



Horizon 2020

*The EU Framework
Programme for
Research and Innovation*

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HORIZON 2020

A graphic for the Horizon 2020 program. The word "HORIZON 2020" is written in large, white, sans-serif capital letters. The letter "O" in "HORIZON" is replaced by a transparent globe of the Earth. The text is set against a background of a blue sky with a bright sun or light source behind the globe, creating a lens flare effect. The bottom of the image shows a curved horizon line of the Earth.

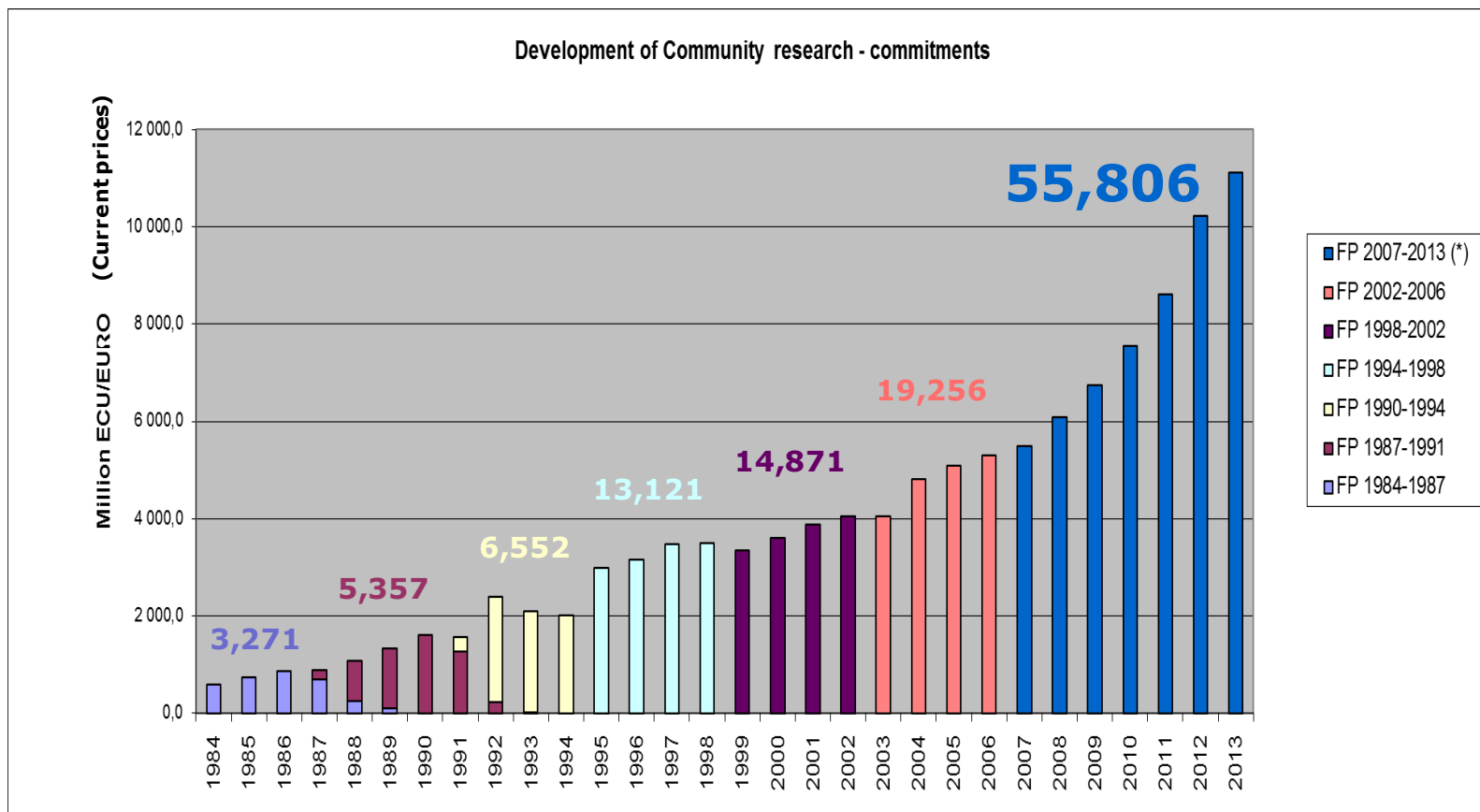
Research and
Innovation

In brief!

- Research and Innovation critical for stimulating growth and jobs in Europe
- Tackling the biggest societal challenges facing Europe
- EU research funding delivering the Innovation Union



Evolution of the Framework budget 1984-2013



FP7 funding to date...

- 19,000 projects funded (signed contracts)
- 79,000 participations of which 13,691 are SMEs (signed contracts - universities, research organisations, businesses)
- 25,3 billion EU contribution as of 16/02/2012 (signed contracts)
- An estimated 50,000 (Marie Skłodowska-Curie) and 5,000 (ERC) individual researchers' directly funded by the end of FP7



The Multiannual Financial Framework 2014-2020: Commission's proposals 29 June 2011

Key challenge: stabilise the financial and economic system while taking measures to create economic opportunities

1. Smart & inclusive growth (€491bn)



2. Sustainable growth, natural resources (€383bn)

3. Security and citizenship (€18.5bn)

4. Global Europe (€70bn)

5. Administration (€62.6bn)

**Total:
€ 1,025bn**

What is Horizon 2020

- **Initial Commission proposal for a 80 billion euro research and innovation funding programme (2014-2020); now just over 70 billion euro;**
- **A core part of Europe 2020, Innovation Union & European Research Area:**
 - **Responding to the economic crisis** to invest in future jobs and growth
 - **Addressing people's concerns** about their livelihoods, safety and environment
 - **Strengthening the EU's global position** in research, innovation and technology

Active involvement of stakeholders

- **EU Presidencies: Sweden** (societal challenges-based approach), **Spain** (integration of research and innovation), **Hungary** (FP7 interim evaluation), **Poland** (widening participation), **European Council conclusions** from 4.2.2011 (Common Framework to bring together all EU research and innovation funding)
- **European Parliament** reports: Merkies (Innovation Union), Audy (FP7 evaluation), Matias (Horizon 2020) and Carvalho (simplification)
- Overwhelming response to the **public consultation** on Horizon 2020 (more than 2000 contributions)
- **Survey on administrative costs for participants in FP7**
- **25 workshops on the content** of Horizon 2020

What's new

- **A single programme** bringing together three separate programmes/initiatives*
- **Coupling research to innovation** – from research to retail, all forms of innovation
- **Focus on societal challenges** facing EU society, e.g. health, clean energy and transport
- **Simplified access**, for all companies, universities, institutes in all EU countries and beyond.

*The 7th Research Framework Programme (FP7), innovation aspects of Competitiveness and Innovation Framework Programme (CIP), EU contribution to the European Institute of Innovation and Technology (EIT)



Three priorities:

- 1. Excellent science**
- 2. Industrial leadership**
- 3. Societal challenges**

Priority 1. Excellent science

Why:

- World class science is the foundation of tomorrow's technologies, jobs and well-being
- Europe needs to develop, attract and retain research talent
- Researchers need access to the best infrastructures

European Research Council <i>Frontier research by the best individual teams</i>	13 268
Future and Emerging Technologies <i>Collaborative research to open new fields of innovation</i>	3 100
Marie Curie actions* <i>Opportunities for training and career development</i>	5 752
Research infrastructures (including e-infrastructure) <i>Ensuring access to world-class facilities</i>	2 478

Priority 2. Industrial leadership

Why:

- Strategic investments in key technologies (e.g. advanced manufacturing, micro-electronics innovation across existing and emerging sectors)
- Europe needs to attract more private investment in research and innovation
- Europe needs more innovative SMEs to create growth and jobs

Leadership in enabling and industrial technologies <i>(ICT, nanotechnologies, materials, biotechnology, manufacturing, space)</i>	13 781
Access to risk finance <i>Leveraging private finance and venture capital for research and innovation</i>	3 538
Innovation in SMEs <i>Fostering all forms of innovation in all types of SMEs</i>	619

Priority 3. Societal challenges

Why:

- Concerns of citizens and society/EU policy objectives (climate, environment, energy, transport etc.) cannot be achieved without innovation
- Breakthrough solutions come from multi-disciplinary collaborations, including social sciences & humanities
- Promising solutions need to be tested, demonstrated and scaled up

Health, demographic change and wellbeing	8 033
Food security, sustainable agriculture, marine and maritime research & the bioeconomy	4152
Secure, clean and efficient energy*	5 782
Smart, green and integrated transport	6 802
Climate action, resource efficiency and raw materials	3 160
Inclusive, innovative and secure societies	3819

Simplification

- **Single set of** simpler and more coherent participation **rules**
- New **balance between trust and control**
- Moving from several **funding rates** for different beneficiaries and activities to just two
- Replacing the four methods to calculate overhead or «indirect costs» with a **single flat rate**
- Major simplification under the **forthcoming financial regulation**
- **Successful applicants to get working more quickly:** reduction of average time to grant by 100 days (current average of around 350 days under FP7)

Evaluation criteria

- **Excellence** (e.g. clarity and importance of the objectives; soundness of the concept; credibility)
- **Impact** (e.g. contribution to 'Expected impact statement' in WP; enhancing innovation capacity of companies; generation, integration of new knowledge)
- **Quality and efficiency of the implementation** (e.g. project work plan; competences and complementarity of individual participants, and consortium as a whole)
- **ERC**: sole criterion of Excellence
- Further details, weightings and thresholds to be set out in the Work Programmes

Widening participation/Structural Funds:

- **Principle of excellence:** continue to allocate funding on the basis of competitive calls, selecting only the best projects
- **Clear division of labour** - cohesion policy and Horizon 2020
 - **Cohesion policy:** support for regions in building up their research and innovation capacity.
 - **Horizon 2020:** widen participation, better coordination between the two Union funding programmes, support policy learning reforms.
- **Accompanying measures in Horizon 2020** to ensure that excellence prevails wherever it exists, including: twinning, ERA chairs, support for access to international networks, development of smart specialisation strategies.

International cooperation

- **International cooperation is crucial** to address many Horizon 2020 objectives.
- **Principle of general openness:** the programme will remain to be the most open funding programme in the world.
- Horizon 2020 shall be open to the **association** of: acceding countries, candidate countries and potential candidates and selected third countries that fulfil the relevant criteria (capacity, track record, close economic and geographical links to the Union, etc.).
- Targeted actions to be implemented taking a **strategic approach to international cooperation** (dedicated measures in the 'Inclusive, innovative and secure societies' challenge).

Timeline towards adoption

- Commission published Horizon 2020 package on 30 November 2011
- Council agreed 'Partial General Approaches' on Regulation in May; on the Rules in October; and the Specific Programme in December 2012
- The European Parliament ITRE Committee proposed amendments in November 2012
- 'Trilogue' process on-going (Commission, Council, EP)
- The budget for Horizon 2020 to be finalised. Agreement by the European Council on the Multiannual Financial Framework – EP needs to give consent
- Adoption of the Horizon 2020 legislative acts expected at end 2013
- First calls: expected mid-December



Thank you for your attention!

Find out more:

www.ec.europa.eu/research/horizon2020