



Synergies between various EU-Instruments related to the energy issues

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What is Horizon 2020?

- Horizon 2020 is the financial instrument implementing the “Innovation Union”, a “Europe 2020 flagship initiative” aimed at securing Europe's global competitiveness.
- Horizon 2020 is EU Research and Innovation programme with ~ € 80 billion EUR available over 7 years (2014 to 2020) – in addition to the private investment that this money will attract (leverage)
- **The EU Framework Programme for Research and Innovation is be complemented by further measures : COSME, ESIF, EUREKA, Erasmus+, Creative Europe, Connecting Europe Facility, LIFE (The Private Finance for Energy Efficiency-PF4EE, etc)**

Sources:

- EU
- National
- PPP
- PuP

GRANTS & TENDERS

Horizon 2020 (€6 bn – €30bn)

- **ESIF** - European Structural and Investment Funds (€ 38 bn for LCE) & EEA Grants
- **CEF** - Connecting Europe Facility
- **LIFE**
- **NER 300, NER 400** (Innovation Fund),
- **RFCS** - Research Fund for Coal & Steel

EU-COORDINATION OF NATIONAL FUNDING

- **ERA** – NET COFUND
- **EUREKA; EUROSTARS**
- **COST**
- **PCP** (Pre-commercial Procurement)
- **PPI** (Public Procurement of Innovative Solutions)

INNOVATION INSTRUMENTS

- **EIT** (European Institut of Innovatio and Technology)

FINANCIAL INSTRUMENTS

- **EFSI** – European Fund for Strategic Investments
- **InnovFin**
- **EIB, EBRD**
- **PF4EE** – Private Finance for Energy Efficiency (LIFE)
- **COSME** (€ 33 bn)

Complementarity within Horizon2020

Tackling Societal Challenges

- Health, demographic change and wellbeing
- Food security and the bio-based economy
- **Secure, clean and efficient energy**
- Smart, green and integrated transport
- Climate action, resource efficiency, including raw materials
- Inclusive, innovative and secure societies

Note: EIT and JRC

Creating Industrial Leadership and Competitive Frameworks

- Leadership in enabling and industrial technologies
 - Information and Communication Technologies (ICT)
 - Nanotechnology, Materials, Manufacturing and Processing
 - Biotechnology
 - Space
- Access to risk finance
- Innovation in SMEs

Excellence in the Science Base

- Frontier research (ERC)
- Future and Emerging Technologies (FET)
- Skills and career development (Marie Curie)
- Research infrastructures

Widening Participation

Science for and within Society

EIT

COSME, ESIF, ELENA, FIs,

H2020 focus areas

1. Personalising health and care
2. Sustainable food security
3. Blue growth: unlocking the potential of seas and oceans
4. Digital security
5. **Smart cities and communities**
6. **Competitive low-carbon energy**
7. **Energy Efficiency**
8. Mobility for growth
9. Waste: a resource to recycle, reuse and recover raw materials
10. Water innovation: boosting its value for Europe
11. Overcoming the crisis: new ideas, strategies and governance structures for Europe
12. Disaster-resilience: safeguarding and securing society, including adapting to climate change

Blue growth: unlocking the potential of the ocean

- ocean can deliver human necessities such as food and energy
- untapped potential of Europe's oceans, seas and coasts for jobs and growth:
 - valorizing the diversity of marine life
 - sustainable harvesting the deep-sea resources
 - new offshore challenge
 - ocean observation technologies
 - the socio-economic dimension.

Horizon 2020 and partnering

- **Public-Private Partnerships (PPPs):**
 - Through *Joint Technology Initiatives* or other formal structures (§ 187.)
 - Via *contractual arrangements*, which provide inputs for workprogrammes
 - Only when criteria met, e.g. *clear commitments from private partners*
- **Public-Public Partnerships (P2Ps):**
 - Through “*ERA-COFUND*” for topping up individual calls/ actions (replacing current ERA-Net, ERA-Net Plus, Inco-Net, Inno-net)
 - Through *participation in joint programs between Member States* (§ 185.)
 - Supporting agendas of Joint Programming Initiatives when in line with Horizon 2020
 - Only when criteria met, e.g. financial commitments of participating countries
- **European Innovation Partnerships**
 - **Not funding instruments**, but for coordination with broader policies and programmes

COSME

1. Building on the CIP
2. COSME is aiming at:
 - Improving access to finance
 - Improving access to markets
 - Improving the framework conditions of EU businesses
 - Promoting entrepreneurship

Objective 1: Improving access to finance

Streamlining set of financial instruments, developing EU-wide venture capital market, supporting cross-border lending, improving information about EU finance available for SMEs

- An equity facility (to invest in SMEs in expansion phase)
- A loan facility (to provide guarantees to cover loans for SMEs)
- Analytical tools (e.g. Enterprise Finance Index)
- Exchange of good practice (e.g. SME Finance Forum)

Horizon 2020 and COSME will support together two EU financial instruments for SMEs

Equity instrument for SMEs' growth and R&I

- Equity Facility for R&I (H2020)
- Equity Facility for Growth (COSME)

Debt instrument for SMEs' growth and R&I

- Loan Guarantee Facility (COSME)
- SMEs & Small Midcaps Guarantee Facility for R&I (H2020)

Equity instrument for SMEs' growth and R&I

Two complementary facilities working together to support access to risk capital and stimulate the development of the VC industry

**Equity
Facility
for R&I**

*Mainly
from
H2020*

*combined
investment
in multi-
stage funds*

*Mainly
from
COSME*

**Equity
Facility
for Growth**

from start-up/early stage
may make growth investments

to expansion/growth stage
may make early-stage investments

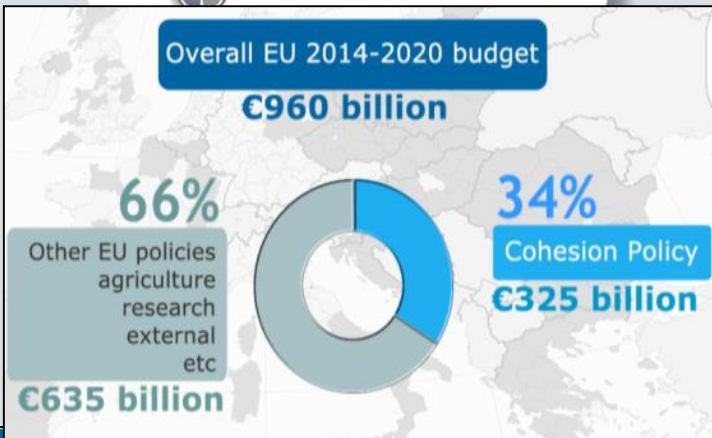
up to 20% of total EU investment

Debt instrument for SMEs' growth and R&I

- ❑ **Loan Guarantee Facility** (COSME)
 - guarantees for loans to SMEs up to € 150 000
 - securitisation of SME debt finance portfolios

- ❑ **SMEs & Small Midcaps Guarantee Facility** (H2020)
 - guarantees for loans over € 150 000 for R&I activities

ESIF

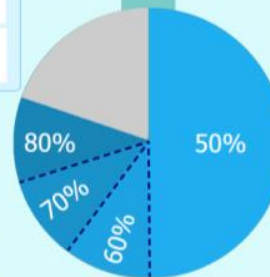


European Regional Development Fund

Investing in Growth

- Research and Innovation
- Information and communication technologies
- Competitiveness of SMEs
- Low-carbon economy

Between 50% and 80% of investments focussed on these priorities



European Social Fund

Investing in People

Employment and Mobility

Better education

Social inclusion

Better public administration



All EU regions benefit

€164 billion for less developed regions

GDP < 75% of EU-27 average

27% of EU pop.

€32bn for transition regions

GDP 75-90% of EU-27 average

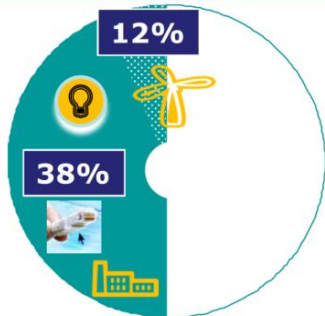
12% of EU pop.

€49bn for more developed regions

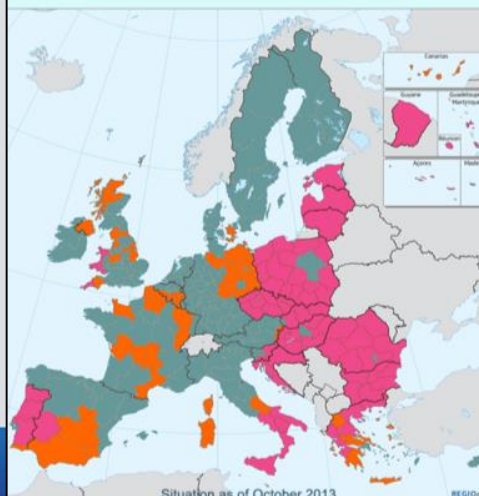
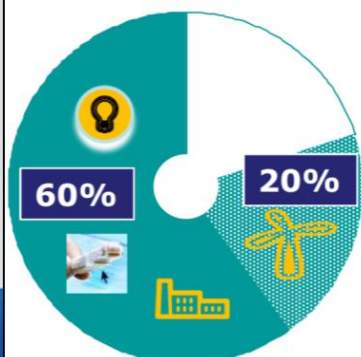
GDP > 90% of EU-27 average

61% of EU pop.

Less developed regions



Developed regions



Level of investment adapted to level of development

Legal base for combination of H2020 and ESIF

- **Article 55(8) CPR & Art.31 RfP Horizon2020:** combination of funding from different EU funding instruments in different expenditure / cost items encouraged
- **Article 60(2) CPR:** 15% of ERDF may be spent outside OP territory
- **Similar cost options** that may facilitate combining funds: lump sums, flat rates, unit costs etc. (Art 57 CPR & H2020 rules for participation)
- **Common Strategic Framework – annex 1 to CPR:** synergies and complementarity of Horizon 2020 and other centrally managed EU programmes in the areas of research and innovation ... in particular in an "up-stream" – "down-stream" logic

Basic principles for synergies

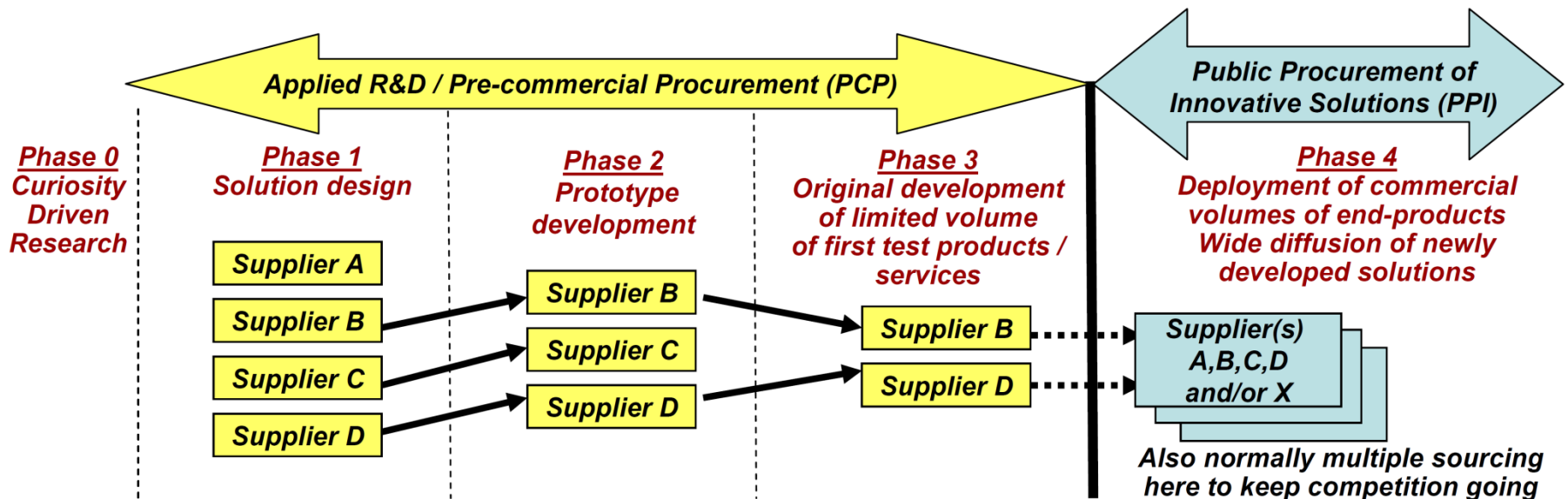
- Combined funding of ESIF programmes and Horizon 2020:
 - NO substitution of national/regional or private co-funding to EU projects/programmes under direct Commission management by ESIF money (and vice versa).
 - NO double financing: in no circumstances shall the same costs be financed twice by any budget.
- Synergies can be achieved through:
 - bringing together Horizon 2020 and ESIF money in the **same project**
 - **Succesive projects** that build on each other or;
 - **parallel projects** that complement each other.

How to achieve the synergies ?



PCP and PPI

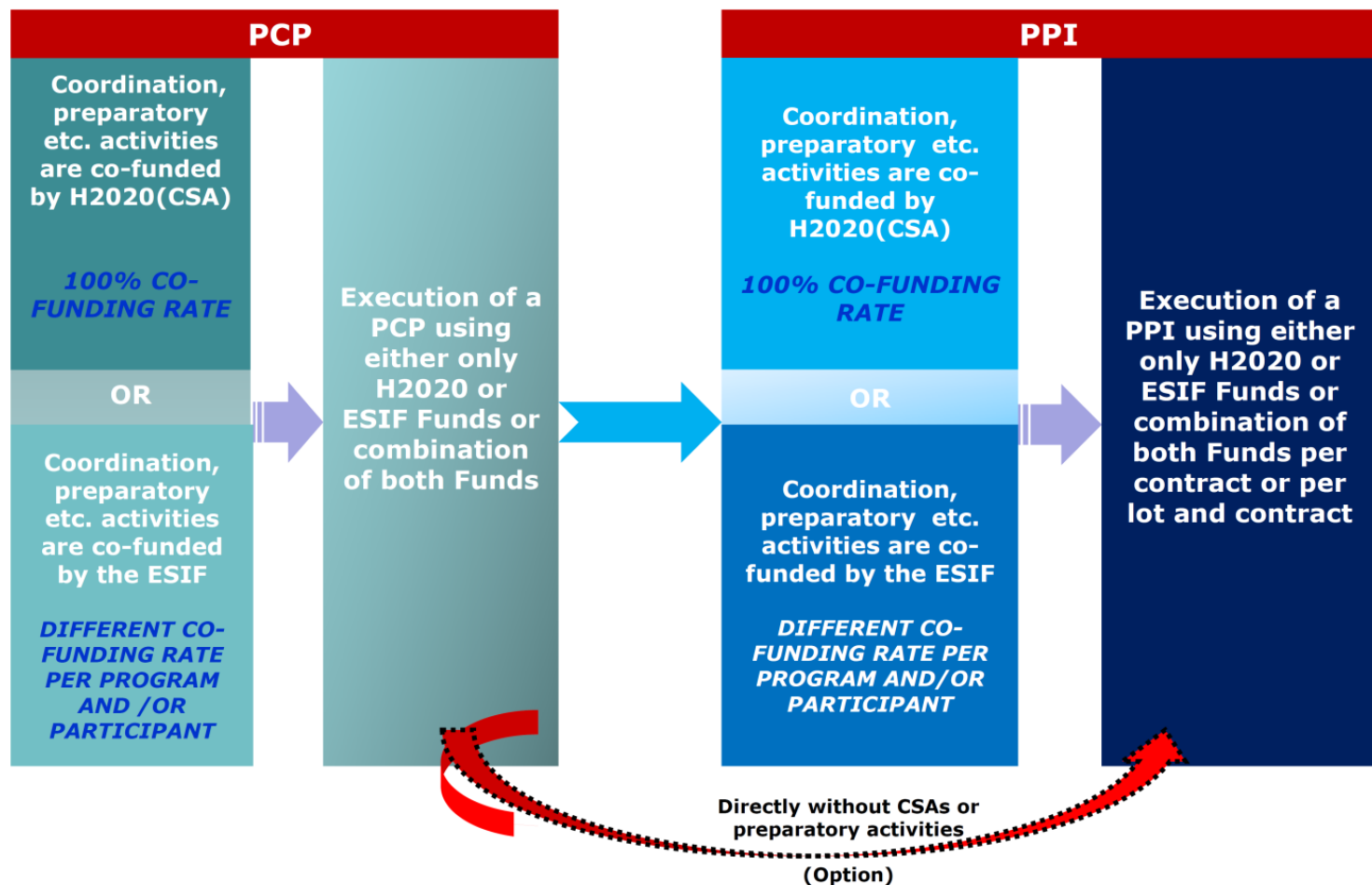
- **PCP** to steer the development of solutions towards concrete public sector needs, whilst comparing/validating alternative solution approaches from various vendors
- **PPI** to act as launching customer / early adopter / first buyer of innovative commercial end-solutions newly arriving on the market



Objectives:

- Price/quality products that better fit public sector needs
- Earlier customer feedback for companies developing solutions
- Better take-up/Wider commercialisation of R&D results

PCP/PPI, H2020, ESIF



Thank you !

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