



**UNECE, Workshop on AMM
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**Research Fund for Coal and Steel
(RFCS)
Research opportunities in field of coal
mine Methane**

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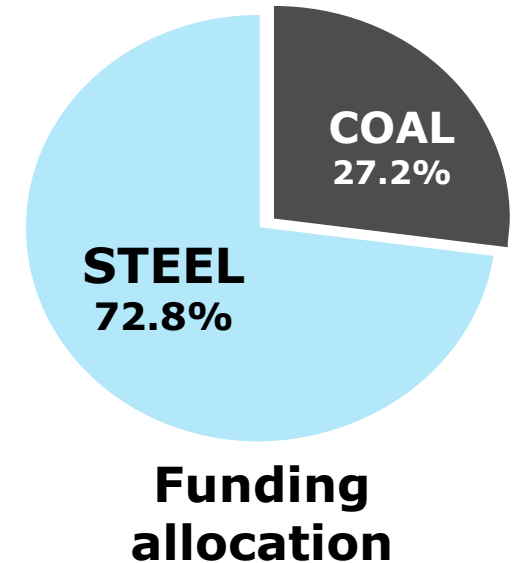
Origins and implementation of RFCS

- **1951**: the Treaty of Paris establishing ECSC is signed. It enters into force in 1952
- **2001**: Treaty of Nice, transfer the ECSC assets to the EC (Protocol 37)
- **2003**: Creation of the RFCS (1/2/2003)
- **Today**: ~ 1.6 billion € assets and interests to co-finance research in coal and steel for ~ 40 M€ per year
- ~150 RFCS on-going R&I projects
- 765m€ have been made available to finance research projects in the coal and steel industry over past 16 years



RFCS Today

- **Balanced industry, academia and research centres consortia**
- **Technical, innovative sectorial projects**
- **RFCS is open to the world but funding only for EU MS organisations**



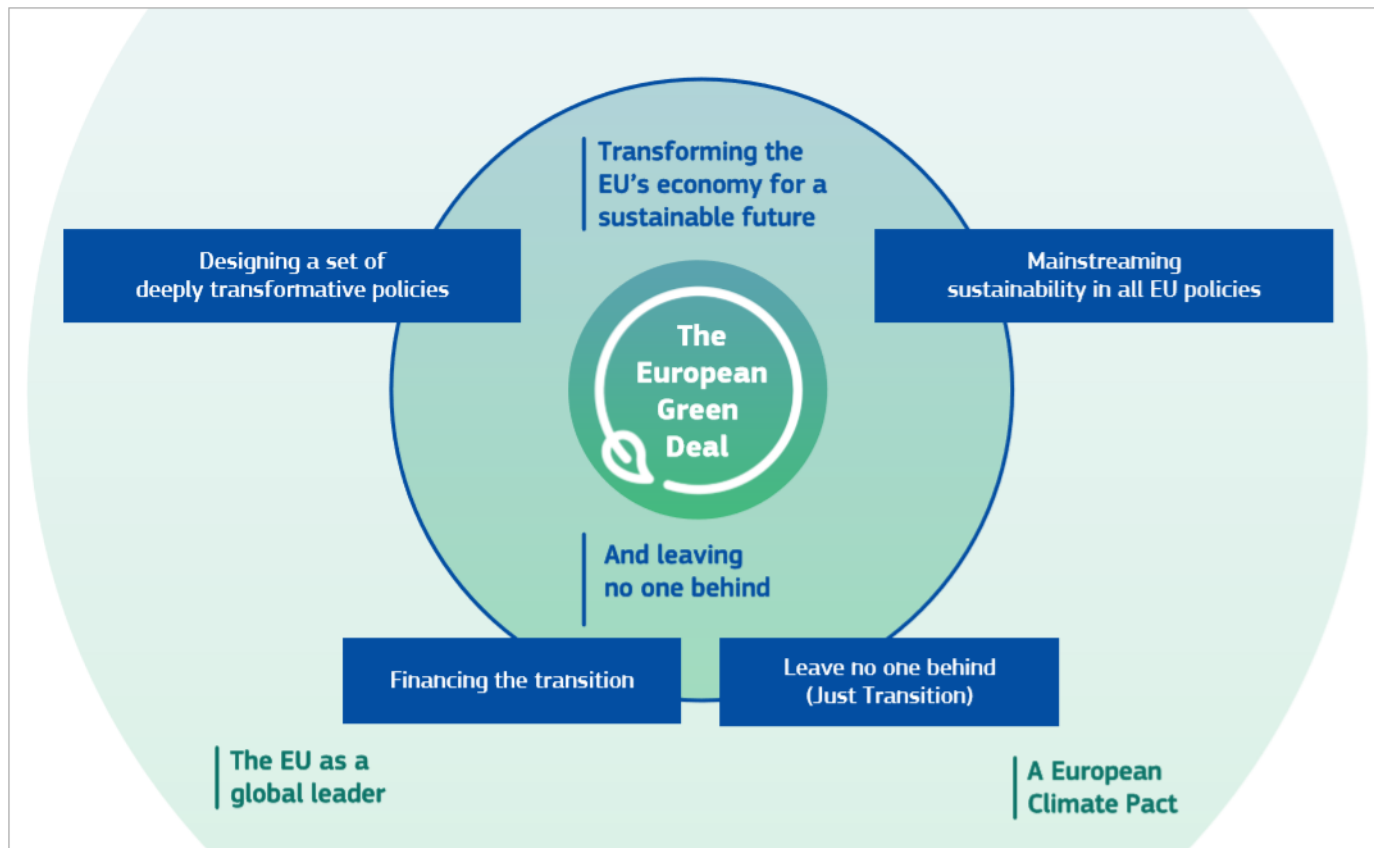
Managed by DG RTD, Unit D4 in collaboration & with inputs from:

- **COSCO** - Coal and Steel Committee
- **CAG** and **SAG** - Coal and Steel Advisory Groups
- **TGs** - Coal and Steel Technical Groups (Monitoring of projects)

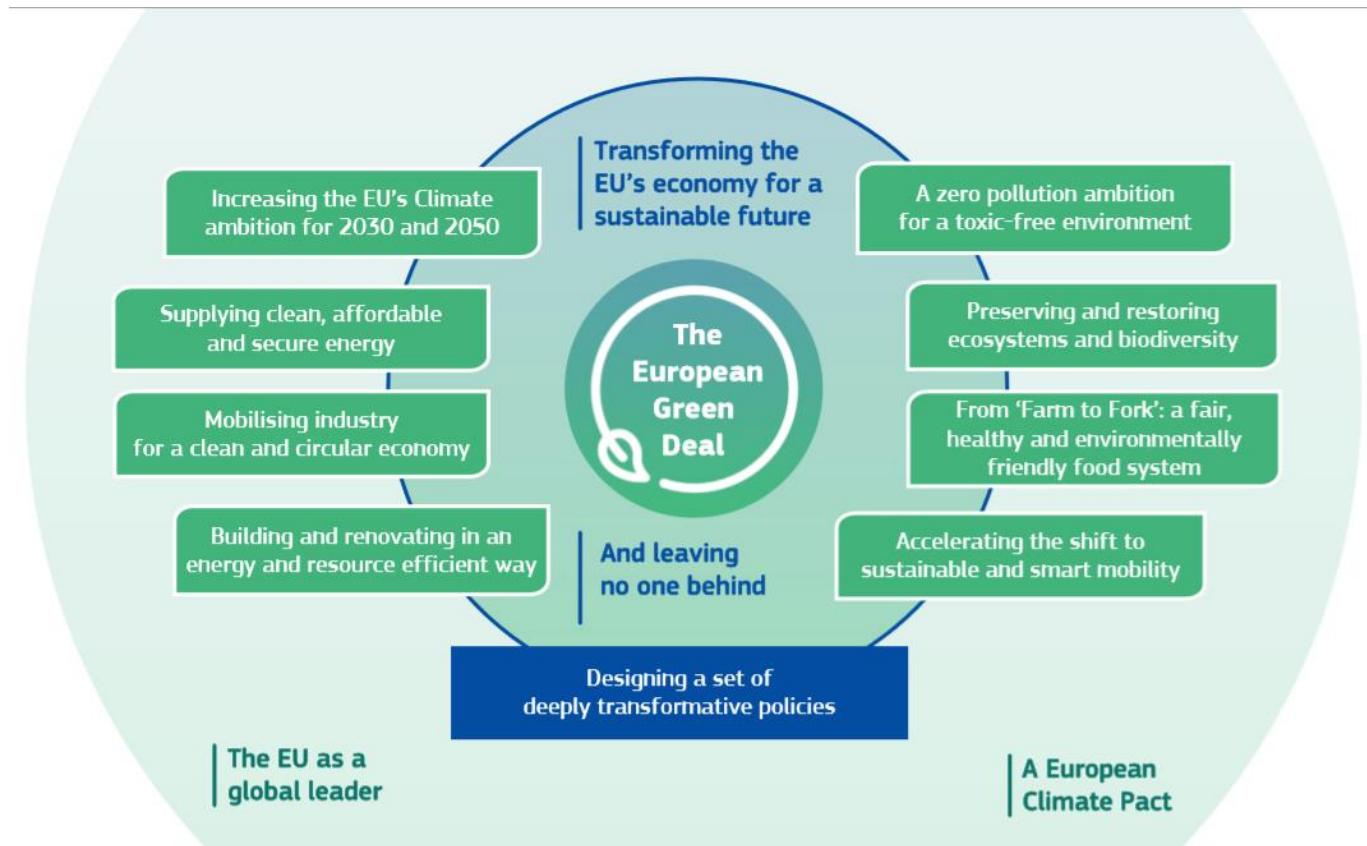
Coal Challenges

- **COP21** – Paris agreement:
 - to pursue efforts to keep global temperature increase well below 2°C and trying to limiting it to 1.5°C;
 - EU reduction of GHG emissions by at least 80% by 2050;
- Expected further decrease in the **EU coal production and consumption** (possible alternative use of coal?)
- How to ensure growth, competitiveness and sustainability vis á vis other energy sources and requirements from Energy Transition?;
- Restructuring after mine closure;
- Modernisation Research in Coal and Steel.

The European Green Deal



Eight priorities for a transformative policy



Just transition Mechanism

Becoming the first climate-neutral continent by 2050 requires significant investment from both the public and the private sector.

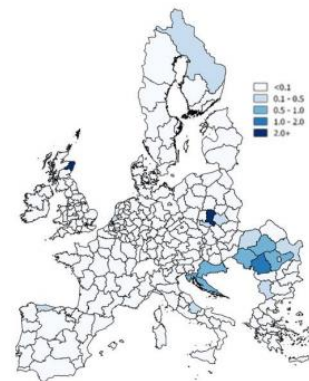
Some sectors and regions will face challenges (e.g. coal mining and fuel extraction) and others will transform (e.g. energy intensive industries and automotive sector).

The Just Transition Mechanism will mobilise at least €100 billion, to provide targeted support.

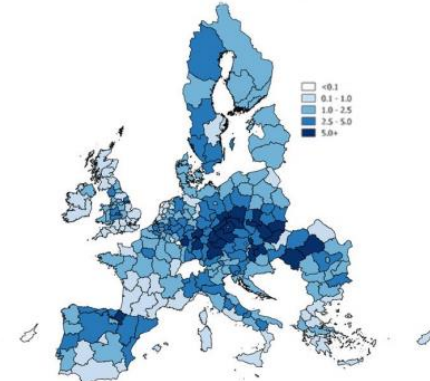
Modernisation process has to be managed:

- Just Transition Fund
- Regional and social funding
- Modernisation fund of the ETS
- Research Fund for Coal and Steel

Share of employment
fossil fuel extraction and mining



Share of employment
Energy Intensive Industries &
Automotive Manufacturing



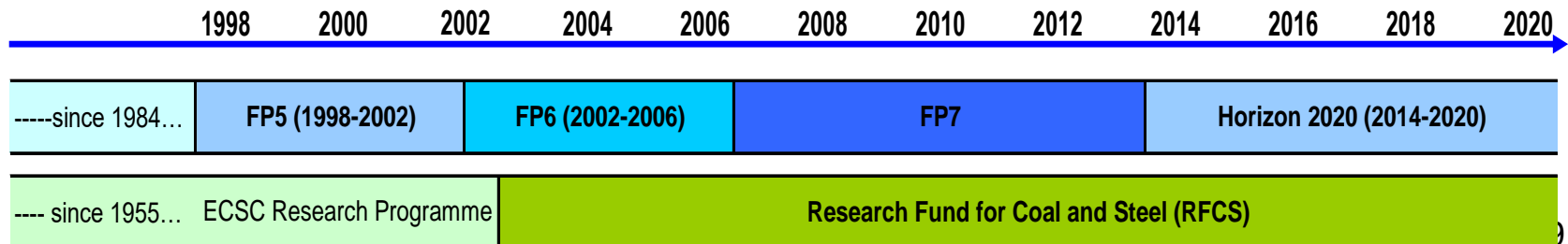
EU Green Deal Investment Plan and RFCS

The Commission will propose a revision of the RFCS legal bases in order to:

- maintain the annual RFCS research programme at a minimum of EUR 40 million by using a portion of the assets of the ECSC in liquidation.
- enable the funding of large clean steelmaking R&I breakthrough projects.
- allow additional funding of research activities in the coal sector focusing on regions in transition in line with the principles of the Just Transition Mechanism.

RFCS 2020 Call for Proposals

- Info Pack will be published in June on the EC Funding and Tender Portal.
- Deadline for submission of proposals 15 September 2020 (17.00):
 - Research projects (max. 60% funding)
 - Pilot & Demonstration projects (max. 50% funding)
 - Accompanying measures (up to 100% funding)
- Outside the FP/H2020 but closely co-ordinated & complementary (e.g. paperless Grant Agreements, use of EU Participant Portal,...)



RFCS 2020 Info Pack

New Structure Coal Technical Groups



TGK 1 - Post-mining issues, safe and productive coal mining operations

TGK 2 - Environmental, technical and economic issues related to coal treatment and use

The new structure was advised by CAG and SAG and endorsed by COSCO. It was implemented in the 2019 RFCS Information Package.

2020 Coal Priority

1.1 Proposals addressing emerging and innovative technologies supporting coal regions in transition

Project proposals relating to Methane capture for closed mines would fit perfectly in the 2020 priority

- **Accompanying measure** started 1/7/2018 lasts 24 months
- The European Network of Clean Coal Technologists has not only the aim to support the **energy transition** in the coal regions, but also to explore opportunities coming from the "energy transition".
- Exploit coal in the EU with **lower CO2 emissions**, responding to EU policies.
- Identify **new technologies and incremental research** opportunities to lead a transformational change in the EU coal mining.
- Early 2020 final seminar with **strategic agenda** and **Recommendations on RFCS management** for EC and Stakeholders

Running RFCS Methane projects

RESEARCH PROJECTS (Max 60% funding)

- **METHENERGY PLUS (2017):** Methane recovery and harnessing for energy and chemical uses at coal mine sites
 - Coordinator University of Oviedo (10 partners)
 - 36 months (from 1/7/2017) and budget EUR 2.734.328;
- **Megaplus (2018):** Unconventional methane production from deep European coal seams through combined Coal Bed Methane (CBM) and Underground Coal Gasification (UCG) technologies
 - Coordinator: Glowny Instytut Gornictwa (GIG) (7 partners)
 - 36 months (from 1/6/2018) and budget EUR 2.899.261;

Running RFCS Methane projects

Pilot and Demonstration project (Max 50 % funding)

- ***DD-MET (2019)***: Advanced methane drainage strategy employing underground directional drilling technology for major risk prevention and greenhouse gases emission mitigation
 - Coordinator: Instytut Nafty I Gazu; 5 partners
 - 42 months (from 1/7/2019) and budget EUR 5.217.586;
 - One Russian partner* that does not receive RFCS funding

* Federal State Budgetary Institution Of Science Institute Of Comprehensive Exploitation Of Mineral Resources Russian Academy Of Sciences

Methane project selected to be financed under 2019 RFCS call

ROCCS (2020)- Establishing a Research Observatory to unlock European Coal seams for Carbon dioxide Sequestration and enhanced coalbed methane recovery

- Coordinator: Cardiff University (Geo-environmental Research Centre); 3 partners (2x PI and 1 x DE)
- 36 months (from summer 2020)
- Budget EUR 2.031.355,80 – Grant: EUR 1.218.813,48;