

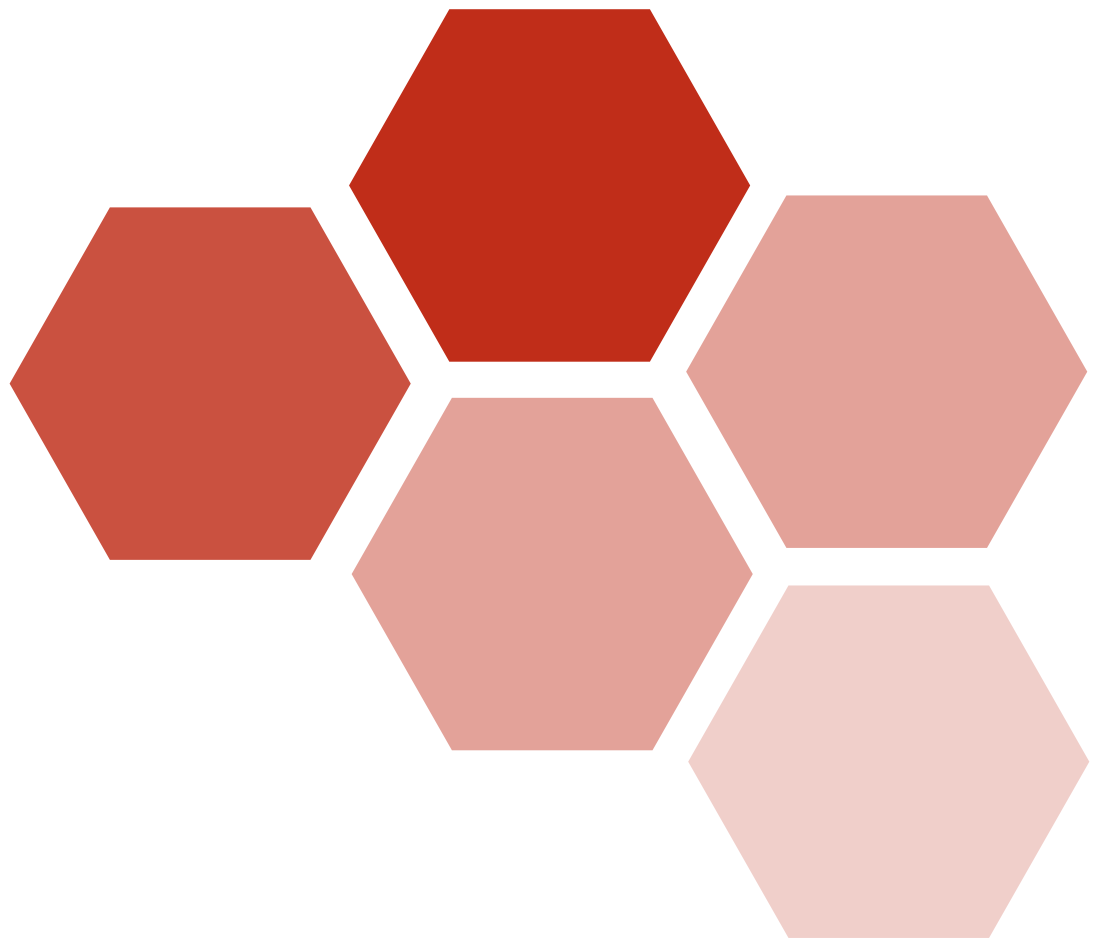
# Annual report



20  
23

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# MESSAGES

FROM THE CHAIR  
AND THE CHIEF  
EXECUTIVE OFFICER



At the Extraordinary General Meeting on 30 January 2023, Cécile Flandre was appointed Independent Director and Chair of SYNATOM's Board of Directors.

What lessons has she learned from her first year in office? This brings an opportunity for a cross-interview between the Chair and the Chief Executive Officer Dimitri Stroobants.

## How would you describe 2023?

**CF:** In many ways, 2023 was an exceptional year.

## First, in terms of global geopolitics and financial markets

**CF:** 2022 was marked by a triple shock (geopolitical, energy, and inflation). The geopolitical context remains complex. In addition to the war in Ukraine, which does not seem likely to end soon, there are the tensions arising from the Israeli-Palestinian conflict following the Hamas attacks in Israel. As a result, many countries now want to improve their energy autonomy and diversify their energy sources, adding to the effort to decarbonize energy production.

**DS:** In the end, the impact of these major events was fairly limited in 2023, both on supply chains, which gradually returned to normal post-covid, and on financial markets, which admittedly experienced a degree of volatility, but held up well and even recovered with an acceleration at the end of the year and at the start of 2024.

## The Phoenix Agreement

**CF:** 2023 marked the conclusion of negotiations between ENGIE and the Belgian government on the extension of 2 reactors ("Phoenix agreement"). This agreement will have a structuring effect on Belgium. It will help ensure the country's security of supply. It will also help SYNATOM structure all of its activities: determining the level of nuclear provisions, managing the assets that counterbalance the provisions, supplying the nuclear operator with uranium and managing spent fuel.

**DS:** The Phoenix Agreement signed on 13 December 2023 led SYNATOM to take decisions regarding financial investments in order to be in a position to make the agreed payments at the closing of the transaction expected at the end of 2024, and to secure the quantities of uranium required for the extended 10-year operation of the Doel 4 and Tihange 3 reactors.

**CF:** Within just a few months, SYNATOM was able to negotiate and execute contracts with its suppliers of uranium in its various forms, despite a particularly tight market because of nuclear power's growing popularity in Europe and around the world, and Western energy companies' ban on Russian raw materials.

**DS:** The Phoenix agreement will also have consequences for spent fuel management. New storage solutions need to be developed for the additional waste volumes, and for the transfer of spent fuel in dry storage facilities to ONDRAF in 2050.

## Financial markets

**CF:** 2023 had started with an uncertain outlook after a poor performance in 2022 for both equity and bond markets, negatively impacted by rising rates and the war in Ukraine. It ended with a good performance against a backdrop of resilient economies, notably in the United States, and anticipation of the end of the central banks' monetary tightening.

**DS:** This environment was compounded by the prospect of an agreement between ENGIE and the Belgian government, which caused SYNATOM to adjust its investments in view of the expected transfer of a significant portion of SYNATOM's liabilities and corresponding assets.

Cécile Flandre,  
Chair





**Dimitri Stroobants,**  
CEO

## SYNATOM Governance

**CF:** I would also like to comment on the smooth functioning of SYNATOM's Board of Directors, characterized by the diversity of skills present, as well as the contribution of the two Committees, i.e. the Audit Committee and the Investment Committee. In this first year of my mandate, I have had the privilege of working with a particularly active Board of Directors, with each participant sharing their expertise and providing real added value. I would also like to emphasize the constructive attitude that has always prevailed at our meetings, despite the uncertain context (LTO or not), and its significant potential impact on financial and operational activities. Ethics also lie at the heart of our governance.

**DS:** SYNATOM's teams and its Board of Directors were extremely responsive in the second half of 2023, when we had to secure the quantities of uranium needed for a 10-year LTO at Doel 4 and Tihange 3, and adapt our investment policy to secure investments and liquidity for the Phoenix closing.

**CF:** Having several ENGIE negotiators on SYNATOM's Board of Directors provided an invaluable insight into the progress of the Phoenix negotiations and their expected impact on SYNATOM. Their presence enabled us to work on the basis of scenarios which were reviewed during the year as the agreements progressed, and enabled us to make the appropriate decisions each time. The presence of government representatives also proved useful. I am delighted with the gender diversity achieved on the Board in 2024 (37.5% women) and in management (50% women).

## Triennial revision of nuclear provisions

**CF:** 2023 marked the end of the triennial revision of nuclear provisions started in September 2022. In-depth discussions between the Nuclear Provisions Commission and SYNATOM led to a revision of the adjustment booked at the end of 2022 from 2.9 billion euros to 2.3 billion euros, i.e. 0.6 billion euros less.

**DS:** As authorized by the Act of 12 July 2022, and following this final opinion, in October 2023 SYNATOM granted a loan of 1.6 billion euros to ELECTRABEL.

## 2024: a year heavily impacted by the Phoenix Agreement

**CF:** The closing of this agreement is expected at the end of 2024, subject to the voting of legislative changes in the Belgian Parliament and approval by the European Commission (regarding state aid). It will give rise to a payment by SYNATOM of 11.5 billion euros from closing and 3.5 billion euros by the end of 2025, for a total of 15 billion euros, to HEDERA, the company set up by the Belgian government to manage financial assets relating to nuclear waste. SYNATOM will see its nuclear provisioning responsibility reduced to plant dismantling and on-site spent fuel management until its transfer to ONDRAF in 2050.

**DS:** Following the closing, SYNATOM's nuclear provisions will be adjusted and the financial assets under management will be at a lower level. In the meantime, we need to prepare all the steps leading up to closing.

**CF:** 2024 will also see the first deliveries of uranium for the extension of Doel 4 and Tihange 3.

**DS:** We will need to work with ELECTRABEL to develop a dry storage solution for all Tihange spent fuel, in line with the commitments made in the Phoenix Agreement.

## Conclusion

**CF:** In conclusion, SYNATOM is well equipped to face these changes and challenges. Solid governance and a wealth of expertise within the company and among its stakeholders mean we can look to the future with confidence. I would particularly like to thank the SYNATOM teams for their excellent work throughout the year in an environment that is more uncertain than ever.



# FRONT-END

## OF THE NUCLEAR FUEL CYCLE



The front-end of the nuclear fuel cycle covers all operations from the extraction of uranium ore to the supply of enriched uranium to the manufacturer of nuclear fuel assemblies. Responsibility for this management is shared between various stakeholders.

SYNATOM's mission is to guarantee the supply of enriched fissile materials to the fuel assembly manufacturing plant designated by the nuclear operator ELECTRABEL, according to a schedule linked to planned reactor shutdowns. The operator then monitors the manufacture of assemblies, which are designed according to the technical specifications of each reactor.

For more than 50 years, SYNATOM has relied on long-term contracts for the supply of natural uranium and for conversion and enrichment services. With nuclear power scheduled to cease in 2025, a final delivery of enriched uranium took place in early 2023.

## 2023, conclusion of the agreement between ENGIE and the Belgian government on the extension of 2 reactors ("Phoenix Agreement")

The year 2023 saw a number of progress milestones in the negotiations between ENGIE and the federal government on the extension of two nuclear reactors.

On 13 December 2023, these negotiations culminated in the signing of a final agreement on the conditions for the long-term operation of the Doel 4 and Tihange 3 nuclear reactors for a further 10 years, with an effective restart announced for the end of 2025, at the earliest.

In light of this, SYNATOM has been negotiating with its suppliers throughout 2023 to secure the materials needed to operate the two reactors for 10 more years.

At the end of 2023, despite a very tight market, SYNATOM was able to confirm that it would be able to supply the enriched fissile materials needed under the agreement to keep the two reactors running on schedule, with the first deliveries scheduled for 2024.

### Characteristics of the uranium market

The uranium market experienced a sharp global upturn in 2022. This trend continued into 2023, driven by falling fuel stocks, nuclear power's increasing popularity, and a desire for independence from Russian energy.

### The natural uranium market

The price of uranium oxide ("yellow cake") has risen steadily since the beginning of 2023, almost doubling over 12 months, from 50 USD per pound (453 grams) in January 2023 to 100 USD on 12 January 2024.

### Conversion and enrichment markets

Rates for these services are also going up, compared with the start of 2023. In addition, the number of suppliers has been reduced as Russia, the world's leading enricher with a 40% market share, has fallen out of favour.

Against this backdrop, SYNATOM has succeeded in negotiating contracts with Western suppliers offering a balanced and sufficiently geographically diversified spread, in line with the strategy defined by its Board of Directors.

**Orano, Georges Besse II (GBII) enrichment plant, southern unit. Tricastin site.**





# BACK-END OF THE NUCLEAR FUEL CYCLE





The back-end of the nuclear fuel cycle consists of three main stages for spent fuel:

### 1. Storage in deactivation pools

The deactivation pool is located in the nuclear island near the reactor building. Spent fuel assemblies generally remain in the deactivation pools for at least 3 years.

### 2. Intermediate storage

Intermediate storage is currently performed at the Doel and Tihange power plants, as well as at BELGOPROCESS (an ONDRAF subsidiary) in Dessel for waste from historical reprocessing contracts.

All the technical operations involved in transferring fuel assemblies from the reactor vessel to the deactivation pool of each unit are performed by experienced teams from the nuclear operator, ELECTRABEL. The same applies to transfers to the centralized intermediate storage facilities at the Doel and Tihange sites. SYNATOM is responsible for covering the costs associated with these operations, and for financing the infrastructure and equipment needed to store spent fuel.

### 3. Final storage

Final storage is the responsibility of ONDRAF. The agreement reached at the end of 2023 between ENGIE and the Belgian federal government provides for the payment of a lump sum of 15 billion euros by the ENGIE Group, in full and final settlement of all final storage costs. This amount will cover all future costs related to the management of nuclear waste from ELECTRABEL's nuclear facilities in Belgium, as well as the management of spent fuel from 2050 onwards.

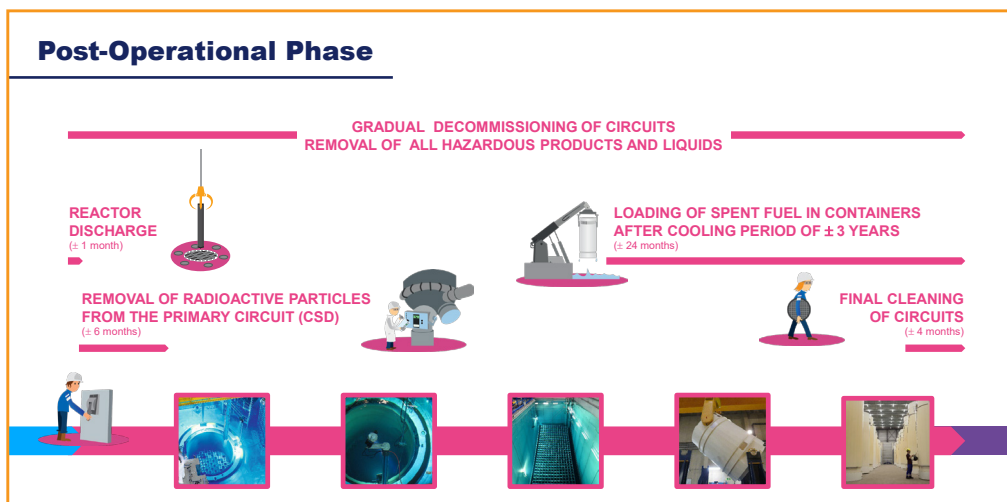
## Major events: Post Operational Phase (POP) of Doel 3 and Tihange 2

First of all, we should point out that the Tihange 2 reactor was shut down at the end of January 2023, a few months after the Doel 3 reactor, thus entering the Post Operational Phase (POP). Preparations for emptying the deactivation pools are now underway. For SYNATOM, this means ensuring that not only the required storage containers, but also the associated infrastructure and equipment, are made available to the operator within the allotted timeframe.

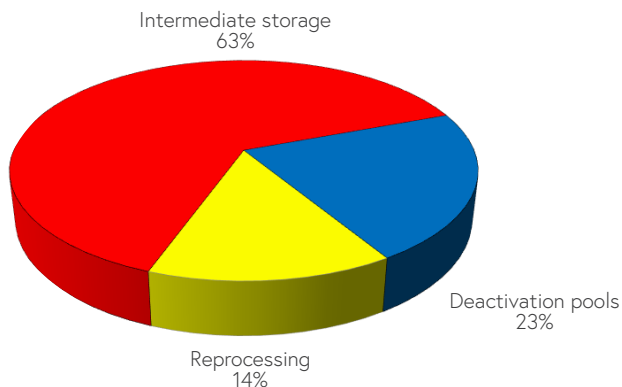
The 10-year extension of the Doel 4 and Tihange 3 reactors will require additional storage casks.

As a reminder, the first stage in the dismantling of a reactor takes place over a period of 5 years, and is known as the "Post Operational Phase" (POP). It mainly involves emptying the deactivation pool of all the spent fuel assemblies it contains.

There are almost 600 spent fuel assemblies in the deactivation pools at Doel 3 and Tihange 2, which will require a significant number of container loads to empty them.



## Where are the spent fuel assemblies located?



### Centralised intermediate storage

The Doel and Tihange sites each have a special building for the temporary storage (over several decades) of spent fuel assemblies, pending their transfer to ONDRAF, which will manage them from 2050 onwards, followed by final storage.

The Tihange plant has opted for underwater storage in a pool, while the Doel plant uses dry storage in casks. The two buildings, commissioned in 1997 and 1995, are almost full. To cover future storage needs, construction of two new buildings (one for each site) was launched, starting in 2020 for Tihange, and in 2022 for Doel. These buildings, known as SF<sup>2</sup> (Spent Fuel Storage Facility), are designed for dry storage in casks.

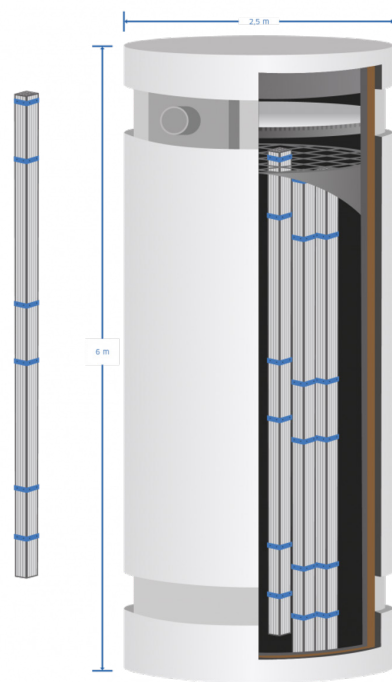
At Tihange, the year 2023 was used to carry out a multitude of tests both with the equipment and with the first dry cask, which arrived on site in March 2023. The actual commissioning of the SF<sup>2</sup> is scheduled for the first half of 2024.

At Doel, the major construction works on the building have been completed. Commissioning is scheduled for late 2025.

### Dry storage casks

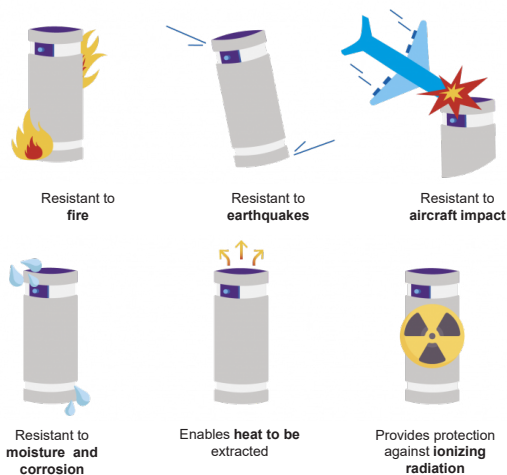
The delivery of dry storage casks is an essential element in the strategy for dismantling Belgian nuclear reactors. SYNATOM, with the support of TRACTEBEL ENGINEERING, is closely monitoring the entire process, from the development of the related concepts, to obtaining licenses from the Safety Authorities, and monitoring the manufacture of the casks.

As for the front-end, SYNATOM has opted to diversify the range of suppliers involved, in particular to meet the different needs of its sites related to the specific technical characteristics of the fuel assemblies in question. This diversification also makes it possible to minimise risks linked to delivery times, in a global context of tight supply chains. It does, however, render the management of qualification files and authorizations to be obtained from the AFCN more complex.



Cross-section of a cask

### Characteristics of a fuel container



For the first containers manufactured by the three selected suppliers, ELECTRABEL's teams perform checks as soon as they are received, and they perform dry-runs to authorize loading.

The manufacturing program is particularly tight, because of the legally defined shutdown of nuclear reactors. Additional orders were signed in 2023 to meet the above requirements.

## ORANO, the historical supplier

In 2016, SYNATOM signed a new contract with its historical supplier ORANO, which had already delivered 125 casks for the Doel power plant over a period of 30 years.

ORANO uses different subcontractors in the 4 stages of the manufacturing process. ORANO entrusted two of these stages to the Belgian company "Les Ateliers de la Meuse" located in Liège, which had become a benchmark subcontractor for ORANO over the years.

In 2023, SYNATOM was informed that Ateliers de la Meuse was having some difficulties. After a court-ordered reorganisation process, the company was declared bankrupt on 30 October. At the end of 2023, a French nuclear equipment manufacturer, ALFEOR, together with the Walloon Region (via Wallonie Entreprendre) acquired the cask manufacturing activities to form the new "Ateliers de la Meuse". During this period, SYNATOM continued its contacts with ORANO to help ensure the continuity of cask manufacturing by Ateliers de la Meuse. It was against this constructive backdrop that, at the beginning of 2024, Ateliers de la Meuse's cask business was able to continue within the new Ateliers de la Meuse. Because of these difficulties, solutions had to be found to further secure the loading schedule at Doel and Tihange.

Despite this, the first cask from the 2016 contract was delivered to Tihange in March 2023, and underwent dry runs at the end of 2023.

## US company HOLTEC

HOLTEC's first cask, designed for spent fuel assemblies from the Doel 1 and Doel 2 reactors, arrived on site in March 2023 and began its battery of dry runs in May. In September 2023, SYNATOM signed an order for additional casks.

## German company GNS

Germany company Gesellschaft Für Nuklear-Service (GNS) supplied the first cask in May 2022 as part of a series intended for the fuel assemblies of Doel 3, Tihange 1, and Tihange 2. This cask was also subjected to a series of dry runs.

SYNATOM also received the certificate of conformity authorizing transport of the cask from the AFCN.

The Safety application for the second model of casks for Doel 4 and Tihange 3 fuel assemblies is currently undergoing review by the authorities.

## Tihange's second transfer shuttle

After their stay in the deactivation pool, the assemblies from the Tihange nuclear power plant are transferred to the centralized building for underwater storage using a special cask known as a shuttle. In light of the anticipated increase in the number of transfers, a second shuttle is currently being manufactured by the US company HOLTEC.

## Special equipment

Defects have been found in a small number of the spent fuel assemblies in the deactivation pools that need to be dealt with before the intermediate storage phase.

SYNATOM and ELECTRABEL therefore launched a specific program called "CIME" (Combustibles Inétanches ou Mécaniquement Endommagés - Non-sealed or mechanically damaged fuel) a few years ago.

The French company FRAMATOME has already successfully completed treatment campaigns for the spent fuel assemblies concerned at the Doel 1 and Doel 2 reactors.

In the second half of 2023, an intervention at Doel 3 was started to address its affected assemblies.

## Relationship with ONDRAF

An amendment to the radioactive waste management contract was signed in May 2023 between ONDRAF and SYNATOM.

This agreement formalizes and sets out the new fees and charges for the reprocessing of waste that has been stored at the BELGOPROCESS site.

In 2024, the contracts between ONDRAF and SYNATOM will be reassessed in light of the agreement signed between ENGIE and the Belgian government at the end of 2023.





# FINANCIAL

## MANAGEMENT



## Triennial review of nuclear provisions

On 2 September 2022, SYNATOM started the 7th triennial review of nuclear provisions by submitting its case to the Nuclear Provisions Commission (NPC).

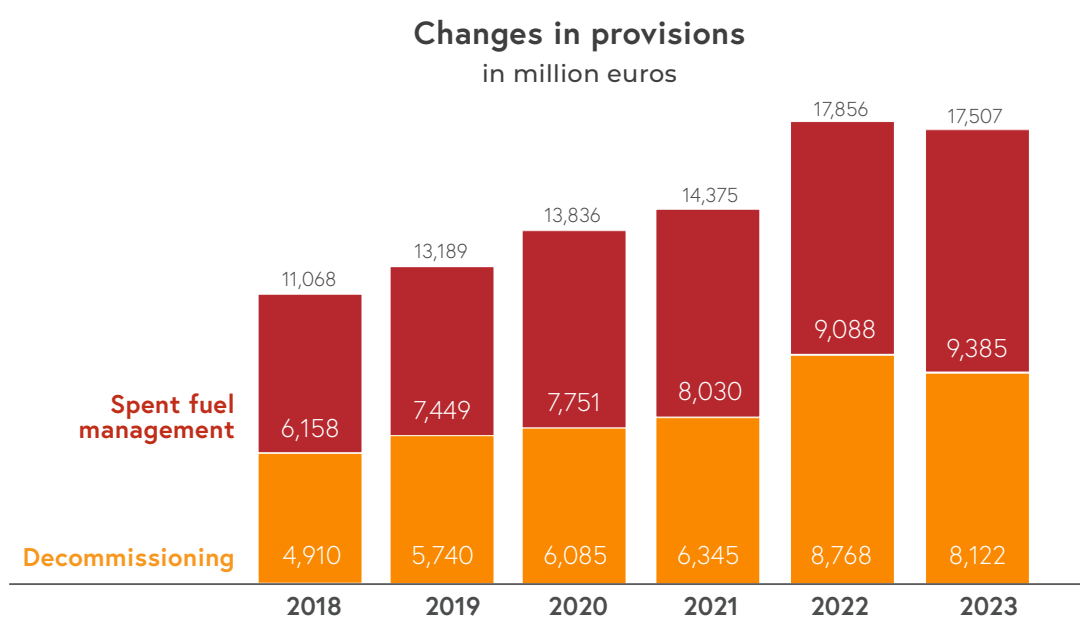
On 22 December 2022, the NPC submitted a series of comments which caused SYNATOM to include - as a precautionary measure - an increase in provisions of 2.9 billion euros in its accounts as per 31 December 2022.

However, in early 2023, SYNATOM lodged an application with the NPC for a consultation on the remarks it considered insufficiently justified.

On 7 July 2023, the NPC delivered its final opinion, which led to an adjustment of provisions, bringing the increase to 2.3 billion euros (1.6 billion euros for dismantling and 0.7 billion euros for spent fuel) instead of the 2.9 billion euros recorded at the end of 2022.

As authorized by the Act of 12 July 2022, and following this final opinion, in October 2023 SYNATOM granted a loan of 1.6 billion euros to ELECTRABEL, which corresponds to the increase in the dismantling provision, 25% of which is repayable within 12 months and the balance over the following seven years.

## Provisions as per 31 December 2023

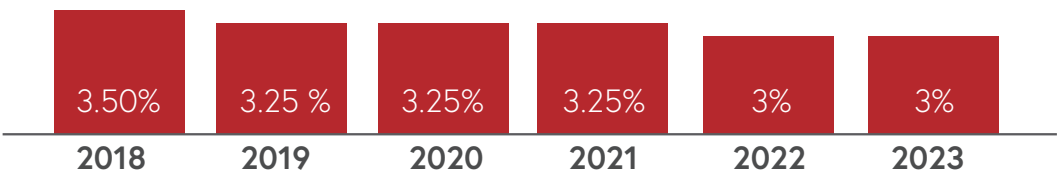


As mentioned above, the Doel 3 and Tihange 2 reactors were shut down on 23 September 2022 and 31 January 2023 respectively, and they have now entered the predefined 5-year Post Operational Phase, with the aim of preparing them for dismantling.

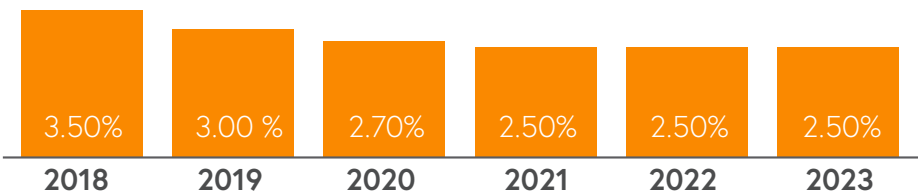
The cost of these operations is charged directly to SYNATOM's dismantling provisions. An amount of 204 million euros was withdrawn from the provisions in 2023. Expenses will continue to increase over the next few years.

# Changes in discount rates

Changes in discount rates for spent fuel management



Changes in discount rates for dismantling



The discount rates for provisions are 3% for provisions relating to spent fuel management and 2.5% for dismantling, as confirmed in the NPC's final opinion of 7 July 2023.

## Nuclear tax

The distribution contribution - also known as the nuclear tax - is an annual tax calculated according to a methodology established by the Commission for Electricity and Gas Regulation (CREG) for the period 2020-2026. As part of its public service obligation, SYNATOM is responsible for advancing the distribution contribution to the State. This contribution is then billed to the owners of the nuclear reactors in proportion to their respective shares in electricity production.

This contribution varies from year to year, depending on the profits made from nuclear power generation at the Doel 3 and 4, and Tihange 2 and 3 reactors.

The Doel 1, Doel 2 and Tihange 1 reactors are covered by specific agreements between the owners of the reactors concerned and the Belgian State.

Under the applicable legal framework, the 2023 nuclear tax is determined on the basis of revenues for year N-1, starting with the year 2022, which saw excellent reactor availability and very high electricity market prices. The nuclear tax amounted to 846.5 million euros, divided between ELECTRABEL (800.2 million euros) and LUMINUS (46.3 million euros).





# INVESTMENTS



At the end of 2020, SYNATOM set up a department dedicated to investment management. In 2021, SYNATOM began a far-reaching overhaul of its rules of governance, notably with the creation of an Investment Committee chaired by an independent Director and composed of experts, all of whom are SYNATOM Directors. The Chief Investment Officer is a permanent guest of the Investment Committee.

SYNATOM's investment policy has recently been changed to reflect the Phoenix agreements which were confirmed on 13 December 2023 and whose Closing is scheduled at the end of 2024.

The goal is:

- for the 8.8 billion share to be liquidated at Closing, with a view to payment of the lump sums for the transfer of financial responsibility to the Belgian State, to safeguard the value of the underlying assets via investments in monetary instruments providing a return at least equivalent to the indexation of the lump sums fixed in the Phoenix agreements;
- for the remaining investments intended to cover SYNATOM's remaining liabilities, to ensure a sufficient return, at an acceptable risk level, with the goal of covering the costs of dismantling and storing spent fuel, subject to diversification, risk minimization and availability as defined by the Act of 12 July 2022.

The return on assets deployed was 5.01% for the financial year 2023.

SYNATOM also considers Environmental, Social and Governance (ESG) factors when determining its investment policy to enable better risk management with a view to generating long-term sustainable returns. These ESG factors enable SYNATOM to better consider the risks and opportunities that could impact financial performance. ESG policies are implemented on a decentralized basis by external asset management companies, who are responsible for managing investments while taking the ESG principles into account. The inclusion of ESG principles in the investment process depends on the maturity of ESG integration in the markets in which the asset managers operate.

Investment management is entrusted to a dedicated investment management department supervised by a Chief Investment Officer. The Investment Committee makes recommendations to the Board of Directors, which sets SYNATOM's investment policy and entrusts it with overseeing the investment decisions that fall within the scope of this policy. The Audit Committee examines, evaluates, and monitors the risk framework applicable to investments.

SYNATOM's investment policy is also submitted to the NPC.

## Lessons from 2023

### Markets

In 2023, in addition to persistent inflation and geopolitical tensions heightened by the Israeli-Palestinian conflict, monetary tightening by central banks mainly drove volatility on the markets in the first half of the year. This tightening caused the collapse of some US regional banks. The second half of the year, particularly after the summer period, saw a slowdown in inflation and a change in tone from central banks, bringing a degree of optimism to the markets.

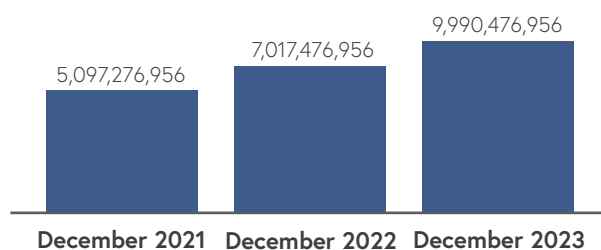
In terms of economic growth, the US remained resilient, buoyed by consumer demand and the federal government's deficit spending, while Europe, and Germany in particular, experienced a more pronounced slowdown. In China, the economic recovery was modest, and especially the real estate sector continued to face persistent challenges.

Stock markets posted overall gains, with a significant contribution from the US technology and semiconductor sectors. Bond performance rebounded after a difficult year in 2022, and currency fluctuations showed relative stability between the euro, dollar, yen, Swiss franc, and pound sterling.

### Investments evolution

Capital invested since 2020 has been growing steadily. This increase is due to the annual repayments of the loans made to ELECTRABEL, as well as the annual increase in total provisions.

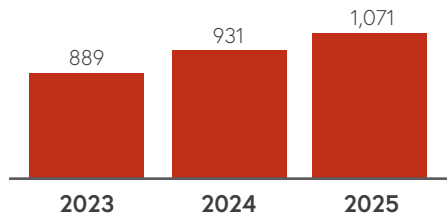
#### Growth of assets in euros



In 2020, ELECTRABEL committed to repaying in full the loan granted against the provisions set aside for spent fuel management by 2025.

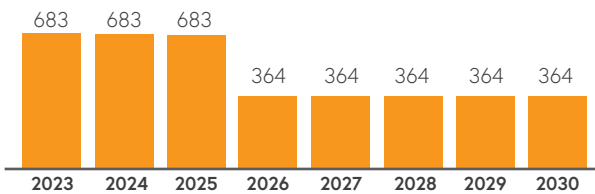


### Repayment plan for loans against provisions for spent fuel management in millions of euros



ELECTRABEL also undertook to repay in full the loan granted against the provisions set aside for dismantling the power plants by 2022.

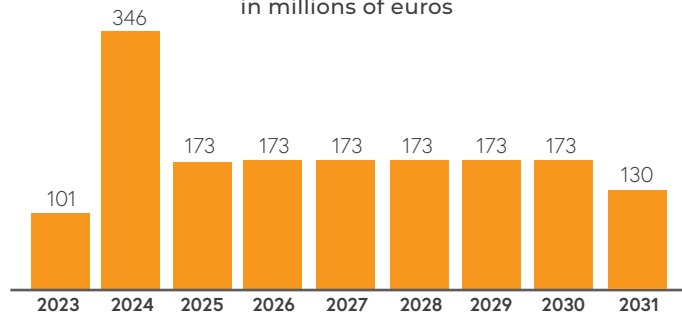
### Repayment plan for loans against dismantling provisions in millions of euros



These commitments were also enshrined in the Act of 12 July 2022.

In addition to these loans defined in the Act of 12 July 2022, SYNATOM entered into a new loan agreement on 1 October 2023 for an amount of 1.6183 billion euros, representing the increase in nuclear provisions for dismantling nuclear power plants.

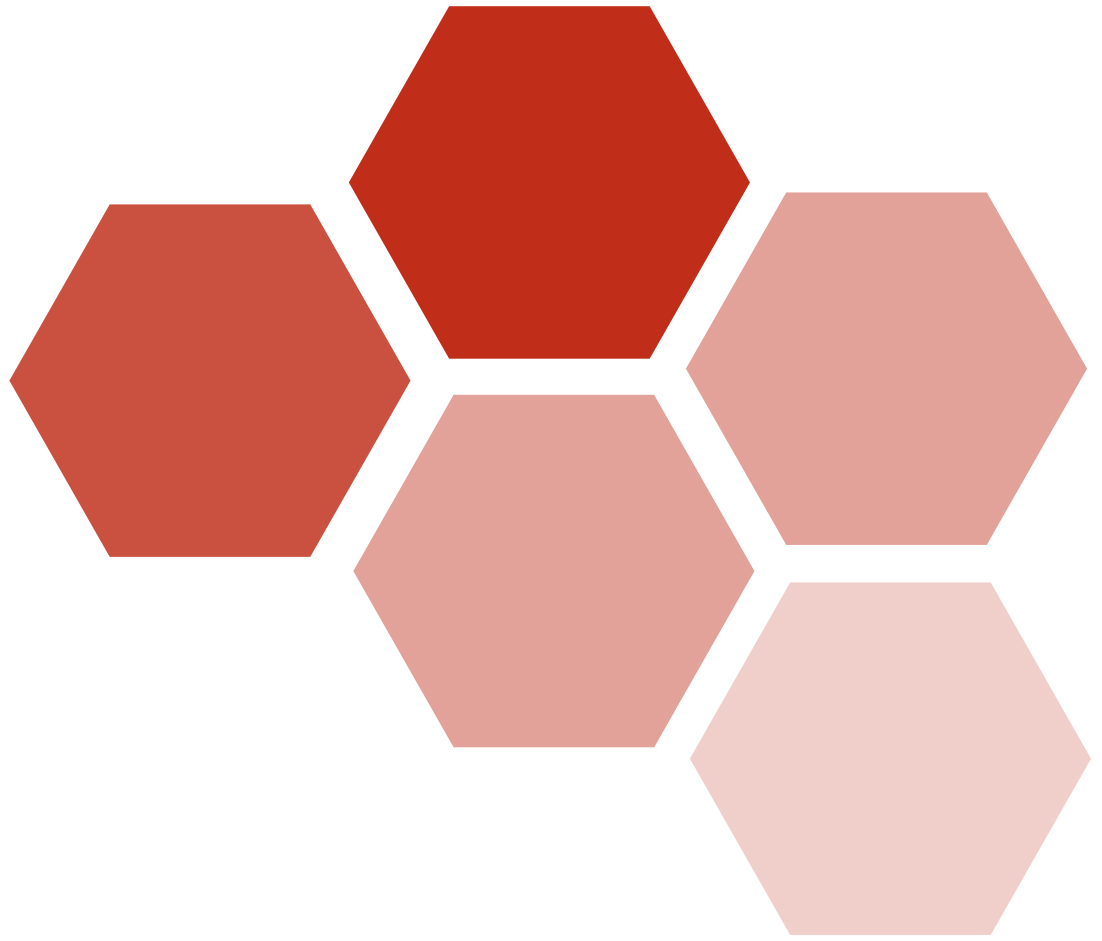
### Repayment plan for 2023 loan against dismantling provisions in millions of euros



SYNATOM deploys these investments through its two SICAVs: an institutional SICAV under Belgian law called Belgian Nuclear Liabilities Fund (BNLF) and a SICAV under Luxembourg law called Nuclear Investment Fund (NIF).

By the end of 2023, their assets were valued at 1.7 billion euros and 8.3 billion euros respectively.





# GOVERNANCE



SYNATOM's corporate governance is based on three pillars: the Corporate Governance Code 2020, the Belgian Code of Companies and Associations, and the company's articles of association. It is also in line with the law of 12 July 2022, which stipulates that the Board of Directors must include three independent Directors (one of whom must be of the opposite sex to the other two), including the Chair. This is how the Chair of SYNATOM was entrusted to Mrs. Cécile Flandre, an independent Director, at the Extraordinary General Meeting of 30 January 2023, during which SYNATOM adapted its statutes to the aforementioned law. Mr. Jan Longeval and Mr. Maximilien de Limburg Stirum had already joined the Board of Directors as Independent Directors from 2021. The Board of Directors consists of eight board members and two federal government representatives.

## Members of the Board of Directors

• Didier ENGELS	Chair until 30 January 2023
• Cécile FLANDRE	Chair from 30 January 2023 Independent Director
• Dimitri STROOBANTS	Chief Executive Officer
• Hélène DURAND	Director
• Michael GILLIS	Director until 8 February 2024
• François GRAUX	Director from 8 February 2024
• Thierry SAEGERMAN	Director until 1 January 2024
• Cedric OSTERRIETH	Director from 1 January 2024
• Patrick GAUSSENT	Director until 1 March 2024
• Mireille VAN STAEYEN	Director from 1 March 2024
• Maximilien de LIMBURG STIRUM	Independent Director
• Jan LONGEVAL	Independent Director
• Carl MALBRAIN	Federal Government Representative
• Olivier SOUMERYN-SCHMIT	Federal Government Representative

• Michaël DELMÉE Secretary to the Board of Directors

The Board has set up (i) an **Audit Committee** made up of three members chosen from among the Directors (two of whom are independent) and (ii) an **Investment Committee** made up of four members chosen from among the Directors and chaired by an independent Director.

## Composition of the Audit Committee

### Chair:

• Patrick GAUSSENT until 1 March 2024

### Chair:

• Mireille VAN STAEYEN from 1 March 2024

### Members:

• Jan LONGEVAL Independent Director  
• Maximilien de LIMBURG STIRUM Independent Director

### Permanent guests:

• Dimitri Stroobants, Chief Executive Officer  
• Dominique GHISLAIN, Chief Financial Officer, SYNATOM  
• Michaël DELMÉE, Secretary to the Board of Directors

## Composition of the Investment Committee

### Chair:

- Jan Longeval Independent Director

### Members:

- Hélène DURAND Director
- Dimitri STROOBANTS Chief Executive Officer
- Patrick GAUSSENT Director until 1 March 2024
- Mireille VAN STAEYEN Director from 1 March 2024

### Permanent guests:

- Xavier PIRET Chief Investment Officer

In 2023, SYNATOM's **Board of Directors** met 8 times, with an attendance rate of more than 90%. During the past financial year, no decision falling within the scope of Article 7:96 of the Belgian Code of Companies and Associations was taken by the Board of Directors.

The **Audit and Investment Committees** met on 4 and 8 occasions respectively, with an attendance rate of more than 90%.

## Follow-up of mandates

Mr. Thierry SAEGEMAN resigned from his Directorship with effect from 1 January 2024. The Board of Directors co-opted Mr. Cedric OSTERRIETH to take over his mandate with effect from the same date.

Mr. Michaël GILLIS resigned from his Directorship with effect from 8 February 2024. The Board of Directors co-opted Mr. François GRAUX to take over his mandate from 8 February.

Lastly, Mr. Patrick GAUSSENT resigned from his Directorship with effect from 1 March 2024. The Board of Directors co-opted Ms. Mireille VAN STAEYEN to take over his mandate and also appointed her as Chair of the Audit Committee, with effect from the same date.

## Day-to-day management

The day-to-day management of the company is the responsibility of the Chief Executive Officer, Mr. Dimitri Stroobants, appointed by the Board of Directors. The company is organized into five departments headed by:

- Mrs. Françoise Renneboog, Director of the Front-end Nuclear Fuel Cycle Department
- Mr. Luc Janssen, Director of the Back-end Nuclear Fuel Cycle Department,
- Mrs. Dominique Ghislain (CFO), Director of the Finance Department,
- Mr. Xavier Piret (CIO), Director of the Investment Department,
- Mrs. Godelieve Vandeputte (CLO), Director of the Legal Department

# THANKS TO OUR STAFF

The Chair joins all the members of the Board of Directors and Management in thanking each and every member of the team for their professionalism and unfailing commitment throughout this exceptional year. Together, we have made a great contribution to SYNATOM's mission and values. Once again, thank you all for your hard work during the busy year of 2023.



# MANAGEMENT REPORT



Ladies and Gentlemen,

In accordance with legal and statutory requirements, it is our pleasure to present our company's management report for its 54th financial year, and to submit for your approval the annual accounts for the year ended 31 December 2023.

## Context

The year 2023 was still marked by geopolitical instability, notably the war in Ukraine and the Israeli-Palestinian conflict, the climate emergency, the accelerated energy transition in many countries, and the revival of nuclear power against this backdrop.

Despite this challenging environment, economies proved resilient and inflation was more or less kept under control.

This background has caused a sharp increase in the market price of the various components of uranium (natural uranium became 90% more expensive in one year, with conversion and enrichment prices each going up by 20%).

The financial markets have done very well in 2023. Except for oil and Chinese equities, the main asset classes were in the green at year end, in anticipation of central bank rate cuts.

The year 2023 saw the conclusion of the dossier on the triennial revision of nuclear provisions, which was submitted by SYNATOM and the nuclear operator to the Nuclear Provisions Commission (NPC) in September 2022, as the final decision was rendered by the Commission on 7 July 2023 (after a reasoned opinion was submitted in February and a prior consultation was held in June). This resulted in the increase in provisions booked at the end of 2022 of 2,946 billion euros<sup>2022</sup> being revised downwards by 648.4 million euros<sup>2022</sup>.

In 2023, negotiations between ENGIE S.A., ELECTRABEL S.A. ("ENGIE Group") and the Belgian State were finalised, with the signing of the final agreement ("the Agreement") on the 10-year extension of the Doel 4 and Tihange 3 nuclear reactors ("LTO") and on nuclear waste obligations ("CAP") in December 2023. SYNATOM is not a party to these agreements. Under these agreements, the ENGIE Group has also committed itself to securing the uranium needed for the LTO. At ELECTRABEL's request, and as approved by SYNATOM's Board of Directors, SYNATOM has negotiated and concluded contracts for the supply of uranium in its various forms in order to allow this extension.

On 6 July 2023 a court-ordered reorganization at SA LES ATELIERS DE LA MEUSE ("ALM"), a major subcontractor of ORANO for delivering casks, was opened by the Liège Enterprise Court, which initially granted a 4-month suspension of payments, and subsequently ALM was declared bankrupt. A buyer was found to incorporate the new Ateliers de la Meuse in early 2024, which will continue to provide ORANO with the services agreed with SYNATOM.

After the initial final shutdown of the Doel 3 reactor (23 September 2022), the Tihange 2 reactor was shut down on 31 January 2023.

Following the introduction of the Act of 12 July 2022, SYNATOM has continued to make the necessary adjustments to its governance, and in early 2023 it revised its Corporate Governance Charter and Articles of Association to comply with it.

## Capital, Shareholder structure and mission of the company

SYNATOM's capital stands unchanged at 49.6 million euros, including approximately 25% of paid-up capital, and is represented by 2 million registered shares.

All shares are held by ELECTRABEL SA, with the exception of one special "golden" share held by the Belgian state. This golden share gives the latter special rights, such as the presence of two Government Representatives on the Board of Directors.

## Technical activities

### Supply of enriched fissile materials

SYNATOM carried out its last deliveries of enrichment services in 2023 within the framework of its historical contracts and the shutdown of the plants in 2025 in accordance with the current legal requirements. The last delivery of enriched uranium to the manufacturing plant designated by ELECTRABEL took place in early 2023. The residual quantities of uranium, based on actual consumption, then became known on the basis of the last cores loaded, and SYNATOM therefore applied an upward revision of its stocks of 89 million euros.

As mentioned in the first paragraph, following the signature of the agreement, SYNATOM renewed its portfolio of supply contracts for natural uranium, and conversion and enrichment services. SYNATOM has excluded all materials of Russian origin. Our existing stocks and new supply contracts will be used to cover the future needs of both plants under the LTO.

The supply contracts were renewed amidst bullish markets for natural uranium, and conversion and enrichment services. These price increases are the result of the war in Ukraine and the decision of electric utilities to no longer depend on Russian supplies, and a general growing global appetite for the revival/development of nuclear power.

## Management of spent fuel assemblies and related waste

### Transfer of spent fuel assemblies from deactivation pools to centralised storage buildings.

In 2023, a cask with assemblies from Doel 4 was loaded and transferred to the centralised dry storage building known as SCG.

There were no transfers of spent fuel between the deactivation pools and the DE centralized storage pool at Tihange.

#### SF<sup>2</sup>

The construction of additional dry storage capacity for spent fuel at each of the two nuclear sites is still under way. These are the SF<sup>2</sup> (Spent Fuel Storage Facility) buildings.

At Tihange, the building and its equipment have undergone functional testing with a view to obtaining the operating license in the first half of 2024.

At Doel, construction work on the SF<sup>2</sup> building continued, which should be operational in early 2025.

These commissioning dates for the SF<sup>2</sup> facilities are compatible with operational needs and the forecast saturation dates for existing storage capacities at the sites.

#### Casks

In response to the growing need for spent fuel storage casks for the Doel and Tihange power plants, and with diversification in mind, SYNATOM has signed several contracts for the supply of casks in the last decade: with the American Company HOLTEC, the German Company GNS and the French Company ORANO NPS.

Delivery of the "first-of-a-kind" series of these new cask types, meeting the most stringent safety criteria and compatible with the new SF<sup>2</sup> facilities, is scheduled between 2022 and 2024. Delivery of the first GNS cask in 2022 was followed by the first HOLTEC cask for Doel 1&2 in early 2023 and the first ORANO NPS cask for Tihange.

2023 was mainly used to perform a number of dry runs on these three "first-of-a-kind" casks, to test the handling, loading, transfer and storage operations using dedicated equipment, and to train the staff involved in cask management.

Early 2023, a total of 53 casks to be used for the transfer and/or storage of spent fuel were being manufactured. Thirty-one new orders for casks were signed in 2023 in total, in line with site requirements.

As mentioned earlier, ALM, a subcontractor of Orano NPS located in Liège, was declared bankrupt in 2023. The manufacture of casks for SYNATOM continued at ALM during the year, thanks in particular to the measures taken by Orano NPS, but at a slower pace than anticipated. The expected delivery dates are still in line with the needs of the Doel and Tihange sites. At the end of 2023, two joint investors came forward to take over some of ALM's activities (including the construction of casks).

The other suppliers of casks, HOLTEC and GNS, have seen some delayed deliveries as a result of inflation, tensions in the post-Covid supply chain and the war in Ukraine, however without compromising - at this stage - the sites' loading schedules for the final shutdown of units.

### The second transfer shuttle of the Tihange nuclear power plant

Production of the second spent fuel transfer shuttle for the Tihange power plant continued with the American manufacturer HOLTEC. Its arrival is scheduled for the second half of 2024.

#### Special assemblies

For several years, SYNATOM has been developing an action plan for managing non-waterproof or mechanically damaged assemblies (CIME), in view of the complete emptying of the deactivation pools. This is a fundamental step in the final shutdown phase, ahead of the dismantling of the reactors.

In 2023, preparations related to equipment and authorizations for the fuel-related operations planned for 2024 at Doel 3 and Tihange 2 continued. A new contract was signed with FRAMATOME for spent fuel at Tihange 1 requiring intervention.

### Relations with the National agency for radioactive waste and enriched fissile materials (ONDRAF)

Deep geological disposal - in a site still to be identified and qualified in Belgium - is today the final destination considered for the radioactive waste of high activity and/or long life. This scenario was not confirmed when the national program under Article 12 of Directive 2011/70/EURATOM was adopted in 2016.

In this regard, the European Commission sent a reasoned opinion to Belgium on 27 November 2019 under the infringement procedure of Article 258 of the Treaty on the Functioning of the European Union.

A Royal Decree of 28 October 2022 has since instituted "the first part of the National Policy for the Long-Term Management of High-Level Radioactive Waste and/or Long-Life Radioactive Waste and specifying the process for the phased institution of the other parts of this National Policy".

This Royal Decree confirms "the deep disposal of this waste on Belgian territory on one or several sites" as "the preliminary draft concept for the long-term management of the radioactive waste referred to in Article 3, pending the outcome of the decision-making process (...)". It also enshrines "the reversibility of the National Policy, which implies, after reconsideration, the possibility of going back on one or more parts of this Policy".

It is therefore not possible to guarantee that deep disposal of category B (low- or medium-level long-lived waste from dismantling) and C (high-level and/or long-life) will remain the technical solution chosen by Belgium.

Nevertheless, this is the assumption used by ONDRAF to assess the cost of the final disposal solution for category B and C waste, and which is taken into account in the final decision of the NPC in July 2023.

We also refer to the terms of the agreement between the ENGIE Group and the Belgian government, relating to the management of nuclear waste and spent fuel.

## Nuclear provisions

The NPC's final decision on the triennial revision of nuclear provisions was rendered on 7 July 2023 (following a reasoned opinion submitted in February and prior consultation held in June), with the following accounting consequences for the 2023 financial year (please note that the accounts for the 2022 financial year were based on the decision taken by the NPC at the end of 2022):

- provisions for dismantling: a decrease of 630.5 million euros<sup>2022</sup>;
- back-end provisions: a decrease of 17.9 million euros<sup>2022</sup>.

## Agreement between the ENGIE Group and the Belgian State - Doel 4 and Tihange 3 LTO

On 9 January 2023, the ENGIE Group and the Belgian government signed an agreement in principle (Heads of Terms and Commencement of LTO Studies Agreement) which provides for the start of environmental and technical studies prior to obtaining authorizations linked to the extension of the Belgian nuclear units Doel 4 and Tihange 3. It gives concrete form to the elements set out in the Letter of Intent signed on 21 July 2022, and specifies certain terms and conditions.

On 29 June 2023, the ENGIE Group and the Belgian government confirmed an interim agreement specifying the terms and conditions for the extension of the Doel 4 and Tihange 3 nuclear units.

On 13 December 2023, the ENGIE Group and the Belgian government signed a final agreement on the extension of the Tihange 3 and Doel 4 nuclear units, and on all nuclear waste obligations. This document confirmed and endorsed the key principles of the above-mentioned framework agreement signed on 21 July 2023, i.e.:

- both parties' commitment to carry out a Flexible Long-Term Operation ("LTO"), for an estimated investment of between 1.6 and 2 billion euros, and to make every effort to restart the Doel 4 and Tihange 3 nuclear units by November 2025;
- the creation of a dedicated legal structure for the two LTO nuclear units, owned in equal halves by the Belgian State and ENGIE;
- the economic model of the LTO, with a balanced distribution of risks, notably through a Contract for Difference mechanism for the remuneration of electricity production;

- setting a fixed amount for the future costs of nuclear waste treatment, for all of ENGIE's nuclear facilities in Belgium, at a total amount of 15 billion euros<sup>2022</sup> ("Cap") payable in two instalments per waste category, a payment of 11.5 billion euros<sup>2022</sup> for category B and C waste (highly radioactive waste destined for geological storage), at the time of closing, then the balance, i.e. 3.5 billion euros<sup>2022</sup> when the LTO units are restarted at the end of 2025 for category A waste (low-level radioactive waste destined for surface storage). These amounts in euros<sup>2022</sup> are subject to 3% indexation from 1 January 2023 until the payment date;
- the restrictions on ELECTRABEL's non-European assets are lifted.

The final text also sets out the technical and operational requirements for restarting the two units as early as November 2025, with full nuclear safety guarantees.

This agreement remains subject to an actual approval of the legislative amendments expected in May 2024 and approval by the European Commission - consultations are underway - expected in Q4 2024. The transaction should therefore close in the 4th quarter of 2024. For SYNATOM, this implies transferring the nuclear provisions for nuclear waste management and the corresponding sum to a public establishment called "Hedera" upon closing.

As a result of this agreement, the ENGIE Group has revised the valuation of its provisions by an amount corresponding to the balance between the liabilities already set aside for future nuclear waste treatment costs and the lump-sum amount of 15 billion euros<sup>2022</sup>, i.e. 5.1 billion euros<sup>2022</sup> (including the share of ELECTRABEL's partners in certain power plants for 0.4 billion euros).

As SYNATOM is not a party to this agreement and the legislative changes have not yet been made, SYNATOM's provisions do not need to be adjusted on 31 December 2023. The consequences of the agreement and legislative changes will have to be analysed, but the impact on SYNATOM's nuclear provisions and corresponding assets will likely be significant.

Lastly, the 10-year extension of the Doel 4 and Tihange 3 units in the agreement means that the operation of certain dismantling waste treatment facilities will be extended, as will the final shutdown phases of certain units (Doel 3 and Tihange 2), and will render the sequence of dismantling activities of the various units less optimal. The government is expected to bear the related additional provisions, estimated at between 500 and 600 million euros. Pending an agreement on the exact amount and the closing of the transaction, this additional liability, paid as a lump sum at closing by the Belgian State, is not included in Engie's financial statements. For the same reasons as above, these amounts are not included in SYNATOM's accounts.



## Asset management counterparty of the nuclear provisions

When it comes to managing the investments that represent the counterparty of the nuclear provisions, SYNATOM relies on a dedicated team and its Investment Committee to oversee investment decisions. Those decisions are taken within the framework of SYNATOM's Investment Policy - approved by its Board of Directors - that defines risk profiles aiming to achieve long-term return objectives and ensure sufficient diversification and risk minimisation.

In 2023, in addition to persistent inflation and geopolitical tensions heightened by the Israeli-Palestinian conflict, monetary tightening by central banks mainly drove volatility on the markets in the first half of the year, notably leading to the collapse of some US regional banks. The second half of the year, particularly after the summer period, saw a slowdown in inflation and a change in outlook from central banks, bringing a degree of optimism to the markets.

In terms of economic growth, the US remained resilient, buoyed by consumer demand and the federal government's deficit spending, while Europe, and Germany in particular, experienced a more pronounced slowdown. In China, the economic recovery was modest, and the real estate sector continued to face persistent challenges.

Stock markets posted overall gains, with a significant contribution from the US technology and semiconductor sectors. Bond performance rebounded after a difficult year in 2022, and currency fluctuations showed relative stability between the euro, dollar, yen, Swiss franc, and pound sterling.

Following the repayment of loans by ELECTRABEL, the size of the portfolio of outsourced assets managed by SYNATOM has grown substantially, reaching almost 10 billion euros by the end of 2023.

SYNATOM's investment objectives have been reviewed to take into account the agreement between the ENGIE Group and the Belgium State:

- for the 8.800 billion euros (counterpart of SYNATOM's provisions set aside to cover nuclear waste to be transferred to Hadera) necessary to pay the lump sums agreed as part of the transfer to the Belgian State of financial responsibility have been secured through investments in money market instruments providing a return at least equivalent to the agreed indexation of the lump sums;
- for the investments intended to cover SYNATOM's remaining liabilities, to ensure a sufficient return, at an acceptable risk level, with the goal of covering the costs of dismantling and storing irradiated fissile materials, subject to diversification, risk minimization and availability as defined by the Act of 12 July 2022.

In 2023, SYNATOM abandoned the stop-loss mechanism for its entire portfolio, which had proved inefficient in highly volatile markets.

The full year return on assets deployed was 5.01% for the financial year.

## Distribution contributions

Since 2008, SYNATOM has been responsible for collecting the distribution contribution, also known as the nuclear tax, on behalf of the Belgian State. For the financial year ending on 31 December 2022, the total amount set by the Royal Decree of 27 September 2023 was 846.5 million euros, divided between ELECTRABEL for 800.2 million euros and LUMINUS for 46.3 million euros.

This contribution does not apply to the Doel 1 and 2, and Tihange 1 reactors, for which special agreements have been reached directly between the Belgian government and the nuclear operator.

## Corporate Governance

SYNATOM's corporate governance is based on the applicable legal provisions (in particular the Belgian Code of Companies and Associations, "the CSA" and the aforementioned Act of 12 July 2022) as well as its Articles of Association, charters and internal regulations of its bodies.

SYNATOM is a monistic structure established in the legal form of a limited Company, organised around the following components:

- The Board of Directors formed by 8 members, including three independent Directors as defined in Article 7:87 CSA. It should be noted that the Federal Government has two representatives (Golden Share). It also has two committees:
  - The Audit Committee, made up of three Directors, two of whom are independent; the Chief Financial Officer and the Chief Executive Officer are permanent guests. It formulates opinions and recommendations to the Board of Directors concerning the control of financial documents, the control of the investment policy risk framework and the control of information transmitted to the Nuclear Provisions Commission.
  - The Investment Committee, comprising four Directors, one of whom is independent, and the CEO. The Chief Investment Officer is a permanent guest; the Chair is an independent Director. It makes recommendations to the Board of Directors on SYNATOM's investment policy and endorses the Chief Investment Officer's proposals in accordance with the investment policy in force.

Independent Directors are chosen for their knowledge of financial management (including accounting and audit) and/or technical expertise in sectors relevant to the Company's activities.

One independent Director is of the opposite sex to the other two.

The completion of the "Fit & Proper" process (Act of 12 July 2022) was confirmed by the NPC with the confirmation (i) for all members of the Board of Directors and effective management of SYNATOM and its subsidiaries - after consultation with the FSMA - that there was "no indication that could cast doubt on the required professional honourability and expertise", and (ii) for the independent Directors in addition - and after consultation with the CREG - that there were no "elements that prevented" their appointment.

In 2023, SYNATOM's Board of Directors met 8 times, with an attendance rate of 90%. During the past financial year, no decision falling within the scope of Article 7:96 of the Belgian Code of Companies and Associations was taken by the Board of Directors.

The Audit and Investments Committees met on 4 and 8 occasions, respectively.

## Follow-up of mandates

In accordance with the law, the Company amended its Articles of Association in line with the Act of 12 July 2022 at the EGM of 30 January 2023. On this occasion, Ms. Cecile Flandre was appointed as an independent Director and became Chair of the Board of Directors with effect from the same date, replacing Mr. Didier Engels who stepped down from his office.

Mr. Thierry SAEGERMAN resigned from his Directorship with effect from 1 January 2024. The Board of Directors co-opted Mr. Cedric OSTERRIETH to take over his mandate with effect from the same date.

Mr. Michaël GILLIS resigned from his Directorship with effect from 8 February 2024. The Board of Directors co-opted Mr. François GRAUX to take over his mandate from 8 February.

Mr. Patrick GAUSSENT resigned from his Directorship with effect from 1 March 2024. The Board of Directors co-opted Ms. Mireille VAN STAEYEN to take over his mandate and also appointed her as Chair of the Audit Committee and member of the Investment Committee, with effect from the same date.

The "fit & proper" process (Act of 12 July 2022) for these persons has been started.

## Day-to-day management

There were no changes in the day-to-day management. It is carried out by the CEO, assisted by department Directors. These departments cover the front-end of the nuclear fuel cycle, the back-end of the nuclear fuel cycle, financial management, legal matters and investments.

## Ethics - Conflict of interest

The Board is regularly updated on the Group's Ethics policies, notably through updates to its ethics policy and the annual report of SYNATOM's Ethics Officer.

During the past financial year, no decision falling within the scope of Article 7:96 of the Belgian Code of Companies and Associations (conflict of interests) was taken by the Board of Directors.

## Disputes

Due to the Belgian authorities' delay in implementing solutions for the management of nuclear waste, including low-level waste, additional costs are estimated at 0.9 billion euros.

SYNATOM has also given the Authorities formal notice to put an end to the uncertainty created by this state of affairs and to the damage caused by the postponement of the various projects necessary for the management of nuclear waste in Belgium. In September 2023, the Company initiated proceedings against the Belgian State, ONDRAF and FANC before the Brussels Court of First Instance, to avoid the statute of limitations.

Implementation of the agreement between ENGIE and the Belgian State will require SYNATOM to drop the action brought in September 2023 against the Belgian State, ONDRAF and FANC, by withdrawing the action within 15 working days of the closing of said agreement.

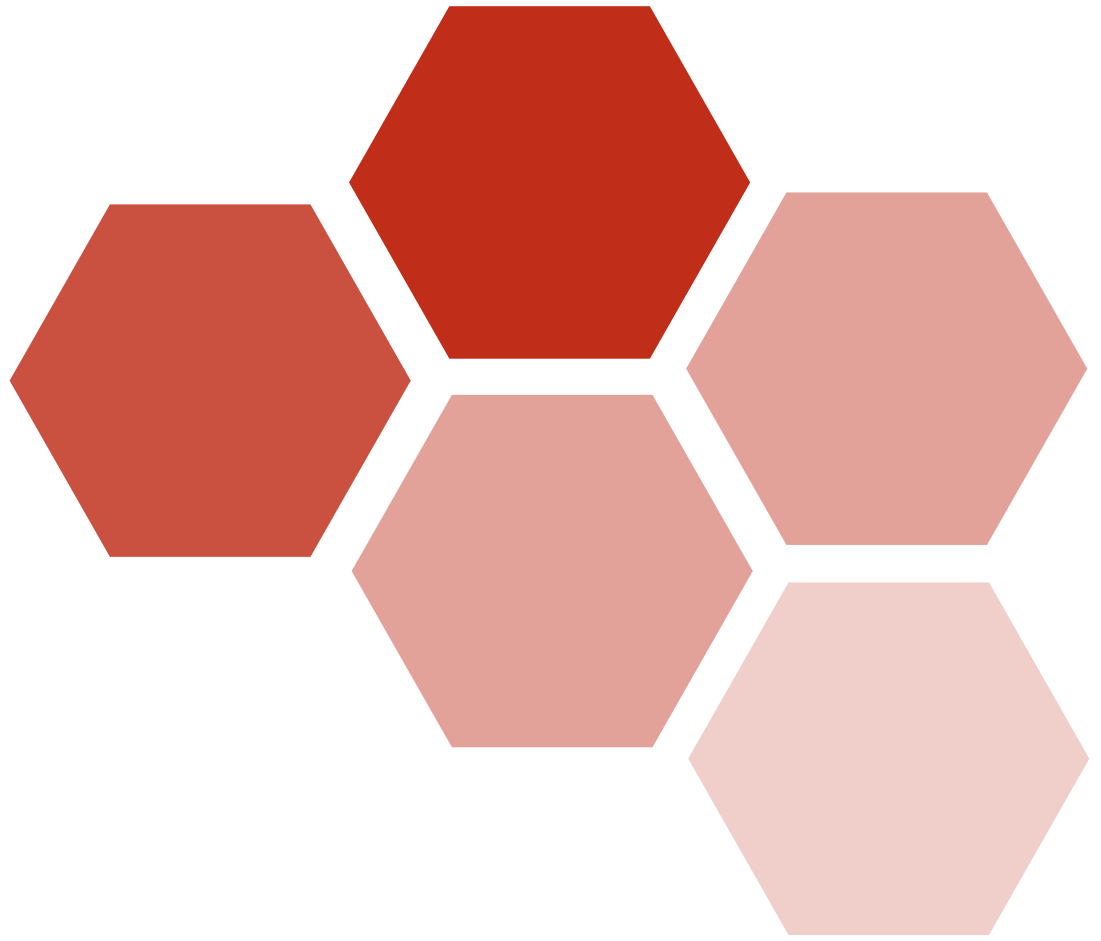
## Release from liability

In accordance with Article 7:149 of the CSA, it is proposed that the Annual General Meeting release the Directors and the statutory Auditor from their liability.

## Branch

The Company has no branches.





# ANNUAL ACCOUNTS



Below, we comment on some of the important items on the balance sheet and the profit and loss statement for the financial year.

## Balance sheet

### Financial assets - Investments in affiliated companies

This section includes the counterpart of provisions invested on the financial markets through SICAVs BNLf and NIF, held at 100% by SYNATOM.

### Financial assets - Receivables from affiliated companies

This section includes outstanding loans to ELECTRABEL, including one for provisions relating to the management of irradiated fissile materials in the amount of 2,002 million euros (1,071 million euros in long-term and 931 million euros in short-term loans), and another for provisions relating to dismantling in the amount of 4,703 million euros (3,673 million euros in long-term and 1,031 million euros in short-term loans). The loan granted to cover provisions for spent fuel management will be repaid by the end of 2025, and the loan granted to cover provisions for the dismantling of nuclear power plants will be repaid by the end of 2030, in accordance with the timetables set out in the Act of 12 July 2022. In 2023, SYNATOM granted a new loan to increase the dismantling provisions for an amount of 1,618 million euros, in accordance with the Act of 12 July 2022. This additional loan will be repaid gradually between now and September 2031. In 2023, ELECTRABEL also repaid 683 million euros of the dismantling loan, 102 million euros of the additional loan granted in 2023 and 889 million euros of the spent fuel management loan.

### Financial assets - Companies with a shareholding relationship

In February 2019, SYNATOM acquired a stake in the 14B fund. Receivables relate to a loan granted to the fund, with capitalised interest, for 12 years. Two capital liberalisations and a capital increase took place in 2023 for a total amount of 0.4 million euros, which brings the amount of the holding at the end of 2023 to 24.75 million euros.

### Long-term receivables - Other receivables

At the end of 2023, the outstanding loan granted to SIBELGA in 2005, maturing on 31 December 2025, amounted to 3.1 million euros (of which 1.6 million euros is a long-term loan and 1.5 million euros a short-term loan).

### Stocks

Stocks amount to 307 million euros and include uranium stocks in their various forms.

The last delivery of enriched uranium to the manufacturing plant designated by ELECTRABEL took place in early 2023.

The residual quantities of uranium, based on actual consumption, then became known on the basis of the last cores loaded, and SYNATOM therefore applied an upward revision of its stocks of 89 million euros.

### Short-term receivables - Trade receivables

This section includes current trade receivables of 360 million euros related to adjustments to nuclear provisions.

It also includes a credit note of 97 million to be received from ELECTRABEL for expenses relating to the dismantling of the nuclear power plants (as the actual expenses incurred were lower than the budgeted expenses invoiced).

The significant reduction in receivables compared with 2022 is mainly related to the payment of invoices by ELECTRABEL and LUMINUS, following the revision of nuclear provisions.

At the end of 2023, 50% of the initial amount (excl. VAT) of the invoices for the increase in provisions for spent fuel management and for the increase in provisions for dismantling to be paid by LUMINUS was still outstanding. Payment of these amounts is scheduled for the end of June 2024.

### Short-term receivables - Other receivables

The increase compared with 31 December 2022 is mainly due to the distribution contribution for 2023, which was invoiced to ELECTRABEL and LUMINUS for a total amount of 846 million euros.

This section also includes:

- the share of the ELECTRABEL loans to be repaid in 2024 for 1,961 million euros,
- the share of the SIBELGA loan maturing in 2024 for an amount of 1.5 million euros,
- An amount of 35.3 million euros in recoverable VAT.

### Cash and cash equivalents

Following the withdrawal from the Cash Pooling Group, cash investments amounted to 117 million euros and available cash to 168 million euros.

### Amounts payable after one year - Other liabilities

At the end of 2023, this item includes SYNATOM's debt to ONDRAF relating to Guiding Principles (200 million euros) following the updating of liabilities applicable to Category B and C waste in storage at BELGOPROCESS, an ONDRAF subsidiary.

## Provisions and deferred taxes

These provisions, commonly referred to as «nuclear provisions», are intended to cover the costs of managing irradiated fissile materials and dismantling nuclear power plants, in accordance with the legal provisions in force.

## Financial debts and other borrowings

To pre-finance the nuclear distribution contribution, SYNATOM had to borrow an amount of 847 million euros from ENGIE Treasury Management (ETM). This loan was repaid in January 2024.

## Trade payables, suppliers

This section amounts to 91 million euros. The increase compared to the previous financial year is due to the receipt of an invoice for uranium enrichment.

## Results

### Turnover

The turnover includes the fees invoiced to ELECTRABEL for the supply of enriched uranium in the amount of 225 million euros. This turnover is due to the shutdown of the Doel 3 and Tihange 2 units, and to the revaluation of uranium stocks.

### Supplies and goods

This item includes purchases of natural uranium, and conversion and enrichment services.

### Services and other goods

This item corresponds to withdrawals from nuclear provisions, mainly to cover costs incurred during the financial year for spent fuel management in the amount of 120 million euros, study costs and initial activities related to dismantling in the amount of 203 million euros, and ONDRAF's R&D program in the amount of 7.9 million euros.

## Non-recurring income and expenses

This item mainly includes the amount corresponding to the change in provisions following consultation with the NPC, i.e. a 649 million euro reduction, and the corresponding invoice to the nuclear operator.

## Financial income

This item covers interest on loans and cash investments. It also includes amounts invoiced to ELECTRABEL and LUMINUS as financial income guarantees, corresponding to the accretion of provisions.

## Taxes on profit

This item amounts to 166 million euros.

## Profit

The annual accounts for the 2023 financial year show a profit of 564,870 euros, corresponding to a return on equity of 3.65%, based on a market rate published by the CBE.

It is proposed to the General Meeting of 8 May 2024, adopting the accounts for the 2023 financial year, to allocate an amount of 28,243.50 euros to the legal reserve and to distribute a dividend of 1.07 euros per fully paid-up share, for a total amount of 536,605 euros. The balance of the profit for the financial year, i.e. 21.50 euros, is added to the retained earnings, which therefore amounts to 11,469.57 euros.

## Off-balance sheet

At the end of 2023, SYNATOM set up bank guarantees for the benefit of ONDRAF in the amount of 249 million euros. ELECTRABEL underwrote these bank guarantees.

In accordance with the law of 12 July 2022, ENGIE CC, ELECTRABEL's financial subsidiary, has underwritten the new loan of 1,618 million euros granted by SYNATOM to ELECTRABEL.

## Events after the balance sheet date

### Casks

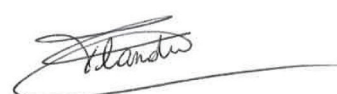
Early 2024, the Liège Business Court approved the proposed takeover of certain ALM activities by the above-mentioned potential buyers, to form the company "les Nouvelles ALM", which is now operational.

We do not anticipate any other notable circumstances that could influence future development of the company in a substantial way.

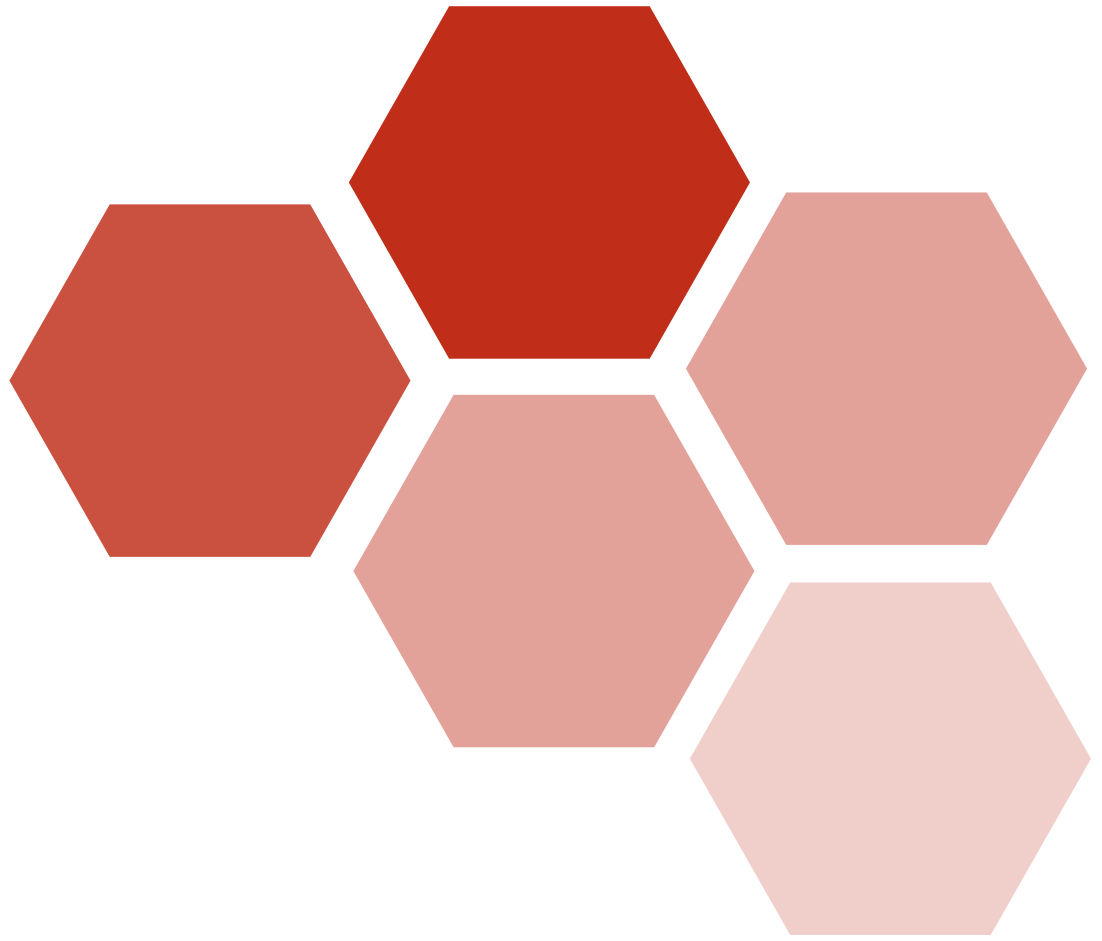
Brussels, 15 March 2024



Dimitri STROOBANTS  
Chief Executive Officer



Cécile FLANDRE  
Chair



# BALANCE SHEET



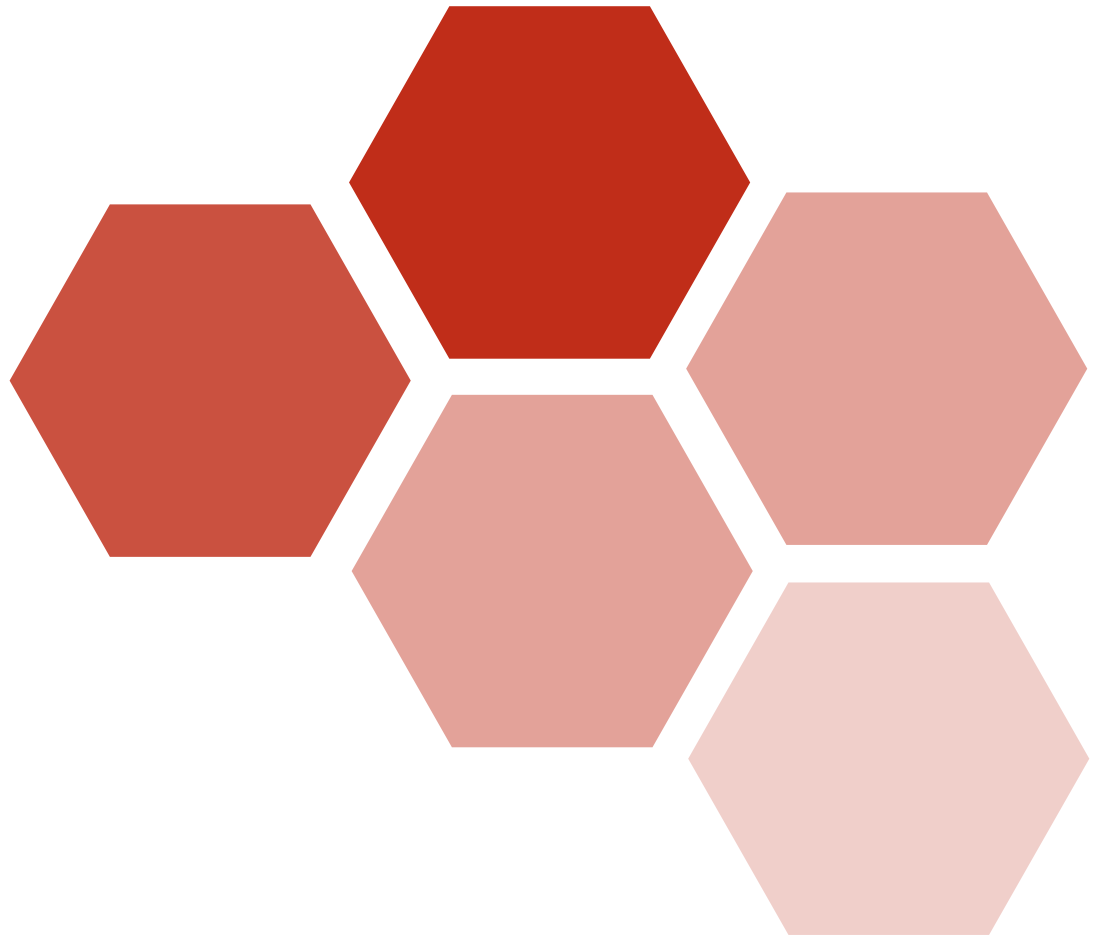
## Balance sheet as per 31 December (in thousands of euros)

ASSETS	2023	2022
<b>Fixed assets</b>	<b>0</b>	<b>0</b>
Furniture, vehicles and equipment	0	0
<b>Financial assets</b>	<b>14,759,677</b>	<b>12,229,838</b>
Financial investment Funds - Receivables	9,990,477	7,017,477
Affiliated companies - Receivables	4,744,443	5,188,000
Other companies linked by participating interests	24,757	24,361
• Participations	24,757	24,361
• Receivables	0	0
<b>Amounts receivable after more than one year</b>	<b>1,618</b>	<b>3,114</b>
Trade Receivables	0	0
<b>Stocks and contracts in progress</b>	<b>306,649</b>	<b>307,744</b>
Stocks		
Work in progress	306,649	307,744
<b>Receivables within one year</b>	<b>3,312,625</b>	<b>5,587,100</b>
<b>Trade debtors</b>	<b>466,420</b>	<b>3,092,233</b>
<b>Other receivables</b>	<b>2,846,205</b>	<b>2,494,867</b>
Current investments	117,000	0
<b>Other investments</b>	<b>117,000</b>	<b>0</b>
Cash at bank and in hand	168,440	1
Accruals and deferred income	1,831	1,188
<b>TOTAL ASSETS</b>	<b>18.667.841</b>	<b>18.128.986</b>

## Balance sheet as per 31 December (in thousands of euros)

EQUITY AND LIABILITIES	2023	2022
<b>Capital</b>	<b>12,453</b>	<b>12,453</b>
Issued share capital	49,600	49,600
Uncalled capital	-37,147	-37,147
<b>Share premiums</b>	<b>141</b>	<b>141</b>
<b>Reserves</b>	<b>1,917</b>	<b>1,889</b>
Legal reserve	1,835	1,837
Non-available reserve		
• Other	15	15
Untaxed reserves	37	37
<b>Profit brought forward</b>	<b>11</b>	<b>11</b>
<b>Provisions and deferred taxes</b>	<b>17,507,084</b>	<b>17,856,801</b>
Provisions for environmental obligations	17,507,084	17,856,801
<b>Amounts payable after more than one year</b>	<b>199,996</b>	<b>192,610</b>
Guiding Principles	199,996	192,610
<b>Amounts payable within one year</b>	<b>939,265</b>	<b>61,264</b>
Financial debts		
• Others loans	846,557	
Trade debts		
• Suppliers	91,335	59,718
Taxes, remuneration and social security		
• Taxes	199	172
• Remuneration and social security	615	472
Other amounts payable	560	903
<b>Accruals and deferred income</b>	<b>6,974</b>	<b>3,817</b>
<b>TOTAL EQUITY AND LIABILITIES</b>	<b>18,667,841</b>	<b>18,128,986</b>





# INCOME STATEMENT

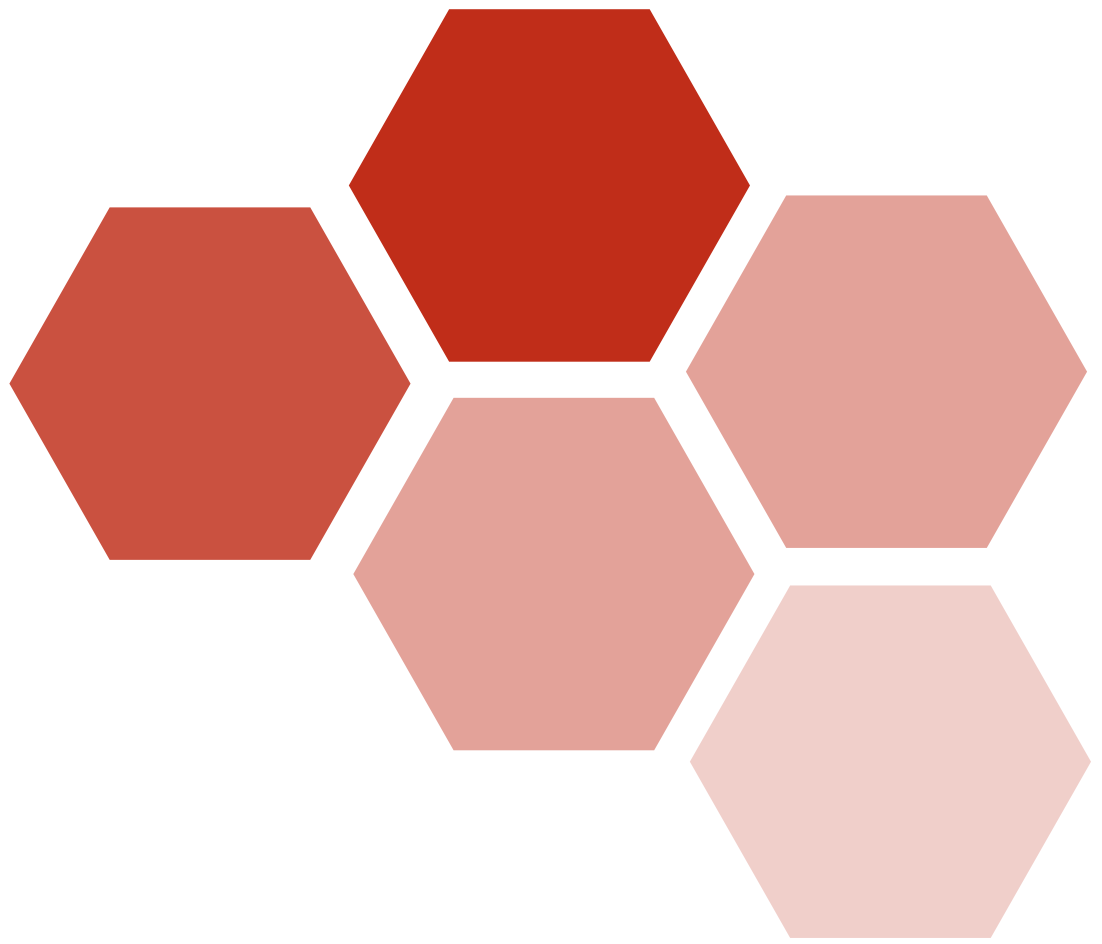


## Income Statement

(in thousands of euros)

	2023	2022
<b>Operating income</b>	<b>391,325</b>	<b>3,271,115</b>
Turnover	225,791	424,577
Stocks of finished goods and work and contracts in progress: increase (decrease)	-1,095	-100,393
Other operating income	894	581
Non-recurring operating income	165,735	2,946,350
<b>Operating charges</b>	<b>683,145</b>	<b>3,747,023</b>
Goods for resale, raw materials and consumables	44,587	86,597
Services and other goods	335,694	175,522
Remuneration, social security and pensions	4,183	3,300
Amortisations of and other amounts written down on formation expenses, intangible and tangible fixed assets	0	0
Provisions for liabilities and charges: appropriations (uses and write-backs)	298,678	535,263
Other operating charges	3	4
Non-recurring operating charges		2,946,337
<b>Operating profit (loss)</b>	<b>-291,820</b>	<b>-475,908</b>
<b>Financial income</b>	<b>462,547</b>	<b>480,913</b>
Income from financial fixed assets	180,380	224,283
Income from current assets	282,167	256,630
Other financial income		
<b>Non-recurring financial income</b>		
Financial charges	3,858	4,050
Debts charges	3,857	3,979
Other financial charges	1	71
<b>Profit (Loss) for the period before taxes</b>	<b>166,869</b>	<b>954</b>
<b>Income taxes on the result</b>	<b>166,304</b>	<b>1</b>
<b>Profit (Loss) of the period</b>	<b>565</b>	<b>953</b>
<b>PROFIT OF THE PERIOD AVAILABLE FOR APPROPRIATION</b>	<b>565</b>	<b>953</b>

APPROPRIATION ACCOUNT	2023	2022
<b>Profit to be appropriated</b>	<b>576</b>	<b>962</b>
Profit (Loss) of the period available for appropriation	565	953
Profit (Loss) of the preceding period brought forward	11	9
<b>Appropriations to equity</b>	<b>28</b>	<b>48</b>
To legal reserve	28	48
<b>Profit to be carried forward</b>	<b>11</b>	<b>11</b>
<b>Profit to be distributed</b>	<b>537</b>	<b>903</b>
Dividends	537	903



# ADDITIONAL NOTES



(in thousands of euros)

## Statement of financial fixed assets

FINANCIAL INVESTMENTS FUNDS	2023
<b>Net book value at the end of the previous period</b>	<b>7,017,477</b>
• Acquisitions	2,973,000
• Transfers from one heading to another	0
<b>Acquisition's value at the end of the period</b>	<b>9,990,477</b>
<b>Net book value at the end of the period</b>	<b>9,990,477</b>

AFFILIATED COMPANIES	2023
<b>Affiliated companies - Receivables</b>	
<b>Net book value at the end of the previous period</b>	<b>5,188,000</b>
• Additions	1,618,390
• Reimbursements	-101,149
Impairment	0
Impairment cancellation	0
Other	-1,960,798
<b>Net book value at the end of the period</b>	<b>4,744,443</b>

COMPANIES LINKED BY PARTICIPATING INTERESTS	2023
<b>Participations Companies linked by participating interests</b>	
<b>Net book value at the end of the previous period</b>	<b>24,641</b>
Acquisitions	253
<b>Acquisition value at the end of the period</b>	<b>24,894</b>
<b>Uncalled capital at the end of the period</b>	<b>280</b>
• Movements during the period	-144
• Uncalled amounts at the end of the period	137
<b>Net book value at the end of the period</b>	<b>24,758</b>
<b>Net book value at the end of the period</b>	<b>0</b>

## Information about participations

NAME	INTERESTS			
	Nature	Number	%	Equity
I4B – The Belgian Infrastructure Fund SA Avenue du Port 86C - 1000 Bruxelles	Registered shares	24,641,334	24.96	64,321,726 euros
BNLF – Belgian Nuclear Liabilities Funds SA Boulevard Simon Bolivar 34 - 1000 Bruxelles	Registered shares	1,632,297	100	1,561,509,712 euros
Nuclear Investment Fund (NIF1) SA Avenue de la gare 65 L-1611 Luxembourg	Registered shares	473,320	100	4,779,572,643 euros
Nuclear Investment Fund (NIF2) SA Avenue de la gare 65 L-1611 Luxembourg	Registered shares	26,546	100	252,947,491 euros
Nuclear Investment Fund (NIF3) SA Avenue de la gare 65 L – 1611 Luxembourg	Registered shares	232,271	100	

## Current investments and accruals and deferred income

	2023	2022
<b>Current investments - Other investments</b>		
Shares	0	0
<b>Term accounts with credit institutions</b>		
With a remaining term or notice between one month and one year	117,000	
<b>Accruals and deferred income</b>		
Accrued interests	1,590	1,188
Operational costs to be regularized	241	0

## Statement of capital and shareholders' structure

CAPITAL	2023
<b>Issued share capital</b>	
At the end of the previous period	49,600
<b>At the end of the period</b>	<b>49,600</b>
<b>Representation of the capital</b>	
Type of shares:	
• Registered shares	2,000,000 shares
UNPAID CAPITAL	2023
Shareholders (uncalled capital)	
ELECTRABEL	37,147
SHAREHOLDER'S STRUCTURE	
ELECTRABEL	1,999,999 shares
Belgian State	1 share
	<b>2,000,000 shares</b>

## Statement of amounts payable and accruals and deferred income (liabilities)

AMOUNTS PAYABLES AFTER MORE THAN ONE YEAR	2023
<b>Others debts (Guiding principles)</b>	<b>199,996</b>
TAXES, REMUNERATION AND SOCIAL SECURITY	
<b>Taxes</b>	
Outstanding tax debts	-
Accruing taxes payable	199
Estimated taxes payable	-
<b>Remuneration and social security</b>	
Amounts due to the National Social Security Office	-
Other amounts payable in respect of remuneration and social security	615
ACCRUALS AND DEFERRED INCOME	
Operating expenses to be paid	88
Operating expenses to be regularised	6,886

## Operating results

	2023	2022
OPERATING INCOME		
Net turnover		
Fees for the availability of fissile material	224,795	423,637
Miscellaneous	996	940
	225,791	424,577
OPERATING CHARGES		
Employees who are recorded in the general personnel register		
Total number at the closing date	22	20
Average number of employees calculated in full-time equivalents	21.2	19.1
Number of actual hours worked	34,672	30,548
Personnel costs		
Remuneration and direct social benefits	2,548	2,216
Employers' contribution for social security	664	554
Employers' premiums for extra statutory insurance	860	445
Other personnel costs	111	86
	4,183	3,301
Provisions for liabilities and charges		
Appropriations	622,891	698,736
Uses and write-backs	(-) 324,212	(-) 163,473
	298,678	535,263
Other operating charges		
Taxes related to operations	3	4
Other		
	3	4



## Non-recurring income and charges

	2023	2022
NON-RECURRING INCOME		
Non-recurring operation income		
Other non-recurring operation income	165,735	2,946,350
NON-RECURRING CHARGES		
Non-recurring operating charges		
Exceptional provisions for liabilities and charges	0	2,946,337

## Taxes

	2023	2022
INCOME TAXES		
Income taxes on the result of prior periods		
Additional income taxes due or paid	166,304	1
Main sources of disparities between pre-tax profit, expressed in the accounts, and the estimated taxable profit		
Disallowed expenses	661	111
Use of anterior losses	0	(-) 354
VALUE ADDED TAX AND RETAINED TAXES CHARGED TO THIRD PARTIES		
Value added tax charged		
To the company (deductible)	75,347	27,992
By the company	538,974	80,389
Retained taxes charged to third parties		
Payroll withholding taxes	994	774

## Off balance sheet rights and commitments

### Forward transactions

Purchase foreign exchange ..... 50,211

### Amount, Nature and Form concerning litigation and other important commitments

Uranium purchase commitments at 31/12/2023 ..... 435,297

## Other commitments

In the nuclear sector, there are purchase contracts for raw materials and services related to uranium concentrates, conversion and enrichment as well as contracts for the back end of the fuel cycle.

## Brief description of the additional retirement or survival pension system

Members of staff enjoy an income guarantee in case of retirement or survival based on their seniority as a staff member of the company or as a staff member of affiliated companies and dependent upon their remuneration at the end of their career.

In order to cover engagements deriving from these guarantees, the company transfers contributions to the above mentioned companies and their pension fund and concluded a group insurance policy.

## Other off balance sheet rights and commitments

Guarantee granted by SYNATOM to ONDRAFF ..... 241,996

Guarantee received by SYNATOM from ENGIE CC ..... - 1,655,880

## Relations with affiliated and associated companies

	AFFILIATED COMPANIES		ASSOCIATED COMPANIES	
	2023	2022	2023	2022
<b>Financial assets</b>				
• Participation	9,990,477	7,017,477	24,758	24,361
• Other receivables	4,744,443	5,188,000	0	0
	<b>14,734,920</b>	<b>12,205,477</b>	<b>24,758</b>	<b>24,361</b>
<b>Receivables</b>				
• Long-term (more than 1 year)				
• Short-term (less than 1 year)	3,194,209	5,584,906		
	<b>3,194,209</b>	<b>5,584,905</b>		
<b>Liabilities</b>				
• Short-term (less than 1 year)	888,673	19,343		
	<b>888,673</b>	<b>19,343</b>		
<b>Personal and real guarantees</b>				
• Provided or irrevocably promised by affiliated companies as security for debts or commitments of the company	266,805	619,126		
<b>Financial results</b>				
• Income from financial assets	180,277	224,092		
• Income from current assets	255,541	247,356		
• Debts loads	0	1,367		

## Financial relations with:

### A. Directors and Managers

Direct and indirect remuneration and pensions paid to Directors and Managers, charged to the income statement: 288,047 euros.

### B. The statutory Auditor(s) and the persons with whom he/she is connected

Statutory Auditor's fees: 88,000 euros.

Other certification assignments: 0 euro.

## Transactions with related parties under non-market conditions

In the absence of legal criteria for listing significant transactions with related parties that are concluded at non-market conditions, no transactions are included here.

For information purposes and in the interest of transparency, all significant transactions with related parties (other than those with companies that are (almost) wholly owned by the group to which we belong) are listed below.

### SIBELGA

SIBELGA is the sole manager of the electricity and natural gas distribution networks for the 19 municipalities in the Brussels-Capital Region

In October 2012, ELECTRABEL transferred to SYNATOM two parts of a loan to SIBELGA. The current balance of this loan amounts to 3.1 million euros. It is repayable in annual instalments until December 2026.

### NON-RECURRING INCOME AND EXPENSES

It should be noted that in code 76A, a gain of 648 million euros corresponding to the invoicing of the revision of provisions by the NPC on 07/07/2023, is offset by an expense of a corresponding amount.

## Evaluation of nuclear provisions

The Belgian Law of 11 April 2003, partially repealed and modified by the law of 12 July 2022, assigns to SYNATOM, a subsidiary of ELECTRABEL, the management of provisions for the dismantling of nuclear power plants and for the management of spent fuel.

Moreover, this law provides for the establishment of the Nuclear Provisions Commission (NPC), whose mission is to control the process of constitution and management of these provisions.

Every three years, in accordance with the law, the NPC conducts an audit of the application and adequacy of the calculation methods used to establish nuclear provisions.

In this context, the NPC issued a final opinion on 7 July 2023 on the proposals submitted by SYNATOM in September 2022. The provisions booked by SYNATOM at 31 December 2023 therefore take full account of remarks and assumptions made by the NPC. The provisions incorporate into their assumptions all of the existing regulatory environmental requirements or those that are scheduled for implementation at European, national or regional level.

Evaluation of the provisions incorporates margins to accommodate contingencies and risks in order to take into account the degree of mastery of the dismantling and spent fuel management techniques. The margins to accommodate contingencies related to the disposal of waste are determined by the National Agency for Radioactive Waste and Enriched Fissile Materials (ONDRAF) and included in its fees.

SYNATOM also estimates appropriate margins for each cost category.

Since 21 July 2023 and the signing of the binding framework agreement with the Belgian government, ELECTRABEL has recorded provisions for the agreements relating to the extension of the Doel 4 and Tihange 3 nuclear reactors. This framework agreement was concluded following the signature of the full transaction documents on 13 December 2023. It provides for a 10-year extension of these two units within the framework of a 50/50 partnership between the State and ELECTRABEL, with the introduction of a contract for difference protecting the co-owners of these plants against market risks. A lump sum of 15 billion euros for future nuclear waste treatment costs is also provided. This last point represents an additional liability in terms of risk premiums to be paid to the Belgian State to transfer the financial responsibility for waste management within the limit of a volumetric credit covering all the nuclear waste produced by Belgian power plants during their legal lifetime, from commissioning to dismantling.

This mutually binding agreement requires the approval and entry into force of the draft laws included in the contract, as well as the European Commission's approval of state aid. If the conditions precedent are lifted/achieved in time, this will lead to the closing expected in the 4th quarter of 2024.

As a result of this agreement, the ENGIE Group has revised the valuation of its provisions by an amount corresponding to the balance between the liabilities already set aside for future nuclear waste treatment costs and the lump-sum amount of 15 billion euros<sup>2022</sup>, i.e. 5.1 billion euros<sup>2022</sup> (including the share of ELECTRABEL's partners in certain power plants for 0.4 billion euros).

The lump-sum amount due at closing is included under current liabilities in ENGIE's financial statements. These impacts were already recorded in ENGIE's financial statements on 30 June 2023. ENGIE confirms that this agreement does not change the Group's medium-term guidance.

As SYNATOM is not a party to this agreement and the legislative changes have not yet been made, SYNATOM's provisions do not need to be adjusted at 31 December 2023. The impact on SYNATOM's nuclear provisions and corresponding assets will likely be significant. Under the terms of the agreement, SYNATOM will essentially remain responsible for the on-site storage of spent fuel waste until the end of dismantling operations, and until 2050 at the latest. SYNATOM will also remain responsible for the financial coverage of the work involved in the Post Operational Phase of the reactors, dismantling them and cleaning up the site. The process of creating and managing all these provisions, which are the responsibility of nuclear operators, will continue to be reviewed by the NPC every 3 years.

The comments in sections A and B, including the description of risks and sensitivity analyses, take into account the agreement, and therefore the risk premium of 5.1 billion euros<sup>2022</sup>, which as explained above is not recorded in SYNATOM's financial statements as per 31 December 2023.

## A. Provisions for the back-end of the nuclear fuel cycle management

After the spent nuclear fuel is unloaded from a reactor and temporarily stored on site, it is conditioned and then disposed of in long-term geological storage

As part of the implementation of a settlement payment for the transfer of financial responsibility for managing the storage and disposal of nuclear waste and spent fuel, as provided for in the agreement, the risks associated with this liability, as described in the consolidated financial information as per 31 December 2022 (see Note 4.1 "Obligations relating to nuclear power generation facilities"), have been considerably reduced. The agreement provides that the State will be financially responsible for all spent fuel management operations after transfer to ONDRAF.

As regards waste management, SYNATOM's responsibility will be essentially limited to on-site storage of fuel elements until the end of dismantling operations, and until 2050 at the latest, as well as their compliance with contractual criteria for the transfer of waste to ONDRAF, whose liabilities are estimated at 1.7 billion euros<sup>2022</sup> in the legislative proposal for implementing the agreement.

Provisions not covered by the agreement are determined on the basis of the following principles and parameters:

- Storage costs essentially comprise the costs of building and operating additional dry storage facilities, as well as operating existing facilities and purchasing casks;
- The discount rate applied by the NPC - for the part not covered by the agreement with the Belgian government - is 3.0% (including inflation of 2.0%).

Costs actually incurred in the future may differ from those estimated due to their nature and timing.

Some of ONDRAF's recommendations as part of the triennial revision of nuclear provisions in 2022, which have not yet been quantified, will be the subject of a specific instruction under the supervision of the NPC as part of the next triennial review.

### Sensitivity analysis

As a result of the Belgian State assuming all nuclear waste-related obligations following their transfer to ONDRAF, SYNATOM will only have to bear future storage and conditioning costs and the corresponding discounting parameters prior to this transfer.

- construction costs for dry storage facilities and the cost of purchasing fuel element containers at ELECTRABEL sites could differ from those provided for. A change of 10% in these costs yet to be incurred would represent a variation of 60 million euros in the provisions recorded in ENGIE's financial statements;
- a 10% change in the annual operating costs of the storage facilities would result in a change of 30 million euros in the provision recorded in ENGIE's accounts;
- a 25 base point change in the discount rate would result in a 40 million euros adjustment to non-transferred provisions, either upwards in the event of a reduction in the discount rate, or downwards in the event of an increase in the rate.

Please note that the risk of volumetric credits being exceeded is considered highly unlikely, as the volumetric credits set out in the agreement have incorporated the volumetric contingencies estimated as part of the revaluation of provisions in 2022.

## B. Provisions for the dismantling of nuclear production sites

At the end of their operating life, nuclear power plants must be dismantled. The provisions created in SYNATOM's accounts are intended to cover all of the costs relating to both the Post Operational Phase, which including unloading and disposing of the plant's irradiated fuel, and the actual dismantling period, which will lead to the decommissioning and remediation of the site.

The dismantling strategy selected is based on (i) immediate dismantling after reactor shutdown, (ii) dismantling in series rather than unit by unit, and (iii) complete dismantling (return to an "industrial greenfield"), enabling future industrial use of the land.

Provisions for the dismantling of the nuclear power plants are calculated on the basis of the following parameters:

- The start of technical operations related to the Post Operational Phase will depend on the unit concerned and the sequence of operations for the entire fleet. These operations are immediately followed by the dismantling phase;
- The scenario selected is based on a dismantling plan and timetable to be approved by the nuclear safety authorities. The safety conditions for the Post Operational Phases have been defined with the Federal Agency for Nuclear Control (FANC) for the Doel 3 and Tihange 2 units already shut down. They have yet to be defined for the dismantling phase. The costs may change depending on the outcome of these discussions and the detailed completion project for these phases, which is currently being defined;

- The amount to be paid over time is determined on the basis of estimated costs for each nuclear power plant, based on a study performed by an independent consultancy firm and assuming that the plants are dismantled in series. Costs actually incurred in the future may differ from those estimated due to their nature and timing;
- Fees for managing category A (low- or medium-level, short-lived) and B (low- or medium-level, long-lived) dismantling waste are determined using the fee schedule established by ONDRAF and approved by its Board of Directors in May 2022;
- Margins for contingencies have been included and reviewed by ONDRAF and NPC for the different phases;
- A 2.0% inflation rate is applied until the end of dismantling to determine the future value of the commitment;
- The discount rate applied by the NPC is 2.5% (including inflation of 2.0%).

## Sensitivity analysis

Under the Phoenix agreement, ELECTRABEL will only be responsible for the Post Operational Phase and dismantling, including conditioning of the nuclear waste arising from these operations in accordance with the contractual transfer criteria. The Group's remaining liabilities are therefore estimated at 6.7 billion euros<sup>2022</sup> under the legislative proposal implementing the agreement.

- A 10% change in the Post Operational Phase costs of the units would lead to a 200 million euro change in provisions;
- A 10% change in the dismantling costs of the units would lead to a 400 million euro change in nuclear provisions;
- A 25 base point change in the discount rate would result in a 170 million euro adjustment to non-transferred provisions, either upwards in the event of a reduction in the discount rate, or downwards in the event of an increase in the rate.

The 10-year extension of the Doel 4 and Tihange 3 units provided for in the agreement will render the sequence of dismantling activities of the various units less optimal. The government is expected to bear the related additional provisions, estimated at between 500 and 600 million euros. Pending an agreement on the exact amount, this additional liability, overseen by the Nuclear Provisions Commission and paid as a lump sum at closing by the Belgian State, is not included in the financial statements. If the additional costs are not fully covered by the government, the Group may have to bear a portion of these additional liabilities.

For the same reasons as above, these amounts are not included in SYNATOM's accounts.

## C. Financial assets dedicated to the coverage of future expenses for dismantling facilities and managing irradiated fissile materials

### Principles, objectives and governance

As indicated in the previous point, the Belgian law of 12 July 2022, partially repealing and amending the law of 11 April 2003, assigns to SYNATOM, a subsidiary 100% owned by ELECTRABEL, the task of managing and investing funds received from Belgian nuclear operators to cover the costs of dismantling nuclear power plants and spent fuel management. Under the law of 11 April 2003, SYNATOM could lend a maximum of 75% of these funds to nuclear operators, subject to certain credit quality criteria.

In accordance with the law of 12 July 2022, the amount of outstanding loans between SYNATOM and nuclear operators, representing the countervalue of provisions for spent fuel management, will be repaid to SYNATOM by 31 December 2025, according to the legally defined schedule.

In millions of euros	2022	2023	2024	2025
Repayment made by December 31 of the year in question	894	889	931	1,071
Principal amount to be repaid by December 31 of the year in question	2,891	2,002	1,071	0

The amount of outstanding loans between SYNATOM and ELECTRABEL, representing the countervalue of the provisions for dismantling, will be repaid to SYNATOM by 31 December 2030, according to the legally defined schedule.

In millions of euros	2022	2023	2024	2025	2026	2027	2028	2029	2030
Repayment made by December 31 of the year in question	683	683	683	683	364	364	364	364	364
Principal amount to be repaid by December 31 of the year in question	3,869	3,186	2,503	1,820	1,456	1,092	728	364	0

In addition to these loans defined in the law of 12 July 2022, SYNATOM entered into a new loan agreement on 1 October 2023 for an amount of 1,618 million euros, representing the increase in nuclear provisions for dismantling nuclear power plants. In accordance with the law, this loan is repayable as follows:

Article 15 §2: (...) By way of derogation from paragraph 2, the countervalue of provisions for dismantling may be the subject of a new loan to a nuclear operator if, pursuant to article 12, the nuclear provisions increase. The amount of the loan must not exceed this increase.

At least twenty-five percent of the outstanding loan will be repaid within twelve months of the date of the decision to revise the nuclear provisions. The balance of the loan will then be repaid over the following seven years in equal instalments at the end of each quarter.

The resulting schedule is shown below:

In millions of euros	2023	2024	2025	2026	2027	2028	2029	2030	2031
Repayment made by December 31 of the year in question	101.1	346.8	173.4	173.4	173.4	173.4	173.4	173.4	130
Principal amount to be repaid by December 31 of the year in question	1517.2	1170.4	997	823.6	650.2	476.8	303.4	130	0

SYNATOM invests the part of the provisions not covered by loans to nuclear operators, either in financial assets outside the nuclear operators, or in loans to legal entities meeting the "credit quality" criteria required by law.

These investments are mainly made in two SICAVs, of which SYNATOM is the sole investor. Changes in the fair value of these assets are recorded in SYNATOM's income statement and allocated to the guarantee asset in accordance with the terms of the contracts signed with ELECTRABEL and LUMINUS.

In financial year 2023, SYNATOM invested nearly 3 billion euros in such assets.

It is the responsibility of SYNATOM's Board of Directors and its Investment Committee to define SYNATOM's investment policy under the supervision of the NPC in accordance with the law of 12 July 2022. Based on a rigorous risk control policy, the Investment Committee oversees investment decisions, which are managed by a team headed by a Chief Investment Officer.

SYNATOM's investment targets for these assets have been adapted to take account of the Phoenix agreements.

They are:

- for the 8.9 billion euros share to be liquidated at Closing, with a view to payment of the lump sums for the transfer of financial responsibility to the Belgian State linked to nuclear waste and spent fuel, to safeguard the value of the underlying assets via investments in monetary instruments providing a return at least equivalent to the indexation of the lump sums fixed at 3%;
- for the remaining investments intended to cover the remaining liabilities, to ensure a sufficient return, at an acceptable risk level, with the goal of covering the costs of dismantling and storing spent fuel, subject to diversification, risk minimization and availability as defined by the act of 12 July 2022.

### Strategic allocation and composition of financial assets

The strategic allocation of financial assets is determined on the basis of a periodic asset-liability analysis, which consists of determining the asset classes and their respective weights in order to achieve the intended return as described above, while respecting the risk framework identified for each type of liability.

This allocation varies from one type of liability to another, taking into account their different investment horizons and discount rates. Separate risk profiles are considered for:

- Assets related to provisions for the dismantling of the nuclear power plants;
- Assets related to provisions for spent fuel management.

The target allocation of hedging assets according to the two above-mentioned risk profiles is as follows:

As a %	Management of irradiated fissile materials	Dismantling
Shares	40	30
Bonds	40	60
Unlisted assets	20	10
TOTAL	100%	100%

Listed shares are made up of international securities. Listed bonds include international sovereign bonds and international corporate bonds. Unlisted assets comprise securities representing funds or investment structures in real estate, private equity, infrastructure or private debt. Investments are managed by specialized asset management companies.

SYNATOM considers Environmental, Social and Governance (ESG) factors when determining its investment policy to enable better risk management with a view to generating long-term sustainable returns.

These ESG principles enable SYNATOM to better consider the risks and opportunities that could impact financial performance. When selecting external asset managers, the ESG principles are also considered.

To implement this investment policy, SYNATOM has created the Nuclear Investment Fund ("NIF"), a SICAV under Luxembourg law, and the Belgian Nuclear Liabilities Fund ("BNLF"), a SICAV under Belgian law.

### Evolution of financial assets in 2023

On 31 December 2023, the financial assets intended to cover nuclear provisions were valued at 9.985 billion euros, with a return of 5.01% for the financial year. The year 2023 was marked by the gradual re-exposure of the portfolio to recovering markets, following a year marked by the downward volatility of global equity and bond markets. As indicated above, however, it has been decided to discontinue this re-exposure following the agreement, and in particular the fact that the government will receive lump sum payments, relating to the transfer of financial responsibility for nuclear waste and fuel, in cash rather than in dedicated assets.

## Valuation of financial assets over the 2023 financial year

Loans to external legal entities and other cash investments are shown below:

In thousands of euros	NIF1	NIF2	NIF3	BNLF	I4B	TOTAL
Net assets	5,314,067	264,254	2,655,168	1,723,093		9,981,341
Number of shares	473,320	26,546	232,271	1 632,297		
VNI per share	11,227	9,954	11,431	1,056		
Historical acquisition value	5,371,460	273,339	2,644,478	1,701,200	24 758	10,015,235
Unrealized gain/(loss)	-57,393	-9,084	10,690	21,893	0	-33,894

12/2023

## Valuation rules

### Establishment costs

Establishment costs are paid in the financial year in which they are incurred.

### Property, plant, and equipment

#### Acquisition value

Property, plant, and equipment are recorded as assets in the balance sheet at their acquisition or production cost, or at their contribution value.

#### Incidental expenses

Costs incidental to investments are included in the acquisition value of the related property, plant and equipment.

They are depreciated at the same rate as the facilities to which they relate.

#### Depreciation

Property, plant, and equipment are depreciated from the date they are put into service. For furniture, and rolling stock, this date generally corresponds to the date of acquisition.

Provisions are calculated on a straight-line basis at the following rates:

- Furniture: 10%
- Office equipment: 20%
- Used equipment: 33.33%
- Fixtures and fittings: over the term of the lease.

## Financial assets

### Participating interests, shares, and units

Participating interests, shares and units in non-consolidated companies are recorded in the balance sheet at their acquisition or contribution value, excluding incidental expenses and less any amounts still to be paid up.

At the end of each financial year, each security is individually evaluated based on the situation, profitability or prospects of the company concerned. The valuation method is selected objectively, taking into account the nature and characteristics of the security concerned. In most cases, net asset value is used, or the market value if it is lower than the net asset value. The criterion adopted for a given security is applied systematically from one year to the next, except where changes in the circumstances justify it, in which case a specific mention is made in the Annex.

When this valuation shows a permanent reduction in value in relation to the inventory value, the securities are subject to a write-down equal to the permanent loss in value.

An exceptional reversal of a write-down may be made when a lasting gain is observed on securities that were previously written down. Apart from this case, no revaluation of the securities is carried out, notwithstanding any capital gains, even lasting ones, that may arise from their valuation.

### Receivables recorded as financial assets

Receivables recorded as financial assets are recorded at their nominal value. Fixed-income securities are recorded at cost. If they are close to repayment upon maturity, in whole or in part, uncertain or compromised, these receivables and securities are written down accordingly.

### Receivables over and under one year

Receivables are recorded at their nominal value and are subject to write-downs if their repayment at maturity appears uncertain or compromised, in whole or in part.

In the event of bankruptcy or composition, unpaid claims are automatically considered doubtful and their total net value (excluding VAT) is immediately written down. Other receivables may be subject to write-downs, adapted to each case.



## Stocks

### Fuel stocks

Fuels and other raw materials are recorded as assets on the balance sheet at their original cost, which includes, in addition to the purchase price, ancillary costs such as non-recoverable taxes and any transport costs.

Stocks are valued at the end of the accounting period on the basis of the weighted average price. Impairments are recorded when the market price is below the net book value.

## Investments

### Shares and units

Shares and units are recorded in the balance sheet at their acquisition or contribution value, excluding incidental expenses and less any amounts still to be paid up.

At the end of each financial year, each security is individually evaluated based on the situation, profitability or prospects of the company concerned. The valuation method is selected objectively, taking into account the nature and characteristics of the security concerned. In most cases, net asset value is used, or the market value if it is lower than the net asset value. The criterion adopted for a given security is applied systematically from one year to the next, except where changes in the circumstances justify it, in which case a specific mention is made in the Annex.

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### Fixed income securities

Fixed income securities are valued on the basis of their actuarial yield calculated at the time of purchase.

## Provisions for liabilities and charges

At the end of each financial year, the Board of Directors, acting prudently, honestly and in good faith, determines the provisions to be set aside to cover all anticipated risks or possible losses arising during the current or previous financial years.

### Provisions for dismantling the nuclear power plants

Under the supervision of the Nuclear Provisions Commission created by the law of 11 April 2003, provisions are recorded on the liabilities side of the balance sheet to cover the costs of dismantling the nuclear power plants. These provisions correspond to the present value of the best estimate of the future costs of shutting down, dismantling, and cleaning up the nuclear power plants.

### Provisions for the management of irradiated fissile materials

Under the supervision of the Nuclear Provisions Commission created by the law of 11 April 2003, provisions are recorded on the liabilities side of the balance sheet to cover future expenses relating to the storage, processing, and disposal of irradiated fuel from nuclear power plants (back-end of the fuel cycle). These provisions are determined on the basis of an average unit cost established on the basis of the present value of the best estimate of costs corresponding to all quantities used during the operating period of the nuclear power plants.

## Amounts payable

Amounts payable are recorded at their nominal value.

## Off-balance sheet rights and commitments

Off-balance sheet rights and commitments are disclosed in the Annexes, by category, at the nominal value of the commitment as stated in the contract or, failing that, at the estimated value. Rights and commitments that cannot be quantified are mentioned as a reminder.

## Foreign currency transactions, assets, and liabilities

Current transactions in foreign currencies are recorded at the spot exchange rate on the day of recording. In case of forward hedging, the assets or liabilities concerned are valued at the hedging rate.

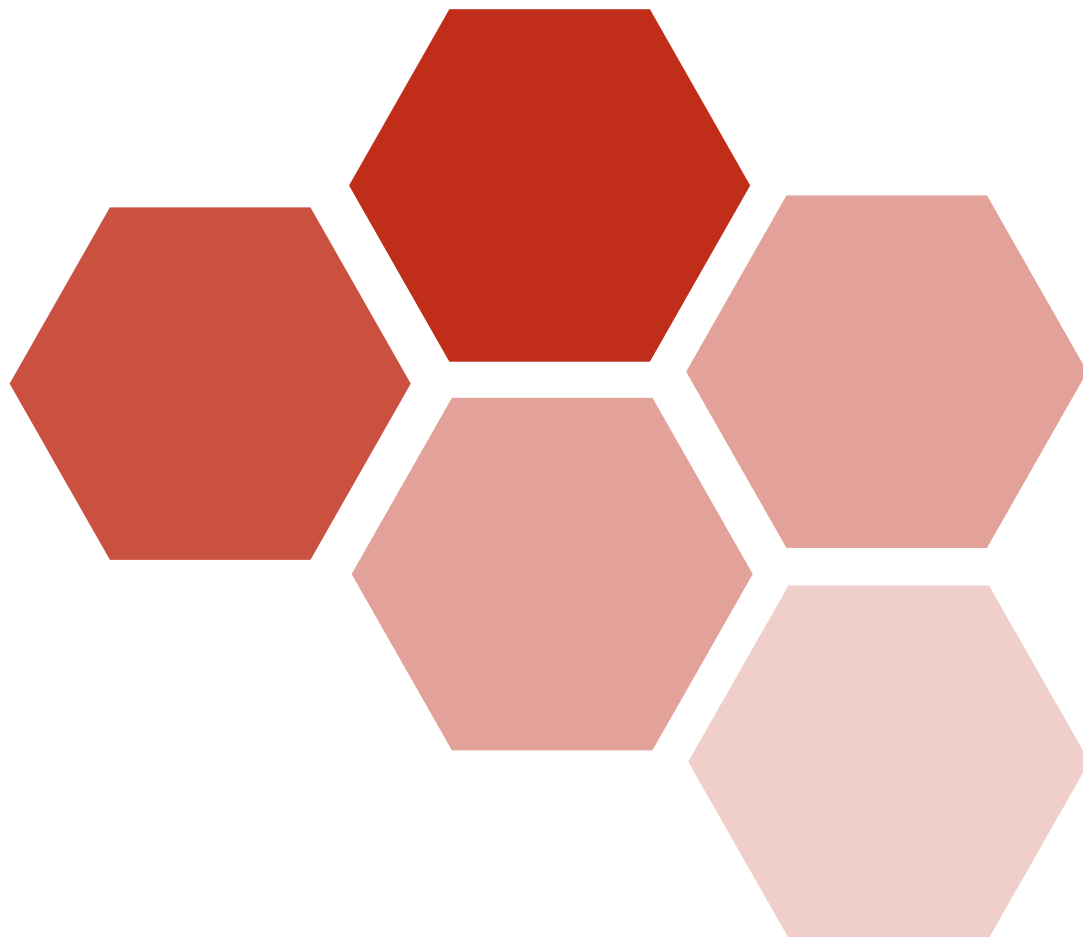
Non-monetary assets and liabilities (mainly establishment expenses, property, plant, and equipment, intangible assets, financial assets, and inventories) continue to be valued at historical exchange rates; this value is used as the basis for calculating depreciation and any impairment losses (see above).

Exchange rate differences in the realisation of monetary assets and liabilities (receivables, borrowings, and payables) are recorded directly in the income statement.

Advance payments are considered as monetary or non-monetary assets depending on their purpose.

At the end of the financial year, the main monetary items in foreign currencies are revalued on the basis of the spot exchange rate at the balance sheet date, with the exception of items covered by specific hedges, for which the hedging rate is applied. Any net conversion differences per currency are added to the deferred income statement in the case of an unrealised profit or are deducted from the income statement in the case of an unrealised loss. Exchange rate differences arising on available-for-sale financial assets are added to the income statement, even if they relate to profits.





# STATUTORY AUDITOR'S REPORT

ON THE ANNUAL  
ACCOUNTS



# Statutory Auditor's report to the shareholders' meeting of Société Belge des Combustibles Nucléaires Synatom SA for the financial year ending 31 December 2023 - Annual accounts

In the context of the statutory audit of the annual accounts of the Société Belge des Combustibles Nucléaires SYNATOM SA (the "company"), we hereby submit our statutory audit. This includes our report on the annual accounts as well as other legal and regulatory requirements. The report constitutes a single report and is inseparable.

We were appointed in our capacity as statutory Auditor by the General Meeting of 11 May 2022, in accordance with the proposal of the Board of Directors. Our mandate as statutory Auditor will expire on the date of the shareholder's meeting deliberating on the annual accounts for the financial year ending 31 December 2024. Given the absence of electronic archives prior to 1997, we have not been able to determine exactly the first year of the mission. We have performed the statutory audit of annual accounts for the Société Belge des Combustibles Nucléaires SYNATOM SA for at least 26 consecutive years.

## Report on the annual accounts

### Unqualified opinion

We have audited the annual accounts of the company, which comprise the balance sheet as at 31 December 2023, the income statement for the year then ended and the explanatory notes thereto and which show a balance sheet total of 18,667,841,000 euros. Its income statement shows a profit for the year of 565,000 euros.

In our opinion, the annual accounts give a true and fair view of the company's financial position and its assets and liabilities as at 31 December 2023, as well as its results for the financial year ending on that date, in accordance with the accounting standards applicable in Belgium.

### Basis for unqualified opinion

We conducted our audit in accordance with International Standards on Auditing (ISA), as applicable in Belgium. In addition, we have applied the International Standards on Auditing approved by the IAASB and applicable at the time of this closing, which have not yet been approved at national level. The responsibilities under these standards are described in more detail in the "Auditor's Responsibilities in the Audit of the annual accounts" section of this report. We have complied with all ethical requirements applicable to the audit of annual accounts in Belgium, including those regarding independence.

We have obtained the explanations and information necessary for our audit from the Board of Directors and the company's officials.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

### Observation paragraph

Without calling into question the unqualified opinion expressed above, we draw your attention to note C-cap 6.20 Point 2 of the annual accounts, which refers to the final agreement of 13 December 2023 between the Belgian State, ENGIE SA and ELECTRABEL SA concerning the extension of the Doel 4 and Tihange 3 nuclear reactors, and the capping of nuclear waste treatment costs for the ENGIE Group. This agreement has no bearing on SYNATOM SA's statutory financial statements for the year ended 31 December 2023 as SYNATOM is not a party to this agreement and the law of July 2022 concerning the accounting of nuclear provisions continues to apply to SYNATOM for the 2023 financial statements.

In addition, SYNATOM's Board of Directors specifies that, after payment of the 15 billion euro lump sum in full discharge of future nuclear waste treatment costs, the company will remain responsible for on-site storage of spent fuel waste until the end of dismantling operations, and until 2050 at the latest, and for providing the financial coverage of the work to decommission and dismantle the reactors, and for cleaning up the sites.

As indicated in note C-cap 6.20, the valuation of the liabilities that will remain payable by the group is sensitive to changes in costs (mainly the construction and operating costs of storage facilities, the cost of purchasing casks, and the cost of the Post Operational Phase and dismantling of the units), as well as to the macroeconomic assumptions applied (inflation, discounting).

### Responsibilities of the Board of Directors in relation to preparation of the annual accounts

The Board of Directors is responsible for the preparation of annual accounts that give a true and fair view in accordance with the financial reporting framework applicable in Belgium, and for such internal control as it determines is necessary to ensure that the annual accounts are free from material misstatement, whether due to fraud or error.

In preparing the annual accounts, it is the responsibility of the Board of Directors to assess the company's ability to continue as a going concern, and to provide going concern information where appropriate, and to apply the going concern basis of accounting unless the Board of Directors intends to liquidate the company or to cease trading, or unless the Board of Directors is unable to consider any other realistic alternative.

## Responsibilities of the Auditor in relation to the audit of the annual accounts

Our objectives are to obtain reasonable assurance about whether the annual accounts taken as a whole are free from material misstatement, whether due to fraud or error, and to issue a statutory Auditor's report containing our opinion. Reasonable assurance corresponds to a high level of assurance, which does not, however, guarantee that an audit performed in accordance with ISA standards will always detect any material misstatements that exists. Misstatements may be the result of fraud or error and are considered material when it is reasonable to expect that they could, individually or in the aggregate, influence the economic decisions that users of the financial statements make in reliance on them.

In performing our audit, we comply with the legal, regulatory and standard framework applicable to the audit of annual accounts in Belgium. The scope of the statutory audit does not include any assurance as to the future viability of the company or the efficiency or effectiveness with which the Board of Directors has conducted or will conduct the company's business.

In conducting an audit in accordance with ISA standards and throughout the audit, we exercise professional judgment and critical thinking. In addition:

- we identify and assess the risks of material misstatement of the annual accounts, whether due to fraud or error, and design and perform audit procedures to respond to those risks, and obtain sufficient appropriate audit evidence on which to base our opinion. The risk of not detecting a material misstatement resulting from fraud is higher than of the risk of not detecting a material misstatement resulting from an error, since fraud may involve collusion, forgery, wilful omission, misrepresentation or circumvention of in-house audit;
- we obtain an understanding of internal control relevant to the audit to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the Company's internal control;
- we assess the appropriateness of the accounting policies used and the reasonableness of the accounting estimates made by the Board of Directors, as well as the information provided by the Board of Directors in this respect;
- we conclude on the appropriateness of the Board of Directors' use of the going concern basis of accounting and, based on the evidence obtained, whether there is material uncertainty related to events or circumstances that may cast significant doubt on the company's ability to continue as a going concern. If we conclude that a material uncertainty exists, we are required to draw the attention of readers of our statutory Auditor's report to the information provided in the annual accounts about that uncertainty or, if that information is not adequate, to express a modified opinion. Our conclusions are based on evidence gathered up to the date of our statutory Auditor's report. However, future situations or events could lead the company to go out of business;

- we assess the overall presentation, structure and content of the annual accounts and evaluate whether the annual accounts reflect the underlying transactions and events in a manner that gives a true and fair view.

We communicate to those charged with governance, in particular, the scope of the audit work and the planned timetable for its completion, as well as any significant observations made during our audit, including any material weaknesses in internal inspection.

## Other legal and regulatory obligations

### Responsibilities of the Board of Directors

The Board of Directors is responsible for the preparation and content of the management report, the documents to be filed in accordance with the legal and regulatory provisions, compliance with the legal and regulatory provisions applicable to accounting and compliance with the Code of Companies and Associations and the company's Articles of Association.

### Auditor's responsibilities

In the context of our mandate and in accordance with the Belgian complementary standard to the International Standards on Auditing (ISA) as applicable in Belgium, our responsibility is to verify, in their significant aspects, the management report, certain documents to be filed in accordance with the legal and regulatory provisions, and the compliance with certain provisions of the Code of Companies and Associations and of the Articles of Association, and to report on these elements.

### Aspects relating to the management report

After specific verifications on the management report, in our opinion, the management report is consistent with the annual accounts for the same financial year and has been prepared in accordance with Articles 3:5 and 3:6 of the Code of Companies and Associations.

In the context of our audit of the annual accounts, we must also assess, in particular on the basis of our knowledge acquired during the audit, whether the management report contains a material misstatement, i.e. information that is incorrectly formulated or otherwise misleading. Based on this work, we have no significant anomalies to report.

## Mention of the social balance sheet

The social balance sheet, to be filed with the National Bank of Belgium in accordance with Article 3:12, § 1, 8° of the Code of Companies and Associations, covers both the form and the content of the information required by this Code, including the information on salaries wages and training, and does not contain any significant inconsistencies with the information available to us in the context of our assignment.

## Statements regarding independence

- Our audit firm and our network did not perform any engagements that were incompatible with the statutory audit of the annual accounts and our audit firm remained independent from the company during our mandate.
- The fees for the additional non-audit services compatible with the statutory audit as referred to in Article 3:65 of the Code of Companies and Associations have been correctly allocated and valued in the Annexes to the annual accounts.

## Other information

- Without prejudice to formal aspects of minor importance, the accounts are kept in accordance with the legal and regulatory provisions applicable in Belgium.
- The distribution of the results proposed to the General Meeting is in accordance with the legal and statutory provisions.
- We have not identified any transactions made or decisions taken in violation of the Articles of Association or the Code of Companies and Associations Code.

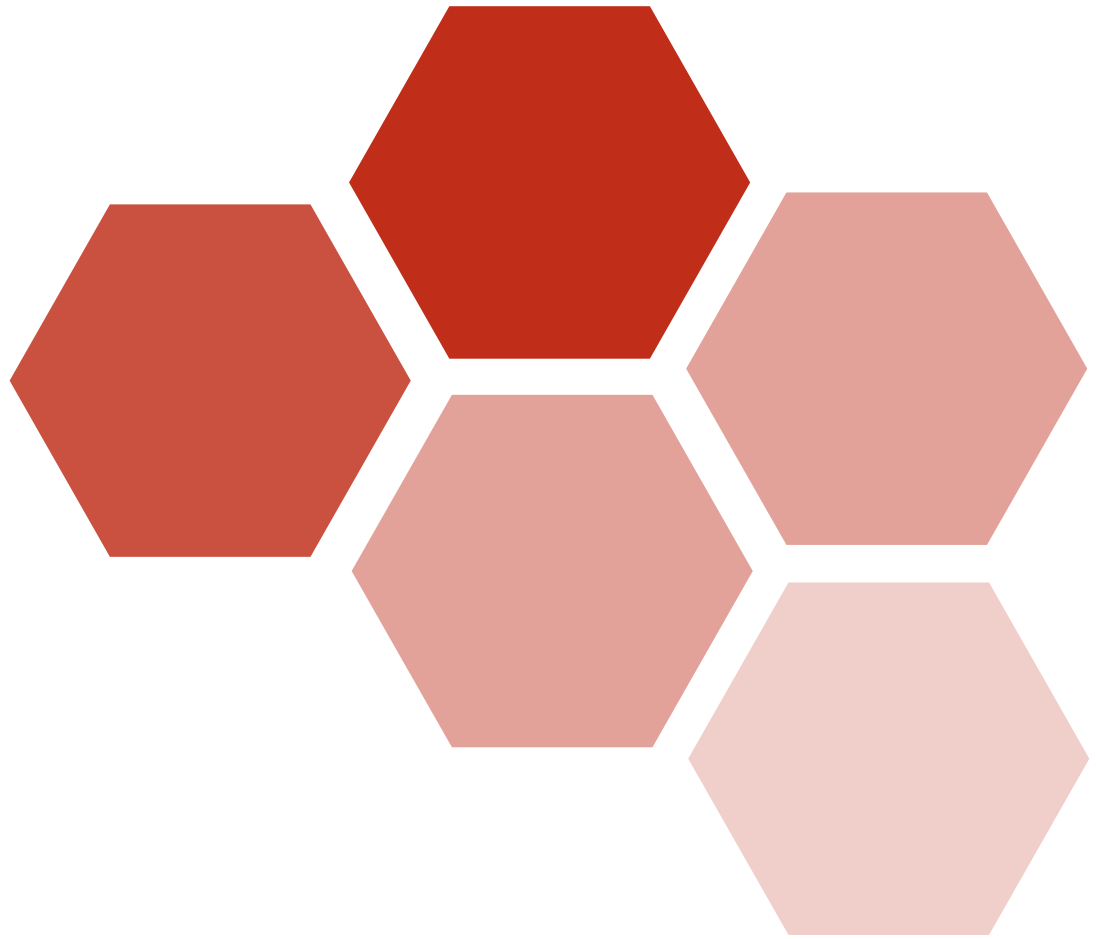
Signed in Zaventem

The Statutory Auditor

Deloitte Réviseurs d'Entreprises SRL

Represented by Corine Magnin





# DETAILS OF **THE NUCLEAR FUEL CYCLE**



# Electrabel

kWh

Use

Deactivation

Fuel assemblies

Spent fuel assemblies

Manufacturing

Intermediate storage

Reprocessing

Enrichment

Pu

U

Waste

Conditioning

Non-reprocessing

Conditioning

Conversion

Storage

Storage

Extraction & concentration

Final disposal

ONDRAF/NIRAS

FRONT-END

FRONT-END

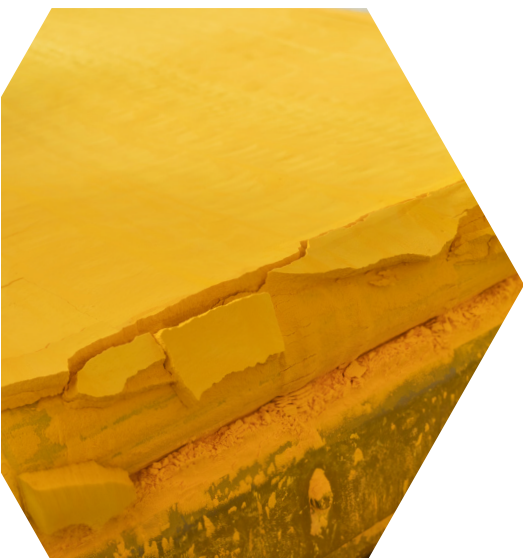
BACK-END

BACK-END

U308

UF6

Enriched UF6



Yellow cake

## Front-end

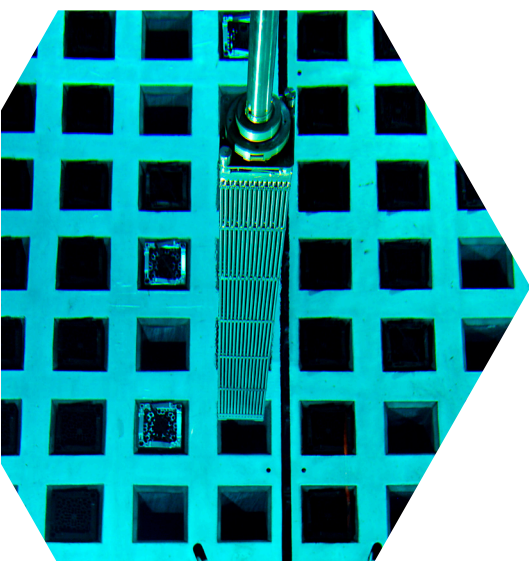
**Extraction:** Uranium deposits are mined using open-pit or underground mining, in situ leaching (ISL, sometimes referred to as in situ recovery, or ISR), using the same methods as deployed in other mining facilities.

**Concentration:** Close to the mines, the uranium ore is processed into «yellow cake», containing roughly 85% uranium.

**Conversion:** The uranium concentrate is then refined and processed into a gaseous chemical compound : uranium hexafluoride.

**Enrichment:** Before it can be used in Belgium's nuclear reactors, the fuel must contain a higher proportion of uranium 235 than it has in its natural state. The content of uranium 235 has to be increased to more than 4%, using the centrifugation method. The result of this process is enriched uranium hexafluoride.

**Fuel assembly manufacturing:** This is the responsibility of the nuclear power plant operator, who determines the specific requirements. SYNATOM's mission is to deliver the enriched uranium hexafluoride to the fabrication plant.



Assembly handling in the deactivation pool

## Use in the reactor

The enriched uranium contained in fuel assemblies is leased to the operator.

## Back-end

**Spent fuel management:** After 3 to 4 1/2 years in the reactor vessel, fuel assemblies are definitively removed and transferred to an underwater pool to begin their radioactive decay and shed some of their residual heat. This phase of spent fuel management is identical in Doel and Tihange and SYNATOM entrusts it to the operator.

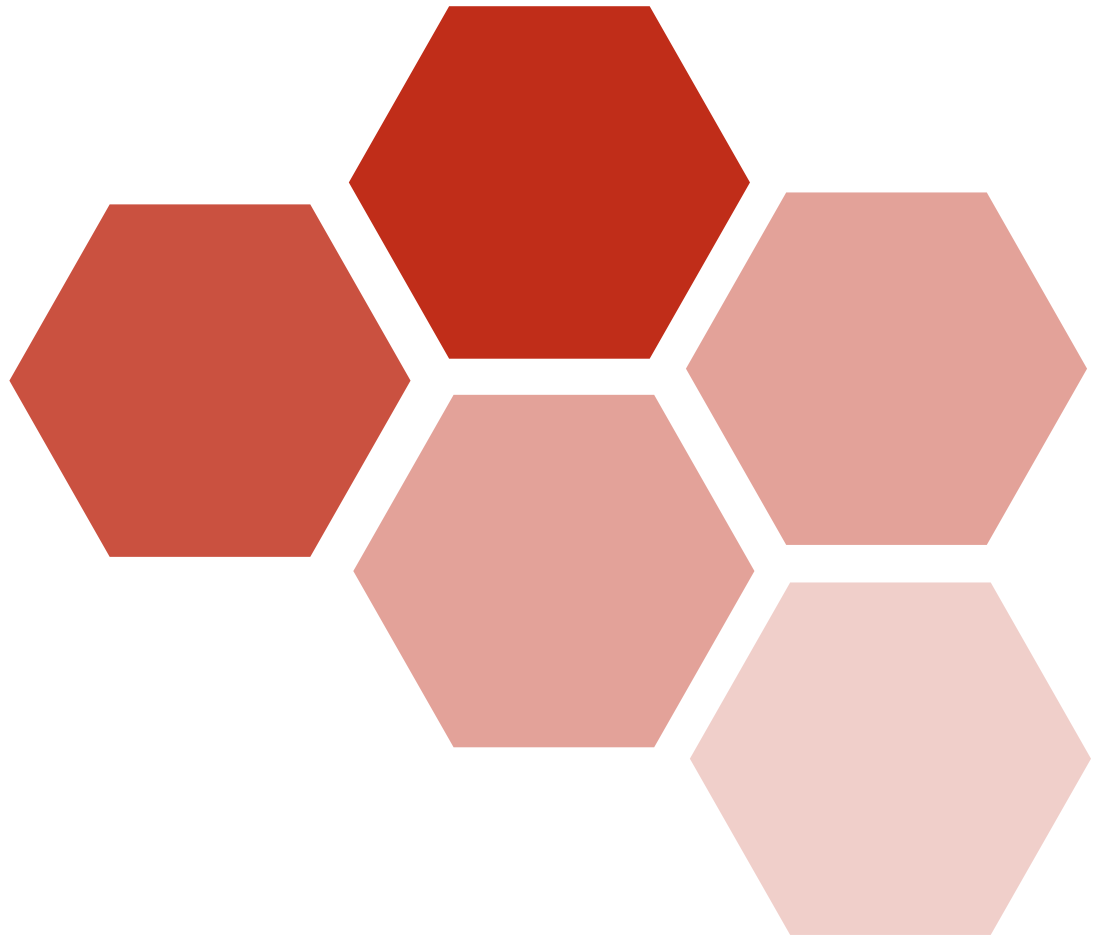
**Interim storage:** After a few years in the spent fuel pool, the fuel assemblies are transferred to a centralised interim storage facility. In Doel, dry storage takes place in specific casks. In Tihange, spent fuel is stored in a centralised underwater pool. Eventually, once the current storage capacity has been extended, both facilities will use dry storage in casks.

**Conditioning:** The spent fuel is conditioned either by reprocessing which consists of the separation of uranium and plutonium - which can be recycled - from radioactive waste, or either by the conditioning of the entire spent fuel assemblies, in order to ensure final disposal.

**Final disposal:** this is the responsibility of the Belgian agency for radioactive waste and enriched fissile materials (ONDRAF/NIRAS), which is responsible for the final management of all nuclear waste produced in Belgium. To date, the problem of final storage of high-grade, long-lived waste remains at the research stage.



Belgoprocess site in Dessel - Storage building for waste from reprocessing



# COLOPHON





SYNATOM publishes on its website [www.synatom.com](http://www.synatom.com) its annual report in French and Dutch. An unofficial English version is also available.

## Editorial team

SYNATOM

Pages 3 to 20: ACTE 4 SRL - Jean-Jacques Pleyers


## Photos

- Page 4: Cécile FLANDRE - Chair - Private photo.
- Page 5: Dimitri STROOBANTS - Chief Executive Officer - ELECTRABEL photo library.
- Page 7: Orano, Georges Besse II (GBII) enrichment plant, southern unit. Tricastin site. Copyright: ORANO.
- Page 9: Post Operational Phase of a nuclear reactor - ELECTRABEL infographic.
- Page 10: Cross-section of a cask for the dry storage of spent fuel - ELECTRABEL infographic.
- Page 10: Properties of the casks - ELECTRABEL infographic.
- Page 55 - at the top: Yellow cake on band filter. Muyunkum plant, Kazakhstan - Copyright: ORANO, AMANKULOV JANARBEEK AMAN.
- Page 55 - middle: Handling a fuel assembly in the deactivation pool - ELECTRABEL photo library.
- Page 55 - bottom: Storage building for reprocessed waste at the Belgoprocess site in Dessel - ONDRAF photo library.

## Content officer

Dimitri Stroobants

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ACTE 4 SRL - Jean-Jacques Pleyers

## Design

Snoeck Medias - Céline Snoeck  
[www.s-medias.be](http://www.s-medias.be)


8 May 2024



Excellence in nuclear fuel cycle management

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