

Energy for Sustainable Science at Research
Infrastructures

Energy related support opportunities

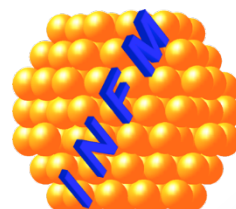
Ornela De Giacomo - CERIC-ERIC



Elettra Sincrotrone Trieste



SOLARIS
NATIONAL SYNCHROTRON
RADIATION CENTRE



Europe 2020 strategy:

delivering growth that is:

smart, through more effective investments in education, research and innovation;

sustainable, thanks to a decisive move towards a low-carbon economy;

and **inclusive**, with a strong emphasis on job creation and poverty reduction.

The 5 targets for the EU in 2020

1. Employment: 75% of the 20-64 year-olds to be employed
2. R&D: 3% of the EU's GDP to be invested in R&D

3. Climate change and energy sustainability

- **greenhouse gas emissions 20% (or even 30%, if the conditions are right) lower than 1990**
 - **20% of energy from renewables**
 - **20% increase in energy efficiency**
4. Education: Reducing the rates of early school leaving below 10%; at least 40% of 30-34-year-olds completing third level education
 5. Fighting poverty and social exclusion: at least 20 million fewer people in or at risk of poverty and social exclusion

The 7 flagship initiatives

Smart growth

Digital agenda for Europe

Innovation Union

Youth on the move

 **HORIZON 2020**

Sustainable growth

Resource efficient Europe

An industrial policy for the globalisation era

Inclusive growth

An agenda for new skills and jobs

European platform against poverty

Horizon 2020 is the biggest EU Research and Innovation programme ever with nearly €80 billion of funding available over 7 years (2014 to 2020)

Proposals : Excellence – Impact – Implementation

Societal challenges:

- **Climate action, environment, resource efficiency and raw materials (€3.081 billion);**
- **Secure, clean and efficient energy (€5.931 billion);**

<http://ec.europa.eu/research/participants/portal/desktop/en/home.html>

- Support for Research and Innovation
 - Well known by most researchers
 - Pre-financing at the project start
 - EU contribution up to 100% of the eligible costs
-
- Decrease in success rates: 14% in H2020 100 first calls against 20% in FP7



- European Regional Development Fund (ERDF)
- European Social Fund (ESF)
- Cohesion Fund (CF)

**Regional
Policy
€351.8
billion
2014-2020**

- European Agricultural Fund for Rural Development (EAFRD)
- European Maritime and Fisheries Fund (EMFF)

Every EU region may benefit from the ERDF and ESF. However, only the less developed regions (Gross National Income per inhabitant is less than 90 % of the EU average) may receive support from the Cohesion Fund.



European Regional Development Fund (ERDF)

concentrated on **4 key thematic priorities**:

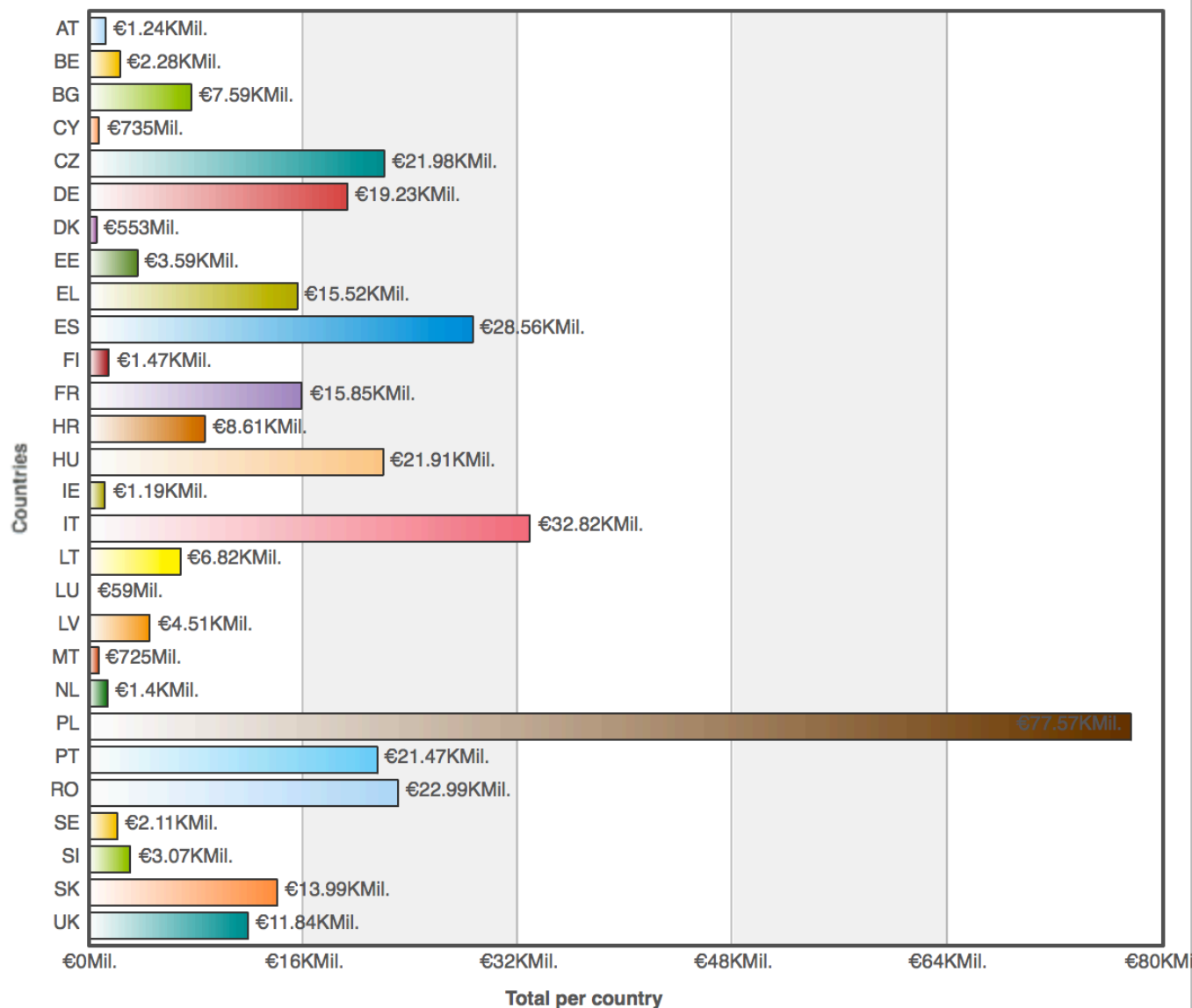
- innovation and research
- the digital agenda
- support for small and medium sized businesses (SMEs)
- the low-carbon economy (€38 billion 2014-2020)**

ERDF support for research and innovation investments depends directly on deployment by MS and regions of successful **Research and Innovation Strategies for Smart Specialisation (RIS3)**

Contact your national or regional Managing Authority

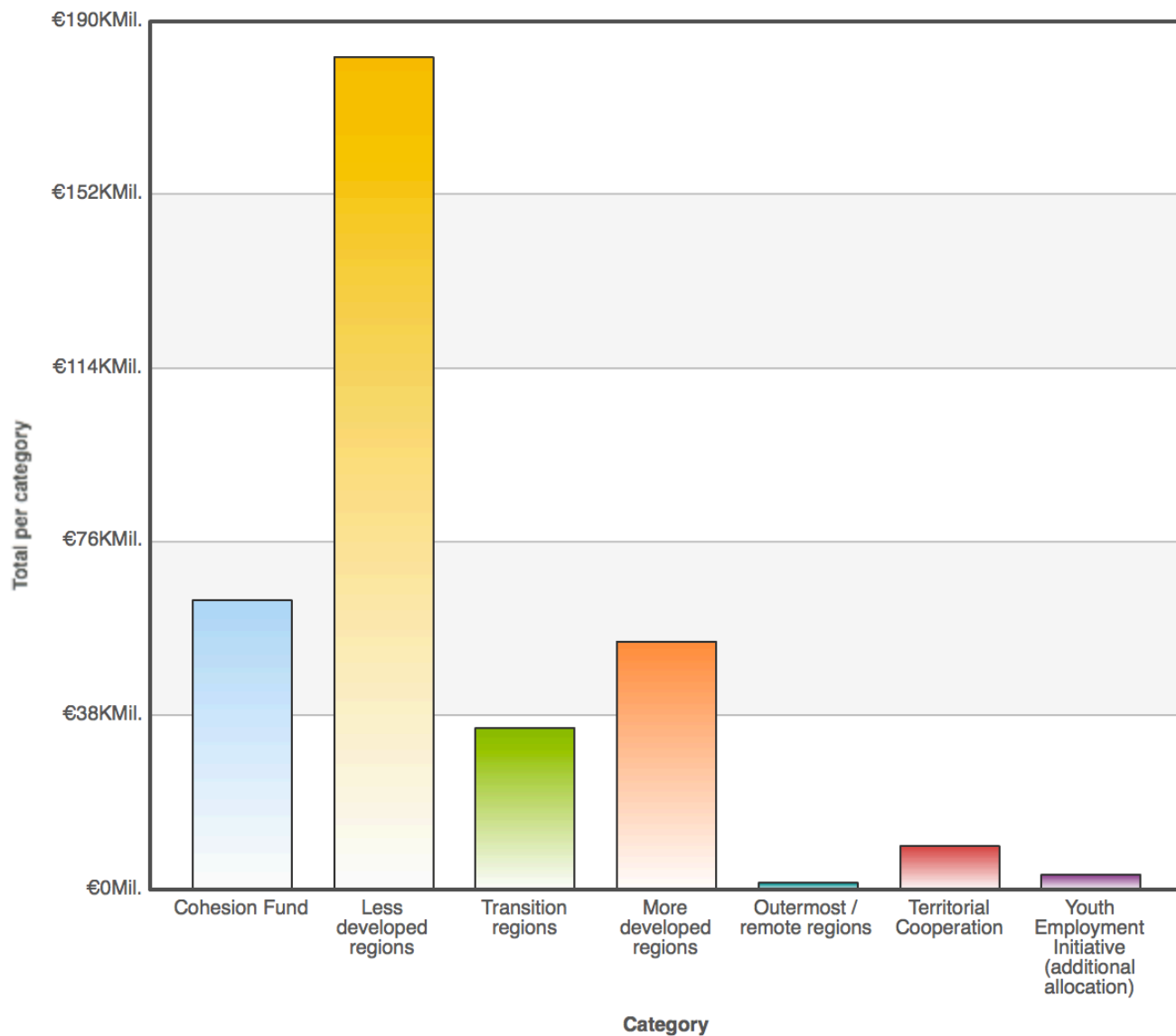
Financial allocations 2014-2020

Total EU allocations of Cohesion Policy 2014-2020* (million €, current prices)



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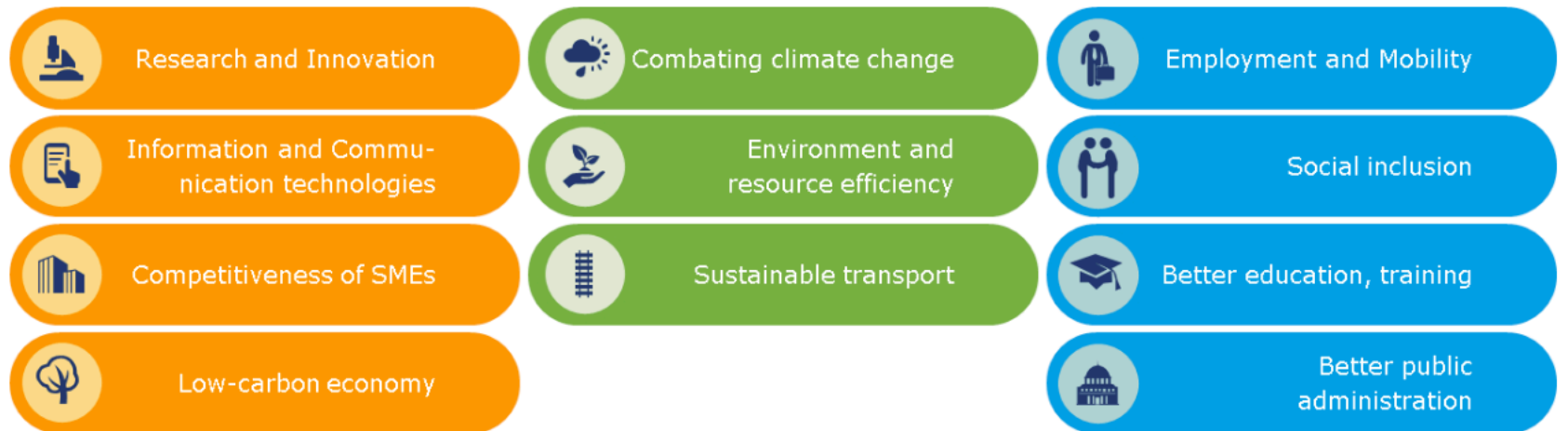
ETC, better known as INTERREG

- three strands:

cross-border (Interreg A), 60 programmes, € 6.6 B;

transnational (Interreg B), 15 programmes, € 2.1 B;

interregional (Interreg C), 4 programmes, € 0.5 B



Typical activities in ETC energy projects are: conducting studies, carrying out pilots, delivering meetings, information events, trainings, etc.

Common project outputs are, among others:
baseline studies, feasibility studies, management plans, handbooks and guidelines, policy recommendations, action plans and strategies, networks and clusters, etc.

Over 50% of all projects undertake investment-oriented activities: actual investments in last programme were 18%, mostly small, pilot-scale investments in, e.g., solar power charging stations, biomass boilers or research equipment.

- Amount of resources available
 - High chances of success if in line with the objectives: managing authorities
-
- Research is not the main objective
 - EU contribution up to 90% of the eligible costs (80-85%)
 - Need to anticipate the expenditure (refund)



ERICs

(19) An ERIC could qualify for funding in accordance with Title VI of the Financial Regulation. Funding under the Cohesion Policy could also be possible, in conformity with the relevant Community legislation.

However... ERICs comprise at least three Member states

An ERIC has the minimum requisite of partners to apply alone in any call



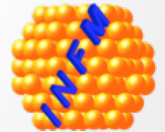
CERIC-ERIC

Central European Research infrastructure Consortium

CERIC has already applied to four Interreg projects, three as lead partner

Counts as a single entity, for the country where the statutory seat is located

Tax exemption (VAT + excise): Energy procurement through CERIC for all its partner facilities





Austria

Scattering

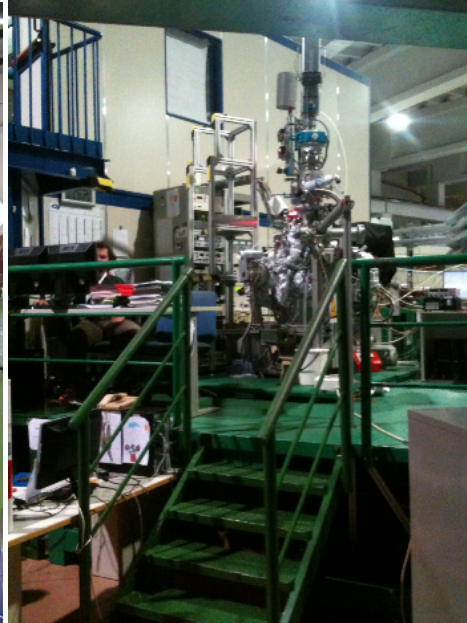
TU Graz and
Elettra



Czech Republic

Surface analysis

Charles University
Prague and Elettra



Croatia

Ion Beam

Instituto Ruder-
Boskovic



Romania

TEM and EPR

National Institute
for
Material Physics



CERIC-ERIC

Central European Research infrastructure Consortium



Italy

Elettra
Sincrotrone
Trieste



Polonia

Sinchrotron
Solaris



Hungary

Budapest
Neutron
Center



Slovenia

NMR

National Institute
of Chemistry