



Consultation for the Reform of the Research Fund for Coal and Steel

*DG-RTD - Directorate E – Prosperity
Unit E3 – Industrial Transformation*

19 June 2025



EUROPEAN COMMISSION
DIRECTORATE-GENERAL FOR RESEARCH AND INNOVATION
Directorate E – Prosperity
E.3 – Industrial Transformation

Consultation for the Reform of the Research Fund for Coal and Steel (RFCS)

19 June 2025, from 9:30 to 12:30 CEST

AGENDA & GUIDING QUESTIONS

1. PURPOSE OF THE EVENT

The **Consultation for the Reform of the Research Fund for Coal and Steel (RFCS)** is organized under the umbrella of the European Commission R&I Days as a virtual event by the Directorate General for Research and Innovation with the purpose to:

- 1) Review the attractiveness of work programmes run under the RFCS since 2021.
- 2) Discuss key questions for a reform of the RFCS legal framework, including the RFCS work programme.

The Commission considers this meeting as an important exchange platform to maintain an open dialogue with the coal and steel communities.

On 19 March 2025 and as follow up of the Clean Industrial Deal communication, the Commission adopted the Steel and Metals Action Plan, designed to strengthen the competitiveness of the sectors and safeguard the related industry future. In the plan a critical role is played also by R&I to support the transformation of the industry and its strategic role in the EU. Among the aspects addressed, two are of specific relevance for the RFCS programme:

- The announcement of RFCS flagship initiatives which would mobilise EUR 150 million in 2026 and 2027 and could also contribute to strengthening the European defence research dimension of the sector.
- The promise for an overall reform of the Research Fund for Coal and Steel, to simplify and further accelerate investments in steel research, including research on defence applications, to be presented before the end of 2025.

The announced RFCS reform is a subject that involves not only the steel sector, but also the coal community, as both are integral part of the RFCS programme. While steel is striving to survive in EU, the coal sector is facing a transition towards closing the mining



Presentation of the Research Executive Agency on the RFCS

19 June 2025



Public Consultation for the Reform of the Research Fund for Coal and Steel (RFCS)

RFCS
Looking back in 2021 - 2024
Looking forward 2026

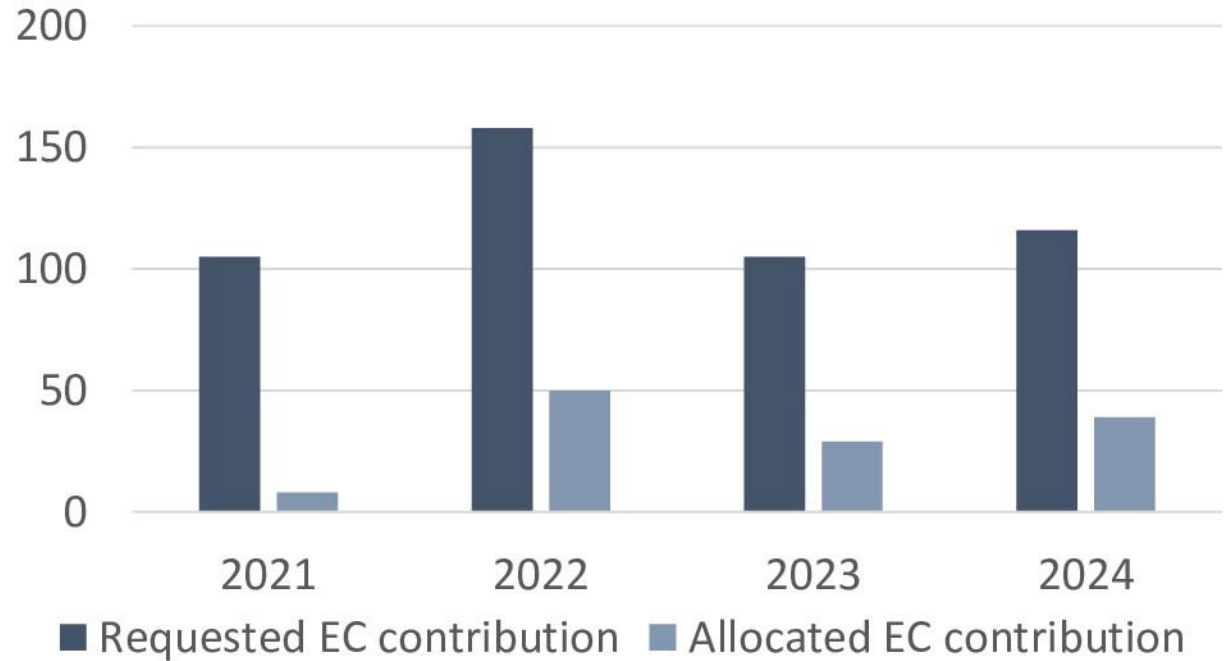
Dr Sebastiano FUMERO
European Research Executive Agency
Head of Unit
REA.B1
Future Low Emission Industries

RFCS in a nutshell

- **Annual call**
 - Funds Accompanying Measures (100% EC funding), Research projects (60%) and Pilot and Demonstration projects (50%)
 - An annual budget of around **€ 11 million for Coal** and **€ 29 million for Steel**
- **Big-Tickets calls**
 - Fund Pilot and Demonstration projects only (50 % EC funding)
 - An annual budget of around **€ 19 million for Coal (BT.JT)** and **€ 52 million for Steel (BT.CSP)**
- **Budgetary Flexibility**
 - Unspent budget can be reported to the next years
 - Authorising Officer has the power to increase up to 20% of the annual budget the amount of the call budget

RFCS annual call for Steel

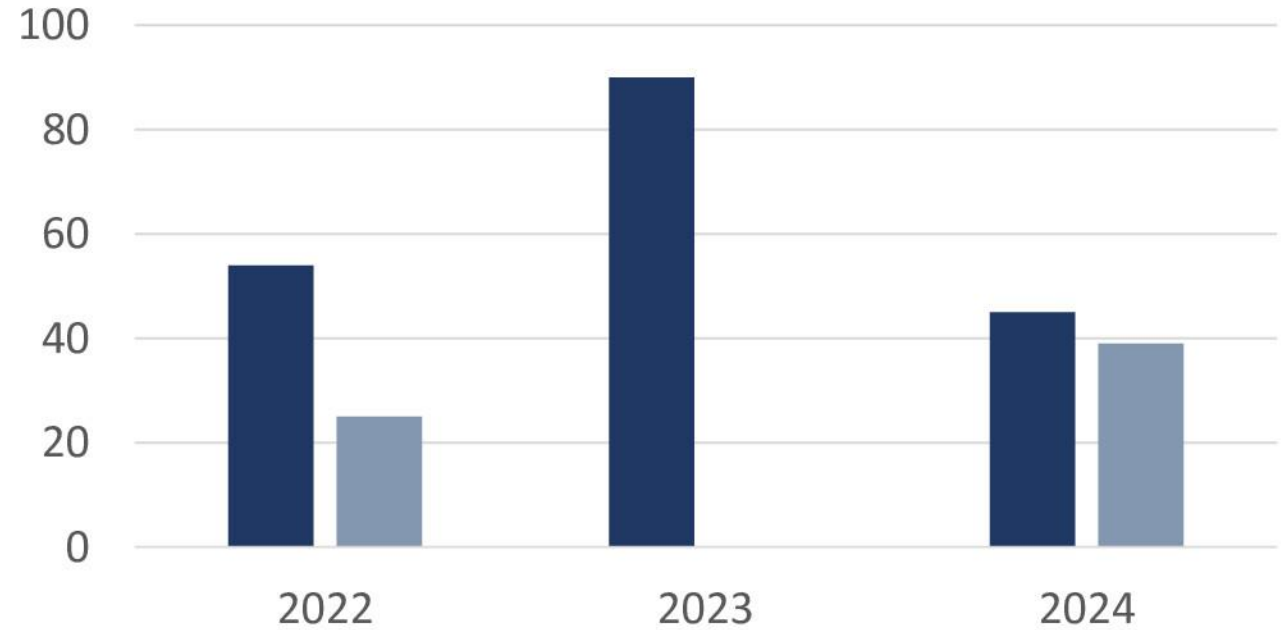
	Proposals submitted	Proposals funded
2021	84	6
2022	103	33
2023	61	21
2024	72	24



Requested and allocated EC contribution in millions of Euro for years 2021-2024

RFCS Big-Tickets calls for **Steel**

	Proposals submitted	Proposals funded
2022	9	4
2023	9	0
2024	6	5

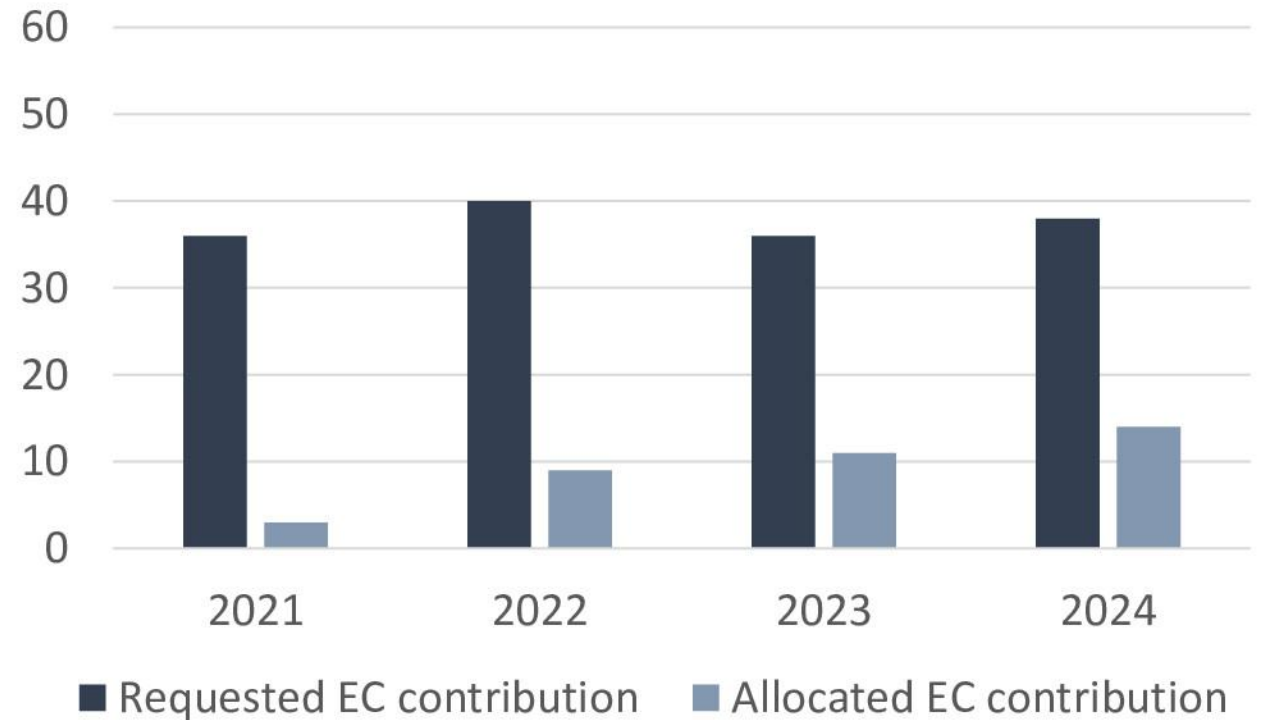


■ Requested EC contribution ■ Allocated EC contribution

Requested and allocated EC contribution in
millions of Euro for years 2022-2024

RFCS annual call for Coal

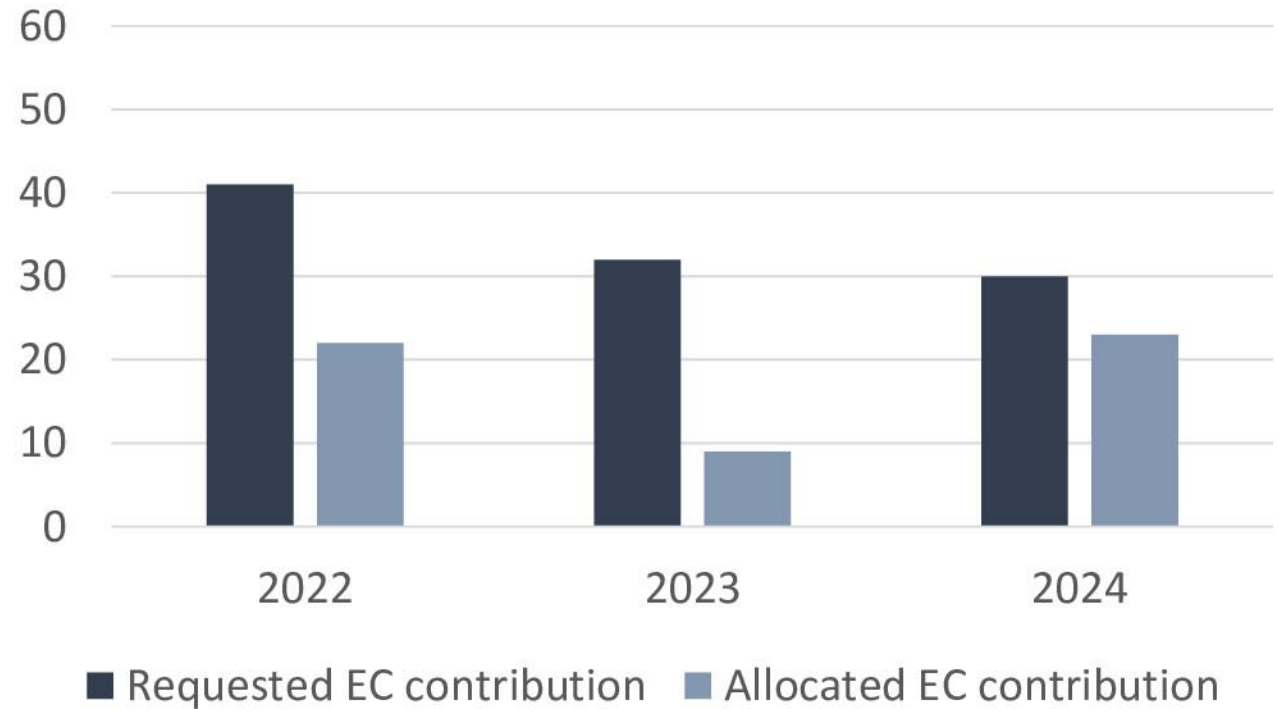
	Proposals submitted	Proposals funded
2021	27	3
2022	26	6
2023	23	6
2024	26	9



Requested and allocated EC contribution in
millions of Euro for years 2021-2024

RFCS Big-Tickets calls for Coal

	Proposals submitted	Proposals funded
2022	6	2
2023	4	1
2024	4	3



Requested and allocated EC contribution in
millions of Euro for years 2022-2024

RFCS Big Tickets 2025 - Steel

The RFCS 2025 Big Tickets COAL: submission statistics



Proposals submitted

1



Call budget

35 MEUR



Requested EC contribution

8 MEUR



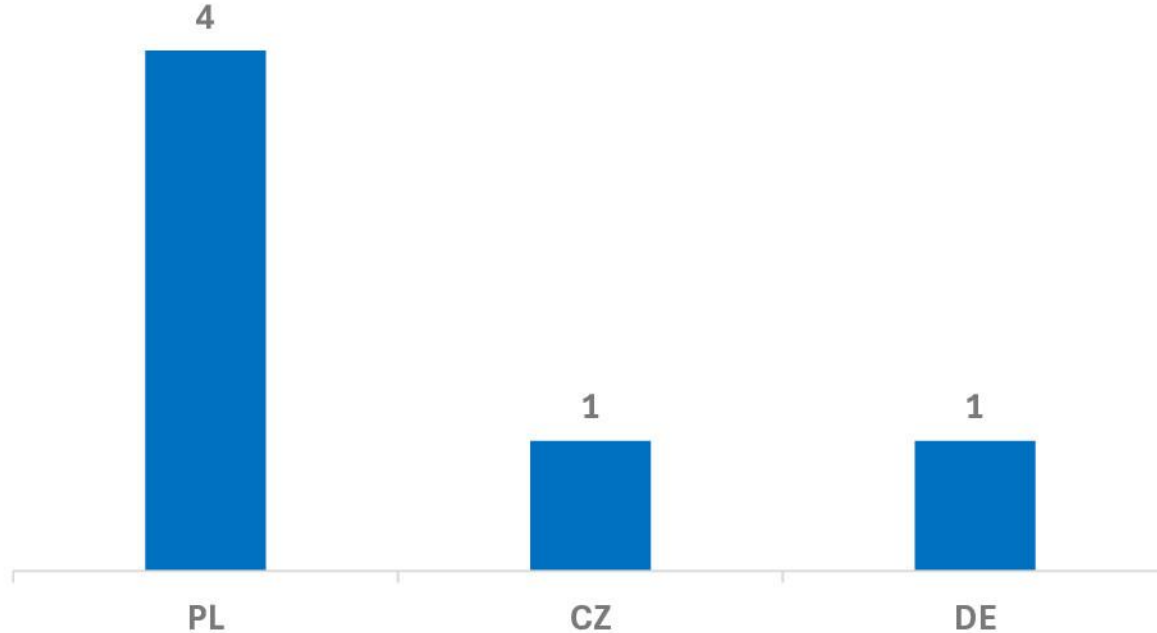
Applicants in total

6

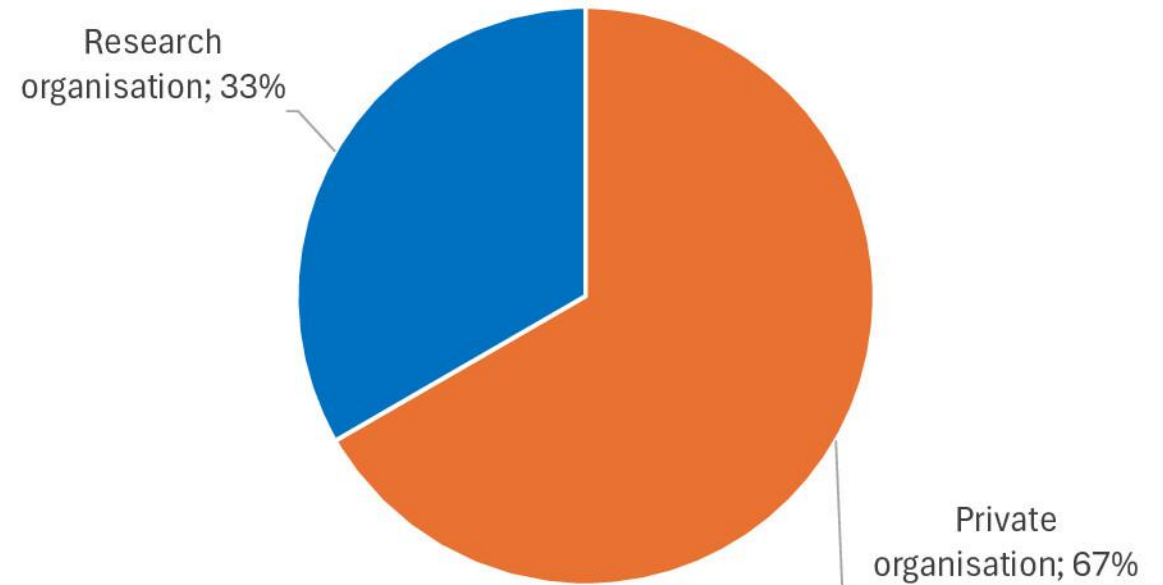
No resubmissions

The RFCS 2025 Big Tickets COAL: submission statistics

Participants geographical distribution



Participants type



The RFCS 2025 Big Tickets COAL: call objectives



Repurposing of formerly operating coal and lignite mines or those in the process of closure and coal-related infrastructure including power supply services



Materials and waste reuse, and development of alternative materials, including recovery of critical raw materials



Land monitoring, modelling, stabilisation and/or restoration



Processing of methane emissions



Monitoring, management and/or treatment of mine water and water tables in coal mines in the process of closure and formerly operating mines

JT-1

JT-2

JT-3

JT-4

JT-5

The RFCS 2025 Big Tickets STEEL: submission statistics



Proposals submitted

7



Call budget

100 MEUR



Requested EC contribution

63 MEUR



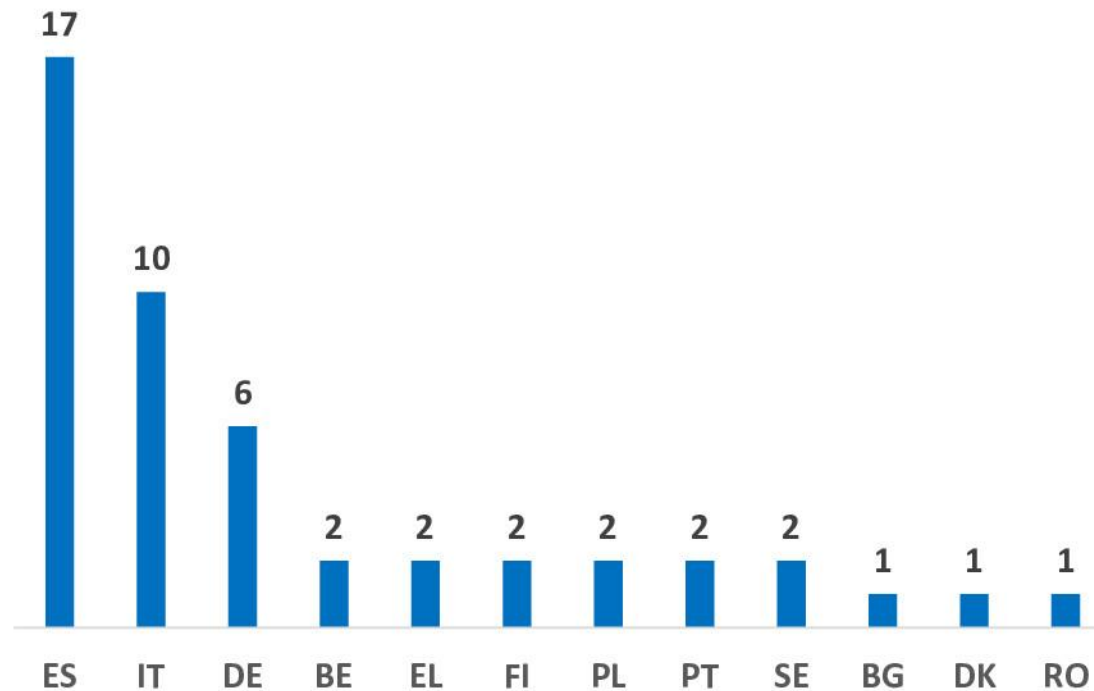
Applicants in total

48

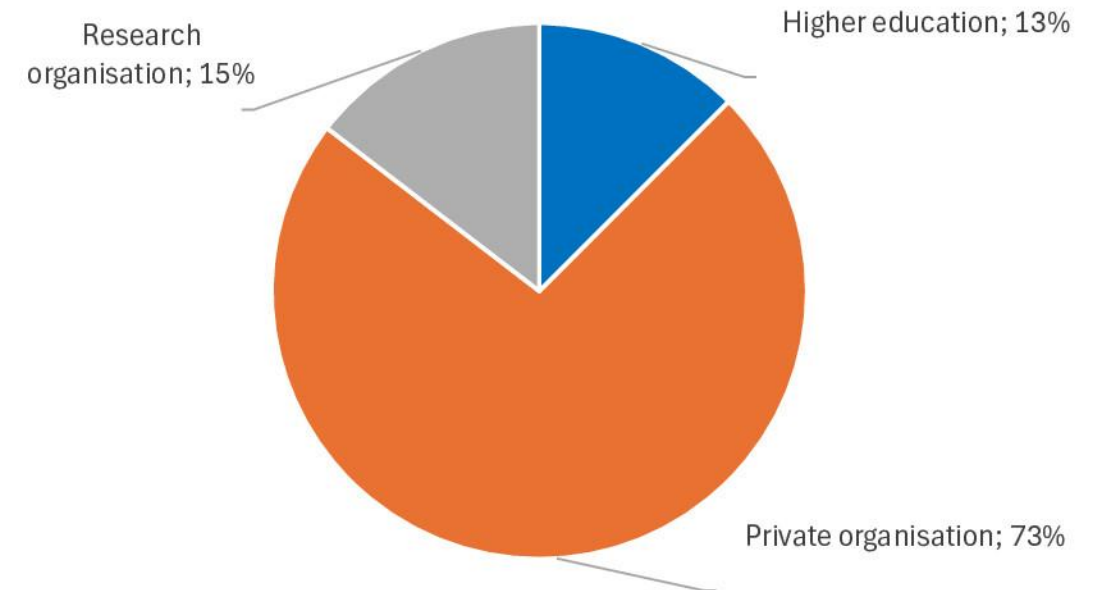
2 resubmissions

The RFCS 2025 Big Tickets STEEL: submission statistics

Participants geographical distribution



Participants type



The RFCS 2025 Big Tickets STEEL: call objectives



Cross cutting issues:
digitalisation,
skills and social
innovation in the
steel sector



CO2 neutral iron
ore reduction
(Increasing the use
of pre-reduced iron
carriers)



Technologies to
improve energy
efficiency, increase
heat recovery and
enhance Process
Integration (PI)
approaches in steel
production



Advanced steel alloys
for special
applications



Circular economy and
sector coupling
solutions to meet the
zero-waste
goal for steelmaking



Carbon capture of
steel CO/CO2 gases

CSP-1

CSP-2

CSP-3

CSP-4

CSP-5

CSP-6

RFCS Big Tickets 2026

Overview of Calls

Clean Industrial Deal Call

Horizon Europe
2026-2027

2026: Optimise the usage of resources in the production phase of the circular economy (RIA)

250 M€
Horizon Europe
2026-2027

2026 & 2027:
Decarbonisation of energy intensive industries (IA):

- Managing of carbon cycle (CCU and/or CCUS).
- Clean energy usage in production.
- Resource efficiency (material, energy, water) of production processes.

15

Top-down & Bottom-up

50 M€
RFCS Big Tickets
2026 – PART 1

Recycling technologies for steel (complementary, not overlapping, to HE 2026)

Excludes Art .10 on conservation of resources, protection of the environment and circular economy (under CID call part 1 and HE 2026-2027),
and Art. 10a on management of work force and working conditions.

50 M€
RFCS Big Tickets
2026 – PART 2

- Art. 8: New, sustainable and low-carbon steelmaking and finishing processes.
- Art. 9: Advanced steel grades and applications.
- Includes defence related applications.

Objectives for the Big Tickets Call for Coal 2026

1. Repurposing of formerly operating coal and lignite mines or those in the process of closure and coal-related infrastructure including power supply services.
2. Materials and waste reuse, and development of alternative materials, including recovery of critical raw materials.
3. Land monitoring, modelling, stabilisation and/or restoration.
4. Processing of methane emissions.
5. Monitoring, management and/or treatment of mine water and water tables in coal mines in the process of closure and formerly operating mines.

Process and Timeline

RFCS Work Programme 2026

Formal discussion meeting with
other DGs end of May / beginning
of June 2025.

Adoption procedure to start in
September 2025.



RFCS WP 2026

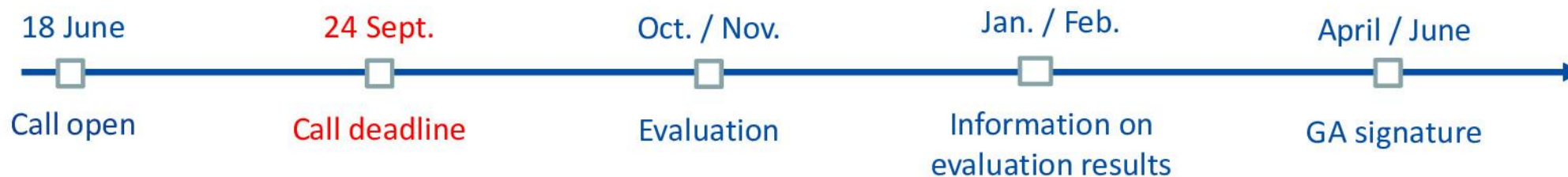
Upcoming events

RFCS annual call 2025

	Budget for Coal	Budget for steel
Accompanying Measures	€ 1,000,000.00	€ 1,000,000.00
Research Projects	€ 7,000,000.00	€ 20,500,000.00
Pilot and Demonstration Projects	€ 2,880,000.00	€ 7,620,000.00

- Possibility to redistribute funds between the call topics

Timeline



RFCS annual call 2025

Info Day

- Date: 3 July 2025. Hybrid event hold in REA and online
- Participants will be informed about:
 - funding opportunities and their objectives,
 - the most updated information on the submission and the evaluation process.
- Networking coffee and cocktail after the event (registration required)
 - Check our webpage for further information available soon:

[Research Fund for Coal and Steel - European Commission](#)

RFCS annual Steel event 2025

The Future of EU Steel Research - How to foster EU steel leadership

- Date: 26 November 2025
- Hybrid event
- Venue: SMS training centre, Mönchengladbach (15 km to Düsseldorf)



THANK YOU!!

Follow us on

LinkedIn

<https://www.linkedin.com/in/sebastiano-fumero>



Steel and Metals Action Plan and industrial decarbonisation accelerator act

DG GROW

Steel and Metals Action Plan

- The Clean Industrial Deal needs to be complemented with more **sector-specific measures**, especially for the sectors that need it the most, such as steel and metals.
- Steel and metals sectors are **vital for the EU's economic security and social stability**; the Competitiveness Compass identified steel and metals as a key area for action.
- The Action Plan therefore covers steel, aluminium, copper, nickel and ferro-alloys.
- These sectors all share major **common challenges** for their competitiveness: high energy costs, exposure to an unlevel playing field in the international competition, decarbonisation investment needs and regulatory burden.

Steel and Metals Action Plan

- Structured around six main pillars:
 1. ensuring clean, abundant, and affordable **energy**;
 2. preventing **carbon leakage** (*see next slide*);
 3. promoting and protecting European **industrial capacity**;
 4. promoting the **circularity of metals**;
 5. defending quality **industrial jobs**; and
 6. de-risking investments through **lead markets** and **support to investments** (*see IDAA part*).

Steel and Metals Action Plan

On preventing carbon leakage specifically

- The Commission is currently working on options on how to address the problem of carbon leakage for CBAM goods exported from the EU to third countries
- By Q4 2025, the Commission will conduct a comprehensive review of CBAM, accompanied by an anti-circumvention strategy and by a first legislative proposal extending the scope of CBAM to certain steel and aluminium-intensive downstream products and including additional anti-circumvention measures.

Industrial Decarbonisation Accelerator Act

- Addresses the **lack of a business case** for energy intensive industries to **invest in decarbonisation**
- Aims to **increase sustainable and resilient industrial production** by supporting decarbonisation investments
- Counteracts the **challenges** faced by the industry: high energy prices, unfair competition, demand slowdown and high decarbonization costs.
- Covers **energy intensive industries** (i.e. chemicals, steel, pulp and paper, plastics, refineries, cement, non-ferrous metals, glass, and ceramics) and potentially downstream sectors (automotive, construction, clean tech)

Industrial Decarbonisation Accelerator Act

- Built on **3 pillars**:

1. Create and protect European **lead markets** for low-carbon products
2. Identify and promote **priority industrial decarbonisation projects and clusters**
3. **Speed up permitting** procedures for industrial access to energy and industrial decarbonization

On permitting: The Act could include a provision on **regulatory sandboxes**, with the goal of enabling authorities to exercise a degree of regulatory flexibility when testing and/or deploying innovative technologies or products

Industrial Decarbonisation Accelerator Act

- **Open Public Consultation** open until 9th of July

[LINK](#)

To be found under: EU Survey IDAA Public Consultation

Thank you



© European Union 2025



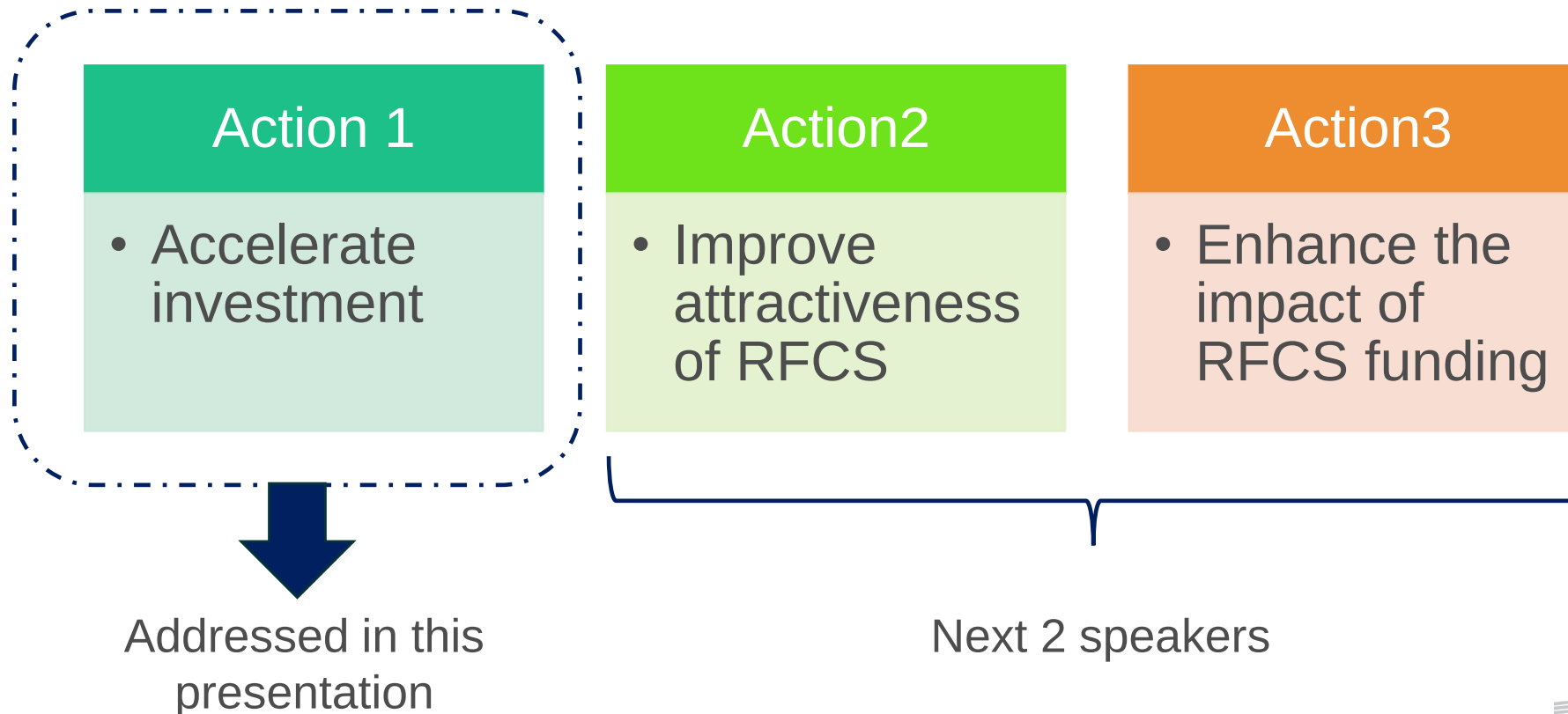
Action 1: R&I to Support Accelerating Investment

*Sophie Lemahieu – Policy officer
DG-RTD - Directorate E – Prosperity
Unit E3 – Industrial Transformation*

19 June 2025

Three Actions

The 3 actions address the 3 main groups of questions included in the distributed guiding document.



RFCS Focus: Steel and Metals Action Plan

The Steel and Metals Action Plan (SMAP) from 19 March 2025 announced that:

“At the innovation stage, the Research Fund for Coal and Steel (RFCS) provides important funding for the steel sector, supporting the transition to clean steel and the overall industrial decarbonisation of the sector.

*The Commission will launch **flagship initiatives which would mobilise EUR 150 million in 2026 and 2027** and **could also contribute to strengthening the European defence research dimension of the sector.***

*In addition, the Commission will propose an **overall reform of the Research Fund for Coal and Steel, to simplify and further accelerate investments in steel research, including research on defence applications.**”*

European Coal and Steel Sectors

COAL

- Commission communication of February 2024 on the 2040 climate targets (90% by 2040).
- Regulation on the reduction of methane emissions in the energy sector of June 2024.
- Coal is facing a different reality in comparison with the 1950s or even 2002.
- The transition is affecting specific regions and its workforce.

STEEL

- Reducing CO2 emissions from steel production by 55% by 2030
- Reducing CO2 emissions overall by 80-95% by 2050
- In 2024: 18.000 job cuts announced, crude steel production below 130 million tonnes
- Global steel overcapacity: expected to reach 721 million tonnes by 2027—five times the EU's own production.
- Low-priced imports from Asia, North Africa, and the Middle East
- U.S. import tariffs at 50% in June 2025.

Clean Industrial Deal and Steel and Metals Action Plan: Key Elements for Steel

- Objective is to create **innovative, green lead** markets
 - Introduction of the **Decarbonisation Accelerator Act**
 - ➔ Focusing on increasing demand for EU-made clean products in energy intensive sectors, Planned for Q4, 2025
 - Introduction of the **Industrial decarbonisation bank**
 - ➔ Planned for Q2 2026 with a budget of **€100 billion to support decarbonization** through auctioning system
 - Revision of State aid guidelines to support **decarbonisation of industry through subsidies**
 - Revision of the Emissions Trading Scheme Directive will **phase out free allowances**
- ➔ **Current policy agenda gives strong incentives to accelerate investments towards decarbonisation**

Top Steel-Producing Companies 2023/2024

Company	Headquarters	Mt		Rank	
		2024	2023	2024	2023
China Baowu Group	China	130.09	130.77	1	1
ArcelorMittal (1)	Luxembourg	65.00	68.52	2	2
Ansteel Group	China	59.55	55.89	3	3
Nippon Steel Corporation (2)	Japan	43.64	43.66	4	4
HBIS Group	China	42.28	41.34	5	5
Shagang Group	China	40.22	40.54	6	6
Jianlong Group	China	39.37	36.99	7	8
POSCO Holdings	South Korea	37.79	38.44	8	7
Shougang Group	China	31.57	33.58	9	9
Tata Steel Group	India	31.02	29.50	10	10
Delong Steel	China	29.33	28.26	11	11
JSW Steel Limited	India	26.95	26.15	12	12
Hunan Steel Group	China	24.90	24.80	13	14
JFE Steel Corporation	Japan	23.53	25.09	14	13
Jingye Group (3)	China	22.72	14.51	15	29
Nucor Corporation	United States	20.66	21.20	16	15
Shandong Steel Group	China	19.45	19.45	17	17
Liuzhou Steel	China	19.22	18.62	18	21
Fangda Steel	China	19.10	19.56	19	16
SAIL	India	19.10	19.18	20	19
Hyundai Steel	South Korea	18.36	19.24	21	18
Rizhao Steel	China	18.30	18.66	22	20
Cleveland-Cliffs Inc.	United States	(e) 16.40	17.27	23	22
CITIC Pacific	China	16.15	(r) 15.66	24	25
Tsingshan Holding	China	16.00	16.28	25	23
Baotou Steel	China	14.99	15.20	26	27
Jinan Iron and Steel Group Co. (4)	China	14.30	15.27	27	26
Techint Group	Argentina	14.29	14.82	28	28
United States Steel Corporation	United States	14.18	15.75	29	24
Novolipetsk Steel (NLMK)	Russia	(e) 13.60	14.24	30	30

In the list of the first 30:

- Asia dominates with 25 companies, including 1 from Russia and 17 from China.
- EU has only 2 companies in the list, one of which has Indian leadership.

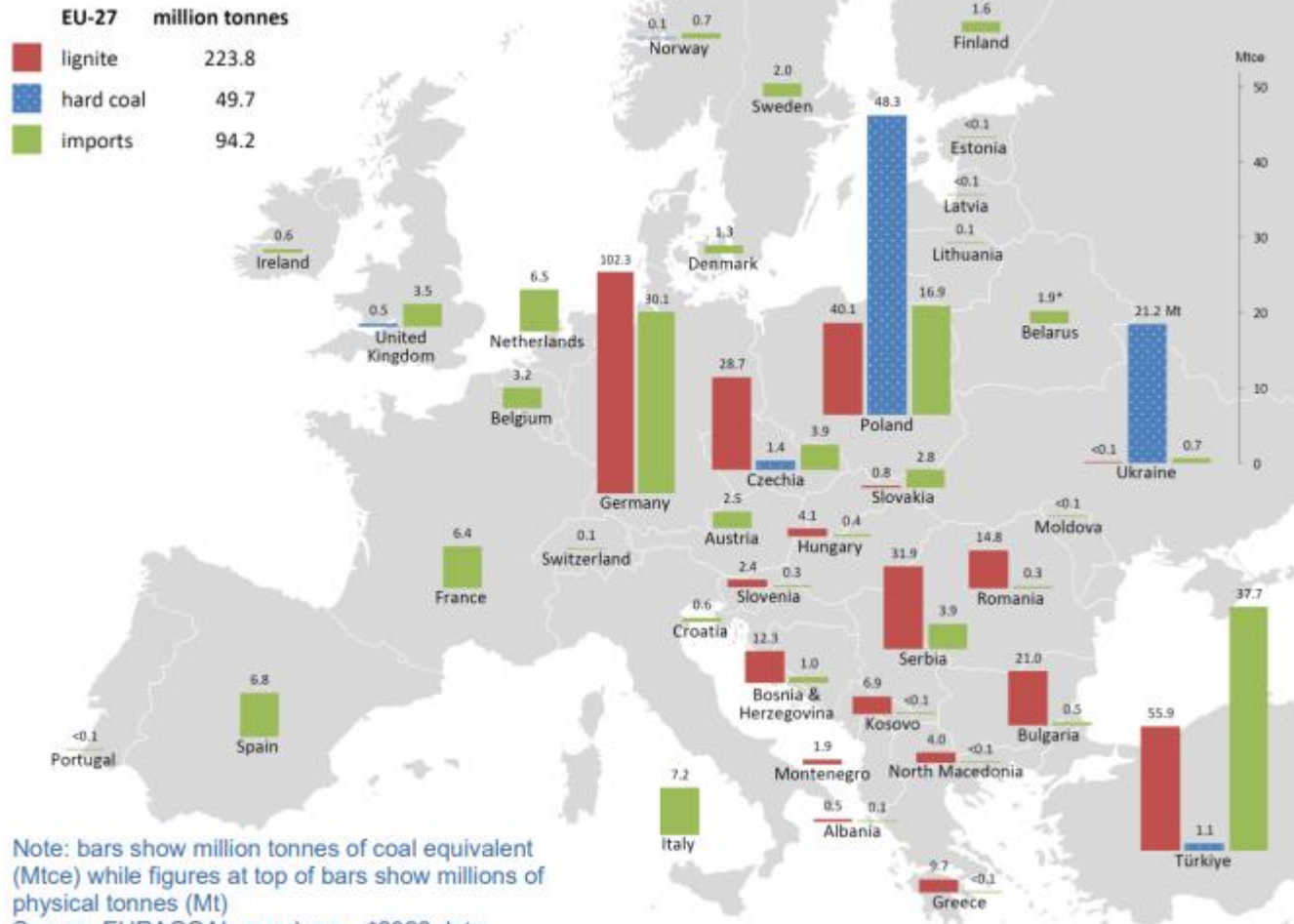
State Aid to Help Steel Decarbonisation

**2023-2025
decarbonisation projects
received € 10 billion
of state aid**

2023	Belgium	ArcelorMittal	Ghent	Decarbonisation	280
2023	France	ArcelorMittal	Dunkirk	Decarbonisation	850
2023	Germany	ArcelorMittal	Duisburg	Decarbonisation	n/a
2023	Germany	ArcelorMittal	Hamburg	Demonstration plant	55
2023	Germany	Salzgitter	Salzgitter	Decarbonisation	1000
2023	Germany	Thyssenkrupp	Project tkH2Steel	Decarbonisation	2000
2023	Hungary	Dunaferr	Dunaferr	Employment costs	42
2023	Italy	Acciaierie d'Italia	DRI d'Italia	Pilot plant	35
2023	Poland	Jastrzebska Spolka Weglowa	JSW Plant	Energy cost support	4
2023	Slovakia	USSK	Kosice	Decarbonisation	300
2023	Slovenia	Slovenian Steel Group	SIJ Acroni	Energy costs	1
2023	Slovenia	Slovenian Steel Group	SIJ Metal Ravne	Energy costs	1
2023	Spain	ArcelorMittal	Gijon	Decarbonisation	450
2023	United Kingdom	Tata Steel	Port Talbot	Decarbonisation	580
2024	Czech Republic	Trinecke Zelezarny	Trinec	Capex support	20
2024	France	ArcelorMittal	Fos-sur-Mer	Capex support	15
2024	Germany	Stahl Holding Saar	Saarstahl and Dillinger	Decarbonisation	2600
2024	Germany	Vallourec	Pipe at Dusseldorf / Mulheim	Restructuring aid	3
2024	Sweden	H2GS	Boden plant	Green steel	265
2024	Sweden	SSAB	Lulea	Decarbonisation	128
2024	Switzerland	Swiss Steel / Beltrame	Gerlafingen / Steeltec	Energy cost support	20
2024	United Kingdom	British Steel	Scunthorpe & Teesside	Decarbonisation	345
2025	Germany	ArcelorMittal	Bremen & Eisenhüttenstadt	Decarbonisation	1300
2025	Italy	JSW Steel Italy	Piombino	Rail mill development	33
2025	Spain	ArcelorMittal	Aviles	Energy efficiency	4

European Hard Coal Production, Lignite Production and Coal Imports for 2023

European hard coal production, lignite production and coal imports, 2023



- The 3 main producing countries in EU are Poland, Germany, and Czech Republic. They all decreased production between 2022 and 2023.
- Lignite production in Poland fell sharply to 40.1 million tonnes in 2023, a 26.6% decline on 2022.

RFCS Investments in 2021-2024 Slowing Down

2021-2024
Available Budget
€ 444 million

2021-2024
Spent Budget
€ 269 million

The Commission Perspective: Help the Transition for Coal and Steel

- The reform of the RFCS should aim for stronger support to accelerate innovation and investments and adapt to the sectors evolving needs.
- Innovation and transition should be accelerated to avoid a stronger impact of the carbon costs.
- Design of the reform should also fit together with the other policy initiatives.

Your Input

- Should the announced RFCS reform be implemented already in 2027 (or the years thereafter)?
- What is needed to ensure appropriate planning of investments at industrial-level in 2027 based on a call?
- How do you see the link between the RFCS reform and other policy initiatives requiring investments?

Action 2: Improving the attractiveness of the Research Fund for Coal and Steel

*Alessandra Colli
DG-RTD - Directorate E – Prosperity
Unit E3 – Industrial Transformation*

19 June 2025

How Can a Reform Boost Participation in the RFCS Programme

Elements for discussions

1. Funding rates

**2. Size / conditions
of calls / projects**

3. Timing of calls

4. Prescriptiveness

5. Capex funding

1. Funding Rates: RFCS vs. Horizon Europe

RFCS

- Accompanying Measures (AM): 100%
- Research Projects (RPJ): 60%
- Pilot and Demonstration Projects (PDP): 50%

HEU

- Coordination and Support Actions (CSA): 100%
- Research and Innovation Actions (RIA): 100%
- Innovation Actions (IA): up to 70% [with Research Institutions funded at 100%]

2. Size and Conditions of Calls and Projects

- Small size projects are funded via the **Annual Call covering all TRL levels**, whereas large size high TRL research is the dedicated purpose of the **Big Tickets calls**.

Type of action	Average EU contribution per project (steel funded projects 2021-2024)
Big Tickets (PDP)	€ 7 million
Annual Call (PDP)	€ 1,5 million
Annual Call (RPJ)	€ 1,6 million
Annual Call (AM)	€ 0,6 million

2. Current Project Size Indications

- **Big Tickets**

COAL: The Commission estimates that an EU contribution of **EUR 5 million to EUR 9 million (or EUR 18 million for large demonstrators)** would allow the objectives of this call to be addressed appropriately.

STEEL: The Commission estimates that an EU contribution of **EUR 5 million to EUR 25 million** would allow the objectives of this call to be addressed appropriately.

For both: This does not preclude submission and selection of a proposal requesting **different amounts**.

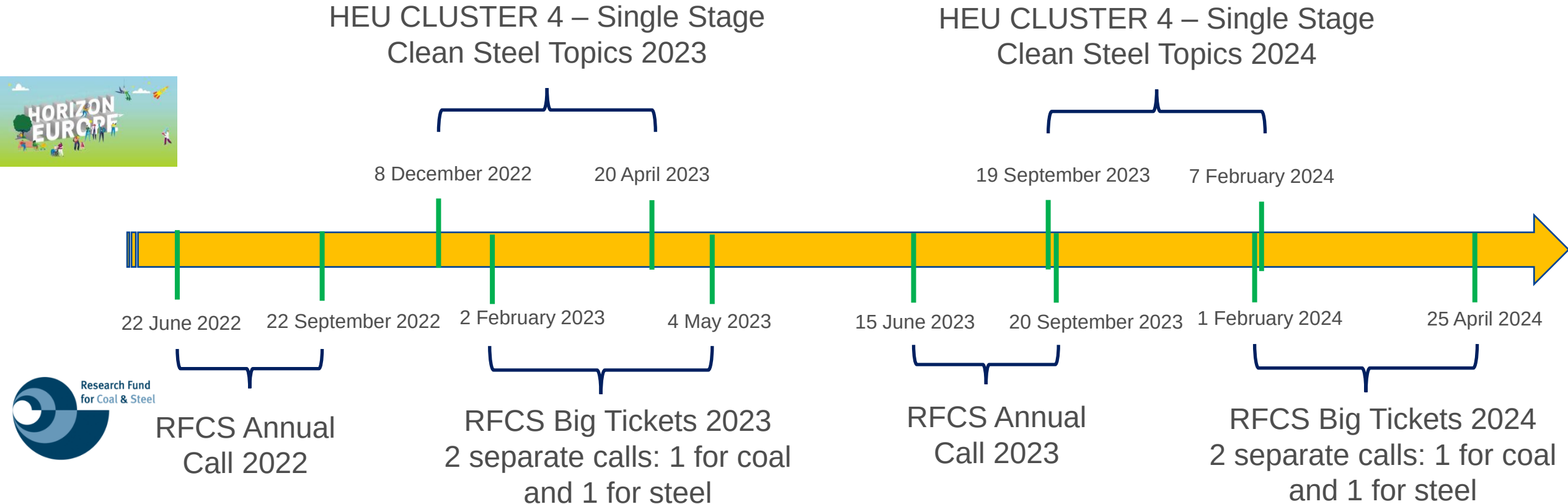
- **Annual Call**

Project budgets for accompanying measures (requested grant amount) are expected to range **between 300.000 and 500.000 EUR**.

Project budgets for research projects (requested grant amount) are expected to range **between 1 and 3 MEUR**.

Project budgets for pilot and demonstration projects (requested grant amount) are expected to **range 3 and 5 MEUR for steel (1.5 and 3 MEUR for coal.)**

3. Timing of the Calls: 2022-2023-2024



RFCS Annual Call 2025, presently open, is fully overlapping with Horizon Europe (for CSP)

4. Reduce Prescriptiveness: Streaming the R&I Objectives

- Many R&I stakeholders advocate more and more for more bottom-up, flexible approach, with less prescriptive calls.
- The RFCS should be bottom-up.
- The research objectives are outlined:
 - In the RFCS legal base amended in 2021: Council Decision 2021/1094/EC.
 - In the call text, especially in the case of the Big Tickets calls.

4. Research Objectives of the RFCS Programme

Council Decision (EU) 2021/1094 of 28 June 2021

COAL

New art. 4, 5 and 6

Old Article 7 on Management of external dependence on energy supply is cancelled.

STEEL

New art. 8, 9, 10 and 10a

New art. 4, 5 and 6 for COAL:

Art. 4: Supporting the Just Transition of the coal sector and regions.

Art. 5: Improving health and safety.

Art. 6: Minimising the environmental impacts of coal mines in transition.

New art. 8, 9, 10 and 10a for STEEL

Art. 8: New, sustainable and low-carbon steel making and finishing products.

Art. 9: Advanced steel grades and applications.

Art. 10: Conservation of resources, protection of the environment and circular economy.

Art. 10a: Management of work force and working conditions.

5. CAPEX Funding

- According to EUROFER, the financial needs for the transition of the steel industry until 2030 are estimated by the steel sector today at **€31 billion for capital expenditures (CAPEX)** and €54 billion for operating expenditures (OPEX), totaling €85 billion for the transition.
- High TRL projects require important capital expenditures, not sufficiently covered in EU funding scheme.
- The Commission announced in the Clean Industrial Deal Communication its intention to simplify State aid rules by adopting a new Clean Industrial Deal State aid Framework to deploy industrial decarbonisation.
- Synergies between RFCS funding and state-level funding is also a possibility.
 - **HY4SMELT**, a 2024 Big Tickets projects for steel is financed by RFCS for € 18 million, in combination with 2 sources of national funds.

DETAILED BUDGET TABLE

C.2 Purchase costs - Equipment						
Description ¹	Date of purchase	Utilisation period (months) ² [A]	Depreciation period (months) ³ [B]	Cost of purchase [C]	% allocation to the project ⁴ [D]	Costs [(A/B)xCx D]
						0.00
						0.00
						0.00
C.2 Rental or leasing costs - Equipment						
Category		Description				Costs
Rental of equipment ⁵						
Total C.2						0.00
¹ PCs and other equipment used for administrative tasks are not eligible costs						
² This is the period (in months) during which the equipment is used for the project after its delivery						
³ Depreciation period should be in line with the applicable rules in the beneficiary's country and with the beneficiary's usual accounting policy						
⁴ For example, if the equipment is used for 6 months and in that time the equipment is used for a total of 300 hours for the project, but for no other purposes, then the allocation is 100%. However, if during the same period the equipment is used for 300 hours for the project and is also used for 100 hours for purposes other than the research project, then the allocation is 75%						
⁵ The total cost for renting equipment must not exceed the allowable costs for its purchase. If the items are used also for other activities outside this project, the amount charged to the project must be reduced proportionally						

Depreciation is the default option for equipment cost.

The use of specific equipment to achieve the objectives will be evaluated by the experts (Criterion Implementation)

DETAILED BUDGET TABLE

- For certain equipment, applicants can also choose the **FULL COST OPTION**.
- This is an applicant **CHOICE** that needs **to be fully justified**, hence the need for a detailed list specifying the relevant equipment included in Part B (table “equipment with full-cost option”) and in the detailed budget table.

Applicants can opt for full cost option if **all the following conditions are met**:

- Applies best value for money standards
- Complies with the beneficiary’s usual cost accounting practices and the international accounting standards
- Costs incurred in the purchase or for the development of the equipment, infrastructure or other assets
- Which are recorded under a fixed asset account of the beneficiary in compliance with international accounting standards and the beneficiary’s usual accounting practices
- There must be no double charging of costs (e.g. no charging of depreciation costs for
- equipment previously funded at full cost by an EU grant

Your Input

- Should the current funding rates change under the RFCS reform? If yes, should future funding rates be more aligned with those under FP 10 or do we need standalone funding rates under RFCS?
- What should be the future project size for annual calls and big ticket calls?
- Any suggestions to improve the current timing for calls? Should there be a longer submission window be considered ?
- Should the RFCS work program take more account of long term priorities (for instance decarbonization, reducing methane emissions?)
- Do we need more ambitious solutions on CAPEX for the future?

Action 3: Enhance the Impact of the RFCS Funding

*Jurgen Tiedje
DG-RTD - Directorate E – Prosperity
Unit E3 – Industrial Transformation*

19 June 2025

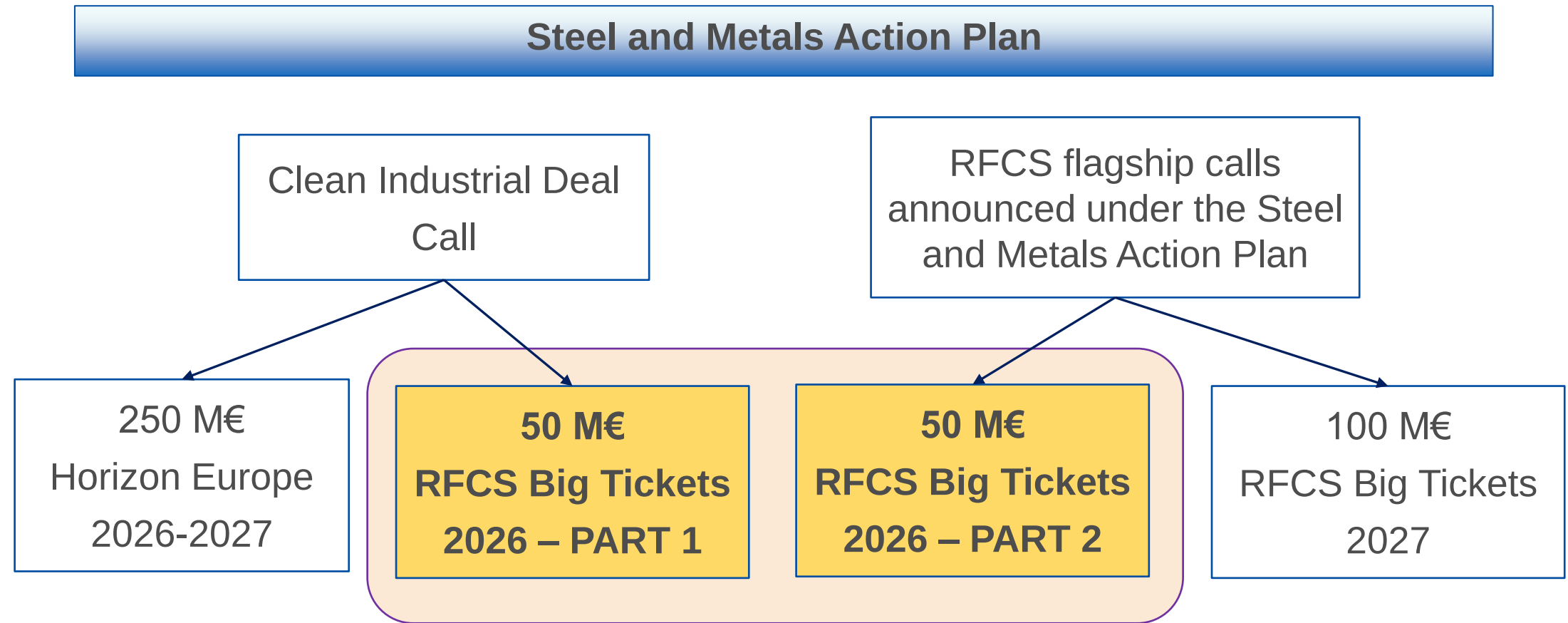
What Has the RFCS Supported for Coal

Project	Repurposing envisaged	Clean technologies supported	
Renewable energy & hydrogen production cluster			
MINE-TO-H2 (TRL 4 – 8)	Green hydrogen production via the electrolysis of mine water using electricity from existing renewables sources, coupled with the heating sector.	- Hydrogen production (electrolysis of mine water and electricity from existing photovoltaic plant and renewable sources) - Waste heat recovery process coupled with the existing geothermal facility and heating sector - Blending hydrogen into the natural gas grid	
Circular economy and materials cluster			
MidSafe (TRL 3 - 6)	Post-mining waste dump management and risk mitigation	- Geotechnical risk management (methodologies such as fuzzy inference systems and 3D modelling to identify, analyse, and mitigate geotechnical risks associated with slope stability in lignite mine waste dumps) - Circular economy practices (recycling of mining wastes to produce new geomaterials for clean energy generation). - Innovative geomaterials (developing geopolymers and zeolites to enhance soil stabilisation and reduce environmental pollution)	
Project	Qualitative aspects		Total methane captured
REM (TRL 4 - 8)	Methane reduction (extracts methane from post-mining goafs, reducing the risk of emissions into the atmosphere) and utilisation (converts captured methane into electricity, demonstrating the potential for energy recovery)	Safety (enhances security in post-mining goafs by preventing uncontrolled methane leaks using Long Reach Directional Drilling (LRDD) and advanced monitoring, such as optical gas imaging & unmanned aerial systems)	Total methane emitted 39,145 t/year (2024) at Pniowek Mine Total methane captured and used 18,013 t/year (2024) Reduction of 9,523 t CH ₄ aiming for 12,924 t)/year (2025)

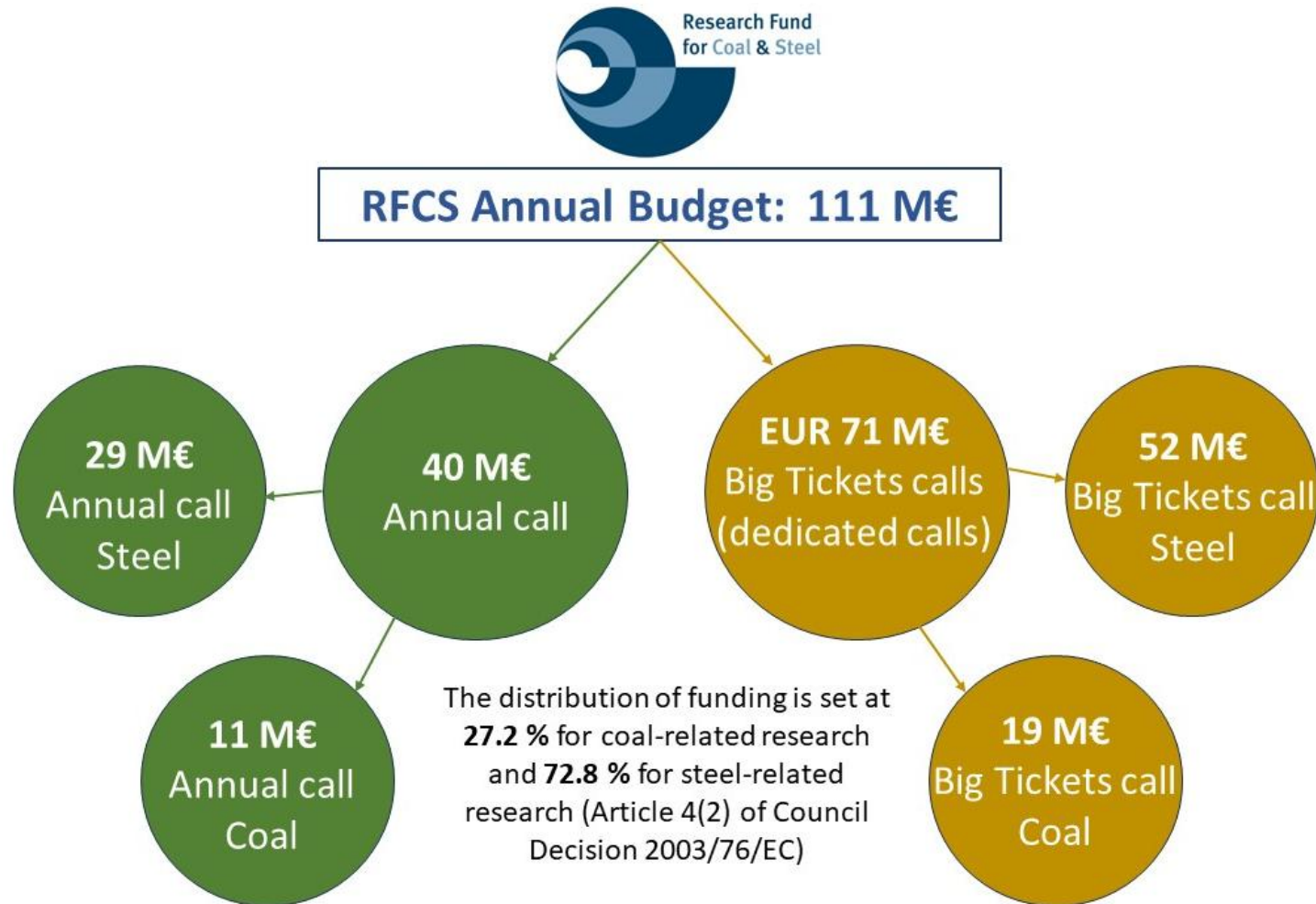
What Has the RFCS Supported for Steel

Project	Decarbonisation target	Impact of decarbonisation on industrial engagement
ProSynteg (TRL 3 - 6)	Emission reduction 14 kg CO ₂ /tonnes steel produced	Delay in supplying equipment Higher costs than expected No technical difficulties for upscaling Political instability and the current economic situation in the EU
HYDREAMS (TRL 4 - 7)	Emission reduction 74.8 kg CO ₂ /t steel produced Emission reduction 14,000 t CO ₂ /y Total emissions 49,000 t CO ₂ /y (Ugine) 187,000 t steel produced (Ugine)	Availability and access to low carbon hydrogen. Cost of clean hydrogen.
MODIPLANT (TRL 6 - 9)	Flat products – Emission reduction (HDG) 5 kg CO₂/t of steel – Emission reduction (HDG) 3,000 t CO₂/y – Emission reduction (electrification) 16 kg CO₂/t – Emission reduction (electrification) 10,000 t CO₂/y 600,000 t steel/y HDG line Long products – Emission reduction 5,3 kg CO₂/t of steel to 11,0 kgCO₂/t of steel – Emission reduction 3985 up to 7,969 t CO₂/y 750,000 t steel/y	Engagement interest is high Potential challenges: Economic barriers Regulatory and policy factors Technical integration Market readiness

Major calls announced for 2026 (and 2027) – request for more investments



Annual Allocations for the Period 2021-2027



- For more impactful research, should the annual allocations be higher ?
- Should there be a strict division of budget between research projects and pilot/demonstration projects ?

Budget Division

- The current RFCS legal base (Article 4(2) of Council Decision 2003/76/EC) foresees a **breakdown between coal and steel**
 - Coal : 27,2%
 - Steel : 72,8%

How was the breakdown decided ?

The protocol on how to use the assets when the ECSC Treaty expired in 2002 states that **revenues from the assets** shall be used for research in the sectors related to the **coal and steel industry**.

Council resolution 98/C 247/04 of 1998 invited the Commission to consider how the breakdown could be applied, stating that it “**should initially be based on the financial contribution paid by the two industries**”.

Valorisation in the EU

- Exploiting R&I results in Europe is an important factor of maximising the social and economic value of R&I in the EU.
- Introducing valorisation activities in the RFCS could enhance impact of research in Europe.

RFCS and Dual Use Applications vs. Horizon Europe

RFCS legal framework on dual use

- *No specific reference to civil or dual use of research*

Horizon Europe legal framework on dual use

- *Funding only for civil use of research*

Dual Use of Research

- **EU White paper on defence** (March 2025) outlines
 - the importance of disruptive innovation to help accelerating **transformation through advanced military tech** across the EU
 - Steel industry can find new opportunities in developing a **European defence industrial base**
 - **Incoming amendment of Horizon Europe regulation** to allow funding of dual use technologies through the European Innovation Council Accelerator

Your Input

- To which extent should we move to larger calls/larger projects following the model of the Clean Industrial Deal Flagship Call and the call announced under the Steel and Metal Action?
- How do you see the breakdown in terms of budget devoted to coal and steel research ? Still up to date since 1998?
- Should we promote more that a valorisation of the outcome of projects should take place in Europe?
- What is the potential in the steel sector to engage more into future projects on dual use research and defence related applications?

Discussion and feedback

*Jurgen Tiedje
DG-RTD - Directorate E – Prosperity
Unit E3 – Industrial Transformation*

19 June 2025

Your Input (session 1)

- Should the announced RFCS reform be implemented already in 2027 (the years thereafter)?
- What is needed to ensure appropriate planning of investments at industrial-level in 2027 based on a call?
- How do you see the link between the RFCS reform and other policy initiatives requiring investments?

Your Input (session 2)

- Should the current funding rates change under the RFCS reform? If yes, should future funding rates be more aligned with those under FP 10 or do we need standalone funding rates under RFCS?
- What should be the future project size for annual calls and big ticket calls?
- Any suggestions to improve the current timing for calls? Should there be a longer submission window be considered ?
- Should the RFCS work program take more account of long term priorities (for instance decarbonization, reducing methane emissions?)
- Do we need more ambitious solutions on CAPEX for the future?

Your Input (session 3)

- To which extent should we move to larger calls/larger projects following the model of the Clean Industrial Deal Flagship Call and the call announced under the Steel and Metal Action?
- How do you see the current breakdown in terms of budget devoted to coal and steel research ?
- Should we promote more that a valorisation of the outcome of projects should take place in Europe?
- What is the potential in the steel sector to engage more into future projects on dual use research and defence related applications?

Questions

Full list of questions

- Should the announced RFCS reform be implemented already in 2027 (or the years thereafter)?
- What is needed to ensure appropriate planning of investments at industrial-level in 2027 based on a call?
- How do you see the link between the RFCS reform and other policy initiatives requiring investments?
- Should the current funding rates change under the RFCS reform? If yes, should future funding rates be more aligned with those under FP 10 or do we need standalone funding rates under RFCS?
- What should be the future project size for annual calls and big ticket calls?
- Any suggestions to improve the current timing for calls? Should there be a longer submission window be considered ?
- Should the RFCS work program take more account of long term priorities (for instance decarbonization, reducing methane emissions)?
- Do we need more ambitious solutions on CAPEX for the future?
- To which extent should we move to larger calls/larger projects following the model of the Clean Industrial Deal Flagship Call and the call announced under the Steel and Metal Action?
- How do you see the breakdown in terms of budget devoted to coal and steel research ? Still up to date since 1998?
- Should we promote more that a valorisation of the outcome of projects should take place in Europe?
- What is the potential in the steel sector to engage more into future projects on dual use research and defence related applications?

Your Input – in writing

Written feedback on the questions and other aspects

by 3 July 2025 to:

RTD-STEEL-COAL@ec.europa.eu

Thank you !