



# Horizon 2020

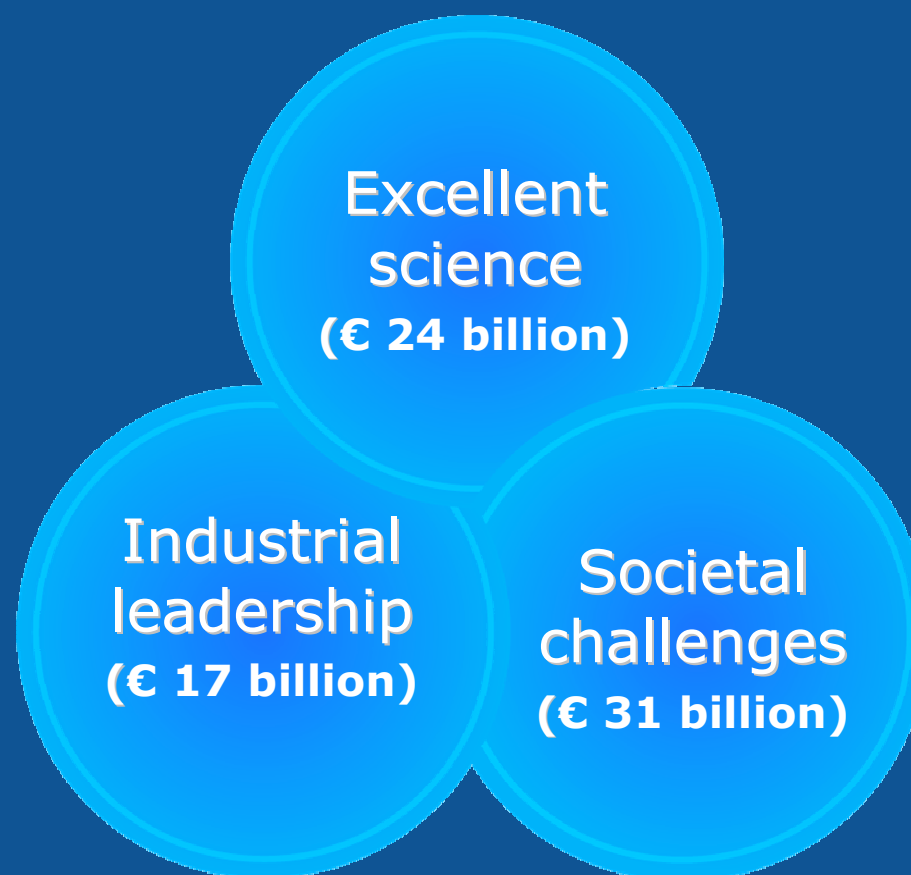
**EU- Latin America dialogue on Raw Materials**  
*Lima, Peru, 10-11 March 2014*

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and Forest-based industries »*

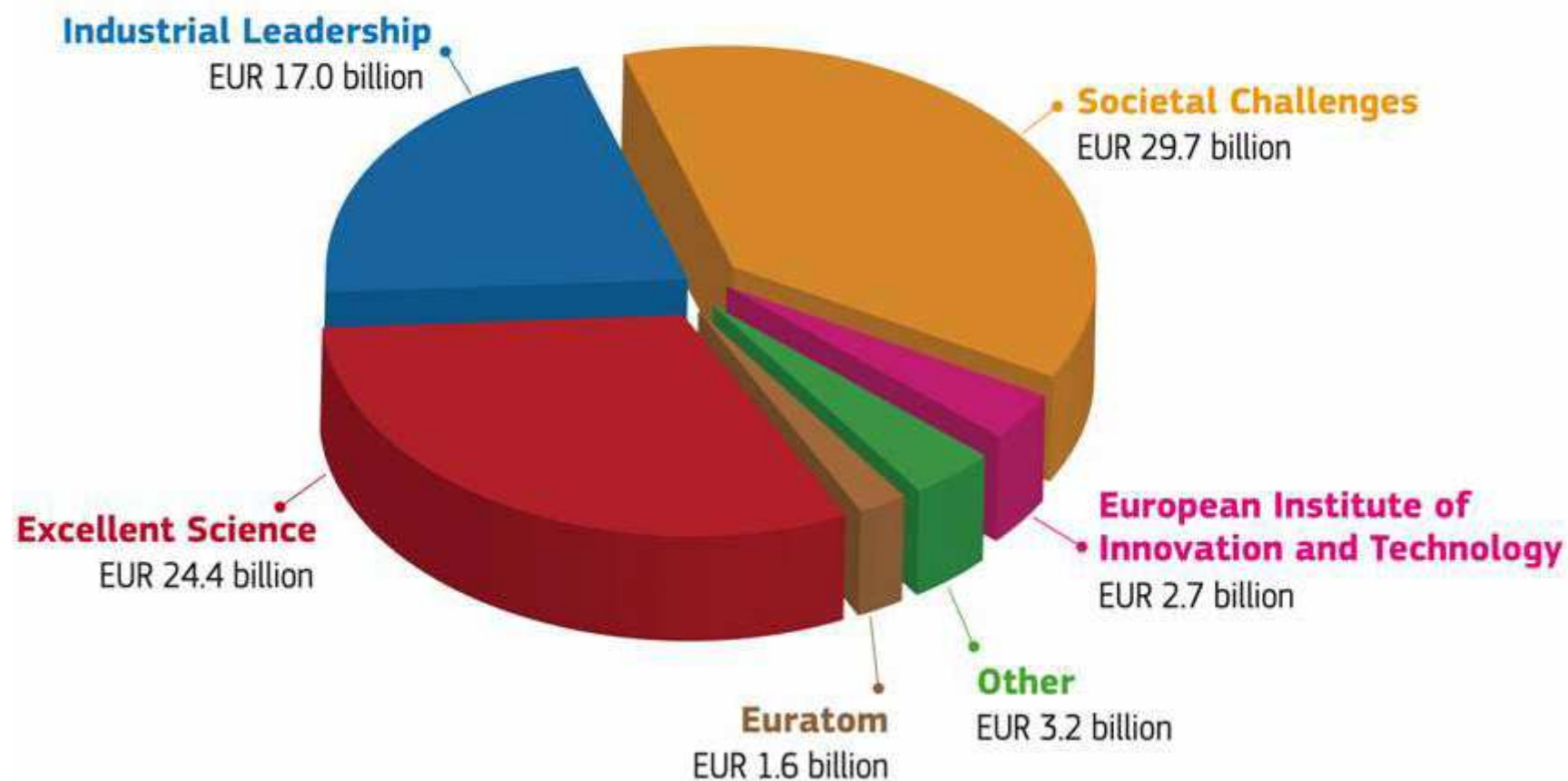
# Horizon 2020

## Context and overview

Horizon 2020



### HORIZON 2020 BUDGET (EUR 78.6 billion, current prices)



|  |               |
|--|---------------|
| <b><i>European Research Council (ERC)</i></b><br>Frontier research by the best individual teams                  | <b>13 095</b> |
| <b><i>Future and Emerging Technologies</i></b><br>Collaborative research to open new fields of innovation        | <b>2 696</b>  |
| <b><i>Marie Skłodowska-Curie actions (MSCA)</i></b><br>Opportunities for training and career development         | <b>6 162</b>  |
| <b><i>Research infrastructures</i></b> (including e-infrastructure)<br>Ensuring access to world-class facilities | <b>2 488</b>  |

|  |   |
|--|---|
| <p><b><u>Leadership in enabling and industrial technologies (LEITs)</u></b></p> <p>(ICT, nanotechnologies, <u>materials</u>, biotechnology, <u>manufacturing</u>, space)</p> | <p><b>13 557</b></p>  |
| <p><b><u>Access to risk finance</u></b></p> <p>Leveraging private finance and venture capital for research and innovation</p>  | <p><b>2 842</b></p>   |
| <p><b><u>Innovation in SMEs</u></b></p> <p>Fostering all forms of innovation in all types of SMEs</p>  | <p><b>616</b> + complemented by expected 20% of budget of societal challenges + LEITs and <b>'Access to risk finance'</b> with strong SME focus</p> |



|   |              |
|---|--------------|
| <b>1. Health, demographic change and wellbeing</b>  | <b>7 472</b> |
| <b>2. Food security, sustainable agriculture, marine and maritime research &amp; the Bioeconomy</b> | <b>3 851</b> |
| <b>3. Secure, clean and efficient energy *</b>  | <b>5 931</b> |
| <b>4. Smart, green and integrated transport</b>   | <b>6 339</b> |
| <b>5. Climate action, environment, resource efficiency and raw materials</b>                        | <b>3 081</b> |
| <b>6. Inclusive and reflective societies</b>  | <b>1 309</b> |
| <b>7. Secure societies</b>  | <b>1 695</b> |
| <i>Science with and for society</i>   | <i>462</i>   |
| <i>Spreading excellence and widening participation</i>  | <i>816</i>   |

\* Additional funding for nuclear safety and security from the Euratom Treaty activities (2014-2018)

# Role of the EIT and JRC in Horizon 2020



Horizon 2020

|  | <i>Proposed funding<br/>(€ million,<br/>2014-2020)</i> |
|--|--|
| <b><u>European Institute of Innovation<br/>&amp; Technology (EIT)</u></b><br>Combining research, innovation & training in<br>knowledge and Innovation Communities<br><b>Call on KIC on Raw materials – 10/9/2014</b> | <b>2 711</b>   |
| <b><u>Joint Research Centre (JRC)*</u></b><br>Providing a robust, evidence base for EU<br>policies   | <b>1 903</b>   |

\* Additional funding for the JRC for Euratom Treaty activities



# Horizon 2020:

## Societal Challenge 5 - Climate action, environment, resource efficiency and **raw materials**



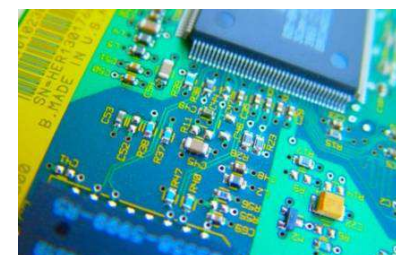
**Objective of Societal Challenge 5** : *"to achieve a resource – and water – efficient and climate change resilient economy and society, the protection and sustainable management of natural resources and ecosystems, and a **sustainable supply and use of raw materials**, in order to meet the needs of a growing global population within the sustainable limits of the planet's natural resources and eco-systems."*

1. Fighting and adapting to climate change
2. Sustainably managing natural resources and ecosystems
- 3. Sustainable supply of non-energy and non-agricultural raw materials**
4. Transition towards a green economy through eco-innovation
5. Global environmental observation and information systems
6. Cultural heritage

+ **Focus Area "Waste"** during 2014-2016

### "Ensuring The Sustainable Supply Of Non-energy And Non-agricultural Raw Materials"

- New solutions for sustainable **production of raw materials**
- Innovative and sustainable solutions leading to **substitution of raw materials**
- **Coordinating and supporting** raw materials research and innovation
- **Cross-challenge topics**



### "Waste: A resource to recycle, reuse and recover raw materials"

- **Recycling of raw materials** from products and buildings
- Towards near-zero waste at European and global level



### ➤ **New solutions for sustainable production of raw materials**

- Mining of small deposits and alternative mining (2014)
- Flexible processing technologies (2014)
- New exploration technologies and geomodels (2015)
- Deep mining on continent and in sea-bed (2015)
- New metallurgical systems (2015)

### ➤ **Innovative and sustainable solutions leading to substitution of raw materials**

- Materials for electronic devices (2014)
- Materials under extreme conditions (2015)



### ➤ Coordinating and supporting raw materials research and innovation

- Mineral deposits of public importance (2014)
- Strategic international dialogues and co-operation on raw materials with technologically advanced countries (2014)
- Raw materials intelligence capacity (2015)
- Innovation friendly minerals policy framework (2015)
- Raw materials research and innovation coordination (2015)
- Strategic international dialogues and cooperation with raw materials producing countries and industry (2015)

### ➤ Cross-challenge topics

- Boosting the potential of small businesses for eco-innovation and a sustainable supply of raw materials (**SME Instrument**)

## ➤ **Recycling of raw materials from products and buildings**

- Recycling of raw materials from products and buildings (2014)

## ➤ **Towards near-zero waste at European and global level**

- Secondary raw materials inventory (2014)
- Raw materials partnerships (2015)



## Strategic international dialogues and cooperation on raw materials with technologically advanced countries [2014]

### Challenge/Scope

- **promoting the cooperation with technologically advanced countries** to facilitate discussion in multilateral fora (such as OECD, UNEP, G20, G8) and strategic international dialogues and cooperation with technologically advanced countries
- **Mapping and addressing the cooperation opportunities** in terms of the synergies in research and innovation, joint educational and skills programmes, raw materials trade aspects, and exchange of best practices in exploration, extraction, processing and recycling of raw materials essential for industry, and in management and substitution of Critical Raw Materials.



## Strategic international dialogues and cooperation on raw materials with technologically advanced countries [2015]

### Challenge/Scope

- to **promote the activity of European companies** active in the mining and raw materials sectors in non-EU countries,
- **inward mining investment to Europe** and
- **co-operation with raw materials producing countries**, including exchange of best practices in raw materials policy and social licence, resulting in strong and sustainable relationships with these countries.
- In line with the Union's strategy the cooperation with international partners is encouraged, in particular with Australia, US, Canada, European Neighbourhood Policy countries, African Union and **Latin America**.

# References



- **EU raw materials webpage:**

[http://ec.europa.eu/enterprise/non\\_energy\\_extractive\\_industries/raw\\_materials.htm](http://ec.europa.eu/enterprise/non_energy_extractive_industries/raw_materials.htm)

- **European Innovation Partnership on Raw Materials:**

<https://ec.europa.eu/eip/raw-materials/en>

- **Horizon 2020:**

<http://ec.europa.eu/research/horizon2020/>

- **first H2020 Call for Proposals - 11 Dec 2013**

<http://ec.europa.eu/research/participants/portal/desktop/en/opportunities/index.html>

- **Call for H2020 experts**

(OJ of the EU, C 342, Volume 56, 22 November 2013)

<http://ec.europa.eu/research/participants/portal/desktop/en/experts/index.html>





Thank you for your attention!