Ref. Ares(2025)2583577 - 31/03/2025

European Commission

Annual Activity Report 2024

annexes

DIRECTORATE GENERAL FOR ENERGY

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ANNEX 1: Statement of the Director(s) in charge of Risk Management and Internal Control

For the director in charge of risk management and internal control:

I declare that in accordance with the Commission's communication on the internal control framework ([1]), I have reported my advice and recommendations on the overall state of internal control in the DG to the Director-General.

I hereby certify that the information provided in section 2 of the present annual activity report and in its annexes is, to the best of my knowledge, accurate and complete.

Brussels, 31 March 2025

Anne MONTAGNON

e-signed

For the director taking responsibility for the completeness and reliability of management reporting on results and on the achievement of objectives:

I hereby certify ([2]) that the information provided in section 1 of the present annual activity report and in its annexes is, to the best of my knowledge, accurate and complete.

Brussels, 31 March 2025

Pierre SCHELLEKENS

e-signed

([1]) C(2017)2373 of 19.04.2017.
([2]) On the basis of the AOSD reports submitted by the Directors in DG ENER.

ANNEX 2: Performance tables

General objective 1: European Green Deal

Impact indicator: Share of renewable energy in gross final energy consumption ([3])
Source of the data: Eurostat (Eurostat online data code: sdg_07_40)

Baseline (2018)	Interim Milestone (2020)	Target (2030)	Latest known results (2023)
19.1%	20%	42.5%	With a RES share of 24.5%, we are 18 pp short of the 2030 target, with seven more years to go. To achieve the 18 pp, this would require an unprecedented speed in the deployment of RES (about 2.5 pp per year compared to about 1.5 pp between 2022 and 2023). Moreover, currently, there is a risk that the contributions from the final NECPs will not add up to the 42.5%.

Impact indicator: Primary energy consumption ([4])
Source of the data: Eurostat (Eurostat online source code: sdg_07_10)

Baseline (2018)	Interim Milestone (2020)	Target (2030)	Latest known results (2023)
1376 MTOE	1483 MTOE	1273 MTOE	1208.5 MTOE

Impact indicator: Greenhouse gas emissions intensity of energy consumption ([5])
Source of the data: Eurostat [Eurostat online data code: sdg_13_20]

Baseline (2017)	Interim Milestone (2022)	Target (2030)	Latest known results (2023)
86.9%	decrease	decrease	Greenhouse gas emissions intensity of energy consumption continues to inch down

([3]) Renewable energy generation is given as the share of renewable energy consumption in gross final energy consumption. The gross final energy consumption is the energy used by end consumers (final energy consumption) plus grid losses and self-consumption of power plants.

([4]) Primary energy consumption covers the energy consumption by end users such as industry, transport, households, services and agriculture, plus energy consumption by the energy sector itself for the production and transformation of energies, losses occurring during the transformation of energies (for example, the efficiency of electricity production from combustible fuels) and the transmission and distribution losses of energy. Expressed in million tonnes of oil equivalent (MTOE).

([5]) The greenhouse gas emissions intensity of energy consumption is the ratio between energy-related greenhouse gas emissions and gross inland consumption of energy. It expresses how many tonnes of CO2 equivalent of energy-related greenhouse gases are emitted per unit of energy consumed. A decrease signifies either burning relatively less fossil fuels or switching to fossil fuels with lower carbon intensity (e.g. from coal to natural gas). Index: 2000 = 100

Specific objective 1 *Energy is clean, affordable and secure* *Related to spending programme(s): Recovery and Resilience Facility, European Structural and Investment Funds, InvestEU, Horizon Europe, Connecting Europe Facility, LIFE, Renewable Financing Mechanism*			
Result indicator: Adoption of the Energy System Integration Strategy and the Hydrogen Strategy ([6]) **Source of the data:** DG ENER			
Baseline (2019)	**Interim Milestone** (2020)	**Target** (2024)	**Latest known results** (2024)
Announcement of the Energy System Integration Strategy in the European Green Deal roadmap for June 2020	Adoption of the Strategies	100% of the actions stemming from Strategies are in line with the European Green Deal objectives	The ESI Strategy lists 42 key actions associated with the six pillars. The majority of the actions as of October 2023 were either implemented/partly implemented (28 actions out of the 42) or on track (4 actions), with 2 actions dropped, and 8 being continuous actions. For H2 strategy: 2024 saw the completion of the major building blocks of the European hydrogen framework. origin and recycled carbon fuels clarifying the rules for renewable hydrogen (in force); -Selection of 65 priority hydrogen infrastructure projects (pipelines, storages, terminals and electrolysers) through the list of Projects of Common interest and Projects of Mutual Interest (under TEN-E Regulation).

([6]) This indicator measures the fulfilment of one of the initiatives included in the roadmap of the European Green Deal and the actions which will be triggered.

Result indicator: Completion of EU Market Coupling ([7]) **Source of the data:** DG ENER & European Union Agency for the Cooperation of Energy Regulators (ACER)			
Baseline (2019) Market coupling for electricity trade in the "intraday" and "day-ahead" timeframe not completed in parts of Europe (notably South-East Europe)	**Interim Milestone** (2022) Day-ahead market coupling at all EU borders (inclusion of 11 outstanding borders in Single Day Ahead Coupling") by the end of 2022	**Target** (2024) Completion of day-ahead and intraday market coupling at all EU borders	**Latest known results** (2024)
19 Member States coupled to the pan-EU day-ahead market; 22 coupled to the pan-EU intraday market.	All Member States with interconnector coupled for day-ahead electricity trading.	All Member States with interconnectors coupled for day-ahead and intraday trading	All EU MS coupled in DA and ID already in 2022
Result indicator: Adoption and full implementation in line with the European Green Deal objectives of the revised TEN-E Regulation and 6th Project of Common Interest (PCI) list ([8]) **Source of the data:** DG ENER			
Baseline (2019)	**Interim Milestone** (2020)	**Target** (2024)	**Latest known results** (2024)
Current TEN-E framework which, while having broad progress on market integration, security of supply and integration of renewables, is not fully aligned yet with Green Deal objectives.	Adoption of the Commission proposal.	Entry into force of 6th Project of Common Interest (PCI) list based on new legislative framework and hence fully in line with the European Green Deal objectives.	6th PCI list entered into force in April 2024

([7]) The indicator measures the status of the expansion of EU-wide electricity market coupling (i.e. central trading platform) for "day-ahead" and "intraday" electricity trading.

([8]) This indicator measures the fulfilment of one of the initiatives included in the roadmap of the European Green Deal including adoption of the Commission proposal, agreement by the co-legislator and full implementation.

Result indicator: National Energy and Climate Plans (NECPs) implement European Green Deal and EU post-2020 energy and climate goals, and thereby contribute to economic recovery ([9]) **Source of the data:** DG ENER			
Baseline (2019)	**Interim Milestone** (2023)	**Target** (2024)	**Latest known results** (2024)
Final National Energy and Climate Plan (NECPs) detailing existing and additional policies and measures to be implemented in the period 2020-30	100% of the policies and measures introduced by Member States, reflected in their National Energy and Climate Plans (NECPs) and Integrated Progress Reports, are in line with the European Green Deal objectives and contribute to the economic recovery	100% of the policies and measures introduced by Member States in their revised National Energy and Climate Plans (NECPs) are in line with the European Green Deal objectives and thereby contribute to the economic recovery	Not all policies and measures reflected in Member States' (draft) updated NECP fully reflect the European Green Deal objectives/REPowerEU. The Commission in its recommendations on draft updated NECPs called on Member States to address shortcomings. Some Member States have scope to increase the ambition of their NECPs, and to better map investment needs towards the achievement of the targets. Stakeholders report the usefulness of NECPs to deliver investment certainty leading to economic recovery. Not all the Member States submitted their final updated NECPs by the legal deadline of 30 June 2024 (nine Member States still have not complied with this obligation by end of 2024).

Result indicator: Share of nuclear material under full scope safeguards verification activities ([10]) **Source of the data:** DG ENER			
Baseline (2019)	**Interim Milestone** (2022)	**Target** (2024)	**Latest known results** (2024)
99.92%	Value to be kept above 99.90 %	Value to be kept above 99.90 %	The target value is calculated as every year including the inspections scheduled for the year and performed until the end of January of the following year. At the end of December 2024, the figure is 99.79%. A figure above 99.90% will likely be achieved in January 2025, taking into account the remaining planned inspections from 2024.

([9]) Under the Governance Regulation Member States are required to submit progress reports every 2 years starting in 2021 and an updated National Energy and Climate Plan (NECP) to the Commission by 2024. The indicator measures how Member States - via their progress reports and revised NECPs - implement their national energy and climate policies to contribute towards the achievements of EU 2030 energy and climate targets and climate neutrality in 2050, including increased ambition level for 2030, thereby contributing to economic recovery.

([10]) Percentage share of all civil nuclear materials held in the EU subject to accountancy verifications, physical inventory verifications and material balance evaluation.

Result indicator: Supporting the highest standards on nuclear safety in the EU ([11])
Source of the data: Commission's data on the Member States' transposition and implementation of the below mentioned directives, including notified transposition measures, information from Member States received through EU Pilots and infringement procedures, complaints, petitions and Member States' implementation reports as required by the Directives and data provided by nuclear operators. Detailed/final decommissioning plans; Commission's work programmes; biyearly monitoring reports and inspections; EVM (Earned Value Management) data per each programme

Baseline (2020) Progress of the implementation of the Euratom legal framework	**Interim Milestone** (2021)	**Target** (2024)	**Latest known results** (2024)
Nuclear Safety Directive (NSD) completeness transposition checks finalised; EU Pilots launched on conformity aspects	Nuclear Safety Directive (NSD) conformity checks completed, i.e. all infringement procedures launched (if any); Adoption of the 2nd Commission report on the implementation of the NSD (2022)	Completeness and conformity checks completed for the Nuclear Safety Directive (NSD), Basic Safety Standards (BSS) Directive and Radioactive Waste Directive (RWD), i.e. all infringement procedures launched (if any) and where possible closed, or in Court	Nuclear Safety Directive: By 2019, completeness checks finalised by closing all infringement cases. By 2022, conformity checks finalised by closing all EU Pilots. Implementation work ongoing based on the Commission's 2022 second progress report on the Directive's implementation. Commission contract (2023 - 2025) to identify good implementation practices that could be recommended for wider implementation in the areas of regulatory independence, nuclear safety objective, safety culture - due in 2025. The study's findings will be discussed with the relevant stakeholders in 2025.

([11]) This indicator measures the achieved levels of transposition and implementation of the recently adopted Euratom Directives in the area of nuclear energy with a view to ensuring nuclear safety, radiation protection, and the responsible management of radioactive waste and spent fuel. The indicator also measures the progress in the implementation of the EU Nuclear Decommissioning Assistance Programmes in Lithuania, Bulgaria and Slovakia towards the decommissioning end states defined in the relevant detailed plans.

Basic Safety Standards (BSS) Directive completeness transposition checks ongoing at advanced level, several infringement procedures pending	Basic Safety Standards (BSS) Directive completeness checks completed, i.e. all infringement procedures launched	Completeness and conformity checks completed for the Basic Safety Standards (BSS) Directive, i.e. all infringement procedures launched (if any) and where possible closed, or in Court	Basic Safety Standards Directive: BSS Directive completeness checks: one case against ES still open after CJEU judgment BSS conformity checks: infringements opened against 12 MS (4 still ongoing but close to completion), conformity checks completed with no infringements opened for 9 MS, technical exchanges ongoing with 5 MS. Finally, conformity check to be launched for ES in Q1/Q2 2025, as last transposition measure was recently notified.
Radioactive Waste Directive (RWD) Completeness and conformity transposition checks finalised - follow-up of open infringement procedures ongoing	Adoption of 3rd Commission report on the implementation of the Radioactive Waste Directive (RWD) (2022)	Completeness and conformity checks completed i.e. all infringement procedures launched (if any) and where possible closed, or in Court	Adoption of 3rd Commission report on the implementation of the Radioactive Waste Directive (RWD): Done - Adopted in May 2024
Baseline (2020) Second Topical Peer Review (TPR) under the NSD	**Interim Milestone** (2021)	**Target** (2024)	**Latest known results** (2024)
Launch of preparatory work	Decision on the topic of the 2nd Topical Peer Review (TPR);	2nd Topical Peer Review (TPR) completed based on the reports submitted by nuclear operators and Member States' competent authorities.	By end Dec 2024 ([12]), the peer review activities involving the nominated experts' review of the national reports submitted by nuclear operators and MS's competent authorities has been completed. 22 country review reports containing short descriptions of the national fire protection approach and the peer review findings have been produced. The final summary report detailing observations on thematic areas has been produced, and is due to be issued by the TPR Board for endorsement by participating countries in ENSREG
Baseline (2020) Progress of the EU Nuclear Decommissioning Assistance Programmes:	**Interim Milestone** (2023)	**Target** (2024)	**Latest known results** (2022)

([12]) Source of information: TPR-II reporting to ENSREG.

(2020, Q1) - Ignalina Programme (LT) Earned Value (EV) = 1252 MEUR ([13]) (37%) - Kozloduy Programme (BG) EV = 734 MEUR (55%) - Bohunice Programme (SK) EV = 628 MEUR (51%)	- Ignalina Programme (LT) EV = 1637 MEUR (48%) - Kozloduy Programme (BG) EV = 1106 MEUR (82%) - Bohunice Programme (SK) EV = 856 MEUR (70%)	-Ignalina Programme (LT) Earned Value (EV) = 1731 (51%) -Kozloduy Programme (BG) EV = 1146 MEUR (84%) -Bohunice Programme (SK) EV = 920 MEUR (75%) The Detailed Decommissioning Plan for the Bohunice Programme has been updated in 2022, reflecting the new end date (Dec 2027) agreed with the Commission. This new baseline implied modifications in both interim milestone 2023 and target 2024.	Realisation as of June 2024 (approved monitoring reports ([14])): Ignalina Programme: 1547 MEUR Kozloduy Programme: 958 MEUR Bohunice Programme: 865 MEUR Programmes are experiencing delays. In the case of Bohunice and Kozloduy this delay is visible by the fact that the projected end-date of the decommissioning is being pushed further (end 2029 for Bohunice and end 2032 for Kozloduy)

Main outputs in 2024:

New policy initiatives

Output	Indicator	Target	Latest known results (situation on 31/12/2024)
Climate Target Plan 2040 (CLIMA lead, ENER Co-responsible)	Adoption	Q1 2024	Adopted: 6.2.2024 COM(2024)63
Communication on Industrial Carbon Management	Adoption	Q1 2024	Adopted: 6.2.2024 COM(2024)62

Initiatives linked to regulatory simplification and burden reduction

Output	Indicator	Target	Latest known results (situation on 31/12/2024)
Commission Implementing Regulation (EU) No .../... establishing a guideline on capacity allocation and congestion management (recast) and amending Commission Regulation (EU) 2017/1485 of 2 August 2017 establishing a guideline on electricity transmission system operation	Adoption	Q4 2024	The revision of the guideline on capacity allocation and congestion management (CACM) is ongoing, with comitology process expected to start in the first half of 2025.
Commission Regulation (EU) 2016/631 of 14 April 2016 establishing a Network Code on requirements for grid connection of generators	Adoption	Q3 2024	The revision of the Network Code on requirements for grid connection of generators is ongoing, with comitology process expected to start in the first half of 2025.

([13]) MEUR (Million Euros).
([14]) Source of information: Monitoring reports for the 3 NDAP programmes and the updated IPS.

Output	Indicator	Target	Latest known results (situation on 31/12/2024)
Commission Regulation (EU) 2016/1388 of 17 August 2016 establishing a Network Code on Demand Connection	Adoption	Q3 2024	The revision of the Network Code on Demand Connection is ongoing, with comitology process expected to start in 2025.
Evaluations and fitness checks			
Output	**Indicator**	**Target**	**Latest known results (situation on 31/12/2024)**
Report from the European Commission to the European Parliament and Council on the Article 45 review of the Regulation on the Governance of the Energy Union and Climate Action.	Adoption	Q2 2024	Adopted: 11.9.2024 COM(2024)550
Report from the Commission to the Council: review on the functioning of Regulation (EU) 2022/1369 on coordinated gas demand reduction	Adoption	Q1 2024	Adopted: 27.2.2024 COM(2024)88
Commission Report to the European Parliament and to the Council on certain aspects concerning gas storage based on Regulation (EU) 2017/1938 of the European Parliament and of the Council	Adoption	Q1 2024	Adopted: 27.2.2024 COM(2024)89
Evaluation of the European Union Agency for the Cooperation of Energy Regulators (ACER) pursuant to Article 45 of Regulation (EU) 2019/942 and of the implementation of Commission Decision (EU) 2020/2152 on fees due to ACER pursuant to Article 32 of Regulation (EU) 2019/942	Adoption	Q3 2024	Abandoned
Interim evaluation of the programme for the decommissioning of nuclear facilities and the management of radioactive waste in JRC sites, Bulgaria (Kozloduy), Lithuania (Ignalina) and Slovakia (Bohunice)	Adoption	Q4 2024	New target date: Q4 2025 Reason for delay: The evaluation of ACER will be combined with the evaluation of ACER's founding act Regulation (EU) 2019/942 which is due by Q4 2025
Other important outputs			
Output	**Indicator**	**Target**	**Latest known results (situation on 31/12/2024)**
Commission Recommendation and guidance on design elements of renewable energy auctions	Adoption	Q2 2024	Adopted: 13.5.2024 C(2024)2650
Delegated Regulation on sector-specific rules for cybersecurity aspects of cross-border electricity flows	Adoption	Q1 2024	Adopted: 11.3.2024 C(2024)1383

Output	Indicator	Target	Latest known results (situation on 31/12/2024)
Report on the State of the Energy Union	Adoption	Q4 2024	Adopted: 11.9.2024 COM(2024)404
Commission Communication on the evaluation of the decommissioning programmes to the European Parliament and the Council	Adoption	Q4 2024	Delayed: The evaluation has to take into account the outcome of the procurement for Project D4.7 under the Bohunice programme, the last major project that defines the end date of the programme.
Commission Recommendation on the use of dose coefficients for the estimation of the effective dose and equivalent dose under Council Directive 2013/59/Euratom	Adoption	Q1 2024	Adopted: 02.02.2024 C(2024)563
Commission delegated regulation on the update of the list of cross-border renewable energy projects under Connecting Europe Facility (call for applications in 2023)	Adoption	Q2 2024	Adopted: 19.9.2023 C(2024)6133
Update Commission Recommendation on speeding up permit-granting procedures for renewable energy projects and facilitating Power Purchase Agreements	Adoption	Q2 2024	Adopted: 13.5.2024 C(2024)2660
Guidance on the designation of renewable acceleration areas	Adoption	Q2 2024	Adopted 13.5.2024 SWD(2024) 333 final
Commission Guidance to Member States on how to promote the development of innovative forms of solar energy deployment	Adoption	Q2 2024	Delayed: Expansion of the scope in order to also include innovative forms of deployment for other renewable energy sectors and other innovative technologies that help reduce the amount of land required for renewables, was deemed necessary.
Commission implementing decision on the selection and award of grants for actions contributing to Projects of Common Interest under the Connecting Europe Facility in the field of trans-European energy infrastructure (call for proposals in 2023)	Adoption	Q1 2024	Adopted: 24.1.2024 C(2024)364
Commission implementing decision on the selection and award of grants for actions contributing to Projects of Common Interest under the Connecting Europe Facility in the field of trans-European energy infrastructure (call for proposals in 2024)	Adoption	Q3 2024	Adoption expected by the end of February 2025

Output	Indicator	Target	Latest known results (situation on 31/12/2024)
Commission Notice on the Guidance for a specific benefit and cost sharing for the deployment of the of the sea-basin integrated offshore development plans	Adoption	Q2 2024	Adopted: 27.6.2024 C(2024)3998
Report from the Commission to the European Parliament and the Council on the implementation of the European Energy Programme for Recovery and the European Energy Efficiency Fund (Year 2022)	Adoption	Q3 2024	Postponed to Q4 2025. This Annual Report is the last one. DG ENER had to wait for the closure of a Project that was delayed
Commission Decision amending Decision (EU) 2020/2152 on fees due to the European Union Agency for the Cooperation of Energy Regulators for tasks under Regulation (EU) No 1227/2011 of 25 October 2011 on wholesale energy market integrity and transparency	Adoption	Q4 2024	The fee scheme is linked to data reporting under Commission Implementing Regulation (EU) No 1348/2014 on data reporting under REMIT which is due to be revised by Q2 2025
Commission's views in accordance with Article 43 of the Euratom Treaty concerning the investment project of "extending the existing disposal facility for low and intermediate level waste (SFR)"	Adoption	Q1 2024	Adopted: 22.4.2024 C(2024)2747
Commission's views in accordance with Article 43 of the Euratom Treaty concerning the investment project of "operating license applications for lifetime extensions of Loviisa Nuclear power plant and low and intermediate level waste repository"	Adoption	Q2 2024	With the communication dated 19 April 2024, the Commission received a notification on additional investment project related to the lifetime extension of the Loviisa nuclear power plant. This required further legal and technical assessments to ensure consistency with the previously notified investment project. Adoption is postponed to early 2025.
Commission's views in accordance with Article 43 of the Euratom Treaty concerning the investment project of "program to replacement of Instrumentation and Control systems Lifetime Management (ICMA) of OL1 and OL2 nuclear power plant units"	Adoption	Q2 2024	Adopted on 25.11.2024 C(2024)8359 Assessment of the notification required several rounds of questions and requests for clarifications, in particular to ensure consistency with the investment project notified at the later stage.
Commission's views in accordance with Article 43 of the Euratom Treaty concerning the investment project of "Cernavoda NPP Units 3 and 4"	Adoption	Q1 2024	Adopted: 28.6.2024 C(2024)4569

Output	Indicator	Target	Latest known results (situation on 31/12/2024)
Commission's views in accordance with Article 43 of the Euratom Treaty concerning the investment project of "construction of a pair of nuclear reactors at the Penly (Seine-Maritime) site in France"	Adoption	Q3 2024	Assessment of the notification required several rounds of questions and requests for clarifications. The last clarification from the investor was received on 22 November 2024. Adoption is postponed to early 2025.
Commission's views in accordance with Article 43 of the Euratom Treaty concerning the investment project to "extend the enrichment capacities of the Georges Besse II (GBII) enrichment plant located at the Tricastin site (France)"	Adoption	Q3 2024	Adopted: 9.10.2024 C52024)6969
Commission's views in accordance with Article 43 of the Euratom Treaty concerning the investment project to "replace Core Shroud Head (CSH) and the feed of the Emergency Core Cooling (ECC) of OL1 and OL2 nuclear power plant units"	Adoption	Q3 2024	Adopted: 25.11.2024 C(2024)8359

Specific objective 2 *Building, renovations and application of the Energy Efficiency first principle ([15])*
Related to spending programme(s): Related to spending programme(s): Recovery and Resilience Facility, European Structural and Investment Funds, InvestEU, Horizon Europe, LIFE, European Energy Efficiency Fund

Result indicator: Final energy consumption
Source of the data: Eurostat (Eurostat online source code: sdg_07_11)

Baseline (2017)	Interim Milestone ([16]) (2020)	Target (2030)	Latest known results (2023)
989 MTOE ([17]) (for EU27_2020)	1086 MTOE (EU28) 959 MTOE (for EU27_2020)	846 MTOE (for EU27_2020)	Final energy consumption reached 894 Mtoe in 2023, a 3.0% decrease compared with 2022. In 2023, final energy consumption was 17.2% above the 2030 target (763 Mtoe), compared with 20.8% the year before.

([15]) Final energy consumption covers the total energy consumed by end users, such as households, industry and agriculture. It is the energy which reaches the final consumer's door and excludes that which is used by the energy sector itself. Expressed in million tonnes of oil equivalent (MTOE).
([16]) The column should be deleted if only short-and medium term (less than 3 years) targets are set.
([17]) MTOE = million tonnes of oil equivalent.

Result indicator: Final energy consumption in households by type of fuel [18] **Source of the data:** Eurostat (Eurostat online source code: ten00125)			
Baseline (2017)	**Interim Milestone** (2020)	**Target** (2030)	**Latest known results** (2023)
251 713 kTOE (for EU27_2020)	243 156 (for EU27_2020)	213 074 (for EU27_2020)	Final energy consumption in the residential sector reached 218.7 Mtoe in 2023, a 8.2% decrease compared with 2022.

Main outputs in 2024:

New policy initiatives

Output	**Indicator**	**Target**	**Latest known results** (situation on 31/12/2024)
Review of ecodesign requirements and rescaling of energy label for local space heaters	Adoption	Q4 2024	Adopted 18.4.2024 C(2024)1732
Review of ecodesign and review/rescaling of energy labelling requirements for air-to-air conditioners, air-to-air heat pumps and comfort fans (review)	Adoption	Q4 2024	The initiative is pending re-submission of the Impact assessment to the Regulatory Scrutiny Board (had to be delayed to take account of implications of new F-Gas regulation, adopted in codecision)
Review of Ecodesign and review/rescaling of energy labelling requirements for space and combination heaters (review/rescaling)	Adoption	Q4 2024	Those initiatives are slightly delayed. Interservice consultations should take place in Q1 2025.
Review of Ecodesign and review/rescaling of energy labelling requirements for water heaters and tanks	Adoption	Q4 2024	Those initiatives are slightly delayed. Interservice consultations should take place in Q12025.

Public consultations

Output	**Indicator**	**Target**	**Latest known results** (situation on 31/12/2024)
Public consultations on product-specific regulations (energy labelling/ecodesign)	Public consultations open and completed	Q4 2024	The public consultation on EL-ED on electronic displays was launched on 13 Nov 2024. It will expire on 5 Feb 2025.

[18] Final energy consumption in households covers the energy consumption of household individual dwellings, apartments, etc.) for space heating, water heating, cooling, and cooking as well as electricity consumption by various electrical appliances. Expressed in thousand tonnes of oil equivalent (KTOE).

Other important outputs			
Output	**Indicator**	**Target**	**Latest known results** (situation on 31/12/2024)
Guidance to Member States and market actors to unlock private investments in energy efficiency (EED recast)	Adoption	Q2 2024	The drafting and adoption of the Guidance has been postponed to Q1 2024 as it was not possible to advance the adoption procedure in Q3-Q4 2024 in parallel with the transition to the new Commission mandate.
Commission Recommendations to MS on guidance on new and revised articles of Directive (EU) 2023/1791 (EED recast). Article 3: Energy efficiency first principle Article 4: Energy efficiency targets Article 5, 6, 7 and Annex IV: Exemplary role of public sector Article 8, 9, 10 and Annex V: Energy savings obligation, Energy efficiency obligation schemes, Alternative policy measures and Common methods and principles for calculating the impact of energy efficiency obligation schemes or other policy measures or other policy measures under Articles 8,9 and 10 and Article 30 (14) Article 11: Energy management systems and energy audits Article 21, 22, 24: Basic contractual rights for heating, cooling, domestic hot water, information and awareness raising, empowering and protecting vulnerable customers and alleviating energy poverty Article 26: Heating and cooling supply Article 29: Energy services	Adoption	Q1 2024	Adopted Q3 2024

Specific objective 3 *Mobilising research and fostering innovation* *Related to spending programme(s): Related to spending programme(s): Horizon Europe, Invest EU, Innovation Fund, LIFE, ITER*			
Result indicator: Annual publication of the "Clean Energy Transition – Technologies and Innovations Report", an evidence based analysis of clean energy Research & Innovation priorities ([19]) **Source of the data:** internal analysis and stakeholders consultation			
Baseline (2020)	**Interim Milestone** (2020)	**Target** (2024)	**Latest known results** (2024)
1 report	1 report	1 report	The publication of the report was postponed for the first 100 days of the Commission. In the meantime, competitiveness was given a larger coverage in the State of the Energy Union Report, published in September 2024.
Result indicator: Share of Horizon Europe funds allocated to the following research activities: renewable energy and Carbon Capture, Utilisation and Storage (CC(U)S), buildings & industry, smart grids, energy storage, smart cities and market uptake of energy innovation activities ([20]) **Source of the data:** MFF and Horizon Europe programme			
Baseline (2021)	**Interim Milestone** ([21]) (2023)	**Target** (2024)	**Latest known results** (2024)
Horizon Europe allocations	Share of the energy funds allocated to Cluster 5 (Energy, Climate and Mobility)	Share of the energy funds allocated to Cluster 5 (Energy, Climate and Mobility)	From the total Horizon Europe budget 2021-27 (EUR 95.5 billion) about 16% is allocated to Cluster 5, "Climate, Energy and Mobility" (EUR 15 billion). About 47% of the Cluster 5 budget is allocated to clean energy projects for the period 2021-27. It is representing an expected annual Horizon Europe budget share of ca. 7%. The ratio in the Work Programme 2024 was close to this figure

([19]) One of the priorities is building a common ground of evidence to assess the technology and innovation needs for our 2030 and 2050 objectives, better prioritize the Research & Innovation objectives and, eventually, reduce the overall cost of the energy transformation.

([20]) Budget allocated to clean energy projects.

([21]) The column should be deleted if only short-and medium term (less than 3 years) targets are set.

Result indicator: An investment alliance for clean energy transition to boost private investments in R&I and deployment ([22]) **Source of the data:** DG ENER, IRENA, Green Recovery call to action			
Baseline (2021)	**Interim Milestone** ([23]) (2023)	**Target** (2024)	**Latest known results** (2024)
50	200	250	49 companies were involved in the technical assistance call in 2023. The project closed in March 2024. No further input can be given for 2024.
Result indicator: Clean energy Research & Innovation projects implemented at transnational level to reach the agreed targets under the European Strategic Energy Technology Plan (SET Plan) in Implementation Plans ([24]) **Source of the data:** SETIS reporting and monitoring system			
Baseline (2016-2019)	**Interim Milestone** (2022)	**Target** (2024)	**Latest known results** (2024)
312 projects launched	400 projects launched	450 projects launched	Despite the joint efforts of ENER, RTD and JRC, the indicator discontinued due to the lack of common methodology and due to the priority given to the revamp of the SET Plan in general. The revamp was successfully carried out in 2023.

([22]) 80% of Research & Innovation funding comes from the private sector, therefore it is crucial for policies to orientate private investments toward climate neutral solutions. As we are keen to support the commitments and initiatives from the private sector to complement those by the public sector, a European alliance of companies and investors willing to increase their level of Research & Innovation spending in clean energy technologies or to deploy available solutions in order to reduce their own carbon footprint will be established.

([23]) The column should be deleted if only short-and medium term (less than 3 years) targets are set.

([24]) The European Strategic Energy Technology Plan (SET Plan) is a framework to coordinate Research & Innovation actions on clean energy technologies at national and European level. 13 Implementation Plans have been developed, combined with agreed targets to reach.

Result indicator: Percentage of completion of International Thermonuclear Experimental Reactor (ITER) construction until "First Plasma" (First Experiments) ([25]) **Source of the data:** Bimonthly reports to the ITER Council			
Baseline (2019)	**Interim Milestone** (2022)	**Target** (2024)	**Latest known results** (2024)
68.7% no longer applicable	86% no longer applicable **New indicators as of 2024**: Indicator 1: The IO schedule performance index (SPI) is a measure of the conformance of actual progress (earned value) to the planned progress: 99% 'Indicator 2: The IO cost performance index (CPI) is a measure of the conformance of the actual work completed (measured by its earned value) to the actual cost incurred/ 105% Similar indicators not yet available for F4E.	95% no longer applicable	As a result of the rebaselining of ITER, a different approach has been enshrined in the new baseline proposed by the Director-General of ITER Organization. The newly proposed baseline no longer uses the concept of First Plasma. The start of experiments will now take place in the form of a Start of Research Operation (SRO) phase which is different from First Plasma. The date of the start of the SRO phase will be confirmed once the new baseline is adopted by the ITER governance instances.

([25]) This indicator measures the progress of the preparatory construction and installation works of the fusion reactor to be ready for the First Plasma at the end of 2025.

Result indicator: Strategic Agenda for Medical Ionising Radiation Applications (SAMIRA) ([26])
Source of the data: Progress reporting to be decided at the time of meeting the interim milestone

Baseline (2019)	**Interim Milestone** (Q4 2024)	**Target** (2024)	**Latest known results** (2024)
Preparatory work conducted within the Commission's SAMIRA InterService Working Group	Finalisation of the action plan by the Commission	Implementation in the relevant EU programmes	This Agenda is working in three strands. A) Supply of medical radioisotopes - here the European Radioisotopes Valley Initiative (ERVI) has been envisaged, and a feasibility study is ongoing. B) Quality and safety - with support of a Member State expert group, 12 projects are ongoing or finished, several stakeholder workshops have been held, and guidance released. A Commission Recommendation on clinical audit was adopted in April 2024. C) Innovation and technological development - A Strategic Research Agenda and Roadmap has been delivered. Ongoing support from the Euratom Research and Training Programme to various projects. Synergies are still to be created between Euratom and the Health cluster of Horizon Europe

Main outputs in 2024:

Evaluations and fitness checks

Output	**Indicator**	**Target**	**Latest known results** (situation on 31/12/2024)
Interim evaluation of the implementation of the Council Decision (Euratom) 2021/281 of 22 February 2021 amending Decision 2007/198/Euratom establishing the European Joint Undertaking for ITER and the Development of Fusion Energy and conferring advantages upon it.	Adoption	Q3 2024	The preparation of the interim evaluation was delayed to take into account the results of the project rebaselining conducted by the ITER Organization's new management in 2023-2024

External communication actions

Output	**Indicator**	**Target**	**Latest known results** (situation on 31/12/2024)
SET Plan Annual Conference – Fourth quarter 2024	Number of participants	200-300	More than 300 participants (320). 14-15/11/2024

([26]) This indicator measures the progress towards establishing and implementing an EU action plan on medical applications of nuclear and radiation technology.

Output	Indicator	Target	Latest known results (situation on 31/12/2024)
BRIDGE General Assembly – First quarter 2024	Number of participants	60-80	More than 200 participants (260). 9-10/04/2024
Event on net-zero technologies	Number of participants	100	EUSEW NZIA session: Net-zero manufacturing to boost EU's competitiveness and climate transition 11/06/2024. More than 600 participants (635) out which 219 onsite.

Other important outputs

Output	Indicator	Target	Latest known results (situation on 31/12/2024)
Net-Zero Industry Act (GROW lead, ENER Co-responsible)	Agreement by the co-legislator	Q1 2024	ADOPTED on 13/06/2024 Regulation (EU) 2024/1735 of the European Parliament and of the Council of 13 June 2024 on establishing a framework of measures for strengthening Europe's net-zero technology manufacturing ecosystem and amending Regulation (EU) 2018/1724 (Text with EEA relevance)
Progress report on the competitiveness of clean energy technologies	Adoption	Q4 2024	The publication of the report was postponed for the first 100 days of the Commission. In the meantime, competitiveness was given a larger coverage in the State of the Energy Union Report, published in September 2024.
Commission Recommendation on the implementation of clinical audit of medical radiological procedures	Adoption	Q1 2024	Adopted 18.4.2024 Commission recommendation 2024/1112

Specific objective 4 *All stakeholders are involved and a Just transition is ensured*			
Result indicator: Local authorities are committed to the Covenant of Mayors initiative ([27]) **Source of the data:** Covenant of Mayors, JRC			
Baseline a) (2019) signatories b) 2017 consumption reduction c) 2017 renewable energy	**Interim Milestone** a) 2022 b) 2020 c) 2020	**Target** a) 2024 b) 2024 c) 2024	**Latest known results** (2024)
a) 908500 b) 757 TWh c) 191 TWh	a) 11000 b) 946 TWh c) 232 TWh	a) 13000 b) 1198 TWh c) 511 TWh	a) 12.012 ([28]) b) 237.4 TWh ([29]) c) 12.78 TWh ([30])
Result indicator: Adoption, implementation and revision of just transition plans under the Just Transition Fund ([31]) **Source of the data:** DG ENER and DG REGIO			
Baseline (2020)	**Interim Milestone** (2021)	**Target** (2024)	**Latest known results** (2024)
Preparatory work conducted in view of adopting the just transition plans by Q1 2021.	100% of just transition plans are adopted and implementation started in all coal, peat and oil shale beneficiary regions	100% of just transition plans updated based on NECP revision and other developments	All Member States adopted Territorial Just transition plans representing in total 70 plans for 97 coal and carbon intensive regions. 22 Member States submitted their final updated National and Energy Climate Plans , but did not update their TJTPs as a result.

([27]) The indicator measures the impact of local authorities that have committed to meeting or exceeding the EU headline targets for GHG emission reductions, climate change adaptation and clean energy access. It covers the numbers of signatories, monitored energy consumptions reductions (vs baseline emission inventories in TWh) and annual monitored increase of local energy production from renewable sources (in TWh) compared to baseline year.

([28]) https://eu-mayors.ec.europa.eu/en/signatories

([29]) Reporting at MyCovenant, there are 6942 signatories from EU-27 having a baseline emissions inventory. From those 6942, 2506 have also reported a monitoring emission inventory, having accomplished an absolute consumption reduction of 237.4 TWh.

([30]) For renewable energy generation, 744 signatories from EU-27 (reporting at MyCovenant) accomplished an absolute increase in energy generation of 12.78 TWh.

([31]) The indicator measures the progress achieved in the drafting, adoption, implementation and revision of just transition plans under the Just Transition Fund in coal, peat and oil shale, which will closely involve local stakeholders in beneficiary regions.

Main outputs in 2024:			
External communication actions			
Output	**Indicator**	**Target**	**Latest known results** (situation on 31/12/2024)
Citizens Energy Forum	Number of participants	300 (in presence and online)	Over 300 people onsite and online participated to this year's Forum. Target was overreached due to effective collaboration with COM Permanent Representation in Hungary and a successfully social media campaign.
Annual Political Dialogue on the coal regions in Transition Initiative (June 2024)	Number of participants	200	Annual Political Dialogue took place on 11 July 2024 in Velenje, Slovenia 393 people registered in total to the event, for participation both onsite (253, of which 202 were admitted to the event) and online (140)
Just Transition Platform meetings (co-organised with DG REGIO), April and October	Number of participants	250-300 (in presence)	There were 250 participants at the forum.
Other important outputs			
Output	**Indicator**	**Target**	**Latest known results** (situation on 31/12/2024)
Covenant of Mayors Office	Signature of the contract	Q1 2024	New contract was signed on 1/4/2024
Energy Poverty Advisory Hub	Call for tender and signature of the contract	Q4 2024	New contract was signed on 18/12/2024

Specific objective 5 *The EU acts as energy global leader*			
Result indicator: Modernisation of the Energy Community ([32]) **Source of the data:** Conclusions of the Energy Community Ministerial Council, Reports from Council Energy Working Party meetings, Commission Decisions on Proposals the Council, Decisions of the Council and the European Parliament			
Baseline (2020)	**Interim Milestone** ([33]) (2021)	**Target** (2024)	**Latest known results** (2024)
Progress towards completion of Energy Community modernisation negotiations	Adoption by the Energy Community Contracting Parties of the EU 2030 Targets	2030 Targets implemented and enforced by the Energy Community Contracting Parties in order to progress towards 2030 Targets and decarbonisation in line with the EU objectives	The 2030 Energy Community targets are underpinned by the Contracting Parties' NECPs (adoption deadline 30th June 2024). Up to December 2024, 5 Contracting Parties have adopted their respective Plans, 2 have submitted their drafts and only 1 has not shown any sign of progress. On the basis of integrated progress reports due by 31st of October 2025, progress made by Contracting Parties' towards meeting 2030 targets will be assessed. Enlargement gained new momentum throughout 2023 and 2024: the fundamentals cluster was opened with Albania and accession negotiations were opened with Ukraine and Moldova.
Result indicator: Implementation of the Intergovernmental Agreement (IGA) Decision ([34]) **Source of the data:** Commission Decisions on the (i) assessment of IGAs notified to the Commission ex-ante or ex-post, (ii) reporting to EU institutions, (iii) optional model clauses and guidance to Member States; Reports from negotiation rounds with Commission as an observer			
Baseline (2020)	**Interim Milestone** (2020-2024)	**Target** (2024)	**Latest known results** (2024)
Assessment on an ongoing basis of draft Intergovernmental Agreements received from EU member states	Commission decisions on individual draft Intergovernmental Agreements adopted in a timely manner - advising member states on how to ensure compliance with EU acquis, if required	IGAs in the field of energy signed by EU Member States compliant with EU acquis	100% (all draft agreements submitted to the Commission were assessed and assessment was shared with the Member States concerned.

([32]) The EU and Energy Community Contracting Parties are currently in the process of modernizing the Energy Community Treaty in view of bringing the relevant legislation in Energy Community Contracting Parties closer to the EU acquis.

([33]) The column should be deleted if only short-and medium term (less than 3 years) targets are set.

([34]) In line with the Intergovernmental Agreement (IGA) Decision, the Commission examines the international agreements in the field of energy before they are signed by member states in order to ensure that they are in line with the EU acquis.

Result indicator: Energy Charter Treaty (ECT) Modernisation ([35]) **Source of the data:** Council mandate for the negotiation, meeting reports and Energy Charter Conference, DG TRADE website on the EU proposal for modernising Energy Charter Treaty			
Baseline (2020)	**Interim Milestone** (2022)	**Target** (2024)	**Latest known results** (2024)
Completion of initial negotiation rounds based on the EU text proposals Progress report on the ECT Modernisation	Make decisive progress in the Energy Charter Treaty modernisation negotiation	Finalisation of the Energy Charter Treaty modernisation negotiation	Modernisation of the Treaty adopted by the Energy Charter Conference on 3 December. The modernised ECT will start provisionally applying as of 3 September 2025 to Contracting Parties that agree to it; following a 9-month period after today vote. The modernised ECT must be ratified by 3/4 of all Contracting Parties to fully enter into force
Result indicator: Continued follow-up of nuclear safety and conduct of stress tests in third countries ([36]) **Source of the data:** European Nuclear Safety Regulators Group (ENSREG)			
Baseline (2020)	**Interim Milestone** (2022)	**Target** (2024)	**Latest known results** (2024)
Progressing stress test process in neighbouring countries	- Peer reviews of Turkey's and Iran's national stress test reports completed; - Peer review of implementation of Belarus's stress test national action plan completed; - If necessary, preparation of further follow-up peer reviews	- Peer reviews of implementation of Turkey's and Iran's national action plans underway; - Other peer reviews of neighbouring countries's nuclear power projects to be organised as necessary.	-Peer reviews of implementation of Turkey's national action plan: Ongoing - Peer reviews of implementation of Iran's national action plan: Ongoing - Other peer reviews of neighbouring countries's nuclear power projects to be organised as necessary: Ongoing

([35]) The EU seeks to modernise the provisions of the Energy Charter Treaty (ECT) so that it takes account of sustainable development and climate goals, as well as modern standards of investment protection and investor-to-state dispute settlement. The objective of the modernised Energy Charter Treaty should be to facilitate investment in the energy sector in a sustainable way, provide for legal certainty and ensure a high level of investment protection.

([36]) It is necessary to promote the EU's nuclear safety standards internationally. To date, six countries from the broader region (Armenia, Belarus, Iran, Switzerland, Turkey, and Ukraine) have or are currently engaging in the EU's stress test process, carried out in conjunction with the European Nuclear Safety Regulators Group (ENSREG). Specifically, the objective concerns organization of ENSREG peer review of national stress test reports and national stress test action plans.

Result indicator: Global Covenant of Mayors for Climate and Energy ([37]) **Source of the data:** Global Covenant of Mayors			
Baseline (2019)	**Interim Milestone** (2022)	**Target** (2024)	**Latest known results** (2024)
10239	13000	13500	13610 signatories of the Global Covenant ([38])

Main outputs in 2024: **Other important outputs**			
Output	**Indicator**	**Target**	**Latest known results** (situation on 31/12/2024)
Euratom Report for the 8th Review Meeting of Contracting Parties to the Joint Convention	Adoption	Q2 2024	Adopted 10.7.2024 C(2024)4852
Commission Decision on the conclusion of an agreement between Euratom and KEDO	Adoption	Q1 2024	Adopted 19.4.2024 C(2024)2485
Timely assessment of notifications by Member States of IGAs with third countries	Commission Decisions and responses to Members States	Procedures completed within legal deadlines 100%	100%

([37]) The indicator reflects the growth of Global Covenant, an instrument to promote EU energy transition policies and business to European Neighbourhood, Africa, Asia and Americas.

([38]) https://www.globalcovenantofmayors.org/

ANNEX 3: Draft annual accounts and financial reports

AAR 2024 Version 1

Annex 3 Financial Reports - DG ENER - Financial Year 2024

- Table 1 : Commitments
- Table 2 : Payments
- Table 3 : Commitments to be settled
- Table 4 : Balance Sheet
- Table 5 : Statement of Financial Performance
- Table 5 Bis: Off Balance Sheet
- Table 6 : Average Payment Times
- Table 7 : Income
- Table 8 : Recovery of undue Payments
- Table 9 : Ageing Balance of Recovery Orders
- Table 10 : Waivers of Recovery Orders
- Table 11 : Negotiated Procedures
- Table 12 : Summary of Procedures
- Table 13 : Building Contracts
- Table 14 : Contracts declared Secret
- Table 15 : FPA duration exceeds 4 years
- Table 16 : Commitments co-delegation type 3 in 2024

Note : The figures are those related to the provisional accounts and not yet audited by the Court of Auditors

Refresh date : 11/03/2025

Additional comments

Note : The figures are those related to the provisional accounts and not yet audited by the Court of Auditors

Refresh date : 11/03/2025

TABLE 1: OUTTURN ON COMMITMENT APPROPRIATIONS IN 2024 (in Mio €) for DG ENER					
			Commitment appropriations authorised*	Commitments made	%
			1	2	3=2/1
Title 01 Research and Innovation					
01	01 01	Support administrative expenditure of the "Research and Innovation" cluster	2.64	1.11	42.12 %
	01 02	Horizon Europe	6.08	6.07	99.91 %
	01 04	International Thermonuclear Experimental Reactor (ITER)	430.69	429.19	99.65 %
	01 20	Pilot projects, preparatory actions, prerogatives and other actions	5.00	4.42	88.43 %
Total Title 01			**444.40**	**440.79**	**99.19 %**
Title 02 European Strategic Investments					
02	02 01	Support administrative expenditure of the "European Strategic Investments" cluster	0.35	0.35	100.00 %
	02 02	InvestEU Fund	3.03	0.00	0.00 %
	02 03	Connecting Europe Facility (CEF)	4.52	1.54	33.97 %
	02 10	Decentralised agencies	23.36	23.01	98.51 %
	02 20	Pilot projects, preparatory actions, prerogatives and other actions	60.65	8.23	13.56 %
Total Title 02			**91.91**	**33.12**	**36.03 %**
Title 05 Regional Development and Cohesion					
05	05 03	Cohesion Fund (CF)	0.00	0.00	0.00 %
Total Title 05			**0.00**	**0.00**	**0.00 %**
Title 06 Recovery and Resilience					
06	06 01	Support administrative expenditure of the `Recovery and Resilience¿ cluster	0.00	0.00	0.00 %
Total Title 06			**0.00**	**0.00**	**0.00 %**
Title 09 Environment and Climate Action					
09	09 01	Support administrative expenditure of the `Environment and Climate Action¿ Cluster	0.37	0.32	85.76 %
	09 02	Programme for the Environment and Climate Action (LIFE)	16.89	16.85	99.74 %
	09 20	Pilot projects, preparatory actions, prerogatives and other actions	0.50	0.50	100.00 %
Total Title 09			**17.76**	**17.67**	**99.45 %**
Title 12 Security					
12	12 03	Nuclear decommissioning for Lithuania	67.13	67.13	100.00 %
	12 04	Nuclear Safety and decommissioning, including for Bulgaria and Slovakia	16.18	16.18	100.00 %
	12 20	Pilot projects, preparatory actions, prerogatives and other actions	27.33	27.28	99.80 %
Total Title 12			**110.64**	**110.59**	**99.95 %**

Note : The figures are those related to the provisional accounts and not yet audited by the Court of Auditors

Refresh date : 11/03/2025

TABLE 1: OUTTURN ON COMMITMENT APPROPRIATIONS IN 2024 (in Mio €) for DG ENER					
			Commitment appropriations authorised*	Commitments made	%
			1	2	3=2/1
Title 14 External Action					
14	14 02	Neighbourhood, Development and International Cooperation Instrument ¿ Global Europe (NDICI ¿ Global Europe)	0.00	0.00	0.00 %
	14 20	Pilot projects, preparatory actions, prerogatives and other actions	6.28	6.26	99.60 %
Total Title 14			**6.28**	**6.26**	**99.60 %**
Title 16 Expenditure outside the annual ceilings set out in the Multiannual Financial Framework					
16	16 01	Support administrative expenditure outside the annual ceilings set out in the Multiannual Financial Framework	0.00	0.00	0.00 %
Total Title 16			**0.00**	**0.00**	**0.00 %**
Title 20 Administrative expenditure of the European Commission					
20	20 01	Members, officials and temporary staff	0.10	0.10	100.00 %
	20 02	Other staff and expenditure relating to persons	0.09	0.05	57.54 %
	20 03	Administrative operating expenditure	0.31	0.27	88.41 %
Total Title 20			**0.50**	**0.42**	**84.97 %**
Title 30 Reserves					
30	30 02	Reserves for operational expenditure	0.00	0.00	0.00 %
Total Title 30			**0.00**	**0.00**	**0.00 %**
Total Excluding NGEU			**671.50**	**608.85**	**90.67 %**
Title 01 Research and Innovation					
01	01 01	Support administrative expenditure of the "Research and Innovation" cluster	0.09	0.00	0.00 %
Total Title 01			**0.09**	**0.00**	**0.00 %**
Title 05 Regional Development and Cohesion					
05	05 02	European Regional Development Fund (ERDF)	0.00	0.00	0.00 %
Total Title 05			**0.00**	**0.00**	**0.00 %**
Total NGEU Only			**0.09**	**0.00**	**0.00 %**
Total DG ENER			**671.59**	**608.85**	**90.66 %**

** Commitment appropriations authorised include, in addition to the budget voted by the legislative authority, appropriations carried over from the previous exercise, budget amendments as well as miscellaneous commitment appropriations for the period (e.g. internal and external assigned revenue)*

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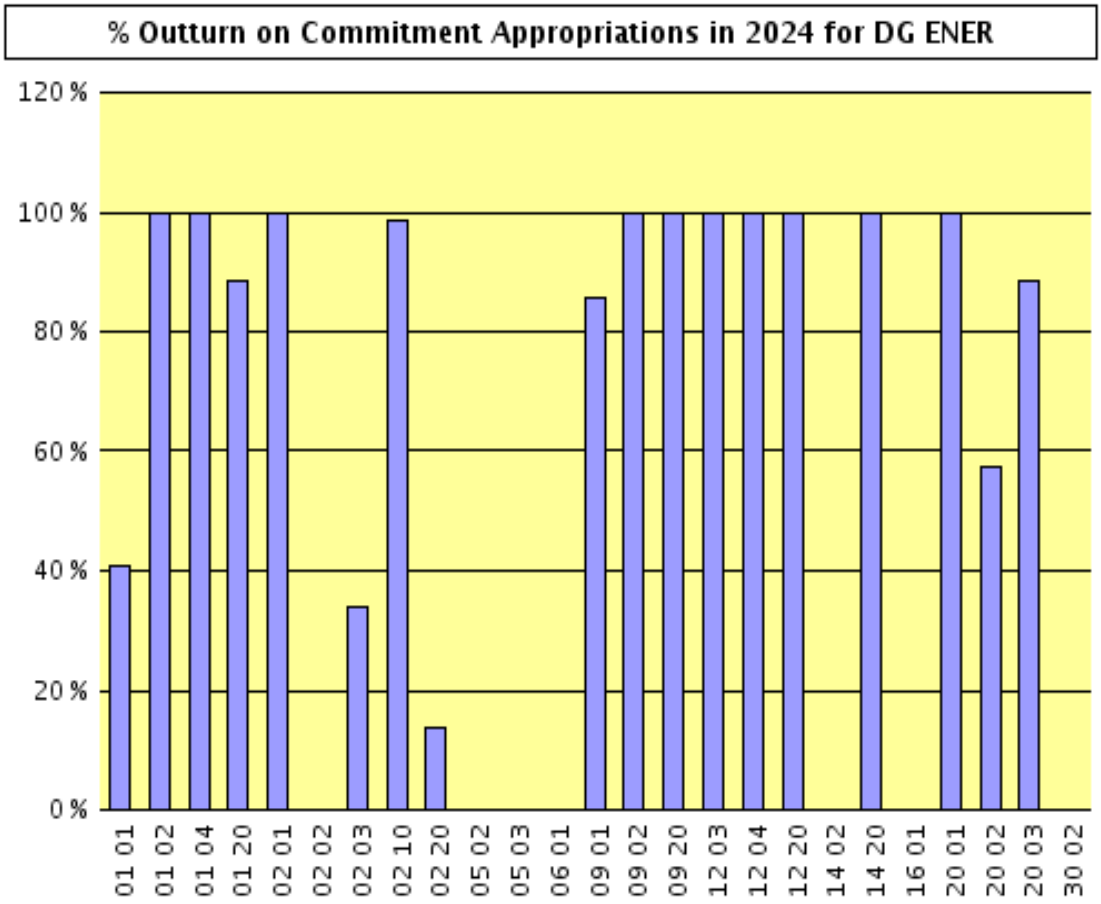
Refresh date : 11/03/2025



Note : The figures are those related to the provisional accounts and not yet audited by the Court of Auditors

Refresh date : 11/03/2025

TABLE 2: OUTTURN ON PAYMENT APPROPRIATIONS in 2024 (in Mio €) for DG ENER					
			Payment appropriations authorised *	Payments made	%
			1	2	3=2/1
Title 01 Research and Innovation					
01	01 01	Support administrative expenditure of the "Research and Innovation" cluster	3.66	1.58	43.09 %
	01 02	Horizon Europe	20.75	15.30	73.73 %
	01 04	International Thermonuclear Experimental Reactor (ITER)	557.86	556.36	99.73 %
	01 20	Pilot projects, preparatory actions, prerogatives and other actions	1.44	0.28	19.58 %
Total Title 01			**583.71**	**573.52**	**98.25%**
Title 02 European Strategic Investments					
02	02 01	Support administrative expenditure of the "European Strategic Investments" cluster	0.77	0.50	65.16 %
	02 02	InvestEU Fund	3.71	0.00	0.00 %
	02 03	Connecting Europe Facility (CEF)	2.91	1.11	38.10 %
	02 10	Decentralised agencies	23.36	23.01	98.51 %
	02 20	Pilot projects, preparatory actions, prerogatives and other actions	66.49	13.96	21.00 %
Total Title 02			**97.24**	**38.58**	**39.68%**
Title 05 Regional Development and Cohesion					
05	05 03	Cohesion Fund (CF)	0.03	0.03	100.00 %
Total Title 05			**0.03**	**0.03**	**100.00%**
Title 06 Recovery and Resilience					
06	06 01	Support administrative expenditure of the `Recovery and Resilience¿ cluster	0.00	0.00	0.00 %
Total Title 06			**0.00**	**0.00**	**0.00%**
Title 09 Environment and Climate Action					
09	09 01	Support administrative expenditure of the `Environment and Climate Action¿ Cluster	0.52	0.20	38.25 %
	09 02	Programme for the Environment and Climate Action (LIFE)	11.61	11.47	98.81 %
	09 20	Pilot projects, preparatory actions, prerogatives and other actions	0.25	0.25	100.00 %
Total Title 09			**12.38**	**11.92**	**96.28%**
Title 12 Security					
12	12 03	Nuclear decommissioning for Lithuania	141.72	141.72	100.00 %
	12 04	Nuclear Safety and decommissioning, including for Bulgaria and Slovakia	37.04	36.77	99.27 %
	12 20	Pilot projects, preparatory actions, prerogatives and other actions	32.53	31.91	98.09 %
Total Title 12			**211.30**	**210.40**	**99.58%**

Note : The figures are those related to the provisional accounts and not yet audited by the Court of Auditors

Refresh date : 11/03/2025

TABLE 2: OUTTURN ON PAYMENT APPROPRIATIONS in 2024 (in Mio €) for DG ENER					
			Payment appropriations authorised *	Payments made	%
			1	2	3=2/1
Title 14 External Action					
14	14 02	Neighbourhood, Development and International Cooperation Instrument ¿ Global Europe (NDICI ¿ Global Europe)	0.00	0.00	0.00 %
	14 20	Pilot projects, preparatory actions, prerogatives and other actions	6.28	6.26	99.60 %
Total Title 14			**6.28**	**6.26**	**99.60%**
Title 16 Expenditure outside the annual ceilings set out in the Multiannual Financial Framework					
16	16 01	Support administrative expenditure outside the annual ceilings set out in the Multiannual Financial Framework	0.00	0.00	0.00 %
Total Title 16			**0.00**	**0.00**	**0.00%**
Title 20 Administrative expenditure of the European Commission					
20	20 01	Members, officials and temporary staff	0.17	0.10	59.86 %
	20 02	Other staff and expenditure relating to persons	0.12	0.04	31.61 %
	20 03	Administrative operating expenditure	0.31	0.27	88.41 %
Total Title 20			**0.60**	**0.41**	**68.56%**
Title 30 Reserves					
30	30 02	Reserves for operational expenditure	0.00	0.00	0.00 %
Total Title 30			**0.00**	**0.00**	**0.00%**
Total Excluding NGEU			**911.53**	**841.12**	**92.28%**
Title 01 Research and Innovation					
01	01 01	Support administrative expenditure of the "Research and Innovation" cluster	0.10	0.00	0.26 %
Total Title 01			**0.10**	**0.00**	**0.26%**
Title 05 Regional Development and Cohesion					
05	05 02	European Regional Development Fund (ERDF)	0.14	0.14	100.00 %
Total Title 05			**0.14**	**0.14**	**100.00%**
Total NGEU Only			**0.24**	**0.14**	**57.41%**
Total DG ENER			**911.77**	**841.25**	**92.27 %**

** Payment appropriations authorised include, in addition to the budget voted by the legislative authority, appropriations carried over from the previous exercise, budget amendments as well as miscellaneous payment appropriations for the period (e.g. internal and external assigned revenue).*

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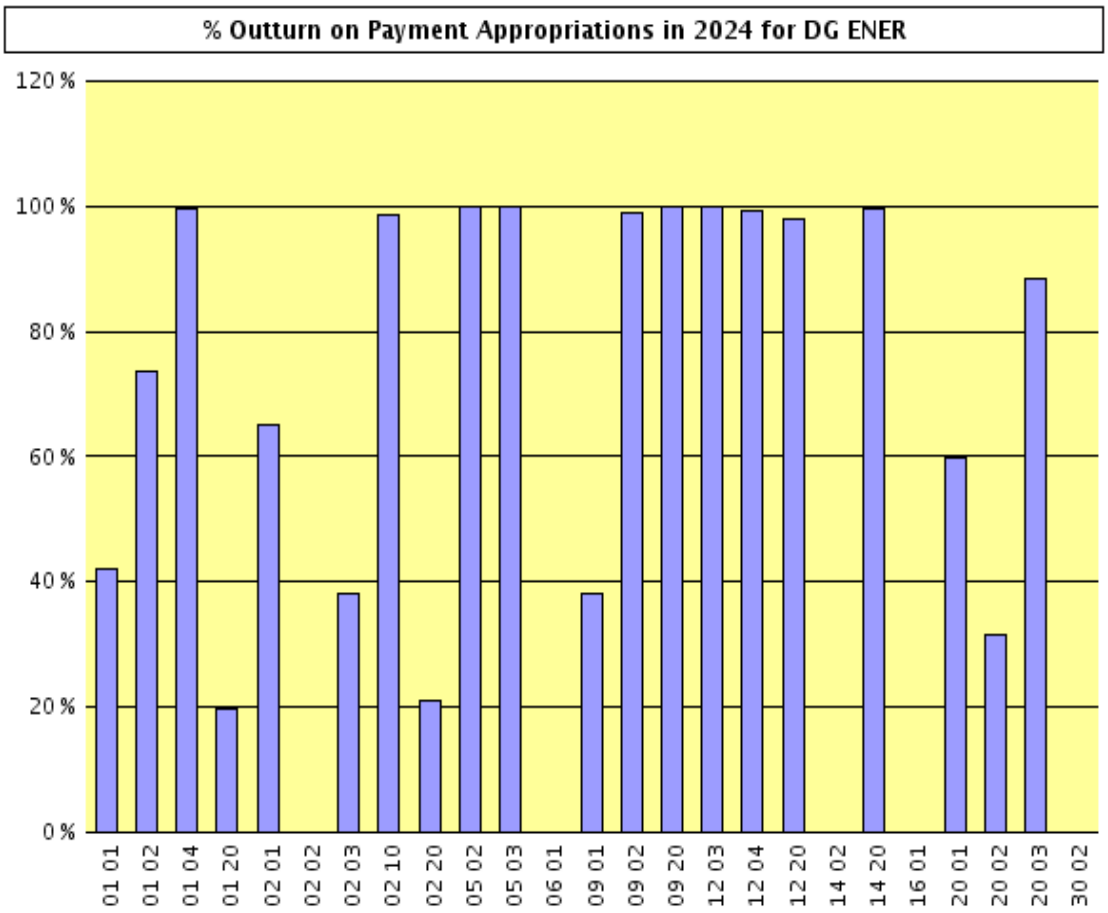
Refresh date : 11/03/2025



Note : The figures are those related to the provisional accounts and not yet audited by the Court of Auditors

Refresh date : 11/03/2025

TABLE 3 : BREAKDOWN OF COMMITMENTS TO BE SETTLED AT 31/12/2024 (in Mio €) for DG ENER									
Chapter			Commitments to be settled				Commitments to be settled from financial years previous to 2023	Total of commitments to be settled at end of financial year 2024	Total of commitments to be settled at end of financial year 2023
			Commitments	Payments	RAL	% to be settled			
			1	2	3=1-2	4=1-2/1	5	6=3+5	7
01	01 01	Support administrative expenditure of the "Research and Innovation" cluster	1.11	0.67	0.44	39.71%	0.01	0.45	1.02
	01 02	Horizon Europe	6.07	0.88	5.20	85.56%	17.54	22.74	32.55
	01 04	International Thermonuclear Experimental Reactor (ITER)	429.19	73.74	355.45	82.82%	1,092.61	1,448.06	1,575.23
	01 20	Pilot projects, preparatory actions, prerogatives and other actions	4.42	0.00	4.42	100.00%	14.30	18.73	14.65
Total Title 01			**440.79**	**75.29**	**365.51**	**82.92%**	**1,124.46**	**1,489.97**	**1,623.45**

TABLE 3 : BREAKDOWN OF COMMITMENTS TO BE SETTLED AT 31/12/2024 (in Mio €) for DG ENER									
Chapter			Commitments to be settled				Commitments to be settled from financial years previous to 2023	Total of commitments to be settled at end of financial year 2024	Total of commitments to be settled at end of financial year 2023
			Commitments	Payments	RAL	% to be settled			
			1	2	3=1-2	4=1-2/1	5	6=3+5	7
02	02 01	Support administrative expenditure of the "European Strategic Investments" cluster	0.35	0.14	0.21	59.44%	0.00	0.21	0.42
	02 02	InvestEU Fund	0.00	0.00	0.00	0.00%	0.00	0.00	0.00
	02 03	Connecting Europe Facility (CEF)	1.54	0.03	1.51	98.15%	1.21	2.72	25.15
	02 10	Decentralised agencies	23.01	23.01	0.00	0.00%	0.00	0.00	0.00
	02 20	Pilot projects, preparatory actions, prerogatives and other actions	8.23	2.10	6.13	74.47%	15.36	21.49	27.78
Total Title 02			**33.12**	**25.28**	**7.84**	**23.67%**	**16.57**	**24.41**	**53.35**

Note : The figures are those related to the provisional accounts and not yet audited by the Court of Auditors

Refresh date : 11/03/2025

TABLE 3 : BREAKDOWN OF COMMITMENTS TO BE SETTLED AT 31/12/2024 (in Mio €) for DG ENER									
Chapter			Commitments to be settled				Commitments to be settled from financial years previous to 2023	Total of commitments to be settled at end of financial year 2024	Total of commitments to be settled at end of financial year 2023
			Commitments	Payments	RAL	% to be settled			
			1	2	3=1-2	4=1-2/1	5	6=3+5	7
05	05 03	Cohesion Fund (CF)	0.00	0.00	0.00	0.00%	0.00	0.00	0.03
Total Title 05			**0.00**	**0.00**	**0.00**	**0.00%**	**0.00**	**0.00**	**0.03**

TABLE 3 : BREAKDOWN OF COMMITMENTS TO BE SETTLED AT 31/12/2024 (in Mio €) for DG ENER									
Chapter			Commitments to be settled				Commitments to be settled from financial years previous to 2023	Total of commitments to be settled at end of financial year 2024	Total of commitments to be settled at end of financial year 2023
			Commitments	Payments	RAL	% to be settled			
			1	2	3=1-2	4=1-2/1	5	6=3+5	7
06	06 01	Support administrative expenditure of the `Recovery and Resilience¿ cluster	0.00	0.00	0.00	0.00%	0.00	0.00	0.00
Total Title 06			**0.00**	**0.00**	**0.00**	**0.00%**	**0.00**	**0.00**	**0.00**

TABLE 3 : BREAKDOWN OF COMMITMENTS TO BE SETTLED AT 31/12/2024 (in Mio €) for DG ENER									
Chapter			Commitments to be settled				Commitments to be settled from financial years previous to 2023	Total of commitments to be settled at end of financial year 2024	Total of commitments to be settled at end of financial year 2023
			Commitments	Payments	RAL	% to be settled			
			1	2	3=1-2	4=1-2/1	5	6=3+5	7
09	09 01	Support administrative expenditure of the `Environment and Climate Action¿ Cluster	0.32	0.09	0.23	72.23%	0.00	0.23	0.15
	09 02	Programme for the Environment and Climate Action (LIFE)	16.85	1.59	15.26	90.54%	15.15	30.41	25.23
	09 20	Pilot projects, preparatory actions, prerogatives and other actions	0.50	0.00	0.50	100.00%	0.00	0.50	0.25
Total Title 09			**17.67**	**1.68**	**15.98**	**90.48%**	**15.15**	**31.14**	**25.63**

Note : The figures are those related to the provisional accounts and not yet audited by the Court of Auditors

Refresh date : 11/03/2025

TABLE 3 : BREAKDOWN OF COMMITMENTS TO BE SETTLED AT 31/12/2024 (in Mio €) for DG ENER									
Chapter			Commitments to be settled				Commitments to be settled from financial years previous to 2023	Total of commitments to be settled at end of financial year 2024	Total of commitments to be settled at end of financial year 2023
			Commitments	Payments	RAL	% to be settled			
			1	2	3=1-2	4=1-2/1	5	6=3+5	7
12	12 03	Nuclear decommissioning for Lithuania	67.13	0.00	67.13	100.00%	263.47	330.60	405.19
	12 04	Nuclear Safety and decommissioning, including for Bulgaria and Slovakia	16.18	0.00	16.18	100.00%	218.08	234.26	254.88
	12 20	Pilot projects, preparatory actions, prerogatives and other actions	27.28	17.00	10.28	37.69%	8.49	18.77	24.58
Total Title 12			**110.59**	**17.00**	**93.59**	**84.63%**	**490.04**	**583.62**	**684.66**

TABLE 3 : BREAKDOWN OF COMMITMENTS TO BE SETTLED AT 31/12/2024 (in Mio €) for DG ENER									
Chapter			Commitments to be settled				Commitments to be settled from financial years previous to 2023	Total of commitments to be settled at end of financial year 2024	Total of commitments to be settled at end of financial year 2023
			Commitments	Payments	RAL	% to be settled			
			1	2	3=1-2	4=1-2/1	5	6=3+5	7
14	14 02	Neighbourhood, Development and International Cooperation Instrument ¿ Global Europe (NDICI ¿ Global Europe)	0.00	0.00	0.00	0.00%	0.30	0.30	0.30
	14 20	Pilot projects, preparatory actions, prerogatives and other actions	6.26	6.26	0.00	0.00%	0.00	0.00	0.00
Total Title 14			**6.26**	**6.26**	**0.00**	**0.00%**	**0.30**	**0.30**	**0.30**

TABLE 3 : BREAKDOWN OF COMMITMENTS TO BE SETTLED AT 31/12/2024 (in Mio €) for DG ENER									
Chapter			Commitments to be settled				Commitments to be settled from financial years previous to 2023	Total of commitments to be settled at end of financial year 2024	Total of commitments to be settled at end of financial year 2023
			Commitments	Payments	RAL	% to be settled			
			1	2	3=1-2	4=1-2/1	5	6=3+5	7
16	16 01	Support administrative expenditure outside the annual ceilings set out in the Multiannual Financial Framework	0.00	0.00	0.00	0.00%	0.00	0.00	0.00
Total Title 16			**0.00**	**0.00**	**0.00**	**0.00%**	**0.00**	**0.00**	**0.00**

Note : The figures are those related to the provisional accounts and not yet audited by the Court of Auditors

Refresh date : 11/03/2025

TABLE 3 : BREAKDOWN OF COMMITMENTS TO BE SETTLED AT 31/12/2024 (in Mio €) for DG ENER									
Chapter			Commitments to be settled				Commitments to be settled from financial years previous to 2023	Total of commitments to be settled at end of financial year 2024	Total of commitments to be settled at end of financial year 2023
			Commitments	Payments	RAL	% to be settled			
			1	2	3=1-2	4=1-2/1	5	6=3+5	7
20	20 01	Members, officials and temporary staff	0.10	0.05	0.05	52.24%	0.00	0.05	0.07
	20 02	Other staff and expenditure relating to persons	0.05	0.04	0.02	30.58%	0.00	0.02	0.03
	20 03	Administrative operating expenditure	0.27	0.27	0.00	0.00%	0.00	0.00	0.00
Total Title 20			**0.42**	**0.35**	**0.07**	**16.20%**	**0.00**	**0.07**	**0.10**

TABLE 3 : BREAKDOWN OF COMMITMENTS TO BE SETTLED AT 31/12/2024 (in Mio €) for DG ENER									
Chapter			Commitments to be settled				Commitments to be settled from financial years previous to 2023	Total of commitments to be settled at end of financial year 2024	Total of commitments to be settled at end of financial year 2023
			Commitments	Payments	RAL	% to be settled			
			1	2	3=1-2	4=1-2/1	5	6=3+5	7
30	30 02	Reserves for operational expenditure	0.00	0.00	0.00	0.00%	0.00	0.00	0.00
Total Title 30			**0.00**	**0.00**	**0.00**	**0.00%**	**0.00**	**0.00**	**0.00**
Total Excluding NGEU			**608.85**	**125.86**	**482.99**	**79.33%**	**1,646.53**	**2,129.51**	**2,387.52**

TABLE 3 : BREAKDOWN OF COMMITMENTS TO BE SETTLED AT 31/12/2024 (in Mio €) for DG ENER									
Chapter			Commitments to be settled				Commitments to be settled from financial years previous to 2023	Total of commitments to be settled at end of financial year 2024	Total of commitments to be settled at end of financial year 2023
			Commitments	Payments	RAL	% to be settled			
			1	2	3=1-2	4=1-2/1	5	6=3+5	7
01	01 01	Support administrative expenditure of the "Research and Innovation" cluster	0.00	0.00	0.00	0.00%	0.02	0.02	0.02
Total Title 01			**0.00**	**0.00**	**0.00**	**0.00%**	**0.02**	**0.02**	**0.02**

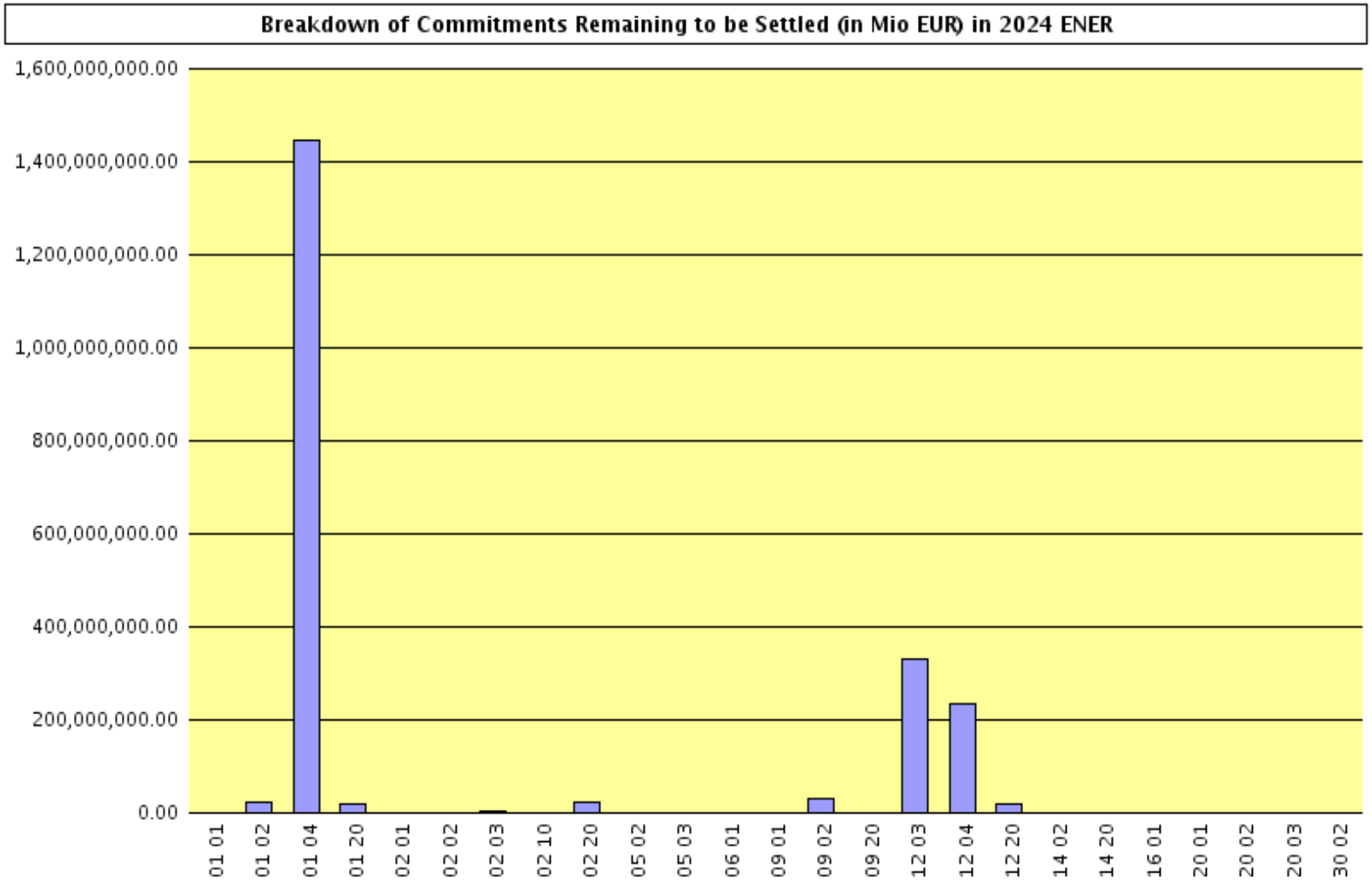
Note : The figures are those related to the provisional accounts and not yet audited by the Court of Auditors

Refresh date : 11/03/2025

TABLE 3 : BREAKDOWN OF COMMITMENTS TO BE SETTLED AT 31/12/2024 (in Mio €) for DG ENER									
Chapter			Commitments to be settled				Commitments to be settled from financial years previous to 2023	Total of commitments to be settled at end of financial year 2024	Total of commitments to be settled at end of financial year 2023
			Commitments	Payments	RAL	% to be settled			
			1	2	3=1-2	4=1-2/1	5	6=3+5	7
05	05 02	European Regional Development Fund (ERDF)	0.00	0.00	0.00	0.00%	0.00	0.00	0.14
Total Title 05			**0.00**	**0.00**	**0.00**	**0.00%**	**0.00**	**0.00**	**0.14**
Total NGEU Only			**0.00**	**0.00**	**0.00**	**0.00%**	**0.02**	**0.02**	**0.16**
Total for DG ENER			**608.85**	**125.86**	**482.99**	**79.33 %**	**1,646.54**	**2,129.53**	**2,387.67**

Note : The figures are those related to the provisional accounts and not yet audited by the Court of Auditors

Refresh date : 11/03/2025



Note : The figures are those related to the provisional accounts and not yet audited by the Court of Auditors

Refresh date : 11/03/2025

TABLE 4 : BALANCE SHEET for DG ENER

BALANCE SHEET	2024	2023
A.I. NON CURRENT ASSETS	580,632,643.02	542,857,296.95
A.I.1. Intangible Assets	2,642,322.76	2,350,150.69
A.I.2. Property, Plant and Equipment	468,064.11	3,478,734.69
A.I.3. Invstmnts Accntd For Using Equity Meth	0.00	0.00
A.I.4. Non-Current Financial Assets	164,359,719.72	206,275,168.18
A.I.5. Non-Current Pre-Financing	412,846,361.85	330,399,780.81
A.I.6. Non-Cur Exch Receiv & Non-Ex Recoverab	316,174.58	353,462.58
A.II. CURRENT ASSETS	189,085,939.37	190,863,045.50
A.II.2. Current Pre-Financing	182,396,846.56	178,885,979.68
A.II.3. Curr Exch Receiv &Non-Ex Recoverables	6,689,092.81	11,978,993.82
A.II.6. Cash and Cash Equivalents	0.00	-1,928.00
ASSETS	**769,718,582.39**	**733,720,342.45**
P.III. NET ASSETS/LIABILITIES	0.00	0.00
P.III.1. Reserves	0.00	0.00
P.II. CURRENT LIABILITIES	-590,469.66	-776,780.66
P.II.3. Current Financial Liabilities	-371,923.09	-425,280.09
P.II.4. Current Payables	-218,546.57	-351,500.57
P.II.5. Current Accrued Charges &Defrd Income	0.00	0.00
LIABILITIES	**-590,469.66**	**-776,780.66**
NET ASSETS (ASSETS less LIABILITIES)	**769,128,112.73**	**732,943,561.79**

P.III.2. Accumulated Surplus/Deficit	8,096,465,650.19	7,586,995,948.14

Non-allocated central (surplus)/deficit*	-8,865,593,762.92	-8,319,939,509.93

TOTAL DG ENER	**0.00**	**0.00**

It should be noted that the balance sheet and statement of financial performance presented in Annex 3 to this Annual Activity Report, represent only the assets, liabilities, expenses and revenues that are under the control of this Directorate General. Significant amounts such as own resource revenues and cash held in Commission bank accounts are not included in this Directorate General's accounts since they are managed centrally by DG Budget, on whose balance sheet and statement of financial performance they appear. Furthermore, since the accumulated result of the Commission is not split amongst the various Directorates General, it can be seen that the balance sheet presented here is not in equilibrium.

Additionally, the figures included in tables 4 and 5 are provisional since they are, at this date, still subject to audit by the Court of Auditors. It is thus possible that amounts included in these tables may have to be adjusted following this audit

Note : The figures are those related to the provisional accounts and not yet audited by the Court of Auditors

Refresh date : 11/03/2025

TABLE 5 : STATEMENT OF FINANCIAL PERFORMANCE for DG ENER

STATEMENT OF FINANCIAL PERFORMANCE	2024	2023
II.1 REVENUES	-47,729,609.03	-43,877,932.94
II.1.1. NON-EXCHANGE REVENUES	-44,024,702.73	-40,002,907.14
II.1.1.6. RECOVERY OF EXPENSES	-3,777,484.66	-2,135.00
II.1.1.8. OTHER NON-EXCHANGE REVENUES	-40,247,218.07	-40,000,772.14
II.1.2. EXCHANGE REVENUES	-3,704,906.30	-3,875,025.80
II.1.2.1. FINANCIAL INCOME	-9,297,761.51	-7,320,676.41
II.1.2.2. OTHER EXCHANGE REVENUE	5,592,855.21	3,445,650.61
II.2. EXPENSES	767,429,246.54	553,347,634.99
II.2. EXPENSES	767,429,246.54	553,347,634.99
II.2.11.OTHER EXPENSES	22,294,812.15	15,419,916.77
II.2.2. EXP IMPLEM BY COMMISS&EX.AGENC. (DM)	52,352,872.91	12,745,135.63
II.2.3. EXP IMPL BY OTH EU AGENC&BODIES (IM)	577,146,704.74	423,456,799.05
II.2.4. EXP IMPL BY 3RD CNTR & INT ORG (IM)	47,454,610.09	47,825,514.38
II.2.5. EXP IMPLEM BY OTHER ENTITIES (IM)	60,939,326.34	54,065,447.35
II.2.6. STAFF AND PENSION COSTS	-172,400.00	-165,200.00
II.2.8. FINANCE COSTS	7,413,320.31	21.81
STATEMENT OF FINANCIAL PERFORMANCE	**719,699,637.51**	**509,469,702.05**

The accounting situation presented in the Balance Sheet and Statement of Financial Performance does not include the accruals and deferrals calculated centrally by the services of the Accounting Officer.

It should be noted that the balance sheet and statement of financial performance presented in Annex 3 to this Annual Activity Report, represent only the assets, liabilities, expenses and revenues that are under the control of this Directorate General. Significant amounts such as own resource revenues and cash held in Commission bank accounts are not included in this Directorate General's accounts since they are managed centrally by DG Budget, on whose balance sheet and statement of financial performance they appear. Furthermore, since the accumulated result of the Commission is not split amongst the various Directorates General, it can be seen that the balance sheet presented here is not in equilibrium.

Additionally, the figures included in tables 4 and 5 are provisional since they are, at this date, still subject to audit by the Court of Auditors. It is thus possible that amounts included in these tables may have to be adjusted following this audit.

Note : The figures are those related to the provisional accounts and not yet audited by the Court of Auditors

Refresh date : 11/03/2025

TABLE 5bis : OFF BALANCE SHEET for DG ENER

OFF BALANCE	2024	2023
OB.1. Contingent Assets	0.00	0.00
GR for pre-financing	0.00	0.00
OB.2. Contingent Liabilities	-9,277,109.00	-9,277,109.00
OB.2.1. Guarantees given for EU FI	-9,277,109.00	-9,277,109.00
OB.2.7. CL Legal cases OTHER	0.00	0.00
OB.3. Other Significant Disclosures	0.00	0.00
OB.3.2. Comm against app. not yet consumed	0.00	0.00
OB.3.3.4.Galileo programme		0.00
OB.4. Balancing Accounts	9,277,109.00	9,277,109.00
OB.4. Balancing Accounts	9,277,109.00	9,277,109.00
OFF BALANCE	**0.00**	**0.00**

It should be noted that the balance sheet and statement of financial performance presented in Annex 3 to this Annual Activity Report, represent only the assets, liabilities, expenses and revenues that are under the control of this Directorate General. Significant amounts such as own resource revenues and cash held in Commission bank accounts are not included in this Directorate General's accounts since they are managed centrally by DG Budget, on whose balance sheet and statement of financial performance they appear. Furthermore, since the accumulated result of the Commission is not split amongst the various Directorates General, it can be seen that the balance sheet presented here is not in equilibrium.

Additionally, the figures included in tables 4 and 5 are provisional since they are, at this date, still subject to audit by the Court of Auditors. It is thus possible that amounts included in these tables may have to be adjusted following this audit.

Note : The figures are those related to the provisional accounts and not yet audited by the Court of Auditors

Refresh date : 11/03/2025

TABLE 6 : AVERAGE PAYMENT TIMES for DG ENER

Legal Times

Maximum Payment Time (Days)	Total Nbr of Payments	Nbr of Payments within Time Limit	Percentage	Average Payment Times (Days)	Nbr of Late Payments	Percentage	Average Payment Times (Days)	Late Payments Amount	Percentage
30	995	985	98.99 %	13.75	10	1.01 %	38.20	129,982.64	0. %
45	4	4	100.00 %	9.25				0.00	0. %
60	314	310	98.73 %	24.59	4	1.27 %	64.25	327,683.65	0. %
90	12	11	91.67 %	55.82	1	8.33 %	97.00	60,000.00	0. %

Total Number of Payments	**1,325**	**1,310**	**98.87 %**		**15**	**1.13 %**		**517,666.29**	**0. %**
Average Net Payment Time	**17.02**			**16.65**			**49.07**		
Average Gross Payment Time	**19.55**			**18.51**			**109.87**		

Suspensions

Average Report Approval Suspension Days	Average Payment Suspension Days	Number of Suspended Payments	% of Total Number	Total Number of Payments	Amount of Suspended Payments	% of Total Amount	Total Paid Amount
0	30	111	8.38 %	1,325	10,987,965.54	1.33 %	827,906,534.73

Late Interest paid in 2024

DG	GL Account	Description	Amount (Eur)
ENER	65010100	Interest on late payment of charges New FR	3,123.65
			3,123.65

NB: Table 6 only contains payments relevant for the time statistics. Please consult its exact scope in the AAR Annex3 BO User Guide (https://myintracomm.ec.europa.eu/budgweb/EN/abac/dwh/Pages/its-030-10-20_documentation.aspx).

Note : The figures are those related to the provisional accounts and not yet audited by the Court of Auditors

Refresh date : 11/03/2025

TABLE 7 : SITUATION ON REVENUE AND INCOME in 2024 for DG ENER								
Chapter		Revenue and income recognized			Revenue and income cashed from			Outstanding balance
		Current year RO	Carried over RO	Total	Current Year RO	Carried over RO	Total	
		1	2	3=1+2	4	5	6=4+5	7=3-6
33	Other administrative revenue	1,421,117.95	140,898.34	1,562,016.29	1,421,117.95	89,939.87	1,511,057.82	50,958.47
42	Fines and penalties	180,000.00	772.14	180,772.14	180,000.00	772.14	180,772.14	0.00
60	Single market, innovation and digital	41,965,803.14	165,391.47	42,131,194.61	41,965,803.14	165,391.47	42,131,194.61	0.00
66	Other contributions and refunds	40,613,223.77	26,942.27	40,640,166.04	40,589,176.61	26,942.27	40,616,118.88	24,047.16
67	Completion for outstanding recovery orders prior to 2021	-4,364,673.43	11,533,697.96	7,169,024.53	-4,364,673.43	4,979,901.76	615,228.33	6,553,796.20
Total DG ENER		**79,815,471.43**	**11,867,702.18**	**91,683,173.61**	**79,791,424.27**	**5,262,947.51**	**85,054,371.78**	**6,628,801.83**

Note : The figures are those related to the provisional accounts and not yet audited by the Court of Auditors

Refresh date : 11/03/2025

TABLE 8 : FINANCIAL IMPACT OF EX-ANTE AND EX-POST CONTROLS in 2024for DG ENER

EX-ANTE CONTROLS BY TRANSACTION	Irregularity	Total ex-ante amounts
NON ELIGIBLE IN COST CLAIMS	900.00	**900.00**
CREDIT NOTES	137,064.25	**137,064.25**
RECOVERY ORDERS ON PRE-FINANCING		
Sub-Total	**137,964.25**	**137,964.25**

EX-POST CONTROLS BY TRANSACTION	Irregularity	Total ex-post amounts
RECOVERY ORDERS OTHER THAN ON PRE-FINANCING	3,777,484.66	**3,777,484.66**
INCOME LINES IN INVOICES		
Sub-Total	3,777,484.66	**3,777,484.66**

GRAND TOTAL (EX-ANTE + EX-POST)	**3,915,448.91**	**3,915,448.91**

Note : The figures are those related to the provisional accounts and not yet audited by the Court of Auditors

Refresh date : 11/03/2025

TABLE 9: AGEING BALANCE OF RECOVERY ORDERS AT 31/12/2024 for DG ENER

	Number at 01/01/2024	Number at 31/12/2024	Evolution	Open Amount (Eur) at 01/01/2024	Open Amount (Eur) at 31/12/2024	Evolution
2014	7	5	-28.57 %	1,926,254.07	1,095,829.61	-43.11 %
2015	1		-100.00 %	1,027,913.46		-100.00 %
2017	1	1	0.00 %	753,373.65	753,373.65	0.00 %
2018	5	5	0.00 %	597,841.60	597,841.60	0.00 %
2019	3	2	-33.33 %	7,369,213.52	4,157,709.81	-43.58 %
2022	1		-100.00 %	165,391.47		-100.00 %
2023	2		-100.00 %	27,714.41		-100.00 %
2024		2			24,047.16	
	20	**15**	**-25.00 %**	**11,867,702.18**	**6,628,801.83**	**-44.14 %**

Note : The figures are those related to the provisional accounts and not yet audited by the Court of Auditors

Refresh date : 11/03/2025

TABLE 10 :Recovery Order Waivers >= 60 000 € in 2024 for DG ENER

Waiver Central Key	Linked RO Central Key	RO Accepted Amount (Eur)	LE Account Group	Commission Decision	Comments
3233240026	3241912043	-2,596,275.38	Private Companies		
3233240046		-89,939.87	Private Companies		
3233240047	3241502437	-1,027,913.46	Private Companies		
3233240156	3241405401	-740,484.59	Private Companies		

Total DG ENER	**-4,454,613.30**

Number of RO waivers	**4**

There are no waivers below 60 000 €

Justifications:
3233240026: Commission Decision C(2023) 6746 of 11 October 2023 / Insolvency of the debtor
3233240046: Commission Decision C(2024)1962 of 2 April 2024 / Insolvency of the debtor
3233240047: Commission Decision C(2024)1962 of 2 April 2024 / Insolvency of the debtor
3233240156: Commission Decision C(2024)6633 of 25.09.2024 / Insolvency of the debtor

Note : The figures are those related to the provisional accounts and not yet audited by the Court of Auditors

Refresh date : 11/03/2025

TABLE 11 : Negotiated Procedures in 2024 for DG ENER

The procedures are presented in the Annual Management and Performance Report of 2024

Note : The figures are those related to the provisional accounts and not yet audited by the Court of Auditors

Refresh date : 11/03/2025

TABLE 12 : Summary of Procedures in 2024 for DG ENER

The procedures are presented in the Annual Management and Performance Report of 2024

Note : The figures are those related to the provisional accounts and not yet audited by the Court of Auditors

Refresh date : 11/03/2025

TABLE 13 : BUILDING CONTRACTS in 2024 for DG ENER

Legal Base	Procedure subject	Contract Number	Contractor Name	Contract Subject	Contracted Amount (€)

Note : The figures are those related to the provisional accounts and not yet audited by the Court of Auditors

Refresh date : 11/03/2025

TABLE 14 : CONTRACTS DECLARED SECRET in 2024 for DG ENER

Legal Base	LC Date	Contract Number	Contract Subject	Contracted Amount (€)

Note : The figures are those related to the provisional accounts and not yet audited by the Court of Auditors

Refresh date : 11/03/2025

TABLE 15 : FPA duration exceeds 4 years - DG ENER

Note : The figures are those related to the provisional accounts and not yet audited by the Court of Auditors

Refresh date : 11.03/2025

TABLE 16 : Commitments co-delegation type 3 in 2024 for DG ENER

Note: The figures are those related to the provisional accounts and not yet audited by the Court of Auditors

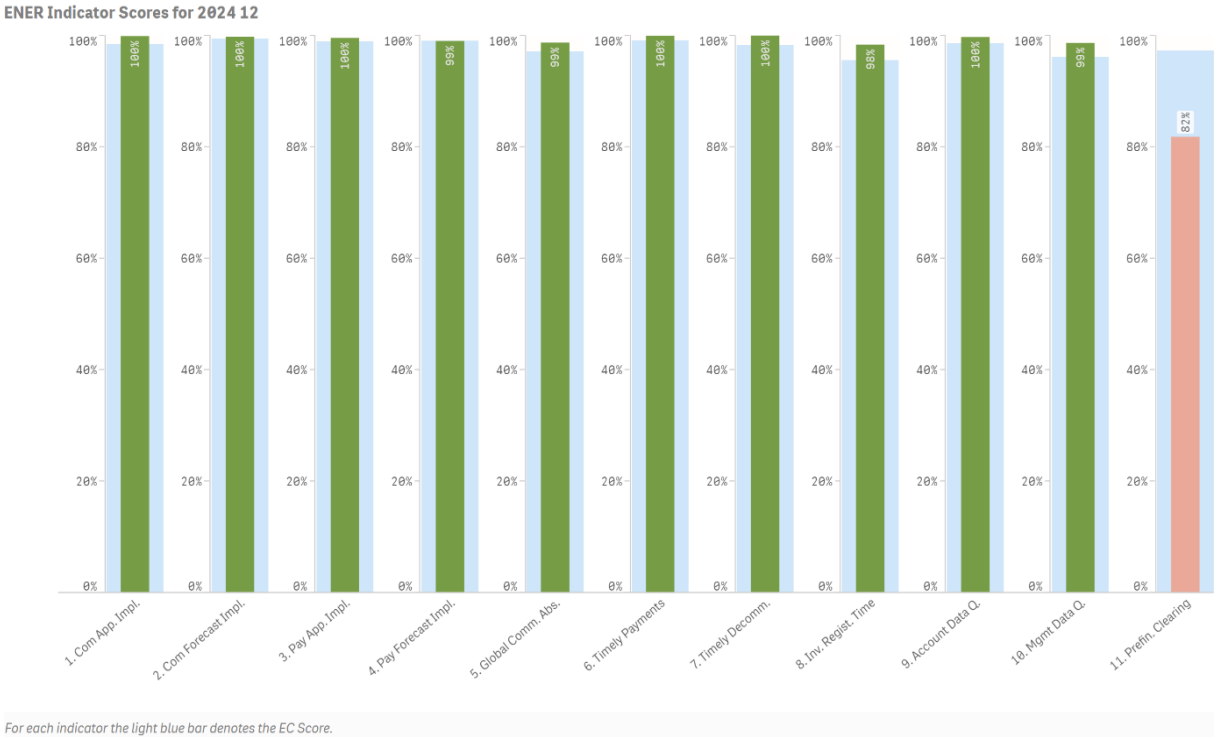
Refresh date: 11.03/2025

ANNEX 4: Financial scorecard

The Annex 4 of each Commission service summarises the annual result of the standard financial indicators measurement. Annexed to the Annual Activity Report 2024, 11 standard financial indicators are presented below, each with its objective and result for the Commission service and for the EC as a whole (for benchmarking purposes) ([39]).

For each indicator, its value (in %) for the Commission service is compared to the common target (in %). The difference between the indicator's value and the target is colour coded as follows:

- 100 – >95% of the target: dark green
- 95 – >90% of the target: light green
- 90 – >85% of the target: yellow
- 85 – >80% of the target: light red
- 80 – 0% of the target: dark red



For each indicator the light blue bar denotes the EC Score.

([39]) If the EC service did not perform any transaction in the area measured by the indicator or the information is not available in the central financial system, the indicator is not calculated (i.e. displayed as "-") in this Annex.

Indicator	Objective	Comment ([40])	ENER Score	EC Score
1. Commitment Appropriations Implementation	Ensure efficient use of commitment appropriations expiring at the end of Financial Year		100%	99%
2. Commitment Forecast Implementation	Ensure the cumulative alignment of the commitment implementation with the commitment forecast in a financial year		100%	99%
3. Payment Appropriations Implementation	Ensure efficient use of payment appropriations expiring at the end of Financial Year		100%	99%
4. Payment Forecast Implementation	Ensure the cumulative alignment of the payment implementation with the payment forecast in a financial year		99%	99%
5. Global Commitment Absorption ([41])	Ensure efficient use of already earmarked commitment appropriations (at L1 level)		99%	97%
6. Timely Payments	Ensure efficient processing of payments within the legal deadlines	DG ENER deployed the necessary controls to ensure timely payment as well as to monitor elements that could impact it such as invoice registration.	100%	99%
7. Timely Decommitments	Ensure efficient decommitment of outstanding RAL at the end of commitment life cycle		100%	98%
8. Invoice Registration Time	Monitor the accounting risk stemming from late registration of invoices in the central accounting system ABAC		98%	96%

([40]) An explanation behind the indicator result can be provided, e.g. the comment about the achievement itself, reference to the whole Commission performance (better or worse), reasons behind this achievement. The comment is mandatory for the 'Timely payments' indicator. For the rest of indicators the comment is mandatory only if the score is equal or below the target of 80%.

([41]) Due to technical limitation: 1. the indicator does not take into account the Com L1 Consumption between the FDC ILC date and the FA FDI allowed as an exception in the external actions for Com L1 of type GF, i.e. with Financing Agreement, under the FR2018 Article 114.2. 2. it is technically not possible to exclude the decommitment of RAL (C8) which is subsequently re-committed for a new purpose. As a result, the actual Indicator score may be slightly higher than the one reported for DGs using the GF commitments.

9. Accounting Data Quality	Ensure the good data quality of ABAC transactions with the focus on fields having a primary impact on the accounts		100%	99%
10. Management Data Quality	Ensure the good data quality of ABAC transactions with the focus on fields having a primary impact on the management decisions		99%	96%
11. Timely Invoice PF clearing	Ensure efficient clearing by invoices of prefinancing payments within the invoice payment time limit	Four clearings out of 22 in 2024 required additional inquiries and could not be processed upon receipt of the supporting documents. This concerned contribution agreements with international organisations, for which the reporting was not aligned DG ENER requirements. To reduce the delays, DG ENER in the future will strengthen its monitoring of such transactions to anticipate the requests for reports.	82%	100%

ANNEX 5: Materiality criteria

This annex provides a detailed explanation on how the AOD defined the materiality threshold as a basis for determining whether significant weaknesses should be subject to a formal reservation to her declaration.

Introduction

Deciding whether a weakness is significant is a **matter of judgement** by the Authorising Officer by Delegation (AOD), who remains responsible for the declaration of assurance, including any reservations to it. In doing so, the AOD should **identify the overall impact of a weakness** and **judge whether it is material** enough so that the non-disclosure of the weakness is likely to have an influence on the decisions or conclusions of the users of the declaration. The benchmark for this judgement is the materiality criteria which the AOD sets at the moment of designing the internal control system under his/her responsibility. For DG ENER, the materiality of residual weaknesses identified (i.e., after mitigating and corrective measures) is assessed on the basis of qualitative and/or quantitative criteria, in line with the instructions for the preparation of the Annual Activity Report.

The **qualitative assessment** includes an analysis of the causes and the types of error (including whether they are repetitive) to conclude on the nature, context and/or scope of the weaknesses identified. This may refer to significant control system weaknesses or critical issues reported by the Directors, the Authorising Officers by Sub-Delegation, the European Court of Auditors (ECA), the Internal Audit Service (IAS), DG BUDG or OLAF. In addition, the duration and any mitigating controls or corrective actions are taken into consideration.

The **quantitative assessment** aims at estimating any financial impact ("amount at risk") resulting from the errors detected. DG ENER's expenditure is composed of (in order of importance), directly managed grants, indirectly managed grants and financial instruments and other direct spending mostly of an administrative nature. The error rate affecting payments is estimated yearly and per management system, following a methodology that takes into account the risk associated to the type of expenditure (in terms of probability and final financial impact). This analysis and the conclusions are presented concisely in the body of the Annual Activity report.

Qualitative criteria for defining significant weaknesses

For all methods of implementation under the operational budget, the relevant parameters are:

Consideration of significant control system weaknesses

Control system weaknesses (whether this is in a system operated by the Commission or by a third party) may be identified by management itself (for example through ex-post audits or through the assessment of the effectiveness of internal control systems), by internal or external auditors or by third party control instances. They may relate to the design or operational effectiveness of a control or of an entire system.

Critical issues outlined by the European Court of Auditors, the Internal Audit Service, DG BUDG and OLAF

Any critical recommendations made by the European Court of Auditors, the IAS, DG BUDG or OLAF, which have not been effectively addressed should be assessed in terms of their significance. Here, the term "critical recommendation" is used in a wider sense; it includes those recommendations labelled by the auditor as "critical" as well as those not labelled at all which is assessed as having a critical impact on the assurance. The impact on assurance of recommendations labelled "very important" for which there is a significant delay in the implementation of the action plan will also be taken into account.

Significant reputational events

Events or weaknesses which have a significant reputational impact on DG ENER, or indirectly on the Commission, will be reported irrespective of the amount of damage to DG ENER administrative and operational budget and will be considered for issuing a reservation on a reputational basis.

When assessing the significance of any weaknesses, the following factors are considered:

- the nature and scope of the weakness;
- the duration of the weakness;
- the existence of compensatory measures (mitigating controls which reduce the impact of the weakness);
- the existence of effective corrective actions to correct the weaknesses (action plans and financial corrections) which have had a measurable impact.

When significant weaknesses are identified, a quantification of the amount at risk should be carried out when possible (see section below).

Quantitative criteria for defining reservations

This section provides the methodology for measuring the residual amount at risk and determining its materiality.

DG ENER's expenditure is composed of procurements, indirectly managed grants, directly managed grants, financial instruments, contribution to administrative expenditure of executive agencies, JUs and decentralised agencies and other direct spending mostly of an administrative nature. The error rate affecting payments is estimated yearly and per management system, following a methodology that takes into account the risk associated to the type of expenditure.

Considering that the fact that the research framework programmes' implementing bodies ([42]) are sharing a common ex-post audit approach, the following section focusses on this specific management system.

Research framework programmes – common aspects

The assessment of the effectiveness of the different programmes' control system is based mainly, but not exclusively, on ex-post audits' results. The effectiveness is expressed in terms of detected and residual error rate, calculated on a representative sample on a multi-annual basis.

Assessment of the effectiveness of controls

The starting point to determine the effectiveness of the controls in place is the cumulative level of error expressed as the percentage of errors in favour of the EC, detected by ex-post audits, measured with respect to the amounts accepted after ex-ante controls. However, to take into account the impact of the ex-post controls, this error level is adjusted by subtracting:

- Errors detected and corrected as a result of the implementation of audit conclusions.
- Errors corrected as a result of the extension of audit results to non-audited contracts with the same beneficiary.

This results in a residual error rate – used for H2020 and Horizon Europe - which is calculated as follows:

$$\text{Re}\,sER\% = \frac{(\text{Re}\ pER\% * (P - A)) - (\text{Re}\ pERsys\% * E)}{P}$$

where:

ResER% Residual error rate, expressed as a percentage.

RepER% Representative error rate, or error rate detected in the common representative sample, expressed as a percentage. The RepER% is composed of complementary portions reflecting the proportion of negative systematic and non-systematic errors detected. This rate is the same for all implementing entities, without prejudice to possible individual detected error rates.

RepERsys% Portion of the RepER% representing negative systematic errors, (expressed as a percentage). The RepERsys% is the same for all entities and it is calculated from the same set of results as the RepER%.

([42]) Directorates General, Executive Agencies and Joint Undertakings (also called Article 187 bodies) implementing grants of the Research Framework Programmes.

P Total requested EC contribution (€) in the auditable population (i.e., all paid financial statements).

A Total requested EC contribution (€) as approved by financial officers of all audited financial statements. This will be collected from audit results.

E Total non-audited requested EC contribution (€) of all audited beneficiaries.

The Common Representative Sample (CRS) is the starting point for the calculation of the residual error rate. It is representative of the expenditure of each Framework Programme (FP) as a whole. Nevertheless, the Director-General must also take into account other information when considering if the overall residual error rate is a sufficient basis on which to draw a conclusion on assurance (or make a reservation) for specific segment(s) of Horizon 2020/Horizon Europe. This information may include the results of other ex-post audits, ex-ante controls, risk assessments, audit reports from external or internal auditors, etc. All this information may be used in assessing the overall impact of a weakness and considering whether to make a reservation or not.

If the CRS results are not used as the basis for calculating the residual error rate this must be clearly disclosed in the AAR, along with details of why and how the final judgement was made.

Should a calculation of the residual error rate based on a representative sample not be possible for a FP for reasons not involving control deficiencies ([43]) the consequences are to be assessed quantitatively by making a best estimate of the likely exposure for the reporting year based on all available information. The relative impact on the Declaration of Assurance would then be considered by analysing the available information on qualitative grounds and considering evidence from other sources and areas. This should be clearly explained in the AAR.

Multiannual approach

The Commission's central services' guidance relating to the quantitative materiality threshold refers to a percentage of the authorised payments of the reporting year of the Activity Based Budgeting (ABB) expenditure. However, the Guidance on AARs also allows a multi-annual approach, especially for budget areas (e.g., programmes) for which a multi-annual control system is more effective. In such cases, the calculation of errors, corrections and materiality of the residual amount at risk should be done on a "cumulative basis" on the basis of the totals over the entire programme lifecycle.

Because of its multiannual nature, the effectiveness of the Research and Innovation (R&I) family services' control strategy can only be fully measured and assessed at the final

([43]) Such as, for instance, when the number of results from a statistically-representative sample collected at a given point in time is not sufficient to calculate a reliable error rate.

stages in the life of the framework programme, once the ex-post audit strategy has been fully implemented and systematic errors have been detected and corrected.

In addition, basing materiality solely on ABB expenditure for one year may not provide the most appropriate basis for judgements, as ABB expenditure often includes significant levels of pre-financing expenditure (e.g., during the initial years of a new generation of programmes), as well as reimbursements (interim and final payments) based on cost claims that 'clear' those pre-financings. Pre-financing expenditure is very low risk, being paid automatically after the signature of the contract.

Notwithstanding the multiannual span of their control strategy, the Director-Generals of the Research DGs (and the Directors of the Executive Agencies implementing R&I Framework Programmes) are required to sign a statement of assurance for each financial reporting year. In order to determine whether to qualify this statement of assurance with a reservation, the effectiveness of the control systems in place needs to be assessed not only for the year of reference but also with a multiannual perspective, to determine whether it is possible to reasonably conclude that the control objectives will be met in the future as foreseen.

In view of the crucial role of ex-post audits defined in the respective common audit strategies, this assessment needs to check in particular whether the scope and results of the ex-post audits carried out until the end of the reporting period are sufficient and adequate to meet the multiannual control strategy goals.

The criteria for making a decision on whether there is material error in the expenditure of the DG or service, and thus, on whether to make a reservation in the AAR, will therefore be principally, though not necessarily exclusively, based on the level of error identified in ex-post audits of cost claims on a multi-annual basis.

Adequacy of the audit scope

The quantity of the (cumulative) audit effort carried out until the end of each year is measured by the actual volume of audits completed. The data is to be shown per year and cumulated, in line with the current AAR presentation of error rates. The multiannual planning and results should be reported in sufficient detail to allow the reader to form an opinion on whether the strategy is on course as foreseen.

The Director Generals should form a qualitative opinion to determine whether deviations from the multiannual plan are of such significance that they seriously endanger the achievement of the internal control objective. In such case, they would be expected to qualify their annual statement of assurance with a reservation.

Research Framework programmes – specific aspects

The control system of each framework programme is designed to achieve the operational and financial control objectives set in their respective legislative base and legal

framework. If the effectiveness of those control systems does not reach the expected level, a reservation must be issued in the annual activity report and corrective measures should be taken. As each programme has a different control system, the following section details the considerations leading to the establishment of their respective materiality threshold and the conclusions to draw with regard to the declaration of assurance.

Horizon 2020 Framework Programme

The control system established for Horizon 2020 is designed to achieve a control result in a range of 2-5% detected error rate, which should be as close as possible to 2%, after corrections. Consequently, this range has been considered in the legislation as the control objective set for the framework programme.

This is based on the provision of the Commission's proposal for the Regulation establishing the Horizon 2020 Framework Programme ([44]) which states that:

''It remains the ultimate objective of the Commission to achieve a residual error rate of less than 2% of total expenditure over the lifetime of the programme, and to that end, it has introduced a number of simplification measures. However, other objectives such as the attractiveness and the success of the EU research policy, international competitiveness, scientific excellence and in particular, the costs of controls need to be considered.

Taking these elements in balance, it is proposed that the Directorates General charged with the implementation of the research and innovation budget will establish a cost-effective internal control system that will give reasonable assurance that the risk of error over the course of the multiannual expenditure period is, on an annual basis, within a range of 2-5%, with the ultimate aim to achieve a residual level of error as close as possible to 2% at the closure of the multi-annual programmes, once the financial impact of all audits, correction and recovery measures have been taken into account.

Horizon 2020 introduces a significant number of important simplification measures that will lower the error rate in all the categories of error. However, […] the continuation of a funding model based on the reimbursement of actual costs is the favoured option. A systematic resort to output-based funding, flat rates or lump sums appears premature at this stage […]. Retaining a system based on the reimbursement of actual costs does however mean that errors will continue to occur.

An analysis of errors identified during audits of FP7 suggests that around 25-35% of them would be avoided by the simplification measures proposed. The error rate can then be expected to fall by 1.5%, i.e., from close to 5% to around 3.5%, a figure that is referred

([44]) COM(2011) 809/3 Proposal for a Regulation of the European Parliament and of the Council establishing Horizon 2020 – the Framework programme for Research and Innovation (2014-2020), see point 2.2, pp 98-102.

to in the Commission Communication striking the right balance between the administrative costs of control and the risk of error.

The Commission considers therefore that, for research spending under Horizon 2020, a risk of error, on an annual basis, within a range between 2-5% is a realistic objective taking into account the costs of controls, the simplification measures proposed to reduce the complexity of rules and the related inherent risk associated to the reimbursement of costs of the research project. The ultimate aim for the residual level of error at the closure of the programmes after the financial impact of all audits, correction and recovery measures will have been taken into account is to achieve a level as close as possible to 2%."

Horizon Europe Framework Programme

For the Horizon Europe Framework Programme ([45]), the general control objective ([46]), following the standard quantitative materiality threshold proposed in the standing instructions for AARs, is to ensure that the cumulative representative error rate and the cumulative residual error rate, i.e., the level of errors which remain undetected and uncorrected, does not exceed 2% on annual basis. A reservation will be issued in the AAR if the cumulative residual error rate is above the 2% materiality threshold.

Other directly managed expenditure

The assessment of the effectiveness of the different programmes' control system is based on ex-ante and, when available, on ex-post audits' results. The effectiveness is expressed in terms of detected and residual error rate, calculated from the best available estimates.

The type of controls deployed is aligned with the risk profile of the expenditure component. Service contracts, reimbursement of experts and administrative expenditure are considered as low risk regarding legality and regularity. Moreover, the individual amounts are relatively limited. Nuclear safeguards/Safety procurements are highly specific. Therefore, there might be no available ex-post audit results available as the costs of such controls would exceed the potential benefits. However, this expenditure remains subject to extensive ex-ante controls.

For other operational grants and support actions, the audit coverage is determined in function of the risk associated with the expenditure. Given the limited size of these actions, the calculation of the residual error rate based on a representative sample is not possible. The consequences are therefore assessed quantitatively by making a best estimate of the likely exposure for the reporting year based on all available information,

([45]) Regulation (EU) 2021/695 of the European Parliament and of the Council of 28 April 2021 establishing Horizon Europe.

([46]) This general control objective described for Horizon Europe is also applicable to FP7 framework programme legacy.

including the detected error rate. The relative impact on the Declaration of Assurance would be then considered by analysing the available information on qualitative grounds and considering evidence from other sources and areas.

Non-expenditure items

For tangible assets the assessment is based on the evolution of the residual evolution of assets exceeding of individual value of EUR 50 000.

For financial assets (shareholding in the EEEF special purpose vehicle) and contingent assets and liabilities (guarantees corresponding to the CEF bond portfolio) the assessment is based on the evolution of the individual share value and of the net present value of the investment/portfolio compared to the initial investment values/initial contribution. The control objective is to maintain the realised loss under 2% of the fund value. It should be noted however that financial investments are valued according to marked-to-market principle and in accordance to accrued future cashflow. The qualitative assessment therefore needs to take into account the actual reason underlying any decrease in valuation.

Assessment of reputational events

In cases where a weakness is considered significant in qualitative terms but not in quantitative terms, DG ENER will consider whether the weakness should lead to a reservation based on reputational grounds.

The impact of a reputational event must be measured as the impact on the Commission's reputation characterised by a loss of confidence in the institution by its stakeholders ([47]), rather than the impact on the stakeholders' own reputation.

The following three factors are to be used to judge the significance of a reputational event:

- The nature of the impact on reputation, generally be expressed in terms of political consequences
- The breadth of awareness of the event,
- The duration of impact on reputation, taking into account that the impact of almost any event on reputation will diminish over time.

([47]) Defined as the Member States, the Council and Parliament, the European Court of Auditors, Member State and third country participants in Community programmes and activities who receive direct or indirect funding from the Commission, contractors, the staff of the Institution, the media, and the wider public.

Disclosure

The AOD reports on the key issues that have arisen during the year. DG ENER will disclose in its AAR events assessed to have had a significant impact on the reputation of the Commission, a service or an activity during the year in question.

The disclosure will address both significant events which have been successfully managed (where the damage to reputation has been effectively mitigated) as well as on those events whose impact is still being felt. It would usually not disclose reputational risks, as these remain potential, uncertain events and would not as such impact the assurance.

For the purposes of a reservation

Significant reputational events may lead to reservations where the impact of the event has a consequence on the declaration of assurance. In other words, it must be linked to the use of resources, sound financial management and the legality and regularity of underlying transactions. It should be noted that a reservation based on reputation does not need to meet the quantitative criteria for reservations, as by definition, its principal impact is on reputation.

De minimis threshold for financial reservation

Since 2019 ([48]), a 'de minimis' threshold for financial reservations has been introduced. Quantified AAR reservations related to residual error rates above the 2% materiality threshold are deemed not substantial for segments representing less than 5% of a DG's total payments and with a financial impact below EUR 5 million. In such cases, quantified reservations are no longer needed. Cases where the 'de minimis' threshold applies this year are reported in annex 9.

([48]) Agreement of the Corporate Management Board of 30/4/2019.

ANNEX 6: Relevant Control System(s) for budget implementation (RCSs)

RCS 1) Research grants (under direct management)

DG ENER uses one Relevant Control System (RCS) per ongoing research programme for the management of grants (Horizon 2020, Horizon Europe).

The RCS for Horizon Europe is similar to that of Horizon 2020. The main improvements for Horizon Europe are the co-creation of the work programme by the Directors' Groups according to the work of the various instances, and the simplification introduced with the single daily rate for personnel costs and the rollout of simplified cost forms, in particular lump sum funding and unit costs for personnel costs.

The error rates per programme are presented in Table X of Annex 9.

Stage 1: Ex-ante controls

For H2020, DG R&I centralises the majority of the ex-ante controls performed. DG ENER participates in the different committees and working groups that contribute to the governance of the programmes, and reports on the relevant indicators. DG ENER monitors and reports on the indicators that remain within its remit, in particular as regards financial and budgetary performance.

Effectiveness, efficiency, and qualitative benefits are detailed per stages A to D.

Economy and quantitative benefits are calculated overall for the ex-ante controls and detailed at the end of Stage 1.

A - Preparation, adoption and publication of the Annual Work Programme and Calls for proposals

Main internal control objectives: Ensuring that the Commission selects the proposals that contribute the most towards the achievement of the policy or programme objectives (effectiveness); Compliance (legality and regularity); Prevention of fraud (anti-fraud strategy).

Main risks	Mitigating controls	Coverage, frequency and depth of controls	Cost-Effectiveness indicators (three E's)
The work programme and subsequent calls for proposals do not adequately reflect the policy objectives and priorities, are incoherent and/or the essential eligibility, selection and award criteria are not adequate to ensure the evaluation of the proposals.	• For Horizon 2020 and Horizon Europe, hierarchical validation within the authorising department Inter-service consultation, including all relevant services. • Adoption by the Commission • Explicit allocation of responsibility. Under Horizon Europe, the work programmes proposed by the Directors' Groups according to the Commission decision C(2021)4472 are co-created with the work of the various entities and with the processes established in this decision. • In particular, the Common Implementation Centre (CIC) in DG Research and Innovation provides all DGs involved in the implementation of Horizon 2020 and Horizon Europe research with harmonised procedures, guidance and IT tools. • The Common Policy Centre (CPC) in DG Research and Innovation under Horizon Europe centralises the budget planning and the monitoring of the Horizon Europe and Horizon 2020's budget implementation. • The CIC/CPC governance structure ensures that programme implementation experience gathered feeds back to the programme design.	**Coverage/Frequency:** 100% **Depth:** all work programmes are thoroughly reviewed at all levels, including for operational and legal aspects and all underlying implementation tools are defined and developed according to common rules. Under Horizon Europe, all business processes follow a governance system under the due supervision of entities such as the Steering Board, the Executive Committee, the Directors Groups and key user	**Effectiveness:** The work programmes are adopted by the Commission. Success rates in terms of "over-subscription": number of proposals retained for funding compared to number of eligible proposals received. **Qualitative Benefits:** A good Work Programme and well publicised calls should generate a large number of good quality projects, from which the best can be chosen. There will therefore be real competition for funds. Optimised procedures, common approach on multiple issues (audits, fraud, legal aspects, reporting…); better reporting on the whole programme – better management of the programme ([49]).

([49]) The mutualisation of the support services represents a quantitative benefit which is certain but not accurately quantifiable in the context of reorganisations, new programme's setting up, general HR offsetting through the Commission.

B - Selecting and awarding: Evaluation, ranking and selection of proposals

Main internal control objectives: Ensuring that the most promising projects for meeting the policy objectives are among the proposals selected; Compliance with legal base; Prevention of fraud.

Main risks	Mitigating controls	Coverage, frequency and depth of controls	Cost-Effectiveness indicators (three E's)
The evaluation, ranking and selection of proposals is not carried out in accordance with the established procedures, the policy objectives, priorities and/or the essential eligibility, selection and award criteria. Conflict of interest regarding the expert evaluators.	• Procedure for selecting and appointing expert evaluators. • Conflict of interest checks. • Assessment by independent experts. • Appropriate briefing of experts, including on the evaluation of cost estimations in lump sum proposals. • Comprehensive IT system supporting the evaluation of proposals and allowing better monitoring of the process. Involvement of external observers in the evaluation process. • Validation by the AOSD of ranked list of proposals. In addition, if applicable: Opinion of advisory bodies; comitology; inter-service consultation and adoption by the Commission; publication. • Systematic checks on operational and legal aspects performed before signature of the Grant Agreement. • Redress procedure.	**100% vetting** (including selection) of experts for technical expertise and independence (e.g., conflicts of interests, nationality bias, ex-employer bias, collusion). - **100%** of proposals are evaluated. - Coverage: 100% of ranked list of proposals. Supervision of work of evaluators. - 100% of contested decisions are analysed by redress committee.	**Effectiveness:** Number of proposals evaluated. Efficiency Indicators: - % of Time-To-Inform on time. - % of number of (successful) redress challenges upheld / total number of proposals evaluated. **Qualitative benefits:** Expert evaluators from outside the Commission bring independence, state of the art knowledge in the field and a range of different opinions. This will have an impact on the whole project cycle: better planned, better implemented projects.

C - Contracting

Main internal control objectives: Ensuring that the most promising projects for meeting the policy objectives are among the proposals contracted; SFM (optimal allocation of the budget available); Compliance; Prevention of fraud and other horizontal priorities (ethics, gender balance, security aspects).

Main risks	Mitigating controls	Coverage, frequency and depth of controls	Cost-Effectiveness indicators (three E's)
The beneficiary lacks operational and/or financial capacity to carry out the actions. Procedures do not comply with regulatory framework. The evaluation stage has not detected a potentially fraudulent proposal/beneficiary.	• Validation of beneficiaries (financial capacity checks on demand). • Systematic checks on operational and legal aspects performed before signature of the GA*. • Risk assessment and risk-based checks before the grant agreement signature and reinforced monitoring flagging if necessary. • Ad hoc anti-fraud checks for riskier beneficiaries. • Signature of the GA by the AO. • Financial Verification when necessary. • Mutual Insurance Mechanism (MIM) (ex H2020 Participants Guarantee Fund). • An ethics review is carried out systematically in all HE calls, starting with an ethics pre-screening, which results in detailed screening or assessment if necessary. • As hoc security checks and screenings. Security review carried out systematically in all HE calls, starting with pre-screening, which may result in detailed security scrutiny.	**Coverage:** - 100% of the selected proposals and beneficiaries are scrutinised. - 100% of draft grant agreements. **Depth:** - Differentiated following the conclusion of the risk assessment. - Controls implemented when justified by the call/proposal content.	**Effectiveness**: - Number of grants signed. **Efficiency Indicators**: - % of Time–to-grant on time. - Average Time–to-grant.

D - Monitoring the implementation

Main internal control objectives: Ensuring that the operational results (deliverables) from the projects are of good value and meet the objectives and conditions; ensuring that the related financial operations comply with regulatory and contractual provisions; prevention of fraud;

ensuring appropriate accounting of the operations.

Main risks	Mitigating controls	Coverage, frequency and depth	Effectiveness, efficiency, economy indicators
The actions foreseen are not carried out in accordance with the grant agreement (for example deliverables, open access to results and publications...). The amounts paid exceed what is due in accordance with the applicable contractual and regulatory provisions. The cost claims are irregular or fraudulent. Lack of harmonised approach within the family with the consequence of unequal treatment of the beneficiaries. Ethics requirements are not fulfilled.	• Kick-off meetings and launch events involving the beneficiaries in order to avoid project management and reporting errors. **Guidance on reporting for lump sum grants (notion of work package completion).** • Specialised aid with web-based tools to inform most error-prone beneficiaries (i.e., SMEs who participate for the first time) about cost calculation practices. • Effective external communication about guidance to the beneficiaries (e.g., Funding and Tender portal, info days for the calls, coordinators' days on grant preparation and grant management). • Anti-fraud awareness raising training for the project officers IT Plagiarism detection tool for deliverables. • Enhanced family approach (anti-fraud cooperation; common legal and audit service; comprehensive and common IT system for all the family). • Operational and financial checks in accordance with the financial circuits. • Operation authorisation by the AO. • For riskier operations, reinforced monitoring. • Selection and appointment of experts for scientific reviews. of intermediate and/or final reporting. • If needed: application of Suspension/interruption of payments. • Referral of grant/beneficiary to OLAF/EPPO.	**Coverage / Frequency:** - 100% of the projects are controlled, including only value-adding checks. - Riskier operations subject to more in-depth controls. **Depth**: depends on risk criteria. However, as a deliberate policy to reduce administrative burden, and to ensure a good balance between trust and control, the level of control at this stage is reduced to a minimum. High risk operations identified by risk criteria. Red flags: suspicions raised by staff, audit results, EDES, individual or "population" risk assessment. Audit certificates required for any beneficiary claiming more than: EUR 325 000 (Horizon 2020). EUR 430 000 (Horizon Europe) **except lump sum grants**	**Effectiveness:** - Number of payments (interim and final). **Efficiency:** - Time-to-pay: % of payments (in value) made on time. - Time-to pay: Average number days net/gross + suspension days. **Qualitative Benefits:** - Projects are executed and produce benefits for the community.

Overall economy for ex-ante control

Main risks	Mitigating controls	Coverage, frequency and depth of controls	Cost-Effectiveness indicators (effectiveness, efficiency, economy)
			Economy: (The estimation is established for the grant process, which includes both Horizon 2020 and Horizon Europe). a. Estimation of cost of staff involved in the ex-ante checks - Programme management and monitoring - Financial management - Budget and accounting - General Coordination incl. Strategic Programming and Planning, internal control, assurance and quality management - Anti-fraud - Development and support of IT systems linked to managing funding programmes. b. Estimation of other costs linked to ex-ante checks - Cost of experts and costs of experts' management - Costs of IT external contracts of CIC. Details of the estimated cost of controls related to shared/pooled control activities carried out by REA and hosted by DG R&I (Common Implementation Centre including Common Audit Service) for the Research and Innovation family are reported in the Annual activity reports of REA and R&I.

Stage 2: Ex post controls

E - Reviews, audits and monitoring

Main internal control objectives: Measuring the level of error in the population after ex-ante controls have been undertaken; detect and correct any error or fraud remaining undetected after the implementation ex-ante controls; identifying possible systemic weaknesses in the ex-ante controls, or weaknesses in the rules.

Main risks	Mitigating controls	Coverage, frequency and depth	Effectiveness, efficiency, economy indicators
The ex-post controls (as such) do not prevent, detect and correct erroneous payments or attempted fraud to an extent going beyond a tolerable rate of error. Lack of consistency in the audit strategy within the family. Lack of efficiency for absence of coordination: multiple audits on the same beneficiary, same programme: reputational risk and high administrative burden on the beneficiaries' side.	• Common Ex-post control strategy for the entire Research and Innovation family (Horizon 2020 and Horizon Europe), implemented by a central service ((Common Audit Service (CAS) part of the Common Implementation Centre, DG Research and Innovation): - At intervals carry out audits of a representative sample of operations to measure the level of error in the population after ex-ante controls have been performed. - Calculate the representative error rate for the R&I programme. - Additional sample to address specific risks. - When relevant, joint audits with the Court of Auditors. • Multi-annual basis (programme's lifecycle) and coordination with other AOs concerned. • Validate audit results with beneficiary. • In case of systemic error detected, extrapolation to all the ongoing projects run by the audited beneficiary (or closed within two years).	**Coverage / Frequency**: Common Representative audit Sample (CRaS): MUS sample across the programme to draw valid management conclusions on the error rate in the population. **Depth:** research and Innovation risk-based sample, determined in accordance with the selected risk criteria aimed to maximise deterrent effect and prevention of fraud or serious error.	**Effectiveness:** - Representative and residual error rate identified. - Number of audits finalised % of beneficiaries & value coverage. **Economy/Efficiency:** - Percentage of implementation of CAS audit plan.

F - Implementing results from ex-post audits/controls

Main internal control objectives: Ensuring that the results from the ex-post controls, including corrections from financial audits, lead to effective recoveries; ensuring appropriate accounting of the recoveries made.

Main risks	Mitigating controls	Coverage, frequency and depth	Effectiveness, efficiency, economy indicators
The financial recommendations stemming from the ex-post audit are not implemented. Cases of potential fraud detected are not addressed in a timely manner or not addressed at all.	• Systematic registration of audit / control results to be implemented and actual implementation. • Guidance on monitoring and reporting on implementation of ex-post audit results. • Validation of recovery in accordance with financial circuits. • Authorisation by AOSD. • Coordination at the level of the R&I family: FAIR committee. • If needed: - Notification to OLAF and regular follow up of detected potential fraud - Reinforced monitoring implemented on ongoing projects.	**Coverage**: 100% of final audit results with a financial impact. **Depth**: all audit results are examined in-depth in making the final recoveries. Systemic errors are extended to all the ongoing non-audited projects of the same beneficiary (or closed within two years).	**Effectiveness:** - Amounts being recovered and offset. **Efficiency**: - Number/value/% of audit results pending implementation, - Number/value/% of audit results implemented.

Overall economy for ex-post control

Main risks	Mitigating controls	Coverage, frequency and depth of controls	Cost-Effectiveness indicators (effectiveness, efficiency, economy)
			Economy (The estimation is established for the grant process which includes both Horizon 2020 and Horizon Europe). a. Estimation of cost of staff involved in the coordination and execution of the ex-post audit strategies and in the implementation of audits. b. Costs of the appointment of audit firms and missions. Details of the estimated cost of controls related to shared/pooled control activities hosted by DG R&I (Common Implementation Centre including Common Audit Service) for the Research and Innovation family are reported in the Annual activity reports of DG R&I.

RCS 2) Energy grants (prerogative) and other support actions (prerogative and CEF) (under direct management)

This RCS covers (1) grants under prerogative lines, including budgetary support to the Energy Community and Energy Charter secretariat and whenever relevant membership fees to international institutions; (2) directly managed pilot projects and preparatory actions (PPAs); (3) CEF programme support actions as well as LIFE CET actions managed directly by DG ENER.

Stage 1: Ex-ante controls

A - Preparation, adoption and publication of the Annual Work Programme

Main internal control objectives: Ensuring that the most promising projects for meeting the policy objectives are among the proposals submitted; Compliance; Prevention of fraud.

Main risks	Mitigating controls	Coverage, frequency and depth	Cost-effectiveness indicators (three E's)
The annual work programme and the subsequent procedures to grant to or contract with specifically designated beneficiaries do not adequately reflect the policy objectives and priorities; are incoherent and/or the essential eligibility, selection and award criteria are not adequate to ensure the evaluation of the proposals. The annual work programmes are not consistent with the policy framework.	• Hierarchical validation within the authorising department • Inter-service consultation, including all relevant services • Adoption by the Commission • Explicit allocation of responsibility	**Coverage / Frequency**: 100% annually **Depth**: All work programmes are thoroughly reviewed at all levels, including for operational and legal aspects. All the underlying implementation tools are defined and developed at family level.	**Effectiveness** - Success ratios in terms of budget implementation: commitments implemented / commitments allocated.

B - Selecting and awarding: Evaluation, ranking and selection of proposals

Main control objectives: Ensuring that the most promising projects for meeting the policy objectives are among the proposals selected; Compliance; Prevention of fraud. In most cases, however CEF support action will be implemented with specifically designated beneficiaries or contractors.

Main risks	Mitigating controls	Coverage, frequency and depth	Cost-effectiveness indicators (three E's)
The selection of beneficiaries /contractors is not carried out in accordance with the established procedures, the policy objectives, priorities and/or the essential eligibility, or with the selection and award criteria defined in the annual work programme.	• Validation by the AOSD of ranked list of proposals and, if applicable: - Opinion of advisory bodies; - comitology; - inter-service consultation; - adoption by the Commission; - publication • Redress procedure	**Coverage / Frequency**: - 100% vetting (including selecting) of experts for technical expertise and independence (e.g., conflicts of interests, nationality bias, ex-employer bias, collusion) - 100% of proposals evaluated - 100% of contested decisions are analysed by redress committee.	**Effectiveness:** - % of number of (successful) redress challenges / total number of proposals received. - number of litigation cases **Efficiency:** - Average time to publication of selection results - % of Time-To-Inform on time when relevant

C – Contracting (new grant agreements, contracts and amendments)

Main internal control objectives: Ensuring that the most promising projects for meeting the policy objectives are among the proposals contracted; SFM (optimal allocation of budget available); Compliance; Prevention of Fraud.

Main risks	Mitigating controls	Coverage, frequency and depth	Cost-effectiveness indicators (three E's)
The description of the action in the grant agreement/contract includes tasks which do not contribute to the achievement of the programme objectives and/or that the budget foreseen overestimates the costs necessary to carry out the action. The beneficiary lacks operational and/or financial capacity to carry out the actions. Procedures do not comply with regulatory framework. A potentially fraudulent proposal /beneficiary was not detected in the evaluation phase.	• Project Officers implement evaluators' recommendations in discussion with selected applicants ([50]) • Hierarchical validation of proposed adjustments • Validation of beneficiaries before the signature of GA, including systematic checks on operational and legal aspects • Ad hoc anti-fraud checks for riskier beneficiaries • Signature of the grant agreement by the AO	**Coverage / Frequency**: - 100% of the selected proposals and beneficiaries - 100% of draft grant agreements. **Depth:** It may be differentiated; determined after considering the type or nature of the beneficiary (e.g., SMEs, joint ventures) and/or of the modalities (e.g., substantial subcontracting) and/or the total value of the grant.	**Effectiveness/Efficiency**: - Average time to grant if and when relevant - - Absence of serious audit findings or litigation

D – Monitoring the implementation and Financial Management

Main internal control objectives: ensuring that the operational and policy objectives are met; ensuring that the related financial operations comply with regulatory and contractual provisions; prevention of fraud; ensuring appropriate accounting of the operations.

Main risks	Mitigating controls	Coverage, frequency and depth	Cost-effectiveness indicators (three E's)
The actions foreseen are not, totally or partially, carried out in accordance with the technical	• Kick-off meetings and launch events involving the beneficiaries in order to avoid project management and reporting errors	**Coverage / Frequency:**	**Effectiveness**:

([50]) Given the constraints on the time to grant set out in the Horizon 2020 legislation, negotiation with applicants is kept to a minimum, as far as possible the positively evaluated projects are accepted without modification.

Main risks	Mitigating controls	Coverage, frequency and depth	Cost-effectiveness indicators (three E's)
description and requirements foreseen in the grant agreement. The amounts paid exceed what is due in accordance with the applicable contractual and regulatory provisions. The cost claims are irregular or fraudulent.	• Effective external communication / guidance to beneficiaries • Anti-fraud awareness raising and training for project officers • Operational and financial checks in accordance with the financial circuits • Operation authorisation by the AO • For riskier operations: - Enhanced ex-ante controls - Selection and appointment of expert for scientific reviews of intermediate and/or final reporting - On-site verification visits • If needed, application of: - Suspension/interruption of payments - Penalties or liquidated damages - Referring grant/beneficiary to OLAF	- 100% of the payments (op. and fin. checks) in normal financial circuits - Riskier operations subject to more in-depth controls. **Depth**: Depending on risk criteria. However, as a deliberate policy to reduce administrative burden, and to ensure a good balance between trust and control, the level of control at this stage is reduced to a minimum Risk criteria: red flags, suspicions raised by POs, audit results, EDES, individual or 'population' risk assessment	- % and value of reductions made to EU contribution paid out through the ex-ante desk checks / total value of EU contribution claimed **Efficiency**: - Average number and value of running projects managed 'per' staff FTE - Timeliness of payments - Cost of control from contracting and monitoring the execution up to payment included/ amount paid (%)

Stage 2 – Ex-post

E - Reviews, audits and monitoring

Main internal control objectives: Measuring the level of error in the population after ex-ante controls have been undertaken; detect and correct any error or fraud remaining undetected after the implementation ex-ante controls; identifying possible systemic weaknesses in the ex-ante controls, or weaknesses in the rules.

Main risks	Mitigating controls	Coverage, frequency and depth	Cost-effectiveness indicators (three E's)
The ex-ante controls (as such) do not prevent, detect and correct erroneous payments or attempted fraud to an extent going beyond a tolerable rate of error. Lack of consistency in the ex-post audit strategy. Lack of efficiency for absence of coordination: multiple audits on the same beneficiary/same programme that leads to high administrative burden on beneficiaries, diminish interest in later calls, reputational risk.	• Ex-post audit planning in line with programme lifecycle and based on risk analysis. • In case of fraud suspicion, referring the beneficiary or grant to OLAF.	**Coverage / Frequency:** Risk-based selection of projects, determined in accordance with the selected risk criteria, aimed to maximise deterrent effect and prevention of fraud or serious error. **Depth**: Common audit ex-post methodology	**Effectiveness**: - Audit coverage: number of audits finalised and value coverage - Representative / detected error rate. - Residual error rate (only for programmes)

F - Implementing results from ex-post audits/controls

Main internal control objectives: Ensuring that the (audit) results from the ex-post controls lead to effective recoveries; Ensuring appropriate accounting of the recoveries made.

Main risks	Mitigating controls	Coverage, frequency and depth	Cost-effectiveness indicators (three E's)
The errors, irregularities and cases of fraud detected are not addressed or not addressed in a timely and effective manner.	• Systematic registration of audit / control results to be implemented and actual implementation. • Validation of recovery in accordance with financial circuits. • Authorisation of recovery by AO.	**Coverage**: 100% of final audit results with a financial impact **Depth**:	**Effectiveness**: - % of adjustments recovered /offset - Number/value/% of audit results implemented

Main risks	Mitigating controls	Coverage, frequency and depth	Cost-effectiveness indicators (three E's)
	• Regular follow up of reported fraud cases with OLAF • Monitoring of recoveries / AO approval for waiving recoveries	All audit results are examined in-depth in making the final recoveries	**Efficiency**: - total (average) annual cost of implementing audit audits compared with benefits

RCS 3) Procurements, studies and other operational expenditure, Nuclear Energy (including safeguards) (under direct management)

This RCS covers, amongst others, the contracts to procure studies, goods and services, including the contracts implemented under the heading "other operational expenditure" and "nuclear energy".

Stage 1 – Ex-ante controls

A - Planning

Main internal control objectives: Effectiveness, efficiency and economy. Compliance (legality and regularity).

Main risks	Mitigating controls	How to determine coverage frequency and depth	Cost-effectiveness indicators (three E's)
The needs are not well defined (operationally and economically) and the decision to procure was inappropriate to meet the operational objectives. Discontinuation of the services provided due to implementation issues or lack of appropriate planning. The required volume of services or the required technical financial capability are not adequately planned.	• Coordinated planning exercise (preparation of Vigie fiches), incl. economic and operational justification of new procurements. • Validation by AO(S)D of justification and planning. • Documented discussions / decisions (document adopted by all parties before the launch of a given procurement procedure setting the main principles to follow during the call).	**Coverage**: 100% of the forecast procurements are justified and validated through the Vigie system. **Depth**: All key procurement procedures formally approved by the Legal Cell and in line with the Financial Regulation.	**Effectiveness**: - Number of projected tenders cancelled. **Economy**: - Average cost per tender.

B – Needs assessment and definition of needs

Main internal control objectives: Effectiveness, efficiency and economy. Compliance (legality and regularity).

Main risks	Mitigating controls	How to determine coverage frequency and depth	Cost-effectiveness indicators (three E's)
The Commission does not receive good offers or cannot select good contractors and/or experts for the required specific expertise. The specifications and requirements are defined in a way that restricts excessively competition, narrowing the choice of suppliers and influencing negatively the possibility to obtain advantageous offers.	• AOSD supervision and approval of tender specifications / terms of reference. • Ex-ante legal controls on the procurement procedure.	**Coverage**: 100% of specifications drafted by technical experts. All specifications for open call for tenders validated by AOSD. **Depth:** 100% of tenders above financial threshold (Directive Threshold).	**Effectiveness** - Number of open procedures or tenders where only one or no offers were received.

C – Selection of the offer and evaluation

Main internal control objectives: Effectiveness, efficiency and economy. Compliance (legality and regularity). Fraud prevention and detection.

Main risks	Mitigating controls	How to determine coverage frequency and depth	Cost-effectiveness indicators (three E's)
The most economically advantageous offer is not being selected, due to a biased, inaccurate or 'unfair' evaluation process. The offer retained does not present the required technical expertise or is financially not sustainable.	• Formal evaluation process, including Opening Committee and Evaluation Committee. • Declaration of absence of conflicts of interest by members of Opening and Evaluation Committee. • Documented evaluation of selection, exclusion and award criteria.	**Coverage**: 100% of offers analysed. **Depth**: - All documents submitted. - 100% of opening/evaluation committee members sign declaration. - 100% criteria checked.	**Effectiveness** - Number of valid complaints or legal cases opened. - Contract signed in time to implement the action. **Economy** - Cost of control vs amount paid.
Procurement procedures are unsuccessful or lead to an excessive use of negotiated procedures.	• Hierarchical review to ensure that open procedures are favoured whenever possible.	**Coverage**: risk-based approach for most complex contracts.	**Effectiveness:**

Main risks	Mitigating controls	How to determine coverage frequency and depth	Cost-effectiveness indicators (three E's)
	• In-depth ex-ante market study to identify potential providers, problems & possibilities for in-house development if any. • If not possible, use of negotiated procedures with pre-identified market players, only following approval by Senior Management.		- number of procedures that need to be re-launched or cancelled.

D – Receipt of services and financial transactions

Main internal control objectives: Ensuring that the implementation of the contract is in compliance with the signed contract.

Main risks	Mitigating controls	How to determine coverage frequency and depth	Cost-effectiveness indicators (three E's)
The products/services/works delivered do not meet the technical description and requirements foreseen in the contract. Insufficient performance or timeliness of the contractor Invoices received do not correspond to the services delivered or to the actual performance of the contractor.	• Monitoring and assessment of deliverables. Regular implementation report on the fulfilment of the contracted tasks. Request of supporting documentation for claimed costs / link between deliverables and payments. • Financial checks in accordance with the financial circuits • Operational authorisation by AO(S)D. • For procurement of goods and on-site services related to Nuclear Safety and Nuclear Safeguards • Ex-ante in-depth verification and testing of new equipment delivered, prior to the acceptance of the invoice.	**Coverage**: 100% of the contracts are controlled. **Depth**: follow-up of all actions by the technical officer in charge.	**Effectiveness**: - Number and amount of payment made - issues regarding legality and regularity **Efficiency**: - Timely payment **Economy** - Cost of control vs amount paid

Main risks	Mitigating controls	How to determine coverage frequency and depth	Cost-effectiveness indicators (three E's)
	• Reinforced monitoring of on-site services delivered by nuclear operators.		

RCS 4) EURATOM contribution to F4E JU (under indirect management)

This RCS covers the EURATOM contribution to the ITER project, entrusted to and implemented through the F4E JU ([51]). Both entities were established before 2016; therefore, this ICT focuses on monitoring, supervision and ex-post controls.

Stage 1: Ex-ante controls

A – Establishment (or prolongation) of the mandate to the entrusted entity ("delegation act"/ "contribution agreement"/etc.)

Not applicable

B – Assessment of the entrusted entity's financial and control framework (towards "budget autonomy"; "financial rules")

Not applicable

C - Operations: monitoring, supervision, reporting

Main internal control objectives: Ensuring that the Commission is fully and timely informed of any relevant management issues encountered by the entrusted entity, to possibly mitigate any potential financial and/or reputational impacts (legality and regularity, sound financial management, true and fair view reporting, anti-fraud strategy).

([51]) Fusion for Energy Joint Undertaking.

Main risks	Mitigating controls	Coverage, frequency and depth	Effectiveness, efficiency, economy indicators
F4E Joint Undertaking The Commission is not informed of relevant management issues encountered by the entrusted entity in a timely manner. The Commission does not react upon and mitigate notified issues in a timely manner. DG ENER cannot exercise suitable supervision and intervene to ensure that issues are addressed in a timely manner	**F4E Joint Undertaking** • DG ENER supervision strategy for F4E (supervision needs & objectives, tools, working methods and procedures) • Delegation Act / Administrative Agreement specifying the control, accounting, audit, publication etc. related requirements – incl. the modalities of reporting on relevant and reliable control results • Reporting: F4E "Dashboard": information on progress of the EU contribution. Further revision to incorporate Key Performance Indicators and other elements from the supervision strategy. • DG ENER Membership of F4E governance structure: - DG ENER representative in Governing Board, assisted notably by - the Administration and Management Committee, of which one member is EURATOM - the Audit Committee, of which one member is proposed by EURATOM - the Bureau - DG ENER membership in the steering committee for the annual F4E independent assessment - DG ENER also participates to the F4E Senior Management Meetings and has bilateral contacts with F4E Director	**Coverage & Frequency**: - Determined by delegation act/ administrative agreement - Regular reports on use of resources and performance of tasks; - Annual reports on operation and budget implementation.	**Effectiveness**: - Effective implementation of the governance mechanisms and reporting channels. - Number of serious issues arising not identified through standard reporting channels - Absence of ECA, discharge or IAS audit observations **Economy** - Evolution of the cost of control at entity level

Main risks	Mitigating controls	Coverage, frequency and depth	Effectiveness, efficiency, economy indicators
	• Revised Administrative Arrangements & Working Relations formalise the monitoring, reporting and supervision arrangements, including: - Regular coordination meetings at management level - Frequent contacts at working level and regular reporting on progress, budgetary, staffing and audit issues - Bilateral meetings when necessary • Management review of the supervision results - Quarterly review of key identified risks - Yearly review of F4E's key internal control documents (risk register, internal control self-assessment, cost of control) if needed: - reinforced monitoring of operational and/or financial aspects of the entity - potential escalation of any major governance-related issues with entrusted entities • Annual activity report based on BUDG guidance and template, submitted to DG ENER.		
EURATOM obligations to ITER project	**EURATOM obligations to ITER project**	**Coverage**: the elements taken into account for decisions taken in the Inter Council.	**Effectiveness** - Strategy exists and is up to date.

Main risks	Mitigating controls	Coverage, frequency and depth	Effectiveness, efficiency, economy indicators
If the ITER project supervision strategy is not comprehensive, DG ENER may not focus its activities on critical or high-risk areas.	• DG ENER supervision Strategy for the ITER project, defining supervision needs and objectives, Commission's strategy, supervision tools, key risks and key performance indicators. • Management review of the implementation of supervision strategy (completeness, effectiveness) on the basis of indicators • Participation in the ITER Council and its Advisory Bodies, including - Chairing of ITER Management Advisory Committee (MAC) - Chairing the Financial and Audit Board (FAB).	**Frequency**: as determined by DG ENER supervision strategy.	- Administrative arrangements are aligned with the strategy.

D – Commission contribution: payment or suspension/interruption.

Main internal control objectives: Ensuring that the Commission adequately assesses the management situation at the entrusted entity, before either paying out the (next) contribution for the operational and/or operating budget of the entity or deciding to suspend/interrupt the (next) contribution.

Main risks	Mitigating controls	Coverage, frequency and depth	Effectiveness, efficiency, economy indicators
Bad cash forecast leading to the Commission paying too much compared to the EE's needs.	• Delegation Act/Administrative Agreement specifying the control, accounting, audit, publication etc. related requirements – including reporting • Management review of the supervision results. • Standard procedures for the validation of all payments and recovery of non-used operating budget subsidy • Good internal communication to ensure that issues are known and dealt with (see stage 3).	**Coverage**: 100% of the contribution payments. **Frequency**: following the rhythm of the payments.	**Effectiveness:** - Degree of implementation of commitment and payment appropriations (%). **Efficiency:** - Timely payment. **Economy** - Cost of control vs payments made.

Stage 2: Ex-post controls

F - Audit and evaluation, Discharge

Main internal control objectives: Ensuring that assurance building information on the entrusted entity's activities is being provided through independent sources as well, which may confirm or contradict the management reporting received from the entrusted entity itself (on the 5 Internal Control Objectives (ICOs)).

Main risks	Mitigating controls	Coverage, frequency and depth	Effectiveness, efficiency, economy indicators
The Commission does not have sufficient information from independent sources on the entrusted entity's management achievements, which prevents drawing conclusions on the assurance for the budget entrusted to the entity.	**F4E Joint Undertaking** • Subject to audit by IAS and the Court of Auditors (yearly audit on the legality and regularity of the operations & performance audits). DG ENER uses their reports, and the follow-up given to their recommendations by the JU, as an element of the supervision. • Annual discharge report sent to the EP and the Council • The Governing Board is assisted by an Audit Committee, in which one member is proposed by EURATOM. • Commission's right to perform targeted financial and/or technical audits and on-the-spot checks on F4E beneficiaries and operations. • Ad hoc independent reviews on demand by the Governing Board or by the Commission itself, when additional independent analysis provided by a group of experts is deemed opportune for a specific issue.	**Coverage:** based on a sampling approach (e.g., random/representative, value-targeted, risk-based). **Frequency:** according to F4E & IAS internal audit planning / annual for DAS and external assessment. The **depth** depends on the level of risks assessed.	**Effectiveness**: - Assurance being provided. **Efficiency:** - cost of controls.

RCS 5) Nuclear Decommissioning Assistance Programmes (under indirect management)

This RCS covers the delegation to EBRD ([52]), CPMA ([53]) and SIEA ([54]) for the Nuclear Decommissioning Assistance Programmes in Bulgaria, Lithuania and Slovakia.

Stage 1: Ex-ante controls

A - Establishment / prolongation of the mandate to the entrusted entities

Main internal control objectives: Ensuring that the legal framework for the management of the relevant funds is fully compliant and regular (legality and regularity), delegated to an appropriate entity (best value for public money, economy, efficiency), without any conflicts of interests (anti-fraud strategy).

Main risks	Mitigating controls	Coverage, frequency and depth	Effectiveness, efficiency, economy indicators
The establishment (or prolongation) of the mandate of the entrusted entity is affected by legal issues, which would undermine the legal basis for the management of the related EU funds (via that particular entity)	• Pillar Assessments of delegated bodies (updated in 2020-2021 for EBRD and CPMA; in 2018 for SIEA) • Framework Administrative & Financial Agreement (FAFA) with EBRD • Contribution agreements based on BUDG template incorporating lessons-learned on: - Ex-post monitoring - key performance indicators - reporting and monitoring requirements - flat fee remuneration scheme • Hierarchical validation within the DG	**Coverage/Frequency**: - 100%/ before signature - prolongation of delegation agreement **Depth**: determined by pillar assessment checklist & other relevant guidance	**Effectiveness**: - Performance of pillar assessments/ validity of the PAs - Adoption of the delegation acts/ contribution agreements **Efficiency**: - included in the efficiency of monitoring and supervision

([52]) European Bank for Reconstruction and Development.
([53]) Central Project Management Agency (Lithuania).
([54]) Slovak Innovation and Energy Agency (Slovakia).

Main risks	Mitigating controls	Coverage, frequency and depth	Effectiveness, efficiency, economy indicators
	• Inter-service consultation including all relevant DGs • Contribution agreements cover clear reporting requirements and were prepared in line with new NDAP regulation and OLAF requirements • Explicit allocation of responsibility to individual officials (reflected in job descriptions)		
Conflicts of interest could impair the management of EU funds by the entrusted entity.	**Controls by DG ENER** • Pillar assessment of internal control framework, incl. anti-fraud policy • Provisions of the respective Contribution Agreements with EBRD, CPMA and SIEA • Regular assessment by DG ENER of the adequacy of control and anti-fraud strategies of implementing bodies **As part of the pillar assessment, DG ENER evaluated the following controls put in place by the entrusted entities:** • EBRD governance framework - Code of Conduct - Prohibited Practices guidelines - Integrity Risk policy - Modification of IDSF rules, to align them with the predominant role of the Commission as a donor. • CPMA's and SIEA's anti-fraud strategy and conflict of interest prevention policy	**Coverage/Frequency**: all entities **Depth**: case by case	**Effectiveness**: - Absence of conflict of interest - Existence of antifraud Strategies and policies at entity level

B – Assessment of the entrusted entity's financial and control framework

Main internal control objectives: Ensuring that the entrusted entity is fully prepared to start/continue implementing the delegated funds autonomously with respect of all 5 Internal Control Objectives (*legality and regularity, sound financial management, true and fair view reporting, safeguarding assets and information, anti-fraud strategy*).

Main risks	Mitigating controls	Coverage, frequency and depth	Effectiveness, efficiency, economy indicators

The financial and control framework deployed by the entrusted entity is not fully mature to guarantee achieving all 5 ICOs (*legality and regularity, sound financial management, true and fair view reporting, safeguarding assets and information, anti-fraud strategy*).	• Pillar assessment of entrusted entities before delegating funds
	• Monitoring actions
	  - site visits
	  - meetings of the Monitoring Committees (CPMA-SIEA/Assembly of Contributors (EBRD)
	• Specific NDAP risk management plan: quarterly review of key risks
	• Provisions of the contribution agreements regarding the obligation to inform the Commission on significant changes that may affect the entrusted tasks
	• Provision of Management's representation and independent auditor's report
		Coverage/frequency:
		- 100% of entrusted entities
		- Frequency of monitoring actions/visits/meetings determined by DA and internal control strategy
		Depth: determined by the DA (reporting, monitoring meeting), risk management plan & control strategy
			Effectiveness:
			- validity of the pillar assessments/ updates carried out
			- timely delivery of monitoring reports, aligned with reporting criteria
			Economy:
			- control cost at entity level

C – Operations: monitoring, supervision, reporting

Main internal control objectives: Ensuring that the Commission is fully and timely informed of any relevant management issues encountered by the entrusted entity, to possibly mitigate any potential financial and/or reputational impacts (legality & regularity, achievement of objectives, sound financial management, true and fair view reporting, anti-fraud strategy).

Main risks	Mitigating controls	Coverage, frequency and depth	Effectiveness, efficiency, economy indicators
The Commission is not informed of relevant management issues encountered by the entrusted entity in a timely manner. The Commission does not react upon and mitigate notified issues in a timely manner.	**All implementing bodies:** • Specific NDAP Control strategy • Specific NDAP risk management plan: quarterly review of key risks • Use of key performance indicators covering financial management • Provision of Management's representation and independent auditor's report **EBRD** • Joint management of multi-donor funds (as per fund rules) and EU Chair of the Assembly of Contributors • EU representation within the EBRD Board of Directors • Commission decision on procedures covering monitoring arrangements, evaluation and audit issues • Daily project execution monitored by EBRD • Programme monitoring Assemblies of Contributors (chaired by the Commission) • Regular reports by beneficiaries and Member States on the progress - Monitoring Committee analyses the report and takes corrective measures • Commission monitoring visits on-site. Corrective measures to ensure that objectives are met. • Adoption of the Rules of Application covering:	**Coverage**: 100% of projects **Frequency & Depth**: - In accordance with Rules of application - Assembly of Contributors biannually - Regular reports on use of resources and performance of tasks - Yearly report on the execution of delegated tasks.	**Effectiveness**: Absence of qualification on the opinion from the independent auditor on the financial statements and management reports of the multi-donor funds organisation of the different governance meetings as planned **Efficiency** - Earned value management synthetic indicator (progress against schedule and budget) **Economy** - Overall supervision cost / budget entrusted to entity (%)

Main risks	Mitigating controls	Coverage, frequency and depth	Effectiveness, efficiency, economy indicators
	- detailed description of monitoring controls - introduction and assessment of key performance indicators - steering of the Member States towards use of an appropriate earned-value management (EVM) technique • Management report		
As above	**National Agencies** • Full state guarantee for implementation through certified agency • Commission decision on procedures in place covering monitoring arrangements, evaluation and audit issues • Daily project execution is monitored by the implementing bodies • Programme monitoring through Monitoring Committees (MC) chaired by the Commission • Biannual reports by the beneficiaries and the Member States on progress - MC analyses the monitoring report and takes corrective measures • Monthly report by the entrusted entity. • Commission monitoring visits on-site. Corrective measures to ensure that objectives are met. • Adoption of the Rules of Application covering	**Coverage**: 100% of projects **Frequency & Depth**: - In accordance with Rules of application - Assembly of Contributors biannually - Regular reports on use of resources and performance of tasks - Yearly report on the execution of delegated tasks	**Effectiveness**: - 100% of monitoring reports received and analysed, reliability of the information provided - unreserved assurance received from the CPMA and SIEA to support their yearly management report and statement of account - timely organisation of the different governance meetings **Efficiency** - earned value management synthetic indicator (progress against schedule and budget) **Economy:** - Overall supervision cost / budget entrusted to entity (%)

Main risks	Mitigating controls	Coverage, frequency and depth	Effectiveness, efficiency, economy indicators
	- detailed description of monitoring controls - introduction and assessment of key performance indicators - steering of the Member States towards use of an appropriate earned-value management (EVM) technique • Management report		

D – Commission contribution: payment or suspension/interruption

Main internal control objectives: Ensuring that the Commission adequately assesses the management situation at the entrusted entity, before either paying out the (next) contribution for the operational and/or operating budget of the entity or deciding to suspend/interrupt the (next) contribution. **This is very closely linked to stage 3 above.**

Main risks	Mitigating controls	Coverage, frequency and depth	Effectiveness, efficiency, economy indicators
The Commission pays out the (next) contribution to the entrusted entity, while not being aware of the management issues that may lead to financial and/or reputational damage.	• Financial checks are performed based on the requests of the entrusted entities and on the operational controls performed by or on behalf of DG ENER	**Coverage**: 100% of the contribution payments **Frequency**: following the rhythm of the payments	**Effectiveness:** - Execution of payment and commitment appropriation **Efficiency**: - Timely payments
Due to the long-term perspective of the programme and to the complex implementation setup, pre-financings may not be cleared timely	• Specific financial checks performed when requests for payments are made by the implementing bodies, based on a six-months forecast of commitments.	**Coverage**: 100% of the contribution payments **Frequency**: following the rhythm of the payments (financial checks) or the accounting schedule (accounting controls)	

Main risks	Mitigating controls	Coverage, frequency and depth	Effectiveness, efficiency, economy indicators
	• Periodic (at least yearly) accounting controls performed by the accounting correspondent		
Cash forecast process may not allow the Commission to pay the amounts that correspond to needs	• Current setup of financial circuits prevents this risk as pre-financing are made based on actual commitments plan	**Coverage**: 100% of the contribution payments	

Stage 2: Ex-post controls

E - Audit and evaluation

Main internal control objectives: Ensuring that assurance building information on the entrusted entity's activities is being provided through independent sources as well, which may confirm or contradict the management reporting received from the entrusted entity itself (on the 5 ICOs).

Main risks	Mitigating controls	Coverage, frequency and depth	Effectiveness, efficiency, economy indicators
The Commission has not received sufficient information from independent sources on the entrusted entity's management achievements, which prevents drawing conclusions on the assurance for the budget entrusted to the entity.	The expenditure falls within the scope of the DAS and is audited by ECA annually, which is the main source of controls. In addition: • Statement of assurance received from entrusted entities • Audit opinions of the external auditors of the entrusted entities • Financial audits carried out by an external audit company on selected NDAP projects	**Coverage**: audits based on a sampling approach (random/representative, value-targeted, risk-based) **Frequency**: whenever necessary The **depth** depends on the level of risks assessed	**Effectiveness**: - Assurance provided - No critical or very important observation from the ECA or the Internal Audit Service - Positive assessment by the AOSD on the reliability of the information received

RCS 6) Subsidy to ACER (under indirect management)

This RCS covers the annual subsidy provided to the decentralised agency ACER ([55]). This entity was established before 2016; therefore, this RCS focuses on monitoring and ex-post controls.

Stage 1: Ex-ante controls

A – Establishment (or prolongation) of the mandate to the entrusted entity ("delegation act"/"contribution agreement"/etc.)

Not applicable

B – Assessment of the entrusted entity's financial and control framework (towards "budget autonomy"; "financial rules")

Not applicable

C - Operations: monitoring, supervision, reporting

Main internal control objectives: Ensuring that the Commission is fully and timely informed of any relevant management issues encountered by the entrusted entity, in order to possibly mitigate any potential financial and/or reputational impacts (legality & regularity, sound financial management, true and fair view reporting, anti-fraud strategy).

Main risks	Mitigating controls	Coverage, frequency and depth	Effectiveness, efficiency, economy indicators
The Commission is not informed of relevant management issues encountered by the entrusted entity in a timely manner.	• DG ENER supervision strategy for ACER (supervision needs & objectives, tools, working methods and procedures) • Revised Administrative Arrangements, integrating the Working Relations	**Coverage**: 100% of the entity monitored / supervised. **Frequency**:	**Effectiveness**: - Existence of serious issues affecting the assurance - Absence of ECA, discharge or IAS audit observations

([55]) Agency for the Cooperation of Energy Regulators.

Main risks	Mitigating controls	Coverage, frequency and depth	Effectiveness, efficiency, economy indicators
The Commission does not react upon and mitigate notified issues in a timely manner, which may reflect negatively.	• DG ENER participation in governance structure - membership of the Administrative Board - participation in ACER Senior Management Meetings - regular bilateral contacts with ACER Director • Operational monitoring: - Regular coordination meetings at management level - Frequent contacts at working level and regular reporting on progress, budgetary, staffing and audit issues - Bilateral meetings when necessary • Management review of the supervision results and if needed: - reinforced monitoring of operational and/or financial aspects of the entity - potential escalation of any major governance-related issues with entrusted entities • Annual activity report submitted to DG ENER	- Regular Board of Regulators and Administrative Board meetings - Regular reports on use of resources and performance of tasks - Annual reports on operation and budget implementation.	

D – Commission contribution: payment or suspension/interruption.

Main internal control objectives: Ensuring that the Commission adequately assesses the management situation at the entrusted entity, before either paying out the (next) contribution for the operational and/or operating budget of the entity or deciding to suspend/interrupt the (next) contribution.

Main risks	Mitigating controls	Coverage, frequency and depth	Effectiveness, efficiency, economy indicators
Bad cash forecast leading to the Commission paying too much compared to the EE's needs	• Delegation Act/Administrative Agreement specifying the control, accounting, audit, publication etc. related requirements – including reporting • Management review of the supervision results. • Standard procedures for the validation of all payments and recovery of non-used operating budget subsidy • Good internal communication to ensure that issues are known and dealt with (see stage 3)	**Coverage**: 100% of the contribution payments **Frequency**: following the rhythm of the payments	**Effectiveness:** - existence or not of legality and regularity issues, effective payment of the Commission contribution **Economy:** - cost of control vs budgetary support

Stage 2: Ex-Post controls

F – Audit and evaluation, Discharge

Main internal control objectives: Ensuring that assurance building information on the entrusted entity's activities is being provided through independent sources as well, which may confirm or contradict the management reporting received from the entrusted entity itself (on the 5 ICOs).

Main risks	Mitigating controls	Coverage, frequency and depth	Effectiveness, efficiency, economy indicators
The Commission does not have sufficient information from independent sources on the entrusted entity's management achievements, which prevents drawing conclusions on the assurance for the budget entrusted to the entity.	• Subject to audit by the IAS and the ECA (annual DAS audit and performance audits) • Annual discharge through Budgetary Authority • Commission right to perform ad-hoc financial or technical audits / on-the-spot reviews • Ad hoc independent reviews on demand by the Governing Board or by the Commission itself	**Coverage**: as determined by audit bodies. **Frequency**: according to ACER & IAS internal audit planning / annual for DAS and external assessment. The **depth** depends on the level of risks assessed.	**Effectiveness**: - Assurance being provided.

RCS 7) Other indirect management (including PPA & indirectly managed LIFE CET)

DG ENER may entrust the implementation of pilot projects, preparatory actions or LIFE CET actions to reliable international partners or other EU bodies.

Establishment (or prolongation) of the mandate to the entrusted entity ('delegation act' or 'contribution agreement')

Main internal control objectives: Ensuring that the legal framework for the management of the relevant funds is fully compliant and regular (legality and regularity), delegated to an appropriate entity (best value for public money, economy, efficiency), without any conflicts of interests (anti-fraud strategy) and gives all the references necessary for a smooth running of the new entity.

Main risks	Mitigating controls	Coverage, frequency and depth	Cost-effectiveness indicators (three E's)
The establishment (or prolongation) act of the mandate of the entrusted entity is affected by legal issues, which would undermine the legal basis for	• Ex-ante evaluation of the entity • Widespread consultation, with internal and external stakeholders	**Coverage/Frequency**: 100%/once and partial for amendments or extensions. **Depth**:	**Effectiveness**: - Timely establishment of the delegation or contribution agreements

Main risks	Mitigating controls	Coverage, frequency and depth	Cost-effectiveness indicators (three E's)
the management of the related EU funds (via that particular entity).	• Hierarchical validation within the authorising department of mandate, covering modalities of cooperation, supervision and reporting. • Inter-service consultation, including all relevant DGs • Mandate adopted by the Commission. • Allocation of supervision responsibility within the DG	Checklist includes a list of the requirements of the regulatory provisions to be complied	- Number of IAS, ECA, OLAF or discharge criticism **Economy**: - Overall supervision cost per (type of) entrusted entity / total budget entrusted (%)

B – Assessment and supervision of the entrusted entity's financial and control framework

Main internal control objectives: Ensuring that the entrusted entity is fully prepared to start/continue implementing the delegated funds autonomously with respect of all 5 Internal Control Objectives (*legality and regularity, sound financial management, true and fair view reporting, safeguarding assets and information, anti-fraud strategy*).

Main risks	Mitigating controls	Coverage, frequency and depth	Cost-effectiveness indicators (three E's)
The financial and control framework deployed by the entrusted entity is not fully mature to guarantee achieving all 5 Internal Control Objectives (ICOs)	• When possible, recourse to pillar attested entities. In that case DG ENER will rely on controls performed by the Commission department owning the Pilar Assessment (for instance DG INTPA) • If not, DG internal or independent external ex-ante assessment before granting budget autonomy • Hierarchical validation within the authorising department • Use of Model-or Framework- financial rules (MFF or FFF) • Requiring justification and prior consent for any deviating financial rules	**Coverage/frequency**: 100% of entrusted entities/once at the beginning and partial (problem focussed) for amendments or work arrangements. **Depth:** Determined after considering the type / nature of the entrusted entity, its form and/or the value of the budget concerned.	**Effectiveness**: - Number of IAS, ECA, OLAF or discharge criticism - Number of recommendations to EE as result of ex-ante or later assessment **Economy**: - Included in the overall supervision costs

Main risks	Mitigating controls	Coverage, frequency and depth	Cost-effectiveness indicators (three E's)
	• Standard business processes and IT tools • Secondment and selection of key staff of entrusted entities • Review of audit reports (IAS, ECA).		

C – Operations: monitoring, supervision, reporting

Main internal control objectives: Ensuring that the Commission is fully and timely informed of any relevant management issues encountered by the entrusted entity, in order to possibly mitigate any potential financial and/or reputational impacts (legality and regularity, achievement of objectives, sound financial management, true and fair view reporting, anti-fraud strategy).

Main risks	Mitigating controls	Coverage, frequency and depth	Cost-effectiveness indicators (three E's)
The Commission does not receive timely information on the implementation of the entrusted tasks. The Commission is not informed of relevant management issues encountered by the entrusted entity in a timely manner. The Commission does not react upon and mitigate notified issues in a timely manner. Inconsistent application of supervision/control arrangements within different EEs	Provisions in the contribution agreements (and in any relevant FFA Assessment of progress reports, management declarations, and where applicable – audit statements related to the implementation of the action. If necessary, technical assessment/project visit.	**Coverage**: In function of the action **Frequency**: In function of the action	**Effectiveness**: - Number of critical / very important IAS and ECA recommendations issued to DG ENER - Regularity of reporting flows between EE and the parent DGs

D – Commission contribution: payment or suspension/interruption

Main internal control objectives: Ensuring that the Commission adequately assesses the management situation at the entrusted entity, before either paying out the (next) contribution for the operational and/or operating budget of the entity or deciding to suspend/interrupt the (next) contribution. **This is very closely linked to stage 3 above.**

Main risks	Mitigating controls	Coverage, frequency and depth	Cost-effectiveness indicators (three E's)
Bad cash forecast leading to the Commission paying too much compared to the EE's needs.	• Contribution Agreement specifying the control, accounting, audit, publication etc. related requirements – including reporting • Management review of the supervision results. • Standard procedures for the validation of all payments and recovery of non-used operating budget subsidy • Good internal communication to ensure that issues are known and dealt with (see stage 3).	**Coverage**: 100% of the contribution payments **Frequency**: following the rhythm of the payments	**Effectiveness:** - existence or not of legality and regularity issues, effective payment of the Commission contribution **Economy:** - cost of control vs budgetary support

Stage 2 – Ex-post

E – Audit and evaluation

Main internal control objectives: Ensuring that assurance building information on the entrusted entity's activities is being provided through independent sources as well, which may confirm or contradict the management reporting received from the entrusted entity itself (on the 5 ICOs).

Considering that these are one off actions, audit and evaluation would, if necessary, be performed through similar methods as for directly managed grants (see stage 2 of RCS 2).

RCS 8) Non-Expenditure Items (including Safeguarding of Assets and Information, EURATOM Safeguards information systems, off-balance sheet items & management of legacy Financial Instruments)

This RCS covers:

(1) the assets & information managed by DG ENER for the discharge of EURATOM Safeguards obligations

(2) the management of legacy Financial Instruments of the corresponding guarantees and off-balance sheet items and other off-balance sheet items resulting from litigations

RCS 8 (1) Elements related to the EURATOM Safeguards obligations

Stage 1 - Ex-ante controls

A – Recognition: establishment of the Commission's rights

Main internal control objectives: Ensuring that the Commission establishes its assets ownership and liabilities correctly and sets up its management reporting and information security; Compliance (legality & regularity); Sound Financial Management (effectiveness, efficiency, cost-effectiveness); Prevention of fraud (anti-fraud strategy); Safeguarding Assets and Information (incl. accounting); Reliable Reporting (true and fair view).

Main risks	Mitigating controls	Coverage, frequency and depth	Effectiveness, efficiency, economy indicators
Recognition* of assets, liabilities are not done at the right moment (e.g., when they become due, when the ownership is transferred, when they become certain) or not for the right amount.	**Assets & liabilities**: • Hierarchical validation of the operation with legal & financial circuits, within the authorising department	**Coverage/Frequency**: 100% **Intensity/Depth**: For riskier operations, ex-ante in-depth verification, e.g.: - application of IT Security Governance rules, via LISO	**Effectiveness**: - Number of control failures; value of the rights concerned and of resulting liabilities

Main risks	Mitigating controls	Coverage, frequency and depth	Effectiveness, efficiency, economy indicators
For information security: the level sensitivity of the information is not adequately recognised	• Maintenance of the inventory and information flow into ABAC • Conservative/prudent valuation & depreciation policy		
	Information security • Establishment of IT and information security 'culture' and strategy • Accurate / complete identification of information assets, data sources, protection needs, ownership and formal assignment of data sensitivity levels in line with legal base (EURATOM Treaty)	**Coverage / Frequency**: 100% **Intensity / Depth:** all networks and information systems	

B – Protection: recording, follow-up and accounting of the Commission's rights

Main internal control objectives: Ensuring that the Commission registers and protects its assets ownership and liabilities correctly, reports transparently and protects its information security; Compliance (legality & regularity); Sound Financial Management (effectiveness, efficiency, cost-effectiveness); Prevention of fraud (anti-fraud strategy); Safeguarding Assets and Information (incl. accounting); Reliable Reporting (true and fair view).

Main risks	Mitigating controls	Coverage, frequency and depth	Effectiveness, efficiency, economy indicators
The implementation of applicable rules* entails weaknesses, which lead to the Commission's legal rights, assets ownerships, liabilities or information security not being duly	**(In)tangible assets and inventories** • Clear procurement, accounting, inspection, depreciation and disinvestment rules; EU accounting rules & manual.	**Depth**: - Value-differentiated PP procedures - Use and value differentiated physical assets accounting rules and inventory checks (inspection planning - inventory checks vary subject to the nature of the assets)	**Effectiveness**: - Number of assets registered and accounted for. - Existence of reputational events due to weak information security

Main risks	Mitigating controls	Coverage, frequency and depth	Effectiveness, efficiency, economy indicators
protected and/or registered and/or reliably reported. EU accounting rules are not respected. For information security: sensitive information is 'lost' (abused, made public) or its integrity breached (data altered)			- Number of internal and external auditors' findings about incorrect registration of items **Economy** - Cost of control / net value of assets
	Information & IT security • Formal policies and procedures on data protection, management of sensitive information, security of IT systems etc. • Information security markings applied to all information (paper or electronic) • A separate IT system, including a segregated network, for handling sensitive information	**Frequency**: security rules and culture to be adjusted in view of latest technical developments and 'possibilities'	**Effectiveness:** - Reputational events during the reporting year linked to issues of data protection and/or sensitive information **Economy** - Cost of control

C – Exercising the Commission's rights

Main internal control objectives: Ensuring that the Commission is able to exercise its assets ownership correctly and provides reliable reporting on these and maintains its information security; Compliance (legality and regularity); Sound Financial Management (effectiveness, efficiency, cost-effectiveness); Prevention of fraud (anti-fraud strategy); Safeguarding Assets and Information (incl. accounting); Reliable Reporting (true and fair view).

Main risks	Mitigating controls	Coverage, frequency and depth	Effectiveness, efficiency, economy indicators
The operations (*or equivalent**) embed weaknesses that would undermine the Commission's execution, assets ownerships or the reliability of its reporting or its maintenance of information security.	**(In)tangible assets and inventories** • Three years inventory checks rule (RAP 250) • Formal procedure for disposal of assets (RAP 251-253)	**Coverage and frequency:** value-differentiated publication procedures	**Effectiveness**: - Value corrected - Value of "losses" and impairments
	Information & IT security • internal rules on data protection, sensitive info, IT systems,	**Coverage and frequency:** continuous controls	

Stage 2: Ex-post controls

D – Ex-Post controls: supervision monitoring, reviews, audits

Main internal control objectives: Measuring the effectiveness of ex-ante controls; detect and correct any negligence, error, irregularity, loss or fraud remaining undetected after the implementation ex-ante controls (legality and regularity; anti-fraud strategy; reliable reporting; safeguarding assets and information); addressing systemic weaknesses in the ex-ante controls, based on the analysis of the findings (sound financial management); Ensuring that the appropriate corrections are being made).

Main risks	Mitigating controls	Coverage, frequency and depth	Effectiveness, efficiency, economy indicators
The ex-ante controls fail to prevent, detect and correct negligence, irregularities, errors, losses or attempted fraud.	**Assets** • Operational monitoring (including assets on distant sites) • If needed: refer to OLAF	**Coverage:** operational monitoring covers the entire extent of the assets under management, if needed using a sampling approach. **Validation of accounts**: at least once a year. **Depth**: desk review of all underlying elements and documents.	**Effectiveness**: - Number of controls performed - Number of supervisory control failures. - Residual value of the assets corresponding to the errors.

RCS 8 (2) Elements related to off-balance operations, including Financial Instruments

DG ENER uses innovative financial instruments to implement energy policies. On one side, DG ENER is one for the DGs partnering in the InvestEU fund. On the other side, it remains responsible for overseeing the Commission's holding in the EEEF investment fund. DG ECFIN is lead DG as regards the relevant control systems for the InvestEU fund. The section below focusses on the legacy management of the EEEF Investment fund.

Stage 1: Ex-ante controls

As regards EEEF, not relevant for the MFF 2021-2027. DG ENER is managing an established holding in the fund. No further contributions are envisaged.

As regards management of liabilities, not applicable. Litigations are primarily managed by Legal Service. This RCS only covers the management of the accounting items.

Stage 2: Ex-post controls

C – Monitoring, reporting and assurance building

Main internal control objectives:

- Ensuring that assurance building information on the FI is being provided through independent sources as well, which may confirm or contradict the management reporting received from the entrusted entity itself (Fraud prevention and detection).
- Ensuring that the (audit) results from the ex-post controls lead to assurance for the accountable AOD (5 ICOs).
- Ensuring that the accounting data reflects appropriately the exposure to litigation and similar events and that the corresponding liabilities, provisions and contingent liabilities are adequately, effectively and timely managed.

Main risks	Mitigating controls	Coverage, frequency and depth	Effectiveness, efficiency, economy indicators
The actions supported do not reflect the policy objectives for FI.	• The participation to the governing instances of the fund, namely the steering committee as regards Invest EU and the Board of Directors as regards the EEEF. • The review, contribution and authorisation of the different procedures of interest, including investment guidelines. Monitoring of the alignment of the investment priorities with the policy objectives of the DG. • The review and assessment of the elements of assurance related to the activity of the funds, such as their implementation reports, annual reports, and the consideration of elements of assurance stemming from third parties, such as audit providers. • As regards the EEEF: the assessment of the situation of shareholding and the corresponding accounting and data consistency checks.	**Coverage/Frequency**: as per documented control approach: - Steering committee/Board of Directors - Operational reports - Financial statements - Risk and performance report	**Effectiveness**: - Absence of serious audit finding as regard the operations of the funds **Reliability of information**: - Availability and positive assessment as to the reliability of the information supporting the assurance given by the AOSD/AOD in their respective report.
Recognition* of financial assets, of liabilities, of provisions or of contingent liabilities is not done timely or not for the right amount. Recording and reporting does not match the real exposure.	• Checks performed with operational units, legal service and when required with DG BUDG or other departments. • Year-end accounting checks • Maintenance of the information flow into SAP SUMMA • Conservative/prudent valuation of the exposure in alignment with corporate accounting instructions.	**Coverage/Frequency:** once per year in the framework of the preparation of the AAR.	**Effectiveness:** - Absence of audit observations

RCS 9) Supervision of the CINEA executive agency

CINEA is responsible for reporting on the implementation of the expenditure falling under its remit. DG MOVE, as lead parent DG, reports on the operating (administrative) budget provided to CINEA. DG ENER's reporting is limited to the significant elements that are relevant to the implementation of Energy expenditure by the Agency.

Stage 1: Ex-ante controls

A – Establishment (or prolongation) of the mandate to the entrusted entity ('delegation act' or 'contribution agreement')

Main internal control objectives: Ensuring that the legal framework for the management of the relevant funds is fully compliant and regular (legality & regularity), delegated to an appropriate entity (best value for public money, economy, efficiency), without any conflicts of interests (anti-fraud strategy) and gives all the references necessary for a smooth running of the new entity.

p.m.

B – Assessment and supervision of the Agency's financial and control framework

Main internal control objectives: Ensuring that the entrusted entity is fully prepared to start/continue implementing the delegated funds autonomously with respect of all 5 Internal Control Objectives (*legality and regularity, sound financial management, true and fair view reporting, safeguarding assets and information, anti-fraud strategy*).

p.m.

C – Operations: monitoring, supervision, reporting

Main internal control objectives: Ensuring that the Commission is fully and timely informed of any relevant management issues encountered by the entrusted entity, to possibly mitigate any potential financial and/or reputational impacts (legality & regularity, achievement of objectives, sound financial management, true and fair view reporting, anti-fraud strategy).

Main risks	Mitigating controls	Coverage, frequency and depth	Effectiveness, efficiency, economy indicators
The Commission is not informed of relevant management issues encountered by the entrusted entity in a timely manner. The Commission does not react upon and mitigate notified issues in a timely manner. Inconsistent application of supervision/control arrangements within different EEs	• Monitoring is based on into the Memorandum of Understanding The MoU specifies the modalities and procedures of governance and control by Parent DGs, covering the implementation of both operational and operating budget, including: - DG ENER representation in Steering Committee; - Liaison meetings at hierarchical level; - Ad hoc meetings and regular contacts at working level; - Quarterly operational reports from the agency; - Regular updates on the achievements of the delegated programmes' objectives; - Budgetary control via commitment and payment appropriations process; - Formal opinion and consultation on key documents (annual work programme and the annual activity report) - 2) Review of - Annual Activity Report of CINEA Audit reports of the IAS and ECA	**Coverage**: as determined by the MoU **Frequency**: as determined in the MoU	**Effectiveness**: - % of execution by CINEA, of Energy related commitment and payment appropriations - Number of critical / very important IAS and ECA recommendations issued to CINEA **Economy** - Overall supervision cost per (type of) entrusted entity / total budget entrusted (%) - Ratio FTEs/funds entrusted.

D – Commission contribution: payment or suspension/interruption

Main internal control objectives: Ensuring that the Commission adequately assesses the management situation at the entrusted entity, before either paying out the (next) contribution for the operational and/or operating budget of the entity, or deciding to suspend/interrupt the (next) contribution. **This is very closely linked to stage 3 above.**

Main risks	Mitigating controls	Coverage, frequency and depth	Effectiveness, efficiency, economy indicators
The Commission pays out the (next) contribution to the entrusted entity, while not being aware of the management issues that may lead to financial and/or reputational damage. Bad cash forecast leading to the Commission paying too much compared to the entity's needs.	See stage C	See stage C	See stage C

Stage 2: Ex-post controls

E – Audit and evaluation

Main internal control objectives: Ensuring that assurance building information on the entrusted entity's activities is being provided through independent sources as well, which may confirm or contradict the management reporting received from the entrusted entity itself (on the 5 ICOs).

Main risks	Mitigating controls	Coverage, frequency and depth	Effectiveness, efficiency, economy indicators
The Commission has not received sufficient information from independent sources on the entrusted entity's management achievements, which prevents drawing conclusions on the assurance for the budget entrusted to the entity – which may reflect negatively on the Commission's governance reputation and quality of accountability reporting.	• Audit rights by the Internal Audit Service of the Commission and by the European Court of Auditors • Analysis of interim and annual reports from the Agency, and of audit reports as an element of the supervision • Follow-up of actions taken by the agency through the supervisory controls	**Coverage**: - Audits performed on sample as needed (e.g., random/representative, value targeted, risk based) - Evaluation covers all programmes entrusted **Frequency**: - Audits / determined by audit bodies - Evaluations / determined in legal base - Annual ECA report on JUs	**Effectiveness**: - Assurance being provided (via management /audit reporting) - Absence of reservations (in relation to DG ENER related programmes) to CINEA's statement of assurance - Residual error rate reported for programmes (falling under the political responsibility of DG ENER)

Main risks	Mitigating controls	Coverage, frequency and depth	Effectiveness, efficiency, economy indicators
		Depth depends on the type of entity and the level of risks assessed	- Number of serious IAS and ECA findings of control failures.

For All RCS:

Overall economy indicators

Estimation of cost of staff involved in the ex-ante checks	Estimation of other costs linked to ex-ante checks
• Programme management and monitoring • Financial management • Budget and accounting • General Coordination incl. Strategic Programming and Planning, internal control, assurance and quality management. • Staff performing supervisory tasks as regards entrusted entities and other partner organisations • Anti-fraud • Development and support of IT systems linked to managing funding programmes	Cost of experts
• Audit staff • Financial staff involved in the implementation	Costs of services procured for audit and other assurance

ANNEX 7: Specific annexes related to "financial management"

Effectiveness and efficiency of controls

The present section distinguishes, on one side, the controls exerted over the main programmes directly managed by DG ENER and on the other the controls exerted over the budget entrusted to other entities.

Direct management

In 2024, DG ENER mainly implemented its direct expenditure through procurements (use of prerogative lines), procurements related to the implementation of Nuclear Safeguards or supporting to NDAP and the ITER programmes, administrative agreements with the JRC as well as a limited volume of directly managed grants (Horizon 2020 and CEF), budgetary support actions and membership fees towards international institutions.

Effectiveness

DG ENER uses internal control processes to ensure the adequate management of the risks relating to the legality and regularity of the underlying transactions it is responsible for, taking into account the multiannual character of programmes and the nature of the payments concerned.

Research Framework Programmes (Horizon 2020 and Horizon Europe) (RCS 1)

Concerning Horizon 2020/Horizon Europe, the remaining projects of this type were delegated to CINEA in 2018. As a result, the number of audited actions managed by DG ENER has decreased significantly, which does not allow a complete analysis of the coverage. The payments made in 2024 regarding Horizon 2020 grants were EUR 7.47 million (or 0.89% of the total payments). In 2024, DG ENER did not make any payments (or clearing of pre-financing) in relation to Horizon Europe grants. Therefore, this AAR focuses on the final stages of the project management, which include the ex-post audits as well as the recovery of any amounts found to have been paid in excess of the amount due.

Common ex-post audit strategy of the Research Directorates General

The R&I Family operates on a common audit strategy intended to contribute to the legality and regularity of expenditure on a multi-annual basis, including detection and correction of non-systemic and systemic errors.

For Horizon 2020, the Common Audit Service (CAS) of the Common Implementation Centre (CIC) carries out all the financial audits ([56]), including those concerning grants managed by the Executive Agencies and the Joint Undertakings. This is a major step towards ensuring

([56]) Except audits for article 185 bodies.

efficiency gains, a harmonised approach, legal certainty, equality of treatment of beneficiaries and the least audit burden on beneficiaries.

The main indicators on legality and regularity of EU Framework Programmes for R&I are the cumulative representative detected error rate and the cumulative residual error rate ([57]).

Control results of H2020 ex-post audits

The error rates based on the audit work for H2020 on 31 December 2024 are:

- **Cumulative representative detected error rate** for the Framework Programme: **3.55%** ([58])
- **Cumulative residual error rate** for the Framework Programme: 1.79%.

In 2024, DG ENER specific cumulative residual error rate for Horizon 2020 was calculated at **2.62%**, which is below the materiality threshold.

By the end of 2024, the Common Audit Service (CAS) in DG Research and Innovation audited 5 247 Horizon 2020 participations ([59]) of the Research and Innovation Family, covering 63.12% of total Horizon 2020 expenditure to date.

The percentage of Horizon 2020 expenditure covered by the audits (63.12%) refers to the value of the participations of the audited beneficiaries. It includes both fully audited participations (3.86%), also referred to as the 'direct' coverage, and the non-audited participations, also referred to as the 'indirect' coverage, which after the full treatment of audit results, are clean from systemic errors (59.26%).

The relatively high level of error in Horizon 2020 grants is linked to the applicable funding model, which is based on the reimbursement of eligible actual costs. Most of the errors relate to incorrect claims for personnel costs that are mainly due to beneficiaries' lack of thorough understanding of the inherently complex rules. Newcomers and Small and Medium Enterprises (SMEs) are more prone to errors in comparison to more experienced/large size beneficiaries.

Since R&I Framework Programmes are multi-annual, the error rates, and the residual error rate in particular, should be considered within a time perspective. Specifically, the implementation of the audit ([60]) results over time will tend to lower the cumulative residual error rate thus increasing its difference with the representative detected error rate.

([57]) DG ENER's assurance building, indicators and materiality criteria are outlined in annual activity report Annex 5.

([58]) Based on 765 representative results out of the 944 expected in the six Common Representative Samples.

([59]) The Horizon 2020 audit campaign started in 2016. At this stage, six Common Representative Samples with a total of 944 expected results have been selected. By the end of 2024, cost claims amounting to EUR 56.7 billion have been submitted by the beneficiaries to the services. In addition to the Common Representative Samples, Common Risk Samples and Additional Samples have also been selected. The audits of 5 247 participations were finalised by 31/12/2024 (of which 540 in 2024 representing 101.9% of the target 2024).

([60]) Audits performed by the Common Audit Service of R&I.

These error rates are calculated on the basis of the audit results available when drafting the Annual Activity Report. They should be treated with caution as they may change subject to the availability of additional data from audit results. The yearly fluctuation of the detected error rate in H2020 exhibits no identifiable correlation with the maturity of the programme.

There is evidence that the simplifications introduced under Horizon 2020, along with the ever-increasing experience, help in reducing the number of errors made by the beneficiaries, especially when compared to the Seventh Framework Programme where the error rate was higher and varied from close to 5% to around 5.5% over time. Notwithstanding these efforts, beneficiaries still make errors.

Horizon Europe

2024 was the fourth year of implementation of the Horizon Europe Framework Programme. No representative error rate for Horizon Europe is available in 2024 as the ex-post audit campaign for the Programme was launched in 2024, once a meaningful number of payments is available for audit. Consequently, without elements allowing an assessment of the level of errors and taking into account the simplifications introduced for Horizon Europe that aim to reduce the error rate, a 2% ([61]) detected and residual error rate will be considered for DG ENER.

Progress made on action plans to both reduce the error rate on Horizon 2020 and prevent a high error rate in Horizon Europe

Following an IAS Limited review on the implementation of the Action Plans for the reduction of the Horizon 2020 error rate and for simplifications to reduce the Horizon Europe error rate and based on the original action plans agreed with central services, DG R&I prepared in 2022 a reprioritized Action Plan to both reduce the error rate on Horizon 2020 and prevent a high error rate in Horizon Europe. The energy research projects managed by DG ENER and CINEA also benefit from these measures. Priorities in this respect are communication, both external and internal, awareness raising among beneficiaries and improved training of Commission staff. As regards other developments (for instance introduction of lump sum grants, personal unit cost schemes or Corporate Arachne) see DG R&I AAR.

Implementation of audit results

For H2020 grants, over the period 2014-2024, the results of the audits relate to one participation, audited by the Commission services with a ‘zero’ adjustment and one participation, audited by the ECA, with a cashed implemented funding adjustment of EUR 35 733 in favour of the EC.

([61]) These rates correspond to the objective set for Horizon Europe.

Implementation of extrapolated audit results

The extrapolation process allows correcting systemic errors of a beneficiary detected by an audit in all its ongoing participations. These corrections stem from audits made by DG ENER or other DGs in the research family where systematic errors were found. By the end of 2024 no participation from Horizon 2020 programme had been deemed concerned by systematic errors.

The Commission closely monitors the implementation of extrapolation cases. It is not unexpected to have open cases at this stage as it might take 18 months before new declarations are received from beneficiaries.

Liquidated damages

Liquidated damages are due where a beneficiary has overstated expenses and has in consequence received unjustified EU contribution. Liquidated damages will only be applied where the unjustified contribution exceeds 2% of the total contribution claimed and accepted for the given period(s) ('de minimis' rule corresponding to the materiality level of ECA). By the end of 2024, DG ENER did not identify any liquidated damages under Horizon 2020.

Energy grants (prerogative) and support actions (prerogative and CEF) (RCS 2)

DG ENER manages directly only a limited number of grants under the CEF programme. In 2024, the payments amounted to only EUR 0.01 million.

DG ENER provides budgetary support (EUR 6.26 million) to the Energy Community Secretariat in Vienna, an external entity in charge of implementing the Energy Community international Treaty that aims to extend the EU acquis on energy to South-East European and other neighbouring countries.

The Commission, represented by DG ENER, acts as a coordinator in the framework of the Treaty. DG ENER ensures oversight over the use by the Secretariat of EU funds and chairs its Budget Committee. The Commissioner for Energy and Housing and a high-level representative of the Council of the European Union represent the European Union in the Ministerial Council, the highest decision making body of the Energy Community.

A Ukraine Energy Support multi-donor Fund was established to counteract the impact of the Russian attacks targeting critical Ukrainian energy infrastructure. The Secretariat acts as the fiduciary of the Fund as well as an intermediary between the donors and the Ukrainian authorities, whereas the effective deployment was embedded in the US-driven "Energy Security Project". The contributions to the fund emanate from EU and non-EU countries, public and private entities. Although DG ENER did not entrust funds from its own budget and does not have any management role in this respect, the European Union contribution represents 14.91% of the amounts pledged.

DG ENER pays close attention to the evolution of the Fund and its governance, considering in particular the uncertainty of the continued engagement of the USA and the increasing

workload born by the Secretariat without foreseen participation from the contributors to the Fund.

Furthermore, DG ENER paid EU contribution to the International Renewable Energy Agency (IRENA), to the International Energy Agency (IEA) and to Latin-American Energy Organisation (OLADE) in the total amount of EUR 0.79 million.

In 2024, one ex post audit was performed on one specific grant agreement without any detected error. DG ENER performed a risk screening exercise on membership fees and support actions concluding that these activities were very low risk.

Procurements, studies and other operational expenditure (RCS 3)

This segment, with total payments of EUR 35.91 million, represents an array of diverse initiatives, including directly managed procurements servicing the activities (studies, specific contracts, etc.) as well as an administrative agreement with the JRC in relation to the Covenant of Mayors, technical and scientific advice. These activities are considered as low-risk, due to the nature of the transactions (procurements) or of the beneficiaries – (other public bodies).

Nuclear Energy (safeguards and safety) (RCS 3*)

The Euratom Treaty mandates the Commission to ensure that civil nuclear materials are not diverted from their declared use and that the agreements in force with third states and the International Atomic Energy Agency (IAEA) are complied with.

DG ENER fulfils this mandate through the implementation of Euratom safeguards, implementing verifications of nuclear materials and drawing the related conclusions, providing technical support and issuing guidelines to Member States and stakeholders.

The implementation of these activities involves the management of an operational mission budget, and procurement of goods and services to acquire and maintain specific scientific and Information Technology equipment and to perform the verifications. In addition, Nuclear Energy expenditure includes the acquisition of goods and services related to the implementation of Nuclear Safety and radioprotection activities, to Nuclear policies and programmes (including the procurement of specific expert and assurance services for the ITER programme).

In 2024, the expenditure specifically related to Nuclear Energy amounted to EUR 30.61 million. The specificities of the equipment used, and regulatory constraints lead to a higher than usual use of negotiated procedures (limited number of suppliers) and of reimbursement agreements (limits imposed by national regulators). The significant increase of this segment of expenditure stems from new obligation to contribute to the decommissioning of EC equipment installed on distant sites.

In addition, there was a payment to the budget of the Euratom Supply Agency (ESA) of 0.27 million. The ESA's strategic objective, as outlined in the 1958 Euratom Treaty, is the

security of supply of nuclear materials. To this end, it provides the Community with expertise, information and advice in relation the operation of the market in nuclear materials and services and plays a market-monitoring.

Cross sub-delegations

DG ENER has the possibility to cross sub-delegate some activities to different services within the Commission, in order to arrange the provision of certain operations more efficiently. Being a Commission service itself, the AOD of the cross sub-delegated service is bound to implement the appropriations subject to the same rules, responsibilities and accountability arrangements as DG ENER. During 2024, DG ENER signed one cross sub-delegation with FPI in the framework of the OSAKA world exhibition.

Efficiency

The main efficiency indicators are the timeliness of payments, from Scorecard and the estimation of benefits of ex-post controls.

Timely payments

As far as the **'timely payments' indicator** is concerned (i.e., payment accepted amount in time/payment accepted amount in EUR), and despite the extraordinary circumstances and increased pressure on its activities, DG ENER managed to achieve 100%, which is above the Commission average of 99%.

Time-to-inform and time-to-grant

In 2024, DG ENER concluded only three grants to identified beneficiaries, for which these indicators are not relevant.

Performance of ex-post audits

DG ENER maintains a limited ex-post audit function of 2.8 FTEs, shared with DG MOVE. A limited number of risk-based audits, including the mandatory contribution to ITER's statutory audits twice a year, can be performed. The implementation of the 2024 audit plan was satisfactory with an implementation rate of 98% atop of the completion of the 2024 audit plan.

Indirect management and direct management by other services

This section reports and assesses the elements that support the assurance on the achievement of the internal control objectives as regards the results of the DG's supervisory controls on the budget implementation tasks carried out by other Commission DGs and entrusted entities distinct from the Commission, i.e.:

- CINEA Executive Agency;

- EBRD and the National Agencies SIEA and CPMA (for Nuclear Decommissioning Assistance);
- ACER Decentralised Agency;
- The F4E Joint Undertaking EIB for the CEF Debt Instrument and the Target pilot project.

In addition to these, some pilot project and preparatory actions were entrusted under ad hoc indirect management to international institutions such as the World Bank, the EIB ([62]) and the United Nations Environmental Programme.

For all these cases, DG ENER's supervision arrangements are based on the principle of controlling 'with' the relevant entity. For details, please refer to Annex 6 (RCSs 4-9).

CINEA Executive Agency *(RCS 9)*

DG ENER is one of seven parent DGs (with MOVE - Leading DG, R&I, CLIMA, ENV, MARE and REGIO) in charge of CINEA.

The Commission has delegated to CINEA the task of executing the operational budget and performing tasks linked to the implementation of its delegated Union programmes in the following fields relevant for DG ENER:

- Energy infrastructure – Connecting Europe Facility programme (CEF) Energy;
- Energy research and innovation – Horizon 2020 and Horizon Europe;
- Clean energy – LIFE;
- EU Emissions Trading System – Innovation Fund (IF);
- Support transition towards a climate-neutral economy – Just Transition Mechanism (JTM);
- Increase investment in renewable energy production capacity – Renewable Energy Financing Mechanism (RENEWFM);

DG ENER defines the policy, the strategic objectives and the priority areas of action while CINEA manages the entire project life cycle, communicates and interacts with beneficiaries and gives key feedback to DG ENER. DG ENER is responsible for implementing the supervision and monitoring arrangements towards CINEA regarding DG ENER delegated programmes.

Supervision arrangements

The Commission Decision establishing CINEA and the Commission Decision delegating powers to CINEA and appointing the members of the Steering Committee (SC) set out the governance and supervision arrangements.

([62]) The legacy CEF DI Financial Instrument, previously reported under indirect management is covered in the section on non-expenditure items.

The working relations between the Parent DGs and CINEA for all delegated programmes are defined through Memorandums of Understanding (MoUs). A general MoU including the General provisions, common to all Agencies and Parent DGs, and sectoral provisions specific to each delegated programme are also applicable. In their supervision of CINEA, the Parent DGs review in particular the objectives and performance indicators in the Annual Work Programme in accordance with the Delegation decision and the MoU.

In 2024, DG ENER participated to quarterly preparatory meetings in relation to the Steering Committee and to regular meetings at operational level. In addition, the CINEA Budget and Finance Network, including representatives both from parent DGs and DG BUDGET discussed finance and budget matters with CINEA during meetings in 2024. In addition, CINEA produces monthly overview reporting on all KPIs, execution of administrative and operational budget and multi-annual error rates as well as respect of deadlines (e.g., time-to-grant). Reports are provided regularly by CINEA.

Additional sources of assurance

CINEA reports on the implementation of budget in its own Annual Activity Report. According to the draft 2024 report, most of its KPIs have met their targets. CINEA's Management considers that suitable controls are in place and working as intended. In addition, the residual error rates for CEF Energy, Horizon 2020 and LIFE are respectively estimated at 1.28%, 2.33% and 0.42%. As regards the implementation of the operating budget, the residual error rate is estimated at 0.5%, significantly below the target of 2%.

Consequently, CINEA's Director, in her capacity as AOD, has signed the declaration of assurance without reservations.

The audits of the IAS and of ECA provide additional elements of assurance. DG ENER follows closely the proceedings and conclusions of their audits concerning CINEA primarily. During the year, the IAS issued one final report, which included seven recommendations for CINEA with no impact of the assurance. ECA found the 2023 annual accounts presented fairly, in all material respects, the financial position of the Agency, the results of its operations, its cash flows, and the changes in net assets. ECA noted that there were shortcomings in CINEA's ex ante control system for CEF grants in the transport and energy sectors. The necessary actions were undertaken by CINEA and the recommendation by ECA was successfully implemented by the end of 2024.

Conclusion

The regular supervision of CINEA did not identify any particular events, issues or problems that could have a material impact on assurance or that would need to be included in this report. Overall, DG ENER considers that its supervision of CINEA is effective and appropriate.

Nuclear Decommissioning Assistance Programmes *(RCS 5)*

Effectiveness

The supervision of the Nuclear Decommissioning Assistance Programmes (NDAP) is based on a multi-layered governance structure, in accordance with the provisions of the NDAP Regulations. Annual work programmes for the decommissioning programmes are prepared by the Member States and adopted by the Commission by means of implementing acts. These programmes specify the objectives, expected results, related performance indicators and timeline for the use of funds.

The monitoring function is conducted in full cooperation with the Member States as they bear the ultimate responsibility for the safe decommissioning of the nuclear power plants. The three joint bi-annual programme monitoring committees, co-chaired by the Commission and the Member States at ministerial level, assess the progress in the activities, approve the monitoring reports detailing the performance of the programme and take the appropriate corrective measures when necessary.

DG ENER has entrusted the implementation of the NDAP to:

- the European Bank for Reconstruction and Development (EBRD), which implements the assistance through three International Decommissioning Funds (IDSF)
- National Agencies in Lithuania (CPMA) and in the Slovak Republic (SIEA).

In this respect, DG ENER relies on the Framework Administrative Agreement between the EBRD and the Commission, on recent or recently updated pillar assessments for all three implementing bodies, as well as on the provisions of the subsequent agreements with these bodies.

Supervision arrangements

DG ENER maintains a robust supervisory framework of the NDAP. This supervisory framework includes:

- Bi-annual on-the-spot verification missions (site visits)
- Bi-annual Monitoring reports, and the related monitoring Committee meetings
- Mid-term and ex-post evaluation (once per programming period)
- Monthly dedicated management meetings
- Risk reviews and updates of the NDAP risk register complemented by a systematic follow-up of identified risks mitigating actions
- Use of the earned value management methodology to ensure an effective assessment of the progress of the activities against cost and schedule progress.

The implementing bodies provide reports on the implementation of the entrusted tasks and financial reports, accompanied by declarations of assurance. The technical reports are subject to an assessment by DG ENER services. Management information received includes financial reporting, project documentation and management reports on procedural issues.

This information was sufficient for drawing assurance conclusions and is considered reliable.

Payments made to the three entrusted entities in 2023 totalled EUR 178.49 million.

EBRD

The EBRD implements the assistance through three dedicated funds (one for each Member State), the so-called International Decommissioning Support Funds (IDSF), set up in 2000.

The multi-donor funds are managed by the EBRD and governed through the Assemblies of Contributors. The Commission is the largest, and since 2004 the sole contributor. Accordingly, the funds rules acknowledge the Commission's monitoring power as well as its decision and control role. Management information received includes work programmes, periodic financial reporting on the three funds under management and project documentation.

A Framework Partnership Agreement was signed on 28 September 2022 as well as new contribution agreements in September 2024 for the Kozloduy IDSF and in December 2023 for the Ignalina and Bohunice IDSFs respectively. The Assemblies of Contributors to the three IDSFs have approved proposals to extend the duration of the three Funds beyond 2022 (March 2026 for Bohunice and end of 2027 for the other two funds).

In 2024, DG ENER paid EUR 25.19 million to the EBRD for the Kozloduy Fund, EUR 6 million for the Bohunice Fund, and EUR 28.93 million for the Ignalina Fund. Payments are requested by the EBRD and determined based on procurement forecasts—as defined in the relevant delegation agreements—and progress in project implementation. Additional funds entrusted (committed) in 2024 amount to EUR 8.02 million for the Kozloduy Fund.

As regards the operations of the KISDF, the value earned methodology shows the following results. The decontamintion of four units was completed, followed by the dismantling of reactors' large items. The construction of the National Disposal Facility was completed in 2024.

Overall, the indicators show that the decommissioning programme in Kozloduy has progressed in 2024 but at a slower pace than planned. The stress-test executed on the overall schedule confirmed that the risk of delay remains high. The decommissioning programme completion date nonetheless remains set for the end of 2030, although additional mitigation measures may be necessary. SERAW is restructuring its organization and implementing mitigation measures under the supervision of the Ministry of Energy and at the request of the European Commission.

CPMA (Lithuania)

The Central Project Management Agency (CPMA) is the main implementation channel for all new projects related to the Ignalina Nuclear Power Plant (INPP). The EBRD continues the implementation of on-going projects and, at the request of the Lithuanian Ministry of

Energy, took over the project for the dismantling of the steam drum-separators. The Commission will closely monitor, and report on, the impact of this setup.

The Commission maintains a close supervision and control on the core dismantling project that will be critical for the 2021-2027 period. The Ignalina graphite core technology reactors pose a specific challenge to the Lithuanian programme (LT). In 2022/2023 delays in contracting impacted the overall schedule. A reassessment of the programme end-date is currently ongoing based on studies delivered in June 2024.

In April 2024, SE-INPP completed the procurement procedure for the construction of the near-surface repository for low- and intermediate-level waste. Upon completion, SE-INPP will have all the tools needed for the disposal of short-lived radioactive waste under the decommissioning plan. The earned value methodology shows the following results: as of June 2024, SE-INPP had dismantled a total of 74,805 tonnes of metal and equipment, disposed of 7,663 m^3 of very-low-level radioactive waste, and stored 3,463 m^3 of low-level and intermediate-level radioactive waste.

In 2024, DG ENER made payments to CPMA amounting to EUR 112.79 million against previous commitments, with additional funds entrusted (committed) of EUR 67.07 million.

SIEA (Slovakia)

The Slovak Innovation and Energy Agency (SIEA) is together with the EBRD is the implementaion channel for all new projects related to the Bohunice NPP.

A complementary pillar assessment was completed in 2022, without major observations from the auditor. On the basis of the multiannual financing decision C(2024)8870, the Contribution Agreement will be amended in 2025.

In 2024, DG ENER made payments to the SIEA in the amount of EUR 5.58 million against previous commitments, with additional funds entrusted (committed) of EUR 8.01 million.

Although the Bohunice programme is the most advanced of the three NDAPs, meeting the 2027 end-date remains challenging due to delays in the procurement of works for the final demolition of the reactor building. DG ENER continues to closely monitor the situation as part of its risk management process. While the procurement delays impact the programme schedule, there is no impact on the legality and regularity of the entrusted entity's activities, but rather on the performance of the decommissioning efforts.

Efficiency

Supervisory activities were carried out within the framework of the existing control strategy. The key benefits of these controls are to foster a constant attention on the delivery on schedule and on cost, and on the early mitigation of issues encountered.

The main cost drivers as regards the supervisory controls for the NDAP are:

- the complexity and specificity of the underlying operations;

- the complexity of the implementation scheme, where implementation occurs both through EBRD operated multi-donor funds and national agencies, leading to a multi-layered governance framework;
- the retention by the Commission of a strong role as regards the approval of project documentation and the decisions on the eligibility of projects.

ACER *(RCS 6)*

Effectiveness

ACER, a decentralized EU agency under DG ENER, plays a vital role in coordinating the work of national energy regulators and advancing the single EU energy market for electricity and natural gas. As of 2024, ACER is tasked with implementing measures outlined in the Clean Energy Package and supporting initiatives to decarbonize the energy sector.

The Agency operates autonomously, managing its resources and assurance processes, while being subject to DG ENER's supervision, primarily through participation in its Administrative Board (AB) and observation in the Board of Regulators. The AB consists of nine members, including two from the Commission. Decisions are made by a two-thirds majority, ensuring a balanced governance framework.

In 2024, DG ENER's subsidy paid to ACER amounted to EUR 23.01 million. By year-end, ACER achieved a 99.5% execution rate for financial commitments (compared to 99.4% in 2023) and a 71.0% payment execution rate (compared to 70.7% in 2023). These figures reflect consistent and efficient financial management.

DG ENER's supervision of ACER is guided by its 2018 strategy, updated annually. Key elements include:

- Quarterly risk reviews by the ENER Control Board.
- A dashboard of indicators for tracking staffing, budget execution, and audit recommendations, updated biannually, ensuring transparency and accountability.
- Regular bilateral meetings between DG ENER and ACER's Executive Director to address emerging challenges, particularly related to energy crisis initiatives.

In 2024, coordination improvements between DG ENER and ACER resulted in enhanced information flow and streamlined decision-making, particularly in budget planning and program delivery.

DG ENER monitors the evolution of ACER’s vacancy rate, considering in particular that ACER received 21 new posts in 2024 and expect to be further reinformed by 2027. The vacancy rate increased from 2.14% in 2023 to 8.98% in 2024.

There are two very important recommendations ongoing resulting from audits of the IAS: one from the audit on Planning, Budgeting and Monitoring, which is ready for review, and the second one concerning the audit on Decision-making process, and which is due in 2025.

ECA issued an unqualified opinion on the legality and regularity of the accounts and on the financial management of ACER. While one past recommendation on the IT framework contract remains unresolved, this does not impair the assurance given by the auditors.

No other events or issues in 2024 significantly impacted DG ENER's assurance regarding ACER.

DG ENER considers that these supervision mechanisms, including risk reviews and monitoring tools, effectively ensured alignment between EU priorities, DG ENER objectives, and ACER's activities.

The European Joint Undertaking for ITER and the Development of Fusion Energy – F4E JU *(RCS 4)*

Effectiveness

Objectives

Fusion for Energy (F4E) is the European Union's Joint Undertaking for ITER ([63]) and the Development of Fusion Energy, located in Barcelona. F4E was created in 2007 for a period of 35 years to provide Europe's contribution to the ITER International Fusion Energy Organization (IO), the world's largest scientific partnership that aims to demonstrate fusion as a viable and sustainable source of energy, bringing together seven parties: the EU, the United States, Japan, South Korea, China, India and Russia.

F4E JU has the following members:

- EURATOM, represented by the European Commission;
- The Member States of EURATOM;
- Third countries which have concluded cooperation agreements with EURATOM in fusion that associate their respective research programmes with the EURATOM programmes, and which have expressed their wish to become members.

Europe supports about 45% of the construction cost and 34% of the cost of operation, deactivation and decommissioning of the facility as well as preparing the site. Europe's contribution to ITER is managed by F4E JU. In 2024, DG ENER paid a total of EUR 556.36 million to F4E JU.

Supervision structure

The Joint Undertaking is an autonomous body and has full responsibility regarding the management of its resources, the design and operation of its control systems and its

([63]) ITER: International Thermonuclear Experimental Reactor.

assurance processes. The supervision of F4E activities by DG ENER ([64]) is organised at different levels.

The top-level decision-making bodies of the Joint Undertaking are the Governing Board (GB) and the Director. The Commission (DG ENER) represents EURATOM in the governance and supervision instances, including the Governing Board. All EU Member States are also represented.

The Board is further assisted by an Administration and Management Committee (AMC), a preparatory Bureau and an Audit Committee. DG ENER represents EURATOM in the AMC and provides a member of the Audit Committee. DG ENER participates also as observer in the Technical Advisory Panel (TAP).

In 2024, DG ENER participated in two Administrative Management Committees (AMCs) and three Governing Board (GB) meetings. The GB approved F4E's annual budget, F4E's Single Programming Document, and the Work Programme, including the related amendments. An updated supervision strategy for F4E was adopted in early 2024, reflecting increased efforts towards effective oversight of F4E's performance in discharging the EU obligations towards ITER, particularly in terms of timeliness and quality of delivery.

DG ENER has continued to implement its dedicated Risk Inventory and Risk Register for the ITER project, including risks associated with F4E's performance. This risk is reviewed quarterly by the DG ENER Control Board to ensure timely mitigation of potential issues.

A specific Administrative Agreement between DG ENER and F4E lays down the modalities for implementing EURATOM's contribution to F4E. The revised Administrative Agreement, was signed in early 2024, providing an updated framework for cooperation.

F4E JU provides the Commission with statutory information (including their AAR and the annual progress report for the European Parliament and the Council), planning documents, and performance information:

The *ex-ante* oversight of F4E by the Commission mainly consists of the assessment of the planning documents. The Commission needs to assure itself that F4E presents a clear vision and strategy to deliver the ITER components under EU responsibility, according to the agreed ITER schedule and within the available budget.

Performance information includes bimonthly reports on the activity and the related milestones and bimonthly updates of the estimate at completion (EaC) system, allowing to take managerial decisions and enabling a monitoring of the overall financial evolution of the project. Requests for appropriations and calls for funds are supported by financial reports.

This information was sufficient for drawing assurance conclusions and is considered reliable.

([64]) On 1 July 2015 the responsibility of the monitoring of the ITER project and the Broader Approach activities were transferred from DG R&I to DG ENER.

Towards the ITER Organization:

DG ENER is the EURATOM representative in the ITER Council and ensures that F4E JU is fully associated and consulted when necessary. The ITER International Organization in charge of the project (the ITER Organization – IO) set up by the ITER Agreement is a main stakeholder in the project and thus plays a major role and has a major impact in particular on the activities of the Joint Undertaking but also on EURATOM's responsibilities as signatory of the ITER Agreement.

The Commission operates a comprehensive strategy for EURATOM's participation in the ITER project's governance and supervision. The main objectives of EURATOM's strategy for an effective governance of the project are to foster an effective steering and supervision of IO by the ITER Council and to secure EURATOM's interests in the governance of ITER.

In 2024, DG ENER provided ongoing support to the Financial Audit Board (FAB) with the necessary support to organise its work. The FAB, undertakes the audit of the annual accounts of the ITER Organization.

Independent assessments requested by the Budgetary Authority

F4E undergoes a yearly independent assessment of the implementation of its activities, which is submitted to the Council of Ministers of the EU and the European Parliament. In 2024, the Commission services conducted a mid-term evaluation of F4E, focusing on the progress of its activities, including the execution of contracts related to the construction of buildings and other civil engineering structures on the ITER Project site. This assessment provided valuable insights into F4E's performance and informed subsequent decisions on its strategic direction.

Points of attention in 2024

As regards the Joint Undertaking

In 2023, the Commission's efforts to reform the Joint Undertaking and optimize its organizational structure translated in a clear mandate given to the newly appointed Director to enhance performance-driven project management, to reorganize the JU, and strengthen cooperation and integration with the ITER Organization.

In 2024, the Commission has continued to support the Director in implementing these objectives. Particular attention remains on improving F4E's performance in critical procurements, such as the delivery of the remaining 3 European sectors of the ITER vacuum vessel, the delivery of heating systems, the completion of buildings and other civil engineering projects on the ITER site, where delays and cost overruns have been significant. These efforts aim to ensure more timely and cost-effective project execution.

As regards the ITER project and the ITER Organisation

DG ENER monitors closely the risks related to the implementation of the project (See also Annex 8, point 2.3.3).

The Director General of the ITER Organization (IO) initiated a project restructuring, including the preparation of the new project baseline. In November 2023, the IO made clear that the date for the start of the pre-nuclear ("First Plasma") operation would be postponed by several years beyond the current baseline.

The French nuclear regulator *Autorité de Sûreté Nucléaire (ASN)* maintains its decision not to release *the Assembly Hold Point.* DG ENER and F4E are closely monitoring the evolution of the situation.

DG ENER furthermore monitors the potential impact of ongoing changes in the geopolitical environment.

Additional sources of assurance

The IAS exercises the powers of Internal Auditor of F4E JU, whilst the internal audit capability of F4E JU is maintained. As of January 2025, one very important recommendation from the audit on delegations and efficiency of decision making in the European Joint Undertaking for ITER and the Development of Fusion for Energy and cooperation mechanisms with DG ENER was implemented and closed. The remaining two other very important recommendations stemming from an HR audit are planned to be implemented by September 2025.

ECA issued its 2023 Annual Report on EU Joint Undertakings, providing unqualified opinions on both the reliability of the accounts and the legality and regularity of transactions for F4E JU. The ECA confirmed that the transactions underlying the annual accounts of F4E JU for the year ending 31 December 2023 were, in all material respects, legal and regular.

The ECA's opinion was again accompanied by an 'emphasis of matter' regarding the EU contribution to the ITER project. ECA noted that the JU provided an updated estimate of the total costs for completing its delivery obligations under the ITER project, which it assessed at EUR 19.5 billion (in 2023 values). The auditor, while not challenging their opinion, highlighted that changes in key assumptions or risk exposure could result in significant cost increases and/or further delays in project implementation.

ECA issued observations on the management of external service providers and of the risks deriving from their use as well as the integration of the risk management process in the internal control framework. Both recommendations are due by end of 2025.

Efficiency

Supervisory activities foster a constant attention on the delivery on schedule and on cost, and on the early mitigation of issues encountered. The continuous risk assessment system improves the reactiveness to potential issues and contributes to the efficiency of supervisory activities.

In 2023, the total amount of the unused F4E appropriations amounted to EUR 470 million in commitments and EUR 264 million in payment appropriations. As part of the 2024

budgetary procedure, a reduction of EUR 370 million was agreed, with these funds returned to the general EU budget for reallocation to other priorities.

- Conclusion on the efficiency of supervision

Based on the monitoring reports and the various supervision activities carried out, DG ENER considers that although F4E JU operated in a challenging environment, was effective and efficient and discharged its duties in line with its obligations. The supervisory controls towards F4E and the administration of the EURATOM contribution were efficient and delivered the expected results. The main cost drivers as regards the supervisory controls for F4E are:

- The complexity and specificity of the underlying operations;
- The persistence of technical and regulatory issues at ITER IO level and the emergence of concerns at ITER project level;
- The magnitude of the budget implication of this project;
- The complexity of the implementation schemes of both the ITER project and the Broader Approach.

DG ENER did not identify — through its regular and reinforced supervision of F4E JU — any other particular events, issues or weaknesses that could have a material impact on the assurance given for the year 2024. It monitors closely the key risks associated with the overall performance of the ITER programme, functioning of F4E JU as an organisation.

Other Indirect Management *(RCS 7)*

DG ENER manages indirectly a limited number of preparatory actions and pilot projects. It relies on the expertise of trusted partner institutions, that provide both a reliable governance scheme and dedicated capabilities:

- A single donor trust fund, entrusted to the World Bank provided technical support to Polish Regions as regards coal transition in Polish. The actions were delivered according to the objectives in 2020-2023 and the closure reports were received in June 2024, resulting in the final clearing of the prefinancing made.
- DG ENER and the EIB established a joint technical assistance facility aimed at closely assisting EU coal, peat and oil shale regions with the identification and preparation of clean energy and energy efficiency projects to support a just transition. Potential beneficiaries are regional and local authorities, public and private project promoters and energy communities. The TARGET facility is complementary to existing mechanisms, such as the Just Transition Mechanism. The EC Contribution amounted in 2024 to EUR 1.75 million. In addition, an amount of EUR 1.68 million was cleared against the contributions for the years 2020 and 2022.
- DG ENER contributes in the context LIFE CET programme to the United Nations Environment Programme. The relationship between UNEP and the European

Commission (EC) is defined by the 2004 Memorandum of Understanding. The MoU is implemented through annual High-Level Policy Dialogues, which are underpinned by regular technical meetings.

- In 2024, the donor agreement in respect to the CCAC Oil and Gas Methane Science Study came to an end. An amount of EUR 3 991 was recovered, out an initial funding of EUR 0.53 million.
- A Contribution of EUR 0.2 million was made in the context of a the EEFIG.

Non-expenditure items

These control objectives are related to the management of assets and information in the framework of the 'Euratom Safeguards' activity and to the assurance to give with regard to specific off-balance sheet items. The nuclear material control system, known as '**Euratom Safeguards**', is based on two pillars:

- The record-keeping and reporting obligations of nuclear operators ([65]), as well as the periodic reports and accountancy declarations to be made to the Commission;
- The verification of the completeness, correctness and coherence of these reports and the effectiveness of the operators' accounting systems.

This activity entails the management of a certain number of tangible and intangible assets (such as, for instance, detection and measurement systems, office laboratory equipment, specific IT hardware and in house developed software), and the management of secured or classified information. DG ENER is asset management centre for all specific assets purchased with its budget.

The key control objectives for DG ENER are to ensure that these assets are appropriately accounted for and safeguarded, that information is protected, and that related weaknesses, errors, irregularities and losses are detected and addressed.

To be recognised as an asset, an item needs to comply with following criteria:

- Acquisition value above EUR 50 000 from 2024 (EUR 5 000 before);
- Lifespan of more than one year.

The net value of **intangible assets** under management (exclusively in-house developed software) increased from EUR 2.35 million in 2023 to EUR 2.64 million in 2024, which was the result of the capitalisations of an Asset under Construction (1.99 million), capitalisation of development costs of a new Asset under Construction (0.52 million) as well as write-off of assets no longer in use (1.77 million).

([65]) Art. 78 and 79 of the Euratom Treaty, further specified by Commission Regulation (Euratom) 302/2005, which defines requirements for the nuclear material accountancy system to be implemented by the nuclear operators.

The net value of the **tangible assets** managed decreased from EUR 3.48 million as of 31 December 2023 to EUR 0.47 million as of 31 December 2024. The decrease is mainly explained by the mass retirement of all assets with a gross value below EUR 50 000.

As regards **financial assets**, the Commission, represented by DG ENER, holds shares in the **European Energy Efficiency Fund (EEEF)**, a legacy fund under the form of a SICAV ("Société d' Investissement à Capital Variable") linked to the EEPR programme. Although there are no further EC contributions linked to this legacy instrument, the holding of the shares will remain in place until the termination of the investment vehicle. The value of the shares, as booked for Q3 2024, has decreased from EUR 70.18 to EUR 65.46 per share ([66]) mirroring the impact of a precautionary write-off of EUR 4.9 million in relation of one investment project in restructuration and to the early transfer of another project to the sponsor municipal authorities.

The EEEF operates through two distinct products: binding investments (23 projects) and technical assistance funding (14 projects). The Fund investments are meant to provide a "junior" tranche to enable the funding of public/private partnerships in the public sphere. These investments are subject to market, partner and project risks. Both write-offs correspond to a sound application of this business model and of the accounting practices applicable to such special purpose vehicles.

The first case relates to a project in which the solution retained suffers significant delays. The fund therefore decided to write off the value of the investment. Negotiations are ongoing in view to explore the possibility of a partial recovery of the investment.

The second case relates to a project where the sponsoring municipality to exert its option to re-tender the funded biomass plant before the end of the contractual period. The fund recorded the loss of future cash flows resulting from this option in its quarterly report, but this loss is temporary and is expected to be compensated in 2025 as the initial amount of the investment is returned to the fund.

The average cost of investment is EUR 61.81 per share.

DG ENER is also one of the sponsor DGs of the legacy **CEF debt instrument.** This instrument was initially set up under indirect management, to leverage EU investment and attracting new sources of funding for CEF-Energy projects. The European Investment Bank (EIB) had been entrusted with the implementing tasks concerning the financial instruments (debt) under the CEF Regulation (EU) 1316/2013.

The investment window is now closed and there will be no further contribution to the instrument. On 18/12/2024, the EIB returned an unused amount of EUR 38.11 million to the EC, together with a revenue amount of EUR 8 558.

The amount of contributions made over time for energy projects has decreased to EUR 61.17 million to account for the partial return of the funds.

([66]) Source: EEEF Quarterly Unaudited Financial Statement.

The Treasury Portfolio generated a positive result of EUR 3.6 million that absorbed prior the outstanding non-realised loss.

Economic result of the Energy sub-account of the CEF Debt Instrument

DG ENER share of results in portfolio	2024 (in EUR thousand)
Remuneration received for guarantee given	66
Other operational and financial revenue	0
Fees paid to EIB	-53
Net portfolio gain	3 614
Economic result	**3 627**

Source: Unaudited financial statements. Amounts rounded to the closest thousand.

The underlying debt portfolio is, by nature, exposed to creditor risk that is covered by the FLP mechanism. There was no significant change in that respect in 2024. The EIB deploys specific fraud prevention and detection processes and reports directly to OLAF. In 2024, the EIB's Inspectorate General reported no fraud case related to CEF operations.

The EIB provided its **draft financial statements and management declaration** on 15 February 2025. The declaration covers the EU funds invested in the current financial instruments and supports the unaudited statements for 2024. The EIB gave reasonable assurance that:

- the information set out in the Financial Statements was in accordance with the accounting principles and is complete and accurate;
- the funds contributed by or on behalf of the Commission had been used for the intended purposes;
- the EIB had applied a professional degree of care and diligence to the management of the Financial Instruments;
- the control systems and procedures put in place provided reasonable assurance as to the legality and regularity of the related financial operations.

The statutory audit performed on the financial statements concluded that these were prepared in all material aspects in accordance with the applicable rules.

Regarding **safeguarding of information**, DG ENER handles secured and classified information in accordance with the provisions of Commission's Decision 2017/46 and Security Notices number 1 and 2. A specific, separate infrastructure and a secure software environment are in place to ensure compliance with these requirements.

DG ENER's current procedures and controls are considered as robust and effective.

The **off-balance sheet items** translate the involvement of DG ENER in the CEF Debt Instruments, the follow up of specific legal issues and other significant disclosures such as not yet expensed outstanding budgetary commitments. The management of debt instrument was delegated to the EIB. The off-balance sheet postings include contingent

liabilities that correspond to the guarantees given by the EU for these financial instruments. These guarantees are stable and amount to EUR 9.28 million at year end.

No contingent liabilities were calculated for 2024 as regards Legal Cases. Regarding the PCA Case P 2020-07, the claimant Nord Stream 2 AG asked the arbitration tribunal to suspend the proceeding in view of the insolvency of the claimant caused by US sanctions in the context of Russia's aggression against Ukraine. The claimant has not specified the amount of claimed damage and the situation remains unchanged for 2024.

Regarding the case Klesch v EU/Klesch v Denmark/Klesch v Germany and about tax matters – no contingent liabilities were calculated at this stage as the claim is still at a very early stage and the amount of any potential prejudice (if any) cannot be determined. DG ENER is aligned with the position taken by DG TRADE and the Legal Service.

Economy

The overall cost of control, at EUR 13.23 million or 1.57%, which is stable in comparison with 2023.

Direct management

The cost of control associated to the reported upon directly managed expenditure takes into account the Commission level costs to manage financially the expenditure and the relevant programmes (covering the staff working time allocated to these tasks) ([67]) and can be summarised as follows:

The 2024 cost of controls related to grants in direct management remained in the same range as in 2023 and 2022.

Cost of control for directly managed grants

Estimates based on the cost of FTEs, per relevant control system	Directly managed grants (Research & Innovation)	Directly managed Energy grants and other support actions
Cost of control in 2024	EUR 2.26 million (EUR 2.19 million in 2023)	EUR 0.6 million (EUR 0.55 million in 2023)
Total Cost/Funds ratio	30.24 % (31.8% in 2023)	8.35% (2.4% in 2023)

DG ENER has only a limited exposure to directly managed grants and other expenditure. The costs of control regarding research grants are exposed at programme level, with the vast majority of grants being implemented by CINEA, and DG R&I's CIC providing ex-ante and ex-post controls. The cost of control to relevant expenditure ratio appears very high due to the extremely low amount of residual expenditure in this domain.

([67]) The costs reported or used in the rations include overheads.

Expenditure made under the prerogative lines is mainly made of procurements, contributions to international entities. It also includes expenditure made in respect of Nuclear Energy matters that is mainly related to the operations of Nuclear Safeguards. The cost of control of about 5.2% of the expenditure, which is relatively limited considering the number of transactions and the potentially technically complex nature of the nuclear energy part of this portfolio.

Indirect management and budgetary support

The cost of control associated with the reported upon indirectly managed expenditure includes the costs of managing the programmes and the financial flows as well as supervising the different entities. As such these costs include the staff working time allocated to these tasks and the specific contracts directly related to supervisory tasks when relevant, and can be summarised as follows:

Summary of the cost of control per management mode and instruments

	Indirect Management – F4E JU	Indirect Management – NDAP (EBRD, SIEA & CPMA)	ACER & other indirect management
EC control cost	EUR 3.09 million (EUR 2.89 million in 2023)	EUR 0.6 million (EUR 0.6 million in 2023)	EUR 0.16 million (EUR 0.38 million in 2023)
Cost of procured controls	EUR 0.18 million	0	n/a
Total cost/funds ratio	0.56% (0.83% in 2023)	0.33% (0.53% in 2023)	0.68% (2.06% in 2023)

In absolute terms, the cost of control for the supervision of these entities remained stable.

The costs at Commission level are in line with other programmes. The key cost drivers are the complexity and specificity of this action, the difficulties encountered in the wake of the COVID-19 crisis, technical issues for the ITER programme, the retention of a strong role by the Commission and the fact that for the NDAP the fees are set as a percentage of the action value. These costs remain overall stable, and it is not possible to achieve further economies of scale.

Cost of control at DG and entrusted entities level

The cost of control for entrusted entities includes both the cost exposed by the Commission and the cost exposed by the entity itself for the management of the entrusted tasks. The cost at entity level is measured through the fees paid to the entities or, for the Joint Undertakings, through the calculation of the effective cost of control resources, using a methodology similar to that used for Commission services. EU bodies and Executive agencies have a full responsibility for the operation of the control systems and report separately on their activities.

Indirect management – Cost of control at entity level

	Cost of control	Comment
EBRD	EUR 1.96 million	Aggregated budgeted amount of the fees to pay for the IISDF, KISDF, BISDF (source: EBRD) – Controlled amount: total of the ongoing projects
CPMA	EUR 1.08 million	Remuneration for 2024 (source: ABAC) – the cost of CPMA operations is set at 3.5% of action value (3.85% until 2021). Controlled amount: ongoing projects.
SIEA	EUR 0.53	Remuneration for 2024 (source: ABAC) – The cost of SIEA operations is set at 2.7% of action value. Controlled amount: Ongoing projects
EIB	EUR 53 000	Aggregated amount of the fees paid for the management of the CEF Debt instrument. – Controlled amount: existing portfolio. (Source: Unaudited Financial Statements)
EEE F	p.m.	Performance fees charged to the 2023 profit and loss account of the investment vehicle amounted to EUR 0.17 million. Of these, 75.5% are attributed to C class shares held by the Commission. However, these fees do not result in any cash settlement but are counted in the economic result and in the value of the shareholding. Controlled amount: Net Asset Value (NAV) of EUR 102.7 million in 2024. *(source: Fees: Audited financial statements for 2023, of June 2024. The financial statements for 2024 will be available in June 2025 - NAV: latest statement of account, see above)*
F4E JU	EUR 46.1 million ([68])	Joint Undertaking under Article 71 of the Financial Regulation. The JU is responsible for the setup of its control systems within this envelope and for reporting on them in its own annual report. (Source: draft F4E "Cost of Controls 2024", 24 February 2025).

Cost of ex-post audits

In 2024, DG ENER devoted one FTEs (equivalent to a cost of EUR 0.18 million) to the performance and follow-up of ex-post audits. The participation to the statutory auditing of ITER IO represented 75% of this effort, the remaining 25% being allocated to audits in relation to support actions & grants.

The CIC in DG R&I is responsible since January 2014 to carry out the ex-post audits for the Research Framework Programmes. The costs of these controls are mutualised, resulting in significant synergies for the R&I family of DGs. Details of the estimated cost of controls related to shared/pooled control activities carried out by REA and hosted by DG R&I (Common Implementation Centre; Common Audit Service; Common Policy Centre) for the R&I family are reported in the Annual Activity Reports of DG R&I and REA.

Cost of organisational controls

([68]) This amount does not include the cost of external service providers supporting the operations of the JU (for instance quality control)

Organisational controls correspond broadly to the non-expenditure related to internal controls operated by DG ENER.

Overview of the estimated cost of control – non-expenditure related

	FTEs	Cost equivalent
Legacy financial instruments	2.95	EUR 0.5 million
Budget and accounting	3.1	EUR 0.5 million
Coordination	3.9	EUR 0.7 million
Fraud prevention	0.5	EUR 0.1 million
ICT and information security	8.0	EUR 1.4 million
Asset management	p.m.	p.m.

DG ENER resources devoted to Budget and Accounting, Coordination, Antifraud and Asset Management are limited and remain stable.

The costs associated to ICT and Information security components are on one side specifically related to the need for DG ENER to maintain and operate a specific secure environment for IT infrastructure and applications for Nuclear Safeguards operations under the EURATOM Treaty, and on the other related to the increased digitalisation of the DG and to the requirements stemming from EPREL and e-Platform systems.

Fraud prevention, detection and correction

The current DG ENER anti-fraud strategy covers the definition of fraud, potential fraud risks in DG ENER's activities and its environment, main objectives and measures for the period of 2021-2027, roles and responsibilities for antifraud actions, and finally, provisions for implementation, monitoring and updates.

The updated action plan was approved by the November 2023 Control Board Meeting and covers the years 2023-2025.

Continuous actions are strengthening the fraud prevention capability, the cooperation with the OLAF, staff awareness (newsletters, training, newcomers' event) or the participation in the different networks. Specific actions aim at building cooperation mechanisms or improving the scrutiny of potentially riskier activities.

The implementation of the anti-fraud strategy is regularly monitored and reported to senior management. Awareness raising actions focussed on the link between fraud prevention and internal control and legislative initiatives and on cybersecurity. One specific risk screening was performed, without significant observations. Integrity risks were given attention in the annual risk assessment but also in the continuous monitoring of the NDAP and of the Euratom contribution to ITER.

OLAF conducted two investigations, and another case was investigated by EPPO. One case was dismissed. DG ENER reported to OLAF on the implementation of its recommendations in December 2024. One administrative recommendation was considered implemented after the OLAF follow-up review. DG ENER informed OLAF that all actions that fell under its remit had been implemented. One financial recommendation is still open, as a legal action is still ongoing in the concerned Member State.

State of implementation of the anti-fraud indicators mentioned in the Strategic Plan 2020-2024

Objective: The risk of fraud is minimised through the application of effective anti-fraud measures and the implementation of the Commission Anti-Fraud Strategy (CAFS) ([69]) aimed at the prevention, detection and correction ([70]) of fraud

Indicator 1: Implementation of the actions included in DG ENER Anti-Fraud strategy over the whole strategic plan lifecycle (2020-2024)
Source of data: DG ENER annual activity report, DG ENER antifraud strategy, OLAF reporting

Baseline (2020)	**Target** (2024)	**Latest known results** (2024)
95%	100% of actions implemented on time	~100% of 2024 actions implemented

Indicator 2: Update of DG ENER's Anti-Fraud strategy on the basis of the methodology elaborated by OLAF
Source of data: OLAF guidelines

Baseline (2018)	**Interim milestone** (2022)	**Target** (2024)	**Latest known results** (2024)
Date of the last update: 2017	AFS strategy revised in 2020	The Action Plan accompanying the Anti-Fraud Strategy will be updated every two years. The Anti-Fraud Strategy will be revised no later than 12 months after major changes in the Commission approach or in the fraud environment of DG ENER.	The anti-fraud strategy was reviewed and found to remain valid. An updated action plan was approved in November 2023 covering actions until end 2025.

Main outputs in 2024:

Output	**Indicator**	**Target**	**Latest known results**
Awareness raising campaign	% of staff reached through workshops, conferences or other direct methods	> 80%	~100% (newsletter, intranet and webinar training session were made available to all staff)

([69]) Communication from the Commission 'Commission Anti-Fraud Strategy Action plan - revision 2023 COM(2023) 405 of 11 July 2023 –'the Communication on the 2023 revision' – and the accompanying document, SWD(2023) 245 – 'the revised Action Plan'.

([70]) Correction of fraud is an umbrella term, which notably refers to the recovery of amounts unduly spent and to administrative sanctions.

Reporting to management	Number of reports on the implementation of the antifraud strategy	At least two times per year	2 x (Control Boards)
Implementation of Anti-fraud Action Plan items, as planned for 2024	% of implementation ([71])	100% by December 31, 2024	~100%

Other

1. Reports and documentation considered for the assessment of the DG's functioning in view of the AOD's assurance:

Assurance is provided on the basis of information on the efficiency and effectiveness of internal control systems and governance processes. The management monitors the functioning of the internal control systems on a continuous basis and carries out an objective examination with internal and external auditors. The results are explicitly documented and reported to the Director-General. The following reports / documentation have been considered:

- the reports by Authorising Officers by Sub-Delegation (AOSDs);
- the reports from Authorising Officers in other Directorates-General managing budget appropriations in cross-subdelegation;
- the reports on control results from entrusted entities in indirect management as well as the result of the Commission supervisory controls on the activities of these bodies;
- the contribution of the Internal Control Coordinator, including the results of internal control monitoring at the Directorate-General level, including the results of the annual risk assessment exercise;
- the reporting on the implementation of DG ENER's Anti-Fraud Strategy;
- the reports on recorded exceptions, non-compliance events and any case of 'confirmation of instructions' (Art 92.3 Financial Regulation);
- the reports of the ex-post audit;
- the limited conclusion of the Internal Auditor on the state of control and the observations and recommendations reported by the Internal Audit Service (IAS);
- the observations and the recommendations reported by the European Court of Auditors (ECA).

([71]) Proposed actions for 2024 include awareness raising, an assessment of certain anti-fraud controls, a scrutiny of programme support actions, in addition to continuous actions such as coordination with OLAF, reporting and support to AOSDs having entrusted entities in their remit.

The systematic analysis of the available evidence provides sufficient guarantees as to the completeness and reliability of the information reported and results in the full coverage of the budget delegated to the Director-General of DG ENER.

2. Financial Regulation: Additional reporting requirements resulting from the 2018 and 2024 revisions.

In line with the requirements of the Financial Regulation, DG ENER reports for the year 2024:

- No cases of any in-kind donation made to the Union, for the purposes of humanitarian aid, emergency support, civil protection or crisis management aid (FR art 25.3)
- No cases of "confirmation of instructions" (FR art 92.3)
- Concerning the cases of financing not linked to costs (FR art 125.3), the remuneration of the entities implementing the NDAP is defined for the European Bank for Reconstruction and Development (EBRD) by the rules of the funds, and for the national agencies as a percentage of the managed contributions. In addition, the European Commission entered into an agreement with the operator of a nuclear site to compensate the decommissioning of an on-site laboratory.
- No new cases Financial Framework Partnerships >4 years (FR art 131.4) in 2024
- No cases of flat-rates >7% for funding indirect costs (FR art 184.6).
- No cases of derogations from the principle of non-retroactivity pursuant to Article 196 of the Financial Regulation.
- No cases of financial support to third parties >EUR 60 000 (FR art 207)
- No cases of non-financial donations provided in the form of services, supplies or works (FR art 244.3)

3. Table Y on the estimated “cost of controls” at Commission level

Table Y – Overview of DG ENER’s estimated cost of controls at Commission (EC) level:

- Overview of ENER's estimated cost of controls at Commission (EC) level

EXPENDITURE The absolute values are presented in EUR

ENER	Ex ante controls***			Ex post controls			Total	
	(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)
Relevant Control System (RCS) / Other as defined in Annex 6 of the AAR*	EC total costs	related payments Made	Ratio (%)** *(a)/(b)*	EC total costs	total value verified and/or audited	Ratio (%) *(d)/(e)*	EC total estimated cost of controls *(a)+(d)*	Ratio (%)** *(g)/(b)*
RCS 1 - Research grants (under direct management)	2,257,620.00 €	7,465,592.27 €	30.24%	- €	- €	0.00%	2,257,620.00 €	30.24%
RCS 2 - Energy grants (prerogative) and other support actions (prerogative and CEF)	490,026.00 €	7,126,254.41 €	6.88%	105,006.00 €	59,034,797.00 €	0.18%	595,032.00 €	8.35%
RCS 3 - Procurements, studies, other operational expenditure; nuclear energy (including safeguards)	3,316,102.00 €	66,853,192.87 €	4.96%	70,004.00 €	- €	0.00%	3,386,106.00 €	5.06%
RCS 4 - Contribution to F4E JU	2,555,135.00 €	556,359,500.02 €	0.46%	537,129.00 €	- €	0.00%	3,092,264.00 €	0.56%
RCS 5 - Nuclear Decommissioning (EBRD/CPMA/SIEA)	595,032.00 €	178,491,232.71 €	0.33%	- €	- €	0.00%	595,032.00 €	0.33%
RCS 6 - Subsidy to ACER	157,508.00 €	23,012,293.35 €	0.68%	- €	- €	0.00%	157,508.00 €	0.68%
RCS 7 - Prep. Actions & Pilot Projects and Contributions under Indirect Management	96,579.00 €	1,944,599.07 €	4.97%	- €		0.00%	96,579.00 €	4.97%
RCS 9 - CINEA	332,518.00 €	not quantified	0.00%	- €		0.00%	332,518.00 €	0.00%
Other organisational controls	2,712,644.00 €		0.00%	- €	- €	0.00%	2,712,644.00 €	0.00%
OVERALL total estimated cost of control at EC level for expenditure	**12,513,164.00 €**	**841,252,664.70 €**	**1.49%**	**712,139.00 €**	**59,034,797.00 €**	**1.21%**	**13,225,303.00 €**	**1.57%**

NON-EXPENDITURE ITEMS ****

ENER	Ex ante controls***			Ex post controls			Total	
	(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)
Relevant Control System (RCS) / Other as defined in Annex 6 of the AAR*	EC total costs	related amounts	Ratio (%)** *(a)/(b)*	EC total costs	total value verified and/or audited	Ratio (%) *(d)/(e)*	EC total estimated cost of controls *(a)+(d)*	Ratio (%)** *(g)/(b)*
Only applicable for DGs with non-expenditure items								
RCS 8 - Non-expenditure items (including Fin Instruments)	- €	9,277,109.00 €	0.00%	708,788.00 €	164,676,000.00 €	0.43%	708,788.00 €	7.64%
Non-expenditure items: revenue (other)	- €	44,049,907.00 €	0.00%	- €	- €	N/A	- €	0.00%

** if the control costs are not attributable to a single RCS and may relate to a 'mix' of expenditure, revenue, assets/liabilities, etc, they may be grouped*

*** ratio possibly "Not Applicable (N/A)", e.g. if a RCS specifically covers an Internal Control Objective such as safeguarding sensitive information, reliable accounting/reporting, etc*
**** any 'holistic' control elements (e.g. with 'combined' ex-ante & ex-post characteristics) can be reported in the ex-ante column provided that a footnote clarifies this (their nature + their cost). Example: MS system audits in shared management.*
***** These include revenue operations (e.g. assigned revenue, fines, interest); assets (e.g. (in)tangible or financial assets, inventories, treasury) and financial liabilities or 'off balance sheet' items (e.g. employee benefits, guarantees offered or other commitments)*

Details of the estimated cost of controls related to shared/pooled control activities carried out by REA and hosted by DG RTD (Common Implementation Centre including Common Audit Service) for the Research and Innovation family are reported in the Annual activity reports of REA and RTD.

ANNEX 8: Reporting on the internal and external audits and assessing the effectiveness of Internal control systems

A. Audit observations and recommendations

Overall, internal and external audit work contributes significantly to the continuous improvement of DG ENER's systems and operations. The energy policy matters are increasingly scrutinised by the IAS and ECA and benefit from numerous audits and audit recommendations. The current residual risk from the audit recommendations remaining open in DG ENER does not impair the declaration of assurance.

The Director-General is regularly informed of the conclusions and the main recommendations stemming from the work of the auditors. The timely implementation of all recommendations is regularly monitored throughout the year and reported at DG ENER's Control Board meetings.

1. Internal Audit Service (IAS)

Audit reports issued in 2024

Audit on IT security risk management at the Commission – DG ENER

The final audit report was issued in the end of January 2025. The IAS concluded that although DG ENER has designed an adequate IT Security and Risk Management (ITSRM) framework and processes in compliance with the EC IT security framework, very important weaknesses remain in IT security risk assessment, risk treatment and risk acceptance criteria which affect their effective and efficient implementation. Two very important recommendations and two important ones were formulated. An action plan will be designed to mitigate the identified risks.

Follow-up of recommendations resulting from previous IAS audit reports

Audit on Delegations and efficiency of decision making in the European Joint Undertaking for ITER and the Development of Fusion for Energy (F4E JU) and cooperation mechanisms with DG ENER

The IAS concluded in January 2022 that that DG ENER's mechanisms to cooperate with and supervise F4E JU are overall adequately designed and effectively implemented. One important recommendation was formulated. The recommendation was satisfactory implemented in January 2024 and closed by IAS in April 2024.

2. European Court of Auditors (ECA)

Audit work 2024 – Declaration of assurance (DAS)

In 2024, DG ENER was subject to the recurring ECA financial audits on the Declaration of

Assurance (DAS) and to audits on the annual accounts of DG ENER., there were no open recommendations from the previous DAS exercises for DG ENER.

With regard to the 2023 Discharge, the process started with the publication of the Commission's Integrated Financial and Accountability Package published over the summer.. In October, ECA published and presented in CONT its 2023 Annual Report focusing on traditional compliance aspects, including the annual statement of assurance and also covering the performance of the EU budget. As regards the 2023 DAS exercise: DG ENER was mainly involved in Chapter 5 of ECA's Annual Report – "Competitiveness for Growth and Jobs". The contribution of DG ENER transactions to the total sample size in this Chapter is limited to only seven transactions – three from CEF programme, three from H2020 - all managed by CINEA, as well as one clearing transaction from NDAP. The ECA's audit work found two quantifiable errors with 5.89% ([72]) and 100% ([73]) error rate, for which DG ENER/CINEA agreed.

In addition, ECA conducted an audit on the reliability of the DGs accounts as of 31 December 2023. No findings or recommendations were issued by ECA. In relation to recommendations issued for the previous DAS exercises, all actions related to DG ENER have been as fully implemented or implemented in most respects.

Special Reports

Special Report 11/2024 "EU's industrial policy on renewable hydrogen" (published in July 2024)

The audit aimed to evaluate whether the Commission has put in place the necessary conditions for the development of a renewable and low-carbon hydrogen market by assessing EU's hydrogen-related targets and whether legal acts have been adopted on time and funding programmes are sufficient as well as if the Commission has coordinated across services, member states, and industry.

Overall, ECA concluded that the Commission was partially successful in creating the necessary conditions for this market and that while the Commission took a number of positive steps, challenges remain all along the hydrogen value chain. This led to a total of nine sub-recommendations. Two sub-recommendations were linked to financial management, while not evidencing any internal control weakness at DG ENER level, but proposing improvements to existing processes. One was fully accepted ([74]) and one partially accepted ([75]).

Special Report 11/2024 "Security of the supply of gas in the EU" (published in June 2024).

([72]) Error related to personal costs on H2020 project.
([73]) Error related to a serious breach of the EU public procurement rules on CEF Energy project.
([74]) Rec 3b to assess whether current EU fundings are appropriate for the future development of the hydrogen value chain across the EU.
([75]) Rec 5a to create a one-stop shop solution for stakeholders under the European Hydrogen Bank (make access to public funding simpler).

This report examined whether the EU's policy framework and action in support of gas SoS have been effective. ECA looked at the EU's pre-crisis framework as well as at the EU's responses to the crisis.

ECA overall concluded that while the EU's framework addressed all aspects the secure supply of gas, albeit unequally, the achievement of crisis-response objectives often cannot be demonstrated. The EU's SoS architecture encouraged cooperation among member states but falls short on some of its key deliverables, and the EU is still developing an affordability framework. The EU short-term measures in response to Russia's weaponisation of gas supplies sent strong signals to the market, although the impact of individual measures implemented by the MS is difficult to quantify.

The Commission accepted all four ECA recommendations. Recommendation 4 was linked to project management and called the Commission to improve the transparency of the implementation of Projects of Common Interests. It does not however evidence any control weakness at DG ENER level.

Follow-up work in 2024

At the end of 2024, DG ENER was chef de file for five open recommendations from ECA with due dates before end of 2024. The implementation status is closely monitored with the aim to close them in the course of 2025. In addition, there are seven open recommendaiton with due dates in 2025 and beyond. The necessary updates to the status of the followed-up recommendations are reflected in Commission monitoring system (RAD).

B. Assessment of the effectiveness of internal control systems

Source and methodology for the internal control self-assessment

The self-assessment of internal controls verified the presence and effective functioning of ICF components and principles as a system throughout 2024 and focused on three objectives:

- Demonstrate the sound functioning of the internal control system.
- Provide to the Director-General and to the Director in charge of Risk Management and Internal Control a sound basis for signing their declarations of assurance, and
- Identify any improvement areas in the internal control systems.

The 2024 self-assessment was based on the following main building blocks:

- evaluation of monitoring indicators,
- evaluation of audit results and the impact of new or outstanding recommendations,
- analysis of available reports, including DG BUDG's validation of local systems, accounting quality and AOSD reports from the Directors of DG ENER,
- risk management;
- assessment of mitigating actions undertaken regarding previous internal control weaknesses, and other corrective measures;
- analysis of control incidents registered during the reporting year.

Internal Control Self-assessment results for 2024

The 2024 internal control self-assessment did not identify any critical or serious weaknesses affecting the Commission Internal Control Framework components or principles.

One moderate internal control deficiency was however identified related to IC Principle 11. The IAS audit on IT security risk management at the Commission identified a very important weaknesses at corporate level in IT security risk assessment, risk treatment and risk acceptance criteria which affect their effective and efficient implementation.

The identified deficiency will be closely monitored during 2025 through the implementation of the audit action plan to mitigate the risks. To address the audit recommendation related to the IT security indicators, DG ENER Internal control monitoring criteria have been adjusted by end 2024.

The previously identified deficiencies in relation to the AOSDs assurance on reliability of performance information, in relation to the management of inventory of assets, and in relation to number of registered exception cases were addressed and are now considered as closed. Moreover, DG ENER will monitor the implementation of established action plans for identified risks and mitigating actions related to the ECA audit reports.

Risk Management

The risk register for 2024 included one critical risk and 12 significant risks. These risks were followed up through ENER's senior management Control Board meetings throughout the year and specific risk management meetings:

- Critical risk related to the implementation of the ITER project: At the beginning of 2024, an action plan was drawn up to address this risk. The proposed actions took into account the progress of the implementation of the project reform, both at ITER and F4E JU, including project re-baselining, further integration between IO and F4E, F4E reorganisation. Several actions have already started with implementation deadlines on track. The different components of this risk are closely monitored, and regularly reported upon in dedicated risk review meetings. The critical risk was maintained for 2025, although updated to reflect the evolution of the challenges.
- 11 significant risks were carried over from 2024 (four of them were partially mitigated).

Internal Control incidents

The functioning of the internal control systems was closely monitored and followed up throughout the year by the systematic registration of non-compliance events and exceptions. In 2024, DG ENER registered less control incidents than in 2023 (eight non-compliance cases and no exception requests). The assessment of non-compliances cases registered in 2024 does not indicate a systemic weakness in the processes and procedures of DG ENER.

ANNEX 9: Specific annexes related to "Control results" and “Assurance: Reservations”

A. Annex related to "Control results" - Table X: Estimated risk at payment and at closure

Table X: Estimated risk at payment and at closure

DG ENER	Payments made (2024;MEUR)	minus new prefinancing [plus retentions made] (in 2024;MEUR)	plus cleared prefinancing [minus retentions released and deductions of expenditure made by MS] (in 2024;MEUR)	Relevant expenditure (for 2024;MEUR)	Detected error rate or equivalent estimates	Estimated risk at payment (2024;MEUR)	Adjusted Average Recoveries and Corrections (*adjusted* ARC; %)	Estimated future corrections [and deductions] (for 2024;MEUR)	Estimated risk at Closure (2024;MEUR)
-1	*-2*	*-3*	*-4*	*-5*	*-6*	*-7*	*-8*	*-9*	*-10*
Research grants (RCS 1)	7.47	- 7.13	0.49	0.83	3.55% - 3.55%	0.03 - 0.03	0.93% - 0.93%	0.01 - 0.01	0.02 - 0.02
Energy grants (prerogative) and other support actions (prerogative and CEF) (RCS 2)	7.13	- 6.81	5.41	5.73	0.50% - 0.50%	0.03 - 0.03	0.23% - 0.23%	0.01 - 0.01	0.02 - 0.02
Procurements, studies and other operational expenditure (RCS 3)	35.91	- 0.50	0.08	35.49	0.50% - 0.50%	0.18 - 0.18	0.23% - 0.23%	0.08 - 0.08	0.09 - 0.09
Nuclear Energy (including safeguards) (RCS 3*)	30.94	- 0.73	0.74	30.95	0.50% - 0.50%	0.15 - 0.15	0.23% - 0.23%	0.07 - 0.07	0.08 - 0.08
Contribution to F4E JU (RCS 4)	556.36	- 556.36	404.39	404.39	0.50% - 0.50%	2.02 - 2.02	0.23% - 0.23%	0.94 - 0.94	1.08 - 1.08
Nuclear Decommissioning Assistance Programme (CMPA/EBRD/SIEA) (RCS 5)	178.49	- 176.87	142.88	144.50	0.50% - 0.50%	0.72 - 0.72	0.23% - 0.23%	0.34 - 0.34	0.39 - 0.39
Subsidy to ACER (RCS 6)	23.01	- 23.01	19.07	19.07	0.00% - 0.00%	0.00 - 0.00	0.00% - 0.00%	0.00 - 0.00	0.00 - 0.00
Pilot projects & preparatory actions (RCS 7)	1.75	- 1.75	1.68	1.68	2.00% - 2.00%	0.03 - 0.03	0.23% - 0.23%	0.00 - 0.00	0.03 - 0.03
Controbution to UNEP (LIFE CET) (RCS 7)	0.19	- 0.19	0.53	0.53	0.47% - 0.47%	0.00 - 0.00	0.05% - 0.05%	0.00 - 0.00	0.00 - 0.00
DG total	**841.25**	**- 773.35**	**575.25**	**643.15**		**3.17 - 3.17**	**0.23% - 0.23%**	**1.46 - 1.46**	**1.71 - 1.71**
					Overall risk at payment in %	**0.49% - 0.49%** *(7) / (5)*		**Overall risk at closure in %**	**0.27% - 0.27%** *(10) / (5)*

Notes to the table X

(1) Relevant Control Systems (RCS) differentiated per relevant portfolio segments and at a level which is lower than the total.

(2) Payments made or equivalent, e.g. expenditure registered in the Commission’s accounting system, accepted expenditure or cleared pre-financing. In any case, this means after the preventive (ex-ante) control measures have already been implemented earlier in the cycle.

In all cases of Co-Delegations (Internal Rules Article 3), "payments made" are reported by the Delegated departments. For Cross-SubDelegations (Internal Rules Article 12), the reporting remains with the Delegating departments. DG ENER is Cross-SubDelegating an amount of EUR 0.5 million to FPI.

(3) New pre-financing actually paid by out by the department itself during the financial year (i.e. excluding any pre-financing received as a transfer from another department). as per note 2.5.1 to the Commission annual accounts thus excluding "Other advances to Member States" which are covered on a purely payment-made basis (note 2.5.2). Pre-financing paid/cleared" are always covered by the Delegated departments, even for Cross-SubDelegations.

(4) Pre-financing actually cleared during the financial year (i.e. their 'delta' in the Financial Year 'actuals', not their 'cut-off' based estimated 'consumption').

(5) For the purpose of equivalence with the ECA's scope of the EC funds with potential exposure to legality & regularity errors (see the ECA's Annual Report methodological annex 1.1), our concept of "relevant expenditure" includes the payments made, subtracts the new pre-financing paid out, and adds the pre-financing actually cleared during the FY. This is a separate and 'hybrid' concept, intentionally combining elements from the budgetary accounting and from the general ledger accounting.

(6) In this column, we disclose the detected error rates or equivalent estimates.

For the EURATOM contribution to the ITER programme (implemented by F4E JU), no residual error rate is available as this activity is implemented through public procurements. Indeed, the functioning of F4E JU is substantially different form the functions of other JUs as it acts as a procurement agency for the EU. The budget provided to F4E JU does not follow the same logic as the usual contribution agreements. For other low-risk types of expenditure, there are indications that the equivalent error rate might be close to 'zero' (*e.g. administrative expenditure)*. In these cases, the rate of 0.5% was used as a conservative estimate. Similarly, the subsidy given by DG ENER to ACER as part of their establishment and core tasks are considered error-free and a rate of 0% was applied.

(8) The adjusted average recovery and corrections percentage is mostly based on the 7 years historic Average of Recoveries and financial Corrections (ARC), which is the best available indication of the corrective measures each department applied over the past years as a result of ex post controls. This percentage does not apply to pre-financing, administrative expenditure or payments made to ACER, which are generally not subject to ex-post recoveries. It should not be confused with the actual corrections, integrated in the DG's calculation of the residual error rate. For H2020 payments, the correction rate used in this column corresponds to the difference between the R&I family detected error rate (3.55%) and DG ENER's residual error rate including draft audit reports (2.62%).

The average amount of the implemented corrections over the past three years (2021-2024) is EUR 1.3 million euros (0.17% of the average amount of relevant expenditure of that period), compared to an average amount of estimated future corrections during the same period of EUR 1.99 million euros (0.26% of the average amount of relevant expenditure of that period). The amount of implemented corrections in 2024 EUR 3.78 million insuring a catch up and reducing the deviation from 1.36 million in 2023 to EUR 0.7 million. The residual deviation (0.09% between the two averages) is considered marginal in comparison to the average relative expenditure of EUR 569.92 million.

B. Reservations

1. Reservation fiche

NOT APPLICABLE

2. A fiche must be completed for each reservation at the end of the reporting year.

NOT APPLICABLE

3. Reservations not issued or lifted in 2024 due to the application of the 'de minimis' threshold.

NOT APPLICABLE

ANNEX 10: Reporting – Human resources, digital transformation and information management and sound environmental management

Human resource management

Objective: DG ENER employs a competent and engaged workforce and contributes to gender equality at all levels of management to effectively deliver on the Commission's priorities and core business		
Indicator 1: Number and percentage of first female appointments to middle management positions **Source of data:** SEC(2020) 146 and SEC (2023) 200		
Baseline (2019)	**Target** (2022) ([76]) + (2024)	**Latest known results** (31/12/2024)
9 female middle managers (41%)	Target 2023-2024: One first female appointment	• 50% female middle managers representation end of 2024 • Three first female appointments in 2024 (50%)
Indicator 2: DG ENER staff engagement index **Source of data:** Commission staff survey		
Baseline (2018)	**Target** (2024)	**Latest known results** (31/12/2024)
70%	70%	73%

Main outputs in 2024:

Description	Indicator	Target	Latest known results
Promote female talent by organising initiatives targeted at female staff	Number of initiatives	At least one initiative by December 2024.	1
Gender balanced appointments to middle management posts	Number	Ensure balanced appointments	43%
Organise internal training courses (online/physical/hybrid) on energy topics	Number of DG ENER webinars and other courses	At least ten courses by December 2024	48
Continue the regular physical initial welcome sessions in both ENER sites, plus the twice-yearly policy overview sessions	Number of sessions	Two sessions by December 2024 Four initial welcome sessions and two policy overview sessions by December 2024.	6 intro sessions (3 in each site), plus 2 policy overview sessions.

([76]) The target will be revised and extended for the period 2023-2024.

Review Local HR Strategy	Local HR Strategy updated	Q2 2024	Local HR Strategy was updated in October
Organise DG/Senior management town hall events on major policy developments and end / beginning of mandate.	Number of meetings	Three in 2024	3
Internal communication of events	Complete transition to ENER Hub (communications part) within new corporate intranet	Q1 2024	Transition to ENER Hub completed

Digital transformation and information management

Objective: DG ENER is using innovative, trusted digital solutions for better policy-shaping, information management and administrative processes to forge a truly digitally transformed, user-focused and data driven Commission

Indicator 1: Degree of implementation of the digital strategy principles by the most important IT solutions
Source of data: Solutions Owners & Suppliers and IT Investment Team

Baseline (2019)	**Target** (2024)	**Latest known results** (31/12/2024)
1. EPREL - 77% 2. e-Platform - 55% 3. CMF - 40%	1. 100% 2. 100% 3. 100%	1. EPREL - 100% 2. e-Platform - 100% 3. CMF4 – 100%

Indicator 2: Percentage of DG ENER's key data assets for which corporate principles for data governance have been implemented.
Source of data: DG ENER data asset inventory

Baseline (2018)	**Target** (2024)	**Latest known results**
35%	80%	81% ([77])

Indicator 3: Percentage of staff attending awareness raising activities on data protection compliance
Source of data: HR statistics

Baseline (2018)	**Target** (2024)	**Latest known results**
0%	100% of staff	100%

([77]) The indicator is calculated taking into consideration the identification and designation of the data owner and steward(s) (Ownership), the sharing and updating of metadata in the EC data catalogue (Metadata), the documentation of processes for data management, access, security, and quality (Processes), and the adaptation of IT systems to ensure the effective management and dissemination of data assets (Implementation).

Indicator 4: Percentage of registered documents that are not filed **Source of data**: Hermes-Ares-Nomcom (HAN) statistics		
Baseline (2018)	**Target** (2024)	**Latest known results**
2.39%	<2%	0.73%

Main outputs in 2024:			
Description	**Indicator**	**Target**	**Latest known results**
Digital Culture			
Promote digital-skills training (e.g., Teams, SharePoint) to the DG staff	Awareness raising initiatives about EU LEARN digital skills training. Include cybersecurity awareness training into the onboarding package for new staff	• At least 2 initiatives in 2024 • 100% of DG ENER new staff in 2024 to be invited for the cybersecurity training	• 2 sessions on the use of Teams and SPO for MOVE/ENER SRD Directorate • 1 session on Introduction to AI for senior management • Recorded video for the newcomers with a specific section dedicated to cybersecurity. • Dedicated training for IT specialists joining SRD is organized every 2 months.
Digital-Ready EU policymaking			
Improve awareness about innovative technologies and other digital considerations in modern policy making	Awareness action about use cases of innovative technologies such as AI and trainings in digital-ready policymaking to be considered by policy units	At least 1 awareness action	2 awareness sessions on digital-ready EU policymaking delivered
Business-driven Digital Transformation			
Digital Transformation Roadmap 2024	DG ENER will produce an Action Plan to further develop the Digital Transformation in the DG	Action Plan to be available (requiring continuous update)	2025 planned actions for DG ENER provided in DIGIT's Digital Transformation Roadmap 2024 survey
IT Portfolio Transformation	DG ENER will prepare an IT Portfolio Transformation plan, i.e., an action plan to transform its complete IS portfolio	IT Portfolio Transformation plan (draft version)	Presentation of the Cloud adoption strategy, Corporate Building Blocks and Reusable Solutions implementation, Management of the IT Legacy, and draft of the SRD2 IT Plan
Implementing the corporate principles for data governance for DG ENER key data assets	Percentage of implementation of the corporate principles for data governance for DG ENER's key data assets	Target by 2024: 80%	81% - Ownership and metadata are clearly documented for all key data assets
Seamless Digital Environment			

Reduce the number of information systems by integrating legacy applications into existing modern ones	Number of legacy systems integrated	At least 1	No legacy systems were identified in DG ENER to be integrated
Migrate information systems to the cloud	Number of information systems on the cloud	At least 1	2 migrated: XEOS, UDB
Decrease the number of information systems (excluding IS hosted on Safeguard Network) on soon-to-deprecate platforms	Percentage of information systems with technical debt	Less than 50%	30% as calculated in DIGIT's Service Customer Dashboard (360° view)
Green, Resilient and Secure Digital Infrastructure			
DG ENER IT systems with a security plan (SafeGuard network excluded)	Percentage of IT systems with a security plan	100% IT systems with a security plan	100%
Safeguard Network IT systems with an IT Security Plan less than 2 years old	Percentage of IT systems with a security plan	100% IT systems with a security plan	100%
DG ENER IT systems using EU Login (SafeGuard network excluded)	Percentage of IT systems using EU Login	100% IT systems using EU Login	100%
DG ENER IT SNC systems using Multiple Factors Authentication (MFA) (SafeGuard network excluded)	Percentage of IT SNC systems using MFA	100% IT systems SNC using MFA	100%
DG ENER IT systems onboard in the Governance Risk and Compliance tool (GRC)	Percentage of IT systems onboarded on GRC Percentage of priority controls attested	100% IT systems onboarded. 100% of priority control attested	100%
DG ENER actions on IT security strategy implementation	Percentage of actions implemented	100% of identified actions for 2024 completed	100%
Raising cybersecurity awareness	Number of local awareness initiatives	• At least one training on Information and IT security • At least 6 articles in the new SPO intranet	• 5 IT security days trainings • 1 Cybersecurity roadshow • 1 IT Security training for HoU • 3 general information security trainings • 7 articles in SPO + 3 email communication to all staff

Information management and data protection			
Documents are retrievable in ARES and properly filed – staff with easier access to information	a. Percentage of registered documents that are systematically filed. b. Integration of IT systems with the corporate records management system HAN (HermesAresNomcom)	a. Above 98% b. At least one IT system identified in the inventory of preservation needs integrated by the end of 2024	a. 99,27% of registered documents are filed b. ePlatform fully integrated in HAN, 3 reporting obligations integrated in DG ENER: NECPR, EED - Datacenters and EED – Skills
Consolidate paperless procedures and efficient use of electronic workflows	Workshops / trainings	• At least 2 ARES trainings on • Electronic Workflows	• Mastering e-Signatories Security in ARES • ARES Basics (3 sessions) • 2 workshops for e-Domec correspondents in Luxembourg • Integration to IAEA portal for receiving reports previously received as letters
Clean-up operation of DG ENER archives kept in the Laccolith building in Luxembourg that will be closed by the end of the year	Transfer/elimination of paper files	100% clean-up operation finalised	• 3 transfers to HAS created. 3585 kg paper eliminated in total. • 65 lineal meters of paper removed from Laccolit building archives
Increase awareness of DG ENER staff on personal data protection rules	a. Information session on data protection b. Percentage of updated corporate instructions/guidelines published on the Data Protections Corner c. Percentage of DG ENER data controllers having followed awareness trainings.	a. At least 2 information sessions per year b. 100% c. 100%	a. 1 session on records and privacy statements; 1 session on data protection obligations for data controllers b. 100% c. 100%
Establish data protection records for new processing operations. Update records for existing processing operations	a. Percentage of records for new identified processing operations b. Percentage of updated records	a. 100% records of new identified processing operations b. 100% records up-to-date	a. 100% b. 100%

Sound Environmental Management

Objective: DG ENER takes account of the environmental impact of its day-to-day actions, taking measures to reduce the impact of the administration work, supported by their respective EMAS Correspondents or EMAS Site Coordinators.

Main outputs in 2024:

I. Reducing emissions from staff and expert' business travel and reducing CO2 and other atmospheric emissions			
Output	**Indicator**	**Target**	**Latest known results** (31/12/2024)
Increased use of Video-conferencing (VC) meeting rooms for meetings with stakeholders in the DG, in collaboration with DG SCIC, OIB and OIL.	Number of VC equipment for hybrid meetings	Equipment of all senior managers' offices with VC equipment for hybrid meetings	All meeting rooms were already equipped in 2023, new ones are consistently equipped
Awareness raising activities concerning missions CO2 emission reductions	Number of awareness raising activities	2 per year	2 times a year. References to the Commission Guidelines are included in all e-mails to the Directorates.
II. Reducing resource use in buildings and workspace (energy) More efficient use of resources (energy)			
Output	**Indicator**	**Target**	**Latest Known Result**
Participation in corporate energy saving actions, by closing down DG/service's buildings during the Christmas and New Year's / summer holiday period, and/or optimisation of the temperature in EC buildings.	Number of DG/service's buildings participating in: - end of year energy saving action - summer holidays saving action - optimisation of comfort hours and/or comfort temperature	100% of DG ENER buildings in Brussels	100%
III. Organise sustainable events			
Output	**Indicator**	**Target**	**Latest Known Result**
Implementation of the EC Guidelines for sustainable meetings and events, e.g. sustainable catering, reduce/eliminate single-use plastics, gadgets/gifts.	• Number of awareness actions organised • Participation in green events	• At least 4 • One person taking part in the inter institutional repair workshops in Luxembourg	• 5 • One person taking part in the inter institutional repair workshops in Luxembourg
IV. Circular economy (public procurement (GPP), waste, biodiversity and sustainable food)			
Output	**Indicator**	**Target**	**Latest Known Result**
Gradual introduction of GPP criteria in contracts and starting to monitor the process ([78]).	% of contracts falling within the GPP domain including the GPP criteria	100%	100%
V. Staff awareness			

([78]) For information, technical support is provided by the Interinstitutional GPP Helpdesk. See also GPP webpage on MY IC for EU reference/guidelines by DG ENV and the Vade-mecum on Public Procurement by DG BUDG.

Output	Indicator	Target	Latest Known Result
Staff awareness actions on reducing GHG emissions (such as actions on sustainable commuting during EU Mobility week and VeloWalk corporate events) and/or raise staff awareness on sustainable commuting in collaboration with OIB or OIL (e.g., availability of bike parking facilities, lockers and showers, promote the reduction of parking spaces' use amongst staff).	• Number of actions organised • Number or % of staff informed/participated	• At least 2 • 100% of staff informed	• DG ENER participated in OIL mobility weeks in September • Walking challenge in October. 11 participants from ENER
Staff awareness actions on digital pollution and gradual change of behaviours avoiding heavy emails, encouraging the use of ICT platforms, avoiding unnecessary storage of data.	Number of actions organised	At least 2	2
Staff awareness actions to reduce energy use in the framework of EMAS corporate campaigns and/or awareness actions about DG/service's total energy consumption in collaboration with OIB/OIL ([79]) where appropriate. Staff awareness actions to reduce water use (for example ensuring that staff use the technical services hotline ([80]) to report leaks) in the framework of EMAS corporate campaigns and/or awareness raising actions about DG/service's water consumption in collaboration with OIB/OIL where appropriate	Number of actions related to: - Energy consumption - Water consumption	At least 2	Dedicated Intranet page (ENER goes green) Summer 2024 campaign - Switch off light / screen / docking station
	Number or % of staff informed related to: - Energy consumption - Water consumption	100%	Support for corporate EMAS campaigns

([79]) See OIB – Environmental Building Performances for Brussels and OIL- Environmental Building Profiles for Luxembourg.

([80]) For example, for Brussels: Email: OIB-55555@ec.europa.eu and Tel: 55555 and for Luxembourg: Email: OIL-DISPATCHING-CENTRAL@ec.europa.eu and Tel: 32220.

Staff awareness actions about waste reduction and sorting in the framework of EMAS corporate campaigns and/or staff awareness actions about DG/service's waste generation in collaboration with OIB/OIL where appropriate (for example, promote and label the waste sorting schemes in place)	• Number of actions organised • % of staff informed	• At least 2 • 100% of staff informed	• Waste sorting game organised by OIL, ENER and DGT in EUFO. 1 repair café • Local EMAS coffee break introducing climate Fresk workshop and Zero-Waste presentations • 2 staff members took part in the world clean up day in Luxembourg • Campaign to improve sorting in the sorting stations available.

ANNEX 11: Implementation through non EU entrusted entities and/or EU Trust Funds

Central Project Management Agency, Lithuania (CPMA)

	Requirement	Information
1.	Programme concerned	Decommissioning funding for Lithuania - Ignalina Programme-CPMA
2.	Annual budgetary amount entrusted	Commitments 2024: EUR 67 068 000 Payments 2024: EUR 112 778 285
3.	Duration of the delegation	31 December 2034
4.	Justification of recourse to indirect centralised management	In 2018, the mid-term evaluation allowed taking stock of some of the advantages and disadvantages of the different approaches that could be used to implement the NDAP, by way of a comparison with similar instruments and programmes. It concluded that indirect management is an appropriate tool, and that changing of the management mode for delivery of the NDAP would induce costs not compensated by the expected benefits.
5.	Justification of the selection of the body (identity, selection criteria, possible indication in the legal basis etc.)	When the scheme was set up, the CPMA was already an established national agency with an accredited implementation system. Before the accession of Lithuania to the EU, CPMA was the certified Lithuanian EDIS contracting authority/paying agency for the PHARE programme. After accession, CPMA was entrusted with the management of structural funds programmes. CPMA had, therefore, a direct experience in the management of EU programmes not requiring an ex-ante control by the Commission. The pillar assessment report of 2021 re-confirmed that the CPMA fulfils the requirements.
6.	Synthetic description of the implementing tasks entrusted to this body	The tasks entrusted to the National Agency are set out in the Work Programme provided in the relevant Commission Financing Decisions and in the project documentation deriving therefrom. The duties of the National Agency include: • Programming and monitoring • Preparation of Projects • Implementation of Projects.
7	Specify if you received for the reporting year Management Declaration, Audit Opinion or Audit Conclusion	Management Declaration received in July 2024 & February 2025 Audit report received on 20 March 2025

Slovak Innovation and Energy Agency (SIEA)

	Requirement	Information
1.	Programme concerned	Decommissioning funding for Slovakia – Bohunice Programme - SIEA
2.	Annual budgetary amount entrusted	Commitment under 2024 appropriations: EUR 8 012 000 (L1 commitment) Payments in 2024: EUR 5 577 864
3.	Duration of the delegation	31 December 2027
4.	Justification of recourse to indirect centralised management	In 2018, the mid-term evaluation allowed taking stock of some of the advantages and disadvantages of the different approaches that could be used to implement the NDAP, by way of a comparison with similar instruments and programmes. It concluded that indirect management is an appropriate tool, and that changing of the management mode for delivery of the NDAP would induce costs not compensated by the expected benefits.
5.	Justification of the selection of the body (identity, selection criteria, possible indication in the legal basis, etc.)	The Slovak Innovation and Energy Agency (SIEA) is active in the management of structural funds in the Slovak Republic. The body was proposed by the Ministry of Economy of the Slovak Republic. The pillar assessment report of 2015 has confirmed that the SIEA fulfils the requirements; yet the report included recommendations to be implemented by the SIEA at the latest before the end of first year of implementation; the follow-up audit finalised in 2019 has ascertained the fulfilment of these recommendations. Moreover a complementary pillar assessment was carried out in 2022. The result was that all the pillars examined (7, 8 and 9) were considered to be compliant. Consequently, the auditor did not propose any roadmap to address and remediate any deficiencies and/or weaknesses.
6.	Synthetic description of the implementing tasks entrusted to this body	The tasks entrusted to the National Agency are set out in the Work Programme provided in the relevant Commission Financing Decisions and in the project documentation deriving therefrom. The duties of the National Agency include: • Programming and monitoring; • Preparation of Projects; • Implementation of Projects.
7.	Specify if you received for the reporting year Management Declaration, Audit Opinion or Audit Conclusion	Management Declaration (received February 2025) and Audit Report (received March 2025)

European Bank for Reconstruction and Development (EBRD)

	Requirement	Information
1.	Programme concerned	International Decommissioning Support Fund (IDSF) for Slovakia, Lithuania and Bulgaria - EBRD
2.	Annual budgetary amount entrusted	Commitment under 2024 appropriations: EUR 8 020 000 (total) all for Kozloduy (Bulgaria) Payments in 2024: EUR 23 933 084 (Ignalina), EUR 6 000 000 (Bohunice) and 25 192 000 (Kozloduy)
3.	Duration of the delegation	Implementation period • Kozloduy IDSF: 31 December 2027 • Bohunice IDSF: 31 March 2026 • Ignalina IDSF: 31 December 2027
4.	Justification of recourse to indirect centralised management	In 2018, the mid-term evaluation allowed taking stock of some of the advantages and disadvantages of the different approaches that could be used to implement the NDAP, by way of a comparison with similar instruments and programmes. It concluded that indirect management is an appropriate tool, and that changing of the management mode for delivery of the NDAP would induce costs not compensated by the expected benefits.
5.	Justification of the selection of the body (identity, selection criteria, possible indication in the legal basis, etc.)	In 2000, a dedicated fund was established for each of the three Member States (SK, LT and BG). These multi-donor funds (ISDF) are managed by the EBRD. The governance structure of the EBRD International Decommissioning Support Funds (IDSF) is still operational. This is mainly due to the nature of these funds as they are multi-donor. The European Commission (EC) is the largest contributor (to date over 95% of all contributions) and, since 2004, the only one. Accordingly, in 2014 the funds' rules were revised to enhance the EC's monitoring power as well as its decision and control role.
6.	Synthetic description of the implementing tasks entrusted to this body	The tasks entrusted to this entity are set out in the Work Programme provided in the relevant Commission Financing Decisions and in the project documentation deriving therefrom. The duties of the implementing entity include: • Programming and monitoring; • Preparation of Projects; • Implementation of Projects.
7.	Specify if you received for the reporting year Management Declaration, Audit Opinion or Audit Conclusion	Financial Statements and Audit Opinion thought the assembly of Contributors in July 2024

World Bank Group (WB)

	Requirement	Information
1.	Programme concerned	Preparatory action A021801 [ENER] Establishing comprehensive support for coal and carbon-intensive regions in transition
2.	Annual budgetary amount entrusted (commitment appropriations)	EUR 1 700 000 in 2020 (2019 global commitment) No new payments in 2024. Only clearing of pre-financing.
3.	Duration of the delegation	From 17/12/2020 to 30/04/2023
4.	Justification of the recourse to indirect management	The action is implemented via a Trust fund established with the World Bank (WB) in order to provide technical assistance to three Polish regions for the delivery of transition plans. See Financing Decision C(2020)455.
5.	Justification of the selection of the body (identity, selection criteria, possible indication in the legal basis etc.)	The WB is a privileged partner because it has been operating in the coal and carbon intensive regions for a long time and has teams of experts already established in the regions. See Financing Decision C(2020)455.
6.	Summary description of the implementing tasks entrusted to this body	The objective of the technical assistance (TA) was to support the Government of Poland and Polish coal regions in improving capacity and knowledge of various levels of government in preparing for a managed energy transition in Polish coal regions. The technical assistance (TA) from the World Bank was provided through the following components: 1. A National Approach to Land Reclamation and Repurposing 2. Technical Assistance to Territorial Just Transition Plans 3. Technical Assistance to Wielkopolskie – Greater Poland 4. Technical Assistance to Dolnośląskie – Lower Silesia 5. Technical Assistance To Śląskie – Silesia 6. Capacity Building for Selecting Coal Region Pilot Projects 7. Communication and Outreach
7.	Specify if you received for the reporting year Management Declaration, Audit Opinion or Audit Conclusion	Annual Management Declaration as well as an annual single audit report, comprising (i) a management report together with an audit opinion from the Bank's external auditors; and (ii) a combined financial statement. June 2024

European Investment Bank (EIB)

	Requirement	Information
1.	Programme concerned	Preparatory Action (A021801) [ENER] Establishing comprehensive support for coal and carbon-intensive regions in transition
2.	Annual budgetary amount entrusted (commitment appropriations)	EUR 14 000 000 in 2021 (2020 global commitment) Payments in 2024: EUR 1 750 000 (pre-financing)
3.	Duration of the delegation	From 18/11/2021 to 31/12/2027
4.	Justification of the recourse to indirect management	The action is implemented by the EIB to provide technical assistance to energy projects in coal regions in transition. See Financing Decision C(2020)5455.
5.	Justification of the selection of the body (identity, selection criteria, possible indication in the legal basis etc.)	The EIB has been selected based on its expertise in the area of Just Transition in Coal Regions and in coal industry restructuring outside and inside the European union, in particular in the Western Balkans. See Financing Decision C(2020)5455
6.	Summary description of the implementing tasks entrusted to this body	The objective of the action is to create a facility that, based on the JASPERS instrument (the Joint Assistance to Support Projects in European Regions), provides technical assistance to energy projects in coal regions in transition and helps to develop good, mature projects to be implemented under the Just Transition Fund (JTF).
7.	Specify if you received for the reporting year Management Declaration, Audit Opinion or Audit Conclusion	In line with the Contribution Agreement, DG ENER received on 15/03/2024: • A signed management declaration of assurance • An audit opinion on the statement of accounts The technical report was approved by the Technical manager on 04/06/2024.

United Nations Environment Programme Finance Initiative (UNEP FI)

	Requirement	Information
1.	Programme concerned	LIFE Clean Energy Transition [ENER] Establishing comprehensive support for coal and carbon-intensive regions in transition
2.	Annual budgetary amount entrusted (commitment appropriations)	EUR 600 000 in 2023 (2022 global commitment) Payments in 2024: EUR 194 599
3.	Duration of the delegation	From 20/12/2023 to 19/12/2026
4.	Justification of the recourse to indirect management	Contribution agreement with UNEP for activating private sector investments to energy efficiency through the Energy Efficiency Financial Institutions Group (EEFIG) in the framework of Chapter 2 of the annex to the "Memorandum of Understanding between the European Commission and the UNEP for cooperation period 2021-2025 agreed between the European Commission and UNEP on 26 /02/2021". See Financing Decision C(2021)4997 Annex IV.
5.	Justification of the selection of the body (identity, selection criteria, possible indication in the legal basis etc.)	The United Nations Environment Programme Finance Initiative (UNEP FI) shall be entrusted with the implementation of part EEFIG activities. EEFIG work is providing a significant contribution in accelerating private finance to energy efficiency currently focusing on the European Green Deal and within the EU Recovery Plan frameworks. See Financing Decision C(2021)4997 Annex IV. See Financing Decision C(2020)5455
6.	Summary description of the implementing tasks entrusted to this body	The objective of the action is to increase the contribution from UNEP FI to help attracting capital flows to energy efficiency investments in line with the EU-target, and to contribute to the effective application of the energy efficiency first principle when financing the clean energy transition. In particular, the contribution agreement will cover the following activities: • activities linked to the governance and the management of EEFIG • support to EEFIG working groups • provide regular updates on international best-practice in energy efficiency financing from non-EU countries • coordination of Networking and outreach activities • support to the Communication activities
7.	Specify if you received for the reporting year Management Declaration, Audit Opinion or Audit Conclusion	N/A. The payment of EUR 194 599.07 corresponds to the first pre-financing instalment, which was due upon signature of the contribution agreement.

ANNEX 12: EAMR of the Union Delegations

NOT APPLICABLE

ANNEX 13: Decentralised agencies and other EU bodies

Name of the entity	Role of the DG	Policy area concerned	Amount paid in 2024 in €			
			Contribution to			Contribution agreement
			Operating (admin) budget	Operational budget	Total in €	
Agency for the Cooperation of Energy Regulators (ACER)	Lead DG	Energy (Conventional and renewable energy)	23,012,293	0	23,012,293	
Fusion for Energy Joint Undertaking (F4E JU)	Lead DG	Energy (Nuclear)	73,739,500	482,620,000	556,359,500	
		Total	96,751,793	482,620,000	579,371,793	

ANNEX 14: Reporting on the Recovery and Resilience Facility

NOT APPLICABLE