

Annual

2020

report



Excellence in nuclear fuel cycle management

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MESSAGE FROM THE CHAIRMAN AND THE CHIEF EXECUTIVE OFFICER

The year of 2020 – sadly marked by the COVID-19 global pandemic

In 2020, we have experienced the most serious and deadly health crisis in a century. A global pandemic that developed in a very short space of time and has continued in 2021.

Nonetheless, the current pandemic is much more than a health crisis, it is also an unprecedented socioeconomic crisis. It has created pressure in every country it has touched.

In fact, the coronavirus crisis has exposed the **fragility** of our modern economic systems in the face of such extraordinary global events. Without a doubt, we have never experienced a crisis of this kind before. At this time, nobody can say how the epidemic will evolve in the coming months or how far-reaching the consequences will be.

On the other hand, we can be sure that the pandemic will have lasting repercussions and will affect global and domestic economies for a long time to come. We expect that the Covid-19 crisis will cause a severe economic recession with dramatic consequences for the population. The disruption of global value chains also risks amplifying the aftershocks in trade, production and financial markets. When recovery eventually comes, it is likely to be slow and unsteady.

Beyond the pandemic

In Belgium

The year 2020 was not only marked by the Covid-19 pandemic. For Synatom, **two major events** took place in Belgium in the second half of the year.

Since **30 September 2020**, Belgium has a new federal government. The government agreement and declaration that followed, clearly reaffirmed the desire to strictly apply the law on phasing out nuclear energy that was passed in 2003... However, the government has kept a clause that allows some reactors to continue operating longer if the country is at risk of an energy shortage. We will only know whether this is the case or not at the end of 2021.

Immediately following the agreement, on **17 November 2020**, Electrabel's leadership officially announced that it would halt investments related to extending the lifetime of the nuclear power plants. Electrabel repeatedly called on the authorities to make a clear decision by December 2020 that would authorise the reactors at Doel 4 and Tihange 3 to continue operating until 2035, or even 2045. This date is calculated based on the scale of investments that will be needed, the length of time it takes to perform regulatory compliance activities, and the delay between

This health crisis has once again revealed the risks of our **excessive dependence** on foreign production in strategic sectors. It has also revealed the extent to which occidental societies have become reliant on technology.

The present health crisis has a lot to teach us – many useful lessons – and it also sent us many warning signs.

Let's focus on one of these warning signs, starting with a quote from the head of the World Health Organisation, who believes : « The coronavirus crisis will not be the last pandemic, and attempts to improve human health are 'doomed' without tackling climate change and animal welfare ». In other words, the fight against the coronavirus must not distract us from the extremely urgent fight against climate change.

Therefore, it is crucial that all the decision makers, whoever they may be, remain aware of these new parameters and above all integrate them into their decision-making process without hesitation, starting from today.

ordering and receiving equipment, not to mention fuel. The lack of a clear and stable framework on top of the many technical, legal and financial constraints, explains Electrabel's decision to stop its investments in the extension of the operating lifetime of two of its nuclear reactors. As it stands, Belgium's electricity policy has reached an impasse and the security of the country's energy supply is very uncertain in the coming years.

For example, the Federation of Enterprises in Belgium (FEB) and the Belgian Federation of Industrial Electricity Consumers (Febeliec) immediately responded with detailed and well-supported arguments calling to preserve some nuclear energy in the country's electricity mix.

What energy policy ?

In the Belgian National Energy-Climate Plan 2021-2030, the country sets out its objectives for energy and climate policy in the next decade. The plan presents an outline of the transition to a sustainable, reliable and affordable energy system aligned with European Union principles. It also offers a long-term strategy aimed at reducing greenhouse gas emissions. It is no longer a question of choice. To limit global warming, we must act **quickly to decarbonise** the economy, including our energy sources. In other words, we must give up as much of our fossil resources (oil, gas and coal) as possible.

We would like to emphasise a few interesting figures that really give us an idea of the scale of the challenge. Petroleum products are still the main source of energy at 43%. Next comes natural gas, which represents roughly 27% of total primary energy use in Belgium including 20% for electricity generation. Belgium's energy resources are limited to roughly 30%, of which three-quarters come from nuclear energy ! The remaining quarter is generated by renewable energies and waste.

The ideal way of adhering to our climate targets would be to reduce our dependence on imported fossil fuels to a maximum and seek out the most diversified energy mix possible, as Europe recommends.

The electricity mix in question

The same must be true for the development of our country's electricity mix. Yet Belgium has decided to give up nuclear power and to make use of only **two subsidised resources** : local renewable energy and imported natural gas. But these cannot cover the country's energy needs and will require many additional storage facilities to be built, greater energy flexibility and reduced electricity use, not to mention massive imports of electricity. To say that these choices are questionable is an understatement. As such, we feel we have an obligation to shed some light in this debate.



Didier Engels,
Chairman

Renewable energies

Our sources of renewable energy continue to grow, mainly thanks to the development of offshore wind farms. These will continue to increase thanks to the support mechanisms put in place by our governments. But care must be taken not to swing from a dependence on fossil fuels to a dependence on metals like copper, nickel, zinc, lithium and so on, or other rare earth elements (for which China has a virtual monopoly).

Natural gas

In order to cope with the closure of the nuclear power plants, the federal government is counting on new gas-fired plants run on imported natural gas (4000 MW) and is developing a planned capacity remuneration mechanism - without which new plants will operate at loss. This option, however, still remains dependant on the approval from the European Commission's Competition Directorate-General, which has launched an in-depth investigation into the planned subsidy mechanism. But if even it does receive approval, is it reasonable to increase our use of natural gas ? The answer is no for several reasons : increased dependency, price fluctuations, the risk of geopolitical tensions and, above all, increased carbon emissions.

The Belgian climatologist Jean-Pascal van Ypersele has issued a warning on this subject and stated that a partial use of nuclear energy would allow Belgium to avoid exploding carbon emissions.

In Belgium there is a **stark contrast** between our declared intentions and concrete actions. This was proven in December 2020 when Belgium supported the European Commission's proposed target of reducing greenhouse gas emissions by -55% by 2030, while simultaneously failing to comply with its own, much less ambitious, targeted trajectory.

Several international organisations have been quite outspoken in **denouncing** Belgium for its poor track record in mitigating climate change. According to the British thinktank EMBER, the Belgian electricity sector will have one of the biggest ecological footprints in the European Union in 2030. By the end of December 2020, the Climate Performance Index established by the organisation Germanwatch did not let Belgium off lightly either. Belgium's performance in terms of climate policy is not only poor (40th in a list of 57 countries analysed), but even worse, this performance has been on the decline for several years.

We're still a long way from having a **plan that works in favour of the planet**.

Reducing our electricity use

In the face of the climate challenge, Fatih Birol, the Executive Director of the International Energy Agency, has been repeating for months that « we cannot afford the luxury of excluding nuclear power from the tools we have at our disposal ». He adds that « to reduce emissions, the share of electricity in the global energy mix must **increase from 20% to 40%** minimum ». Reducing the use of fossil fuels must be an absolute priority. On the other hand, it seems unrealistic and unreasonable to aim to reduce electricity use at a time when it is so omnipresent in our daily lives. It remains the driving force behind our future technological developments, starting from our digital transformation which is in turn driving the digital revolution.

Electricity imports

The risks of over-dependence from abroad has already been sufficiently stressed. It is important that we remain highly self-sufficient to avoid compromising the security of our electricity supply. And the greatest danger arises when the European electricity market is under pressure i.e. during a cold spell or heat wave. At times like these, the countries that usually top up Belgium's supply (France and Germany) can no longer do so because they do not have enough to cover their own needs. Keep in mind that, today, Germany and France have diminishing export capabilities. This trend will intensify in the coming years.

In this particularly complex situation, it is vital for our country to set responsible and realistic targets again – with an achievable timeline. This must be done regardless of whether the pressure is on or off – whether it is an emergency or not. It is high time we set a ten-year plan followed by a longer-term outlook.

For Synatom

The year of 2020 began with a sense of urgency. We had to reorganise the company very quickly, set new priorities and ensure the safety of our staff while continuing to operate efficiently in a context of constant uncertainty. We would like to stress just how flexible and adaptable our staff have proven themselves to be. Our service providers too, combined creativity with a pro-active approach that allowed us to fulfil our main operational commitments. As a result of our joint efforts, the pandemic has only had a **limited impact** on Synatom's activities so far. Nevertheless, we still need to exercise extreme caution in the coming months.

Some established facts

The gradual phase out of nuclear power has started and the final shutdown of the first reactor (Doel 3) will take place in the autumn of 2022, which will be followed by the disconnection of Tihange 2 a few months later.

This means that our **core business** is evolving, and a profound change is under way.

For 40 years, our primary mission has been to supply the fissile materials required for the fabrication of nuclear fuel assemblies. This activity may become a thing of the past, if the lifetime of the Doel 4 and Tihange 3 reactors is not extended.

On the other hand, our back-end activities in the nuclear fuel cycle are increasing at a rapid pace. As the owner of the fissile materials and spent fuel assemblies (after the materials have been used in the reactor) we must ensure that they are kept in safe interim storage facilities on the Doel and Tihange sites. This is a pre-requisite for any dismantling operations. We are funding the costs of new infrastructure and scrupulously tracking progress in our contracts for casks. In this area, we have opted for a strategy of **diversification and forward planning**.

We have learned to function differently so we can adapt very quickly to a constantly changing environment and deal with increasingly complex and multifaceted issues.



Robert Leclère,
CEO

An innovative financial player

By 2025, Synatom will have become one of the largest fund managers in Belgium. With this in mind, we have taken several important and necessary steps to increase the scale of our financial structure.

First of all, we have expanded our organisation chart with the creation of a fourth department exclusively dedicated to **investments**. This department will be in charge of consolidating capital and making it grow. This capital was 13.8 billion euros at the end of 2020 and has been entrusted to us in the form of provisions to cover our future commitments.

The investments department will search for the best solutions with a combination of short and medium-term investment solutions for decommissioning provisions and very long-term investment solutions for spent fuel management provisions. To do so, it will develop new channels of investment while reinforcing the reporting and auditing rules in parallel.

In 2020, we took a major step in this direction by creating a **SICAV** called the Belgian Nuclear Liabilities Fund (BNLF), which is a **regulated Belgian institution**, and which will eventually house most, if not all, of the provisions set aside for the long-term management of spent fuel. This SICAV will be fully operational by the start of 2021. This also responds to the recommendation issued by the Nuclear Provisions Commission.

We would also like to be a financial player that inspires the **confidence** of our key stakeholders. Stakeholders including the Belgian State, the Nuclear Provisions Commission and the National Organisation for Radioactive Waste and Enriched Fissile Materials. We will inspire confidence through full transparency in our financial dealings and by aligning our strategies with the recommendations and findings of the Nuclear Provisions Commission. And by following good practices in Corporate and Environmental Responsibility.

We are confronted by multiple complex parameters and it is crucial that we take them all into consideration if we wish to respond effectively to the major challenges facing us in the coming years. As we know, the key to achieving this is continual adaptation. We are committed, determined and optimistic, in a future that we will build over the long term, but which we are doing everything we can to secure and shape today.

THE FRONT-END OF THE NUCLEAR FUEL CYCLE

Since the founding of the company in 1969, Synatom's primary mission has been to ensure a supply of enriched fissile materials to the Belgian nuclear power plants.

As a brief reminder, it is the operator of the nuclear reactors, Electrabel, who manages the fabrication of fuel assemblies. Electrabel is also responsible for stipulating its future supply requirements taking into consideration factors like, scheduled shutdowns for maintenance and major works, as well as reactor operating requirements.

Unlike previous decades, when the seven reactors in Belgium required a next to constant supply of enriched uranium, the coming decade will undoubtedly see a decline in demand. Why do we expect this ? The law on the gradual phasing out of nuclear energy was adopted in 2003 and is expected to take effect as early as October 2022 when Doel 3 will close after 40 years of operation. The law also foresees the final shutdown of the other six remaining reactors by 2025, unless a decision is made to extend the lifetimes of the reactors to cover the country's electricity needs.

Considering this **gradual decline** in demand, Synatom will be almost completely reliant, as it is now, on its forward contracts and regulated stock, which must without fail cover demand for two «rolling» years. In 2020, Synatom did not need to turn to the spot market.

Key stages in the front-end nuclear fuel cycle

1. Uranium milling

Following the extraction of uranium ore, milling operations are performed at the mining site, or in close proximity, to produce a product called yellow cake, which has a uranium content of about 75%.

2. Converting uranium into uranium hexafluoride

Yellow cake is purified and transformed into uranium hexafluoride (UF₆).

3. Enrichment

Uranium must have a concentration of approximately 4% to 5% uranium 235 to be used as fuel in a Belgian nuclear reactor. Since natural uranium only contains 0.7% uranium, enrichment operations must be performed to increase its concentration rate. Today, enrichment is performed using a centrifugal enrichment technique.

Synatom negotiates contracts with the leading companies in its three business areas.



The Cigar Lake mine in Canada

The uranium ore market

The Covid-19 pandemic, and its successive waves, have had a **dramatic impact** on natural uranium extraction and milling activities in 2020. The major mining countries have been forced to close their mines for many weeks in 2020.

On a global scale, total uranium production in 2020 fell to **its lowest level** for the past 12 years, with an estimated decrease of more than 10% compared to 2019.

Unlike oil, the demand for uranium does not greatly fluctuate. It stays relatively constant over time. Worldwide, nuclear power plant operating rates have remained stable despite electricity use decreasing since the beginning of the health crisis.

In this context, the price of uranium concentrate, commonly known as yellow cake, has **noticeably increased** on the spot market as well as the long-term contracts' market.

The price on the spot market this year opened at US\$24.63 per pound of yellow cake. It then reached a four-year high of US\$33.96 per pound at the peak of the first wave of the pandemic. This later dropped to US\$30.20 by the end of December 2020. According to experts, this price should now remain stable or even slightly increase.

In fact, global demand for uranium **increases 1.5%** per year. This trend should continue well beyond 2030. This growth takes into account plant closures, mainly in Europe and the United States, in addition to the commissioning of new plants in China, Russia and India.

Long-term contract prices followed a similar trend starting the year at US\$32.50 per pound, rising to US\$36.00 in April and July, and then stabilising at US\$35.00 until the end of the year.

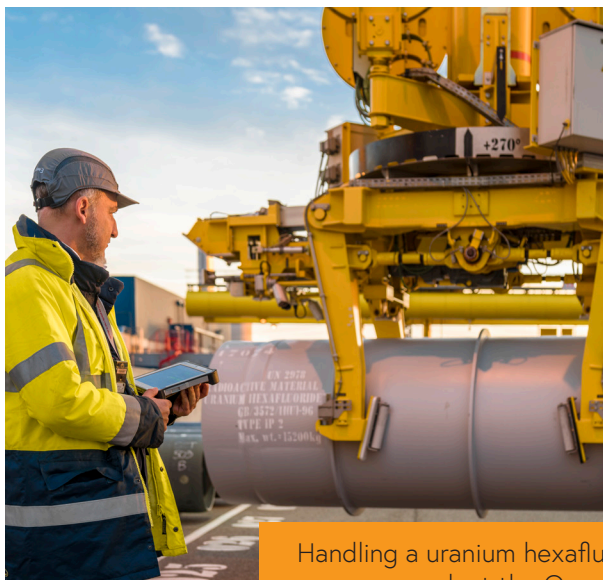
Domino effects

The Covid-19 pandemic also had some **less visible effects** that could have an impact on markets in the coming years.

1. Confronted by a reduced production capacity, the large mining groups have purchased great quantities of uranium on the spot market to be able to meet their contractual obligations. Strategic stock must consequently be replenished.
2. As well as reducing output from the uranium mines, the pandemic has also eliminated small-scale operators from the market, which were already struggling to survive in a context of low ore prices. The disappearance of these operators limits the supply diversification options.

The conversion market

The Covid-19 pandemic did not have a significant impact on the conversion market. Prices have decreased **for the first time** in several years by as much as 10% or more.



Handling a uranium hexafluoride cask at the Orano site in Tricastin

The enrichment market

The global pandemic has not greatly affected companies operating in the enrichment market, largely thanks to extensive health protection policies.

Prices rose almost 20% in 2019 and continued to rise in 2020. Spot prices for enrichment services increased from US\$50 per separation unit in January to US\$51.75 in December 2020.

Long-term prices for enrichment services rose from US\$55 to US\$60 per separation unit, which corresponds to an increase of nearly **10%**.

Synatom's enrichment contracts for 2020 were honoured and enriched fissile materials were delivered safely to the nuclear fuel manufacturers.

A doubly cautious approach

Synatom has been proceeding with extreme caution regarding supply markets after the two major events of 2020: the global pandemic, which affected front-end activities in the nuclear fuel cycle to varying degrees of severity, and the decision by the new Belgian government to adopt the law on a gradual phasing out of nuclear energy by 2025.

Synatom regularly **adapts** the level of needs coverage. It takes about two years from the time uranium concentrate is ordered to the time it is loaded into the reactor. Today, Synatom's remaining long-term contracts are sufficient to ensure that nuclear power plants in Belgium can continue to operate until 2025.

Great care has been taken to reduce **our vulnerability to fluctuations in foreign exchange rates**, particularly fluctuations in the strength of the US dollar, which is the currency used for front-end activities in the nuclear fuel cycle. In practical terms, all of our supply contracts worth more than US\$1 million have been backed up with a reserve of up to 97.5%.

This cautious approach will allow us to **bounce back** in the event of a change in the Belgian context (i.e. a decision to prolong operations in two Belgian nuclear reactors) or the international context (adjustment of long-term contracts).

THE BACK-END OF THE NUCLEAR FUEL CYCLE

Back-end activities in the nuclear fuel cycle comprise all the spent fuel management activities that take place after electricity generation in the reactor.

These activities can be divided into **three main stages**.

1. **The first stage** is **storage in the spent fuel pool** for three to five years. This is performed by Electrabel's teams (the operator).
2. **The second stage** is **interim storage** of spent fuel assemblies in a central storage building on site. This stage is performed by Synatom, which pays for all of the necessary equipment and facilities and will reimburse Electrabel for any services performed on Synatom's behalf.
 - At Doel, dry interim storage was developed as early as 1995.
 - At around the same time, the Tihange plant opted for an underwater storage system. This technique uses a special transfer cask, called a shuttle.

The storage facilities at Doel and Tihange will reach full capacity in the next few years.

3. **The third stage** is managed by ONDRAF/NIRAS, which is the Belgian Agency for Radioactive Waste and Enriched Fissile Materials. It is legally responsible for **the safe management of radioactive waste** in Belgium. It is up to ONDRAF/NIRAS to come up with long-term solutions to ensure that all types of waste are safely and securely disposed of, in particular, categories B and C waste (medium-level and high-level radioactive waste with a long half-life).

It has been a particularly busy year for Synatom with regard to the second stage - interim storage on site.

In addition to multiple projects in spent fuel management, increasingly complex and constantly evolving regulations in nuclear safety – both international and national – have profoundly affected licensing procedures for equipment and infrastructure.

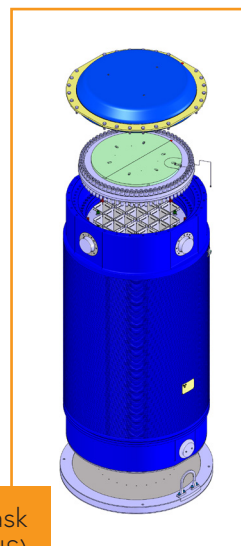
This means that Synatom must regularly adapt its schedules and constantly plan ahead. This is essential to meet the deadlines imposed in the decommissioning plans on time.

It is also worth noting that the Covid-19 pandemic has not had a major impact on manufacturing and construction schedules. Synatom would like to draw attention to the efficient organisation, creativity and measures put in place by suppliers to ensure that they adhered to these schedules. For example, sophisticated inspection cameras were used to perform a whole series of checks remotely.

Three supply contracts for dry storage casks

In 2020, a large series of casks are being manufactured by Holtec, an American company. The work has progressed well, and the first cask is expected to arrive at Doel in the second half of 2021. This will make it possible to conduct several cold tests first (i.e. without spent fuel assemblies) before conducting the hot tests (in real conditions of use).

At the end of 2016, Synatom signed **two major contracts** with the French company ORANO NPS and the German company GNS (Gesellschaft für Nuklear-Service mbH) to supply additional storage casks for Doel 3 and Doel 4 assemblies and the three Tihange reactors. Each supplier will manufacture two different types of cask to very precise specifications.



Schematic of a CASTOR cask
(GNS)

Two new central storage buildings

After the final shutdown of a nuclear reactor, and within a period of five years at most, there are various operations that must be performed before the real dismantling work can begin. The disposal of spent fuel assemblies in each storage pool is a top priority. It is also one of the largest and longest phases.

In order to shut down Belgium's nuclear reactors by 2025, additional interim storage is required at Doel and Tihange and a new building (called SF²) needs to be built. Dry storage in dual-purpose casks (storage and transport) is the selected storage method for both of these sites.

After receiving a federal permit to build and operate the **SF² building at Tihange** and obtaining planning permission from the Walloon Region, construction began in the spring of 2020.

Authorisation to build the **SF² building at Doel** involved several steps to obtain the various permits. The Scientific Council on ionising radiation granted preliminary approval in September 2020 and the obligatory public consultation was launched at the end of the year.

In order to empty the fuel storage pools completely, Synatom has also been working for several years on a project called **CIME** (Unclean or Mechanically Damaged Fuels). A limited number of assemblies have defective pins or abnormalities in their metal structure. In 2017, the first remote-control equipment called **FREED** was successfully tested in the fuel storage pool at Doel 1 and 2. This equipment covers defective pins in a special casing.

One transfer shuttle for the Tihange nuclear power plant

Starting from 2023, the frequency of transfers between the three fuel storage pools and the central storage building at Tihange will intensify. The purchase of a second transfer cask, called a shuttle, was approved in 2013. The Belgian Federal Agency for Nuclear Control has nearly completed its safety assessment. Complex administrative requirements and the **unique characteristics** of the special cask make this a lengthy process. Synatom has decided to move ahead **step by step** : not only has it given the go ahead to launch the first stages of production, but also to begin using the shuttle at Tihange in a limited capacity. It is essential that the shuttle is ready to operate in 2023 when Tihange 2 is finally shut down and dismantling begins.

Other major projects

We need to keep in mind one basic principle that states that before we can dismantle the old infrastructure, we must design and build new infrastructure. Doel and Tihange are no exception. Eventually, the interim storage buildings must be able to function **totally independently**.

At Tihange, the current interim storage building needs to be completely disconnected from the Tihange 3 buildings to which it is currently attached. Preliminary studies, which started in 2020, aim for all of this work to be completed by 2030.

At Doel, aside from functional independence, particular attention has been given to researching designs for new equipment that can perform safety checks on storage casks, and possibly even repair them.

ONDRAF/NIRAS relations

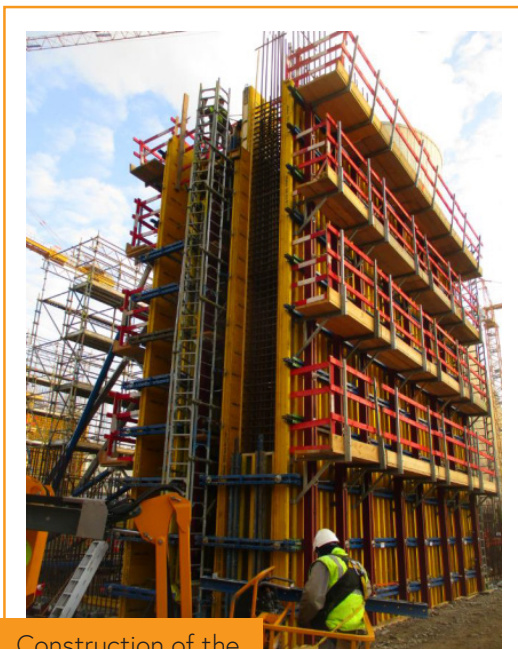
All of ONDRAF/NIRAS's costs are covered by the producers of radioactive waste. The management of radioactive waste comprises spent fuel management services both now and in the long-term.

Tariffs for large producers like Synatom are defined in contractual agreements. In 2020, we have continued renegotiating our ONDRAF/NIRAS contract, which has a **baseline scenario** established in 2018, integrating a tripling of costs and a delay of 30 years for final disposal of category B and C waste.

The National Agency for Radioactive Waste and Enriched Fissile Materials has also begun a feasibility study into taking category B waste from dismantled power plants at Doel and Tihange and storing it at the Belgoprocess site in Dessel. A building, known as Building 136, was financed by Synatom and has

storage space for category C reprocessing waste.

As in previous years, Synatom has substantially contributed to the funding of research (**11 million** euros in 2020) conducted by ONDRAF/NIRAS on the final disposal of category B and C waste in deep geological repositories.



Construction of the SF² building at Tihange

FINANCIAL MANAGEMENT

The challenges Synatom is facing in the new decade beginning in 2020 are mainly financial. In fact, Synatom is on its way to becoming **one of the largest fund managers in Belgium**.

Let's take a look back at events of 2018-2019 that have accelerated this process.

1. The first was ONDRAF/NIRAS's publication of a **new baseline scenario** for the long-term management of high-level and medium-level radioactive waste with a long half-life. A tripling of the estimated costs and a longer phasing for final disposal activities have increased the total amount of provisions required.
2. The Nuclear Provisions Committee subsequently decided to adopt a number of **specific discount rates** : the first for waste management and the second for decommissioning operations. These two different rates, factor in a progressive decrease in the discount rate. This decision has an effect on the total amount of the provisions.
3. Engie Electrabel subsequently promised to **reimburse** the portion of provisions set aside for spent fuel management by 2025. This portion of the provisions was loaned to it by Synatom and will amount to 4.8 billion euros at maturity in 2025.

At this time it has become clear that Synatom had entered a new era in which **capital management** will play a dominant role.

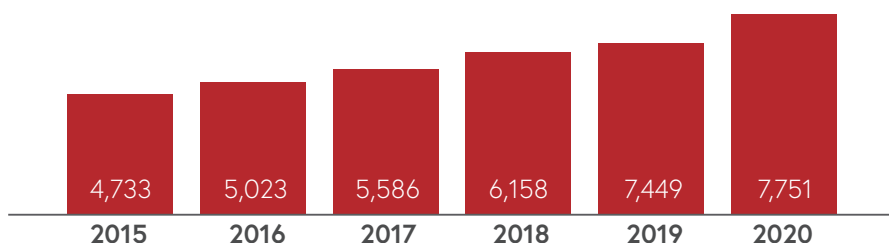
As such, 2020 was taken as an opportunity to reflect strategically on the company's current and future financial responsibilities. The year allowed us to rethink our priorities and establish a plan to develop the human and material resources that our company needs to achieve its long-term objectives.

This plan has already led to practical measures and the organisation chart now includes **a new department dedicated to "investments"**.

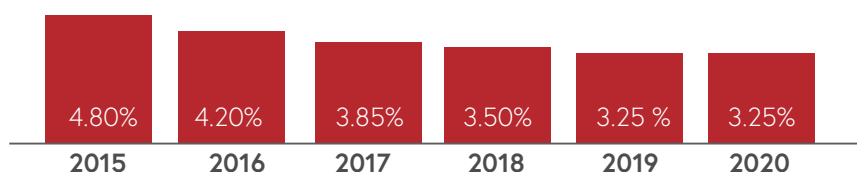
In terms of financial devices, Synatom started to form **a "SICAV"** under Belgian law that is called the « Belgian Nuclear Liabilities Fund ». The purpose of the SICAV is to manage the nuclear provisions and make them grow.

Of course, we cannot conclude our review of 2020 without a look back at the Covid-19 global pandemic: it forced the financial markets into a nosedive at the end of February, followed by a spectacular rebound at the end of March bringing most stock markets back to nearly the same level as the start of the year – even higher if the DOW JONES is included. By the end of this turbulent year, Synatom's assets were once again worth more than the book value.

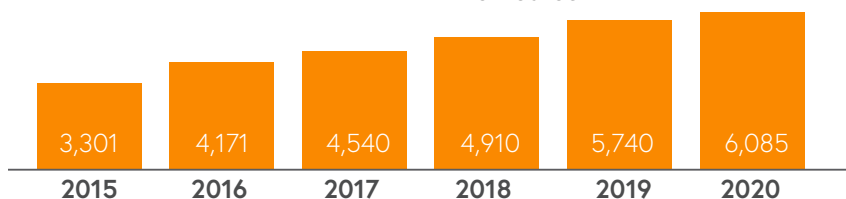
Changes in the provisions for spent fuel management
in million euros



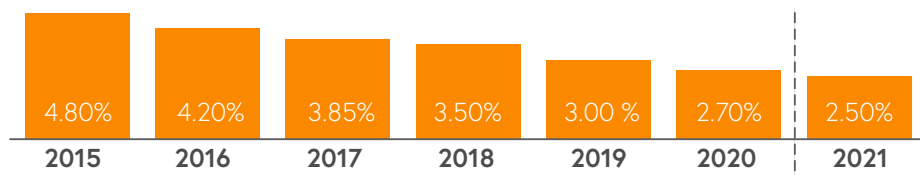
Discount rate for spent fuel management



Changes in the provisions for decommissioning in million euros



Discount rate for decommissioning



State of the provisions at the end of 2020

The total amount of the provisions at the end of 2020 was **13.8 billion euros**, compared to 13.189 billion euros at the end of 2019. An increase of 600 million euros, mainly thanks to changes in the discount rate following the NPC, the Nuclear Provisions Commission's decision to lower nuclear provisions in 2019. While the discount rate for the provisions dedicated to spent fuel management remained stable at 3.25%, the rate for decommissioning decreased by 0.30%, from 3% in 2019 to 2.70% in 2020.

Where are the provisions held?

The provisions are regulated by the Belgian law of 11 April 2003 that also established a Nuclear Provisions Commission. This NPC is in charge of supervising how Synatom distributes the provisions. The law states, among other things, that Synatom can lend up to **75%** of the total amount of the provisions to the nuclear power plant operator, Electrabel. The remaining **25%** can be placed in external assets.

At the end of 2020, 75% of the decommissioning provisions were still on loan to Electrabel. However, 75% of the spent fuel management provisions, which were on loan to Electrabel, are also the object of a progressive repayment plan for the 2020-2025 period.

The total amount loaned to Electrabel out of the spent fuel management provisions, only amount to **60.1%** of the total provisions.

Repayment schedule of the loan relating to the management of the spent fuel

2020	2021	2022	2023	2024	2025	Total
108	870	894	889	931	1,071	4,763

Synatom prefers to invest the remaining provisions in shares and bonds, while monitoring cash assets to ensure that they are adequate **to cover three years' expenditure** – whether it is expenditure on equipment, like the interim storage casks, or the costs of preparing to dismantle the nuclear reactors.

An « Investment » department

More than ever, protecting our assets is an essential part of our management activities. We are constantly striving to protect our assets and make them grow. Therefore, Synatom has created a department dedicated exclusively to Investments.

A SICAV under Belgian law

On 18 December 2020, Synatom created an institutional **SICAV** under Belgian law, called the Belgian Nuclear Liabilities Fund (BNLF), which aims to manage, in the long term, all the assets related to the nuclear provisions.

New skills

The major changes that began in 2020 will lead to profound organisational transformation and the development/recruitment of new skilled workers. It is paramount today that we are able to identify these trends and developments, and to anticipate change several years in advance.

It is also crucial that we adopt the right technology so that we will be able to cut through vast amounts of data and process it intelligently.

In addition, Synatom would like to strengthen its governance rules, reporting tools and auditing procedures. **Financial transparency** remains our top priority, as does the alignment of our strategies with the advice and recommendations of the NPC.

The year of 2020 was marked by several major projects that we will continue to consolidate in 2021.

MANAGEMENT AND SUPERVISORY BODIES

BOARD OF DIRECTORS

Messrs	Didier ENGELS	Chairman
	Robert LECLÈRE	Chief Executive Officer
	Marc BEYENS	
	René DELPORTE	
	Thierry SAEGEMAN	
	Dimitri STROOBANTS	Directors

GOVERNMENT REPRESENTATIVES

Messrs	Yves DE GRAEVE (until 31/12/2020)
	Martial PARDOEN (until 15/12/2020)
	Carl MALBRAIN (as from 15/12/2020)

AUDITOR

DELOITTE Réviseurs d'Entreprises, SC s.f.d. SCRL, represented by Mr Laurent Boxus

ACKNOWLEDGMENTS

In a context deeply marked by the Covid-19 pandemic, Synatom has taken very strict sanitary measures to drastically reduce the risk of contamination. Telework has become an imperative rule of work organisation. At the same time, special attention has been paid to maintaining team cohesion and securing the data exchanged. The Board of Directors would like to thank the staff for their commitment to the company and their ability to adapt to new working conditions.

CONTROL HANDOVER

At the end of the General Meeting of 12 May 2021, Mr Robert Leclère will hand over leadership of Synatom to a new Chief Executive Officer. This is a good opportunity to look back at the events that have marked his time here, and ask him how he imagines the future of Synatom.

Q. : What will you remember most from your 15 years as head of Synatom ?

First of all, on an international level, I am still profoundly affected by the accident at Fukushima and devastating tsunami, which killed thousands of people and destroyed Fukushima Daiichi nuclear power plant. This accident had a significant global impact and affected Synatom's markets related to the supply of fissile materials. Since the accident, I have also been impressed by the **resilience** of the local population and the plant workers.

On another note, I am impressed by the growth of nuclear power in **China**, which really started with the commissioning of the two Daya Bay reactors in 1995. Today, China has 51 reactors operating and about 15 under construction. The country has reached a level of technological and industrial **maturity** that allows it to design and build its own reactors. Even to export them.

In Belgium, I will remember the discovery of **hydrogen microbubbles** in the vessels at the Doel 3 and Tihange 2 reactors in 2012. After three years of intense research by various bodies, the Federal Agency for Nuclear Control confirmed that the structural integrity of the vessels remains compliant with safety regulations. In December 2020, a follow-up inspection once again demonstrated that the microbubbles have not moved. During this period, prolonged shutdowns at the two reactors had a severe impact on Synatom's purchases of fissile materials.

I should also mention the Belgian government's decision in 2015 to **extend** the lifetimes of the Doel 1, Doel 2 and Tihange 1 reactors by another ten years.

In each case, Synatom has managed to adapt intelligently and quickly. That's why, if I could mention just one thing, it would be the **dedication** of the teams who have worked at my side. We are a small company with a real family atmosphere, which is based on mutual trust and respect. I appreciate their professional attitude and desire for excellence. Together, we have been able to continually adapt to changes taking place in our different business areas. I would like to express **my gratitude** and **heartfelt thanks** to everyone.

Q. : What do you see in Synatom's future ?

For the last two years, we have been part of a fundamental movement of transformation that is essential to prepare Synatom to face challenges in the coming years. We see this transformation as a way of making our business sustainable and protecting its values.

Today, Synatom's core business has changed. For 40 years, our **primary mission** was to supply, in the best conditions possible, the fissile materials needed to fabricate nuclear fuel assemblies. The planned shutdown of Belgium's nuclear power plants, whether total or partial, has already had an impact on our front-end activities in the nuclear fuel cycle. This activity will decrease even further in the future.

Synatom's point of focus has shifted. It is now centred on the task of efficiently managing interim storage for the spent fuel assemblies at Doel and Tihange. Fissile materials and assemblies remain the property of Synatom

after they have been used in the reactor. Over the next five years, major investments will be approved to build new infrastructure as well as purchase dozens of fuel casks. These investments are indispensable in order to immediately dismantle the nuclear reactors and avoid passing costs on to future generations. The multiple files and their complexity mean that we need to hire new skilled workers.

In my opinion, as we extend our technical activities, it is **financial activities** that are going to change the most at Synatom. These will be increasingly focused on managing the nuclear provisions. Two very specific approaches are being developed: first, to manage the provisions related to the decommissioning of the nuclear reactors; and secondly, to manage the provisions related to spent fuel management.

The preliminary phase to dismantle the reactors has already begun. It constitutes the first steps in a process that will eventually dismantle the reactors completely by 2045. This requires a two-pronged approach to managing the **provisions dedicated to decommissioning**. On one hand, these provisions are going to be needed to cover costs, and on the other, we need to invest them in order to grow our funds through short-term investments that offer us the level of flexibility we require. Just as a reminder, at the end of 2020 these provisions totalled more than 6 billion euros.

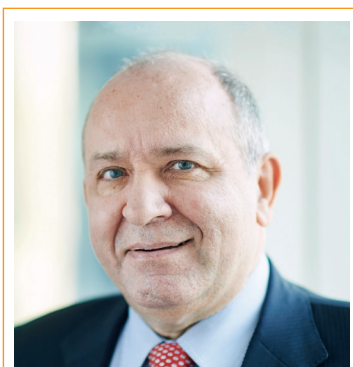
On the other hand, concerning the provisions dedicated to **spent fuel management**, Synatom will have to develop investment strategies for the very long term; on the understanding that the bulk of the funds will not be required until 2070 according to the National Organisation for Radioactive Waste and Enriched Fissile Materials (ONDRAF/NIRAS) ! In the meantime, by 2025, Synatom will become one of the largest **fund managers** in Belgium with capital surpassing 10 billion euros. It will pursue a genuine business approach and strategy based on new human skills and innovative investment solutions to ensure our energy security and financial returns.

These are the main trends I see in the coming years. At the same time, we have **digital** and **technological** challenges to meet and which offer us new tools in management, control, reporting and communication.

In conclusion, I would like to add that I am still convinced that nuclear power has a place in Belgium. Through the 20-year lifetime extension for the Doel 4 and Tihange 3 reactors today... and through things like the construction of modular reactors tomorrow. And, of course, I still **dream** of a remake of the 1960s when Belgium was a pioneer in the development of PWR-type reactors in Europe! It sealed our alliance with France, which was eager to access the technology to build Chooz A, Tihange 1 then Chooz B1 and Chooz B2.

Could Belgium once again become a **pioneer** in the industry and build one of the first modular reactors in Europe ? Modular Nuclear Reactors (MNRs) are currently being developed by several manufacturers and are the new generation of reactors, characterised by their small size, simplified design, mass production capacity and passive safety features.

Long live Synatom !



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 fiftieth financial year, and to submit for your approval the annual accounts for the year ended 31 December 2020.

General information

During the financial year under review, the generation of nuclear power in the country reached 32,828 GWh.

In 2020, Belgian nuclear power plants operated at an average load factor of 62.6% compared with 79% in 2019.

Note that in 2020 Tihange 1 was shut down for almost the entire year following an extensive overhaul in order to make the necessary investments to extend the life of the unit, the shutdown having been prolonged following a technical problem.

Shareholder structure, capital and mission of the company

Synatom's capital stands at 49.6 million euros, including approximately 25% of paid-up capital, and is represented by 2 million registered shares. All of the shares are held by Electrabel apart from a golden share held by the Belgian State granting it certain special rights on the Board of Directors and in the General Assembly of Synatom.

Synatom's mission consists primarily of supplying Belgium's nuclear power plants with enriched uranium, managing the back-end of the fuel cycle and managing the provisions related to both the decommissioning of the nuclear plants and the management of irradiated fissile material in these plants.

Technical and commercial activities

Nuclear fuel supply

As the 2003 law provides to permanently shut down the nuclear power plants from 2022, Synatom has redefined its procurement policy for the coming years, using tried-and-tested criteria that have proven their value in the past : supply diversification and maintaining a strategic stock in line with the recommendations of the Euratom Supply Agency.

This strategic stock will nevertheless be reduced to zero by 2025, when the last 5 nuclear power plants are closed.

The year 2020 was characterized by the epidemic of the Covid-19 virus. It resulted in a decrease in production linked to the measures put in place by the producers to protect their personnel. This decrease in production had no impact on the deliveries planned by Synatom during the past financial year.

These production stops had an impact on the prices of natural uranium, characterized by a rapid increase in prices until the end of May followed by a gradual decrease to reach a value of 30.40 USD / lb at the end of December (against 24.90 USD / lb at the end of 2019).

The indicator for long-term contracts estimated at 33 USD/lb in January 2020 ended the year at 37 USD/lb.

Spot prices for enrichment services continued the increase that began in September 2018 to end the year at 51.75 USD/SWU. The long-term price of enrichment services went from 55 USD/SWU at the beginning of the year, ending the year at 60 USD/SWU.

Synatom's supply portfolio and strategic stock guarantee that it has the fissile materials required to operate the plants in the coming years.

Spent fuel and waste management

Synatom continues to ensure the safe and responsible management of spent fuel at the Doel and Tihange nuclear power plants.

In 2020, 3 dry storage casks were loaded with spent fuel at the Doel site. The total number of casks loaded in the dedicated «SCG» (Splijstof cask gebouw) building is 115.

The manufacturing of the first transport casks for Doel 1 and 2 continued. The first delivery is expected in August 2021.

On the Tihange site, following technical problems on the installations, only one spent fuel transfer campaign was carried out by the dedicated transfer shuttle between the Tihange 3 deactivation pools and the centralized underwater storage facility.

New storage buildings (SF²) and purchase of new casks

In order to anticipate the saturation of the current spent fuel storage facilities (both in Doel as in Tihange), the construction of a new dry storage building, called SF² (Spent Fuel Storage Facility), on each of the two sites is being carried on.

Construction of the SF² building in Tihange started in May.

The application for authorization of the SF² building in Doel, similar to the one in Tihange, was filed with the Federal Agency for Nuclear Control in January 2020, and the first Scientific Council gave a favorable opinion in September. Discussions with the authorities continued for the second Scientific Council, which is due to take place in May 2021. The application for an urban planning permit was filed in September and the public consultation launched at the end of 2020.

At the same time, Synatom continues to deploy a new purchasing strategy for storage casks intended for these new installations, known as « Post-2020 Casks ».

Research and Development and relations with the Belgian National Agency for Radioactive Waste and Enriched Fissile Material (ONDRAF/NIRAS)

ONDRAF/NIRAS is continuing its research and development work on geological disposal, funded by the producers of radioactive waste, in order to develop a definitive solution for Category B&C waste. Synatom, in consultation with the other producers, has just renewed its contract to finance ONDRAF/NIRAS's R&D for this geological repository.

Discussions with ONDRAF/NIRAS are continuing in order to adapt Synatom's delivery contract to the new principles which define the new rules for the contribution of the waste producers to the financial coverage of radioactive waste management by ONDRAF/NIRAS.

In the meantime, Synatom has signed an extension of the current contract until the end of March 2021.

The new tariffs applicable to B&C waste destined for future geological disposal have been implemented by ONDRAF/NIRAS from January 1, 2021.

Management of nuclear provisions

Constitution of nuclear provisions

Following the triennial review of December 12, 2019, the Nuclear Provisions Commission has revised downward the discount rates applied to nuclear provisions, reflecting the declining interest rate environment.

As a result, the nuclear provisions in Synatom's statutory accounts amount 13.8 billion euros as at 31 December 2020 (compared with 13.2 billion as at 31 December 2019).

Provisions for management of irradiated fuel

In view of the growing challenges in terms of management of the counterpart for nuclear provisions, Synatom has set up a new Investments Department.

Synatom proceeded on December 18, 2020 to the constitution of a SICAV under Belgian law Belgian Nuclear Liabilities Fund («BNLF») which aims to manage the counterpart of nuclear provisions.

Nuclear tax

Since 2008, Synatom has been responsible for paying the so-called nuclear tax to the Belgian government.

The Royal Decree of 13 November 2020 set an amount of 72 million euros for 2020 to be paid by the nuclear operators.

Guarantee contract signed with Electrabel

Given the repercussions of the Covid-19 crisis on the financial markets, the value of the shares held by Synatom in its SICAV Nuclear Investments Fund (NIF) has undergone a certain volatility.

An agreement has been concluded between Electrabel and Synatom in order to set up perfect hedging with regard to the value of all NIF 1 shares as valued in Synatom's balance sheet.

In this guarantee contract, Electrabel irrevocably undertakes to compensate Synatom for any losses that it may suffer on the NIF 1 shares, in relation to the purchase price thereof, either at the expiry of this contract in 2025 or following a sale of the NIF 1 shares or a total or partial liquidation of the NIF SICAV.

Derivative financial instruments and hedging policy

Synatom is aligned with ENGIE Group's policy with regard to the use of derivative financial instruments mainly to manage its exposure to exchange rate fluctuations for its supplies expressed in US dollars.

Within this context, all supply contracts with commitments of over 1 million US dollars have been covered for 97.5% of the estimated prices and for the minimum quantities specified in the contracts. This currently represents a coverage amount of 138.7 million US dollars.

Disputes

There are no disputes in progress.

Board of Directors

No director terms of office are due to expire in 2021.

However, two directors, namely Mrs Leclère and Delporte have asked to be relieved of their functions in 2021, given their retirement. It should also be noted that new independent directors will join the Synatom Board of Directors in 2021.

Discharge

In accordance with Article 554 of the Belgian Companies Code (Code des Sociétés), we ask the General Assembly to discharge the Board and the statutory auditor within the limits of said laws.

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 sheets

Financial assets - Receivables from affiliated companies

Since 1 January 2017, two 10-year loans have been granted to Electrabel, including one in consideration of the provisions relating to management of irradiated fissile material and another in consideration of the provisions for decommissioning.

Electrabel has committed to repay the entire loan granted for provisions for spent fuel management by the end of 2025. A first tranche of 108 million euros was repaid at the end of 2020.

Financial assets – Participating interests

In February 2019, Synatom acquired a stake in the I4B fund. The debt item concerns a loan with capitalised interest repayable in 12 years and a first release of capital, for a total amount of 2.3 million euros.

Long-term receivables – Other receivables

Since 2005, a part of the provisions has been invested outside the nuclear operator as provided for by the Law of 11 April 2003 on nuclear provisions. Synatom has an outstanding loan to Sibelga for 7.7 million euros.

Short-term receivables – Trade receivables

This section contains the current trade receivables.

Short-term receivables - Other receivables

At the end of 2020, this section mainly included the nuclear tax, for the year 2020, to be paid by Electrabel and Luminus for their respective shares.

This section also includes part of the loan to Electrabel, which will be repaid in 2021, for 870 million euros, and a share of the Sibelga loan, which will be due in 2021, for 2.8 million euros.

Deposits, securities and bonds

This section represents, pursuant to nuclear provisions legislation, the amounts necessary for financing the expenditure associated with decommissioning and management of irradiated fuels for the next three years of operation, as well as some of the amount of the provisions that must be placed outside of the nuclear operator.

Provisions and deferred taxes

These provisions are intended to cover the costs of managing irradiated fissile material and decommissioning of the nuclear plants in accordance with the legal provisions in force.

Results

Turnover

The turnover includes the fees for supply of fissile materials for 256 million euros.

Supplies and goods

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

Services and other goods

This item mainly includes the costs incurred over the financial year for management of spent fuel, i.e. 64 million euros, 4 million euros of fees for decommissioning and 11 million euros for the ONDRAF/NIRAS R&D programme.

Non-recurring income and expenses

The amounts in this section are the result of the 2019 three-year review of nuclear provisions, and in particular the shift of the discount rate from 3.00% to 2.70% for the provision for decommissioning. The non-recurring operating costs reflect the provisions additional to the nuclear provisions, whereas the non-recurring operating revenue reflects the additional billing of provisions to the nuclear operators for the same amount.

Financial income

This item concerns interest on long-term loans and receivables and interest on investments within the framework of the nuclear provisions law.

Profit

The annual accounts for the 2020 financial year closed with a profit of 474,543.44 euros compared to 532,989 euros in 2019.

Subsequent events and outlook

The provisions incorporate into their assumptions all the regulatory requirements either existing or scheduled for implementation at European, national or regional level. If new legislation has to be introduced in the future, the estimated costs used as a basis for calculations would be likely to vary. However, we are not aware of any changes to regulations that could significantly affect the provisioned amounts.

Evaluation of the provisions incorporates margins to accommodate contingencies and risks in order to take into account the degree of mastery of the decommissioning and irradiated fuel management techniques. The margins to accommodate contingencies related to the disposal of waste are determined by ONDRAF/NIRAS and included in its fees. Synatom also estimates appropriate margins for each cost category.

Synatom considers, to the best of its knowledge, that the provisions as approved by the NPC take into account all of the information currently available to cover the contingencies and risks of the decommissioning and irradiated fuel management process.

The situation with the Coronavirus epidemic remains uncertain at this stage and its development is being monitored by Synatom, which is taking the appropriate measures to prevent contamination of its employees, subcontractors and customers

and to reduce the epidemic's consequences on business and results. At this stage, we have mainly identified the temporary effect during the first quarter of 2020 of the deterioration of the financial markets on our investments.

It is proposed to the General Assembly of 12 May 2021, ruling on the accounts for the 2020 financial year, to allocate an amount of 23,727 euros to the legal reserve and to distribute a dividend of 0.90 euro per fully paid-up share, for a total amount of 451,350 euros. The balance of profit for the financial year, i.e. -533.56 euros, is deducted from the balance brought forward, which now stands at 7,335.72 euros.

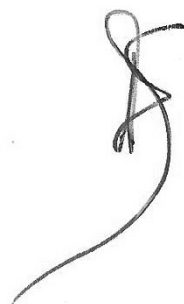
Unless there are any major unpredictable events, the profit for the current financial year should enable Synatom to pay a dividend in 2022, for the 2021 financial year, of the same order of magnitude.

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

Brussels, 15 March 2021



Robert LECLÈRE
Chief Executive Officer



Didier ENGELS
Chairman

BALANCE SHEET

As per 31 December (in thousands of euros)

ASSETS	2020	2019
Fixed assets	0	0
Furniture, vehicles and equipment	0	0
Financial assets	8,138,846	8,256,146
Financial investment Funds – Receivables	1,200	0
Affiliated companies -Receivables	8,135,000	8,255,000
Participating interests	2,646	1,146
• Participations	2,350	850
• Receivables	296	296
Other receivables	7,679	10,574
Trade receivables	0	0
Stocks and contracts in progress	527,482	534,318
Stocks		
Work in progress	527,482	534,318
Receivables within one year	1,632,079	3,017,699
Trade debtors	35,304	2,137,466
Other receivables	1,596,775	880,233
Deposits, securities and bonds	3,792,997	1,977,228
Other deposits	3,792,997	1,977,228
Cash and cash equivalents	2	322
Prepayments and accrued income	1,211	860
TOTAL ASSETS	14,100,296	13,797,147

EQUITY AND LIABILITIES	2020	2019
Capital	12,453	12,453
Issued share capital	49,600	49,600
Capital not fully paid-up (-)	-37,147	-37,147
Share premiums	141	141
Reserves	1,817	1,793
Legal reserve	1,766	1,742
Non-available reserve		
• Other	14	14
Tax free reserve	37	37
Profit brought forward	7	8
Provisions and deferred taxes	13,836,004	13,188,259
Provisions for liabilities and charges	13,836,004	13,188,259
Amounts payable after more than one year	138,500	
Guiding Principles	138,500	
Amounts payable within one year	111,230	591,467
Trade payables		
• Suppliers	66,030	224,261
Taxes, payroll and social security		
• Taxes	44,436	366,479
• Payroll and social security	313	220
Other amounts payable	451	507
Accruals and deferred income	144	3,026
TOTAL EQUITY AND LIABILITIES	14,100,296	13,797,147

INCOME STATEMENT

(in thousands of euros)

	2020	2019
Operating income	439,936	2,020,902
Turnover	256,758	307,965
Variation in stocks of finished good, work and contracts in progress (increase +; decrease -)	-6,836	-53,380
Other operating income	18	1,486
Non-recurrent operating income	189,996	1,764,831
Operating charges	841,616	2,407,739
Supplies and goods	108,479	103,345
Services and other goods	82,872	181,617
Payroll, social security costs and pensions	2,520	2,332
Depreciation and amounts written off on formation expenses, tangible and intangible assets	0	0
Provisions for liabilities and charges (increase +; decrease -)	457,749	355,612
Other operating charges	0	2
Non-recurrent operating charges	189,996	1,764,831
Operating result	-401,680	-386,837
Financial income	402,756	387,500
Income from financial assets	272,043	299,537
Income from current assets	130,713	87,963
Other financial assets		
Non-recurrent financial income	600	128
Financial charges	668	107
Other financial charges	-68	21
Pre-tax operating result	476	535
Pre-tax result for the year	476	535
Taxes on profit	2	2
Profit (loss) for the year	474	533
PROFIT OF THE YEAR TO BE APPROPRIATED	474	533

APPROPRIATION ACCOUNT	2020	2019
Profit to be appropriated	541	583
Profit for the period	474	533
Profit brought forward from previous year	8	8
Appropriation to capital and reserves	24	27
To legal reserve	24	27
Result to be carried forward	7	8
Profit to be distributed	451	506
Dividends	451	506

ADDITIONAL NOTES

(in thousands of euros)

Financial assets

	2020
FINANCIAL INVESTMENTS FUNDS	
Net book value at the end of the previous period	0
• Additions	1,200
Net book value at the end of the period	1,200

	2020
AFFILIATED COMPANIES	
Affiliated companies - Receivables	
• Net book value at the end of the previous period	8,255,000
• Additions	750,000
• Reimbursements	870,000
• Impairment	0
• Impairment cancellation	0
• Other	0
• Net book value at the end of the period	8,135,000

	2020
PARTICIPATING INTERESTS	
Participating interests - Participations	
Net book value at the end of the previous period	3,100
• Acquisitions	1,500
Uncalled capital at the end of the period	2,250
Net book value at the end of the period	296

Information about participations

NAME	INTERESTS			Equity
	Nature	Number	%	
I4B – The Belgian Infrastructure Fund SA Avenue du Port 86C – 1000 Bruxelles	Registered shares	3,100,000	33.33	198,537 euros

ADDITIONAL NOTES

Deposits, securities and bonds, prepayments and accrued income

	2020	2019
Deposits, securities and bonds		
Shares	3,792,997	1,977,227
Prepayments and accrued income		
Accrued interests	709	834
Operational Costs to be Regularized	502	26

Equity and shareholders

CAPITAL	2020
Issued share capital	
At the end of the previous period	49,600
At the end of the period	49,600
Representation of the capital	
Type of shares:	
• Registered shares :	2.000.000 actions
NON FULLY PAID-UP	
Shareholders (non-called capital)	
• Electrabel	37,147
SHAREHOLDER'S STRUCTURE	
• Electrabel	1,999,999 shares
• Belgian State	1 share
	2,000,000 shares

ADDITIONAL NOTES

Liabilities, accruals and deferred income

	2020
AMOUNTS PAYABLES AFTER MORE THAN ONE YEAR	
• Others debts (Guiding Principles)	138,500
TAXES, PAYROLL AND SOCIAL SECURITY	
Taxes	
• Due taxes	2
• Not yet due taxes	44,434
• Estimated taxes	-
Payroll and social security	
• Due liabilities to social security	-
• Other debts related to payroll and social security	313
ACCRUALS AND DEFERRED INCOME	
Deferred income	0
Miscellaneous	144

ADDITIONAL NOTES

Operating results

	2020	2019
OPERATING INCOME		
Turnover		
• Fees for the availability of fissile material	255,661	306,628
• Miscellaneous	1,097	1,337
	256,758	307,965
OPERATING CHARGES		
Number of staff hired		
• Total at the end of period	15	14
• Average number of staff in full time equivalent	14.7	14.3
• Effective hours	23,696	22,396
Employment costs		
• Payroll and social benefits	1,600	1,402
• Employer's contribution to social security	450	395
• Employer's premiums for non-statutory insurance	413	492
• Other personnel costs	57	43
	2,520	2,332
Provisions for liabilities and charges		
• Increase	544,667	522,571
• Use and decrease	(-) 86,918	(-) 166,959
	457,749	355,612
Other operating charges		
• Taxes related to operations	0	2
• Other		
	0	2

ADDITIONAL NOTES

Non recurrent income and charges

	2020	2019
NON-RECURRENT INCOME		
Non-recurrent operation income		
• Other non-recurrent operation income	189,996	1,764,831
NON-RECURRENT CHARGES		
Non-recurrent operating charges		
• Exceptional provisions for liabilities and charges	189,996	1,764,831

Taxes

	2020	2019
INCOME TAXES		
Main sources of disparities between pre-tax profit, expressed in the accounts, and the estimated taxable profit		
• Disallowed expenses	60	60
• Use of anterior losses	(-)537	(-)596
VALUE ADDED TAX AND RETAINED TAXES CHARGED TO THIRD PARTIES		
Value added tax charged		
• To the company (deductible)	13,959	5,373
• By the company	97,437	433,352
Retained taxes charged to third parties		
• On wages and salaries	449	497

ADDITIONAL NOTES

Off balance sheet rights and commitments

Forward transactions

Purchase foreign exchange 117,115

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

Revision of the dismantling provision for nuclear plants – 2.50% in 2021..... 126,103

Relations with affiliated and associated companies

	AFFILIATED COMPANIES		ASSOCIATED COMPANIES	
	2020	2019	2020	2019
Financial assets				
• Participation	-	-	850	850
• Other receivables	8,135,000	8,255,000	296	296
	8,135,000	8,255,000	1,146	1,146
Receivables				
• Long-term (more than 1 year)				
• Short-term (less than 1 year)	1,625,245	2,553,172		
	1,625,245	2,553,172		
Liabilities				
• Short-term (less than 1 year)	5,381	8,268		
	5,381	8,268		
Financial results				
• Income from financial assets	296,793	292,442		
• Income from current assets	123,849	82,635		
• Debts loads	668	107		

ADDITIONAL NOTES

Related party transactions which are not concluded at arm's length

In the absence of any legal criteria to inventory significant non-arm's length transactions with related parties, no transactions are recorded here,

For information purposes and in the interest of transparency, all significant transactions with related parties (apart from transactions with companies which are (more or less) wholly owned by the group to which we belong) are listed below,

Sibelga

Sibelga is the sole manager of networks for electricity and natural gas distribution for the 19 municipalities of the Brussels Region,

In October 2012, Electrabel has transferred to Synatom two tranches of a loan to Sibelga. The loan, with an actual outstanding amount of 11 million euros, is repayable in annual instalments until December 2026,

Financial relations with:

A. Directors and managers

Direct and indirect salaries and pensions to directors and managers charged to the income statement : 24,017 euros.

B. The auditor(s) or associated persons

Audit fees : 42,000 euros

Other control missions : 3,750 euros

Valuation of the nuclear provisions

The Belgian Law of 11 April 2003 assigns to Synatom management of the provisions for decommissioning of nuclear power plants and for managing the back-end of the irradiated fuel cycle in these plants. Under the same law, Synatom can lend Electrabel an amount corresponding to a maximum of 75% of the amount of the nuclear provisions. The Electrabel debt on the Synatom balance sheet, including trade liabilities, amounted to 7.7 billion euros at 31 December 2020 (10.6 billion euros at 31 December 2019).

Moreover, this legislation has organised establishment of a Nuclear Provisions Commission (NPC), whose mission is to control the process of constitution and management of these provisions.

To enable the NPC to perform its missions in accordance with the law referred to above, Synatom is required to submit, every three years, a file describing the basic features of the constitution of these provisions. In the event that changes are observed between two triennial valuations, which may significantly change the financial parameters, the industrial scenario, the cost estimate or the timetable, the NPC may revise its opinion.

On 12 September 2019, a triennial reassessment of nuclear provisions was sent to the NPC, which issued its opinion on 12 December 2019.

This was taken into account during the closing of the accounts of December 31, 2019. The provisions have not changed since beyond the recurring impacts of consumption / constitution and discounting of provisions.

The provisions have been established considering the current contractual and legal framework that sets the operating life of nuclear units at 50 years for Tihange 1 and Doel 1 and 2 and 40 years for other units.

The provisions incorporate into their assumptions all the environmental regulatory requirements either existing or scheduled for implementation at European, national or regional level. If new legislation has to be introduced in the future, the estimated costs used as a basis for calculations would be likely to vary. However, Synatom is not aware of any changes to regulations on the constitution of these provisions that could significantly affect the provisioned amounts.

Evaluation of the provisions incorporates margins to accommodate contingencies and risks in order to take into account the degree of mastery of the decommissioning and irradiated fuel management techniques. The margins to accommodate contingencies relating to disposal of waste are determined by ONDRAF/NIRAS and exceed those incorporated into its fees to make sure that the provisions cover the expenses associated with the back-end of the cycle in the event that the optimisations submitted for appraisal do not materialise. Synatom also estimates appropriate margins for each cost category.

Synatom considers, to the best of its knowledge, that the provisions as approved by the NPC take into account all of the information currently available to cover the contingencies and risks of the decommissioning and irradiated fuel management process.

Provisions for the back-end of the cycle

After being unloaded from the reactor and stored temporarily on site, the spent nuclear fuel should be conditioned, and possibly reprocessed to separate the most active radionuclides, prior to disposal for long-term storage.

On 9 February 2018, ONDRAF/NIRAS proposed geological disposal as a national policy for long-term management of high-level and/or long-lived waste. This proposal remains subject to

ADDITIONAL NOTES

approval by the Belgian government, which will first obtain the opinion of the FANC (Federal Agency for Nuclear Control).

In addition, Synatom considers in its assessment that the «mixed» scenario chosen by the NPC continues to apply: some of the fuel, that containing the most active radionuclides, is reprocessed and the rest is disposed of directly, without being reprocessed.

The provisions for the back-end of the cycle cover all of the costs associated with this « mixed » scenario : on-site warehousing, transport, reprocessing, conditioning, warehousing and geological disposal. They are determined based on the following principles and parameters :

- the costs of temporary storage, mainly including the costs of construction and operation of additional dry storage facilities, as well as the operation of existing installations, and the costs for purchasing casks ;
- some of the irradiated fuel is transferred for reprocessing. The plutonium and uranium produced by reprocessing are sold to a third party ;
- the irradiated, non-reprocessed fuel is conditioned, which requires the construction of conditioning installations according to the acceptance criteria issued by ONDRAF/NIRAS. The ONDRAF/NIRAS recommendations relating to the cost of this facility have been fully taken into account ;
- the residues of reprocessing and the irradiated fuel are transferred to ONDRAF/NIRAS ;
- the costs of disposal in deep geological formations are estimated by ONDRAF/NIRAS and evaluated not at the value of the fees established by ONDRAF/NIRAS in 2018 but using a « virtual prudential tariff » established by ONDRAF/NIRAS upon request from the NPC, based on a total cost of the disposal facility of 10.7 billion euros 2017 excluding the optimisation options subject to appraisal. The estimated cost of the preliminary recommendation of the FANC concerning an additional shaft has also been added on the basis of ONDRAF/NIRAS recommendations ;
- the forward commitment is calculated on the basis of estimated internal costs and external costs evaluated from bids received from third-parties ;
- the new baseline scenario incorporates the updated ONDRAF/NIRAS scenario delayed by around 30 years compared to the scenario adopted in 2016, with the beginning of geological storage in around 2070, closing in around 2135, with the intermediate storage and reprocessing and conditioning activities postponed accordingly.
- the discount rate is reduced to 3.25%. It takes into account (i) an analysis of the evolution and the historical and prospective average of the reference rates in the long term, (ii) the extension of the duration of liabilities in light of the new ONDRAF/NIRAS scenario, and (iii) the commitments relating to financing of these provisions made by Electrabel to Synatom ;
- an inflation assumption of 2.0% (an actual rate of 1.25%).

The costs actually borne in the future could, however, differ from these estimates given their nature and their due dates.

ONDRAF/NIRAS, in its opinion to the NPC, in particular pointed to elements of uncertainty on some costs, in principle covered by the margins for contingencies, but for which the NPC will develop a work programme and additional analyses from 2020. The amount of these provisions could be adjusted at a later date depending on changes to the parameters presented above and the estimations of associated costs. More specifically, the current regulatory framework in Belgium does not allow partial reprocessing and has not yet confirmed adoption of geological disposal as a policy for managing intermediate-level and high-level nuclear waste.

Regarding the partial reprocessing scenario, following a resolution passed by the House of Representatives in 1993, reprocessing contracts that were not running were suspended and then terminated in 1998. The scenario retained is based on the assumption that the Belgian Government will authorise Synatom to reprocess spent fuel and that an agreement between Belgium and France will be signed in order to allow Orano (formerly Areva) to carry out this reprocessing. A scenario based on direct disposal of waste, without prior reprocessing, would lead to a provision lower than that resulting from the «mixed» scenario retained today and approved by the NPC.

Furthermore, the Belgian government has not yet made a decision regarding the management of waste, either in deep geological repositories or in long-term storage above ground. For this reason, the European Commission sent a reasoned opinion to Belgium on 27 November 2019 within the framework of the infringement proceedings of Article 258 of the Treaty on the Functioning of the European Union, on the grounds that it has not adopted a national radioactive waste management programme that complies with certain requirements of the Directive on spent fuel and radioactive waste (Council Directive 2011/70/Euratom). At this stage, there is therefore only a national programme that confirms safe temporary storage of spent fuel followed by its reprocessing or storage. The assumption incorporated into the scenario chosen by the NPC is based on a deep geological repository in Boom clay, as recommended in the ONDRAF/NIRAS « waste plan », extrapolated to a deep site to be identified and qualified in Belgium.

Sensitivity

The provisions for management of the back-end of the nuclear fuel cycle remain sensitive to assumptions concerning costs, schedule of operations and commitment of expenses and to the discount rate :

- a 10% increase in ONDRAF/NIRAS fees beyond the virtual prudential tariff requested by the NPC for the disposal of high-level and/or long-lived waste would result, for an unchanged amount of uncertainty margin, in an increase in the provisions of about 175 million euros ;
- the acceleration by 5 years of ONDRAF/NIRAS expenses for temporary storage, conditioning and storage of high-level and/or long-lived radioactive waste would result in a 170 million euros increase in provisions. Postponing these expenses in the engagement schedule by 5 years would result in less of a reduction ;

ADDITIONAL NOTES

- the impact of a variation in the discount rate of 10 basis points is likely to lead to a change in the balance of provisions for processing the back-end of the nuclear fuel cycle in the region of 260 million euros, upwards if the rate decreases and downwards if the rate increases.

It should be specified that these sensitivities are the result of a purely financial calculation. They must be analysed with all the usage precautions given the number of other parameters, some interdependent, incorporated into the evaluation.

Provisions for decommissioning

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 definitive shutdown phase, which concerns the unloading and disposal of the plant's irradiated fuel, and the decommissioning period itself, which results in site declassification and clean-up.

The decommissioning strategy adopted is based on decommissioning (i) immediately after reactor shutdown, (ii) performed in series rather than one unit at a time, and (iii) complete (return to «industrial greenfield» status), enabling future industrial use of the land.

The provisions for decommissioning of nuclear power plants are constituted based on the following parameters :

- the amount to be disbursed is ultimately determined by the estimated costs of each nuclear power plant, based on a study conducted by an independent consultancy firm and under the assumption that the plants would be dismantled in series ;
- the fees for the management of categories A and B decommissioning waste are determined using the « virtual prudential tariff » established by ONDRAF/NIRAS at the request of the NPC and including margins recommended by ONDRAF/NIRAS for waste reclassification risks given the uncertainties relating to definition of criteria for admission of waste into these categories ;
- for the different phases, the inclusion of margins for normal contingencies, reviewed by ONDRAF/NIRAS and the NPC, is taken into account ;
- a rate of inflation of 2% is applied until the end of decommissioning for determining the future value of the commitment ;
- a discount rate reduced to 3% (including 2.0% inflation) is applied at 31 December 2019 for the determination of the current value of the commitment (NPV). It differs from that used for the provision for management of the back-end of the nuclear fuel cycle given the significant differences in duration of the two obligations after consideration of the new ONDRAF/NIRAS scenario. It should be noted that this discount rate will be reduced to 2.7% in 2020 and 2.5% in 2021 ;
- the operating life of the nuclear units is 50 years for Tihange 1 and Doel 1 and 2 and 40 years for the other units ;
- the beginning of the technical operations for the final shutdown of the installations depends on the unit concerned and

the sequencing of the operations for the entire fleet. They are immediately followed by the dismantling phase.

The costs actually borne in the future could, however, differ from these estimates given their nature and their due dates. ONDRAF/NIRAS, in its opinion to the NPC, in particular pointed to elements of uncertainty on some costs, in principle covered by the margins for contingencies, but for which the NPC will develop a work programme and additional analyses from 2020. The amount of these provisions could also be adjusted at a later date depending on changes to the parameters presented above. However, these parameters are established, and the assumptions are made, based on the information and estimations that Synatom considers to be most appropriate currently, and approved by the NPC.

Moreover, the scenario retained is based on a dismantling plan and schedules that should be approved by the nuclear safety authorities.

Sensitivity

Based on the parameters currently applied for the estimation of costs and the disbursement calendar, a variation in the discount rate of 10 basis points is likely to lead to a change in the balance of provisions for decommissioning in the region of 62 million euros, upwards if the rate decreases and downwards if the rate increases.

It must be specified that these sensitivities result from a purely financial calculation. It must be analysed with all the usage precautions given the number of other parameters, some interdependent, incorporated into the evaluation.

Return on provision amounts invested by Synatom

Synatom invests in the financial markets the amount of provisions paid by Electrabel to cover the costs of dismantling nuclear power plants and managing spent fuel. If during the use of funds it turns out that the amounts provisioned were insufficient, Electrabel should make up the difference.

In the shorter term, the value of Synatom's investments is covered by a value guarantee contract between Electrabel and Synatom whereby, if at the end of this contract in 2025, the market value was lower than the book value of acquisition, Electrabel should compensate for the difference in value.

With the increase of dedicated assets to be managed, Synatom is professionalizing by entrusting the management of investments will be entrusted to a team led by an investment director, and by creating an investment committee made up of experts responsible for supervising the investment decisions. Its investment policy imposes a controlled risk profile in order to achieve return objectives and significant risk diversification, based on a rigorous risk control policy.

A new SICAV under Belgian law was created on December 18, 2020 and will be operational during the first half of 2021.

ADDITIONAL NOTES

Electrabel commitment

Electrabel, going beyond its legal obligations, committed to fund via Synatom the full amount of the provisions for management of spent fuel by 2025, according to the following schedule :

2021	2022	2023	2024	2025	Total
870	894	889	931	1,071	4,655

Valuation rules

Formation expenses

The formation expenses are included in the financial year in which they are made.

Tangible fixed assets

Purchase value

Tangible fixed assets are booked on the assets side of the balance sheet at their acquisition price, cost price, or contribution value.

Additional costs

Additional costs linked to investments are included in the original cost of the tangible fixed assets concerned.

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

Depreciation

Tangible fixed assets are depreciated as from the date on which they are brought into service. With regard to furniture and vehicles, this date normally corresponds to the date of purchase.

Provisions for depreciation are calculated using the linear method at the following depreciation percentages :

- Furniture : 10%
- Office equipment : 20%
- Second-hand equipment : 33.33%
- Renovations: over the term of the lease.

Financial fixed assets

Participations, stocks and shares

Participations, stocks and shares of non-consolidated companies are booked on the assets side of the balance sheet at their acquisition value or contribution value, excluding additional costs and reduced by any sums outstanding which may still have to be paid.

At the end of each financial year, each security is valued individually according to the situation, profitability or prospects of the company concerned. The method of valuation is chosen objectively, taking into account the nature and characteristics of the security concerned. In most cases, the net asset value is opted for, or the market value if the latter is lower than the net asset value. The criterion chosen for a security is applied systematically from one financial year to the next, unless a

change in circumstances justifies doing otherwise, in which case this is specifically mentioned in the notes to the accounts.

Where the valuation thus made reveals a permanent loss of value relative to the inventory value, the securities are written down by an amount equal to the permanent part of the loss in value reported.

An exceptional write-back of amounts written down may be made where a permanent increase in value is reported for securities the value of which was previously written down. Except in this situation, the securities are never revalued, even if permanent increases in value come to light during a valuation of the securities.

Amounts receivable recorded as financial fixed assets

Amounts receivable recorded in the accounts as financial fixed assets are recorded at their nominal value. Fixed-income securities are entered in the accounts at their original cost. If the full or partial repayment of these amounts receivable or securities on their due date appears uncertain or is endangered, the value of these amounts receivable and securities are written down by the corresponding amount.

Amounts receivable after more than one year and amounts receivable within one year

Amounts receivable are recorded at their nominal value and are written down if their full or partial repayment on the due date appears uncertain or is endangered. In the event of bankruptcy or an arrangement with creditors, unpaid amounts receivable are automatically deemed to be bad debts and their total net value (excluding VAT) is immediately written down. Other amounts receivable may be written down, depending on each situation.

Stocks

Stocks of fuel

Fuel and other raw materials are booked on the assets side of the balance sheet at their original cost, which includes, in addition to the purchase price, additional 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. Write-downs are recorded in the accounts when the market price proves to be lower than the net book value.

ADDITIONAL NOTES

Short-term investments and term deposits

Stocks and shares

Participations, stocks and shares of non-consolidated companies are booked on the assets side of the balance sheet at their acquisition value or contribution value, excluding additional costs and reduced by any sums outstanding which may still have to be paid.

At the end of each financial year, each security is valued individually according to the situation, profitability or prospects of the company concerned. The method of valuation is chosen objectively, taking into account the nature and characteristics of the security concerned. In most cases, the net asset value is opted for, or the market value if the latter is lower than the net asset value. The criterion chosen for a security is applied systematically from one financial year to the next, unless a change in circumstances justifies doing otherwise, in which case this is specifically mentioned in the notes to the accounts.

Where the valuation thus made reveals a permanent loss of value relative to the inventory value, the securities are written down by an amount equal to the permanent part of the loss in value reported.

An exceptional write-back of amounts written down may be made where a permanent increase in value is reported for securities the value of which was previously written down. Except in this situation, the securities are never revalued, even if permanent increases in value come to light during a valuation of the securities.

Fixed-income securities

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

Provisions for liabilities and charges

At the end of each financial year, the Board of Directors, acting with prudence, sincerity and in good faith, determines the provisions to be made to cover all the forecast risks or any losses which have arisen during the financial year or previous financial years.

Provisions for decommissioning of nuclear power stations

The decommissioning costs coverage is assured, under the supervision of the Nuclear Provisions Commission created by the law of 11 April 2003, by the build-up of provisions on the liabilities side of the balance sheet. These provisions correspond to the discounted value of the best estimate of the future cost of shutdown, decommissioning and decontamination of nuclear power stations.

Provisions for management of irradiated fissile material

Cover for the future costs concerning storage, processing and removal of irradiated fuel in nuclear power stations (back-end of the cycle) is assured, under the supervision of the Nuclear Provisions Commission created by the law of 11 April 2003, by the build-up of provisions on the liabilities side of the balance sheet. These provisions are determined on the basis of an average unit cost established using the discounted value of the best estimate of the costs corresponding to all the quantities used during the period of operation of the nuclear power stations.

Amounts payable

Amounts payable are recorded in the accounts at their nominal value.

Off-balance sheet rights and commitments

Off-balance sheet rights and commitments are mentioned in the notes to the accounts, by category, for the nominal value of the obligation shown in the contract or, failing this, for the estimated value. Rights and commitments which cannot be quantified are mentioned for the record.

Transactions, assets and commitments in foreign currencies

Current operations in foreign currencies are recorded in the accounts at the spot rate of exchange on the date of transaction. In the case of forward foreign exchange contracts, the asset or liability entries concerned are valued at the coverage rate.

Non-monetary assets and liabilities (mainly formation expenses, tangible and intangible fixed assets, financial assets and stocks) continue to be valued at the historic conversion rates ; this value serves as a basis for calculation of depreciation and any amounts written down (see above).

Exchange differences reported on realization of monetary assets and liabilities (amounts receivable, loans and amounts payable) are entered directly in the income statement.

Advance payments are deemed to be monetary or non-monetary assets depending on where they are allocated.

At the end of the financial year, the main monetary items in foreign currencies are revalued on the basis of the valid spot rate of exchange on the date of closure of the accounts, except for items which are the subject of specific hedging and for which the hedging rates are applied. The net conversion differences per foreign currency reported on this occasion are entered in the prepayments and accruals if an unrealized profit is involved, or as a liability in the income statement if an unrealized loss is involved. The currency conversion differences reported on the cash at bank and in hand are included in the income statement, even if a profit is involved.

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 year ended 31 December 2020 - Annual accounts

The original text of this report is in Dutch/French

In the context of the statutory audit of the annual accounts of Société Belge des Combustibles Nucléaires Synatom SA (the «company»), we hereby submit our statutory audit report. This report includes our report on the annual accounts and the other legal and regulatory requirements. These parts should be considered as integral to the report.

We were appointed in our capacity as statutory auditor by the shareholders' meeting of 8 May 2019, in accordance with the proposal of the board of directors. Our mandate will expire on the date of the shareholders' meeting deliberating on the annual accounts for the year ending 31 December 2021. Due to a lack of online archives dating back prior to 1997, we have not been able to determine exactly the first year of our appointment. We have performed the statutory audit of the annual accounts of Société Belge des Combustibles Nucléaires Synatom SA for 23 consecutive periods.

Report on the annual accounts

Unqualified opinion

We have audited the annual accounts of the company, which comprises the balance sheet as at 31 December 2020 and the income statement for the year then ended, as well as the explanatory notes. The annual accounts show total assets of 14,100,297,000 euros and the income statement shows a profit for the year ended of 474,000 euros.

In our opinion, the annual accounts give a true and fair view of the company's net equity and financial position as of 31 December 2020 and of its results for the year then ended, in accordance with the financial reporting framework applicable in Belgium.

Basis for the 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 applicable to the current financial year, but not yet approved at national level. Our responsibilities under those standards are further described in the "Responsibilities of the statutory auditor for the audit of the annual accounts"

section of our report. We have complied with all ethical requirements relevant to the statutory audit of the annual accounts in Belgium, including those regarding independence.

We have obtained from the board of directors and the company's officials the explanations and information necessary for performing our audit.

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

Emphasis of matter

Without questioning the unqualified opinion expressed above, we draw attention to appendix C6.20 Point 2 of the annual accounts which describes the process of evaluation of the provisions put in place for decommissioning nuclear plants and for the management of irradiated fissile materials in these plants (collectively « the nuclear provisions ») in compliance with the law of 11 April 2003 regarding nuclear provisions.

As indicated in this appendix, the evaluation of nuclear provisions results from the best estimates of the board of directors and the company's officials. This evaluation is also sensitive to the industrial scenarios retained, the associate cost estimates and the macro-economic scenarios (rate of inflation and discount rate) to apply.

Responsibilities of the board of directors for the preparation of the annual accounts

The board of directors is responsible for the preparation and fair presentation of the annual accounts in accordance with the financial reporting framework applicable in Belgium and for such internal control as the board of directors determines is necessary to enable the preparation of the annual accounts that are free from material misstatement, whether due to fraud or error.

In preparing the annual accounts, the board of directors is responsible for assessing the company's ability to continue as a going concern, disclosing, as applicable, matters to be considered for going concern and using the going concern basis of accounting unless the board of directors either intends to liquidate the company or to cease operations, or has no realistic alternative but to do so.

Responsibilities of the statutory auditor for the audit of the annual accounts

Our objectives are to obtain reasonable assurance about whether the annual accounts as a whole are free from material misstatement, whether due to fraud or error, and to issue a statutory auditor's report that includes our opinion. Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with ISA will always detect a material misstatement when it exists. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of these annual accounts.

During the performance of our audit, we comply with the legal, regulatory and normative framework as applicable to the audit of annual accounts in Belgium. The scope of the audit does not comprise any assurance regarding the future viability of the company nor regarding the efficiency or effectiveness demonstrated by the board of directors in the way that the company's business has been conducted or will be conducted.

As part of an audit in accordance with ISA, we exercise professional judgment and maintain professional skepticism throughout the audit. We also :

- identify and assess the risks of material misstatement of the annual accounts, whether due to fraud or error, design and perform audit procedures responsive to those risks, and obtain audit evidence that is sufficient and appropriate to provide a basis for our opinion. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from an error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control ;
- obtain an understanding of internal control relevant to the audit in order 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 ;
- evaluate the appropriateness of accounting policies used and the reasonableness of accounting estimates and related disclosures made by the board of directors ;
- conclude on the appropriateness of the use of the going concern basis of accounting by the board of directors and, based on the audit evidence obtained, whether a material uncertainty exists related to events or conditions 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 attention in our statutory auditor's report to the related disclosures in the annual accounts or, if such disclosures are inadequate, to modify our opinion. Our conclusions are based on the audit evidence obtained up to the date of our statutory auditor's report. However, future events or conditions may cause the company to cease to continue as a going concern ;
- evaluate the overall presentation, structure and content of the annual accounts, and whether the annual accounts represent the underlying transactions and events in a manner that achieves fair presentation.

We communicate with those charged with governance regarding, amongst other matters, the planned scope and timing of the audit and significant audit findings, including any significant deficiencies in internal control that we identify during our audit.

Other legal and regulatory requirements

Responsibilities of the board of directors

The board of directors is responsible for the preparation and the content of the directors' report on the annual accounts for the documents to be filed according to the legal and regulatory requirements, for maintaining the company's accounting records in compliance with the legal and regulatory requirements applicable in Belgium, as well as for the company's compliance with the Companies Code, the Code of companies and associations and the company's articles of association.

Responsibilities of the statutory auditor

As part of our mandate and in accordance with the Belgian standard complementary to the International Standards on Auditing (ISA) as applicable in Belgium, our responsibility is to verify, in all material respects, the director's report on the annual accounts, those documents to be filed according to the legal and regulatory requirements and compliance with certain obligations referred to in the Companies Code, the Code of companies and associations and the articles of association, as well as to report on these matters.

Aspects regarding the directors' report

In our opinion, after performing the specific procedures on the directors' report on the annual accounts, the directors' report on the annual accounts is consistent with the annual accounts for that same year and has been established in accordance with the requirements of articles 3:5 and 3:6 of the Code of companies and associations.

In the context of our statutory audit of the annual accounts we are also responsible to consider, in particular based on information that we became aware of during the audit, if the directors' report on the annual accounts is free of material misstatement, either by information that is incorrectly stated or otherwise misleading. In the context of the procedures performed, we are not aware of such material misstatement.

Statement on the social balance sheet

The social balance sheet, to be filed at the National Bank of Belgium in accordance with article 3:12, § 1, 8° of the Code of companies and associations, includes, both in form and in substance, all of the information required by this Code, including those relating to wages and training, and is free from any material inconsistencies with the information available to us in the context of our mission.

Statements regarding independence

- Our audit firm and our network have not performed any prohibited services and our audit firm has remained independent from the company during the performance of our mandate.
- The fees for the additional non-audit services compatible with the statutory audit of the annual accounts, as defined in article 3:65 of the Code of companies and associations, have been properly disclosed and disaggregated in the notes to the annual accounts.

Other statements

- Without prejudice to certain formal aspects of minor importance, the accounting records are maintained in accordance with the legal and regulatory requirements applicable in Belgium.
- The appropriation of results proposed to the general meeting is in accordance with the relevant legal and regulatory requirements.
- We do not have to report any transactions undertaken or decisions taken which may be in violation of the company's articles of association, the Companies Code or, as from 1 January 2021, the Code of companies and associations.

The statutory auditor

**Deloitte Bedrijfsrevisoren/
Réviseurs d'Entreprises CVBA/SCRL**

Represented by Laurent Boxus

Electrabel



Use

Deactivation

Fuel assemblies

Spent fuel assemblies

Manufacturing

Intermediate storage

Reprocessing

Enrichment

Conditioning

Conditioning

Conversion

Storage

Storage

Extraction & concentration

Final disposal

Pu

U

Waste

Non-reprocessing



FRONT-END



FRONT-END



BACK-END



BACK-END



Synatom 

ONDRAF/NIRAS

DETAILS OF THE NUCLEAR FUEL CYCLE



Yellow cake

Front-end

Extraction : Uranium deposits are mined in open pits or underground 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 75% uranium.

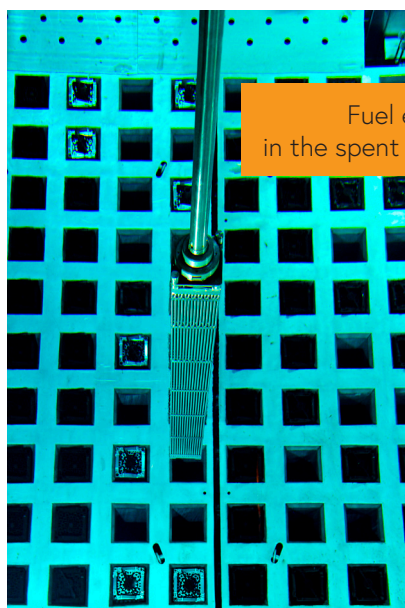
Conversion : The uranium concentrate is then refined and processed into a gaseous chemical compound : uranium hexafluoride.

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.

Use in the reactor

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



Fuel elements in the spent fuel pool



Storage building for reprocessed waste - Site of Belgoprocess in Dessel

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.

OUR MISSION

Synatom's activities have two main focuses.

The nuclear fuel cycle

Synatom is responsible for activities upstream of the nuclear fuel cycle (the front-end) until the enriched uranium is supplied to the assembly fabrication plant.

From this point on, the operator, so in this case Electrabel, manages the fabrication and use of fuel assemblies in the reactor core and their transfer to the spent fuel pool.

Synatom then takes charge of the process downstream of the fuel cycle (the back-end), so the management of the spent fuel up to the time when it is passed on to the Belgian Agency for Radioactive Waste and Enriched Fissile Materials (ONDRAF/NIRAS/NIRAS). These days, this by and large means interim storage on the Doel and Tihange sites.

Nuclear provisions

Synatom establishes nuclear provisions, i.e. sums of money to eventually cover the expenses of nuclear power plant decommissioning and the management of spent fuel.

Synatom also takes care of public service obligations, seeing to the annual collection of the special contribution for nuclear activities, or nuclear tax, on behalf of the Belgian State.

OUR VISION

Synatom takes a long view.

Synatom firmly believes that nuclear energy remains a key part of the energy mix.

Be it in Belgium or elsewhere in Europe or the world, nuclear energy has a role to play in the economic developments of the future, which must seek to make progress towards steadily reducing greenhouse gas emissions.

As such, Synatom is determined to offer the best possible price for the long-term supply of fuel.

In Synatom's view, we can learn a lot from the decommissioning of nuclear facilities around the world, as they facilitate accurate judgements on the financial resources needed to eventually decommission Belgium's nuclear power plants.

Synatom expects the ongoing research on radioactive waste management to lead to significant technological improvement.



OUR VALUES

In carrying out all its activities, Synatom abides by four inextricably linked values :

Exactingness : Synatom adopts the highest possible standards. It applies the best practices and constantly develops pragmatic, cost-justified solutions.

Commitment : Synatom is committed to guaranteeing a safe supply of nuclear fuel as well as an adapted management of spent fuel. Synatom manages financial provisions in a spirit of complete transparency and exercising excellent judgement.

Proactiveness and responsiveness : Synatom foresees developments and responds quickly and judiciously.

Openness : Synatom invests in research and development. It develops trust-based relationships with all of its partners.

In accordance with Belgian law, Synatom publishes its annual report in French and Dutch.

An English version is also available. You can also access and download these three versions at www.synatom.com.

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Synatom

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- Page 6 : The Cigar Lake mine in Canada - photo courtesy of Cameco Corporation.
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- Page 37 - At the centre : Handling of a fuel element in a spent fuel pool - Photo library ENGIE-Electrabel.
- Page 37 - Below right : Storage building for reprocessed waste - Site of Belgoprocess in Dessel - Photo library ONDRAF/NIRAS.

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Concept

ACTE 4 SPRL - Jean-Jacques Pleyers

Design

Snoeck Medias - Céline Snoeck
www.s-medias.be

Printed

J.-F. Smets

May 2021

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Excellence in nuclear fuel cycle management

Annual

2020

report



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