



Horizon 2020

***New Knowledge, New Jobs,
New Solutions- Horizon
2020: Investing in Your
Future***

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A large graphic for "HORIZON 2020" set against a blue background with a glowing horizon and radiating light rays. The word "HORIZON" is in white capital letters, with the letter "O" replaced by a realistic, transparent globe showing the Earth. The word "2020" is also in white capital letters. Below the text, a dark, reflective surface shows a faint reflection of the globe and the text.

HORIZON 2020

Main topics

- The **political context and Europe 2020 Strategy**
- **Innovation Union** – turning the European Union into an Innovation Union
- **Horizon 2020** – the future EU Framework programme for Research & Innovation (2014-2020)
- New **cohesion policy** 2014-2020
- Latvia

Political Context

Europe faces:

- **Lack of growth, bleak economic climate;**
- **Increasing imbalances across the continent;**
- **Declining public confidence and high social costs of adjustment;**
- **Increased competition from other parts of the world;**
- **Debate on the EU and its future**

Fighting the crisis & reviving growth

1. Sound public finances

- Public deficits need to shrink

2. Structural reforms

- Restoring competitiveness of MS (e.g. flexible labour markets)
- Reaping synergies from the world's largest Single Market

3. Smart investment

- Stepping-up efforts to protect, at national level, pro-growth public spending in consolidation processes
- Pro-growth EU budget (e.g. Horizon 2020 to support objectives of Europe 2020 Strategy)

Europe 2020 strategy

- Objectives of **smart, sustainable and inclusive** growth
- Headline targets, including **3% of GDP invested in R&D**
- 7 flagship initiatives:
 - **Innovation Union**
 - Digital Agenda for Europe
 - Resource Efficient Europe
 - Industrial policy for the globalisation era
 - Youth on the move
 - An agenda for new skills and jobs
 - European platform against poverty

Innovation Union

Turning the European Union into an Innovation Union

- **Innovation Union flagship initiative aims at creating the best conditions for Europe's researchers and entrepreneurs to innovate**
- **A broader approach to innovation: meshing research and technological development with**
 - Product innovation, service innovation, innovation in design etc., including process and organisational innovation
 - Social innovation, public sector innovation, eco-innovation etc.
 - Exploration of new business models
 - Both technological & non-technological
 - Both incremental & disruptive innovation

Turning the European Union into an Innovation Union

- **Improving framework conditions** for innovation to flourish
- **34 commitments**
 - Speeding up standardisation
 - Making better use of and 'modernising' public procurement procedures
 - Creating a real internal market for venture capital
 - Agreeing on a unified European patent
 - Completing the **European Research Area (ERA)**

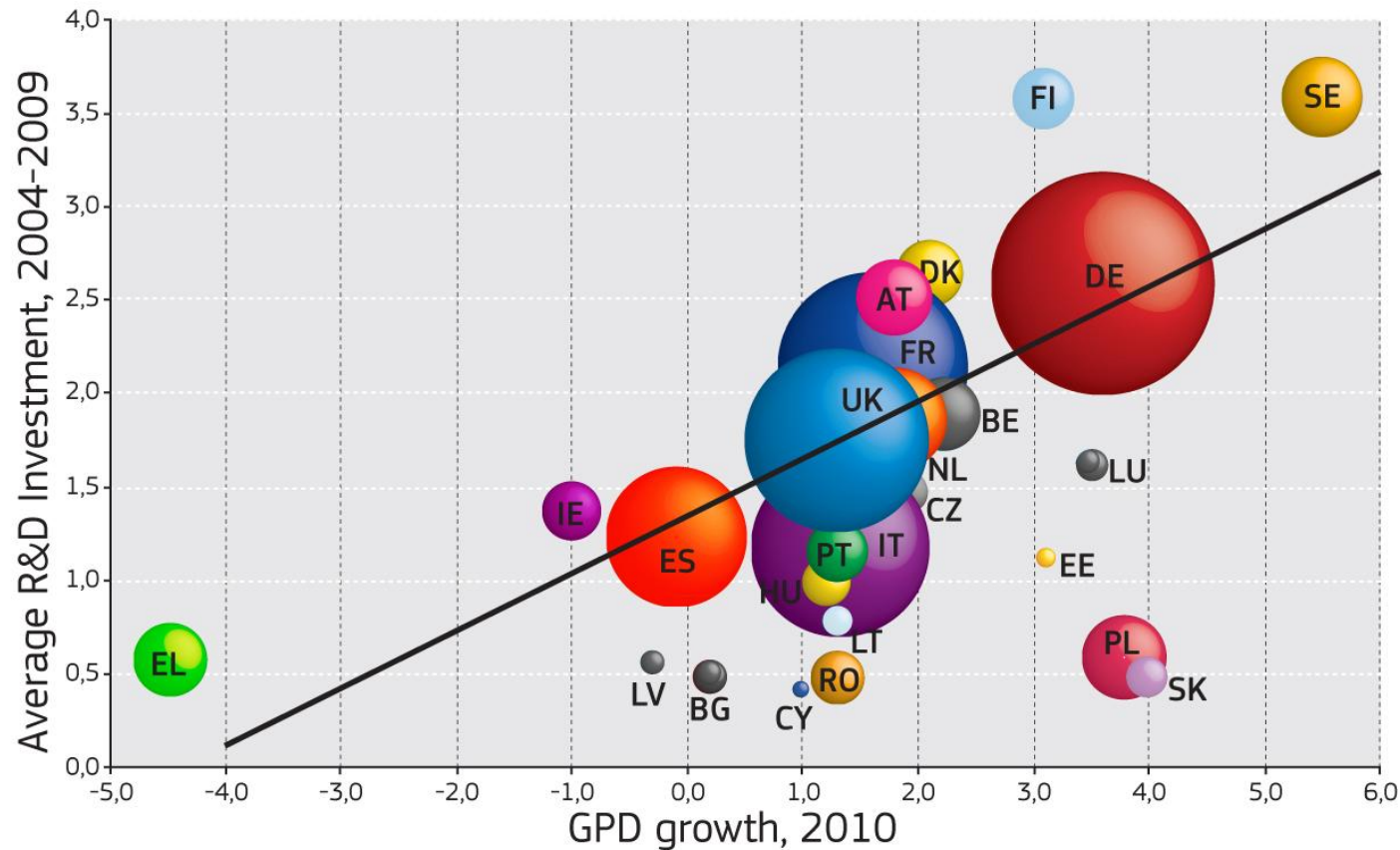
European semester for economic policy coordination

- Aims to ensure that Member States align their budgetary and economic policies with the Stability and Growth Pact and the Europe 2020 Strategy
- Priorities at EU level: Annual Growth Survey
- Country Specific Recommendations

Horizon 2020

The Framework Programme for Research
and Innovation (2014-2020)

Investment in R&I is part of the solution to exit from the economic crises



The Multiannual Financial Framework 2014-2020: European Council conclusions, 8 February 2013

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

1. Smart & inclusive growth (€451bn)



2. Sustainable growth, natural resources (€373bn)

3. Security and citizenship (€16bn)

4. Global Europe (€58bn)

5. Administration (€61.6bn)

**Total:
€ 960bn**

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

Horizon 2020 - What is 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
- Continuation of **investment in frontier research**
- **Simplified access**, for all companies, universities, institutes in all EU countries and beyond.

Horizon 2020 - Three priorities:

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

Horizon 2020 - Priority 1. Excellent science (~24.4 Billion Euro)

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>	13.095
Future and Emerging Technologies <i>Collaborative research to open new fields of innovation</i>	2.696
Marie Curie Actions* <i>Opportunities for training and career development</i>	6.162
Research Infrastructures (including e-infrastructure- <i>Ensuring access to world-class facilities</i>	2.488
TOTAL	24.441 17

Horizon 2020 - Priority 2. Industrial leadership (~17 Billion Euro)

Why:

- Strategic investments in key technologies (e.g. advanced manufacturing, micro-electronics) underpin innovation across existing and emerging sectors

- Europe needs to attract more private investment in research and innovation

Leadership in enabling and industrial technologies <i>(ICT, nanotechnologies, materials, biotechnology, manufacturing, space)</i>	13.557
Access to risk finance <i>Leveraging private finance and venture capital for research and innovation</i>	2.842
Innovation in SMEs <i>Fostering all forms of innovation in all types of SMES</i>	616
TOTAL	17.015

- Europe needs more innovative SMEs to create growth and jobs

Horizon 2020 - Priority 3. Societal challenges (~29.7 Billion Euro)

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	7.472
Food security, sustainable agriculture, marine and maritime research & the bio-economy	3.851
Secure, clean and efficient energy	5.931
Smart, green and integrated transport	6.339
Climate action, resource efficiency and raw materials	3.081
Inclusive societies	1,309
Secure societies	1.695
TOTAL	29.678
<i>Science for and with society</i>	462
<i>Widening participation</i>	816

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

The inter-institutional debate unfolds

- Commission published Horizon 2020 proposals on 30 November 2011
- Council agreed 'Partial General Approaches' on Regulation May; on the Rules in October; and the Specific Programme in December 2012
- The ITRE Committee of Parliament proposed amendments in November 2012
- Agreement on the overall EU budget at the European Council of 8 February 2013; on 3 July the Parliament approved the deal reached with Council on MFF on the basis of a Resolution;
- Trilogue negotiations are completed and the final budgets for Horizon 2020 are being revised;
- Final legislative acts expected at end of the year
- First calls are expected thereafter, start H2020 on 1 January 2014

New cohesion policy 2014-2020

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New cohesion policy 2014-2020 – more focus on R&I

- **Support to applied research and innovation** for the purpose of regional socio-economic development
- **Capacity building for innovation and growth** through the promotion of innovation friendly business environments
- **New regulatory provisions for thematic concentration** (R&I is part of the minimum 80% concentration for ERDF funds in more developed regions - 50% in less developed regions)
- **Ex-ante Conditionality** for the use of the European Regional Development Fund (ERDF) in support of R&I
- **Smart Specialisation** – strategic approach to economic development through strategic support for R&I

Ex-ante conditionality

To ensure effective implementation and more efficient use of structural funds MSs are called for drawing their **Smart Specialisation Strategy** outlines:

- based on available resources and capabilities,
- identifying competitive advantages and technological specialisations highly consistent with their potential for innovation
- specifying public and private investments required, with regard to research, technological development and innovation

Smart Specialisation

- Setting innovation as priority for all regions (Europe 2020) and improving innovation (strategy) process;
- Search for more efficient and effective regional development policies, avoiding overlap and imitation;
- Better use of scarce public resources, aiming for synergies between EU, national/regional and private funds (PPP)
- Driving for economic development; new academic insights and concepts in the fields of growth and competitiveness
- Smart Specialisation Platform established by the Commission (JRC in Seville) - analytical and hands-on support to the development of these strategies, policy learning at regional level through international evaluation by peers and best practice sharing.

Latvia and EU R&I opportunities

For Latvia, six Country Specific Recommendations (CSRs) in 2013

CSR n° 4: "Implement the planned reforms of higher education concerning, in particular, the establishment of a quality-rewarding financing model, reform of the accreditation system, consolidation of the institutions and promotion of internationalization. **Take further steps to modernise research institutions based on the on-going independent assessment.**"

Latvia and cohesion funding

- Latvia actively involved
- For 2007-2013, 16 % of total EU Cohesion funding for core R&I in both Entrepreneurship & Innovation and Human Resources OP;
- Main priorities are strengthening scientific and research potential, enhancing international competitiveness, promoting the transfer of knowledge and commercialisation and upgrading graduate and postgraduate education.
- For 2014-2020, preparation of programming documents and smart specialisation strategy is underway.

FP7 participation of Latvia

- To date 194 signed grant agreements
- With 263 Latvian participations
- Total EU contribution of around €36 million
- Main fields: Marie Curie, SMEs, Research Infrastructures, ICT, Food/Agriculture and Biotechnology, Health, NMP
- Main participants: Latvijas Universitate, Rigas Tehniska Universitate, Latvijas Valsts Koksnes Kimijas Instituts, Latvijas Organiskas Sintezes Instituts, Rigas Stradina Universitate
- Member country of the Joint Baltic Sea Research and Development programme (BONUS)

Opportunities for Latvia in H2020

- Opportunities in all pillars of Horizon 2020;
- Important to build on national and regional strengths and national investments in education, science and innovation;
- Ensure an adequate support system for Horizon 2020
- Potential fields: Marie Skłodowska Curie, ERC;
- Teaming & Twinning;
- ERA Chairs;
- COST;
- BONUS.

Conclusions:

- Research and Innovation triggers growth and jobs and will help us exit the crisis
- Also necessary to ensure that Europe remains an attractive place for world-class science, vibrant innovation and high-quality products
- Therefore, investments in R&I, both at national and EU level, should be safeguarded from budget cuts
- With the Horizon 2020 budget, we send a strong signal of our shared commitment



Thank you for your attention!

Find out more:

www.ec.europa.eu/research/horizon2020