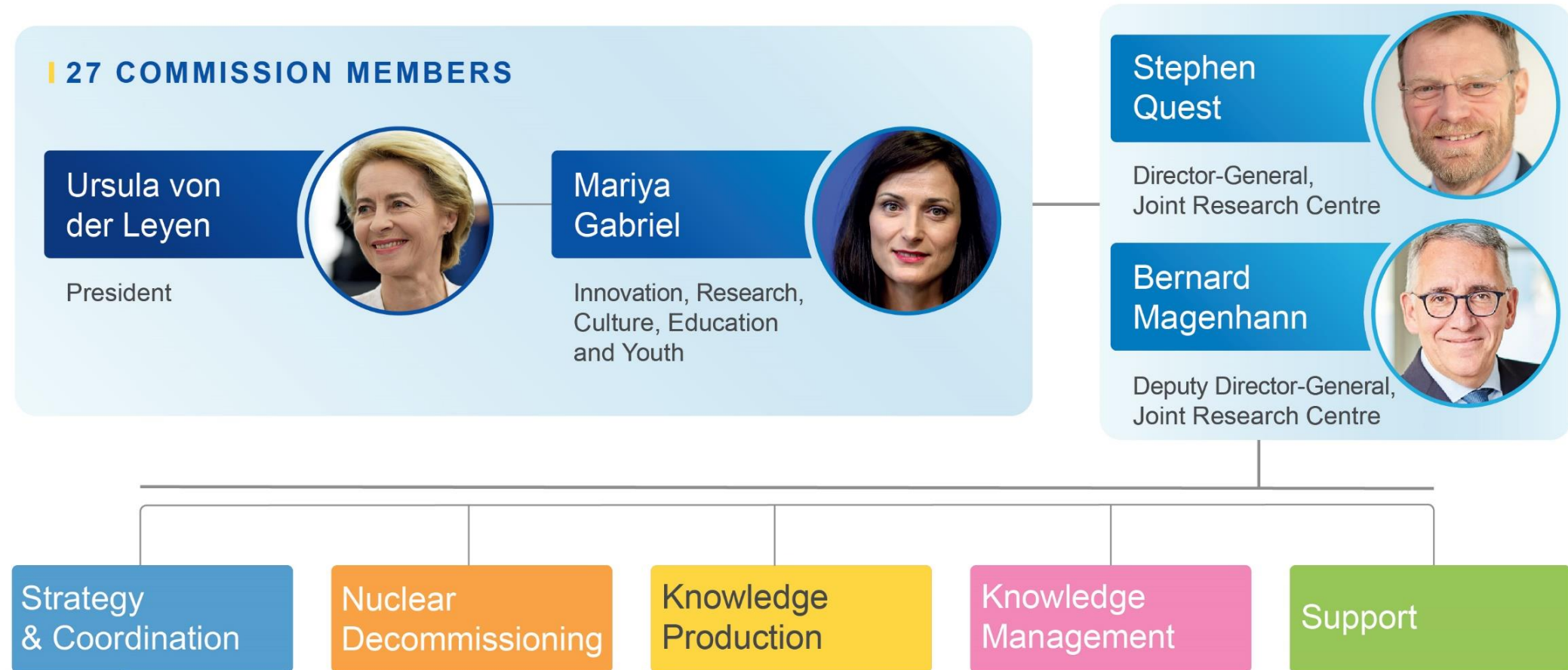# JRC's initiatives for KT at European level

Netval summer school, 14 September 2021

Giancarlo Caratti,
Unit - Intellectual Property and Technology Transfer
European Commission, DG Joint Research Centre

European Commission

The JRC within the European Commission

JRC Mission

As the science and knowledge service of the European Commission our mission is to support EU policies with independent evidence throughout the whole policy cycle.

European Commission

JRC sites

Headquarters in **Brussels** and research facilities located in **5 Member States:**

- Belgium (Geel)

- Germany (Karlsruhe)

- Italy (Ispra)

- The Netherlands (Petten)

- Spain (Seville)

PETTEN

GEEL

BRUSSELS

SEVILLE

KARLSRUHE

ISPRA

European Commission

JRC role: facts and figures

Policy neutral: has no policy agenda of its own

More than **50 large scale research facilities**
More than **110 online databases**

About **2 800 staff,** nearly **70 %** of whom are **scientific/technical staff**
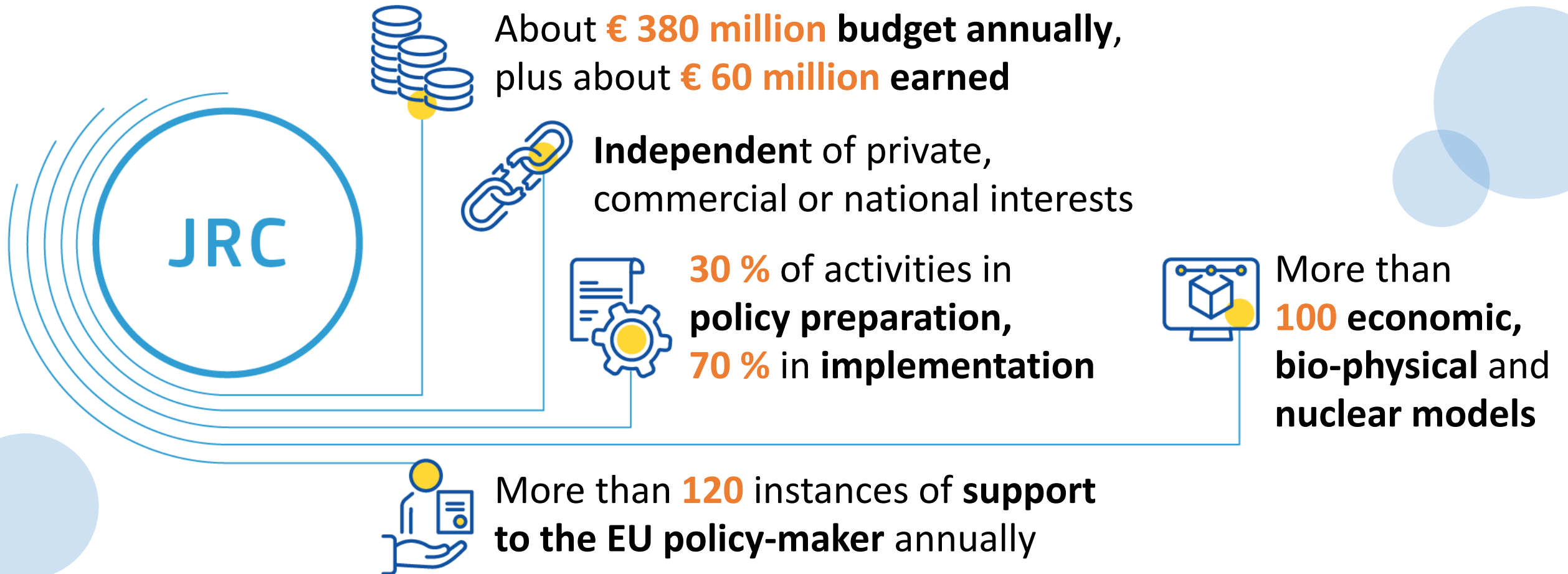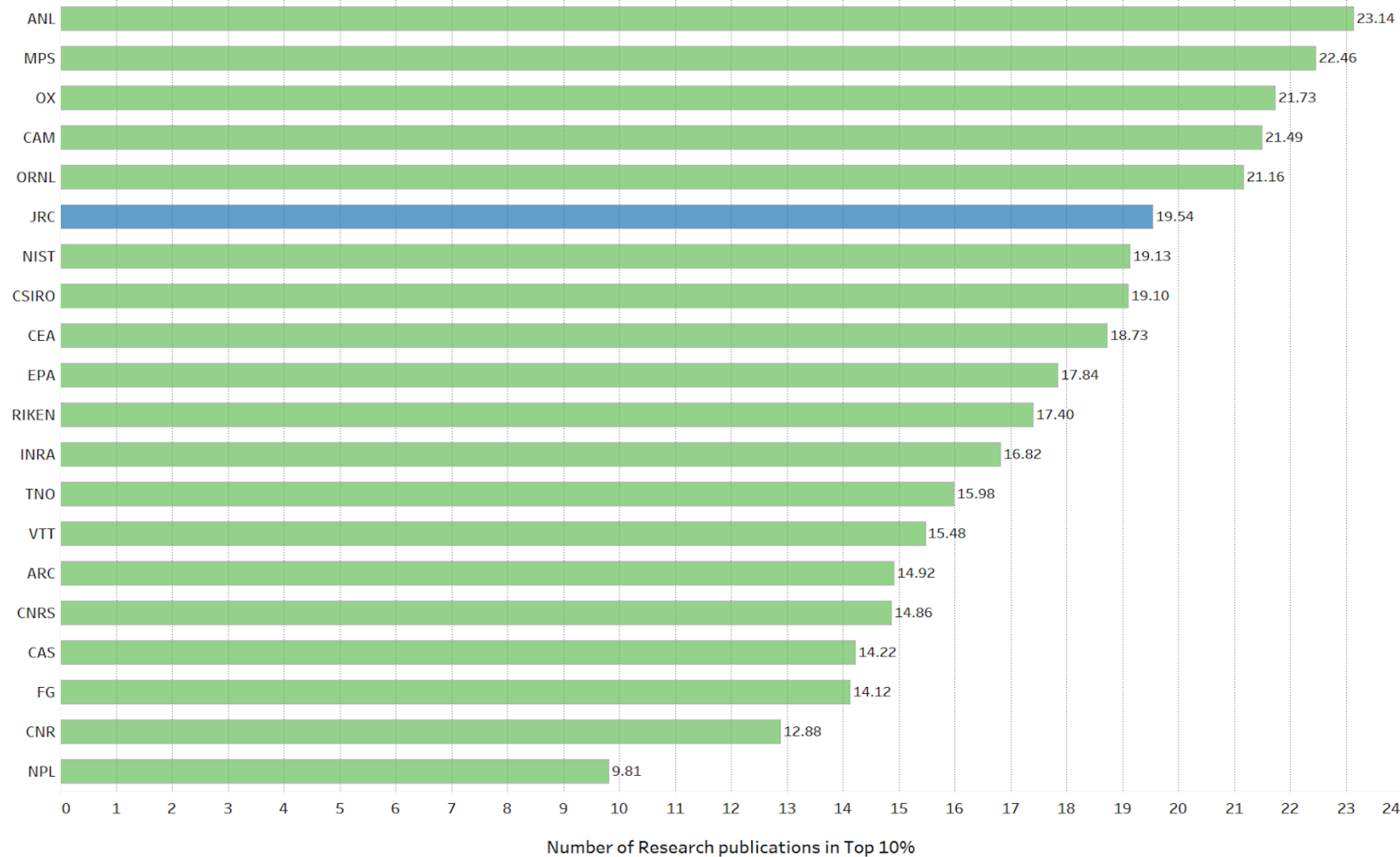
83 % of core **research staff with PhDs**

Over **1 400 scientific publications per year**

JRC

European Commission

JRC role: facts and figures

About **€ 380 million budget annually**, plus about **€ 60 million earned**

Independent of private, commercial or national interests

30 % of activities in **policy preparation, 70 %** in **implementation**

More than **100 economic, bio-physical** and **nuclear models**

More than **120** instances of **support to the EU policy-maker** annually

European Commission

JRC scientific excellence
Research publications in top 10 %

	Number of Research publications in Top 10%
ANL	23.14
MPS	22.46
OX	21.73
CAM	21.49
ORNL	21.16
JRC	19.54
NIST	19.13
CSIRO	19.10
CEA	18.73
EPA	17.84
RIKEN	17.40
INRA	16.82
TNO	15.98
VTT	15.48
ARC	14.92
CNRS	14.86
CAS	14.22
FG	14.12
CNR	12.88
NPL	9.81

European Commission

Eight Knowledge Centres

Knowledge Centre for
TERRITORIAL POLICIES

Knowledge Centre for
DISASTER RISK
MANAGEMENT

Knowledge Centre for
MIGRATION AND DEMOGRAPHY

Knowledge Centre for
BIOECONOMY

Knowledge Centre for
FOOD AND NUTRITION
SECURITY

Knowledge Centre for
FOOD FRAUD
AND QUALITY

Knowledge Centre for
BIODIVERSITY

Knowledge Centre on
EARTH OBSERVATION

European
Commission

Seven Competence Centres

Competence Centre on
**COMPOSITE INDICATORS
AND SCOREBOARDS**

Competence Centre on
MICROECONOMIC EVALUATION

**Competence
Centre on
TEXT MINING
AND ANALYSIS**

COMPETENCE CENTRES

**Competence
Centre on
MODELLING**

**Competence
Centre on
FORESIGHT**

Competence Centre for
TECHNOLOGY TRANSFER

Competence Centre on
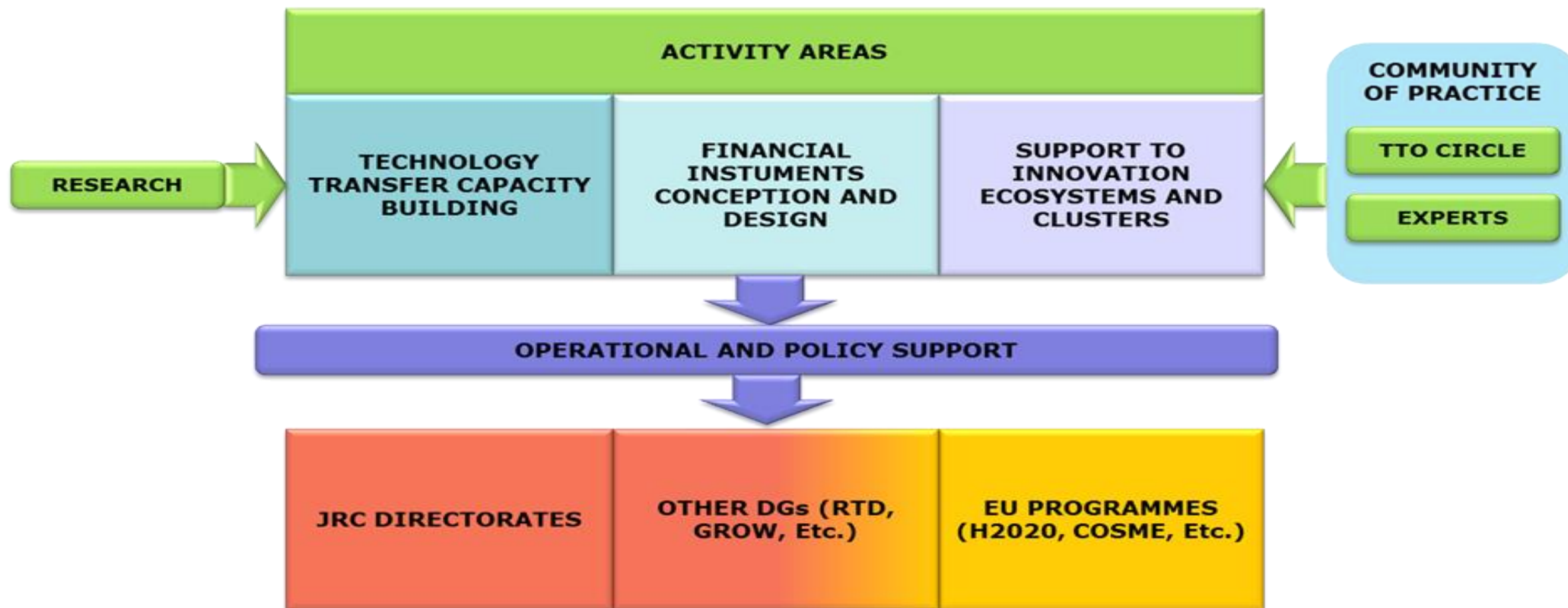**BEHAVIOURAL INSIGHTS**

European
Commission

Competence Centre for Technology Transfer

- To create a single reference point for expertise on technology transfer at the EC

- Support the entire EU policy cycle, from the upstream concept stage to the downstream implementation phase.

- To deepen understanding and knowledge of technology transfer through research and aggregation of results and best practices
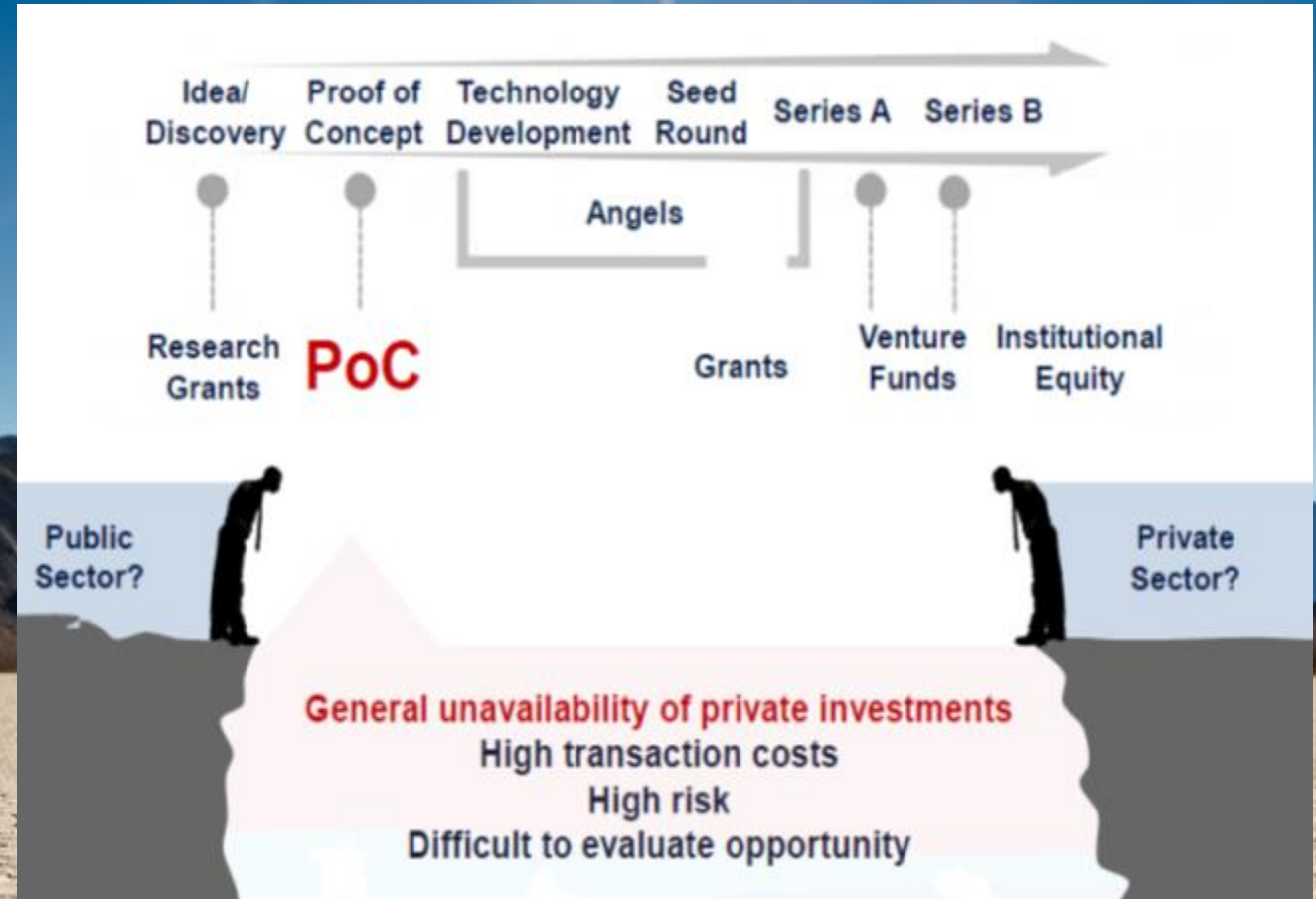
Competence Centre for Technology Transfer

The smart specialisation

THE SMART SPECIALISATION PLATFORM

Why it was created

Research & Innovation

Digital Growth

Shift to Low Carbon Economy

Competitiveness of SME

TO UNLOCK REGIONS' GROWTH POTENTIAL

EUROPE WILL INVEST IN INNOVATION **€123 bn** IN 2014 - 2020

35% of cohesion policy funds

€123 bn

€351.8 bn

What is happening

178 regions

18 countries

>70 peer reviewed regional / national innovation strategies

"EU Regions and Countries" and "Non EU regions" registered in S3P

Peer Reviewed Regions and Countries

Technology Transfer is an implementation tool of Smart Specialisations

European Commission

Supporting EC DGs/MS with Expertise and Competences

- RTD – Conception and ex-ante evaluation of InnovFin TT

- DG NEAR – Coordination of TT related capacity building measure in the Western Balkans

- DG NEAR - Regional proof of concept support scheme for the Western Balkans

- DG REGIO – Assessment and recommendations on improving operational performance of Sofia Tech Park

- DG REGIO – Strategic Evaluation of Bulgarian Centres of Competence and Centres of Excellence

- DGs RTD/NEAR – Benchmarking study of TT ecosystems in 12 neighbourhood countries

- DG COMP – Study on the application of the state-aid regulation to RDI organisations

- Slovakia/DG REGIO – evaluation study on STP project in Kosice

- DG REGIO – Capacity building for technology transfer in Croatia, Romania and Bulgaria

Studies

- IP collateralisation and securitisation (2016)

- PPPs in Science and Technology Parks and Innovation Districts (Q1 2020)

- Corporate Venturing (Q1 2020)

- Technology Transfer Metrics (Q1 2020)

- Innovative investment models for sustainable and inclusive urban innovation ecosystems (Q4 2020)

- Technology Transfer Metrics II (Q4 2020)

- TT Knowledge Management (2021)

- China Flagship Report II (Chapter on IP and TT)

- Taxonomy of Innovation Ecosystems (2021)

Covid-19 related support

- Together with DGs GROW, RTD and SANTE and SECGEN possibilities for creation of a patent pool for Covi-19 related technologies. In collaboration with UN Medicines Patent Pool.

- Supporting DG GROW and Commission's Clearing House in relation to PCR test kits and reagents

- Support to the TEAM Europe Initiative for Africa. Technology Transfer for setting up a m-RNA vaccine production facility in South Africa
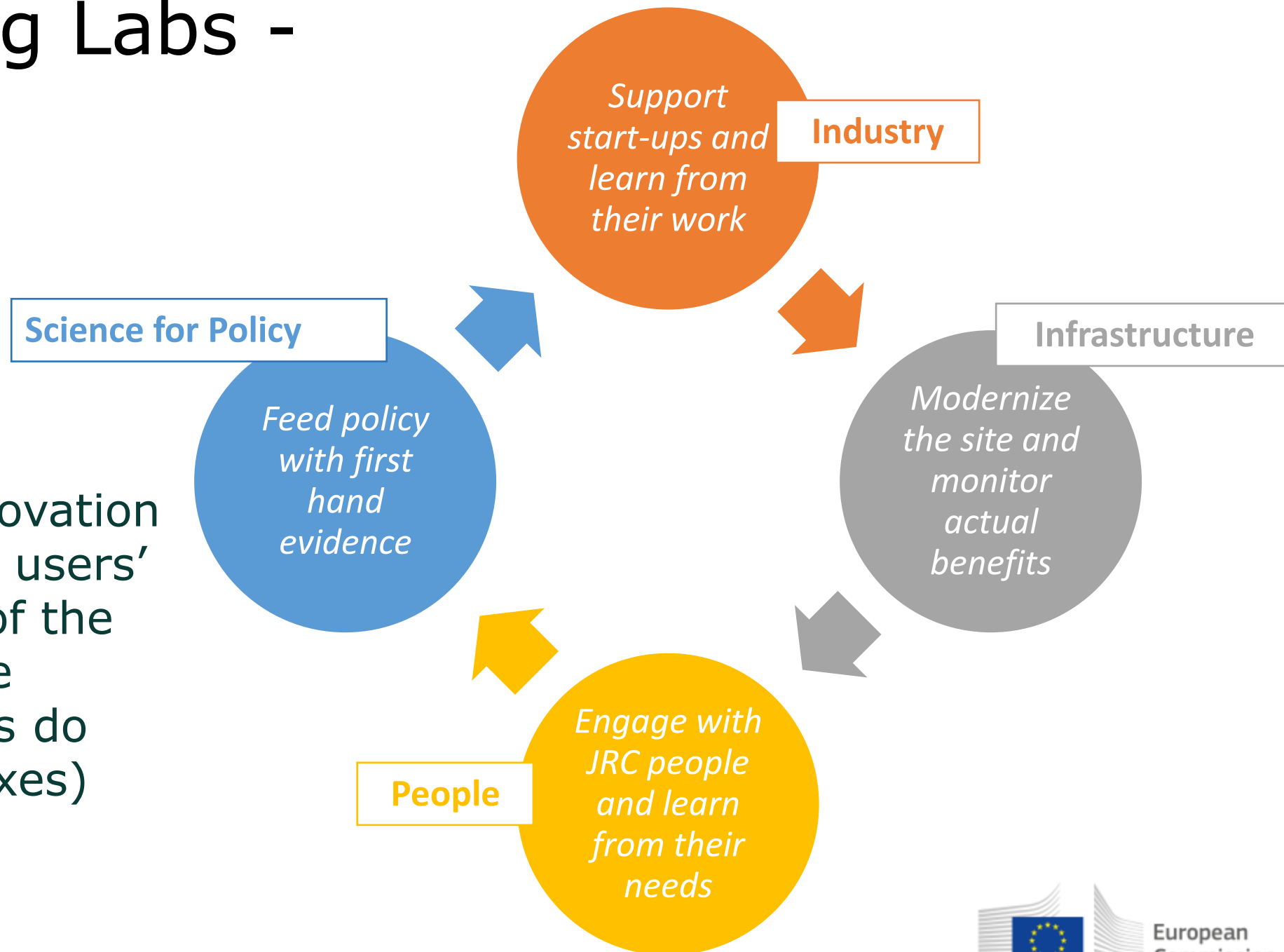
European Commission

European TTO CIRCLE

30+ Public Research Organizations
200.000 staff
35.000 patents
4.200 Startups
5.200 software

https://ec.europa.eu/jrc/communities/en/community/tto-circle-community

European Commission
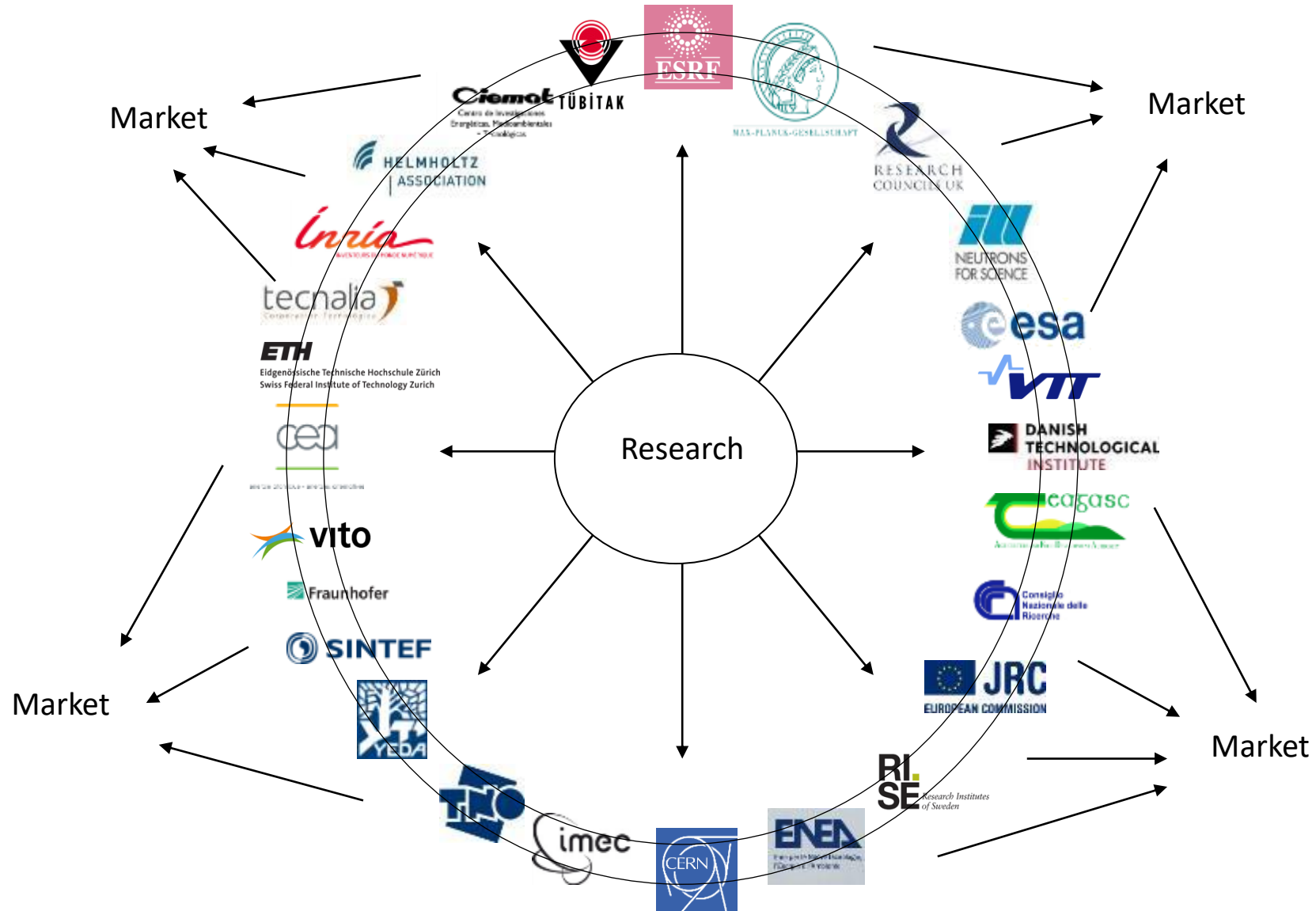
JRC Living Labs - drivers

Living labs are innovation ecosystems where users' behaviour is part of the research and some limiting regulations do not apply (sandboxes)

Industry

Support start-ups and learn from their work

Science for Policy

Feed policy with first hand evidence

Infrastructure

Modernize the site and monitor actual benefits

People

Engage with JRC people and learn from their needs

European Commission

JRC Living Labs as policy-support instrument

➢ Gradually integrate living labs within different policy areas (starting with energy and transport)

➢ Bring living labs approach closer to the policy realm

Examples:

➢ Support Horizon Europe

➢ Support regulation and standards – JRC Living Labs as a tool for regulatory learning

European Commission

Thank You !

1. Hydrogen Testing Facility, 2. European Laboratory for Structural Assessment (ELSA), 3. European Interoperability Centre for Electric Vehicles and Smart Grids, 4. Food Contact Materials (EURL FCM), 5. European Crisis Management Laboratory (ECML), 6. European Microwave Signature Laboratory (EMSL), 7. Vehicle Emission Laboratory (VELA), 8. European Solar Test Installation (ESTI), 9. Nanobiotechnology Laboratory, 10. Hot Cell Laboratory, 11. Reference materials processing facility, 12. AMALIA Laboratory

European Commission