GHENT UNIVERSITY

**European Innovation Partnerships** (EIPs) - no funding - EC initiatives - bring different actors together – develop Strategic Implementation Plan (SIP) - launch calls for commitment

- EIP-AHA on Active and Healthy Ageing
- EIP-Agriculture on Agricultural Sustainability and Productivity
- EIP on Water
- EIP-SCC on Smart Cities and Communities
- EIP-RARE on Raw Materials

## Public to Public Partnerships (P2Ps) - EC and Member States (MS)

ERA LEARN 2020

**Joint Programming Initiatives** (JPIs)
- Virtual common pot
- develop Strategic Research and Innovation Agenda (SRIA) and/or Strategic Implementation Plan (SIP)

- **JP ND** (Neurodegenerative Disease Research)
- **JPI-HDHL** (A Healthy Diet for a Healthy Life)
- **More Years, Better Lives** - The Potential and Challenges of Demographic Change
- **JPI-AMR** - The Microbial Challenge - An emerging Threat to Human Health
- **FACCE** (Agriculture, Food Security and Climate Change)
- **JPI Oceans** - Healthy and Productive Seas and Oceans
- **Urban Europe** - Global Urban Challenges, Joint European Solutions
- **JPI Climate** - Connecting Climate Knowledge for Europe
- **Water JPI** - Water Challenges for a Changing World
- **JHEP** (Cultural Heritage and Global Change: a new challenge for Europe)

**SET plan** - The European Strategic Energy Technology Plan

**ERA-NETs**
Virtual common pot
**Search: ERA-LEARN**
+66 active ERA-nets
Examples:
- LEAP-AGRI
- BiodivERsA3
- PhotonicSensing
- CHIST-ERA III
- ERA-MIN 2
- SUSFOOD2
- E-Rare-3
- DEMOWIND
- EMEUROPE
- GeoERA
- ENTIII
- HDHL-INTIMIC
- NEURON Cofund
- ERA4CS
- ENSUF
- EuroTransBio
- EURONANOMED III
- HERA JRP UP
- TRANSCAN-2
- CORE Organic
- ERA-CVD
- M-ERA.NET2
- FLAG-ERA II
- MARTERA
- T2S
- Smart grids plus
- SusAn
- …

**Article 185 initiatives**
- Real common pot
- EC supports/participates in research programmes undertaken jointly by several MS

- **EDCTP** - European and Developing Countries Clinical Trial Partnership
- **AAL** - a joint research programme on 'Active and Assisted Living';
- **EMPIR** - a joint research programme in the field of Metrology (the science of measurement).
- **Eurostars** - a joint research pro-gramme for research-perfor-ming SMEs and their partners.
- **Bonus** - a joint research pro-gramme in the field of Baltic Sea research;

**EUREKA clusters**
- long-term, strategically significant industrial initiatives
- virtual common pot
- **CELTIC Plus** (2011-2019)
- **EURIPIDES²** (2013-2020)
- **ITEA 3** (2014-2020)
- **EUROGIA2020** (2013-2020)
- **Metallurgy Europe**
- **Penta**

## Horizon 2020 (EU Framework Programme)

RESEARCH & INNOVATION
Participant Portal

**I. Excellent Science Pillar**
- European Research Council (ERC)
- Marie Sklodowska Curie Actions (MSCA)
- Future and Emerging Technologies (FET)
- Research Infrastructures (RI)

**II. Industrial Leadership Pillar**
- Leadership in Enabling and Industrial Technologies (LEIT)
  - ICT
  - Nanotechnologies
  - Advanced Manufacturing and Processing
  - Advanced Materials
  - Biotechnology
  - Space
- Access to risk finance
- Innovation in SMEs

**III. Societal Challenges Pillar (SC)**
- (SC1) Health, Demographic Change and Wellbeing
- (SC2) Food Security, Sustainable Agriculture, Marine and Maritime Research and the Bio-Economy
- (SC3) Secure, Clean and Efficient Energy
- (SC4) Smart, Green and Integrated Transport
- (SC5) Climate Change, Resource Efficiency and Raw Materials
- (SC6) Inclusive, Innovative and Reflective Societies
- (SC7) Secure societies - protecting freedom and security of Europe and its citizens

Cross-cutting issues:
❖ Spreading Excellence and Widening Participation
❖ Science with and for Society

**European Institute of Innovation and Technology** (EIT)

Euratom

## Public private partnerships (PPPs) – EC and industry

**Contractual Public Private Partnerships** (cPPPs) – part of Horizon 2020 Industrial Leadership Pillar
- industry sets agenda
- within Horizon 2020

- **EeB** – Energy Efficient Buildings
- **FoF** - Factories of the Future
- **EGVI** – European Green Vehicles Initiative
- **SPIRE** - Sustainable Process Industry through Resource and Energy Efficiency
- **5G** (Advanced 5G for Future Internet)
- **Photonics**
- **Robotics**
- **High Performance Computing**
- **Big Data Value**
- **Cybersecurity**

**Key Enabling Technologies** (KETs)
Cross-cutting actions under Industrial Leadership Pillar
- nanotechnology
- micro- and nanoelectronics including semiconductors
- advanced materials
- biotechnology
- photonics
- advanced manufacturing

**Joint Technology Initiatives** (JTIs)
- industry sets agenda
- externalized ppps with own Rules for Participation
- managed by a Joint Undertaking (JU)

- **IMI2** - Innovative Medicines Initiative
- **ECSEL**
  - **ENIAC** - nanoelectronics
  - **ARTEMIS** - R&D in embedded systems
- **FCH2** - Fuel cells and Hydrogen
- **CS2** - Clean Sky
- **BBI** - Biobased and Renewable Industries for Development and Growth in Europe
- **Shift2Rail** – Rail industry and transport
- **SESAR** – High performing aviation

**Programme for the Competitiveness of enterprises and SMEs (COSME)**
- Better access to finance for SMEs
- Access to markets
- Support to entrepreneurs
- Business friendly environment

**European Structural and Investment Funds (ESIF)**

**Regional Policy**

**In your country**
- **European Regional Development Fund** (ERDF) (i.a. Interreg)
- **European Social Fund** (ESF)
- **European Agricultural Fund for Rural Development** (EAFRD)
- **European Maritime and Fisheries Fund** (EMFF)
- **Cohesion Fund** (only for less developed Member States)

**COST** (European Cooperation in Science and Technology) - funding for networking for researchers

## European Technology Platforms (ETPs) - no funding - industry-led stakeholder fora - develop SRIAs and Implementation Plans - labelled by the European Commission

| Bio-based economy | Energy | Environment | ICT | Production and processes | Transport | Cross ETP Initiatives |
|---|---|---|---|---|---|---|
| EATIP (Aquaculture Technology) | Biofuels | WssTP (Water Supply | ARTEMIS (Embedded Systems) | ECTP (Construction Technology) | ACARE (Aviation) | Nanofutures (Nanotechnology) |
| ETPGAH (Global Animal Health) | EU PV TP (Photovoltaics) | and Sanitation) | EUROP (Robotics) | ESTEP (Steel Technology) | ALICE (logistics innovation) | Industrial Safety (Occupational |
| Food for Life | ETIPWind (Wind Energy) | | ETP4HPC (High Performance Computing) | EuMaT (Advanced Engineering) | ERRAC (Rail) | Diseases and Work-related |
| Forest-based Sector | RHC (Renewable Heating | | ENIAC (Nanoelectronics) | FTC (Textiles and Clothing) | ERTRAC (Road Transport) | Accidents) |
| Plants for the Future | and cooling) | | EPoSS (Smart Systems Integration) | SusChem (Sustainable Chemistry) | Waterborne | Conxept (Consumer goods) |
| FABRE TP (Farm animal breeding | SmartGrids | | EU-robotics | Nanomedicine | | |
| and reproduction) | SNETP (Sustainable Nuclear | | NetWorld (Communication Networks) | ETP-SMR (Sustainable Mineral | | |
| TP Organics (Organic Food and | Energy) | | NEM (Network and Electronic Media) | Resources) | | |
| Farming) | ZEP (Zero Emissions Platform) | | NESSI (Software and Services) | Manufuture | | |
| | Ocean Energy Europe | | Photonics 21 | | | |