

HORIZON 2020

THE FRAMEWORK PROGRAMME FOR RESEARCH AND INNOVATION

Di Rosa Matteo - APRE

National Contact Point Environment (including Climate Change)

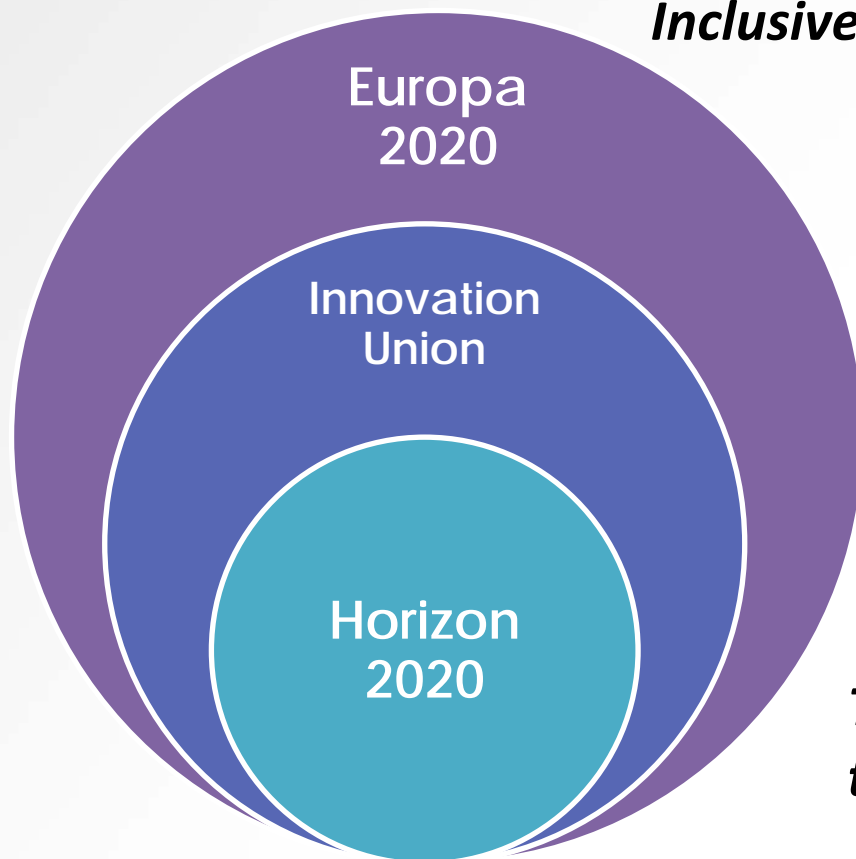


Towards Horizon 2020

- To come into effect in 2014
- Commission proposed a total budget of
 - 80 billion Euro
- Aim to make EU research and innovation funding
 - More efficient
 - More impactful
 - Simplify and standardize implementation
 - Reduce administrative burden for participants
 - Shorter negotiation and selection phases
 - Simpler guidance and advisory services

Where is Horizon 2020 placed ?

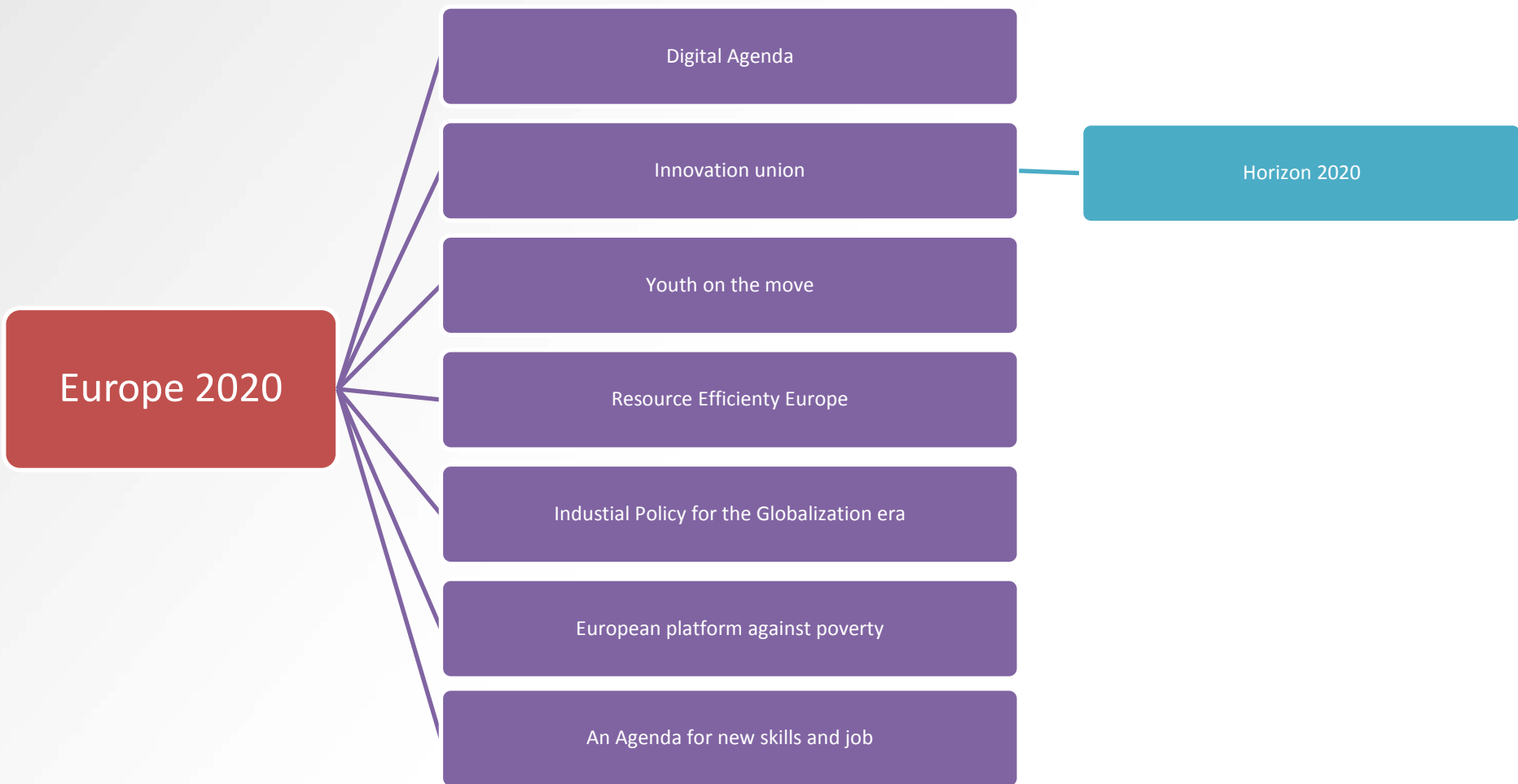
Strategy for a Smart, Sustainable and Inclusive Growth



Flagship initiative

The financial instrument to implement the Innovation Union (2014- 2020)

Where is Horizon 2020 placed?

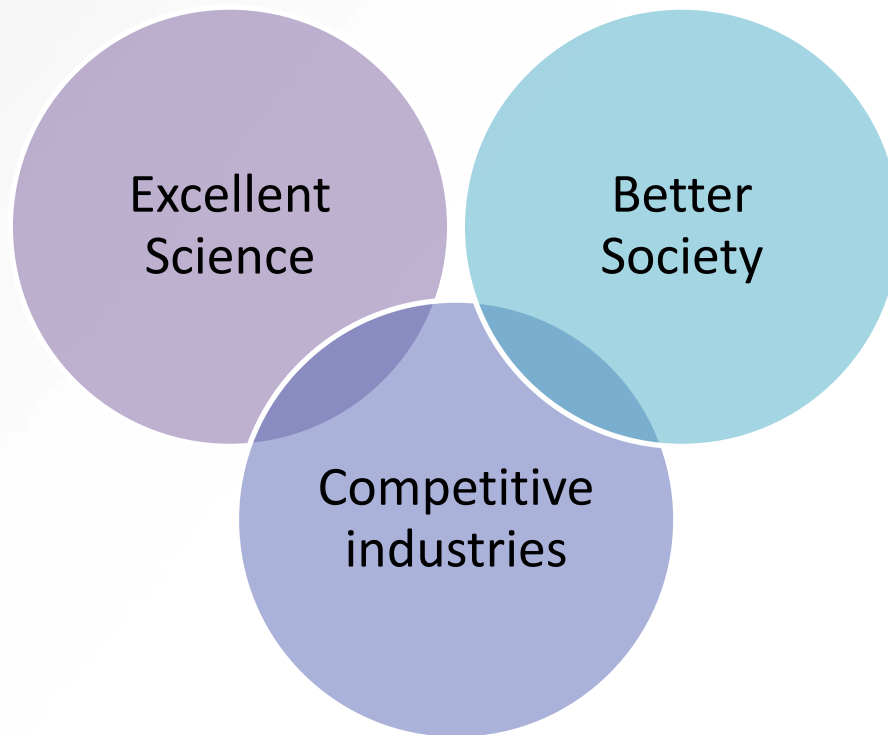


Bring together more funding programme:

- **The 7th Framework Programme (FP7)** for research, technological development and demonstration
 - €53 billion (2007-13). 4 main programmes on Ideas, Cooperation, People and Capacities.
- **The Competitiveness and Innovation Framework Programme (CIP)**
 - €3.6 billion (2007-13). 3 programmes on enterprise & innovation, intelligent energy, and ICT policy support.
- **The European Institute for Innovation and Technology (EIT)**
 - Autonomous EU body bringing together higher education, research and business to stimulate innovation in Knowledge and Innovation Communities. EU budget contribution of €309 million (2007-13)
- **And strengthening complementarities with the Structural Funds**
 - €86 billion allocated (2007-13) to R&D and innovation, entrepreneurship, ICT and human capital development

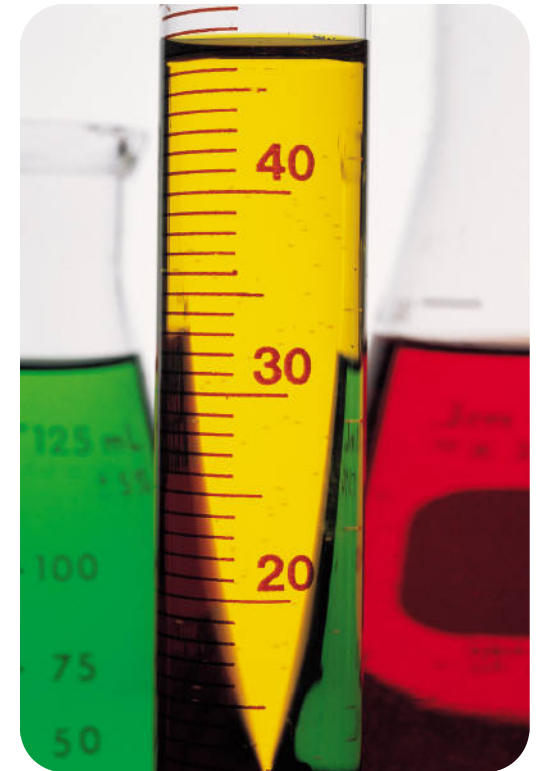
Horizon 2020 Architecture

Three key objectives



Excellent Science

- support the most talented and creative individuals and their teams to carry out frontier research of the highest quality by building on the success of the **European Research Council**;
- fund collaborative research to open up new and promising fields of research and innovation through support for **Future and Emerging Technologies (FET)**;
- provide researchers with excellent training and career development opportunities through the **Marie Skłodowska-Curie actions (Marie Curie actions)**;
- ensure Europe has world-class **research infrastructures** (including einfrastructures) accessible to all researchers in Europe and beyond.



Industrial Leadership

This will aim at making Europe a more attractive location to invest in research and innovation

- build leadership in enabling and industrial technologies, with dedicated support for **ICT, nanotechnologies, advanced materials, biotechnology, advanced manufacturing and processing, and space**, while also providing support for cross-cutting actions to capture the accumulated benefits from combining several Key Enabling Technologies;
- facilitate access to risk finance;
- provide Union wide support for innovation in **SMEs**.



Social Challenges

This reflects the policy priorities of the Europe 2020 strategy and addresses major concerns shared by citizens in Europe and elsewhere.

Funding will be focussed on the following challenges:

- Health, demographic change and wellbeing;
- Food security, sustainable agriculture, marine and maritime research and the bio-economy;
- Secure, clean and efficient energy;
- Smart, green and integrated transport;
- Climate action, resource efficiency and raw materials;
- Inclusive, innovative and secure societies

how does cooperation theme change?

FP7 Cooperation programme	"Theme" Horizon 2020 Pillar	Horizon 2020 activity
Health	Societal challenges	Health, demographic change and wellbeing challenge;
Food, Agriculture and Fisheries, and Biotechnology	Societal challenges	Food security, sustainable agriculture and the bio-economy challenge
	Industrial Leadership	Biotechnology
Information and Communication Technologies	Industrial Leadership	Leadership in enabling and industrial technologies: Information and Communication Technologies (ICT)
	Societal challenges	Applications within relevant challenges
Nano-science, nanotechnologies and new production technologies	Industrial Leadership	Leadership in enabling and industrial technologies: Support for enabling technologies
	Societal challenges	Applications within relevant challenges
Energy includes follow-up to CIP intelligent energy Programme	Societal challenges	Secure, clean and efficient energy challenge
Environment (including climate change and CIP eco-innovation actions)	Societal challenges	Climate action, resource efficiency including raw materials challenge
Transport (including Aeronautics)	Societal challenges	Smart, green and integrated transport challenge
Socio-economic science and humanities	Societal challenges	Inclusive, innovative and secure societies challenge and applications within all other societal challenges.
Space	Industrial Leadership	Leadership in enabling and industrial technologies: Space
Security	Societal challenges	Inclusive, innovative and secure societies challenge.

Environment in H2020

Supply of Raw Materials; Resource Efficiency and Climate Action



Environment in H2020

The major societal challenges to be met by environmental research and innovation are:

- Climate change.
- Loss of biodiversity.
- Resource constraints and loss of ecosystem services.
- Evolution of urban and rural environment
- Post industrial demography
- Environmental impacts on health
- Social preparedness
- Eco-innovative solutions and their dissemination



Councils' Partial General Approach: A positive step forward

Main elements of the Commission's proposal are maintained, in particular:

- One project, one rate (although with exceptions)
- Single flat rate for indirect costs
- Open Access
- IPR orientations

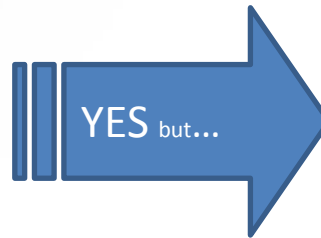
A SINGLE FUNDING RATE (Art. 23)

Commission

Council PGA

One project = One rate

- Same rate for all beneficiaries and all activities in the grant.
- The rate is fixed ex-ante in the WP (not negotiated per project).
- Up to 100 % of the total eligible cost
- Limited to maximum 70 % for actions close to market



"For close-to-market actions, as an exception to paragraph 3 of this Article, the Horizon 2020 grant may reach a maximum of 100% of the total eligible costs for non-profit legal entities, without prejudice to the co-financing principle."

Council PGA

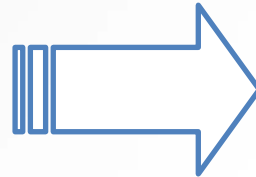
➔ New definition on "close-to-market":

"close-to-market action' means an action primarily consisting of activities directly aiming at producing plans and arrangements or designs for new, altered or improved products, processes or services. For this purpose they may include prototyping, testing, demonstrating, piloting, large-scale product validation and market replication;

INDIRECT COSTS (Art. 24)

Commission

Single model:
20 % Flat Rate



Council PGA

Single model:
25 % Flat Rate

Art. 24 PGA:

" 1. Indirect eligible costs shall be determined by applying a flat rate of 25% of the total direct eligible costs, excluding direct eligible costs for subcontracting and the costs of resources made available by third parties which are not used on the premises of the beneficiary, as well as financial support to third parties.

2. By way of derogation from paragraph 1, indirect costs may be declared in the form of a lump sum or scale of unit costs when provided for in the work programme or work plan."

Commission

EXCELLENCE

IMPACT

IMPLEMENTATION

**Sole criterion for ERC
frontier research**

Council PGA

2a. The criterion of impact may be given a higher weighting for proposals for close-to-market actions.

International Cooperation

The new strategic approach to international cooperation in research and innovation will be characterised by:

- Horizon 2020 being fully open to third country participants, allowing European researchers to cooperate with the best brains across the world;
- Targeted international cooperation activities with the scale and scope necessary to maximise impact;
- The development of multi-annual roadmaps for cooperation with key partner countries and regions;
- Reinforcing the partnership between the Commission, the Member States and relevant stakeholders;
- Promoting common principles for the conduct of international cooperation in research and innovation;
- Enhancing the role of the Union in international organisations and multilateral fora;
- Strengthening implementation, governance, monitoring and evaluation.

Timeline Horizon 2020

2010

- EU2020 Strategy
- A Digital Agenda for Europe
- Innovation Union
- Other Europe 2020 Flagship Initiatives
- FP simplification communication
- Financial Regulation revision
- EU budget review

• FP7 interim evaluation

2011

• Green Paper: Common Strategic Framework (CSF) for EU Research & Innovation

• 29/6 Multi-annual Financial Framework (MFF) proposal

• 30/11 Horizon 2020 proposal

2012

2013

• MFF decision

• Horizon 2020 decision

ETP and JPI: Other opportunities?

Technological Platform	Acronimo	Website
European Technology Platform for Wind Energy	TPWind	http://www.windplatform.eu/
Photovoltaic	EU PV Platform	http://www.eupvplatform.org/
Zero Emission Fossil Fuel Power Plants	ZEP	http://www.zeroemissionsplatform.eu/
Renewable Heating & Cooling	RHC	http://cordis.europa.eu/technology-platforms/rhc_en.html
European Technology Platform for Global Animal Health	ETPGAH	http://www.etpgah.eu/
Plants for the Future	Plant ETP	http://www.plantetp.org/
Forest based sector Technology Platform	FTP	http://www.forestplatform.org/
Farm Animal Breeding and Reproduction Technology Platform	FABRE-TP	http://www.fabretp.info/
European Construction Technology Platform	ECTP	http://www.ectp.org/
European Steel Technology Platform	ESTEP	http://cordis.europa.eu/estep/
European Technology Platform on Sustainable Mineral Resources	ETP SMR	http://www.etpsmr.org/
Future Manufacturing Technologies	Manufuture	http://www.manufuture.org/manufacturing/
Future Textiles and Clothing	FTC	http://www.textile-platform.eu/
Water Supply and Sanitation Technology Platform	WSSTP	http://www.wsstp.eu
Sustainable Chemistry	SusChem	http://www.suschem.org/
Iniziativa		
European Innovation Partnership on Raw Materials	RARE	http://ec.europa.eu/enterprise/policies/raw-materials/innovation-partnership/index_en.htm
JPI Initiatives		
Joint Programming Initiative on Cultural Heritage and Global Change	JPI Cultural Heritage	http://www.jpi-culturalheritage.eu
Joint Programming Initiative "Connecting Climate Knowledge for Europe	JPI-Climate	http://www.jpi-climate.eu/
Agriculture Food Security and Climate Change	FACCE JPI	http://www.faccejpi.com/
Water challenges for a changing world	Water	http://www.waterjpi.eu/water-jpi/
Joint Programming Initiative for Healthy and Productive Seas and Oceans	Oceans	http://www.jpi-oceans.eu

CIP and Life+

The **CIP** runs from 2007 to 2013 with an overall budget of € **3621 million**.

With small and medium-sized enterprises (SMEs) as its main target, the Competitiveness and Innovation Framework Programme (CIP) supports innovation activities (including eco-innovation), provides better access to finance and delivers business support services in the regions.

It encourages a better take-up and use of information and communication technologies (ICT) and helps to develop the information society.

It also promotes the increased use of renewable energies and energy efficiency.

The CIP runs from 2007 to 2013 with an overall budget of € 3621 million.

LIFE+ is the EU's financial instrument supporting environmental and nature conservation projects throughout the EU, as well as in some candidate, acceding and neighbouring countries. Since 1992, LIFE has co-financed some 3708 projects, contributing approximately €2.8 billion to the protection of the environment.

Useful link

http://ec.europa.eu/research/horizon2020/pdf/proposals/communication_from_the_commission_-_horizon_2020_-_the_framework_programme_for_research_and_innovation.pdf

http://ec.europa.eu/research/horizon2020/pdf/press/fact_sheet_fp7_themes_in_h2020.pdf

http://ec.europa.eu/research/horizon2020/pdf/workshops/resource_efficiency_and_climate_action/presentations/6_research_areas_-_p.devillers.pdf

http://ec.europa.eu/research/horizon2020/pdf/workshops/secure_clean_and_efficient_energy_challenge/summary_report_workshop_on_23_june_2011.pdf

Thank you!

Di Rosa Matteo - APRE
National Contact Point Environment (including Climate Change)
dirosa@apre.it

