



**FINAL ANNUAL ACCOUNTS OF THE
CLEAN HYDROGEN
JOINT UNDERTAKING
FINANCIAL YEAR 2023**

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CERTIFICATION OF THE ACCOUNTS

I acknowledge my responsibility for the preparation and presentation of the annual accounts of the Clean Hydrogen Joint Undertaking, in accordance with Article 52 of the Model Financial Regulation ('MFR')¹ and I hereby certify that the annual accounts of the Clean Hydrogen JU for the year 2023 have been prepared in accordance with Chapter 8 and the accounting rules adopted by the Commission's Accounting Officer, as are to be applied by all the institutions and Union bodies.

I have obtained from the Authorising Officer, who certified its reliability, all the information necessary for the production of the accounts that show the Clean Hydrogen Joint Undertaking's assets and liabilities and the budgetary implementation.

Based on this information, and on such checks as I deemed necessary to sign off the accounts, I have a reasonable assurance that the accounts present fairly, in all material aspects, the financial position, the results of the operations and the cash-flow of the Clean Hydrogen JU.

My assurance statement related to the Final Accounts 2023 will be transmitted to the Accounting Officer of the Commission. The Management Representation Letter, signed by the Authorising Officer and myself, will be sent to the European Court of Auditors for the audit of the Final Accounts.

Andrea TÓTH²

**Accounting Officer of the
Clean Hydrogen Joint Undertaking**

¹ Commission Delegated Regulation (EU) 2019/887 of 13 March 2019 on the model financial regulation for public-private partnership bodies referred to in Article 71 of Regulation (EU, Euratom) 2018/1046 of the European Parliament and of the Council.

² The final accounts signed on 11.06.2024 included clerical errors on page 43, in table 4.6 "Contribution per program" (the FP7 members' contributions target figure); on page 52 in column 9 of the table "Implementation of Budget Revenue" (implementation percentage figures); on pages 59-64, in column 6 in the tables "Implementation of commitment Appropriations" and "Implementation of Payment Appropriations" (implementation percentage figures). The tables were corrected, and the accounts signed again on 10.07.2024.

BACKGROUND INFORMATION NOTE

GENERAL BACKGROUND ON THE ENTITY

Establishment

The Fuel Cells and Hydrogen 2 Joint Undertaking (FCH 2 JU) was a public-private partnership, based in Brussels, that supported research, technological development and demonstration activities in fuel cell and hydrogen energy technologies in Europe.

The first FCH JU was established by Council Regulation (EC) No. 521/2008³ for a period up to 31 December 2017. The interim evaluation of FCH JU confirmed a need for such a partnership and recommended an increase of its activities. As a result, a new Joint Undertaking named Fuel Cells and Hydrogen 2 Joint Undertaking, was established by Council Regulation (EU) No. 559/2014⁴.

Horizon Europe – the EU Framework Programme for Research and Innovation (2021-2027) – aims to increase the EU's research and innovation impact by combining European partnership co-investment with additional private and public sector funds in areas where the scope and scale of the research and innovation resources can help achieve the EU's Horizon Europe priorities notably, its Pillar II – Global challenges and European industrial competitiveness.

The setting up of the joint undertakings under Horizon Europe has been regulated through Council Regulation No. 2021/2085 of 19 November 2021 and published in the Official Journal on 30 November 2021 (date of entry into force of the Single Basic Act (SBA)).

Under the Council Regulation (Article 174.5), the Clean Hydrogen Joint Undertaking is the legal and universal successor in respect of all contracts, including employment contracts and grant agreements, liabilities and acquired property of the Fuel Cells and Hydrogen 2 Joint Undertaking established by Council Regulation No. 559/2014, which it shall replace and succeed.

Mission

Clean Hydrogen JU's mission is to facilitate the transition to a greener EU society through the development of hydrogen technologies.

Main operational activities

The objective of Clean Hydrogen JU is to enhance cooperation between the diverse stakeholders along the whole hydrogen value-chain and mobilise them to increase the leverage effect of R&I for investments, with the main objectives to:

1. Contribute to the EU ambitious 2030 and 2050 climate ambition;
2. Support the implementation of the Commission's Hydrogen Strategy;
3. Strengthen the competitiveness of the Union clean hydrogen value chain;
4. Stimulate research and innovation on clean hydrogen production, distribution, storage and end use applications.
5. Participate in the RePowerEU program, which aims to rapidly reduce Europe's dependence on Russian fossil fuels by fast forwarding the clean transition and joining forces to achieve a more resilient energy system and a true Energy Union.

³ Council Regulation (EC) No. 521/2008 of 30 May 2008 setting up the Fuel Cells and Hydrogen Joint Undertaking

⁴ Council Regulation (EC) No. 559/2014 of 6 May 2014 setting up the Fuel Cells and Hydrogen 2 Joint Undertaking

Governance

The Joint Undertaking is headed by an Executive Director, who is the legal representative of Clean Hydrogen JU and the chief executive responsible for the implementation of the Joint Undertaking's operations, in accordance with the decisions of the Governing Board. The Programme Office support the Executive Director in the day-to-day management of the Joint Undertaking.

The Executive Director is appointed by the Governing Board, that is the main decision-making body of Clean Hydrogen JU. The Governing Board has overall responsibility for the strategic orientation and the operations of the Clean Hydrogen JU and supervises the implementation of its activities. It brings together the three groups of the JU's members:

- The EU represented by the European Commission – three representatives;
 - The Industry Grouping represented by Hydrogen Europe - six representatives, including at least one representative of Small and Medium Enterprises (SMEs);
 - The Research Grouping represented by the New European Research Grouping on Fuel Cells and Hydrogen – one representative;

The States Representatives Group and the Stakeholders Group are the advisory bodies of the Clean Hydrogen JU.

Sources of financing

The Clean Hydrogen JU is jointly funded by the contributions of its members. The administrative costs are covered by the financial contributions of the EU and of the Industry and Research Grouping. The operational costs are covered by the financial contributions of the EU and the in-kind contributions of the other members. The in-kind contributions are the costs incurred by the constituent entities of the members other than the Union or their affiliated entities in implementing indirect actions that are not reimbursed by the Joint Undertaking.

ANNUAL ACCOUNTS

Basis for preparation

The legal framework and the deadlines for the preparation of the annual accounts are set by Model Financial Regulation (MFR)⁵. As per this regulation, the annual accounts are prepared in accordance with the rules adopted by the Accounting Officer of the Commission (EU Accounting Rules, EAR), which are based on internationally accepted accounting standards for the public sector (IPSAS).

Accounting Officer

In accordance with the MFR, the Governing Board of the entity appoints the Accounting Officer who is, amongst other tasks, responsible for preparation of the annual accounts.

The Single Basic Act⁶ establishing the new generations of JUs required, within one year following the date of entry into force of the Regulation, the establishment of back-office arrangements, to provide horizontal support functions to the joint undertakings, by concluding service level agreements. The Accounting Back Office (Acco BOA) was established and took over the accounting services from Accounting Officer the European Commission from 1 December 2022.

Following the decision of the Clean Hydrogen JU Governing Board of 25 November 2022, on behalf of the Acco BOA, as of 1 December 2022, Andrea Tóth acts as the Accounting Officer of Clean Hydrogen JU.

Composition of the annual accounts

The annual accounts cover the period from 1 January to 31 December and comprise the financial statements and the reports on the implementation of the budget. While the financial statements and the complementary notes are prepared on an accrual accounting basis, the budget implementation reports are primarily based on movements of cash.

Process from provisional accounts to discharge

The provisional annual accounts prepared by the Accounting Officer are transmitted, by 1 March of the following year, to the European Court of Auditors (ECA) and to the audit company contracted by the JU. Following the audit, the Accounting Officer prepares the final annual accounts and submits them to the Governing Board for opinion.

The final annual accounts, together with the opinion of the Governing Board, are sent to the Accounting Officer of the Commission, the European Court of Auditors, the European Parliament and the Council by 1 July of the following financial year. The ECA scrutinises the final annual accounts and includes any findings in the annual report for the European Parliament and the Council.

It falls to the Council to recommend, and then to the European Parliament to decide, whether to grant discharge to the Executive Director in respect of the implementation of the budget for a given financial year. Amongst other elements this decision is also based on a review of the accounts and the annual report of the ECA.

⁵ Commission Delegated Regulation (EU) 2019/887 of 13 March 2019 on the model financial regulation for public-private partnership bodies referred to in Article 71 of Regulation (EU, Euratom) 2018/1046 of the European Parliament and of the Council (OJ L 14 2, 29.5.2019, p. 16)

⁶ COUNCIL REGULATION (EU) 2021/2085 of 19 November 2021 establishing the Joint Undertakings under Horizon Europe and repealing Regulations (EC) No 219/2007, (EU) No 557/2014, (EU) No 558/2014, (EU) No 559/2014, (EU) No 560/2014, (EU) No 561/2014 and (EU) No 642/2014

1. OPERATIONAL HIGHLIGHTS

Achievements of the year

With regards to implementing activities, Clean Hydrogen JU successfully published its hydrogen research **call for proposals** under Horizon Europe on 17 January 2023 with a total budget of EUR 195.00 million. A total of 26 topics were part of this call, including 7 for renewable hydrogen production, 5 for hydrogen storage and distribution, 3 for transport and 4 for heat and power. In addition, 3 topics addressed cross-cutting issues. The call also included 2 hydrogen valleys topics and 2 strategic research challenges. The topics were grouped into 11 Innovation Actions (IA), 13 Research and Innovation Actions (RIA) and 2 Coordination and Support Action (CSA). Five of the Innovation Actions were considered of strategic importance and accordingly selected as flagship projects. **Synergies** with other European partnerships and programmes as well as with Member States and regional programmes were at the core of a number of topics. A total of 132 proposals were submitted by the call deadline of 18 April 2023. 10 proposals were either inadmissible or ineligible and were not evaluated. The central evaluation week took place in June 2023. 73 proposals were above the funding threshold requesting a budget of EUR 382 MEUR. A total of 32 proposals were invited for grant agreement preparation and 27 grants were signed before the end of 2023. The remaining grants will be signed early in 2024. In 2023, additional 33 grants were signed, still from the Call 2022. Altogether, the JU signed 60 grants in 2023 for a value of 411 MEUR.

With the **new grants** signed in 2023 (and also in 2022), the number of projects the JU is managing has increased significantly. By the end of 2023, the JU portfolio included 117 projects⁷ supporting R&I across the whole hydrogen value chain. 37 of these projects are funded under H2020 and 80 from Horizon Europe (amounting to 740 MEUR of EU/JU funding).

Of particular interest is the support that the JU is providing to Hydrogen Valleys. **Hydrogen Valleys** contribute to the REPowerEU objectives by scaling up green hydrogen production, supply and consequently meeting the growing demand from industry, transport, and other sectors. Accordingly, the European Commission, in 2022, allocated to the Clean Hydrogen Partnership an additional €200 million through REPowerEU plan, to double the number of Hydrogen Valleys in Europe by 2025. In 2022, partially using this budget but not limited to, a total of 11 grants supporting new Hydrogen Valley projects across Europe were signed, amounting for EU funding of 134 MEUR.

Furthermore, in 2023, a total of 53 reports were assessed (44 resulted in payments to the projects whilst the remain 9 were clearings). It should be noted that a number of the projects managed by the JU are suffering delays. In 2023, the delays the projects encountered, shifted the submission of 10 reports from 2023 to 2024. There are different reasons for this. For H2020 projects delays may still be related to exceptional circumstances such as COVID-19. However, delays following the post-pandemic period still occur due to other factors such as disruptions to the supply chain (e.g. due to geopolitical conflicts). In addition, changes in the market conditions (including high electricity prices) led to less favourable business models what, in the best of the cases, delayed financial investment decisions; this is of particular relevance for demonstration projects.

Looking at other **operational activities implemented via procurements**, 2023 had several studies ongoing covering subjects of a strategic nature for the Clean Hydrogen JU, providing input to R&I priority setting and supporting further financing, deployment and commercialisation of clean hydrogen projects. Some highlights are included below.

In July 2023, the JU launched a Call for EoI targeting **managing authorities** across Europe willing to strengthen cooperation and synergies with the Clean Hydrogen JU⁸. As a result, 10 Managing Authorities (MAs) across Europe were selected. The JU is currently working with these MAs with view to sign Memorandum of Cooperations with them on R&I activities and in particular concerning knowledge management, capacity building and funding.

⁷ This excludes all projects ended in 2023 even if the final reports were not yet paid by 31 December 2023.

⁸ https://www.clean-hydrogen.europa.eu/media/news/call-expression-interest-receiving-technical-assistance-generate-synergies-clean-hydrogen-2023-06-06_en

In 2023, support to regions continued also under the **Project Development Assistance (PDA) II** initiative⁹. Through this initiative, a total of 15 regions are currently receiving support for the development of hydrogen projects across their territories. At the global level, work under Mission Innovation 2.0 (MI2.0) continued. As a result, the Hydrogen valleys platform has seen an increase in the number of Hydrogen Valleys that it features, reaching more than 80 Hydrogen Valleys across the globe by the end of 2023 (out of which around 60 are in Europe).

Over the last years the JU has supported the **CertifHy**¹⁰ activities. These activities came to an end in December 2023. This work delivered a pioneering Non-Governmental certification (NGC) scheme for consumer disclosure, including detailed carbon footprinting methodologies. It also set-up a registry that is operational for the NGC Scheme certification, that has seen growing demand since it has been available. A number of case studies have been developed to showcase how to determine the carbon footprint of hydrogen depending on the production pathway, which are used as base scenarios for the NGC Scheme but can be used as a reference for Member State certification Schemes. In 2023, CertifHy enlarged its scope to the compliance market, by developing a certification scheme tailored for economic operators seeking to capitalize on the premium value associated with meeting regulatory binding targets for the production of Renewable Fuels of Non-Biological Origin (RFNBOs). All in all, CertifHy has fulfilled its initial objective of establishing itself as a market facilitator for renewable and low-carbon hydrogen. And it will continue to operate in both the voluntary and compliance markets, putting its hydrogen and derivatives' certification expertise at the service of economic operators wishing to access the premium value of their products.

Also in 2023, the **Hydrogen Ports study**¹¹ came to an end. A part of this study, 3 reports have been published which present a comprehensive assessment of the hydrogen demand in ports and industrial coastal areas in Europe. In addition, a report has been published which looks at non-technical (policy, regulatory, governance, strategic, etc.) enablers, areas of priority for research and innovation projects and required safety regulations, codes, and standards for the timely development of hydrogen related activities and infrastructures in EU port ecosystems. The study concluded with the elaboration of detailed case studies highlighting the techno-economic feasibility of developing a range of hydrogen-related activities and infrastructures in the vicinity of specific ports.

Also in 2023, the Clean Hydrogen JU set-up the **European Hydrogen Sustainability and Circularity Panel**, which, at the Programme level, will support the Clean Hydrogen JU Programme implementation and the transition of the overall European hydrogen sector towards a sustainable and circular hydrogen economy, while it will also promote and disseminate the relevant knowledge within and beyond the Programme. This multi-disciplinary team/group of experts (10-15 experts approx.) shall act as an independent advisory group on adoption of sustainability and circularity aspects both at the projects (i.e. JU funded grants) and JU programme level.

In addition, in 2023, the JU launched a call for tenders aims at concluding a single service framework contract for the setup, organisation, management, and coordination of the **European Hydrogen Safety Panel** (EHSP).

Building on the activities performed in the past, in 2023, the JU launched and awarded the **Hydrogen Knowledge Hub** via a public procurement. The aim is to gather and manipulate all the R&I data related to the hydrogen technologies, especially data from the JU projects, also developing a platform for integrating the existing tools and platforms and further enhancing their capacity. The procurement was based on the feasibility study under the title "**Architecture proposal for the Clean Hydrogen Knowledge Hub**", based on the specific contract CleanH2- SC1 under Framework contract DI/07925 - BEACON - LOT 2. The foreseen duration of the contract is 3 years.

In addition, the new **European Hydrogen Observatory**¹², was re-launched in September 2023 and has already become the new point of reference for the hydrogen market sector in Europe.

In terms of other operational activities aiming to support its strategic objectives, the JU continued its technology and programme monitoring activities, both covering its projects and the wider developments in the hydrogen sector, resulting also in the latest **Programme Review Report 2023**¹³. The data from the projects were collected both from Commission tools (COMPASS, SYGMA, eGRANTS, etc), but also via an

⁹ https://www.clean-hydrogen.europa.eu/media/news/15-european-regions-will-receive-project-development-assistance-2023-01-15_en

¹⁰ <https://www.certify.com/>

¹¹ https://www.clean-hydrogen.europa.eu/media/publications/study-hydrogen-ports-and-industrial-coastal-areas-reports_en

¹² <https://observatory.clean-hydrogen.europa.eu/>

¹³ <https://op.europa.eu/en/publication-detail/-/publication/00f833fa-7ec4-11ee-99ba-01aa75ed71a1/language-en/format-PDF/source-296436320>

annual data collection exercise from projects, using the internally developed data collection platform TRUST (Technology Reporting Using Structured Templates)¹⁴.

The Clean Hydrogen JU co-organised the **European Hydrogen Week**¹⁵ together with Hydrogen Europe and the European Commission on 20-24.11.2023 at Brussels Expo. Over 8000 stakeholders of the hydrogen community were brought together to witness more exhibitors and speakers covering all elements of the sector's value chain. More than 200 exhibitors, including from representatives of international partners Brazil and South Africa, populated the exhibition floor with their innovative products, projects, and plans. More than 200 speakers were involved in bringing lively and fascinating discussions across 27 sessions between the High-Level Policy Conference and B2B forum. The week was bookended by two major announcements for the hydrogen sector: on Monday, European Commission President Ursula von der Leyen informed attendees that the second European Hydrogen Bank auction would take place in Spring 2024 with a budget of €2.2 billion. This figure is nearly triple the budget of the pilot auction and meets the €3 billion commitment first made by President von der Leyen in her 2022 State of the Union address. Speaking of the pilot auction, former Dutch foreign minister and current European Commissioner for Climate Action Wopke Hoekstra arrived at the event on Thursday to officially launch the €800m competition. Bidding is now open and a decision on winning projects is expected by April 2024.

Under the umbrella of the Hydrogen Week, the **Clean Hydrogen Partnership Awards 2023** celebrated excellence and innovation on 22 November 2023. The awards categories recognised the Best Innovation, Best Success Story, Best Project Outreach and the best European H2 Valleys of the Year:

- **Best Innovation Award: emission-free aviation**
The winner, [HEAVEN](#), represents the first application of liquid hydrogen storage technology in aviation. The innovation was integrated with a hydrogen-electric fuel cell propulsion system in a light demonstrator aircraft that seats up to four people.
- **Best Success Story Award: clean power for heavy duty applications**
The winner, [StasHH](#), is helping to meet the growing demand for zero-emission heavy-duty transport through the standardisation of heavy-duty fuel cell modules.
- **Best Outreach Award: clean public transport**
The award recognises project consortia that communicate their work to the public using a creative, well-planned campaign.
The award winner, [JIVE 2](#) and its predecessor JIVE, are Europe's largest fuel cell bus deployment initiative to date. They have demonstrated an unwavering commitment to increasing awareness of the technology, deploying buses and infrastructure across Europe, and making them commercially viable for bus operators to include in their fleets without subsidies.

Also under the umbrella of the Hydrogen Week, on 15 and 16 November the **EU Hydrogen Research Days**¹⁶ (previously Programme Review days) took place online. With over 1000 online participants, the event assessed the progress and achievements in the various pillars of the Clean Hydrogen Partnership and presented the diverse projects portfolio managed by the programme. The sessions of day two on 15 November focused on the Clean Hydrogen Partnership programme status and JRC's support, projects portfolio analysis, European Hydrogen Valleys, hydrogen production and end-uses in the field of clean heat and power production. Sessions of day two on 16 November focused on transport applications, hydrogen storage, skills, and the challenges in hydrogen R&I.

Budget and budget implementation

The budget of Clean Hydrogen JU amounted to EUR 268 780 240 in terms of commitment appropriations and EUR 327 726 530 in terms of payment appropriations. This represented a decrease in terms of commitments and a threefold increase in terms of payment appropriations as compared to 2022 budget. The increase in 2023 budget was due to the launch of two calls Horizon Europe in 2022, which also included pre-financing paid at the beginning of 2023.

The budget implementation in terms of commitments reached 99% (99% in 2022) whereas payments reached 85% (65% in 2022).

¹⁴ https://www.clean-hydrogen.europa.eu/knowledge-management/technology-monitoring-trust_en

¹⁵ https://www.clean-hydrogen.europa.eu/european-hydrogen-week/european-hydrogen-week-2023_en

¹⁶ https://www.clean-hydrogen.europa.eu/knowledge-management/annual-programme-review/eu-hydrogen-research-days_en#eu-hydrogen-research-days-2023

The consumption of administrative budget was 81% in terms of commitments (79% in 2022) and 75% in terms of payments (73% in 2022).

More specifically, Title 1 commitment and payment rates decreased from 2022 (commitment: 86% in 2023 whereas 97% in 2022, payment: 86% in 2023 and 96% in 2021). Staff in active employment comprises 53% of total administrative budget but there was a decrease in 2023, due to delays in recruitment at least of three positions (ED, SNE and Synergies Officer).

Title 2 also, on the other hand, increased in both commitment and payments rates compared to 2022 (committed: 67% in 2023 and 62% in 2022, paid: 61% in 2023 and 51% in 2022).

Specifically, information technology costs showed an implementation of 91%, followed closely by communication costs (85%). Lapsing appropriations come mainly from service contracts (kEUR 699) since the contract related to the Project Technical Assistance was not ready at the end of the year and did not run for the whole year. In terms of payments, lapsing appropriations come mainly from the same item (around kEUR 1 050 from service contracts of which part will cover the final payment of the contract related to the Project Technical Assistance that would be paid in 2024).

Under Title 3, the last payment for the FP7 Programme was carried out in 2023 and led to a 100% execution rate. H2020 commitment implementation rate slightly increased from 84% in 2022 to 100% in 2023, whereas Horizon Europe commitments were 99% implemented, showcasing a very good planning. Payment implementation in H2020 (70%) was lower than in 2022 (81%). Throughout the year, several delays in grant implementation were reported and mitigated with amendments that shifted payment from 2023 to 2024. Other delays resulted in claims being much lower than initially estimated. Payment implementation in Horizon Europe reached 89%, with the remaining amount paid in 2024 following the signature of some grant agreements before the deadline of February 2024.

CLEAN HYDROGEN JOINT UNDERTAKING
FINANCIAL YEAR 2023

FINANCIAL STATEMENTS AND EXPLANATORY NOTES

BALANCE SHEET

	Note	31.12.2023	31.12.2022
NON-CURRENT ASSETS			
Intangible assets	2.1	990.04	3,969.58
Intangible assets under construction	2.1	-	-
Property, plant and equipment	2.2	89,229.96	136,260.15
Long term pre-financing	2.3	249,580,601.80	64,904,581.37
		249,670,821.80	65,044,811.10
CURRENT ASSETS			
Short term pre-financing	2.3	56,677,596.36	46,252,801.52
Exchange receivables and non-exchange recoverables	2.4	90,692,093.15	47,053,847.78
Cash and cash equivalent	2.5	-	-
		147,369,689.51	93,306,649.30
TOTAL ASSETS		397,040,511.31	158,351,460.40
CURRENT LIABILITIES			
Short term provisions	2.6	-	-
Payables and other liabilities	2.7	122,618,423.02	110,975,331.31
Accrued charges and deferred income	2.8	39,123,975.09	49,915,404.59
		161,742,398.11	160,890,735.90
TOTAL LIABILITIES		161,742,398.11	160,890,735.90
Contribution from Members	2.9	1,904,513,506.67	1,580,943,012.81
Accumulated deficit		(1,583,482,288.31)	(1,455,733,390.07)
Economic result of the year		(85,733,105.16)	(127,748,898.24)
NET ASSETS		235,298,113.20	(2,539,275.50)
LIABILITIES AND NET ASSETS		397,040,511.31	158,351,460.40

STATEMENT OF FINANCIAL PERFORMANCE

	Note	2023	2022
REVENUE			
Revenue from non-exchange transactions			
Recovery of operating expenses	3.1	2,422,224.07	1,563,445.88
Other non-exchange revenue	3.2	-	-
Revenue from exchange transactions	3.3		
Financial revenues		-	0.03
Other exchange revenue		12,489.05	35,732.09
Total revenue		2,434,713.12	1,599,178.00
EXPENSES			
Operating costs	3.4	(81,940,405.91)	(123,005,176.97)
Staff costs	3.5	(3,337,901.67)	(3,359,274.02)
Financial expenses	3.6	(2,366.64)	-
Other expenses	3.7	(2,887,144.06)	(2,983,625.25)
Total expenses		(88,167,818.28)	(129,348,076.24)
ECONOMIC RESULT OF THE YEAR		(85,733,105.16)	(127,748,898.24)

CASHFLOW STATEMENT

	2023	2022
Economic result of the year	(85,733,105.16)	(127,748,898.24)
Operating activities		
Depreciation and amortization	59,147.69	65,280.69
(Increase)/decrease in pre-financing	(195,100,815.27)	15,739,328.78
(Increase)/decrease in exchange receivables and non-exchange recoverables	(43,638,245.37)	(37,407,905.64)
Increase/(decrease) in payables	11,643,091.71	51,961,471.39
Increase/(decrease) in accrued charges & deferred income	(10,791,429.50)	251,094.51
Increase/(decrease) in cash contributions	298,672,392.41	77,924,492.06
Increase/(decrease) in in-kind contributions	24,898,101.45	19,235,775.56
Other non-cash movements		
Investing activities		
(Increase)/decrease in intangible assets and property, plant and equipment	(9,137.96)	(20,639.11)
NET CASHFLOW	(0.00)	0.00
Net increase/(decrease) in cash and cash equivalents	-	-
Cash and cash equivalents at the beginning of the year	-	-
Cash and cash equivalents at year-end	-	-

The treasury of Clean Hydrogen JU is integrated into the Commission's treasury system. Because of this Clean Hydrogen JU does not have any bank accounts of its own. All payments and receipts are processed via the Commission's treasury system and registered on intercompany accounts, which are presented under the heading exchange receivables.

STATEMENT OF CHANGES IN NET ASSETS

	Contribution from Members	Accumulated Surplus/(Deficit)	Economic result of the year	Net Assets
BALANCE AS AT 31.12.2021	1,483,782,745.19	(1,331,980,531.65)	(123,752,858.42)	28,049,355.12
Allocation 2021 economic result	-	(123,752,858.42)	123,752,858.42	-
Cash contribution	77,924,492.06	-	-	77,924,492.06
Contribution in-kind	19,235,775.56	-	-	19,235,775.56
Unpaid cash contributions	-	-	-	-
Economic result of the year	-	-	(127,748,898.24)	(127,748,898.24)
BALANCE AS AT 31.12.2022	1,580,943,012.81	(1,455,733,390.07)	(127,748,898.24)	(2,539,275.50)
Allocation 2022 economic result	-	(127,748,898.24)	127,748,898.24	-
Cash contribution	298,672,392.41	-	-	298,672,392.41
Contribution in-kind	24,898,101.45	-	-	24,898,101.45
Unpaid cash contributions	-	-	-	-
Economic result of the year	-	-	(85,733,105.16)	(85,733,105.16)
BALANCE AS AT 31.12.2023	1,904,513,506.67	(1,583,482,288.31)	(85,733,105.16)	235,298,113.20

NOTES TO THE FINANCIAL STATEMENTS

1. SIGNIFICANT ACCOUNTING POLICIES

1.1. ACCOUNTING PRINCIPLES

The objective of financial statements is to provide information about the financial position, performance and cash flows of an entity that is useful to a wide range of stakeholders.

The overall considerations (or accounting principles) to be followed when preparing the financial statements are laid down in EU Accounting Rule 1 'Financial Statements' and are the same as those described in IPSAS 1: fair presentation, accrual basis, going concern, consistency of presentation, materiality, aggregation, offsetting and comparative information. The qualitative characteristics of financial reporting are relevance, faithful representation (reliability), understandability, timeliness, comparability and verifiability.

1.2. BASIS OF PREPARATION

1.2.1. Reporting period

Financial statements are presented annually. The accounting year begins on 1 January and ends on 31 December.

1.2.2. Currency and basis for conversion

The annual accounts are presented in thousands of euros, the euro being the EU's functional currency. Foreign currency transactions are translated into euros using the exchange rates prevailing at the dates of the transactions. Foreign exchange gains and losses resulting from the settlement of foreign currency transactions and from the re-translation at year-end exchange rates of monetary assets and liabilities denominated in foreign currencies are recognised in the statement of financial performance. Different conversion methods apply to property, plant and equipment and intangible assets, which retain their value in euros at the date when they were purchased.

Year-end balances of monetary assets and liabilities denominated in foreign currencies are translated into euros on the basis of the European Central Bank (ECB) exchange rates applying on 31 December.

Euro exchange rates

Currency	31.12.2023	31.12.2022	Currency	31.12.2023	31.12.2022
BGN	1.9558	1.9558	PLN	4.3395	4.6808
CZK	24.724	24.116	RON	4.9756	4.9495
DKK	7.4529	7.4365	SEK	11.096	11.1218
GBP	0.8869	0.8869	CHF	0.926	0.9847
NOK	11.2405	10.4812	JPY	156.33	140.66
HUF	382.80	400.87	USD	1.105	1.0666

1.2.3. Use of estimates

In accordance with IPSAS and generally accepted accounting principles, the financial statements necessarily include amounts based on estimates and assumptions by management based on the most reliable information available. Significant estimates include, but are not limited to: amounts for employee benefit liabilities, financial risk of accounts receivable and the amounts disclosed in the notes concerning financial instruments, impairment allowance for financial assets at amortised cost and for financial guarantee contract liabilities, accrued revenue and charges, provisions, degree of impairment of intangible assets and property, plant and equipment, net realisable value of inventories, contingent assets and liabilities. Actual results could differ from those estimates. Reasonable estimates are an essential part of the preparation of financial statements and do not undermine their reliability. An estimate may need revision if changes occur in the circumstances on which the estimate was based or as a result of new information or more experience. By its nature, the revision of an estimate does not relate to prior periods and is not the correction of an error. The effect of a change in accounting estimate shall be recognised in the surplus or deficit in the periods in which it becomes known.

1.2.4. Application of new and revised European Union Accounting Rules (EAR)

Revised IPSAS standards which have been issued, and are effective for annual periods beginning on or after 1 January 2025

The following IPSAS standards are effective as of January 1, 2025 (earlier application is permitted):

- **IPSAS 43 Leases:** IPSAS 43 introduces new or amended requirements with respect to lease accounting. It introduces significant changes to lessee accounting by removing the distinction between operating and finance lease and requiring the recognition of a right-of-use asset and a lease liability at commencement for all leases, except for short-term leases and leases of low value assets.
- **IPSAS 44 Non-current Assets Held for Sale and Discontinued Operations:** IPSAS 44 specifies the accounting for assets held for sale and the presentation and disclosure of discontinued operations. IPSAS 44 includes additional public sector requirements, in particular, the disclosure of the fair value of assets held for sale that are measured at their carrying amounts, when the carrying amount is materially lower than their fair value.

The Accounting Officer is assessing the impact of the above standards on the Annual Accounts and considering a possible revision of relevant EAR accordingly.

1.3. BALANCE SHEET

1.3.1. Intangible assets

An intangible asset is an identifiable non-monetary asset without physical substance. An asset is identifiable if it is either separable or arises from binding arrangements. Acquired intangible assets are stated at historical cost less accumulated amortisation and impairment losses. Internally developed intangible assets are capitalised when the relevant criteria of the EU accounting rules are met and the expenses relate solely to the development phase of the asset. Intangible assets are amortised on a straight-line basis over their estimated useful lives (3 to 11 years).

1.3.2. Property, plant and equipment

All property, plant and equipment are stated at historical cost less accumulated depreciation and impairment losses. Cost includes expenditure that is directly attributable to the acquisition, construction or transfer of the asset. Subsequent costs are included in the asset's carrying amount or recognised as a separate asset, as appropriate, only when it is probable that future economic benefits or service potential associated with the item will flow to the entity and its cost can be measured reliably. Repairs and maintenance costs are charged to the statement of financial performance during the financial period in which they are incurred. Land is not depreciated, as it is deemed to have an indefinite useful life. Assets under construction are not depreciated as these assets are not yet available for use. Depreciation on other assets is calculated using the straight-line method to allocate their cost less their residual values over their estimated useful lives, as follows:

Type of asset	Straight line depreciation rate
<i>Buildings</i>	<i>4 % to 10 %</i>
<i>Plant and equipment</i>	<i>10 % to 25 %</i>
<i>Furniture and vehicles</i>	<i>10 % to 25 %</i>
<i>Computer hardware</i>	<i>25 % to 33 %</i>
<i>Other</i>	<i>10 % to 33 %</i>

Gains or losses on disposals are determined by comparing proceeds less selling expenses with the carrying amount of the disposed asset and are included in the statement of financial performance.

Leases

A lease is an agreement whereby the lessor conveys to the lessee, in return for a payment or series of payments, the right to use an asset for an agreed period of time. Leases are classified as either finance leases or operating leases.

Finance leases are leases where substantially all the risks and rewards incidental to ownership are transferred to the lessee.

An operating lease is a lease other than a finance lease, i.e. a lease where the lessor retains substantially all the risks and rewards incidental to ownership of an asset. When entering an operating lease as a lessee, the operating lease payments are recognised as an expense in the statement of financial performance on a straight-line basis over the lease term with neither an asset nor a liability recognised in the balance sheet.

1.3.3. Impairment of non-financial assets

Assets that have an indefinite useful life are not subject to amortisation/depreciation and are tested annually for impairment. Assets that are subject to amortisation/depreciation are tested for impairment whenever there is an indication at the reporting date that an asset may be impaired. An impairment loss is recognised for the amount by which the asset's carrying amount exceeds its recoverable (service) amount. The recoverable (service) amount is the higher of an asset's fair value less costs to sell and its value in use.

Intangible assets and property, plant and equipment residual values and useful lives are reviewed, and adjusted if appropriate, at least once per year. If the reasons for impairments recognised in previous years no longer apply, the impairment losses are reversed accordingly.

1.3.4. Financial assets

The classification of the financial instruments is determined at initial recognition. Based on the management model and the asset contractual cash-flow characteristics the financial assets can be classified in three categories: Financial assets at amortised cost ('AC'), financial assets at fair value through net assets/equity ('FVNA') or financial assets at fair value through surplus or deficit ('FVSD'). Based on this classification, the entity has only 'financial assets at amortised cost', which are exchange receivables.

Financial assets at amortised cost are non-derivative financial assets that meet two conditions: 1) The entity holds them in order to collect the contractual cash flows. 2) On specified days, there are contractual cash flows that are solely payments of the principal and interest on the outstanding principal.

Financial assets at amortised cost are included in current assets, except for those with maturity of more than 12 months from the balance sheet reporting date.

Initial recognition and measurement

Financial assets at amortised cost are initially recognised at their fair value plus the transaction costs.

Subsequent measurement

Financial assets at amortised cost are carried at amortised cost, which is the amount initially recognised minus the principal repayments, plus or minus the cumulative amortisation of the interests using the effective interest method. In addition, the entity recognises a loss allowance for expected credit losses over the lifetime of the financial assets. At each reporting date, the annual movement in the loss allowance adjusts the carrying amount of the financial asset. In the statement of financial performance, the entity recognises an impairment gain or loss for the adjustment of the loss allowance.

Derecognition

Financial assets at amortised cost are derecognised either when the rights to receive cashflows from the investments have expired or are waived, or and when the entity has transferred substantially all risks and rewards of ownership to another party.

1.3.5. Pre-financing amounts

Pre-financing is a payment intended to provide the beneficiary with a cash advance, i.e. a float. It may be split into a number of payments over a period defined in the particular contract, decision, agreement or basic legal act. The float or advance is either used for the purpose for which it was provided during the period defined in the agreement or it is repaid. If the beneficiary does not incur eligible expenditure, he has the obligation to return the pre-financing advance to the entity. Thus, as the entity retains control over the pre-financing and is entitled to a refund for the ineligible part, the amount is recognised as an asset.

Pre-financing is initially recognised on the balance sheet when cash is transferred to the recipient. It is measured at the amount of the consideration given. In subsequent periods pre-financing is measured at the amount initially recognised on the balance sheet less eligible expenses (including estimated amounts where necessary) incurred during the period.

1.3.6. Receivables and recoverables

The EU accounting rules require separate presentation of exchange and non-exchange transactions. To distinguish between the two categories, the term 'receivable' is reserved for exchange transactions, whereas for non-exchange transactions, i.e. when the EU receives value from another entity without directly giving approximately equal value in exchange, the term 'recoverables' is used (e.g. recoverables from Member States related to own resources).

Receivables from exchange transactions meet the definition of financial instruments. The entity classified them as financial assets at amortised cost and measured them accordingly.

Recoverables from non-exchange transactions are carried at fair value as at the date of acquisition less write-down for impairment. A write-down for impairment is established when there is objective evidence that the entity will not be able to collect all amounts due according to the original terms of the recoverables. The amount of the write-down is the difference between the asset's carrying amount and the recoverable amount. The amount of the write-down is recognised in the statement of financial performance.

1.3.7. Cash and cash equivalents

Cash and cash equivalents are financial assets at amortised cost and include cash at hand, deposits held at call or at short notice with banks, and other short-term highly liquid investments with original maturities of three months or less.

1.3.8. Payables

Included under accounts payable are both amounts related to exchange transactions such as the purchase of goods and services, and to non-exchange transactions e.g. to cost claims from beneficiaries, grants or other EU funding, or pre-financing received (see note **1.3.5**), or non-validated in-kind contributions to operational activities (see note **1.6.2**).

Where grants or other funding are provided to the beneficiaries, the cost claims are recorded as payables for the requested amount, at the moment when the cost claim is received. Upon verification and acceptance of the eligible costs, the payables are valued at the accepted and eligible amount.

Payables arising from the purchase of goods and services are recognised at invoice reception for the original amount. The corresponding expenses are entered in the accounts when the supplies or services are delivered and accepted by the entity.

1.3.9. Accrued and deferred revenue and charges

Transactions and events are recognised in the financial statements in the period to which they relate. At year-end, if an invoice is not yet issued but the service has been rendered, or the supplies have been delivered by the entity or a contractual agreement exists (e.g. by reference to a contract), an accrued revenue will be recognised in the financial statements. In addition, at year-end, if an invoice is issued but the services have not yet been rendered or the goods supplied have not yet been delivered, the revenue will be deferred and recognised in the subsequent accounting period.

Expenses are also accounted for in the period to which they relate. At the end of the accounting period, accrued expenses are recognised based on an estimated amount of the transfer obligation of the period. The calculation of accrued expenses is done in accordance with detailed operational and practical guidelines issued by the Accounting Officer. These aim at ensuring that the financial statements provide a faithful representation of the economic and other phenomena they purport to represent. By analogy, if a payment has been made in advance for services or goods that have not yet been received, the expense will be deferred and recognised in the subsequent accounting period.

1.3.10. Provisions

Provisions are recognised when the entity has a present legal or constructive obligation towards third parties as a result of past events, it is more likely than not that an outflow of resources will be required to settle the obligation, and the amount can be reliably estimated. Provisions are not recognised for future operating losses. The amount of the provision is the best estimate of the expenditure expected to be required to settle the present obligation at the reporting date. Where the provision involves a large number of items, the obligation is estimated by weighting all possible outcomes by their associated probabilities ('expected value' method).

When the obligation whose existence will be confirmed by uncertain future events that are not wholly within the control of the entity, is possible, no provision is recognised, but a contingent liability is disclosed. Refer to note **1.5.2** for details.

1.3.11. Net assets

Net assets are the residual of assets and liabilities and comprise of accumulated contributions received from the members of the JU (EU and industry) less the accumulated contributions used. The contributions include financial contributions received by the JU and contributions provided by the members to the funded projects in-kind. The net assets also contain reserves, if applicable. Refer to note **1.6** for details.

1.4. STATEMENT OF FINANCIAL PERFORMANCE

1.4.1. Revenue

Revenue comprises gross inflows of economic benefits or service potential received and receivable by the entity, which represents an increase in net assets, other than increases relating to contributions from owners.

Depending on the nature of the underlying transactions in the statement of financial performance, revenue is distinguished between:

(i) *Revenue from non-exchange transactions*

Revenue from non-exchange transactions are taxes and transfers, because the transferor provides resources to the recipient entity, without the recipient entity providing approximately equal value directly in exchange. Transfers are inflows of future economic benefits or service potential from non-exchange transactions, other than taxes. For the EU entities, transfers mostly comprise funds received from the Commission (e.g. balancing subsidy to the traditional agencies, operating subsidy for the delegation agreements).

The entity shall recognise an asset in respect of transfers when the entity controls the resources as a result of a past event (the transfer) and expects to receive future economic benefits or service potential from those resources, and when the fair value can be reliably measured. An inflow of resources from a non-exchange transaction recognised as an asset (i.e. cash) is also recognised as revenue, except to the extent that the entity has a present obligation in respect of that transfer (condition), which needs to be satisfied before the revenue can be recognised. Until the condition is met the revenue is deferred and recognised as a liability.

(ii) *Revenue from exchange transactions*

Revenue from the sale of goods and services is recognised when the significant risk and rewards of ownership of the goods are transferred to the purchaser. Revenue associated with a transaction involving the provision of services is recognised by reference to the stage of completion of the transaction at the reporting date.

1.4.2. Expenses

Expenses are decreases in economic benefits or service potential during the reporting period in the form of outflows or consumption of assets or the incurring of liabilities that result in decreases in net assets. They include both the expenses from exchange transactions and expenses from non-exchange transactions.

Expenses from exchange transactions arising from the purchase of goods and services are recognised when the supplies are delivered and accepted by the entity. They are valued at the original invoice amount. Furthermore, at the balance sheet date expenses related to the service delivered during the period for which an invoice has not yet been received or accepted are recognised in the statement of financial performance.

Expenses from non-exchange transactions relate to transfers to beneficiaries and can be of three types: entitlements, transfers under agreement and discretionary grants, contributions and donations. Transfers are recognised as expenses in the period during which the events giving rise to the transfer occurred, as long as the nature of the transfer is allowed by regulation or an agreement has been signed authorising the transfer; any eligibility criteria have been met by the beneficiary; and a reasonable estimate of the amount can be made.

When a request for payment or cost claim is received and meets the recognition criteria, it is recognised as an expense for the eligible amount. At year-end, incurred eligible expenses due to the beneficiaries but not yet reported are estimated and recorded as accrued expense.

1.5. CONTINGENT ASSETS AND LIABILITIES

1.5.1. Contingent assets

A contingent asset is a possible asset that arises from past events and of which the existence will be confirmed only by the occurrence or non-occurrence of one or more uncertain future events not wholly within the control of the entity. A contingent asset is disclosed when an inflow of economic benefits or service potential is probable.

1.5.2. Contingent liabilities

A contingent liability is either a possible obligation of which the existence will be confirmed only by the occurrence or non-occurrence of one or more uncertain future events not wholly within the control of the entity; or a present obligation where it is not probable that an outflow of resources embodying economic benefits or service potential will be required to settle the obligation.

A contingent liability also arises in the rare circumstances where a present obligation exists but cannot be measured with sufficient reliability.

Contingent liabilities are not recognised in the accounts. They are disclosed unless the possibility of an outflow of resources embodying economic benefits or service potential is remote.

1.6. CONTRIBUTIONS FROM MEMBERS

The contributions from the Members of the Joint Undertakings (JU) form the funding of the JU and are treated as contributions from owners. An owner in this context does not mean an owner in the sense of owning shares of the JU (no shares are issued) but rather in the sense of political interest and governance of the JU by exercising the voting rights linked to these contributions.

1.6.1. Financial contributions

Financial contributions are contributions of Members made in cash in order to provide funding of the operational or administrative needs of the JU.

Horizon 2020 Programme:

Financial contributions are contributions of Members made in cash in order to provide funding of the operational or administrative needs of the JU. These financial contributions are recognised in net assets in the period in which the enforceable right to receive the payment was established.

Horizon Europe Programme:

- EU Contributions: In accordance with Article 19 of the Financial Framework Partnership Agreement (FFPA) 2020-2027, the JU receives from the European Union a pre-financing payment for the implementation of the Horizon Europe Framework Programme.
- According to the Specific Guidance¹⁷ for the accounting of the EU cash contributions received by the Joint Undertakings under FFPA related to MFF 2021-2027, the contribution payments done by the EU for the Horizon Europe Programme are accounted as 'Contributions in cash to be validated'. During the Final accounting closure, the JU should, on the basis of the payment's implementation report, determine the amount of operating and administrative expenditure that have been covered from the EU financial contributions to the Horizon Europe Programme. In the accounting of the JU the underlying amount should be, for the purpose of the preparation of the final financial statements, transferred from the provisional payments to the net assets of the JU (cut-off procedure). It will be qualified as final payments and formally transferred to the net assets once the Commission has accepted the Consolidated Annual Activity Report – AAR (Art. 19.2 FFPA)
- Private (Industry Members) contributions: financial contributions are contributions made in cash in order to provide funding of the administrative needs of the JU. These financial contributions are recognised in net assets in the period in which the enforceable right to receive the payment was established.

¹⁷ Ares(2022)6810956 – 03/10/2022 : Specific Guidance: Accounting for EU cash contributions received by Joint Undertakings under the Financial Framework Partnership Agreement related to MFF 2021-2027

1.6.2. In-kind contributions

Members other than the EU (i.e. 'Private Members') can also contribute resources other than cash, e.g. laboratory equipment, specialised staff, etc. These in-kind contributions consist of the costs incurred by Private Members in implementing indirect actions.

The Regulation distinguishes between two types of in-kind contributions: (1) In-kind contributions to operational activities (IKOP) and (2) in-kind contributions to additional activities (IKAA).

The IKOP represents in-kind contributions made to the JU linked to its work plan and co-financed by the EU. The IKOP is recognised in net assets of the JU in the period when the conditions for Members' contributions stipulated by the Regulation are met.

As IKOP calculated from periodic cost claims of projects is not automatically recorded in the statement of financial performance, at year-end, this incurred IKOP as well as IKOP not yet reported (via received costs claims) is estimated and recorded as other liabilities ('Contributions of Members to be validated').

The EU makes available the cash contributions in advance (until the payments reach the 90%), providing the beneficiaries with sufficient level of funds to implement the program activities; while the in-kind contributions provided by the private members can be verified and recognised only after the activities are concluded, reported and certified.

The EU cash contributions are validated and recognised in the accounts of the JU when paid to the JU (or based on the payments processed by the JU, in case of HE, see point 2.9) at the moment of the payments to the project, providing the consortia with cash up front to finance the project implementation, while members' in-kind contributions are only recognised after validation of the costs incurred and declared. Consequently, due to this time gap, during the program implementation the amounts of contributions recognised per member category (EU and private members) differ significantly from each other. This gap between the recognised amount of EU cash contributions on one hand and in-kind contributions on the other hand will be closed as the program is approaching the finalisation stage.

Due to major simplifications introduced in H2020 programme (which continue to be applied for Horizon Europe too), the certification for IKOP is based on the CFS¹⁸ certificate (or in some cases based on ex-post audit results) for the total eligible project costs. The certificates for IKOP are only due to be submitted to the JU after the end of the last project reporting period. This time difference is a cause of a major delay between the time when the IKOP balances are committed (upon signature of the grant) until they could be validated and recognised in net assets of the JU.

The validation and recognition of the IKOP for H2020 is still ongoing, while the recognition and certification of the Horizon Europe IKOP balances would only start later on in the programme. The committed amounts and estimates for the entire IKOP balances for both programmes are presented in the annual activity report of the JU in details.

The IKAA relates to contributions linked to implementing additional activities, included in the annual additional activities plan annexed to the main part of the work programme, that does not receive financial support from the joint undertaking but contributes to its objectives.

Because the outflow of resources related to those activities is outside of the control of the JU, these contributions are not recognised in the financial statements of the JU. However, to provide a complete picture of the operational activities related to the JU they are still disclosed as additional information in the notes.

¹⁸ CFS: Certificate on Financial Statements

2. NOTES TO THE BALANCE SHEET

ASSETS

2.1. INTANGIBLE ASSETS

	TOTAL
Gross carrying amount at 31.12.2022	118,393.46
Additions	-
Gross carrying amount at 31.12.2023	118,393.46
Accumulated depreciation at 31.12.2022 - ()	(114,423.88)
Depreciation charge for the year - ()	(2,979.54)
Accumulated depreciation at 31.12.2023 - ()	(117,403.42)
NET CARRYING AMOUNT AT 31.12.2023	990.04
NET CARRYING AMOUNT AT 31.12.2022	3,969.58

The above amounts relate primarily to computer software with amortisation rate of 25%.
No new entries in intangible assets in 2023.

2.2. PROPERTY, PLANT AND EQUIPMENT

Property, plant and equipment are tangible assets that are held for use in the production or supply of goods or services, for rental to others, or for administrative purposes, and are expected to be used during more than one reporting period.

	Plant and equipment	Furniture and vehicles	Computer hardware	Other	TOTAL
Gross carrying amount at 31.12.2022	153,626.92	61,820.86	224,398.43	48,436.67	488,282.88
Additions	-	1,232.16	9,336.80	-	10,568.96
Disposals	-	(1,431.00)	-	-	(1,431.00)
Gross carrying amount at 31.12.2023	153,626.92	61,622.02	233,735.23	48,436.67	497,420.84
Accumulated depreciation at 31.12.2022 - ()	(93,767.03)	(44,475.62)	(187,139.89)	(26,640.19)	(352,022.73)
Depreciation charge for the year - ()	(28,163.85)	(5,497.65)	(18,676.60)	(4,843.67)	(57,181.77)
Disposals	-	1,013.62	-	-	1,013.62
Accumulated depreciation at 31.12.2023 - ()	-121,930.88	-48,959.65	-205,816.49	-31,483.86	-408,190.88
NET CARRYING AMOUNT AT 31.12.2023	31,696.04	12,662.37	27,918.74	16,952.81	89,229.96
NET CARRYING AMOUNT AT 31.12.2022	59,859.89	17,345.24	37,258.54	21,796.48	136,260.15

Assets additions and disposals of equipment made in 2023 are at the standard level of the Joint Undertaking's policy for equipment replacement. All disposed assets were fully depreciated at the time of the disposal.

2.3. PRE-FINANCING

Pre-financing is a payment intended to provide the beneficiary with a cash advance, i.e. a float. It may be split into a number of payments over a period defined in the particular underlying contract, decision, agreement or basic legal act.

	31.12.2023	31.12.2022
Long term pre-financing	249,580,601.80	64,904,581.37
Short term pre-financing	56,677,596.36	46,252,801.52
Total	306,258,198.16	111,157,382.89

Short-term and long-term pre-financing covers programs as Horizon 2020, Horizon Europe and RePowerEU.

Long-term prefinancing distribution per program is:

- 20.283.895,71 EUR for Horizon 2020
- 209.865.942,68 EUR for Horizon Europe
- 19.430.763,41 EUR for RePowerEU.

For all pre-financing amounts open at 31 December 2023 a case-by-case assessment has been performed and all the pre-financing that was considered unlikely to be cleared in the course of 2024 was classified as non-current pre-financing.

The overall high amount of the open pre-financing can be explained by the fact that according to the Horizon 2020 and Horizon Europe rules, the incurred costs (both actual and estimated) are only cleared against pre-financing when the amounts paid to the beneficiary reach 90% of the grant agreement amount. In addition, only the amount exceeding this threshold is cleared.

The outstanding pre-financing presented under this heading is net of estimated (cut-off) expenses for ongoing projects without validated costs on 31 December 2023. The clearing of pre-financing with year-end (cut-off) adjustments amounted to 300.969kEUR (2022: 133.203kEUR). The remaining portion of the cut off expenses is recorded in accrued charges (see note **2.8.**).

The increase of both the long and short term prefinancing reflects the operational development for the year 2023, where under Horizon Europe a significant number of new projects have been launched and pre-financed compared to 2022 (66 pre-financing was paid in 2023, compared to the 14 in 2022).

2.4. EXCHANGE RECEIVABLES & NON-EXCHANGE RECOVERABLES

Exchange transactions are transactions in which the entity receives assets or services, or has liabilities extinguished, and directly gives approximately equal value (primarily in the form of goods, services or use of assets) to the other party in exchange. Non-exchange transactions are transactions in which an entity either receives value from another entity without directly giving approximately equal value in exchange or gives value to another entity without directly receiving approximately equal value in exchange.

	31.12.2023	31.12.2022
Recoverables from non-exchange transactions		
Central treasury liaison accounts	90,289,250.17	47,024,465.90
	90,289,250.17	47,024,465.90
Receivables from exchange transactions		
Customers	394,710.75	2,541.63
Receivables from members and partners	5,993.18	7,400.61
Other	2,139.05	19,439.64
	402,842.98	29,381.88
Total	90,692,093.15	47,053,847.78

The highest amount under this heading relates to Central treasury liaison (intercompany) accounts with the Commission which represent the virtual bank accounts. As for most of the Joint undertaking, the treasury remains in the Commission's treasury system. Because of the Joint Undertaking does not have any bank account, all payments and receipts are processed via the Commission's treasury and registered on these intercompany accounts. The ending balance of this heading is thus the result of the incoming and outgoing payments and represents the funds available for the joint undertaking.

The customers balances are mainly related to recognised receivables deriving from ex-post audit findings.

2.5. CASH AND CASH EQUIVALENTS

Payments and receipts are processed via the Commission's treasury system and registered on liaison accounts, which are presented under heading 'recoverables from non-exchange transactions' (see 2.4). As the treasurer remains the Commission, the joint undertaking does not hold any cash or cash equivalent.

LIABILITIES

2.6. PROVISIONS

Provisions are recognised when the entity has a present legal or constructive obligation towards third parties as a result of past events, it is more likely than not that an outflow of resources will be required to settle the obligation, and the amount can be reliably estimated. Provisions are not recognised for future operating losses. The amount of the provision is the best estimate of the expenditure expected to be required to settle the present obligation at the reporting date. Where the provision involves a large number of items, the obligation is estimated by weighting all possible outcomes by their associated probabilities ('expected value' method).

	31.12.2023	31.12.2022
Short-Term provisions	-	-

At 31 December 2023 the joint undertaking did not have any liabilities raising provisions.

2.7. PAYABLES AND OTHER LIABILITIES

Payables are liabilities to pay for goods or services that have been received or supplied and (unlike accrued charges) have already been invoiced or formally agreed with the supplier. Payables can relate to both exchange transactions (such as the purchase of goods and services) and non-exchange transactions (e.g. cost claims from beneficiaries of grants, pre-financing or other EU funding).

	31.12.2023	31.12.2022
Contribution in kind from Members to be validated	49,689,327.72	57,969,866.40
Payables to Participant Guarantee Fund	-	3,532,695.28
Suppliers	10,807,668.77	15,644,938.89
Contribution in cash to be validated	61,100,570.74	33,039,712.30
Public bodies and other current payables	1,020,829.40	788,118.42
Sundry payables	26.39	0.02
Total	122,618,423.02	110,975,331.31

Included under the heading 'Contribution in-kind to be validated' are the in-kind contributions from Members relating to on-going or ended projects, with validated interim cost claims (without certificate, since the CFS is received together with the final period) or without a validated cost statement at 31 December 2023. According to the rules applicable to validation of in-kind contributions in Horizon 2020 and Horizon Europe, the in-kind contributions can be only entered in net assets when the underlying costs have been certified by an audit and the amount has been accepted (validated) by the JU director. Until then, the estimated in-kind contributions are presented under other liabilities. The contributions are estimated on a case-by-case basis using the best available information on the projects at 31 December 2023: the in-kind contributions estimated based on cost claims received but not validated amounted to kEUR 29 351 (kEUR 39 561 in 2022). The in-kind contributions based on estimates provided by the coordinators (or based on pro rata if no other

information is available) amounted to kEUR 20 338 (kEUR 18 409 in 2022). The estimated EU contributions related to those projects are included under accrued charges (see note **2.8**).

After validation of the contributions through the Executive Director, the amounts will be booked to Net Assets and presented as Contribution received from members (Notes **2.9**).

The 'contributions in cash to be validated' are the received but unspent EC financial contributions to the Horizon Europe Programme (Notes **1.6.1**). The increase in the closing balance is mainly due to the projects which were planned to be granted in 2023, but the pre-financing could be paid only at the beginning of 2024.

2.8. ACCRUED CHARGES

Accruals are liabilities to pay for goods or services that have been received or supplied but (unlike payables) have not yet been invoiced or formally agreed with the supplier. They include amounts due to employees (e.g. accruals for untaken holidays). The calculation of accruals is based on the open amount of budgetary commitments at year-end. The portion of the estimated accrued charges relating to pre-financing paid has been recorded as a reduction of the pre-financing amounts.

	31.12.2023	31.12.2022
Accrued charges	39,123,975.09	49,915,404.59

The estimated operational expenses are calculated for on-going or ended projects without a validated cost statement, where 2023 expense was estimated on a case-by-case basis, using the best available information about the projects at 31 December 2023. The estimations were carried out asking directly the beneficiaries about their best estimation of expenses incurred at the reporting date. Only in the few cases where this information was not received a pro-rata temporis method was used. The portion of the estimated accrued charges which relates to pre-financing paid has been recorded as a reduction of the pre-financing amounts (see note 2.3). The decrease in clearing of pre-financing with accrued charges resulted into an increase of "simple" accrued charges included under this heading.

NET ASSETS

2.9. CONTRIBUTIONS FROM MEMBERS

The JU is funded by contributions from its members. Given their funding nature these contributions, which comprise both cash contributions and contributions in-kind, are recognised in the JU's net assets as 'Contributions from owners' once validated. The term 'owner' does not imply ownership of any shares of the JU (in fact no shares are issued) but reflects the specific governance of the JU where voting rights are allocated in accordance with the contributions made.

Programming period	2023			2022		
	Cash	in-Kind	Total	Cash	in-Kind	Total
FP7	428.258.887,88	476.939.549,19	905.198.437,07	425.243.683,23	469.129.818,03	894.373.501,26
Horizon 2020	652.619.445,88	68.829.607,05	721.449.052,93	587.867.986,68	51.741.236,76	639.609.223,44
Horizon Europe	258.435.252,85	-	258.435.252,85	46.960.287,70	-	46.960.287,70
RePowerEU	19.430.763,41	-	19.430.763,41	-	-	-
Total	1.358.744.350,02	545.769.156,24	1.904.513.506,26	1.060.071.957,61	520.871.054,79	1.580.943.012,40

- Under the 7th framework program (**FP7**), the joint undertaking implemented specific program cooperation themes for Energy, Nano sciences, nanotechnologies, materials and new production technologies, environment (including Climate change) and transport (including aeronautics) under the supervision of Directorate General Research, Technological development and Demonstration (DG RTD). The program was closed in 2023.
- Under the framework **Horizon 2020**, the joint undertaking participates to the implementation regulations linked to the secure, clean and efficient energy challenge and the smart, green and integrated transport challenge. The joint undertaking is also contributing to the objectives related to the fuel cells and Hydrogen, through the development of a strong, sustainable, and globally competitive fuel cells and hydrogen sector in the Union.
- Under the framework **Horizon Europe**, the joint undertaking contributes to EU Green Deal and Hydrogen Strategy through optimized funding of R&I activities. Its aim is to strengthen and integrate EU scientific capacity, in order to accelerate the development and improvement of advanced clean hydrogen applications.
- The joint undertaking contributes to the **RePowerEU** program which aims to rapidly reduce Europe dependence on Russian fossil fuels by fast forwarding the clean transition and joining forces to achieve a more resilient energy system and a true Energy Union.

Research and Innovation funding programme for 2007-2013 (FP7)

Under the FP7 programme all services in-kind (except the in-kind services provided by JRC) validated by the Executive Director of the JU are considered as in-kind contribution. Last activities under FP7 program have been closed in 2023.

Member	Commission			Industry Grouping		Research Grouping			Total	
	Cash	In-kind	TOTAL	Cash	In-kind	Cash	In-kind	Total	Cash	In-kind
Running costs contributions at 31.12.2022	9.253.384,54	1.808.299,27	11.061.683,81	15.328.792,74	-	2.554.800,29	-	17.883.593,03	27.136.977,57	1.808.299,27
Current year contributions	-	-	-	-	-	-	-	-	-	-
Running costs contributions at 31.12.2023	9.253.384,54	1.808.299,27	11.061.683,81	15.328.792,74	-	2.554.800,29	-	17.883.593,03	27.136.977,57	1.808.299,27
Operating costs contributions at 31.12.2022	398.106.705,66	17.298.820,00	415.405.525,66	-	298.574.620,24	-	151.448.078,52	450.022.698,76	398.106.705,66	467.321.518,76
Current year contributions	3.015.204,65	-	3.015.204,65	-	5.014.553,63	-	2.795.177,53	7.809.731,16	3.015.204,65	7.809.731,16
Operating costs contributions at 31.12.2023	401.121.910,31	17.298.820,00	418.420.730,31	-	303.589.173,87	-	154.243.256,05	457.832.429,92	401.121.910,31	475.131.249,92
TOTAL contributions at 31.12.2022	407.360.090,20	19.107.119,27	426.467.209,47	15.328.792,74	298.574.620,24	2.554.800,29	151.448.078,52	467.906.291,79	425.243.683,23	469.129.818,03
TOTAL contributions at 31.12.2023	410.375.294,85	19.107.119,27	429.482.414,12	15.328.792,74	303.589.173,87	2.554.800,29	154.243.256,05	475.716.022,95	428.258.887,88	476.939.549,19

Research and Innovation funding programme for 2014-2020 (Horizon 2020)

In line with the Horizon 2020 rules, only contributions from the members certified by an external auditor and validated by the Executive Director of the JU are considered in-kind contributions to the net assets. Estimated in-kind contributions, i.e. contributions for which no certifications have been received and/or this certification has not been validated by the Executive Director, are reported under other liabilities (see note **2.7**).

With regard to the Horizon 2020 programme, Council Regulation (EC) No 559/2014 distinguishes between Members (European Commission, Industry Grouping and Research Grouping) and non-members of the JU.

Member	Commission			Industry Grouping		Research Grouping			Total	
	Cash	In-kind	TOTAL	Cash	In-kind	Cash	In-kind	Total	Cash	In-kind
Running costs contributions at 31.12.2022	14.802.660,00	-	14.802.660,00	12.730.287,00	-	2.072.373,47	-	14.802.660,47	29.605.320,47	-
Current year contributions	3.405.524,46	-	3.405.524,46	2.928.751,04	-	476.773,36	-	3.405.524,40	6.811.048,86	-
Running costs contributions at 31.12.2023	18.208.184,46	-	18.208.184,46	15.659.038,04	-	2.549.146,83	-	18.208.184,87	36.416.369,33	-
Operating costs contributions at 31.12.2022	558.262.666,21	-	558.262.666,21	-	50.405.584,82	-	1.335.651,94	51.741.236,76	558.262.666,21	51.741.236,76
Current year contributions	57.940.410,34	-	57.940.410,34	-	15.872.848,95	-	1.215.521,34	17.088.370,29	57.940.410,34	17.088.370,29
Operating costs contributions at 31.12.2023	616.203.076,55	-	616.203.076,55	-	66.278.433,77	-	2.551.173,28	68.829.607,05	616.203.076,55	68.829.607,05
TOTAL contributions at 31.12.2022	573.065.326,21	-	573.065.326,21	12.730.287,00	50.405.584,82	2.072.373,47	1.335.651,94	66.543.897,23	587.867.986,68	51.741.236,76
TOTAL contributions at 31.12.2023	634.411.261,01	-	634.411.261,01	15.659.038,04	66.278.433,77	2.549.146,83	2.551.173,28	87.037.791,92	652.619.445,88	68.829.607,05

The difference that can be observed between the total contribution of the Union in one side, the total contribution from the Industry Grouping and Research Grouping is due to the different pattern of recognition in the Net Assets of the cash and in-kind contributions. While the cash is recognized as a contribution in the same year when amount receivable is established, the in-kind contributions are for the most part recognized in the net assets one year later after being provided due to the reporting and certification requirements. The in-kind contribution targets include the in-kind contributions from additional activities, for the status of the implementation see note **4.6**).

Research and Innovation funding programme for 2021-2027 (Horizon Europe / RePowerEU)

Member	Commission			Industry Grouping		Research Grouping			Total	
	Cash	In-kind	TOTAL	Cash	In-kind	Cash	In-kind	Total	Cash	In-kind
Running costs contributions at 31.12.2022	-	-	-	-	-	-	-	-	-	-
Current year contributions	-	-	-	-	-	-	-	-	-	-
Running costs contributions at 31.12.2023	-	-	-	-	-	-	-	-	-	-
Operating costs contributions at 31.12.2022	46.960.287,70	-	46.960.287,70	-	-	-	-	-	46.960.287,70	-
Current year contributions	211.474.965,15	-	211.474.965,15	-	-	-	-	-	211.474.965,15	-
Operating costs contributions at 31.12.2023	258.435.252,85	-	258.435.252,85	-	-	-	-	-	258.435.252,85	-
TOTAL contributions at 31.12.2022	46.960.287,70	-	46.960.287,70	-	-	-	-	-	46.960.287,70	-
TOTAL contributions at 31.12.2023	258.435.252,85	-	258.435.252,85	-	-	-	-	-	258.435.252,85	-

Member	Commission			Industry Grouping		Research Grouping			Total	
	Cash	In-kind	TOTAL	Cash	In-kind	Cash	In-kind	Total	Cash	In-kind
Operating costs contributions at 31.12.2022	-	-	-	-	-	-	-	-	-	-
Current year contributions	19.430.763,41	-	19.430.763,41	-	-	-	-	-	19.430.763,41	-
Operating costs contributions at 31.12.2023	19.430.763,41	-	19.430.763,41	-	-	-	-	-	19.430.763,41	-
TOTAL contributions at 31.12.2022	-	-	-	-	-	-	-	-	-	-
TOTAL contributions at 31.12.2023	19.430.763,41	-	19.430.763,41	-	-	-	-	-	19.430.763,41	-

According to the specific guidance issued by the EC Accounting Officer¹⁹ for the accounting of the EU cash contributions received under Horizon Europe program (and under RePowerEU, following the same rules), the accounting treatment of the EU contribution should align with Art. 19.1 of the Financial Framework Partnership Agreement (FFPA), defining that the Union contributions take form of provisional payments (“pre-financings”). Based on this new requirement, the JU determines, on the basis of the payment implementation report the amount of operating and administrative expenditure that have been covered from the EU financial contributions to the Horizon Europe Program and enters only this amount into the net assets. The unspent funds are booked among the liabilities as “Contributions in cash to be validated” (see note **2.7**).

¹⁹ Ares(2022)6810956 – 03/10/2022 : Specific Guidance: Accounting for EU cash contributions received by Joint Undertakings under the Financial Framework Partnership Agreement related to MFF 2021-2027

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The difference that can be observed between the total contribution of the Union and the total contribution from the Industry Grouping is due to the form of contributions: cash for the EU while mostly in-kind for the Industry; and the associated conditions for the recognition of the contributions in the net assets. As the condition for the cash (to be implemented by payments) is fulfilled first, mostly due to the provision of pre-financing for the grant agreements, it is usual to see a higher contribution from the EU in the net assets section in the first years of the programme implementation when the grant agreements are signed and the prefinancing is paid to the beneficiaries. The gap will be gradually reduced as the projects are implemented, and the related in-kind contributions can be reported and validated. The in-kind contribution targets include the in-kind contributions from additional activities, for the status of the implementation see note **4.6**).

3. NOTES TO THE STATEMENT OF FINANCIAL PERFORMANCE

REVENUE

NON-EXCHANGE REVENUE

Revenue from non-exchange transactions relates to transactions where the transferor provides resources to the recipient entity without the recipient entity providing approximately equal value directly in exchange. The heading mainly includes amounts received from the Commission during the year and recoveries of operational expenses.

3.1. RECOVERY OF EXPENSES

The revenue resulting from recovery of expenses refers to operational expenses recovered from beneficiaries during the year and adjustments coming from audits that will be collected in the following year.

	2023	2022
Recovery of expenses	2.422.224,07	1.563.445,88

In 2023 the JU recovered negative adjustments deriving from ex-post audit findings and from negative adjustments issued by the beneficiaries related to previous periods' claims.

3.2. OTHER NON-EXCHANGE REVENUE

	2023	2022
Other	-	-

EXCHANGE REVENUE

3.3. REVENUE FROM EXCHANGE TRANSACTIONS

The revenue from exchange transactions and events relates to following types of transactions: rendering of services; sales of goods; and the use by others of entity assets yielding interest.

	2023	2022
Recovery of administrative expenses	12.489,05	35.732,12
Total	12.489,05	35.732,12

This heading includes small recoveries from other institutions for the provided administrative services.

EXPENSES

3.4 OPERATIONAL COSTS

Included under this heading are operational expenses related to projects that were carried out in the current year. The part of the operational costs related to on-going projects without any validated cost claims (or equivalent) available on 31 December was estimated using the best information available at the time of preparation of the annual accounts. The estimation is based on the case-by-case assessment of completion which ensures that only costs that reflect the services or work performed by 31 December are included in the operational costs of the year. Depending on the availability of information at the time of preparation of the annual accounts, the estimates are based on costs incurred to date as a proportion of the estimated total costs of the projects ("pro-rata temporis").

The break-down of the operational costs between operational costs incurred on the basis of validated cost claims (or equivalent) and estimated operational costs is given in the table below:

	2023	2022
Operational costs: validated in-kind contributions	24,966,669.72	19,891,157.29
Operational costs: estimated in-kind contributions	(8,280,538.68)	6,643,588.91
Total operational costs from in-kind contributions	16,686,131.04	26,534,746.20
Operational costs: validated EU contributions	94,734,837.44	71,037,763.05
Operational costs: estimated EU contributions	(29,480,562.57)	25,432,667.72
Total operational costs from EU contributions	65,254,274.87	96,470,430.77
Total	81,940,405.91	123,005,176.97

The overall reduction of operational costs is due to the phasing out of the H2020 projects, with a decrease in the estimation of in-kind to be validated and the EU funded operational cost compared to the previous year. The variation in operational expenses is explained by the diverse composition of projects by the end of the year, which is affected by factors such as the types of calls launched, the number of projects concluded, and the level of execution of each project.

3.5 STAFF COSTS

This heading includes the expenses for salaries, allowances and other employment -related benefits. Based on the service level agreement between the JU and the Commission, the calculations of staff -related costs is carried out by the Commission's Office for Administration and Payment of Individual Entitlements (also known as the Paymaster's Office - PMO). The pensions of the JU staff members are covered by the Pension Scheme of European Officials. This pension scheme is a defined benefit plan, i.e. the amount of benefit an employee will receive on retirement depends on several factors, the most important of which is years of service. Both the JU staff, the JU and the EU budget contribute to the pension scheme, with the contribution percentage being revised annually in line with the changes in the Staff Regulation governing the scheme. The cost to the EU Budget is not reflected in the JU accounts. Similarly, no provision related to the future pension payments is recognised in the annual accounts of the JU, as the obligation falls to the Commission.

As per Article 83a (2) of the Staff Regulations, the part paid by the JU shall correspond to the percentage share between a) the JU's revenues without the subsidy from the general budget, and b) its total revenues. To avoid disruptive variations over time, the JUs employer's pension contribution is calculated with a single percentage share for the whole duration of the JU. This single percentage was established on the basis of the EU and non-EU members' respective contributions, as foreseen in the JU's legal basis, with a correction and regularisation at the last year of existence of the JU. The contribution of Clean Hydrogen

Joint Undertaking was set as 2.9 % of the total pension scheme contributions. This contribution is accounted within staff costs.

In view of implementation problems and the principle of good administration, it was agreed between the Commission and the JUs that the provisions of Article 83a(2) are applied only to the JUs set up by the SBA and EuroHPC and not to those established under the previous Regulations. Given the late entry into force of the SBA at the end of November 2021, the applicability started as from 2022.

	2023	2022
Staff costs	3.337.901,67	3.359.274,02

The slight decrease is a combined effect of the yearly increase due to promotions, advancements in step and indexation which has been offset with cost decrease due to empty posts where the recruitments were ongoing.

3.6 FINANCE EXPENSES

	2023	2022
Interest expense on late payment of charges	2.366,64	-
Other financial expenses	-	-
Total	2.366,64	0,00

3.7 OTHER EXPENSES

Included under this heading are expenses of administrative nature such as external non-IT services, operating leasing expenses, communications and publications, training costs etc.

	2023	2022
Communications & publications	472.985,28	691.265,36
External IT services	491.042,95	402.850,57
External non-IT services	918.744,55	657.031,80
Rent expenses	358.298,22	353.207,33
Experts' expenses	511.280,89	740.012,06
Fixed asset depreciation and impairment	60.578,69	66.065,12
Missions	59.945,01	58.613,74
Other	14.268,47	14.579,27
Total	2.887.144,06	2.983.625,25

The decrease of Communications & publications expenses is mainly related to costs incurred for the organization of the Hydrogen Week. In 2022, costs for the Hydrogen Weeks 2021 and 2022 are booked, whereas in 2023 only that year is booked.

The increase of Other external non-IT services expenses is related to the use for the first time in 2023 of the Framework Contract for the Provision of Technical Services in Support of the Clean Hydrogen JU.

The decrease of experts' expenses is due to the number of evaluations performed: 2 in 2022 involving more than 100 experts compared to 1 in 2023 with only around 60 experts.

The operating lease expenses are related to the Clean Hydrogen JU building "White Atrium". Amounts committed to be paid during the remaining term of this lease contract include rent and related charges and are as follows:

	Future amounts to be paid			Total
	< 1 year	1- 5 years	> 5 years	
Buildings	382.468,16	-	-	382.468,16

The current lease agreement ends on 31/12/2024. The new procedure was concluded in 2023 with an award decision, the contract will be signed in 2024.

4. OTHER SIGNIFICANT DISCLOSURES

4.1. CONTINGENT ASSETS

	31.12.2023	31.12.2022
Contingent assets	-	63.149,81

The joint undertaking does not have any contingent assets in 2023.

4.2. CONTINGENT LIABILITIES

	31.12.2023	31.12.2022
Contingent liabilities	-	-

The joint undertaking does not have any ongoing legal cases raising contingent liabilities.

4.3. OUTSTANDING COMMITMENTS NOT YET EXPENSED

The outstanding commitments not yet expensed comprise the budgetary RAL ('Reste à Liquider') less related amounts that have been included as expenses in the current year's statement of financial performance. The RAL represents the open budgetary commitments for which payments and/or de - commitments have not yet been made. This is the normal consequence of the existence of multi -annual programmes.

	2023	2022
Outstanding commitment not yet expensed	282,181,757.87	287,377,061.66

4.4. IN-KIND CONTRIBUTIONS

According to both Council Regulation (EU) No 559/2014 and Council Regulation (EU) No 2021/2085, the members other than the Union shall provide in-kind contributions to the Joint Undertaking.

According to Art.2.(8) of the SBA: "in-kind contributions to operational activities' means contributions by private members, constituent entities or the affiliated entities of either, by international organisations and by contributing partners, consisting of the eligible costs incurred by them in implementing indirect actions less the contribution of that joint undertaking and of the participating states of that joint undertaking to those costs".

Consequently, in-kind contributions to operational activities are accounted for solely on the basis of eligible costs and reported and audited in accordance with the mechanism applicable to the specific grant agreement.

Such accounting on the basis of eligible costs will allow for the automated calculation of in-kind contributions to operational activities via the Horizon Europe IT tools (under development).

4.5. IN-KIND CONTRIBUTIONS IN ADDITIONAL ACTIVITIES (IKAA)

H2020 programme

Besides in-kind contributions in projects (IKOP), see notes 1.6.2 and 2.7, in accordance with Council Regulation (EU) 559/2014 of 6 May 2014 establishing the FCH 2 JU, members other than the Union shall provide under H2020 programme in-kind contributions of at least kEUR 285 000 over the period 2014–2024, consisting of the costs incurred by them in implementing additional activities outside the work plan of the FCH 2 Joint Undertaking, contributing to the objectives of the FCH Joint Technology Initiative.

The last Horizon 2020 reporting exercise for IKAA took place in 2021 with total certified IKAA for the entire H2020 programme 2014-2019 amounting to kEUR 1 039 050. Due to the high number of certified IKAA, there was no additional plan adopted for years 2021 & 2022, nor for the year 2023 for Horizon 2020.

The additional activities for H2020 programme consist of investments in the following main fields:

- Transportation (FC cars, FC buses, FC range extenders, material handling vehicles, Auxiliary Power Units for aviation and trucks);
- Transport Infrastructure (hydrogen refueling infrastructure, including on-site green H2 production);
- Hydrogen production (large scale green hydrogen production via electrolysis, hydrogen purification, power-to-hydrogen and storage of renewables);
- Heat and power equipment (distributed power generation FC applications, self-sufficient household systems, back-up systems, manufacturing facilities);
- Regulations, standards and education (energy storage roadmaps, including dissemination activities and awareness, commercialisation strategies, patents).

Further information on IKAA for H2020 is available in the annual activity reports of the FCH 2 JU and its successor, the Clean Hydrogen JU, published in the Clean Hydrogen JU website under:

https://www.clean-hydrogen.europa.eu/about-us/key-documents/annual-activity-reports_en

Horizon Europe programme

According to COUNCIL REGULATION (EU) 2021/2085 of 19 November 2021 establishing the Joint Undertakings under Horizon Europe, Hydrogen Europe Industry and Hydrogen Europe Research Members of the Clean Hydrogen Joint Undertaking have submitted their second Additional Activities Plan covering the period of 1 January 2023 – 31 December 2023 as an annex to the Annual Work Plan 2023. For the reporting of the annual additional activities plan annexed to the main part of the work programme, a scope of the additional activities was presented according to categories in line with the Article 78 of the COUNCIL REGULATION (EU) 2021/2085.

The Plan included Additional Activities for a total amount of EUR 904.78 million.

The private members shall report by 31 May each year at the latest to their respective governing board on the value of the in-kind contributions.

According to the Horizon Europe legal basis, a certificate on the in-kind contributions to additional activities (IKAA) must be provided for contributions of private members for activities contributing to the objectives the Clean Hydrogen Joint Undertaking.

For valuing these contributions, the costs shall be determined in accordance with the usual cost accounting practices of the entities concerned, to the applicable accounting standards of the country where the entity is established, and to the applicable International Accounting Standards and International Financial Reporting Standards. The costs shall be certified by an independent audit body appointed by the entity.

The purpose of the IKAA certificate is to provide the EU granting authority with sufficient information on the value of private contributions from the members of the Clean Hydrogen Joint Undertaking other than the Union who shall make or arrange for their constituent or affiliated entities to make a total contribution of at least EUR 1 000 000 000.

Due to the restructuring of the partnership between Hydrogen Europe, Hydrogen Europe Research and Clean Hydrogen Partnership (former FCH Joint Undertaking), and because the new Partnership was not in legal existence during 2021, no IKAA was reported in 2021.

At the moment of establishing the annual accounts for the Clean Hydrogen JU, IKAA 2022 reporting was completed, yet the certification process for the IKAA 2023 was ongoing. The value of IKAA certified contributions for 2023 will be reported to the Clean Hydrogen JU Governing board throughout the year 2024.

The total value of the certified **IKAA contributions for the year 2022 is kEUR 240 429.09**, and the reported 2022 IKAA not certified at 31/12/2023 amounts to kEUR 245 128.51. No further 2022 IKAA certificates are expected to be received, as the 2022 IKAA reporting was closed at the end of 2023.

In the moment of establishing the annual accounts for the Clean Hydrogen JU, the certification process for the IKAA 2023 were launched and was still ongoing. The total value of the certified contributions for the financial year 2023 reported to the Clean Hydrogen JU as of 31 May 2024 were at the amount of **kEUR 444 905.47**.

4.6. CONTRIBUTIONS PER PROGRAMME

	Members' contributions (as per Funding regulation)				
	EU cash	Private members' cash	Private members' IKOP	Private members' IKAA	Total (f)=(a)+(b)+ (c)+(d)
	(a)	(b)	(c)	(d)	
	FP7	470.000.000,00	470.000.000,00		N/A
H2020	665.000.000,00	95.000.000,00		285.000.000,00	1.045.000.000,00
Horizon Europe	1.000.000.000,00	30.193.000,00	969.807.000,00		2.000.000.000,00
RePowerEU	200.000.000,00	N/A	N/A	N/A	200.000.000,00

	Members contributions as of 31.12.2023									
	EU cash validated	IKOP EU	EU cash not validated (PF)	Other members cash	Other members IKOP validated	Other members IKOP reported but not validated	IKAA certified	IKAA reported but not certified	Total	Achievement rate
FP7	410,375,294.85	19,107,119.27	0.00	17,883,593.03	457,832,429.92	0.00	N/A	N/A	905,198,437.07	96%
H2020	634,411,261.01	N/A	0.00	18,208,184.87	68,829,607.05	47,660,418.65	1,039,050,000.00	0.00	1,808,159,471.58	173%
Horizon Europe	258,435,252.85	N/A	44,531,334.15	0.00	0.00	1,216,545.47	685,334,561.81	245,128,513.94	1,234,646,208.22	62%
RePowerEU	19,430,763.41	N/A	16,569,236.59	0.00	0.00	812,363.60	N/A	N/A	36,812,363.60	18%

H2020 program : The Council regulation establishing the FCH 2 JU explicitly mentioned the minimum target leverage effect over the whole 2014–2020 period as 0.57. Expressed in terms of a leverage effect ($1,126 / 634 = 1.77$), the certified in-kind contributions and received cash contributions far more exceeded that initial target (three times higher than anticipated).

HE program: The Council Regulation for Horizon Europe does not establish leverage effect targets. However, it does establish an overall objective for 1:1 matching of the Union financial contribution to the Clean Hydrogen Joint Undertaking of up to EUR 1 billion with a total contribution of up to EUR 1 billion of private contributions. The figures for 2023 indicate promising progress toward this goal, with a ratio of 1:0.93.

4.7. RELATED PARTIES

The related parties of the JU and the key management personnel of these entities. As transactions between the JU and these parties take place as part of the normal operations of the JU and on terms and conditions that are normal for such transactions, no specific disclosures are required.

4.8. KEY MANAGEMENT ENTITLEMENTS

The Director, or head of entity, is remunerated in accordance with the Staff Regulations of the European Union, which establish the rights and obligations of all officials of the EU. The Staff Regulations are published on the Europa website.

	31.12.2023	31.12.2022
Executive Director (ad interim)	AD14	AD14

The contract of the former Executive Director, Bart Biebuyck came to an end on 15 May 2023. By Governing Board Decision of the same date, Mirela Atanasiu was appointed Executive Director ad interim as of 16 May 2023. At its meeting of 27 February 2024, the Clean Hydrogen JU Governing Board appointed Valérie Bouillon-Delporte as new Executive Director as from 01 June 2024.

4.9. OTHER EVENTS

RUSSIA-UKRAINE WAR

H2020 programme

For the Clean Hydrogen Joint Undertaking, there is no direct impact on the existing grant agreements, as there is no funding being provided to Russian or Belarus entities, and there were no participations of these countries in the H2020 program.

There has been one participation of the Ukrainian research institution in our H2020 programme, with the entire funding already validated and paid prior to the start of the conflict.

Horizon Europe programme

For the Horizon Europe programme, in the calls launched, we are fully in line with the EC guidance towards participations from these affected regions.

The participation is limited: only one Ukrainian entity participates in a project starting in 2023 (pre-financing paid in 2023) and four Ukrainian entities participate in 3 projects starting in 2024 (pre-financing paid in 2023).

4.10. OTHER INFORMATION

BREXIT - United Kingdom joins Horizon Europe programme

As of 1 January 2024, the United Kingdom became an associated country to Horizon Europe. Its researchers are able to participate in this research and innovation programme of the EU on the same terms as researchers from other associated countries and have access to Horizon Europe funding.

4.11. EVENTS AFTER REPORTING DATE

Not applicable.

4.12. OBSERVATIONS ON MANAGEMENT AND CONTROL SYSTEMS

Not applicable.

5. FINANCIAL RISK MANAGEMENT

5.1. TYPES OF RISK

Market risk is the risk that the fair value or future cash flows of a financial instrument will fluctuate, because of variations in market prices. Market risk embodies not only the potential for loss, but also the potential for gain. It comprises currency risk, interest rate risk and other price risk (the entity has no significant interest rate risk and other price risk).

(1) Currency risk is the risk that the fair value or future cash flows of a financial instrument will fluctuate because of changes in foreign exchange rates. This risk arises from the change in the price of a foreign currency against the functional currency of an entity.

(2) Interest rate risk is the risk that the fair value or future cash flows of a financial instrument will fluctuate because of changes in market interest rates. As an example, higher interest rates will lead to lower prices of fixed rate bonds (other things equal), and vice versa. The entity does not have any securities thus it is not exposed to the interest rate risk. **Credit risk** is the risk of loss due to a debtor's non-payment or other failure to meet a contractual obligation. The default events include a delay in repayments, and bankruptcy.

Liquidity risk is the risk that an EU entity will encounter difficulty in meeting obligations associated with financial liabilities that are settled by delivering cash or another financial asset.

5.2. CURRENCY RISKS

At the end of the year, the financial assets are composed of exchange receivables. The financial liabilities are composed of accounts payable. Their ending balances are quoted in EUR, the entity is thus not exposed to currency risk.

5.3. CREDIT RISK

At the end of the year, the financial assets comprise exchange receivables that are not past due for more than 30 days. As no credit loss is expected during the lifetime of those receivables the entity is not exposed to any significant credit risk.

5.4. LIQUIDITY RISK

The financial liabilities are mainly composed of accounts payable. All the accounts payable have remaining contractual maturity of less than 1 year.

THE BUDGET IMPLEMENTATION REPORTS AND EXPLANATORY NOTES

1. BUDGETARY PRINCIPLES AND STRUCTURE

1.1. BUDGETARY PRINCIPLES

The establishment and implementation of the budget of Clean Hydrogen is governed by the following basic principles set out in the Chapter 2 of the Financial Rules of the joint undertaking:

Principles of unity and budget accuracy

This principle means that no revenue shall be collected and no expenditure effected unless booked to a line in the budget of the joint undertaking. No expenditure may be committed or authorised in excess of the appropriations authorised by the budget. An appropriation may be entered in the budget only if it is for an item of expenditure considered necessary.

Principle of annuality

The appropriations entered in the budget shall be authorised for a financial year which shall run from 1 January to 31 December.

Principle of equilibrium

Revenue and payment appropriations shall be in balance.

Principle of unit of account

The budget shall be drawn up and implemented in euro and the accounts shall be presented in euro.

Principle of universality

Total revenue shall cover total payment appropriations and all revenue and expenditure shall be entered in full without any adjustment against each other.

Principle of specification

Appropriations shall be earmarked for specific purposes at least by title and chapter.

Principle of sound financial management

Appropriations shall be used in accordance with the principle of sound financial management, namely in accordance with the principles of economy, efficiency and effectiveness.

Principle of economy

The principle of economy requires that the resources used by the JU in the pursuit of its activities shall be made available in due time, in appropriate quantity and quality and at the best price.

Principle of efficiency

The principle of efficiency concerns the best relationship between resources employed and results achieved.

Principle of effectiveness

The principle of effectiveness concerns the attainment of the specific objectives set and the achievement of the intended results.

Principle of internal control

The principle of internal control of budget implementation means that the JU budget shall be implemented

in compliance with effective and efficient internal control in order to provide reasonable assurance of achieving effectiveness, efficiency and economy of operations; reliability of reporting; safeguarding of assets and information; prevention, detection, correction and follow-up of fraud and irregularities; inadequate management of the risks relating to the legality and regularity of the underlying transactions, taking into account the multi-annual character of the programmes as well as the nature of the payments concerned.

Principle of transparency

The budget shall be established and implemented and the accounts presented in accordance with the principle of transparency. The budget and any amending budgets shall be published on the internet site of the joint undertaking within four weeks of their adoption and shall be transmitted to the Commission and the Court of Auditor.

1.2. STRUCTURE AND PRESENTATION OF THE BUDGET

Since 1 January 2015, no distinction between non-dissociated and dissociated appropriations is made. All appropriations follow the dissociated logic.

Following the provisions of the Financial rules of the joint undertaking, the budget accounts shall consist of a statement of revenue and a statement of expenditure. The budget is distributed in the following titles:

Title 1

Budget lines relating to staff expenditure such as salaries and allowances for personnel working with the joint undertaking. It also includes recruitment expenses, staff missions, expenses for the socio-medical infrastructure and representation costs.

Title 2

Budget lines relating to all infrastructure, equipment and miscellaneous administrative expenditure.

Title 3

Budget lines providing for the implementation of the activities and tasks assigned to the joint undertaking in accordance with its establishing Council Regulation.

1.3. RESULT OF THE IMPLEMENTATION OF THE BUDGET

EUR '000

	Title	2023	2022
Revenue		326 814	111 455
of which:			
Subsidy	2	326 814	111 455
Expenditure		(280 034)	(77 438)
of which:			
Staff expenditure	1	(3 644)	(3 804)
Administrative expenditure	2	(1 993)	(2 128)
Operational expenditure	3	(274 397)	(71 506)
Exchange rate differences		-	0
Budget result		46 780	34 017

1.4. RECONCILIATION OF ECONOMIC RESULT WITH BUDGET RESULT

EUR

	2023	2022
ECONOMIC RESULT OF THE YEAR	(85,733,105.16)	(127,748,898.24)
Adjustment for accrual items (items not in the budgetary result but included in the economic result)		
In-kind contributions validated in the year	24,898,101.45	19,235,775.56
Adjustments for accrual cut-off (net)	(38,059,672.13)	32,497,524.64
Unpaid invoices at year end but booked in expenses	6,081,176.76	22,121,075.94
Depreciation, amortization and impairment of intangible and tangible assets	60,578.69	66,065.12
Movement in provisions	-	-
Recovery orders issued in the year and not yet cashed	(17,395.12)	(2,541.63)
Correction of recovery orders issued last year	-	-
Pre-financing given in previous year and cleared in the year	42,185,779.62	23,805,018.16
Payments made from carry-over of payment appropriations		
Other individually immaterial	(0.01)	(47.26)
Adjustment for budgetary items (item included in the budgetary result but not in the economic result)		
Members' cash contributions collected in the year	326,733,250.85	110,964,204.36
Asset acquisitions (less unpaid amounts)	(10,568.95)	(21,423.54)
Payments made from non-budget lines	-	(24,696.94)
New pre-financing paid in the year and remaining open as at 31 December	(229,362,236.89)	(46,960,287.70)
New pre-financing received in the year and remaining open as at 31 December		
Entitlements established in previous year and cashed in the year	4,243.48	85,372.11
Entitlements established on balance sheet accounts and cashed in the year		
Payment appropriations carried over to next year		
Cancellation of unused carried over payment appropriations from previous year		
Adjustment for carry-over of assigned revenue appropriations from previous year		
Other individually immaterial		
BUDGET RESULT OF THE YEAR	46,780,152.59	34,017,140.58

2. IMPLEMENTATION OF BUDGET REVENUE

EUR
'000

	Item	Income appropriations		Entitlements established			Revenue				Out-standing
		Initial budget	Final budget	Current year	Carried over	Total	On entitlements of current year	On entitlements carried over	Total	%	
		1	2	3	4	5=3+4	6	7	8=6+7	9=8/2	10=5-8
2001	European Commission subsidy for operational expenditure (7th Framework Programme)	3,015	3,015	3,015	0	3,015	3,015	0	3,015	100%	0
2002	European Commission subsidy for administrative expenditure	3,335	3,406	3,406	0	3,406	3,406	0	3,406	100%	0
2003	Hydrogen Europe contribution for administrative expenditure	2,868	2,929	2,929	0	2,929	2,929	0	2,929	100%	0
2004	Hydrogen Europe Research contribution for administrative expenditure	467	477	477	0	477	477	0	477	100%	0
2005	European Commission subsidy for operational expenditure (Horizon 2020)	57,940	57,940	57,940	0	57,940	57,940	0	57,940	100%	0
2006	European Commission subsidy for operational expenditure (Horizon Europe)	258,056	258,967	258,967	0	258,967	258,967	0	258,967	100%	0
2007	JU revenues	0	0	138	3	141	78	3	81	-	60
Total Chapter 20		325,682	326,733	326,872	3	326,874	326,812	3	326,814	100%	60
Total Title 2		325,682	326,733	326,872	3	326,874	326,812	3	326,814	100%	60
3020	Reactivation of appropriations operational expenditure (2021)	316	316							-	
3021	Reactivation of appropriations administrative expenditure (2021)	518	518							-	
3022	Reactivation of appropriations administrative expenditure (2022)	0	159							-	
Total Chapter 30		834	993							-	
Total Title 3		834	993							-	
GRAND TOTAL		326,516	327,727	326,872	3	326,874	326,812	3	326,814	100%	60

3. IMPLEMENTATION OF BUDGET EXPENDITURE

Breakdown & changes in commitment appropriations

Breakdown & changes in commitment appropriations – Title 1

EUR '000

	Item	Budget appropriations				Additional appropriations			Total appropr. available
		Initial adopted budget	Amending budgets	Transfers	Final adopted budget	Reactivated appropriations	Assigned revenue	Total	
		1	2	3	4=1+2+3	5	6	7=5+6	
1101	Salaries and allowances: of which establishment plan posts	3.548	0	-15	3.533	127	12	139	3.672
1102	Salaries and allowances: of which external personnel	266	0	0	266	0	0	0	266
Total Chapter 11		3.814	0	-15	3.799	127	12	139	3.938
1200	Expenditure related to staff recruitment	5	0	0	5	0	0	0	5
Total Chapter 12		5	0	0	5	0	0	0	5
1300	Missions expenses	60	0	15	75	0	1	1	76
Total Chapter 13		60	0	15	75	0	1	1	76
1401	Sociomedical infrastructure	15	0	0	15	0	0	0	15
1402	Training	30	0	0	30	0	0	0	30
Total Chapter 14		45	0	0	45	0	0	0	45
1500	External services	166	0	0	166	0	0	0	166
Total Chapter 15		166	0	0	166	0	0	0	166
1600	Receptions, events and representation	4	0	0	4	0	0	0	4
Total Chapter 16		4	0	0	4	0	0	0	4
Total Title 1		4.094	0	0	4.094	127	13	140	4.234

Breakdown & changes in commitment appropriations – Title 2

EUR '000

	Item	Budget appropriations				Additional appropriations			Total approp. available
		Initial adopted budget	Amending budgets	Transfers	Final adopted budget	Reactivated appropriations	Assigned revenue	Total	
		1	2	3	4=1+2+3	5	6	7=5+6	
2000	Rental of building and associated costs	436	0	0	436	0	4	4	440
Total Chapter 20		436	0	0	436	0	4	4	440
2100	Information, communication technology and data processing	445	0	0	445	0	18	18	463
Total Chapter 21		445	0	0	445	0	18	18	463
2200	Movable property and associated costs	20	0	0	20	0	0	0	20
Total Chapter 22		20	0	0	20	0	0	0	20
2300	Current administrative expenditure	9	0	0	9	0	0	0	9
Total Chapter 23		9	0	0	9	0	0	0	9
2400	Postage / telecommunications	11	0	0	11	0	0	0	11
Total Chapter 24		11	0	0	11	0	0	0	11
2500	Meeting expenses	50	0	0	50	0	0	0	50
Total Chapter 25		50	0	0	50	0	0	0	50
2600	Information and publishing	755	0	0	755	0	0	0	755
Total Chapter 26		755	0	0	755	0	0	0	755
2700	Running costs in connection with operational activities	1.241	0	0	1.241	300	0	300	1.541
Total Chapter 27		1.241	0	0	1.241	300	0	300	1.541
Total Title 2		2.967	0	0	2.967	300	22	322	3.289

Breakdown & changes in commitment appropriations – Title 3

EUR '000

		Budget appropriations				Additional appropriations			Total approp. available
	Item	Initial adopted budget	Amending budgets	Transfers	Final adopted budget	Reactivated appropriations	Assigned revenue	Total	
		1	2	3	4=1+2+3	5	6	7=5+6	8=4+7
3002	H2020	0	0	0	0	73	46	119	119
3003	Horizon Europe	260.000	820	0	260.820	399	0	399	261.219
Total Chapter 30		260.000	820	0	260.820	472	46	519	261.338
Total Title 3		260.000	820	0	260.820	472	46	519	261.338
GRAND TOTAL		267.061	820	0	267.880	900	81	981	268.861

Breakdown & changes in payment appropriations

Breakdown & changes in payment appropriations – Title 1

EUR '000

	Item	Budget appropriations				Additional appropriations			Total appropr. available
		Initial budget adopted	Amending budgets	Transfers	Final adopted budget	Reactivated appropriations	Assigned revenue	Total	
		1	2	3	4=1+2+3	5	6	7=5+6	8=4+7
1101	Salaries and allowances: of which establishment plan posts	3.157	0	-80	3.077	518	12	529	3.607
1102	Salaries and allowances: of which external personnel	266	0	0	266	0	0	0	266
Total Chapter 11		3.423	0	-80	3.343	518	12	529	3.873
1200	Expenditure related to staff recruitment	5	0	0	5	0	0	0	5
Total Chapter 12		5	0	0	5	0	0	0	5
1300	Missions expenses	60	0	15	75	0	1	1	76
Total Chapter 13		60	0	15	75	0	1	1	76
1401	Sociomedical infrastructure	15	0	0	15	0	0	0	15
1402	Training	30	0	0	30	0	0	0	30
Total Chapter 14		45	0	0	45	0	0	0	45
1500	External services	166	0	65	231	0	0	0	231
Total Chapter 15		166	0	65	231	0	0	0	231
1600	Receptions, events and representation	4	0	0	4	0	0	0	4
Total Chapter 16		4	0	0	4	0	0	0	4
Total Title 1		3.703	0	0	3.703	518	13	530	4.234

Breakdown & changes in payment appropriations – Title 2

EUR '000

	Item	Budget appropriations				Additional appropriations			Total approp. available
		Initial budget adopted	Amending budgets	Transfers	Final adopted budget	Reactivated appropriations	Assigned revenue	Total	
		1	2	3	4=1+2+3	5	6	7=5+6	
2000	Rental of building and associated costs	436	0	0	436	0	4	4	440
Total Chapter 20		436	0	0	436	0	4	4	440
2100	Information, communication technology and data processing	445	0	0	445	0	18	18	463
Total Chapter 21		445	0	0	445	0	18	18	463
2200	Movable property and associated costs	20	0	0	20	0	0	0	20
Total Chapter 22		20	0	0	20	0	0	0	20
2300	Current administrative expenditure	9	0	0	9	0	0	0	9
Total Chapter 23		9	0	0	9	0	0	0	9
2400	Postage / telecommunications	11	0	0	11	0	0	0	11
Total Chapter 24		11	0	0	11	0	0	0	11
2500	Meeting expenses	50	0	0	50	0	0	0	50
Total Chapter 25		50	0	0	50	0	0	0	50
2600	Information and publishing	755	0	0	755	0	0	0	755
Total Chapter 26		755	0	0	755	0	0	0	755
2700	Running costs in connection with operational activities	1.241	141	0	1.382	159	0	159	1.541
Total Chapter 27		1.241	141	0	1.382	159	0	159	1.541
Total Title 2		2.967	141	0	3.108	159	22	181	3.289

Breakdown & changes in payment appropriations – Title 3

EUR '000

		Budget appropriations				Additional appropriations			Total appropr. available
	Item	Initial budget adopted	Amending budgets	Transfers	Final adopted budget	Reactivated appropriations	Assigned revenue	Total	
		1	2	3	4=1+2+3	5	6	7=5+6	8=4+7
3001	FP7	3.015	0	0	3.015	24	0	24	3.039
3002	H2020	57.940	0	0	57.940	292	46	338	58.279
3003	Horizon Europe	258.056	910	0	258.967	0	0	0	258.967
Total Chapter 30		319.012	910	0	319.922	316	46	362	320.285
Total Title 3		319.012	910	0	319.922	316	46	362	320.285
GRAND TOTAL		325.682	1.051	0	326.733	993	81	1.074	327.807

4. IMPLEMENTATION OF COMMITMENT APPROPRIATIONS

Implementation of commitment appropriations – Title 1

EUR '000

	Item	Total approp. available	Commitments made					Appropriations carried over to 2023			Appropriations lapsing			
			from final adopt. budget	from re-activations	from assign. revenue	Total	%	Assign. revenue	By decision	Total	from final adopt. budget	from re-activations	from assign. revenue	Total
		1	2	3	4	5=2+3+4	6=5/1	7	8	9=7+8	10	11	12	13=10+11+12
1101	Salaries and allowances: of which establishment plan posts	3,672	3,180	61	0	3,241	88%	0	0	0	353	67	12	431
1102	Salaries and allowances: of which external personnel	266	203	0	0	203	76%	0	0	0	63	0	0	63
Total Chapter 11		3,938	3,383	61	0	3,444	87%	0	0	0	415	67	12	494
1200	Expenditure related to staff recruitment	5	1	0	0	1	20%	0	0	0	4	0	0	4
Total Chapter 12		5	1	0	0	1	20%	0	0	0	4	0	0	4
1300	Missions expenses	76	75	0	0	75	98%	0	0	0	0	0	1	1
Total Chapter 13		76	75	0	0	75	98%	0	0	0	0	0	1	1
1401	Sociomedical infrastructure	15	10	0	0	10	65%	0	0	0	5	0	0	5
1402	Training	30	30	0	0	30	100%	0	0	0	0	0	0	0
Total Chapter 14		45	40	0	0	40	88%	0	0	0	5	0	0	5
1500	External services	166	140	0	0	140	84%	0	0	0	26	0	0	26
Total Chapter 15		166	140	0	0	140	84%	0	0	0	26	0	0	26
1600	Receptions, events and representation	4	1	0	0	1	25%	0	0	0	3	0	0	3
Total Chapter 16		4	1	0	0	1	25%	0	0	0	3	0	0	3
Total Title 1		4,234	3,640	61	0	3,701	87%	0	0	0	453	67	13	533

Final annual accounts of the Clean Hydrogen Joint Undertaking 2023

Implementation of commitment appropriations – Title 2

EUR '000

	Item	Total approp. available	Commitments made					Appropriations carried over to 2022			Appropriations lapsing			
			from final adopt. budget	from re-activations	from assign. revenue	Total	%	Assign. revenue	By decision	Total	from final adopt. budget	from re-activations	from assign. revenue	Total
		1	2	3	4	5=2+3+4	6=5/1	7	8	9=7+8	10	11	12	13=10+11+12
2000	Rental of building and associated costs	440	382	0	0	382	87%	0	0	0	54	0	4	59
Total Chapter 20		440	382	0	0	382	87%	0	0	0	54	0	4	59
2100	Information, communication technology and data processing	463	437	0	0	437	94%	0	0	0	8	0	18	26
Total Chapter 21		463	437	0	0	437	94%	0	0	0	8	0	18	26
2200	Movable property and associated costs	20	15	0	0	15	74%	0	0	0	5	0	0	5
Total Chapter 22		20	15	0	0	15	74%	0	0	0	5	0	0	5
2300	Current administrative expenditure	9	6	0	0	6	67%	0	0	0	3	0	0	3
Total Chapter 23		9	6	0	0	6	67%	0	0	0	3	0	0	3
2400	Postage / telecommunications	11	10	0	0	10	91%	0	0	0	1	0	0	1
Total Chapter 24		11	10	0	0	10	91%	0	0	0	1	0	0	1
2500	Meeting expenses	50	45	0	0	45	89%	0	0	0	5	0	0	5
Total Chapter 25		50	45	0	0	45	89%	0	0	0	5	0	0	5
2600	Information and publishing	755	606	0	0	606	80%	0	0	0	149	0	0	149
Total Chapter 26		755	606	0	0	606	80%	0	0	0	149	0	0	149
2700	Running costs in connection with operational activities	1,541	626	215	0	842	55%	0	0	0	615	85	0	699
Total Chapter 27		1,541	626	215	0	842	55%	0	0	0	615	85	0	699
Total Title 2		3,289	2,127	215	0	2,342	71%	0	0	0	840	85	22	947

Implementation of commitment appropriations – Title 3

EUR '000

	Item	Total approp. available	Commitments made					Appropriations carried over to 2024			Appropriations lapsing			
			from final adopt. budget	from re-activations	from assign. revenue	Total	%	Assign. revenue	By decision	Total	from final adopt. budget	from re-activations	from assign. revenue	Total
		1	2	3	4	5=2+3+4	6=5/1	7	8	9=7+8	10	11	12	13=10+11+12
3002	H2020	119	0	73	0	73	61%	0	0	0	0	0	46	46
3003	Horizon Europe	261,219	253,530	123	0	253,653	97%	0	0	0	7,289	276	0	7,566
Total Chapter 30		261,338	253,530	196	0	253,727	97%	0	0	0	7,289	276	46	7,612
Total Title 3		261,338	253,530	196	0	253,727	97%	0	0	0	7,289	276	46	7,612
GRAND TOTAL		268,861	259,297	472	0	259,770	97%	0	0	0	8,583	428	81	9,092

5. IMPLEMENTATION OF PAYMENT APPROPRIATIONS

Implementation of payment appropriations – Title 1

EUR '000

	Item	Total approp. availab.	Payments made					Appropriations carried over to 2024				Appropriations lapsing			
			from final adopt. budget	from re-activations	from assign. revenue	Total	%	Autom. carry-overs	By decision	Assigned rev.	Total	from final adopt. budget	from re-activations	from assign. rev.	Total
		1	2	3	4	5=2+3+4	6=5/1	7	8	9	10=7+8+9	11	12	13	14=11+12+13
1101	Salaries and allowances: of which establishment plan posts	3,607	2,621	518	0	3,139	87%	0	0	0	0	456	0	12	468
1102	Salaries and allowances: of which external personnel	266	203	0	0	203	76%	0	0	0	0	63	0	0	63
Total Chapter 11		3,873	2,824	518	0	3,342	86%	0	0	0	0	519	0	12	531
1200	Expenditure related to staff recruitment	5	1	0	0	1	20%	0	0	0	0	4	0	0	4
Total Chapter 12		5	1	0	0	1	20%	0	0	0	0	4	0	0	4
1300	Missions expenses	76	58	0	0	58	77%	0	0	0	0	17	0	1	18
Total Chapter 13		76	58	0	0	58	77%	0	0	0	0	17	0	1	18
1401	Sociomedical infrastructure	15	5	0	0	5	36%	0	0	0	0	10	0	0	10
1402	Training	30	14	0	0	14	48%	0	0	0	0	16	0	0	16
Total Chapter 14		45	20	0	0	20	44%	0	0	0	0	25	0	0	25
1500	External services	231	223	0	0	223	97%	0	0	0	0	8	0	0	8
Total Chapter 15		231	223	0	0	223	97%	0	0	0	0	8	0	0	8
1600	Receptions, events and representation	4	0	0	0	0	4%	0	0	0	0	4	0	0	4
Total Chapter 16		4	0	0	0	0	4%	0	0	0	0	4	0	0	4
Total Title 1		4,234	3,127	518	0	3,644	86%	0	0	0	0	577	0	13	589

Final annual accounts of the Clean Hydrogen Joint Undertaking 2023

Implementation of payment appropriations – Title 2

EUR '000

	Item	Total approp. availab.	Payments made					Appropriations carried over to 2024				Appropriations lapsing			
			from final adopt. budget	from re-activations	from assign. revenue	Total	%	Autom. carry-overs	By decision	Assigned rev.	Total	from final adopt. budget	from re-activations	from assign. rev.	Total
		1	2	3	4	5=2+3+4	6=5/1	7	8	9	10=7+8+9	11	12	13	14=11+12+13
2000	Rental of building and associated costs	440	381	0	0	381	86%	0	0	0	0	55	0	4	60
Total Chapter 20		440	381	0	0	381	86%	0	0	0	0	55	0	4	60
2100	Information, communication technology and data processing	463	443	0	0	443	96%	0	0	0	0	2	0	18	20
Total Chapter 21		463	443	0	0	443	96%	0	0	0	0	2	0	18	20
2200	Movable property and associated costs	20	15	0	0	15	74%	0	0	0	0	5	0	0	5
Total Chapter 22		20	15	0	0	15	74%	0	0	0	0	5	0	0	5
2300	Current administrative expenditure	9	6	0	0	6	61%	0	0	0	0	3	0	0	3
Total Chapter 23		9	6	0	0	6	61%	0	0	0	0	3	0	0	3
2400	Postage / telecommunications	11	6	0	0	6	58%	0	0	0	0	5	0	0	5
Total Chapter 24		11	6	0	0	6	58%	0	0	0	0	5	0	0	5
2500	Meeting expenses	50	11	0	0	11	23%	0	0	0	0	39	0	0	39
Total Chapter 25		50	11	0	0	11	23%	0	0	0	0	39	0	0	39
2600	Information and publishing	755	640	0	0	640	85%	0	0	0	0	115	0	0	115
Total Chapter 26		755	640	0	0	640	85%	0	0	0	0	115	0	0	115
2700	Running costs in connection with operational activities	1,541	332	159	0	491	32%	0	0	0	0	1,050	0	0	1,050
Total Chapter 27		1,541	332	159	0	491	32%	0	0	0	0	1,050	0	0	1,050
Total Title 2		3,289	1,834	159	0	1,993	61%	0	0	0	0	1,274	0	22	1,296

Implementation of payment appropriations – Title 3

EUR '000

	Item	Total approp. availab.	Payments made					Appropriations carried over to 2024				Appropriations lapsing			
			from final adopt. budget	from re-activations	from assign. revenue	Total	%	Autom. carry-overs	By decision	Assigned rev.	Total	from final adopt. budget	from re-activations	from assign. rev.	Total
		1	2	3	4	5=2+3+4	6=5/1	7	8	9	10=7+8+9	11	12	13	14=11+12+13
3001	FP7	3,039	3,015	24	0	3,039	100%	0	0	0	0	0	0	0	0
3002	H2020	58,279	40,159	292	0	40,452	69%	0	0	0	0	17,781	0	46	17,827
3003	Horizon Europe	258,967	230,906	0	0	230,906	89%	0	0	0	0	28,061	0	0	28,061
Total Chapter 30		320,285	274,080	316	0	274,397	86%	0	0	0	0	45,842	0	46	45,888
Total Title 3		320,285	274,080	316	0	274,397	86%	0	0	0	0	45,842	0	46	45,888
GRAND TOTAL		327,807	279,041	993	0	280,034	85%	0	0	0	0	47,693	0	81	47,773

6. OUTSTANDING COMMITMENTS

Outstanding commitments – Title 1

EUR '000

	Item	Commitments outstanding at the end of previous year				Commitments of the current year				Total commitm. outstanding at year-end
		Commitm. carried forward from previous year	Decommit. Revaluation Cancellations	Pay-ments	Total	Commit-ments made during the year	Pay-ments	Cancel-lation of commit. which cannot be	Commit. outstand-ing at year-end	
		1	2	3	4=1+2-3	5	6	7	8=5-6-7	
1101	Salaries and allowances: of which establishment plan posts	7	-3	4	0	3.241	3.135	0	106	106
1102	Salaries and allowances: of which external personnel	0	0	0	0	203	203	0	0	0
Total Chapter 11		7	-3	4	0	3.444	3.338	0	106	106
1200	Expenditure related to staff recruitment	0	0	0	0	1	1	0	0	0
Total Chapter 12		0	0	0	0	1	1	0	0	0
1300	Missions expenses	0	0	0	0	75	58	0	17	17
Total Chapter 13		0	0	0	0	75	58	0	17	17
1401	Sociomedical infrastructure	2	-1	1	0	10	4	0	5	5
1402	Training	9	-5	4	0	30	10	0	20	20
Total Chapter 14		10	-5	5	0	40	15	0	25	25
1500	External services	192	-67	126	0	140	97	0	43	43
Total Chapter 15		192	-67	126	0	140	97	0	43	43
1600	Receptions, events and representation	0	0	0	0	1	0	0	1	1
Total Chapter 16		0	0	0	0	1	0	0	1	1
Total Title 1		210	-76	135	0	3.701	3.510	0	191	191

Outstanding commitments – Title 2

EUR '000

		Commitments outstanding at the end of previous year				Commitments of the current year				Total commitm. outstanding at year-end
	Item	Commitm. carried for- ward from pre- vious year	Decommit. Revaluation Cancel- lations	Pay- ments	Total	Commit- ments made during the year	Pay- ments	Cancel- lation of commit. which cannot be	Commit. outstand- ing at year-end	
		1	2	3	4=1+2-3	5	6	7	8=5-6-7	9=4+8
2000	Rental of building and associated costs	52	-37	9	6	382	372	0	10	16
Total Chapter 20		52	-37	9	6	382	372	0	10	16
2100	Information, communication technology and data processing	244	-40	178	25	437	265	0	172	197
Total Chapter 21		244	-40	178	25	437	265	0	172	197
2200	Movable property and associated costs	0	0	0	0	15	15	0	0	0
Total Chapter 22		0	0	0	0	15	15	0	0	0
2300	Current administrative expenditure	1	0	1	0	6	5	0	1	1
Total Chapter 23		1	0	1	0	6	5	0	1	1
2400	Postage / telecommunications	6	-2	1	3	10	5	0	5	8
Total Chapter 24		6	-2	1	3	10	5	0	5	8
2500	Meeting expenses	10	-10	0	0	45	11	0	33	33
Total Chapter 25		10	-10	0	0	45	11	0	33	33
2600	Information and publishing	607	-53	536	18	606	104	0	502	520
Total Chapter 26		607	-53	536	18	606	104	0	502	520
2700	Running costs in connection with operational activities	286	-9	220	57	842	271	0	571	628
Total Chapter 27		286	-9	220	57	842	271	0	571	628
Total Title 2		1.206	-151	946	109	2.342	1.047	0	1.295	1.404

Outstanding commitments – Title 3

EUR '000

	Item	Commitments outstanding at the end of previous year				Commitments of the current year				Total commitm. outstanding at year-end
		Commitm. carried forward from previous year	Decommit. Revaluation Cancellations	Pay-ments	Total	Commit-ments made during the year	Pay-ments	Cancel-lation of commit. which cannot be	Commit. outstand- ing at year-end	
		1	2	3	4=1+2-3	5	6	7	8=5-6-7	
3001	FP7	3.039	0	3.039	0	0	0	0	0	0
3002	H2020	93.490	-85	40.378	53.026	73	73	0	0	53.026
3003	Horizon Europe	255.700	0	121.884	133.816	253.653	109.022	0	144.632	278.447
Total Chapter 30		352.229	-85	165.302	186.842	253.727	109.095	0	144.632	331.474
Total Title 3		352.229	-85	165.302	186.842	253.727	109.095	0	144.632	331.474
GRAND TOTAL		353.645	-312	166.382	186.951	259.770	113.652	0	146.118	333.068

7. GLOSSARY

Administrative appropriations

Appropriations to cover the running costs of the entities (staff, buildings, office equipment).

Adopted budget

Draft budget becomes the adopted budget as soon as approved by the budgetary authority.

Amending budget

Decision adopted during the budget year to amend (increase, decrease, transfer) aspects of the adopted budget of that year.

Appropriations

Budget funding.

The budget forecasts both commitments (legal pledges to provide finance) and payments (cash or bank transfers to the beneficiaries). Appropriations for commitments and payments often differ — differentiated appropriations — because multiannual programmes and projects are usually fully committed in the year they are decided and are paid over the years as the implementation of the programme and project progresses.

Assigned revenue

Revenue dedicated to finance specific items of expenditure.

Budget result

The difference between income received and amounts paid, including adjustments for carry-overs, cancellations and exchange rate differences.

For agencies, the resulting amount will have to be reimbursed to the funding authority.

Budget implementation

Consumption of the budget through expenditure and revenue operations.

Budget item / Budget line / Budget position

Revenue and expenditure are shown in the budget structure in accordance with a binding nomenclature, which reflects the nature and purpose of each item, as imposed by the budgetary authority. The individual headings (title, chapter, article or item) provide a formal description of the nomenclature.

Budgetary commitment

Operation by which the authorising officer responsible reserves the budget appropriations necessary to cover for subsequent payments to honour legal commitments.

Cancellation of appropriations

Appropriations which have not been used by the end of the financial year and which cannot be carried over, shall be cancelled.

Carryover of appropriations

Exception to the principle of annuality in so far as appropriations that could not be used in a given budget year may, under strict conditions, be exceptionally carried over for use during the following year.

Commitment appropriations

Commitment appropriations cover the total value of legal obligations (contracts, grant agreements or decisions) that could be signed in the current financial year.

De-commitment

Operation whereby the authorising officer responsible cancels wholly or partly the reservation of appropriations previously made by means of a budgetary commitment.

Differentiated appropriations.

Differentiated appropriations are used to finance multiannual operations; they cover, for the current financial year, the total cost of the legal obligations entered into for operations whose implementation extends over more than one financial year.

Economic result

Impact on the balance sheet of expenditure and revenue based on accrual accounting rules.

Entitlements established

Right to collect income from a debtor as recognised through the issuing of a recovery order.

Exchange rate difference

The difference resulting from currency exchange rates applied to the transactions concerning countries outside the euro area, or from the revaluation of assets and liabilities in foreign currencies at the date of the accounts.

Expenditure

Term used to describe spending the budget from all types of funds sources.

Grants

Direct financial contributions from the budget to third-party beneficiaries, engaged in activities that serve Union policies.

Lapsing appropriations

Unused appropriations to be cancelled at the end of the financial year. Lapsing means the cancellation of all or part of the authorisation to make expenditures and/or incur liabilities, as represented by an appropriation.

For joint undertakings (and EIT), as specified in their Financial Rules, any unused appropriations may be entered in the estimate of revenue and expenditure of up to the following three financial years (the so-called "N+3" rule). Hence, lapsing appropriations for JUs can be re-activated until financial year "N+3".

Legal basis / basic act

The legal act adopted by the legislative authority (usually the Council and European Parliament) specifying the objective of a Union spending programme, the purpose of the appropriations, the rules for intervention, expiry date and the relevant financial rules to serve as a legal basis for the implementation of the spending programme.

Legal commitment

The act whereby the Authorising Officer enters into an obligation towards third parties which results in a charge for the Union budget.

Common forms of legal commitments are contracts in the case of procurement, grant agreements and grant decisions.

Non-differentiated appropriations

Appropriations which meet annual needs and must therefore be committed during the budget year. Only amounts qualifying for automatic carryover can be disbursed in the following year. Non-differentiated appropriations which have not been used, i.e. committed, by the end of the year, are cancelled (unless, exceptionally, permission is given by a Commission decision for a non-automatic carryover). Non-differentiated appropriations apply to administrative expenditure and commitment appropriations equal payment appropriations.

Operational appropriations

Operational appropriations finance the different policies, mainly in the form of grants or procurement.

Outstanding commitments

Outstanding commitments (or RAL, from the French 'reste à liquider') are defined as the amount of appropriations committed that have not yet been paid. They stem directly from the existence of multiannual programmes and the dissociation between commitment and payment appropriations.

Payment appropriations

Payment appropriations cover expenditure due in the current year, arising from legal commitments entered in the current year and/or earlier years.

RAL (Reste à liquider)

Amount remaining to be paid on a budgetary commitment at a given moment (carryforward of outstanding commitments).

Surplus

Positive difference between revenue and expenditure, which has to be returned to the funding authority (carryforward of budget result).

Transfer between budget lines

Transfers between budget lines imply the relocation of appropriations from one budget line to another, in the course of the financial year, and thereby they constitute an exception to the budgetary principle of specification.