



Research Fund for Coal and Steel (RFCS)

Call for proposals

RFCS Annual Call 2022
(RFCS-2022)

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EUROPEAN RESEARCH EXECUTIVE AGENCY (REA)

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CALL FOR PROPOSALS

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0. Introduction

This is a call for proposals for EU action grants in the field of Coal and Steel under the **Research Fund for Coal and Steel (RFCS)**.

The regulatory framework for this EU Funding Programme is set out in:

- Regulation 2018/1046 ([EU Financial Regulation](#))
- the basic act ([RFCS Regulation](#)¹)

The call is launched in accordance with the 2022 Work Programme² and will be managed by the **European Research Executive Agency (REA)** ('Agency').

The call covers the following **topics**:

- RFCS-01-2022-AM Coal Accompanying Measures
- RFCS-01-2022-RPJ Coal Research Projects
- RFCS-01-2022-PDP Coal Pilot and Demonstration Projects
- RFCS-02-2022-AM Steel Accompanying Measures
- RFCS-02-2022-RPJ Steel Research Projects
- RFCS-02-2022-PDP Steel Pilot and Demonstration Projects

We invite you to read the **call documentation** carefully, and in particular this Call Document, the Model Grant Agreement, the [EU Funding & Tenders Portal Online Manual](#) and the [EU Grants AGA – Annotated Grant Agreement](#).

These documents provide clarifications and answers to questions you may have when preparing your application:

- the [Call Document](#) outlines the:
 - background, objectives, scope, activities that can be funded and the expected results (sections 1 and 2)
 - timetable and available budget (sections 3 and 4)
 - admissibility and eligibility conditions (including mandatory documents; sections 5 and 6)
 - criteria for financial and operational capacity and exclusion (section 7)
 - evaluation and award procedure (section 8)
 - award criteria (section 9)
 - legal and financial set-up of the Grant Agreements (section 10)
 - how to submit an application (section 11)
- the [Online Manual](#) outlines the:

¹ [Council Decision of 29 April 2008 2008/376/EC](#) amended by the [Council Decision \(EU\) 2017/955 of 29 May 2017](#) and [Council Decision \(EU\) 2021/1094 of 28 June 2021](#) (OJ L 130, 20.5.2008, p. 7).

² Commission Implementing Decision C(2022)905 on the launching of three calls for proposals in year 2022 under the Research Programme of the Research Fund for Coal and Steel (RFCS) to finance research in the sectors related to the coal and steel industry.

- procedures to register and submit proposals online via the EU Funding & Tenders Portal ('Portal')
- recommendations for the preparation of the application
- the AGA — Annotated Grant Agreement contains:
 - detailed annotations on all the provisions in the Grant Agreement you will have to sign in order to obtain the grant (*including cost eligibility, payment schedule, accessory obligations, etc*).

You are also encouraged to visit the [RFCS funded projects](#) to consult the list of projects funded previously.

1. Background

Policy objectives

During the programming period 2021-2027, the RFCS will be linked to the objectives of the [European Green Deal Communication](#)³, which aims to transform the EU into a fair and prosperous society, with a modern, resource-efficient and competitive economy where there are no net emissions of greenhouse gases in 2050 and where economic growth is decoupled from resource use.

This Communication, which sets out a new growth strategy for Europe, refers to the need to support clean steel breakthrough technologies leading to zero-carbon steelmaking by 2030. The Communication also states that all EU actions and policies should pull together to help achieve a successful and just transition towards a sustainable future.

Within the European Green Deal objectives, applicants to the RFCS calls should therefore consider the following elements when preparing their proposals:

- Energy-intensive industries, such as steel [...] are indispensable to Europe's economy, as they supply several key value chains⁴. **The decarbonisation and modernisation of this sector is essential.**
- The Commission will support clean steel breakthrough technologies leading to a zero-carbon steel making process by 2030.
- A power sector must be developed that is based largely on renewable sources, complemented by the **rapid phasing out of coal.**
- The EU should also reinforce current initiatives [...] on cross-cutting climate and environment issues. This may include ending global fossil fuel subsidies in line with its G20 commitments, [...] phasing out all new coal plant construction, and action to reduce methane emissions.
- Focus on the regions and sectors that are most affected by the transition because they depend on fossil fuels or carbon-intensive processes.
- Protect people and workers most vulnerable to the transition, providing access to re-skilling programmes, and jobs in new economic sectors.

The latest (2011-2017) [Monitoring and Assessment of the RFCS Research Programme](#) report, highlights the major future challenges for the European coal and steel industry: – (i) to cut greenhouse gas emissions, (ii) to make sustainable use of energy and resources, and (iii) to develop new competitive, high-performance products and processes⁵.

The RFCS amendments to the legal basis package adopted on 19 July 2021 is in line with the Von der Leyen Commission's objectives and therefore enables the fund to tackle the sectors' climate and environmental challenges. This means in particular assisting the EU's steel industries to reduce their emissions, while remaining competitive, and the EU coal regions most affected by the transition towards the

3 [A European Green Deal | European Commission \(europa.eu\)](#)

4 EUR-Lex - 52019DC0640 - EN - EUR-Lex (europa.eu), section 2.1

5 [Research Fund for Coal and Steel monitoring and assessment report | European Commission \(europa.eu\)](#)

European Green Deal's goals and achieving a [Just Transition](#) towards a climate neutral economy.

The Research Programme is consistent with the political, scientific, and technological objectives of the Union, and complements the activities carried out in the Member States and within the existing Union Framework Programme for research, technological development and demonstration ('Horizon Europe').

The European Commission encourages complementarity, synergies and sequencing among research programmes and supports the exchange of information between projects financed under different instruments. To this regard, the Research Programme is complementary to national and other European financial instruments for research and innovation, including Horizon Europe, ESIF, ERDF, the Innovation Fund and LIFE.

Research objectives

The RFCS Research Programme has the following research objectives for the Coal and Steel sector:⁶

Coal

- Article 4. Supporting the just transition of the coal sector and regions;
- Article 5. Improving health and safety;
- Article 6. Minimising the environmental impacts of coal mines in transition.

Steel

- Article 8. New, sustainable and low-carbon steelmaking and finishing processes;
- Article 9. Advanced steel grades and applications;
- Article 10. Conservation of resources, protection of the environment and circular economy;
- Article 10a. Management of work force and working conditions.

Each proposal shall include an assessment of anticipated industrial, economic, social and environmental benefits (Article 26 of RFCS Regulation "Content of proposals").

Proposers may submit proposals for Research projects, Pilot or Demonstration projects or Accompanying Measures (see Art. 14, 15, 16 and 17 of the RFCS Regulation).

⁶ Defined in the 'RFCS Regulation' - [Council Decision of 29 April 2008 2008/376/EC](#) amended by the [Council Decision \(EU\) 2017/955 of 29 May 2017](#) and [Council Decision \(EU\) 2021/1094 of 28 June 2021](#) (OJ L 130, 20.5.2008, p. 7).

2. Objectives — Themes and priorities — Activities that can be funded — Expected impact

RFCS-01-2022-AM Coal Accompanying Measures

Objectives

This topic covers all research objectives for the coal sector, as set out in the RFCS Regulation, i.e.:

- supporting the just transition of the coal sector and regions
- improving health and safety
- minimising the environmental impacts of coal mines in transition

Within this frame, projects from all areas and domains are admitted.

Proposals should address the RFCS objectives listed above.

Themes and priorities (scope)

There are no annual priorities for this topic.

Activities that can be funded (scope) — Type of action

This topic concerns RFCS Coal Accompanying Measures (AMs).

Accompanying Measures (AMs) aim to promote the use of knowledge gained or the organisation of dedicated workshops or conferences in connection with projects or priorities of the RFCS.

Expected impact

Accompanying Measures are expected to involve among the Consortium a balanced representation from relevant Academia, Research centres, Industry and/or Industry Associations.

They are also expected to address all the relevant actors required for the decarbonisation of the EU Steel industry and for the Just transition of the Coal regions.

In addition, Accompanying Measures should be able to provide suggestions on possible policy initiatives to contribute to the digital, greening and circular transformation of the Coal and Steel communities, in line with the the European Green Deal.

RFCS-01-2022-RPJ Coal Research Projects

Objectives

This topic covers all research objectives for the coal sector, as set out in the RFCS Regulation, i.e.:

- supporting the just transition of the coal sector and regions

- improving health and safety
- minimising the environmental impacts of coal mines in transition

Within this frame, projects from all areas and domains are admitted.

Proposals should address the RFCS objectives listed above.

Themes and priorities (scope)

There are no annual priorities for this topic.

Activities that can be funded (scope) – Type of action

This topic concerns RFCS Coal Research Projects (RPJs).

Research Projects (RPJs) target investigative or experimental work aiming to acquire knowledge that helps to facilitate the attainment of specific practical objectives, such as the creation or development of new products, production processes or services.

Expected impact

Research projects activities are expected to achieve TRL 4-5 by the end of the project.

RFCS-01-2022-PDP Coal Pilot and Demonstration projects

Objectives

This topic covers all research objectives for the coal sector, as set out in the RFCS Regulation, i.e.:

- supporting the just transition of the coal sector and regions
- improving health and safety
- minimising the environmental impacts of coal mines in transition

Within this frame, projects from all areas and domains are admitted.

Proposals should address the RFCS objectives listed above.

Themes and priorities (scope)

There are no annual priorities for this topic.

Activities that can be funded (scope) – Type of action

This topic concerns RFCS Coal Pilot and Demonstration Projects (PDPs).

Pilot Projects target the construction, operation and development of (significant parts of) installations on an appropriate scale and using suitably large components in order to examine the potential for putting theoretical or laboratory results into practice and/or increasing the reliability of the technical and economic data needed to progress to demonstration stage, and in certain cases to industrial and/or commercial stage.

Demonstration Projects cover the construction and/or operation of (significant parts of) an industrial-scale installation, in order to bring together all the technical and economic data in order to proceed with the industrial and/or commercial exploitation of the technology at minimum risk.

Both Pilot and Demonstration Projects aim to bridge the gap between Research and Innovation.

Expected impact

Pilot and Demonstration Activities are expected to start at TRL 4-5 and achieve TRL 7-8 by the end of the project.

RFCS-02-2022-AM Steel Accompanying Measures

Objectives

This topic covers all research objectives for the steel sector, as set out in the RFCS Regulation, i.e.:

- new, sustainable and low-carbon steelmaking and finishing processes
- advanced steel grades and applications
- conservation of resources, protection of the environment and circular economy
- management of work force and working conditions

Within this frame, projects from all areas and domains are admitted.

Proposals should address the RFCS objectives listed above.

Themes and priorities (scope)

There are no annual priorities for this topic.

Activities that can be funded (scope) — Type of action

This topic concerns RFCS Steel Accompanying Measures (AMs).

Accompanying Measures (AMs) aim to promote the use of knowledge gained or the organisation of dedicated workshops or conferences in connection with projects or priorities of the RFCS.

Expected impact

Accompanying Measures are expected to involve among the Consortium a balanced representation from relevant Academia, Research centres, Industry and/or Industry Associations.

They are also expected to address all the relevant actors for the decarbonisation of the EU Steel industry.

In addition, Accompanying Measures should be able to provide suggestions on possible policy initiatives to contribute to the digital, greening and circular transformation of the Coal and Steel communities, in line with the European Green Deal.

RFCS-02-2022-RPJ Steel Research Projects

Objectives

This topic covers all research objectives for the steel sector, as set out in the RFCS Regulation, i.e.:

- new, sustainable and low-carbon steelmaking and finishing processes
- advanced steel grades and applications
- conservation of resources, protection of the environment and circular economy
- management of work force and working conditions.

Within this frame, projects from all areas and domains are admitted.

Proposals should address the RFCS objectives listed above.

Themes and priorities (scope)

There are no annual priorities for this topic.

Activities that can be funded (scope) – Type of action

This topic concerns RFCS Steel Research Projects (RPJs).

Research Projects (RPJs) target investigative or experimental work aiming to acquire knowledge that helps to facilitate the attainment of specific practical objectives, such as the creation or development of new products, production processes or services.

Expected impact

Research projects activities are expected to achieve TRL 4-5 by the end of the project.

RFCS-02-2022-PDP Steel Pilot and Demonstration projects

Objectives

This topic covers all research objectives for the steel sector, as set out in the RFCS Regulation, i.e.:

- new, sustainable and low-carbon steelmaking and finishing processes
- advanced steel grades and applications
- conservation of resources, protection of the environment and circular economy
- management of work force and working conditions

Within this frame, projects from all areas and domains are admitted.

Proposals should address the RFCS objectives listed above.

Themes and priorities (scope)

There are no annual priorities for this topic.

Activities that can be funded (scope) — Type of action

This topic concerns RFCS Steel Pilot and Demonstration Projects (PDPs).

Pilot Projects target the construction, operation and development of (significant parts of) installations on an appropriate scale and using suitably large components in order to examine the potential for putting theoretical or laboratory results into practice and/or increasing the reliability of the technical and economic data needed to progress to demonstration stage, and in certain cases to industrial and/or commercial stage.

Demonstration Projects cover the construction and/or operation of (significant parts of) an industrial-scale installation, in order to bring together all the technical and economic data in order to proceed with the industrial and/or commercial exploitation of the technology at minimum risk.

Both Pilot and Demonstration Projects aim to bridge the gap between Research and Innovation.

Expected impact

Pilot and Demonstration Activities are expected to start at TRL 4-5 and achieve TRL 7-8 by the end of the project.

3. Available budget

The available call budget is **EUR 68.637.500**.

Percentage Coal: 27.2%

Percentage Steel 72.8%

Specific budget information per topic can be found in the table below.

Topic	Topic budget
RFCS-01-2022-AM Coal Accompanying Measures	EUR 1 000 000
RFCS-01-2022-RPJ Coal Research Projects	EUR 17.669.400
RFCS-01-2022-PDP Coal Pilot and Demonstration Projects	
RFCS-02-2022-AM Steel Accompanying Measures	EUR 1 000 000
RFCS-02-2022-RPJ Steel Research Projects	EUR 48.968.100
RFCS-02-2022-PDP Steel Pilot and Demonstration Projects	

Only one proposal will be funded for the topic RFCS-01-2022-AM Coal Accompanying Measures and only one proposal will be funded for the topic RFCS-02-2022-AM Steel Accompanying Measures (max EU Contribution per Accompanying measures project EUR 1 million).

We reserve the right not to award all available funds or to redistribute them between the call priorities, depending on the proposals received and the results of the evaluation.

4. Timetable and deadlines

Timetable and deadlines (indicative)	
Call opening:	22 June 2022
Deadline for submission:	<u>22 September 2022 – 17:00:00 CET</u> (Brussels)
Evaluation:	October-November 2022
Information on evaluation results:	January-February 2023
GA signature:	April/June 2023

5. Admissibility and documents

Proposals must be submitted before the **call deadline** (see *timetable section 4*).

Proposals must be submitted **electronically** via the Funding & Tenders Portal Electronic Submission System (accessible via the Topic page in the [Search Funding & Tenders](#) section). Paper submissions are NOT possible.

Proposals (including annexes and supporting documents) must be submitted using the forms provided *inside* the Submission System (⚠ NOT the documents available on the Topic page — they are only for information).

Proposals must be **complete** and contain all the requested information and all required annexes and supporting documents:

- Application Form Part A — contains administrative information about the participants (future coordinator, beneficiaries and affiliated entities) and the summarised budget for the project (*to be filled in directly online*)
- Application Form Part B — contains the technical description of the project (*to be downloaded from the Portal Submission System, completed and then assembled and re-uploaded*)
- **mandatory annexes and supporting documents** (*to be uploaded*):
 - detailed budget table (former Form B3) (*template available in the Submission System*)
 - list of previous projects (key projects for the last 4 years in the area of the topic) (*template available in Part B*)

⚠ Please note that other documents will NOT be accepted and any additional documents uploaded will NOT be evaluated.

The amounts entered into the summarised budget table (filled in directly online) must correspond to the amounts calculated in the detailed budget table. In case of discrepancies, the amounts in the online summarised budget table will prevail.

At proposal submission, you will have to confirm that you have the **mandate to act** for all applicants. Moreover, you will have to confirm that the information in the application is correct and complete and that the participants comply with the conditions for receiving EU funding (especially eligibility, financial and operational capacity, exclusion, etc). Before signing the grant, each beneficiary and affiliated entity will have to confirm this again by signing a declaration of honour (DoH). Proposals without full support will be rejected.

The application must be **readable, accessible and printable**.

Proposals are limited to maximum **70 pages** (Part B). Evaluators will not consider any additional pages.

You may be asked at a later stage for further documents (*for legal entity validation, financial capacity check, bank account validation, etc*).

 For more information about the submission process (including IT aspects), consult the [Online Manual](#).

6. Eligibility

Eligible participants (eligible countries)

In order to be eligible, the applicants (beneficiaries and affiliated entities) must:

- be legal entities (public or private bodies, e.g. undertakings, public bodies, research organizations, higher or secondary education establishments or other legal entities) which carry out an RTD activity or substantially contribute to such an activity
- be established in one of the eligible countries, i.e.:
 - EU Member States (including overseas countries and territories (OCTs))
 - non-EU countries :
 - countries associated to the RFCS or countries which are in ongoing negotiations for an association agreement and where the agreement enters into force before grant signature ([list of participating countries](#))

Beneficiaries and affiliated entities must register in the [Participant Register](#) — before submitting the proposal — and will have to be validated by the Central Validation Service (REA Validation). For the validation, they will be requested to upload documents showing legal status and origin.

Other entities may participate in other consortium roles, such as associated partners, subcontractors, third parties giving in-kind contributions, etc (*see section 13*).

- ⚠ Please note that, in RFCS, associated partners may participate only if their participation is in the EU interest.

Specific cases

Natural persons — Natural persons are eligible.

International organisations — International organisations are not eligible.

Entities without legal personality — Entities which do not have legal personality under their national law may exceptionally participate, provided that their representatives have the capacity to undertake legal obligations on their behalf, and offer guarantees for the protection of the EU financial interests equivalent to that offered by legal persons⁷.

EU bodies — EU bodies (with the exception of the European Commission Joint Research Centre) can NOT be part of the consortium.

Associations and interest groupings — Entities composed of members may participate as 'sole beneficiaries' or 'beneficiaries without legal personality'⁸. ⚠ Please note that if the action will be implemented by the members, they should also participate (either as beneficiaries or as affiliated entities, otherwise their costs will NOT be eligible).

Countries currently negotiating association agreements — Beneficiaries from countries with ongoing negotiations (*see above*) may participate in the call and can sign grants if the negotiations are concluded before grant signature (with retroactive effect, if provided in the agreement).

⁷ See Article 197(2)(c) EU Financial Regulation [2018/1046](#).

⁸ For the definitions, see Articles 187(2) and 197(2)(c) EU Financial Regulation [2018/1046](#).

EU restrictive measures — Special rules apply for certain entities (*e.g. entities subject to [EU restrictive measures](#) under Article 29 of the Treaty on the European Union (TEU) and Article 215 of the Treaty on the Functioning of the EU (TFEU)⁹ and entities covered by Commission Guidelines No [2013/C 205/05](#)¹⁰*). Such entities are not eligible to participate in any capacity, including as beneficiaries, affiliated entities, associated partners, subcontractors or recipients of financial support to third parties (if any).



For more information, see [Rules for Legal Entity Validation, LEAR Appointment and Financial Capacity Assessment](#).

Consortium composition

Proposals must be submitted by a consortium of:

- for Accompanying Measures, minimum 3 independent applicants (beneficiaries; not affiliated entities) from 3 different eligible countries
- for Research projects, minimum 3 independent applicants (beneficiaries; not affiliated entities) from 2 different eligible countries
- for Pilot and Demonstration projects, minimum 2 independent applicants (beneficiaries; not affiliated entities) from 2 different eligible countries

Independent means that none of the entities must be under the direct or indirect control of the other or under the same direct or indirect control as the other. For this purpose, control may, in particular, take either of the following forms:

- the direct or indirect holding of more than 50 % of the issued share capital, or of a majority of the voting rights
- the direct or indirect holding, in fact or in law, of decision-making powers.

The following relationships do not in themselves constitute control:

- if the entities have the same public investment corporation, institutional investor or venture-capital company with a direct or indirect holding of more than 50 % of the issued share capital or a majority of voting rights
- if the entities are owned or supervised by the same public body.

Eligible activities

Eligible activities are the ones set out in section 2 above.

Projects should take into account the results of projects supported by other EU funding programmes. The complementarities must be described in the project proposals (Part B of the Application Form).

Projects must comply with EU policy interests and priorities (*such as environment, social, security, industrial and trade policy, etc.*).

Financial support to third parties is not allowed.

⁹ Please note that the EU Official Journal contains the official list and, in case of conflict, its content prevails over that of the [EU Sanctions Map](#).

¹⁰ Commission guidelines No [2013/C 205/05](#) on the eligibility of Israeli entities and their activities in the territories occupied by Israel since June 1967 for grants, prizes and financial instruments funded by the EU from 2014 onwards (OJEU C 205 of 19.07.2013, pp. 9-11).

Geographic location (target countries)

Proposals must relate to activities taking place in the eligible countries (*see above*).

Duration

Accompanying Measures should normally range between 18 and 36 months.

Research projects and Pilot and Demonstration projects should normally range between 36 and 42 months.

Projects of longer duration may be accepted in duly justified cases. Extensions are possible, if duly justified and through an amendment.

Project budget

Project budgets (requested grant amount) are expected to be of a maximum of 1 MEUR for accompanying measures.

Project budgets (requested grant amount) are expected to range between 1.5 and 3 MEUR for research projects.

Project budgets (requested grant amount) are expected to range between 3.5 and 5 MEUR for pilot and demonstration projects.

This does not however preclude the submission/selection of proposals requesting other amounts. The grant awarded may be lower than the amount requested.

Ethics

Projects must comply with:

- highest ethical standards (including highest standards of research integrity) and
- applicable EU, international and national law.

Projects involving ethics issues will have to undergo an ethics review to authorise funding and may be made subject to specific ethics rules (which become part of the Grant Agreement in the form of ethics deliverables, *e.g. ethics committee opinions/notifications/authorisations required under national or EU law*).

7. Financial and operational capacity and exclusion

Financial capacity

Applicants must have **stable and sufficient resources** to successfully implement the projects and contribute their share. Organisations participating in several projects must have sufficient capacity to implement all these projects.

The financial capacity check will be carried out on the basis of the documents you will be requested to upload in the [Participant Register](#) during grant preparation (*e.g. profit and loss account and balance sheet, business plan, audit report produced by an*

approved external auditor, certifying the accounts for the last closed financial year, etc). The analysis will be based on neutral financial indicators, but will also take into account other aspects, such as dependency on EU funding and deficit and revenue in previous years.

The check will normally be done for all beneficiaries, except:

- public bodies (entities established as public body under national law, including local, regional or national authorities)
- if the individual requested grant amount is not more than EUR 60.000.

If needed, it may also be done for affiliated entities.

If we consider that your financial capacity is not satisfactory, we may require:

- further information
 - an enhanced financial responsibility regime, i.e. joint and several responsibility for all beneficiaries or joint and several liability of affiliated entities (*see below, section 10*)
 - pre-financing paid in instalments
 - (one or more) pre-financing guarantees (*see below, section 10*)
- or
- propose no pre-financing
 - request that you are replaced or, if needed, reject the entire proposal.



For more information, see [Rules for Legal Entity Validation, LEAR Appointment and Financial Capacity Assessment](#).

Operational capacity

Applicants must have the **know-how, qualifications** and **resources** to successfully implement the projects and contribute their share (including sufficient experience in projects of comparable size and nature).

This capacity will be assessed together with the 'Quality and efficiency of the implementation' award criterion, on the basis of the competence and experience of the applicants and their project teams, including operational resources (human, technical and other) or, exceptionally, the measures proposed to obtain it by the time the task implementation starts.

If the evaluation of the award criterion is positive, the applicants are considered to have sufficient operational capacity.

Applicants will have to show their capacity via the following information:

- description of the consortium participants
- list of previous projects (key projects for the last 4 years in the area of the topic).

Additional supporting documents may be requested, if needed to confirm the operational capacity of any applicant.

Exclusion

Applicants which are subject to an **EU exclusion decision** or in one of the following **exclusion situations** that bar them from receiving EU funding can NOT participate¹¹:

- bankruptcy, winding up, affairs administered by the courts, arrangement with creditors, suspended business activities or other similar procedures (including procedures for persons with unlimited liability for the applicant's debts)
- in breach of social security or tax obligations (including if done by persons with unlimited liability for the applicant's debts)
- guilty of grave professional misconduct¹² (including if done by persons having powers of representation, decision-making or control, beneficial owners or persons who are essential for the award/implementation of the grant)
- committed fraud, corruption, links to a criminal organisation, money laundering, terrorism-related crimes (including terrorism financing), child labour or human trafficking (including if done by persons having powers of representation, decision-making or control, beneficial owners or persons who are essential for the award/implementation of the grant)
- shown significant deficiencies in complying with main obligations under an EU procurement contract, grant agreement, prize, expert contract, or similar (including if done by persons having powers of representation, decision-making- or control, beneficial owners or persons who are essential for the award/implementation of the grant)
- guilty of irregularities within the meaning of Article 1(2) of Regulation [2988/95](#) (including if done by persons having powers of representation, decision-making- or control, beneficial owners or persons who are essential for the award/implementation of the grant)
- created under a different jurisdiction with the intent to circumvent fiscal, social or other legal obligations in the country of origin or created another entity with this purpose (including if done by persons having powers of representation, decision-making- or control, beneficial owners or persons who are essential for the award/implementation of the grant).

Applicants will also be refused if it turns out that¹³:

- during the award procedure they misrepresented information required as a condition for participating or failed to supply that information
- they were previously involved in the preparation of the call and this entails a distortion of competition that cannot be remedied otherwise (conflict of interest).

¹¹ See Articles 136 and 141 of EU Financial Regulation [2018/1046](#).

¹² Professional misconduct includes: violation of ethical standards of the profession, wrongful conduct with impact on professional credibility, false declarations/misrepresentation of information, participation in a cartel or other agreement distorting competition, violation of IPR, attempting to influence decision-making processes or obtain confidential information from public authorities to gain advantage.

¹³ See Article 141 EU Financial Regulation [2018/1046](#).

8. Evaluation and award procedure

The proposals will have to follow the **standard submission and evaluation procedure** (one-stage submission + one-step evaluation).

An **evaluation committee** (assisted by independent outside experts) will assess all applications. Proposals will first be checked for formal requirements (admissibility, and eligibility, *see sections 5 and 6*). Proposals found admissible and eligible will be evaluated (for each topic) against the operational capacity and award criteria (*see sections 7 and 9*) and then ranked according to their scores.

For proposals with the same score (within a topic or budget envelope) the **priority order** will be determined according to the following approach:

Successively for every group of *ex aequo* proposals, starting with the highest scored group, and continuing in descending order:

- 1) Proposals will be prioritised according to the scores they have been awarded for the criterion 'Impact'; when these scores are equal, priority will be based on scores for 'Excellence' and lastly 'Quality and efficiency of the implementation'.
- 2) If two proposals with the same overall score have the same scores for all 3 criteria:
 - the proposal with the highest percentage of participants of private for profit organisations will be ranked first
 - the proposal with the highest percentage of budget assigned in the proposal to private for profit organisations will be ranked first.

All proposals will be informed about the evaluation result (**evaluation result letter**). Successful proposals will be invited for grant preparation; the other ones will be put on the reserve list or rejected.

 No commitment for funding — Invitation to grant preparation does NOT constitute a formal commitment for funding. We will still need to make various legal checks before grant award: *legal entity validation, financial capacity, exclusion check, etc.*

Grant preparation will involve a dialogue in order to fine-tune technical or financial aspects of the project and may require extra information from your side. It may also include adjustments to the proposal to address recommendations of the evaluation committee or other concerns. Compliance will be a pre-condition for signing the grant.

If you believe that the evaluation procedure was flawed, you can submit a **complaint** (following the deadlines and procedures set out in the evaluation result letter). Please note that notifications which have not been opened within 10 days after sending will be considered to have been accessed and that deadlines will be counted from opening/access (*see also [Funding & Tenders Portal Terms and Conditions](#)*). Please also be aware that for complaints submitted electronically, there may be character limitations.

9. Award criteria

The **award criteria** for this call are as follows:

- **Excellence (5 points):** clarity and consistency of the project, objectives and planning; extent to which they match the themes and priorities and objectives of the call; extent to which the proposed work is ambitious and goes beyond the state of the art; soundness of the proposed methodology, including the underlying concepts, models, assumptions, inter-disciplinary approaches
- **Impact (5 points):** viability of the pathways to achieve the expected outcomes and impacts specified in the call, and the likely scale and significance of the contributions from the project; suitability and quality of the measures to maximise the expected outcomes and impacts, as set out in the dissemination and exploitation plan, including communication activities
- **Quality and efficiency of the implementation (5 points):**
 - **Project design and implementation:** technical quality; logical links between the identified problems, needs and solutions proposed (logical frame concept); methodology for implementing the project (concept and methodology, management, procedures, timetable, risks and risk management, monitoring and evaluation); feasibility of the project within the proposed time frame; quality and effectiveness of the work plan, assessment of risks, and appropriateness of the effort assigned to work packages, and the resources overall; cost effectiveness (sufficient/appropriate budget for proper implementation; best value for money)
 - **Project team and cooperation arrangements:** quality of the consortium and project teams; appropriate procedures and problem-solving mechanisms for cooperating within the project teams and consortium; capacity and role of each participant, and the extent to which the consortium as a whole brings together the necessary expertise.
- **Annual priority bonus point:** this year there are no annual priorities

Award criteria	Minimum pass score	Maximum score
Excellence	3	5
Impact	3	5
Quality and efficiency of the implementation	3	5
Overall (pass) scores	10	15

Maximum points: 15 points.

Individual thresholds per criterion: 3/5, 3/5 and 3/5 points.

Overall threshold: 10 points.

Proposals that pass the individual thresholds AND the overall threshold will be considered for funding — within the limits of the available call budget (i.e. up to the budget threshold). Other proposals will be rejected.

10. Legal and financial set-up of the Grant Agreements

If you pass evaluation, your project will be invited for grant preparation, where you will be asked to prepare the Grant Agreement together with the EU Project Officer.

This Grant Agreement will set the framework for your grant and its terms and conditions, in particular concerning deliverables, reporting and payments.

The Model Grant Agreement that will be used (and all other relevant templates and guidance documents) can be found on [Portal Reference Documents](#).

Starting date and project duration

The project starting date and duration will be fixed in the Grant Agreement (*Data Sheet, point 1*). Normally the starting date will be after grant signature. Retroactive application can be granted exceptionally for duly justified reasons — but never earlier than the proposal submission date.

Project duration: *see section 6 above*

Milestones and deliverables

The milestones and deliverables for each project will be managed through the Portal Grant Management System and will be reflected in Annex 1 of the Grant Agreement.

The following deliverables will be mandatory for all projects:

- communication and dissemination plan
- comprehensive overview of the project (month 6)
- public publishable report (last month of the project)

Form of grant, funding rate and maximum grant amount

The grant parameters (*maximum grant amount, funding rate, total eligible costs, etc*) will be fixed in the Grant Agreement (*Data Sheet, point 3 and art 5*).

Project budget (requested grant amount): *see section 6 above*.

The grant will be a budget-based mixed actual cost grant (actual costs, with unit cost and flat-rate elements). This means that it will reimburse ONLY certain types of costs (eligible costs) and costs that were *actually* incurred for your project (NOT the *budgeted* costs). For unit costs and flat-rates, you can charge the amounts calculated as explained in the Grant Agreement (*see art 6 and Annex 2 and 2a of the Model Grant Agreement*).

The costs will be reimbursed at the funding rate fixed in the Grant Agreement depending on the topic:

- RFCS-01-2022-AM Coal Accompanying Measures : 100 %
- RFCS-02-2022-AM Steel Accompanying Measures : 100 %

- RFCS-01-2022-RPJ Coal Research Projects : 60 %
- RFCS-02-2022-RPJ Steel Research Projects : 60 %
- RFCS-01-2022-PDP Coal Pilot and Demonstration Projects: 50 %
- RFCS-02-2022-PDP Steel Pilot and Demonstration Projects: 50 %

Grants may NOT produce a profit (i.e. surplus of revenues + EU grant over costs). For-profit organisations must declare their revenues and, if there is a profit, we will deduct it from the final grant amount (*see Model Grant Agreement art 22.3*).

Moreover, please be aware that the final grant amount may be reduced in case of non-compliance with the Grant Agreement (*e.g. improper implementation, breach of obligations, etc*).

Budget categories and cost eligibility rules

The budget categories and cost eligibility rules are fixed in the Grant Agreement (Data Sheet, point 3, art 6 and Annex 2).

Budget categories for this call:

- A. Personnel costs
 - A.1 Employees, A.2 Natural persons under direct contract, A.3 Seconded persons
 - A.4 SME owners and natural person beneficiaries
- B. Subcontracting costs
- C. Purchase costs
 - C.2 Equipment
 - C.3 Other goods, works and services
- E. Indirect costs

Specific cost eligibility conditions for this call:

- personnel costs:
 - SME owner/natural person unit cost¹⁴ Yes
- equipment costs: depreciation only
- other cost categories:
 - costs for financial support to third parties: not allowed
- indirect cost flat-rate: 35% of the eligible personnel costs (category A, except volunteers costs, if any)
- VAT: non-deductible VAT is eligible (but please note that since 2013 VAT paid by beneficiaries that are public bodies acting as public authority is NOT eligible)
- other:

¹⁴ Commission [Decision](#) of 20 October 2020 authorising the use of unit costs for the personnel costs of the owners of small and medium-sized enterprises and beneficiaries that are natural persons not receiving a salary for the work carried out by themselves under an action or work programme (C(2020)7715).

- in-kind contributions for free are allowed, but cost-neutral, i.e. they cannot be declared as cost
- project websites: communication costs for presenting the project on the participants' websites or social media accounts are eligible; costs for *separate* project websites are not eligible
- other ineligible costs: No

Reporting and payment arrangements

The reporting and payment arrangements are fixed in the Grant Agreement (*Data Sheet, point 4 and art 21 and 22*).

After grant signature, you will normally receive a **pre-financing** to start working on the project (float of normally **40%** of the maximum grant amount; exceptionally less or no pre-financing). The pre-financing will be paid 30 days from entry into force/10 days before starting date/financial guarantee (if required) — whichever is the latest.

There will be one or more **interim payments** (with cost reporting through the use of resources report).

Payment of the balance: At the end of the project, we will calculate your final grant amount. If the total of earlier payments is higher than the final grant amount, we will ask you (your coordinator) to pay back the difference (recovery).

All payments will be made to the coordinator.

 Please be aware that payments will be automatically lowered if one of your consortium members has outstanding debts towards the EU (granting authority or other EU bodies). Such debts will be offset by us — in line with the conditions set out in the Grant Agreement (*see art 22*).

Please also note that you are responsible for keeping records on all the work done and the costs declared. The Grant Agreement contains additional record-keeping rules (*Data Sheet, point 3 and art 20*).

Prefinancing guarantees

If a pre-financing guarantee is required, it will be fixed in the Grant Agreement (*Data Sheet, point 4*). The amount will be set during grant preparation and it will normally be equal or lower than the pre-financing for your grant.

The guarantee should be in euro and issued by an approved bank/financial institution established in an EU Member State. If you are established in a non-EU country and would like to provide a guarantee from a bank/financial institution in your country, please contact us (this may be exceptionally accepted, if it offers equivalent security).

Amounts blocked in bank accounts will NOT be accepted as financial guarantees.

Pre-financing guarantees are formally NOT linked to individual consortium members, which means that you are free to organise how to provide the guarantee amount (*by one or several beneficiaries, for the overall amount or several guarantees for partial amounts, by the beneficiary concerned or by another beneficiary, etc.*). It is however important that the requested amount is covered and that the guarantee(s) are sent to us in time to make the pre-financing (scanned copy via Portal AND original by post).

If agreed with us, the bank guarantee may be replaced by a guarantee from a third party.

The guarantee will be released at the end of the grant, in accordance with the conditions laid down in the Grant Agreement.

Certificates

Depending on the type of action, size of grant amount and type of beneficiaries, you may be requested to submit different certificates. The types, schedules and thresholds for each certificate are fixed in the Grant Agreement (*Data Sheet, point 4 and art 24*).

Liability regime for recoveries

The liability regime for recoveries will be fixed in the Grant Agreement (*Data Sheet point 4.4 and art 22*).

For beneficiaries, it is one of the following:

- limited joint and several liability with individual ceilings — *each beneficiary up to their maximum grant amount*
- unconditional joint and several liability — *each beneficiary up to the maximum grant amount for the action*

or

- individual financial responsibility — *each beneficiary only for their own debts*.

In addition, the granting authority may require joint and several liability of affiliated entities (with their beneficiary).

Provisions concerning the project implementation

Ethics rules: *see Model Grant Agreement (art 14 and Annex 5)*

IPR rules: *see Model Grant Agreement (art 16 and Annex 5):*

- background and list of background: Yes
- protection of results: Yes
- exploitation of results: Yes
- additional information obligations relating to possible standardisation: Yes
- right to object to transfers and licensing: Yes
- rights of use on results: Yes
- access to results for policy purposes: Yes
- access to results in case of public emergency: Yes
- access rights to ensure continuity and interoperability obligations: No

Communication, dissemination and visibility of funding: *see Model Grant Agreement (art 17 and Annex 5):*

- communication and dissemination plan: Yes

- dissemination of results: Yes
- additional dissemination obligations: Yes
- additional communication activities: Yes
- open science: No
- additional obligations regarding the validation of scientific publications: No
- additional open science obligations in case of public emergency: No

Specific rules for carrying out the action: *see Model Grant Agreement (art 18 and Annex 5)*:

- Recruitment and working conditions for researchers: Yes

Non-compliance and breach of contract

The Grant Agreement (chapter 5) provides for the measures we may take in case of breach of contract (and other non-compliance issues).



For more information, see [AGA — Annotated Grant Agreement](#).

11. How to submit an application

All proposals must be submitted directly online via the Funding & Tenders Portal Electronic Submission System. Paper applications are NOT accepted.

Submission is a **2-step process**:

a) create a user account and register your organisation

To use the Submission System (the only way to apply), all participants need to [create an EU Login user account](#).

Once you have an EULogin account, you can [register your organisation](#) in the Participant Register. When your registration is finalised, you will receive a 9-digit participant identification code (PIC).

b) submit the proposal

Access the Electronic Submission System via the Topic page in the [Search Funding & Tenders](#) section (or, for calls sent by invitation to submit a proposal, through the link provided in the invitation letter).

Submit your proposal in 3 parts, as follows:

- Part A includes administrative information about the applicant organisations (future coordinator, beneficiaries, affiliated entities and associated partners) and the summarised budget for the proposal. Fill it in directly online
- Part B (description of the action) covers the technical content of the proposal. Download the mandatory word template from the Submission System, fill it in and upload it as a PDF file
- Annexes (*see section 5*). Upload them as PDF file (single or multiple depending on the slots). Excel upload is sometimes possible, depending on the file type.

The proposal must keep to the **page limits** (*see section 5*); excess pages will be disregarded.

Documents must be uploaded to the **right category** in the Submission System otherwise the proposal might be considered incomplete and thus inadmissible.

The proposal must be submitted **before the call deadline** (*see section 4*). After this deadline, the system is closed and proposals can no longer be submitted.

Once the proposal is submitted, you will receive a **confirmation e-mail** (with date and time of your application). If you do not receive this confirmation e-mail, it means your proposal has NOT been submitted. If you believe this is due to a fault in the Submission System, you should immediately file a complaint via the [IT Helpdesk webform](#), explaining the circumstances and attaching a copy of the proposal (and, if possible, screenshots to show what happened).

Details on processes and procedures are described in the [Online Manual](#). The Online Manual also contains the links to FAQs and detailed instructions regarding the Portal Electronic Exchange System.

12. Help

As far as possible, ***please try to find the answers you need yourself***, in this and the other documentation (we have limited resources for handling direct enquiries):

- 1) [Online Manual](#)
- 2) FAQs on the Topic page (for call-specific questions in open calls; not applicable for actions by invitation)
- 3) [Portal FAQ](#) (for general questions).

Please also consult the Topic page regularly, since we will use it to publish call updates. (For invitations, we will contact you directly in case of a call update).

Contact

For individual questions on the Portal Submission System, please contact the [IT Helpdesk](#).

Non-IT related questions should be sent to the following email address:

REA-RFCS@ec.europa.eu.

Please indicate clearly the reference of the call and topic to which your question relates (*see cover page*).

13. Important



IMPORTANT

- **Don't wait until the end** — Complete your application sufficiently in advance of the deadline to avoid any last minute **technical problems**. Problems due to last minute submissions (*e.g. congestion, etc*) will be entirely at your risk. Call deadlines can NOT be extended.
- **Consult** the Portal Topic page regularly. We will use it to publish updates and additional information on the call (call and topic updates).
- **Funding & Tenders Portal Electronic Exchange System** — By submitting the application, all participants **accept** to use the electronic exchange system in accordance with the [Portal Terms & Conditions](#).
- **Registration** — Before submitting the application, all beneficiaries, affiliated entities and associated partners must be registered in the [Participant Register](#). The participant identification code (PIC) (one per participant) is mandatory for the Application Form.
- **Consortium roles** — When setting up your consortium, you should think of organisations that help you reach objectives and solve problems.

The roles should be attributed according to the level of participation in the project. Main participants should participate as **beneficiaries** or **affiliated entities**; other entities can participate as associated partners, subcontractors, third parties giving in-kind contributions. **Associated partners** and third parties giving in-kind contributions should bear their own costs (they will not become formal recipients of EU funding). **Subcontracting** should normally constitute a limited part and must be performed by third parties (not by one of the beneficiaries/affiliated entities). Subcontracting going beyond 30% of the total eligible costs must be justified in the application.

- **Coordinator** — In multi-beneficiary grants, the beneficiaries participate as consortium (group of beneficiaries). They will have to choose a coordinator, who will take care of the project management and coordination and will represent the consortium towards the granting authority. In mono-beneficiary grants, the single beneficiary will automatically be coordinator.
- **Affiliated entities** — Applicants may participate with affiliated entities (i.e. entities linked to a beneficiary which participate in the action with similar rights and obligations as the beneficiaries, but do not sign the grant and therefore do not become beneficiaries themselves). They will get a part of the grant money and must therefore comply with all the call conditions and be validated (just like beneficiaries); but they do not count towards the minimum eligibility criteria for consortium composition (if any).
- **Associated partners** — Applicants may participate with associated partners if participation is in the EU interest (i.e. partner organisations which participate in the action but without the right to get grant money). They participate without funding and therefore do not need to be validated.
- **Consortium agreement** — For practical and legal reasons it is recommended to set up internal arrangements that allow you to deal with exceptional or unforeseen circumstances (in all cases, even if not mandatory under the Grant Agreement). The consortium agreement also gives you the possibility to redistribute the grant money according to your own consortium-internal principles and parameters (for instance, one beneficiary can reattribute its grant money to another beneficiary). The consortium agreement thus allows you to customise the EU grant to the needs inside your consortium and can also help to protect you in case of disputes.

- **Balanced project budget** — Grant applications must ensure a balanced project budget and sufficient other resources to implement the project successfully (*e.g. own contributions, income generated by the action, financial contributions from third parties, etc*). You may be requested to lower your estimated costs, if they are ineligible (including excessive).
- **No-profit rule** — Grants may NOT give a profit (i.e. surplus of revenues + EU grant over costs). This will be checked by us at the end of the project.
- **No double funding** — There is a strict prohibition of double funding from the EU budget (except under EU Synergies actions). Outside such Synergies actions, any given action may receive only ONE grant from the EU budget and cost items may under NO circumstances declared to two different EU actions.
- **Completed/ongoing projects** — Proposals for projects that have already been completed will be rejected; proposals for projects that have already started will be assessed on a case-by-case basis (in this case, no costs can be reimbursed for activities that took place before the project starting date/proposal submission).
- **Combination with EU operating grants** — Combination with EU operating grants is possible, if the project remains outside the operating grant work programme and you make sure that cost items are clearly separated in your accounting and NOT declared twice (see [AGA — Annotated Model Grant Agreement, art 6.2.E](#)).
- **Multiple proposals** — Applicants may submit more than one proposal for *different* projects under the same call (and be awarded a funding for them).

Organisations may participate in several proposals.

BUT: if there are several proposals for *very similar* projects, only one application will be accepted and evaluated; the applicants will be asked to withdraw one of them (or it will be rejected).

- **Resubmission** — Proposals may be changed and re-submitted until the deadline for submission.
- **Rejection** — By submitting the application, all applicants accept the call conditions set out in this this Call Document (and the documents it refers to). Proposals that do not comply with all the call conditions will be **rejected**. This applies also to applicants: All applicants need to fulfil the criteria; if any one of them doesn't, they must be replaced or the entire proposal will be rejected.
- **Cancellation** — There may be circumstances which may require the cancellation of the call. In this case, you will be informed via a call or topic update. Please note that cancellations are without entitlement to compensation.
- **Language** — You can submit your proposal in any official EU language (project abstract/summary should however always be in English). For reasons of efficiency, we strongly advise you to use English for the entire application. If you need the call documentation in another official EU language, please submit a request within 10 days after call publication (for the contact information, see *section 12*).

- **Transparency** — In accordance with Article 38 of the [EU Financial Regulation](#), information about EU grants awarded is published each year on the [Europa website](#).

This includes:

- beneficiary names
- beneficiary addresses
- the purpose for which the grant was awarded
- the maximum amount awarded.

The publication can exceptionally be waived (on reasoned and duly substantiated request), if there is a risk that the disclosure could jeopardise your rights and freedoms under the EU Charter of Fundamental Rights or harm your commercial interests.

- **Data protection** — The submission of a proposal under this call involves the collection, use and processing of personal data. This data will be processed in accordance with the applicable legal framework. It will be processed solely for the purpose of evaluating your proposal, subsequent management of your grant and, if needed, programme monitoring, evaluation and communication. Details are explained in the [Funding & Tenders Portal Privacy Statement](#).

Annex 1 - Technological readiness levels

Where the call conditions require a specific Technology Readiness Level (TRL), the following definitions apply, unless otherwise specified:

TRL 1 — Basic principles observed

TRL 2 — Technology concept formulated

TRL 3 — Experimental proof of concept

TRL 4 — Technology validated in a lab

TRL 5 — Technology validated in a relevant environment (industrially relevant environment in the case of key enabling technologies)

TRL 6 — Technology demonstrated in a relevant environment (industrially relevant environment in the case of key enabling technologies)

TRL 7 — System prototype demonstration in an operational environment

TRL 8 — System complete and qualified

TRL 9 — Actual system proven in an operational environment (competitive manufacturing in the case of key enabling technologies, or in space)

Annex 2 - Scope of the Technical Groups

Given the adoption of the [Council Decision \(EU\) 2021/1094 of 28 June 2021](#) Technical Groups scope should adapt to the new research objectives.

Coal Technical Groups – TGK

TGK1

Articles 4 and 5 of [Council Decision \(EU\) 2021/1094 of 28 June 2021](#)

Article 4

Supporting the just transition of the coal sector and regions

1. Research projects shall support the transition towards a climate-neutral Union economy by 2050, with the objective of supporting the phasing out of fossil fuels, developing alternative activities on former mine sites and avoiding or addressing the environmental damage from coal mines in the process of closure, formerly operating coal mines and their surroundings. Projects shall in particular focus on:

(a) the development and testing of carbon dioxide capture, use and storage technologies;

(b) the use of geothermal energy on former coal sites;

(c) non-energetic uses and the production of raw materials from mining wastes and residues from formerly operating coal mines or those in the process of closure, while duly ensuring that their climate, environmental and health impact is minimised and lower than alternative solutions;

(d) the repurposing of former coal and lignite mines as well as coal-related infrastructure¹⁵, including power supply services, in line with a climate-neutral and environmentally friendly transition;

(e) the promotion of the development of efficient reskilling and upskilling programmes for workers affected by a coal phase-out, including research on the training and reskilling of workers employed or previously employed in the coal sector.

2. Special attention shall be given to strengthening European leadership in managing the transition of formerly operating coal mines and coal-related infrastructure through technological and non-technological solutions, while supporting technology and non-technology transfer. Research activities with those objectives shall present tangible climate and environmental benefits in line with the objective of climate neutrality by 2050.

Article 5

Improving health and safety

1. Issues concerning safety in coal mines in the process of closure and formerly operating coal mines with a view to improving working conditions, occupational health and safety, as well as environmental issues deleterious to health, shall be taken into account in the projects covering the activities referred to in Article 4.

2. Research projects shall focus on diseases related to mining activities with the aim of improving the health of people living in coal regions in transition. Research projects

¹⁵ This includes coal power plants

shall also ensure protective measures during the closure of mines and in formerly operating mines.

TGK2

Articles 6 and 5 of [Council Decision \(EU\) 2021/1094 of 28 June 2021](#)

Article 6

Minimising the environmental impacts of coal mines in transition

1. Research projects shall seek to minimise the impacts of coal mines in the process of closure and of formerly operating mines on the atmosphere, water and soils. Research shall be geared towards preserving and restoring natural resources for future generations and minimising the environmental impact of coal mines in the process of closure and in formerly operating mines.

2. Preference shall be given to projects that envisage one or more of the following:

(a) new and improved technologies to avoid environmental pollution, including methane leakage, of coal mines in the process of closure, formerly operating mines and their surroundings (including the atmosphere, land, soils and water);

(b) capturing, avoiding and minimising greenhouse gas emissions, in particular methane, from coal deposits in the process of closure;

(c) managing and reusing mining waste, fly ash and desulphurisation products from coal mines in the process of closure and formerly operating coal mines, as well as, where relevant, other forms of waste;

(d) refurbishing waste heaps and using industrially residues from coal production and consumption in coal regions in transition;

(e) protecting water tables and purifying mine drainage water;

(f) restoring the environment of former installations or installations that are in the process of closure that used coal, and their surroundings, in particular water, land, soils and biodiversity;

(g) protecting surface infrastructure against the effects of subsidence and ground movements in the short and long term.

Article 5

Improving health and safety

1. concerning safety in coal mines in the process of closure and formerly operating coal mines with a view to improving working conditions, occupational health and safety, as well as environmental issues deleterious to health, shall be taken into account in the projects covering the activities referred to in Article 6.

Steel Technical Groups – TGA

TGA1 IRON- AND STEELMAKING

With reference to the [Council Decision \(EU\) 2021/1094 of 28 June 2021](#) the scope of TGA1 includes the following points

8 (a) new and improved breakthrough near-zero-carbon iron- and steel-making processes and operations, with particular attention to carbon direct avoidance or smart carbon usage, or both;

8 (b) [Upstream] steel process and process chain optimisation (including the reduction and pre-reduction of iron-ore, iron- and steel-making, processes based on recycled scrap melting, secondary metallurgy);

8 (c) steel [upstream] process integration and process efficiency in near-zero-carbon steel production;

8 (d) maintenance and reliability of [upstream] steel production tools;

8 (e) techniques for increasing recyclability, recycling and reuse of steel and developing a circular economy;

8 (f) techniques for increasing the energy efficiency of steel production by recovery of waste heat, prevention of energy losses, hybrid heating techniques and energy management solutions;

8 (g) innovative technologies and solutions for the iron- and steel-making processes promoting cross-sector activities, demonstration projects integrating zero-carbon energy production or contributing to a clean hydrogen economy.

10 (a) techniques for recycling obsolete steel and by-product from various sources and improvement of the quality of steel scrap;

10 (b) treatment of waste and recovery of valuable secondary raw materials, including slags, inside and outside the steel plant;

10 (e) utilisation of process gases and elimination of waste gases emissions from [upstream] steel production;

TGA2 DOWNSTREAM STEEL PROCESSING

With reference to the [Council Decision \(EU\) 2021/1094 of 28 June 2021](#) the scope of TGA2 includes the following points

8 (b) [Downstream] steel process and process chain optimisation (including casting, rolling, finishing and coating operations) via instrumentation, detection of properties of intermediate and final products, modelling, control and automation, including digitalisation, application of big data, artificial intelligence and any other advanced technologies);

8 (c) steel [downstream] process integration and process efficiency in near-zero-carbon steel production;

8 (d) maintenance and reliability of [downstream] steel production tools;

8 (f) techniques for increasing the energy efficiency of [downstream processes in] steel production by recovery of waste heat, prevention of energy losses, hybrid heating techniques and energy management solutions;

8 (g) innovative technologies and solutions for the [downstream] processes promoting cross-sector activities, demonstration projects integrating zero-carbon energy production or contributing to a clean hydrogen economy.

10 (e) utilisation of process gases and elimination of waste gases emissions from [downstream] steel production;

TGA3 CONCEPTION OF STEEL PRODUCTS

With reference to the [Council Decision \(EU\) 2021/1094 of 28 June 2021](#) the scope of TGA3 includes the following points

9 (a) new advanced steel grades;

9 (b) improvement of steel properties such as mechanical and physical properties, suitability for further processing, suitability for various applications and various working conditions;

9 (c) prolonging service life, in particular by improving the resistance of steels and steel structures to heat and corrosion, mechanical and thermal fatigue and other deteriorating effects;

9 (d) predictive simulation models on microstructures, mechanical properties and production processes;

9 (f) standardisation of testing and evaluation methods;

TGA4 STEEL APPLICATIONS AND SOLUTIONS FOR EXISTING AND NEW MARKETS

With reference to the [Council Decision \(EU\) 2021/1094 of 28 June 2021](#) the scope of TGA4 includes the following points

9 (e) technologies relating to the forming, welding and joining of steel and other materials;

9 (g) high-performance steels for applications like mobility, including sustainability, eco-design methods, retrofitting, lightweight design and safety solutions.

10 (d) design of steel grades and assembled structures to facilitate the easy recovery of steel for recycling or reuse;

10 (f) life cycle assessment and life cycle thinking concerning steel use.

TGA5 STEEL FACTORIES - SMART AND HUMAN

With reference to the [Council Decision \(EU\) 2021/1094 of 28 June 2021](#) the scope of TGA5 includes the following points

8 (b) [Holistic approaches to] steel process and process chain optimisation via instrumentation, detection of properties of intermediate and final products, modelling, control and automation, including digitalisation, application of big data, artificial intelligence and any other advanced technologies;

10 (c) pollution control and protection of the environment in and around the workplace and the steel plant (gaseous, solid or liquid emissions, water management, noise, odours, dust, etc.);

10 (f) life cycle assessment and life cycle thinking concerning steel production;

10a (a) developing and disseminating competencies to keep pace with new near-zero-carbon steel production processes, such as digitalisation, and to reflect the principle of lifelong learning;

10a (b) improving working conditions, including health, safety and ergonomics in and around the workplace.

Annex 3 - Evaluation form questions **for Research Projects and Pilot/Demonstration projects**

1. Excellence (5 points)

Extent to which the proposal matches the themes, priorities and objectives of the call.

Clarity and consistency of project, objectives and planning.

- Are the objectives of the proposal clearly described? Are they measurable and verifiable?

Extent to which the proposed work is ambitious and goes beyond the state of the art.

- To what extent do the applicants demonstrate their knowledge of the international state-of-the-art?
- To what extent is the proposed work ambitious, innovative, and goes beyond the state of the art (does it include novel concepts and approaches)?

Soundness of the proposed methodology, including the underlying concepts, models, assumptions, inter-disciplinary approaches

- Are the proposed methods and techniques, including any important challenges identified, clearly described?
- Is the scientific and technical feasibility of the proposed work, convincingly addressed?

2. Impact (5 points)

Viability of the pathways to achieve the expected outcomes and impacts specified in the call, and the likely scale and significance of the contributions from the project.

- Are there relevant and substantial expected benefits for the European Coal/Steel sector? Are these benefits credible?
- Do the expected results address the European Green Deal-related challenges and/or bring other important benefits for society?

Suitability and quality of the measures to maximise the expected outcomes and impacts, as set out in the dissemination and exploitation plan, including communication activities.

- To what extent do the expected results meet the technology readiness level (TRL) specified in the call?
- (for PDP only) Are economic issues adequately addressed and is the further demonstration or deployment of the proposed technology convincing?

- Are the proposed communication, dissemination, and exploitation measures suitable for the project and of good quality?

3. Quality and efficiency of the implementation (5 points)

30

Technical quality. Logical links between the identified problems, needs and solutions proposed (logical frame concept). Methodology for implementing the project (concept and methodology, management, procedures, timetable, risks and risk management, monitoring and evaluation). Feasibility of the project within the proposed time frame. Quality and effectiveness of the work plan, assessment of risks, and appropriateness of the effort assigned to work packages, and the resources overall.

- Are the work packages and claimed financial resources clearly described, well defined and appropriate?
- Is the overall schedule suitable for achieving the project objectives?
- Is the interaction of the partners and tasks clearly defined and functional to achieving the project objectives?

Quality of the consortium and project teams. Appropriate procedures and problem-solving mechanisms for cooperating within the project teams and consortium. Capacity and role of each participant, and the extent to which the consortium as a whole brings together the necessary expertise.

- Do individual partners have the necessary operational capacity to carry out the proposed action?

Evaluation form questions for Accompanying Measures

1. Excellence (5 points)

- Extent to which the proposal matches the themes, priorities and objectives of the call.

Clarity and consistency of project, objectives and planning.

- Are the objectives of the proposal clearly described? Are they measurable and verifiable?

Extent to which the proposed work is ambitious and goes beyond the state of the art. Soundness of the proposed methodology, including the underlying concepts, models, assumptions, inter-disciplinary approaches

- Is the proposal in line with the role of accompanying measures and does it disseminate new information?
- Does it effectively address the appropriate audience in the field concerned?

2. Impact (5 points)

Viability of the pathways to achieve the expected outcomes and impacts specified in the call, and the likely scale and significance of the contributions from the project.

- Do the actions proposed have a strategic importance for the European coal/steel industry?
- Do the intended accompanying measures:
 - have a potential direct impact on EU regulations and standards, on application at industrial level, on exploitation of new market opportunities, etc.,
 - contribute to policy initiatives on the digital, greening and circular transformation of the Coal and Steel communities, in line of the European Green Deal
 - and/or bring other important benefits for society?

Suitability and quality of the measures to maximise the expected outcomes and impacts, as set out in the dissemination and exploitation plan, including communication activities.

- Are the proposed communication and dissemination measures suitable and of good quality?

3. Quality and efficiency of the implementation (5 points)

30

Technical quality. Logical links between the identified problems, needs and solutions proposed (logical frame concept). Methodology for implementing the project (concept and methodology, management, procedures, timetable, risks and risk management, monitoring and evaluation). Feasibility of the project within the proposed time frame. Quality and effectiveness of the work plan, assessment of risks, and appropriateness of the effort assigned to work packages, and the resources overall.

- Are the work packages and claimed financial resources clearly described, well defined and appropriate?
- Is the overall schedule suitable for achieving the project objectives?
- Is the interaction of the partners and tasks clearly defined and functional to achieving the project objectives?

Quality of the consortium and project teams. Appropriate procedures and problem-solving mechanisms for cooperating within the project teams and consortium. Capacity and role of each participant, and the extent to which the consortium as a whole brings together the necessary expertise.

- Do individual partners have the necessary operational capacity to carry out the proposed action?
- Is the Consortium composition balanced in terms of the relevant stakeholders from industry and/or industry associations, academia and research centres participation?