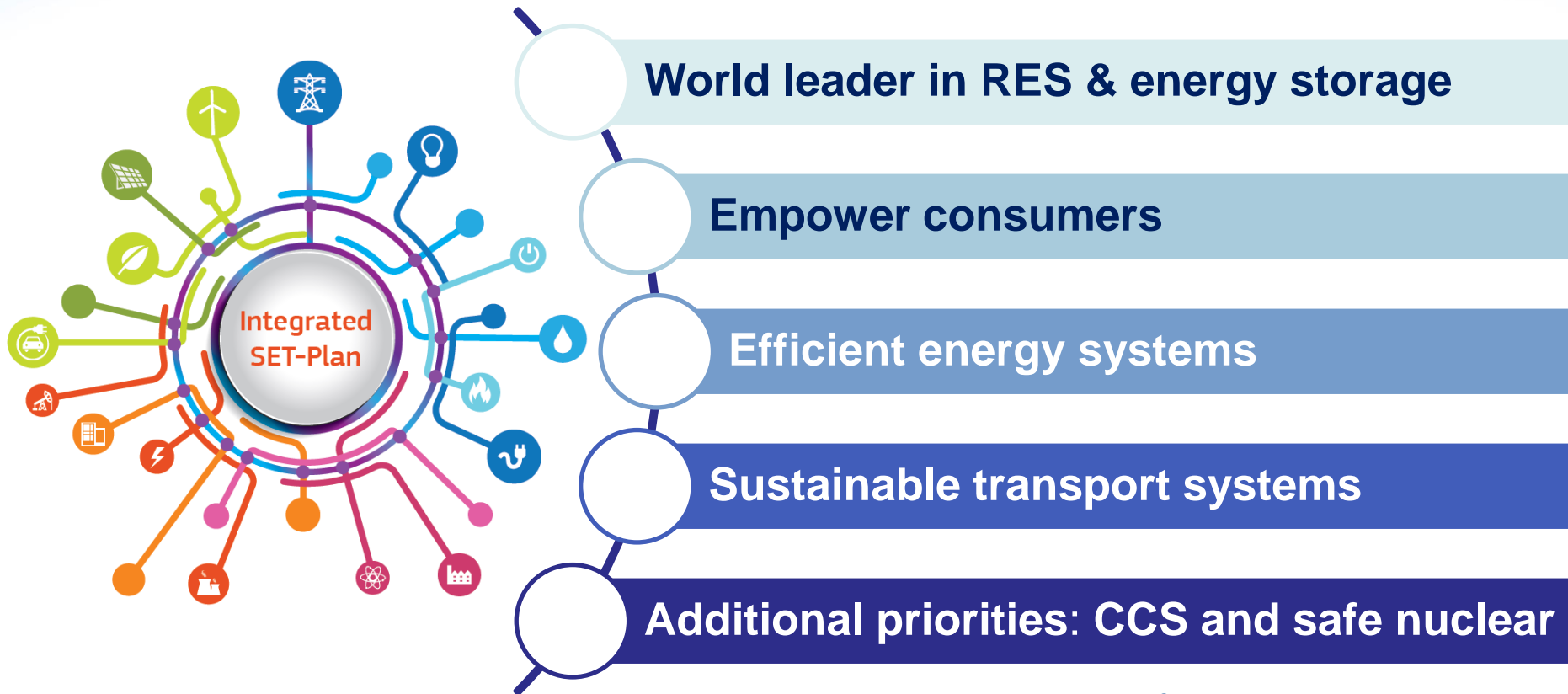
Decarbonisation of the Economy

Meeting 2030 targets and COP21



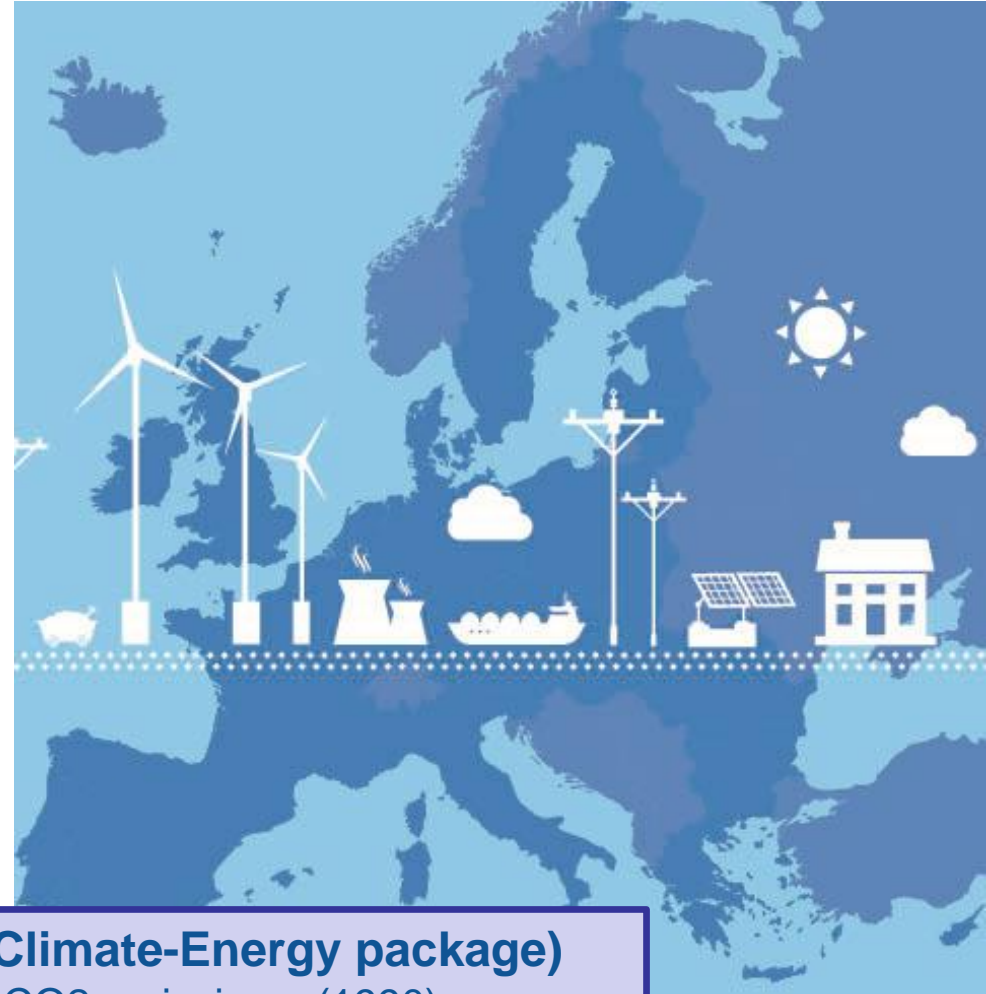
Research, innovation and competitiveness

How to maintain global leadership?



Key Principles

- New challenges post 2020
- From sectors to system
- Bridging R&I with energy policy
- Making better use of existing financial resources
- Keep options open
- Join endogenous resources



Objectives for 2030 (Climate-Energy package)

- 40% reduction of CO₂ emissions (1990)
- 27% share of Renewable Energy
- 27% improvement in Energy Efficiency

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>

Number one in RES

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

Cost efficient key technologies



Consumer at the centre of the future energy system

Smart homes, smart cities

Resilience, security and smartness of the energy system



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



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



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



Financing

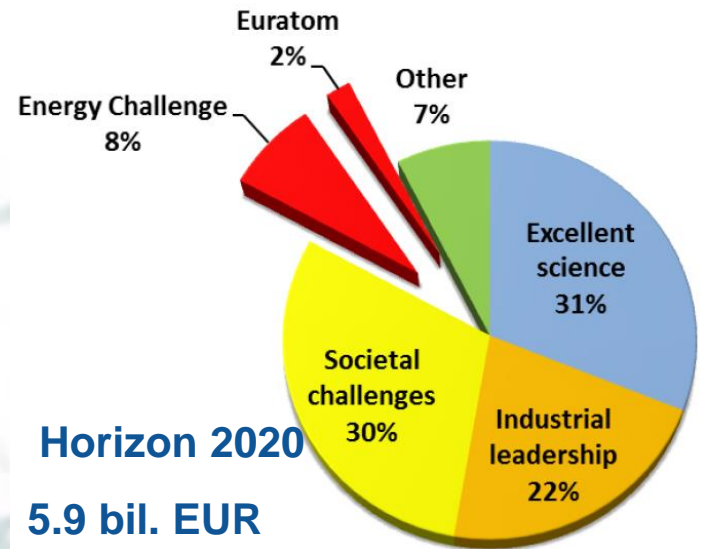


Develop and bring innovations to the market

Overcome 'valley of death'

Better articulation of funding sources: EDP, EFSI, ESFI, KIC-IE, H2020...

Create demand for innovative products and services: adding market pull to technology push



European Investment Bank

InnoFin

Cohesion policy

38 bil. EUR – low carbon economy

40 bil. EUR – R&I

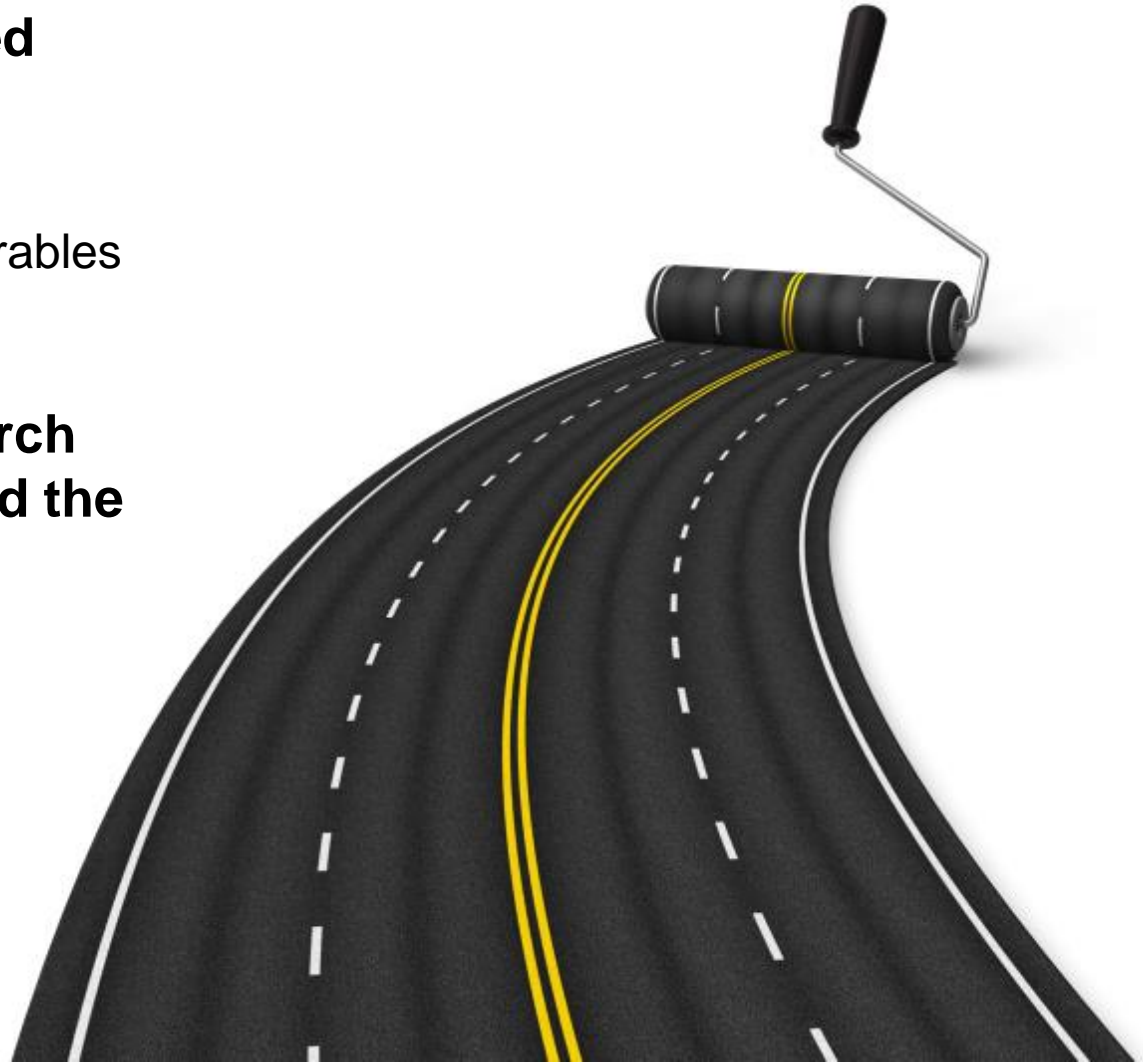
33 bil. EUR - SMEs

- **Delivering on the Integrated SET Plan priority actions**

Define level of ambition, implementation, timing and deliverables

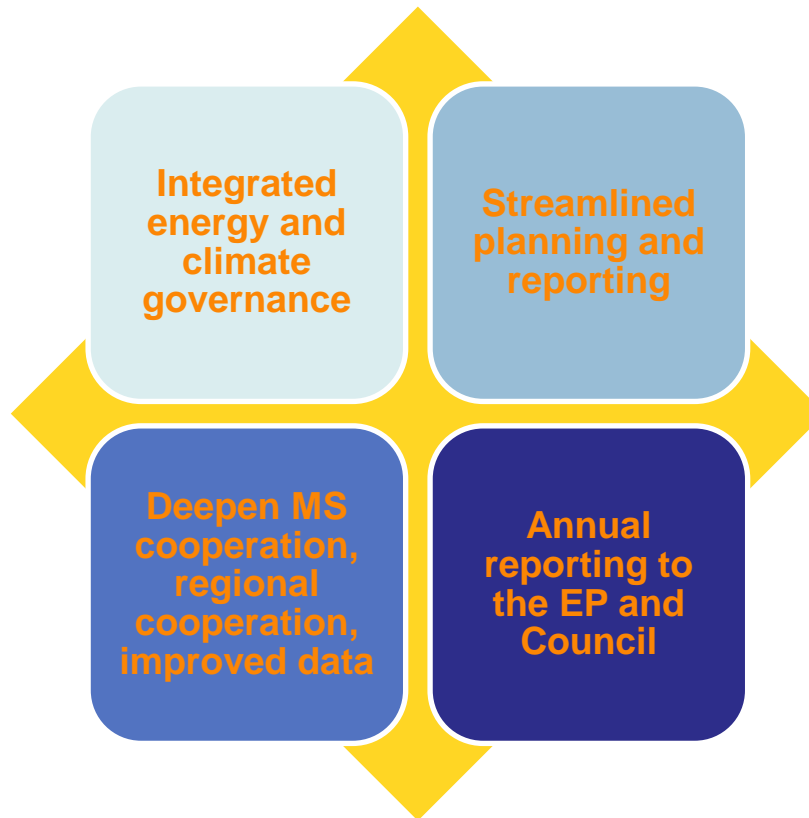
- **Strategic Transport Research and Innovation Agenda and the Global Technology and Innovation Leadership Initiative**

- **An overarching research, innovation and competitiveness strategy**



Delivering the Energy Union:

A dynamic governance



Delivering the Energy Union:

Governance process (May-Nov 2015)

(May-Nov 2015)

(2016)

Council

TTE Council
(26 Nov)

EP

**EP Report on
the Energy
Union**

EC

Energy Union Tour

**Country fact
Sheets**

Draft guidance
on Governance

**State of the
Energy Union
Report**
(18 Nov)

**Streamlined
planning and
reporting**
(tbc)



Implementation July/september 2015

Summer Package (adopted on 15 July 2015):

- **Market Design Communication:** A consultative communication in view of a **revision of electricity legislation in 2016**
- **New Deal for energy consumers:** A communication on retail market accompanied by a Staff working Document on renewable energy self-consumption
- Legal proposal for the **review of the Energy Labelling Directive** and the report on this issue
- Legal proposal for the **review of the Emissions Trading Directive**

Integrated Strategic Energy Technology (SET) Plan (Adopted on 15 September 2015)

- SET Plan proposes **10 focused research and innovation actions** to accelerate the energy system's transformation



Implementation

Winter Package (planned for January 2016)

- Revision of **regulation on security of gas supply** including the **communication on LNG and storage strategy**
- Review of the decision on information exchange for **Intergovernmental Agreements (IGAs)** on energy
- Strategy for **heating and cooling** as a contribution to the 2030 Framework
- Communication on the **nuclear illustrative programme (PINC)**

Legislative initiatives planned for 2016

- Review of the **Energy Efficiency and Energy Performance of Buildings Directives**, new **Renewable Energy Directive**, **Market Design**



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