



#InvestEUresearch

Horizon 2020 Work Programme for Research & Innovation 2018-2020

European Context

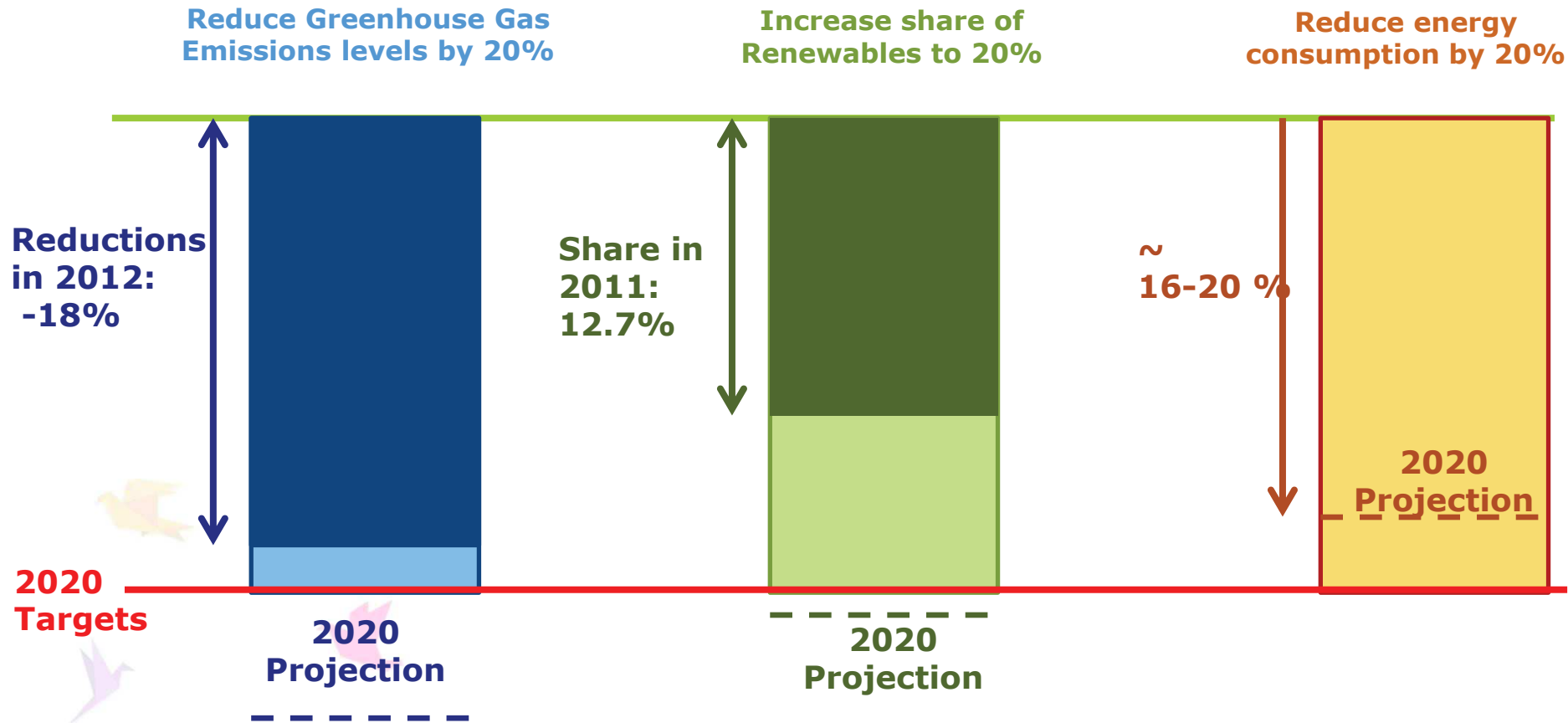
Philippe Schild – Renewable Energy Unit
DG Research and Innovation

Research and
Innovation

© European Union, 2017. Images: © toymim, #140789074; © toymim, #140421500; © dthak, #132658929; © zffoia, #145469452, 2017. Source: Fotolia.com

Current Policy Frameworks – 1/4

2008 Energy & Climate package



Current Policy Frameworks – 2/4

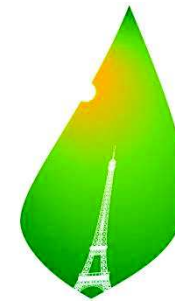
2015 – Energy Union / COP21 / SET-Plan Roadmap



Energy Union (Strategy on Research, Innovation and Competitiveness; Strategic Energy Technology Plan – SET-Plan)



COP21 (Mission Innovation)

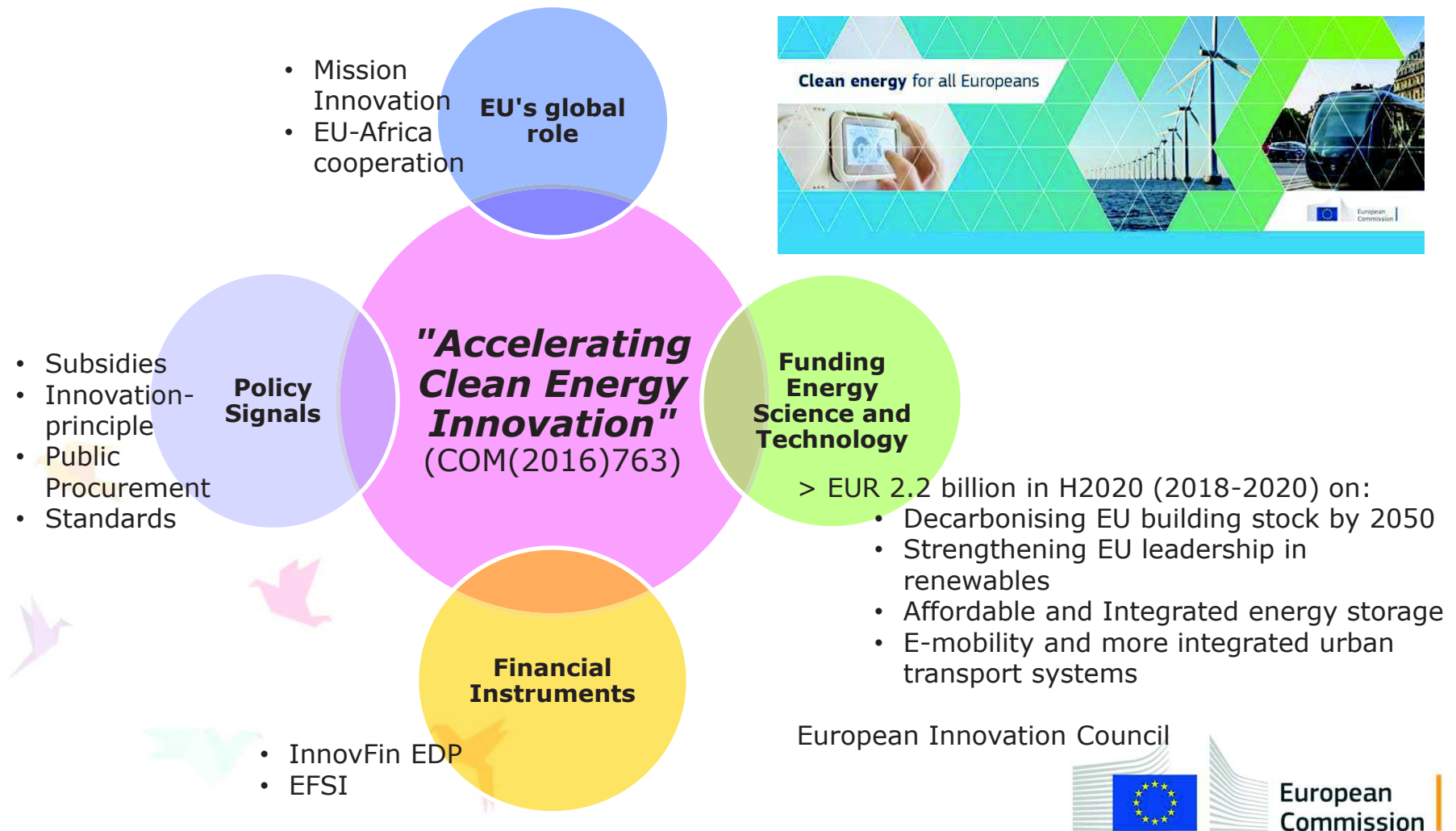


COP21 · CMP11
PARIS 2015
UN CLIMATE CHANGE CONFERENCE

Supporting further major priorities (Digital Single Market; Jobs, Growth and Investments; EU as a strong global actor)



Accelerating Clean Energy Innovation



Current Policy Frameworks – 4/4

Energy Union 2016 Winter Package

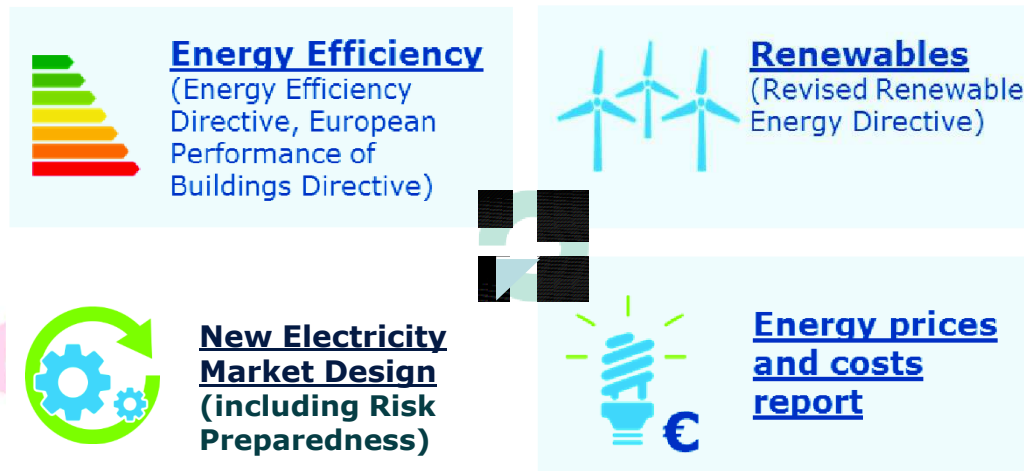
THE RIGHT REGULATORY FRAMEWORK FOR POST – 2020

" In essence the new package is about tapping our green growth potential across the board"

Commissioner Miguel Arias Cañete (2016)

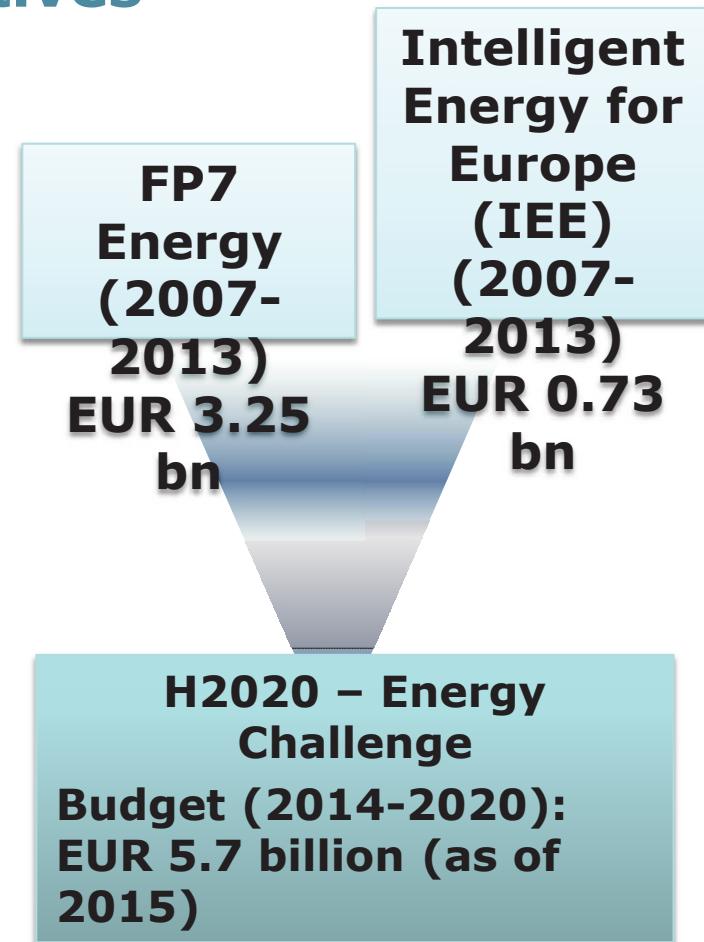
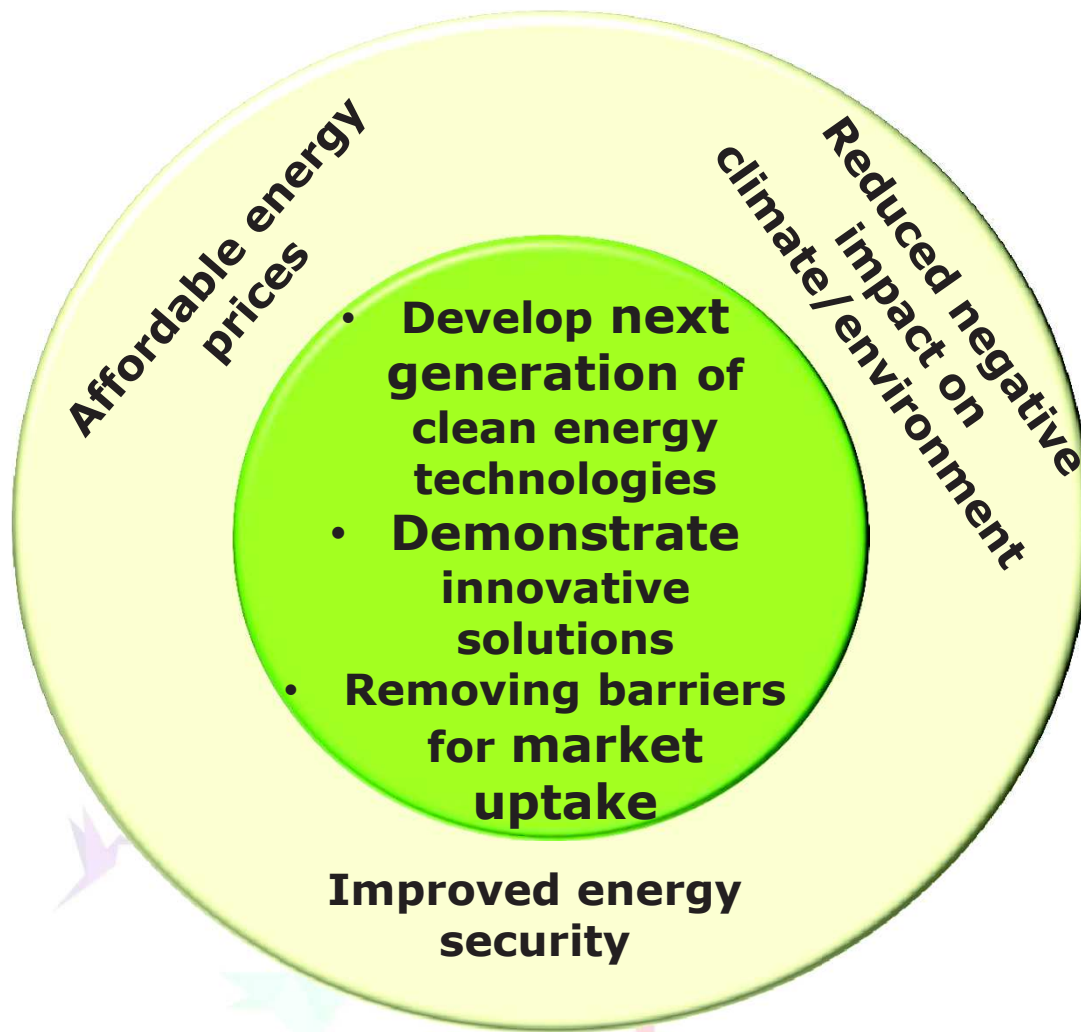


Energy Union Governance

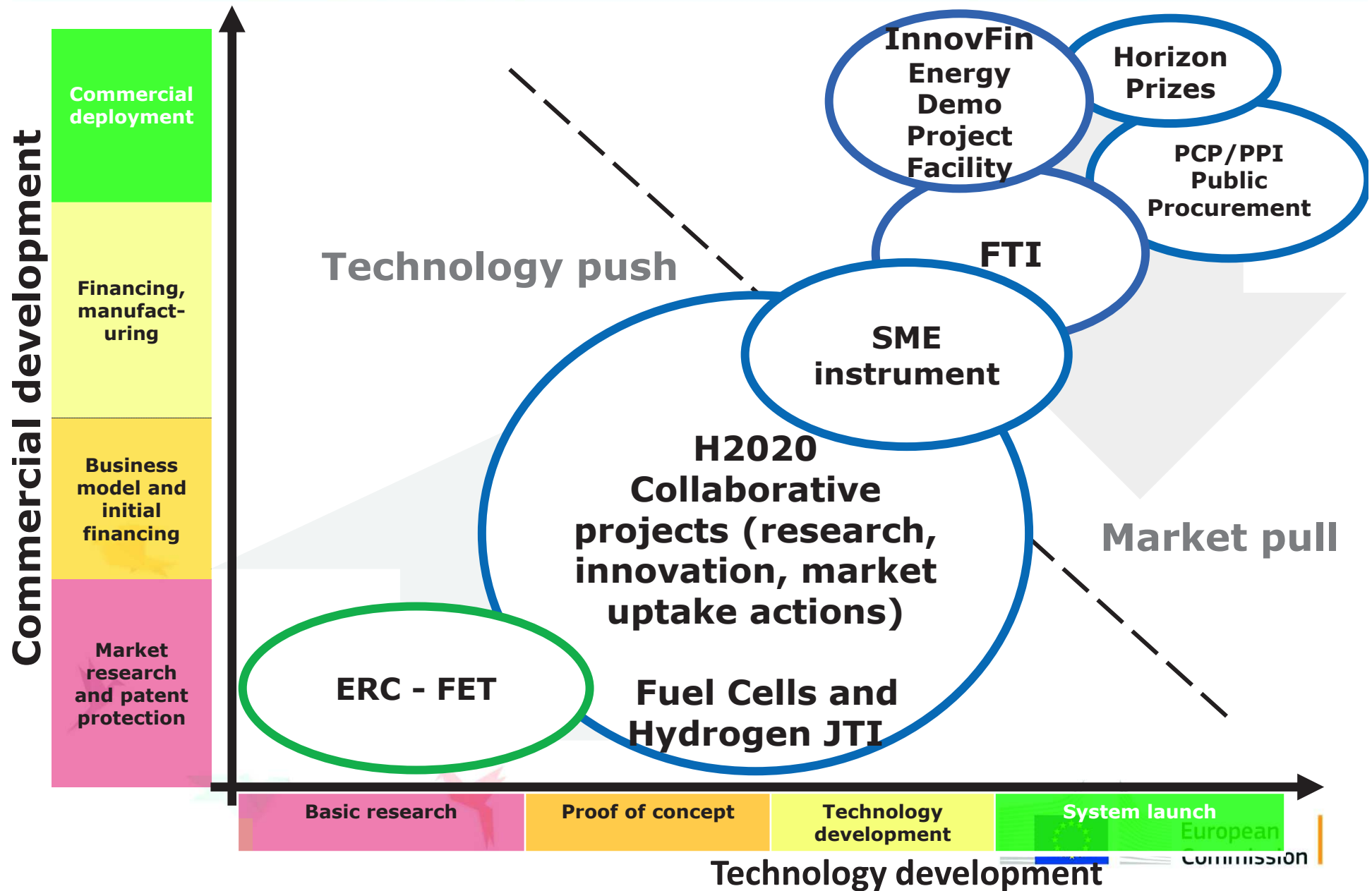


Contributing to the policy – 1/4

H2020 Energy Challenge - objectives



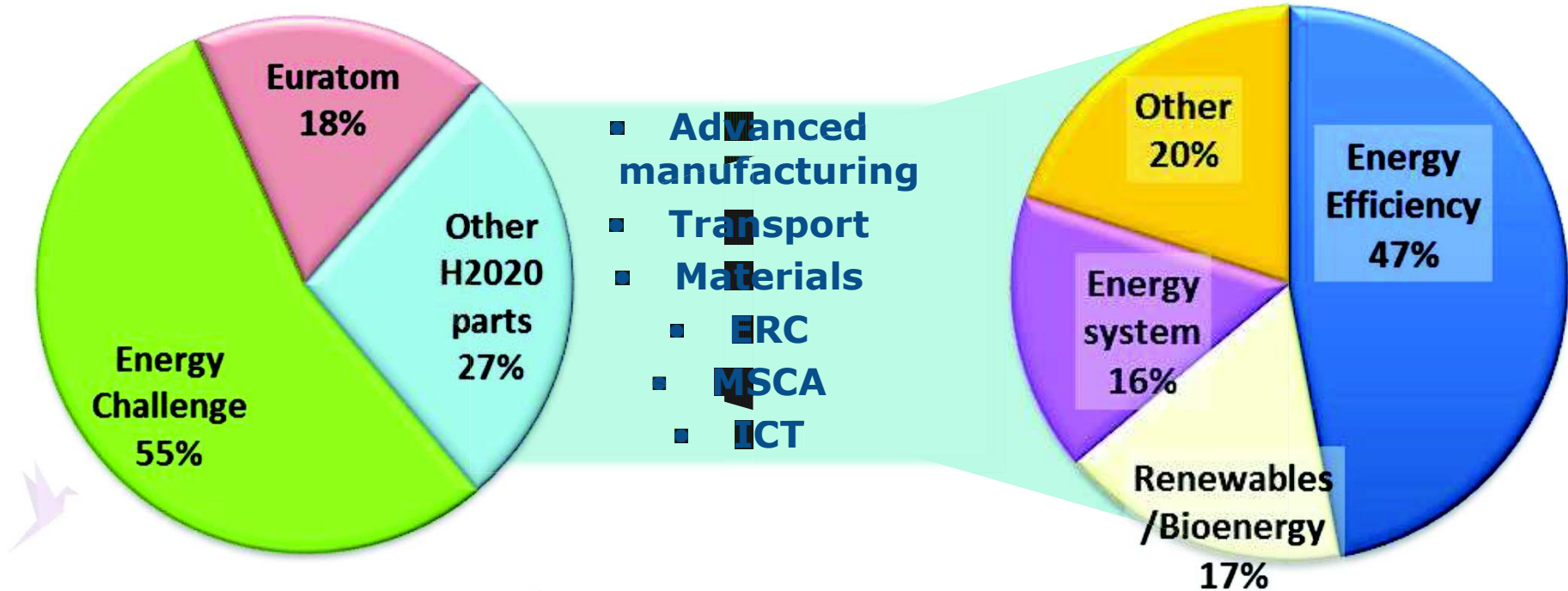
Contributing to the policy - 2/4



Contributing to the policy – 3/4

Energy in other parts of H2020

Additional energy-related spending in H2020, but outside the Energy Challenge: ca. 50% of the Energy Challenge budget



Total budget for energy in H2020: ~ EUR 8.5 billion (11.4% of the total H2020 budget)

Contributing to the policy – 4/4

Inputs



Horizon 2020 INTERIM EVALUATION

Findings on the Societal Challenge Energy



STRENGTHS

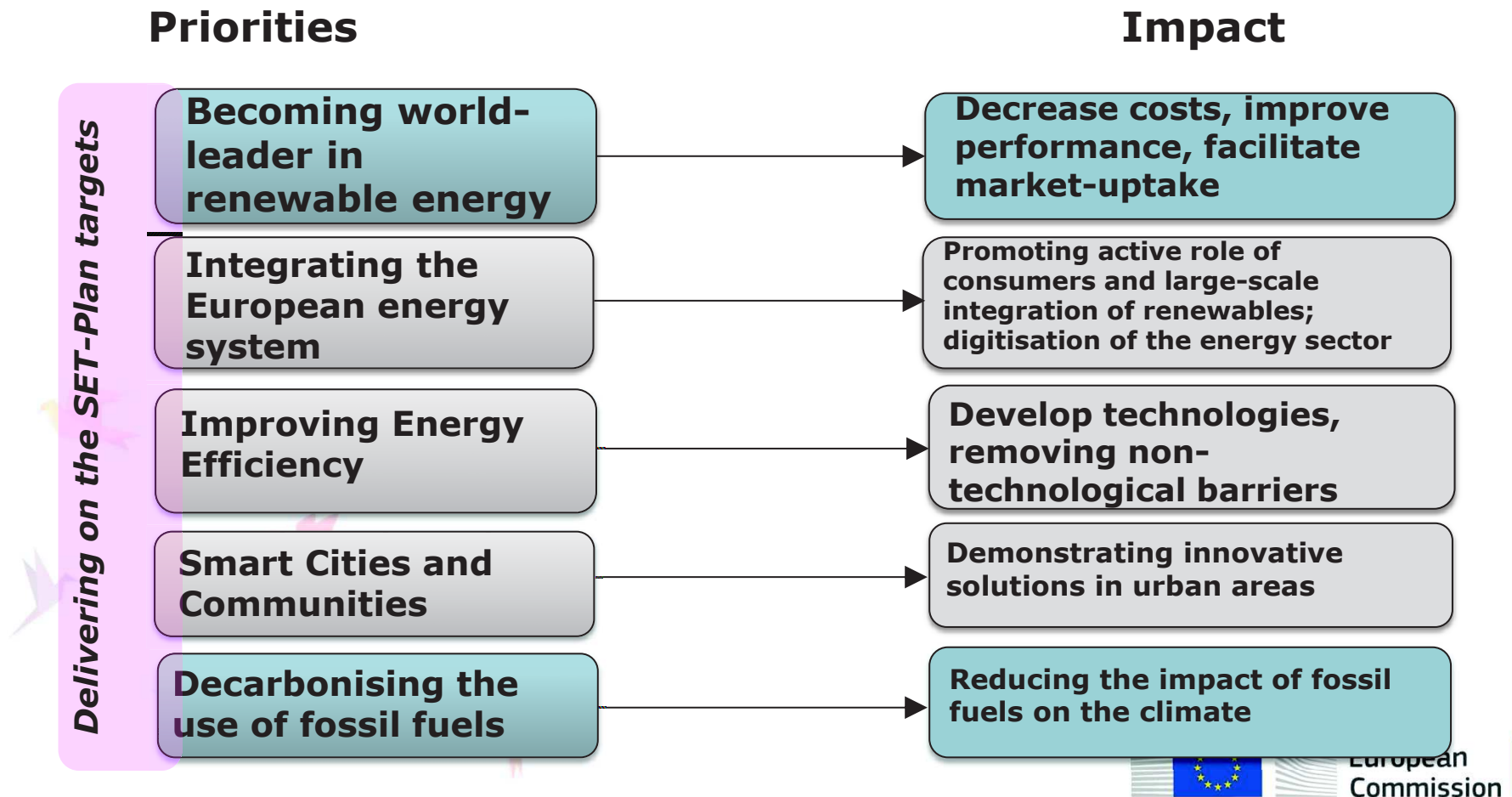
- > Highly relevant with regard to global societal challenges (e.g. decarbonisation of economy) and EU policies (notably Energy Union)
- > High industry participation ($\approx 50\%$) ensures strong innovation focus and real impact on market and society.
- > Strong citizen involvement translates into direct economic benefits for citizens

CHALLENGES

- > Better exploit synergies between energy-relevant activities across different programme parts (in programming and monitoring phase)
- > Better exploitation of complementarities with other EU programmes (e.g. ESIF, EFSI, EDF, EIT)
- > Budget not commensurate with investments needed for decarbonising the energy system

Translating to actions – 1/4

WP 2018 – 2020 : Overall Themes



Translating to actions – 2/4

Highlights

Shift from technology silos to energy system approach

- Focus on solutions and (technology-neutral) applications
- Fostering cross-sectorial benefits

Strong focus on the consumer

- In line with the *Clean Energy for all Europeans* package
- 8 topics requiring direct consumer involvement (total topic budget: ~200 M€)
- More than 40% of SC3 topics are SSH-flagged

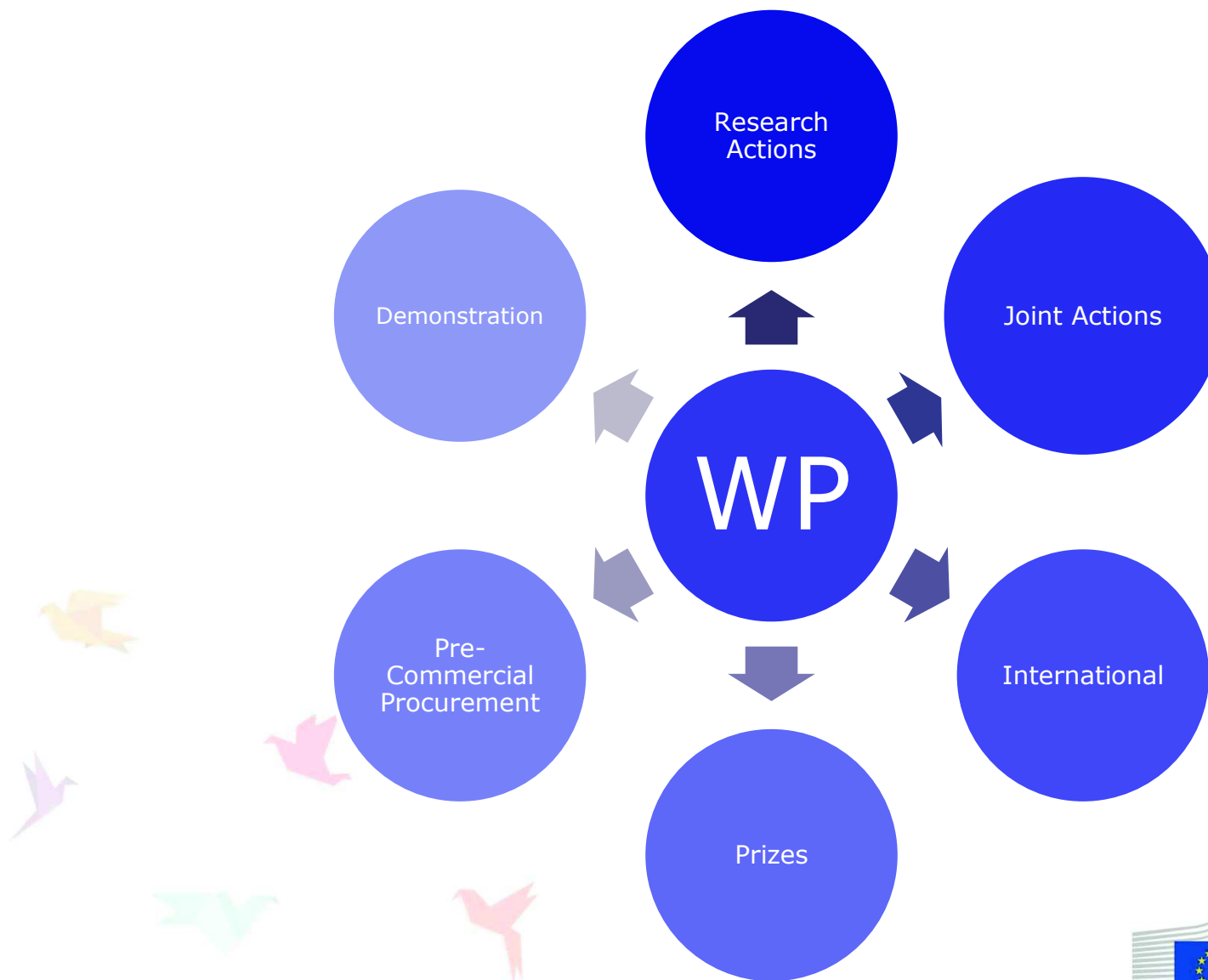
Digitising the energy sector

- Concrete cooperation with DG CNECT on Internet of Things, High Performance Computing (HPC) and Big Data, as well as Cybersecurity for the energy sector (SC3 co-funding: ~ 80 M€)

International focus

- Joining forces with major global economies in *Mission Innovation* to accelerate energy innovation (dedicated topics and Prize for 120 M€)
- Other INCO flagship: Launch of a joint programme with EU and African partners for R&I actions in the area of renewable energy (total budget: 16 M€)

Translating to actions – 3/4



Translating to actions – 4/4

Global leadership in Renewables

New renewable energy solutions

Renewable energy solutions at the consumer scale

Renewable energy solutions at the energy system scale

Renewable fuels for transport

Market uptake measures

International Actions





Thank you!

#InvestEUresearch

www.ec.europa.eu/research

ec.europa.eu/research/participants/portal

