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> **RECH 289 FIN 413 COMPET 452 ENER 260**

LEGISLATIVE ACTS AND OTHER INSTRUMENTS

Subject:

COUNCIL DECISION amending Decision 2008/376/EC on the adoption of the Research Programme of the Research Fund for Coal and Steel and on the multiannual technical guidelines for this programme



COUNCIL DECISION (EU) 2021/...

of ...

amending Decision 2008/376/EC on the adoption of the Research Programme of the Research Fund for Coal and Steel and on the multiannual technical guidelines for this programme

THE COUNCIL OF THE EUROPEAN UNION,

Having regard to the Treaty on the Functioning of the European Union,

Having regard to the Protocol (No 37) on the financial consequences of the expiry of the ECSC Treaty and on the Research Fund for Coal and Steel, annexed to the Treaty on European Union and to the Treaty on the Functioning of the European Union, and in particular the second paragraph of Article 2 thereof,

Having regard to the proposal from the European Commission,

Having regard to the opinion of the European Parliament¹,

¹ Opinion of 19 May 2021 (not yet published in the Official Journal).

Whereas:

- On 5 October 2016 the Union ratified the Paris Agreement adopted under the United Nations Framework Convention on climate change (hereinafter 'the Paris Agreement'). The Paris Agreement invites parties who have ratified it to strengthen the global response to the threat of climate change with a view to limiting global temperature rise to well below 2 °C.
- (2) In line with the Paris Agreement, on 11 December 2019 the Commission published a communication to the European Parliament, the European Council, the Council, the European Economic and Social Committee and the Committee of the Regions on the European Green Deal, committing to tackle climate and environmental-related challenges and to transform the Union 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. The communication on the European Green Deal, which sets out a new growth strategy, refers to the need to support clean steel breakthrough technologies leading to a zero-carbon steelmaking process by 2030 and to explore whether part of the funding liquidated under the European Coal and Steel Community can be used. The communication also states that all Union actions and policies should pull together to help the Union achieve a successful and just transition towards a sustainable future. In line with the 'do no harm' principle referred to in the communication, the objectives of the Research Programme of the Research Fund for Coal and Steel are being revised, so as to no longer cover activities that perpetuate the extraction, processing and unabated use of coal.

- (3) The Union has been pursuing an ambitious policy on climate action and has put in place a regulatory framework to achieve its 2030 greenhouse gas emission reduction target. In particular, Regulation (EU) 2018/1999 of the European Parliament and of the Council¹ sets out the legislative foundation for reliable, inclusive, cost-efficient, transparent and predictable governance of the Energy Union and climate action which ensures the achievement of the 2030 and long-term objectives and targets of the Energy Union in line with the Paris Agreement.
- In its communication to the European Parliament, the European Council, the Council, the European Economic and Social Committee and the Committee of the Regions on the Sustainable Europe Investment Plan and the European Green Deal Investment Plan, the Commission announced its intention to propose a revision of Council Decision 2008/376/EC² with the aim of enabling the funding of large clean steelmaking R&I breakthrough projects as well as research activities in the coal sector in line with the principles of the Just Transition Mechanism.

Regulation (EU) 2018/1999 of the European Parliament and of the Council of 11 December 2018 on the Governance of the Energy Union and Climate Action, amending Regulations (EC) No 663/2009 and (EC) No 715/2009 of the European Parliament and of the Council, Directives 94/22/EC, 98/70/EC, 2009/31/EC, 2009/73/EC, 2010/31/EU, 2012/27/EU and 2013/30/EU of the European Parliament and of the Council, Council Directives 2009/119/EC and (EU) 2015/652 and repealing Regulation (EU) No 525/2013 of the European Parliament and of the Council (OJ L 328, 21.12.2018, p. 1).

² Council Decision 2008/376/EC of 29 April 2008 on the adoption of the Research Programme of the Research Fund for Coal and Steel and on the multiannual technical guidelines for this programme (OJ L 130, 20.5.2008, p. 7).

- (5) In addition, the report on the monitoring and assessment of the Research Programme of the Research Fund for Coal and Steel ('the Research Programme') recommends to amend the research objectives for coal and steel set out in Chapter II, Sections 3 and 4, of Decision 2008/376/EC and to support breakthrough research in the steel sector as well as emblematic projects in the coal sector.
- (6) It is necessary therefore to align the objectives of the Research Programme of the Research Fund for Coal and Steel with international agreements, such as the Paris Agreement, as well as with the scientific, technological and political objectives of the Union on climate neutrality by 2050.
- (7) Co-programmed partnerships have been shown to be effective in pooling resources for a common European research objective. In order to help to reach a climate-neutral economy by 2050, it is necessary to set out the possibility of providing support via co-programmed European partnerships, in synergy and sequencing with other programmes. A European partnership could be an ideal instrument for pooling resources to support research on breakthrough technologies for the reduction of CO₂ emissions in the steel industrial sector.
- (8) Decision 2008/376/EC should therefore be amended accordingly,

HAS ADOPTED THIS DECISION:

Decision 2008/376/EC is amended as follows:

(1) in Article 2, the second paragraph is replaced by the following:

'The Research Programme shall provide support for collaborative research in the coal and steel sectors. The Research Programme shall also provide support for clean steel breakthrough technologies leading to near-zero-carbon steel making projects and research projects for managing the just transition of formerly operating coal mines or coal mines in the process of closure and related infrastructure in line with the Just Transition Mechanism and in compliance with Article 4(2) of Decision 2003/76/EC. The Research Programme shall be consistent with the political, scientific, and technological objectives of the Union, and shall complement the activities carried out in the Member States and within the existing Union Framework Programme for research, technological development and demonstration activities ("the Research Framework Programme").';

(2) Articles 4 to 6 are replaced by the following:

'Article 4

Supporting the just transition of the coal sector and regions

- 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 infrastructure, 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.

Improving health and safety

- 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 Articles 4 and 6.
- 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 shall also ensure protective measures during the closure of mines and in formerly operating mines.

Minimising the environmental impacts of coal mines in transition

- 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.';
- (3) Article 7 is deleted;
- (4) Articles 8 to 10 are replaced by the following:

New, sustainable and low-carbon steelmaking and finishing processes

Research and technological development shall aim to develop, demonstrate and improve near-zero-carbon steel production processes with a view to raising product quality and increasing productivity. Substantially reducing emissions, energy consumption, the carbon footprint and other environmental impacts, as well as conserving resources, shall form an integral part of the activities sought. Research projects shall address one or more of the following areas:

 (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;

- (b) 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, 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;
- (c) steel process integration and process efficiency in near-zero-carbon steel production;
- (d) maintenance and reliability of steel production tools;
- techniques for increasing recyclability, recycling and reuse of steel and developing a circular economy;
- (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;
- (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.

Article 9 Advanced steel grades and applications

Research and technological development shall focus on meeting the requirements of steel users to develop new near-zero-carbon products and on creating new market opportunities while reducing emissions and environmental impacts. In the context of the technologies referred to in Article 8, research projects shall address one or more of the following areas, with the objective of delivering near-zero-carbon and sustainable steel production processes in the Union:

- (a) new advanced steel grades;
- (b) improvement of steel properties such as mechanical and physical properties, suitability for further processing, suitability for various applications and various working conditions;
- (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;
- (d) predictive simulation models on microstructures, mechanical properties and production processes;
- (e) technologies relating to the forming, welding and joining of steel and other materials;

- (f) standardisation of testing and evaluation methods;
- (g) high-performance steels for applications like mobility, including sustainability, eco-design methods, retrofitting, lightweight design and safety solutions.

Conservation of resources, protection of the environment and circular economy

In both steel production and steel utilisation, the conservation of resources, the preservation of ecosystems, the transition to a circular economy and safety issues shall form an integral part of the research and technological development work. Research projects shall address one or more of the following areas:

- (a) techniques for recycling obsolete steel and by-product from various sources and improvement of the quality of steel scrap;
- (b) treatment of waste and recovery of valuable secondary raw materials, including slags, inside and outside the steel plant;
- (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.);

- (d) design of steel grades and assembled structures to facilitate the easy recovery of steel for recycling or reuse;
- (e) utilisation of process gases and elimination of waste gases emissions from steel production;
- (f) life cycle assessment and life cycle thinking concerning steel production and use.';
- (5) in Chapter II, Section 4, the following article is inserted:

'Article 10a

Management of work force and working conditions

Research projects shall address one or more of the following areas:

- (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;
- (b) improving working conditions, including health, safety and ergonomics in and around the workplace.';

(6) the following article is inserted:

[•]Article 17a European Partnerships

 Part of the Research Programme, namely research on breakthrough technologies for the reduction of CO₂ emissions in the steel industrial sector, may be implemented through co-programmed European Partnerships established in accordance with the rules set out in Article 10 and Annex III to Regulation (EU) 2021/695 of the European Parliament and of the Council^{*}.

- 2. For the purposes of this Article, a co-programmed European Partnership means an initiative prepared with early involvement of Member States, where the Union, together with private or public partners or both (such as: industry; universities; research organisations; bodies with a public-service mission at local, regional, national or international level; and civil society organisations, including foundations and NGOs), commit to jointly support the development and implementation of a programme of research activities. Co-programmed European Partnerships are set up on the basis of memoranda of understanding or contractual arrangements between the Commission and such private or public partners or both specifying the objectives of the partnership, related commitments for financial or in-kind contributions, or both, of the partners, key performance and impact indicators, and outputs to be delivered. They include the identification of complementary research activities that are implemented by the partners and by the Research Programme.
- In the framework of co-programmed European Partnerships, the Research Programme may provide funding to activities eligible under this Section, in the form foreseen under Article 30. In addition, it may provide funding on the form of prizes.

4. Funding to activities under this Section shall follow the dedicated calls for proposals referred to in Article 25(2) and (3).

(7) Article 39 is replaced by the following:

Article 39 Appointment of independent and highly qualified experts

For the appointment of independent and highly qualified experts referred to in Article 18, Article 28(2) and Article 38, the provisions set out in Article 237 of Regulation (EU, Euratom) No 2018/1046 of the European Parliament and of the Council* shall apply.

^{*} Regulation (EU) 2021/695 of the European Parliament and of the Council of 28 April 2021 establishing Horizon Europe – the Framework Programme for Research and Innovation, laying down its rules for participation and dissemination, and repealing Regulations (EU) No 1290/2013 and (EU) No 1291/2013 (OJ L 170, 12.5.2021, p. 1).';

^{Regulation (EU, Euratom) 2018/1046 of the European Parliament and of the Council of 18 July 2018 on the financial rules applicable to the general budget of the Union, amending Regulations (EU) No 1296/2013, (EU) No 1301/2013, (EU) No 1303/2013, (EU) No 1304/2013, (EU) No 1309/2013, (EU) No 1316/2013, (EU) No 223/2014, (EU) No 283/2014, and Decision No 541/2014/EU and repealing Regulation (EU, Euratom) No 966/2012 (OJ L 193, 30.7.2018, p. 1).';}

(8) in Article 41, point (c) is deleted.

Article 2

This Decision shall enter into force on the twentieth day following that of its publication in the *Official Journal of the European Union*.

Done at ...,

For the Council The President