NUCLEARELECTRICA

SUSTAINABILITY REPORT | 2021

NUCLEARELECTRICA

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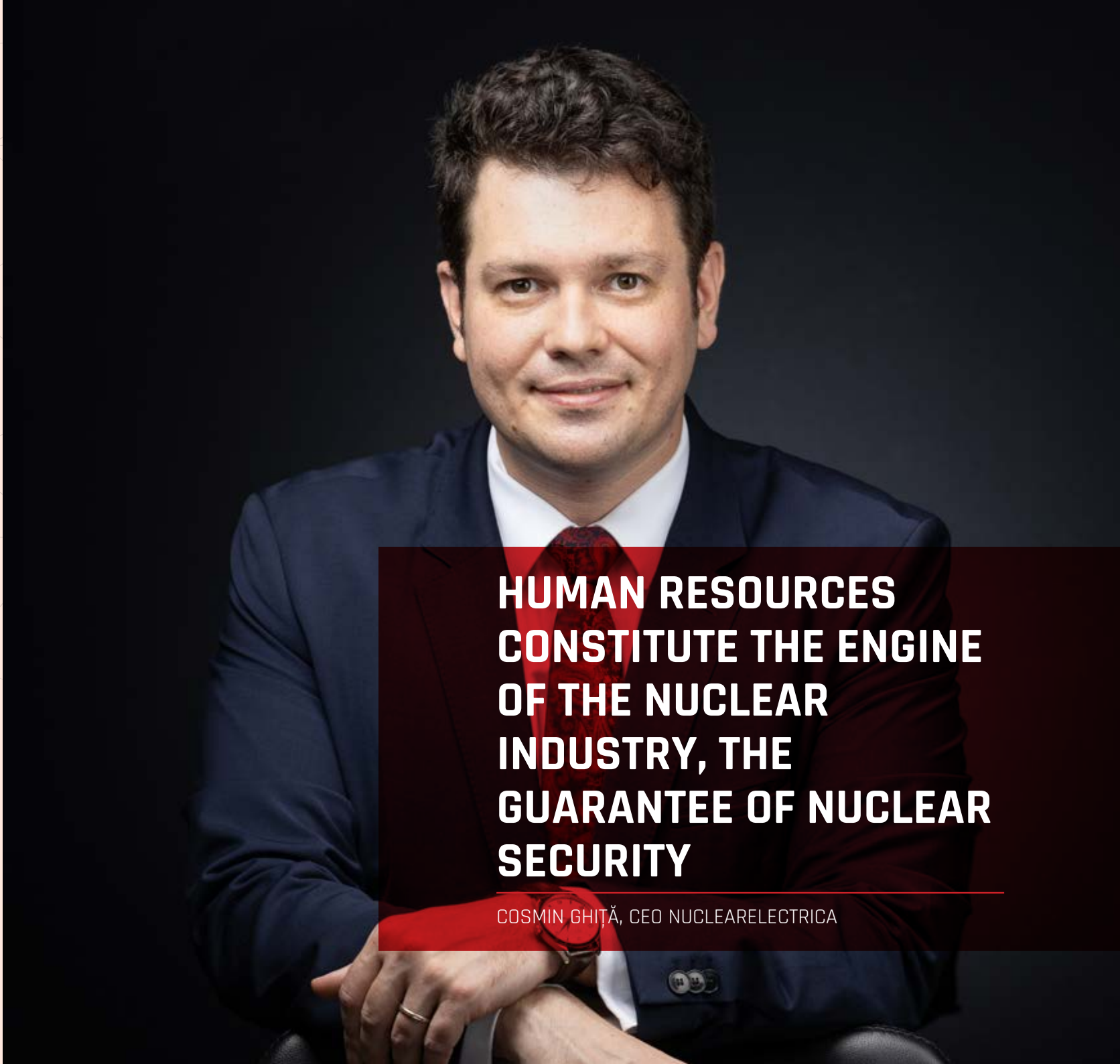

HUMAN RESOURCES CONSTITUTE THE ENGINE OF THE NUCLEAR INDUSTRY, THE GUARANTEE OF NUCLEAR SECURITY

COSMIN GHIȚĂ, CEO NUCLEARELECTRICA

MESSAGE FROM THE CHIEF EXECUTIVE OFFICER

COSMIN GHIȚĂ GRI 102-14

For SNN, 2021 meant 25 years of operation for Unit 1 of Cernavoda NPP. In 25 years, Nuclearelectrica delivered in SEN over 200 million MWh, at a capacity factor of over 90%, avoiding the atmospheric release of 170 million tons of CO2.

Unit 1 of Cernavoda NPP has delivered 127 million MWh since it became operational, namely 9% of the national consumption in 25 years. At the same time, since it became operational, U1 has avoided the atmospheric release of 125 million tons of CO2, the equivalent of the emissions released by all the cars in Romania for over 6 years. Currently, nuclear energy ensures 11,000 jobs in Romania, has a cumulated annual turnover of approximately EUR 600 million and a GDP contribution of EUR 5.7 billion. It is a source of clean, resilient and accessible energy. The future of the nuclear industry is built starting from the expertise accumulated in its 25 years of operation, and that is why SNN will use this expertise acquired from the operation of CANDU reactors for future conventional or state-of-the-art nuclear capabilities. In the context of the measures of decarbonization and energy transition, new nuclear capabilities, both large, CANDU, and small modular reactors, will act as an economic recovery engine, will create jobs and will keep in the country the expertise and the advantageous use of the expertise in its 25 years of operation, and will solidify the regional position of Romania.

2021 was a year of significant achievements of the company; an important moment for SNN was the fact that the Parliament of Romania passed a draft law for ratifying the Agreement between the Government of Romania and the Government of the United States of America regarding the cooperation in relation to the nuclear projects at Cernavoda, the Refurbishment of Unit 1 and the Project of Units 3 and 4. The ratification of the Agreement between the two governments represented the general

framework for continuing and implementing strategic nuclear projects, undertaken by Romania in the energy strategy and in PNIESC, as a pillar of achieving the targets of decarbonization, energy security and efficient transition to clean energy. The goal of SNN is to have Unit 3 connected to the network in 2030, and Unit 4 in 2031. Thus, Romania will be aligned to the states that intensely capitalize internal resources in order to ensure both the transition and the necessary consumption at sustainable prices, considering that, for example, based on international studies, the cost of electricity resulted from the extension of the lifecycle of nuclear units is the lowest out of all the sources, and the cost of implementing new nuclear projects is relatively competitive. Therefore, nuclear projects have two advantages: competitive costs and zero CO2 emissions. The implementation of the Project for the Refurbishment of Unit 1 and Units 3 and 4 of Cernavoda NPP represents a significant contribution to the reduction of CO2 emissions, and will double, after 2031, the quantity of CO2 avoided by operating nuclear units, from the current 10,000,000 tons of CO2/year to 20,000,000 tons of CO2/year.

Also in 2021, SNN advanced the Project of CANDU Units 3 and 4 by Energonuclear S.A., the project company, signing the first contract with Candu Energy, a member of the SNC-Lavalin Group and the Authority for Designing Units 3 and 4 and OEM Candu (the original manufacturer of the Candu technology). Within the contract, CANDU Energy provides engineering services for drafting and updating the necessary documentation for initiating the Project of Units CANDU 3 and 4 (out of which, updating the main licensing documents, updating the nuclear security guides, updating the list of project modifications with nuclear security functions, etc.).

Another important step taken by SNN in 2021 was signing the agreement for advancing the implementation of NuScale's innovating technology, small modular reactors. Following this partnership, Romania has the potential of using small modular reactors for the first time in Europe, and thus of becoming a catalyst for the development of SMR in the region, and also a base for ensuring the operation of this new type of technology in other states.

2021 in numbers - GRI 102-7

Net profit:	1.036.262 thousand RON
Operating revenues:	3.203.880 thousand RON
EBITDA:	1.742.336
EBIT:	1.179.480
Number of employees:	2205
Production:	10 401 162 MWh
Tons of CO2 avoided by operation:	10 million / 2021, 170 million after start-up
Amount invested in CSR:	10 million RON

According to the National Plan in the field of Energy and Climate Change (PNIESC), Romania intends to reduce CO2 emissions by 55% until 2030 and its dependency on imports from 20.8%, in the present, to 17.8% in 2030. Nuclear energy has an essential role in reaching these decarbonization targets and in ensuring the energy transition to an economy without emissions, as it currently contributes with 33% to the total generation of clean energy.

SNN is committed to continuing to generate safe and clean energy for Romania. In 2030, nuclear energy will ensure, for Romania, approximately 35% of the necessary consumption, by operating 4 CANDU nuclear units, will avoid the release of 20,000,000 million tons of CO2 a year, will indirectly create approximately 19,000 jobs in the internal supply chain, will contribute to the development and education and research in the nuclear field and related fields. The investment projects of SNN, the Refurbishment of Unit 1, the Project of Units 3 and 4, the Tritium Removal Facility, the manufacture of Cobalt 60, in value of approximately 9 billion euros, will turn the company into a pillar of decarbonization and, at the same time, will generate multiple effects of micro- and macro-economic development. SNN implements these projects by training a new generation of nuclear specialists, by keeping and training young people in Romania, by capitalizing their potential.

Regarding the impact on the environment, SNN has developed a comprehensive environment management system, as well as related norms, procedures, assessments and reporting methods. The environment management system is, for a nuclear manufacturer, the guarantee of continuing its activities.

From a social point of view, we rely on the value of the company, the care for our employees, which we also extend to other categories of stakeholders, and we continue to constantly improve aspects related to working conditions, operations, occupational health and safety, employees' rights and protection.

Human resources constitute the engine of the nuclear industry, the guarantee of nuclear security.

Corporate governance represents, for SNN, as a priority, the responsibility of its management actions, independent internal structures that would enhance and increase the efficiency of its governance, transparency in everything we do, anti-bribery system and certification, ethics and integrity.

2 REPORT DATA

GRI 102-46, 102-50, 102-51, 102-52, 102-53, 102-55

SN Nuclearelectrica SA publishes its fourth sustainability report for January 1, 2021 - December 31, 2021, a year in which the company continued the development of investment projects, developed its supply chain for raw materials and paid special attention to its environment, social and corporate governance components, and also to their reporting to all the stakeholders in order to facilitate the understanding of the way in which a nuclear power station is operated.

This Sustainability Report was drafted according to Directive 2014/95/EU of the European Parliament and Council, based on the Guidelines on reporting non-financial information (2017/C215/01) and contains non-financial information and information regarding the diversity of the company's activities, which is relevant, useful and applicable to a producer of nuclear energy such as SN Nuclearelectrica SA, exemplified by performance indicators allowing all interested categories of the public to compare the relevant annual results, by reference to the policies, procedures and authorizations that are applicable and used by SNN; with the Global Reporting Initiative (GRI) standard, the Core option, the specific supplement of the energy sector and the sector of production from nuclear sources.

The most recent report was released in April 2021, and the reporting cycle is annual, associated to each financial year.

The results and the indicators presented in the report are consolidated on the level of Nuclearelectrica, and the limit is applied to all the categories of information that is presented.

For several information about the report, comments, suggestions, clarifications, please contact the Investor Relations team at: investor.relations@nuclearelectrica.ro

3 WHO WE ARE

GRI 102-1, 102-2, 102-3, 102-4, 102-5C, 102-8

Societatea Nationala Nuclearelectrica S.A. (“SNN” or the “Company”) is a national joint-stock company, managed in a one-tier management system, having the registered office in Bucharest, 1st District, 65, Polona Street, and two branches without legal status. The main activity of the company is represented by the “Production of electricity” – NACE code 3511, and it is recorded in the Trade Register under no. J40/7403/1998, tax number 10874881, fiscal attribute RO.

At present, SNN is the sole producer of electricity based on nuclear technology in Romania. SNN also produces nuclear fuel bundles, CANDU type, used for the operation of its own nuclear reactors.

CNE branch (Nuclear - Electric Station) Cernavoda, with the registered office in Cernavoda, 2, Medgidiei Street, registered with the Trade Register under no. J13/3442/October 11th, 2007, provides the operation of the two nuclear units, based on CANDU technology type, as well as the management of all SNN assets in Cernavoda (except for Units 1 and 2 in operation, Units 3 and 4 in different construction stages, Unit 5 for which the shareholders of the Company approved the change of destination since March 2014, namely, the use thereof for the performance of the activities related to the operation of Units 1 and 2, and also the central heating system). The two units have a installed capacity around 700 MW each (MWe 706.5 Unit 1 and MWe 704.8 MWe Unit 2).

FCN Branch (Nuclear Fuel Plant) Pitesti, with the head office in Mioveni, 1, Campului Street, registered with the Trade Register under no. J03/457/August 24th, 1998, where CANDU fuel bundles are made for Units 1 and 2 of Cernavoda.

Unit 1 was commissioned in 1996 and Unit 2 in 2007. The two reactors alone provide about 17% - 18% of the internal energy production of Romania. The nuclear reactors from the two units are 6 CANDU type, design developed in Canada, by Atomic Energy of Canada Ltd. This type of reactors are cooled and moderated with heavy water and use natural uranium as fuel. The initial project envisaged the construction of 5 nuclear units CANDU type.

Unit 5 is currently completely depreciated, due to the fact that there is no plan for its construction; in March 2014, the shareholders of the Company approved the use of Unit 5 for operating activities of Units 1 and 2.

SNN fully owns the project company, EnergoNuclear, created for developing the project of Units 3 and 4 of Cernavoda NPP.

Units 1 and 2 use, on an annual basis, approximately 11,000 nuclear fuel bundles, each containing around 19 kg of uranium and produce approximately 10TW of energy.

Resolution no. 5/25.04.2018 of the Ordinary General Assembly of SNN Shareholders approved the strategy for diversifying the supply sources with the raw materials that are necessary for producing nuclear fuel, and in 2021 SNN purchased some of the Feldioara shares and the uranium technical concentrate processing line, in order to ensure the integrated nuclear fuel chain.

In 2021, the company has 2205 employees.

SNN represents a stability factor for the energy market in Romania, both by the continuous delivery of electricity and the competitive production cost.

Shareholding structure as of 31.12.2021

Shareholder type	Number of shares owned	% share capital ownership
Romanian State - Ministry of Economy, Energy and Business Environment	248.850.476	82,4981 %
Other shareholders	52.793.418	17,5019 %
Total	**301.643.894**	**100%**

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MISSION, VISION, VALUES

GRI 102-16

NUCLEARELECTRICA

SNN MISSION

We generate clean energy at standards of excellence

SNN VISION

We build a durable future for tomorrow's generation

SNN VALUES

SAFETY AND SUSTAINABILITY

PROFESSIONAL EXCELLENCE

CONCERN FOR EMPLOYEES

SUSTAINABLE DEVELOPMENT

EMPATHY AND RESPONSIBILITY

5

MARKETS ON WHICH THE COMPANY OPERATES

SNN operates only on the Romanian market, being the only nuclear power producer in the country.

The electricity was sold based on the production license, as follows:

- On the competition market by energy sale-purchase contracts on the markets managed by the market operator OPCOM S.A.: mainly PCCB – LE and PCCB - NC (centralized market for bilateral electricity contracts with the method trading contracts by extended tender procedures and the method of trading contracts according to which contracts are distributed by continuous negotiations), PZU (following-day market) and PCSU (universal service centralized market) and PC-OTC (the centralized market with double negotiation of bilateral electricity contracts).
- On the balancing market managed by Transelectrica S.A., in case of positive unbalance.
- By the energy supply contracts concluded with two consumers supplied directly from the installations of NPP Cernavoda, according to the electricity manufacture license.

The thermal energy produced and sold both in 2019 and 2018, by means of CNE Cernavoda, was exclusively delivered to the local supplier of thermal power. In Cernavoda, SNN is the only manufacturer delivering thermal power in a centralized system. Starting with 2020, small quantities (0.5% of the sold thermal energy) were also sold to end clients/economic agents.

CLIMATE CHANGE ROLE OF SNN ON INDUSTRY LEVEL

GRI 102-16, EU-10

The targets undertaken by Romania are ambitious, to reduce CO2 emissions by 55% until 2030 compared to their level of 2005

Romania also targets the reduction of its dependency on energy imports from 20.8% today to 17.8% in 2030

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CLIMATE CHANGE ROLE OF SNN ON INDUSTRY LEVEL

GRI 102-16, EU-10

The targets undertaken by Romania are ambitious, to reduce CO2 emissions by 55% until 2030 compared to their level of 2005. Romania also targets the reduction of its dependency on energy imports from 20.8% today to 17.8% in 2030, which means significant investments in production capabilities without carbon emissions or transition ones, with base load production, ensuring the stability of the national energy system.

The two nuclear units contribute to the energy security of Romania, and also to reaching the decarbonization targets by the 170 million tons of CO2 avoided since the start-up (10 million tons of CO2 a year avoided by the operation of the two units at Cernavoda) and contributes by 33% to the total clean energy of Romania.

By extending the nuclear capacity with CANDU units in Romania, nuclear energy will reach over 66% contribution of clean energy, 20 million tons of CO2 a year avoided, and over 19,000 jobs. By considering the implementation of SMR, the clean energy percentage significantly increases, we maintain and/or develop the areas in which coal-supplied power stations were located, and we generate thousands of new jobs, directly and indirectly, besides generating clean energy.

Decarbonization is not possible without nuclear energy. First of all, nuclear energy directly contributes to the decrease of emissions in the atmosphere, both by generating clean energy, without CO2, and by gradually replacing energy production based on coal resources. The most recent UNECE report regarding the role of nuclear energy in decarbonization concludes that the nuclear sector has led to the elimination of approximately 74Gt of CO2 emissions in the last 50 years, which amounts almost two years of the total global emissions from energy. In Romania,

both units at Cernavoda NPP have avoided the release into the atmosphere of 170 million tons of CO2 after start-up, which mainly represents 10 million tons of CO2 a year. Building a new additional unit at the Cernavoda location will double this amount, with the nuclear increase of clean energy generation, from the current contribution of 33% to 66% after 2031, when the new units are scheduled to become operational. The refurbishment of Unit 1 also plays an important role in decarbonization. Practically, nuclear lifecycle extension projects have the lower electricity cost out of all energy sources, including renewable sources. For less than half of the cost of a new reactor, Romania will have the same nuclear power for another 30 years, under the same safety conditions.

Also, by SMR development, Romania will use base-load nuclear technology, safe, financially accessible, with zero CO2 emissions, at the locations of former coal-based power stations. Thus, SMR will support the Recovery and Resilience National Plan of the Government of Romania to decommission 4.59 GWe of coal capacity until 2032.

Second of all, feasibility-wise, we must analyze the three pillars established in the EU Taxonomy Regulations: economic, social and environment. The nuclear industry of Romania has an annual contribution of 5.7 billion euros to the national GDP and ensures 12,600 jobs. This number will increase to 19,000 after initiating our new nuclear projects. EUR 5.7 billion is sufficient money to ensure the operation of all the hospitals in Romania for a year.

Third of all, there are non-electric applications of nuclear energy, such as the production of clean hydrogen, in which Nuclearelectrica is interested. EU intends to increase the contribution of clean hydrogen in the industry from 2% today to 13-14% until 2050 and intends to invest half a trillion euros for the production of clean hydrogen. Due to its basic-production capability, nuclear energy is very suitable for the production of clean hydrogen, with low costs.

In order to support for renewable energy sources, as they become cheaper and more available, we must ensure base-load production capabilities with low level of carbon for back-up purposes for renewable sources, and in this regard, nuclear energy is a reliable solution. According to a FORATOM study, if the percentage of renewable energy increases by 190% and the percentage of nuclear energy remains unchanged until 2050, Europe will continue to depend on natural gas up to 26% and on coal up to 12% of the necessary energy, both with high CO2 emissions. In the scenarios developed by the International Energy Agency and IPCC, nuclear energy continues to increase up to an estimated global level of 17%, from the current 10%, with a constant rate in Europe as well.

Looking further into the future, nuclear technology already approaches consumption need changes, and becomes more flexible, less capital-straining in the construction phase. Small modular reactors represent the answer of the nuclear industry to decarbonization requirements, which makes this technology easier to implement and operate in isolated network areas, at industrial locations, etc. Based on advanced technology, SMRs have high passive safety systems, which require fewer resources, such as fuel and cooling water, in order to operate and be safely shut down. For Romania, SMR (small modular reactors) are a feasible solution, and Nuclearelectrica is already involved in layout studies, with the financial support of USTDA USA for potentially building SMR in Romania and in a cooperation agreement with NuScale for the development of this technology in Romania until 2027/2028.

The nuclear projects of SNN amount to investments of up to 8-9 billion euros in the following years. Their impact is quantifiable both regarding the increased security of the supply for Romania and in the region, considering the unified European market, estimated to reach an interconnectivity of 15% until 2030, and regarding the development of related industries, of infrastructure, research and development and education.

SNN SUPPLY CHAIN

Purchasing raw materials
(???? concentrat tehnic de uraniu/pulbere de dioxid de uraniu)

Processing raw materials
(the processing line of the Feldioara branch)

Manufacturing fuel bundles at the FCN Pitesti branch

Using bundles in reactors 1 and 2 of Cernavoda NPP

Delivering the energy produced by nuclear means in SEN

7 SUPPLY CHAIN

GRI 102-9, 102-10

In financial year 2021, Societatea Nationala Nuclearelectrica S.A. (“SNN”) signed with CNU the contract for the sale and purchase of assets within the uranium concentrate processing line at the Feldioara Branch of the CNU on March 18, 2021, following the approval of the transaction and mandating the executive management of SNN to sign this transaction by the Resolutions of the Board of Directors of SNN and the approval in the General Meeting of Shareholders of CNU.

The shareholders of SNN approved by GMS Resolution No. 5/25.04.2018: “Strategy for diversification of the sources of supply of raw material necessary for the production of nuclear fuel”, including the identification of a solution to ensure the processing/refining capacity of the uranium technical concentrate (U3O8), i.e. the raw material from which the uranium octoxide (UO2) required for the manufacture of fuel bundles is obtained. Through specific studies and optimal conditions for the acquisition of uranium octoxide, SNN considered processing it at the Feldioara Factory by taking over the uranium technical concentrate processing line by SNN from the CNU.

By means of corroboration, by GMS Resolution No. 4/30.03.2020, shareholders have approved the start of the procedures for the purchase of assets of the Feldioara Branch, by direct negotiation, in accordance with the provisions of GEO 88/1997 on the privatization of companies and of Law 44/1998, further amended and supplemented.

Following a due diligence analysis, SNN has identified the necessary assets that it will strategically integrate into the structure and thus SNN, by means of this transaction, will integrate the entire cycle of manufacture of CANDU nuclear fuel, except for mining activity.

The scope of the transaction consists only of assets (land, buildings, special constructions, installations, machinery and equipment).

The acquisition of some assets of the Feldioara Branch is structured in two different stages: The contract signing date, the stage that took place on March 18, 2021, and the Completion Date. Between the two stages are provided a number of preconditions that depend to a large extent on the support of the UNC. Thus, at the time of signing the contract, the general terms and conditions of the transaction were agreed upon, and the preconditions were established. On the completion date, the immovable asset sale-purchase contract and the movable asset sale-purchase contract will be signed in authentic form, based on the terms and conditions established on the signing date.

The prior conditions mainly deal with the transmission and issuance by the competent authorities of the necessary transfer authorizations, permits and approvals, as well as clarification by CNU of certain aspects related to the performance of the asset transfer.

The strategic decision to acquire part of Feldioara’s assets necessary for the processing of the raw material was aimed at ensuring integrated production capabilities at the SNN level and, to an equal extent, ensuring the production of fuel beams and the optimal operation of FCN Pitesti and CNE Cernavoda, in the context of expanding the capacity of the nuclear power plant, and maintaining the nuclear fuel cycle at national level at an advantageous transaction cost.

On 24.09.2021, an SNN branch, Fabrica de Prelucrare a Concentratelor de Uraniu-Feldioara SRL, was incorporated, Trade Register registration number J8/2729/2021, sole registration number 44958790.

Also, EGMS Resolution no. 10/11.08.2021 approved the Articles of Incorporation of the SNN Feldioara branch.

8

WHAT IS IMPORTANT FOR US

GRI 102-16

Considering the essential role of nuclear energy both in the transition process and in reaching the decarbonization targets assumed by Romania, for SNN, until 2050, the following aspects are priorities and constitute the basis for the current operation and for the contribution to a clean and sustainable economy:

- Operating Units 1 and 2, the Nuclear Fuel Plant and the Feldioara Branch under nuclear security conditions, by protecting the environment and our employees
- Maintaining and developing the management system, including the environment system, in order to cope with the challenges of the future challenges generated by major investment projects
- Protecting the environment, our personnel and the general population
- Developing the investment projects of SNN within the agreed schedule
- Reducing the environment footprint in Romania by extending nuclear production capabilities that do not generate CO2 emissions
- Developing corporate governance as a coagulation factor and efficiently integrating all processes within SNN
- Protecting our employees, collaborators and the general population, by responsibly managing all the operation and development activities
- Involving SNN stakeholders in the development of the company, and communicating relevant SNN aspects related to governance, ethics and integrity to them
- Developing a new generation of nuclear specialists who will continue to operate and develop nuclear projects and, implicitly, developing several programs for attracting, keeping and training new employees
- Ensuring the supply security for the Romanian energy system, the availability of the source in SEN, and also the backup for renewable sources, until and beyond 2050

STRATEGIC OBJECTIVES

GRI 102-6

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Alongside the other major producers on the Romanian electricity market,

SNN WILL HAVE THE MISSION TO ENSURE THE SATISFACTION OF DOMESTIC ELECTRICITY DEMAND, under specific conditions in terms of the plants' nuclear safety and environment protection, and the safety of the population and of its own staff.

9 STRATEGIC OBJECTIVES

GRI 102-6

The company has its mission, goals and values defined in a coherent way. The general goals represent a comprehensive picture of SNN's annual objectives, which in turn are supported and fulfilled by annual plans and specific programs. Alongside the other major producers on the Romanian electricity market, SNN will have the mission to ensure the satisfaction of domestic electricity demand, under specific conditions in terms of the plants' nuclear safety and environment protection, and the safety of the population and of its own staff.

THE BOARD OF DIRECTORS OF SNN HAS THE FOLLOWING ATTRIBUTIONS:

As regards the operation of nuclear units in conditions of nuclear safety and security for personnel, population, environment and production assets:

- Maintaining a maximum degree of availability of the technological systems and security functions.
- Improving/maintaining the high level of professional training of the personnel operating the two nuclear units.
- Maintaining the volume of radioactivity releases in water and air below the regulated level.
- Maintaining affiliations with the international organizations in the field of nuclear energy, and, if necessary, affiliation with other organizations.
- Providing the oversight function.

In order to maintain the production capacity of electricity above the average level in the industry:

- Carrying out the maintenance and repair plans to increase the reliability of the equipment and systems and the operation of the nuclear units in safe and secure conditions.
- Running the lifetime management programs of Cernavoda NPP components and systems (reactor, steam generator, turbo-generator, etc.).
- Continuation of the replacement programs for the used and discontinued components and equipment.
- Development on time and in conditions of maximum quality the programs of mandatory annual inspections of the vital nuclear components (fuel channels, heat exchangers, etc.)
- Maintaining the above-average installed power utilization coefficient of the nuclear industry.
- Implementation of the strategy on the diversification of the supply sources with the raw material necessary for the production of nuclear fuel.

Menţinerea coeficientul de utilizare a puterii instalate peste medie din industria nucleară.
Implementarea strategiei privind diversificarea surselor de aprovizionare cu materie primă necesară producerii combustibilului nuclear.

Major strategic objectives:
(1) Project for Refurbishing Unit 1;
(2) Project for Units 3 and 4.
(3) Small modular reactors
The development and implementation of these projects depend on the adoption of decisions at the level of the Romanian authorities, including a set of support measures: state guarantees for loans, contracts for the difference, etc., identifying and structuring financing depending on a set of prior decisions of the Romanian authorities.

As regards the electricity trading strategy:

- Long-term contracting in advance, in order to provide the stability of the revenues of the company and decrease the risk of electricity price volatility.

As regards the improvement of the indicators on the financial performances of the Company and the fulfilment of the three financial indicators indicated in the contract with EURATOM, we have in view:

- Maximizing the use of the capabilities of the company with direct effect on obtaining proper cost structures, in compliance with the nuclear safety culture.
- Consolidation of the operational cash flows of the company, in order to provide the necessary liquidity for the current investment projects, as well as for the increase of the bankability of the major investment projects run by SNN.
- Providing the necessary liquidity for the payment of the instalments due on the contracted loans.
- Strengthening the capacity of self-financing of the activity (CAF) in the conditions of the observance of the nuclear safety regulations.

As regards the maintenance of a foreseeable/predictable dividend policy of the company:

- Maintaining a dividend granting rate of at least 50% of the remaining accounting profit after the corporate tax deduction.

As regards the optimization and streamlining of the organizational structure of the Company:

- The optimization considers the implementation of an organizational structure allowing the maximization of the capabilities of the company as a fundamental element of the sustainability of the competitive advantages.
- Creating a system for the allocation of the internal resources allowing the maximization, efficiency and adequacy of uses, with direct effect of obtaining cost-effective structures.
- In the context of the consolidation of the Nuclear Safety culture, we aim at implementing an organizational structure based on clearly defined roles, removal of the inadequate role redundancy, goal cascading, alignment of the skills with the current changing requirements, based on the good corporate governance rules, with a fluent vertical and horizontal communication system.
- Alignment of the organizational structure with the other 3 dimensions of the organization: human resources, process system and technology.

As regards maintaining/attracting highly qualified personnel, in the conditions of a specialized labour market:

- Adopting a human resources strategy for attraction, training and retention.
- Implementation of cooperation programs with the Polytechnic University of Bucharest and Faculties with technical profile at national level, especially in the operating areas of SNN, adjusted to the personnel needs of SNN on medium and long term, for granting scholarships.
- Implementation of informative campaigns at national and local level in high-schools, in order to attract young people both for enrolment in specialized faculties (energy specialization) and to attract graduates of vocational schools.
- Development of internship programs for students and individual mentoring programs for young employees.
- Adoption of measures specific to the field of human resources on the increase of the satisfaction level of the highly qualified personnel and the retention thereof, correlated with the current and long-term needs of SNN.
- Implementing a remuneration system based on individual performance, by the analysis of the individual performance indicators.

As regards the observance of the principles of corporate governance and the code of ethics and integrity:

- Compliance with all the legal provisions and recommendations of the Romanian capital market institutions on the corporate governance principles.
- Carrying out a regular benchmarking with entities at international level and adopting the best international practices.
- Zero tolerance to deviations from the SNN Code of Ethics.

As regards the responsible and active involvement in corporate social responsibility actions:

- Involvement in social responsibility actions at local and national level in the following fields: educational and research, humanitarian, cultural and environment.

For the development/improvement of the reporting, control and risk management capabilities, paying more attention to the investor relationship, SNN aims at:

- Integration/correlation of the corporate risk management processes and mechanisms (other than the operating ones addressed by regulations, standards and practices of the nuclear industry) with the risk management processes and mechanisms related to the operating activities of the nuclear power plant, in order to provide a proper addressing of the risks that the organization is exposed to, in the sense of the completeness of addressing them.
- Reviewing, improving and/or developing (as appropriate) the corporate risk management processes and tools, as well as periodically reviewing and/or recalibrating/adjusting risk management tools (e.g. internal procedures, algorithms and models, assessment, risk profile, risk tolerance limit, operational and information flows).
- Increasing the level of knowledge of the personnel of the Company on risk management, especially by conducting training sessions for the staff of SNN Centrala, Cernavoda NPP and FCN Pitesti.
- Improvement of the information flows of information circulation on the risks within the organization, both in order to better manage them at the locations where there is exposure, and to better apply the principle of informed decision-making from a risk perspective (RIDM - Risk -Informed Decision Making).
- Development of an internal framework to provide business continuity (BCM - Business Continuity Management)

DEVELOPMENT AND INVESTMENTS

GRI 102-2, EU-10

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The medium and long term investment projects of SNN have an approximate value of

9 billion euro

10 DEVELOPMENT AND INVESTMENTS

GRI 102-2, EU-10

The medium and long term investment projects of SNN have an approximate value of EUR 9 billion euro.

Their impact is quantifiable both regarding the increased security of the supply for Romania and in the region, considering the unified European market, estimated to reach an interconnectivity of 15% until 2030, and regarding the development of related industries, of infrastructure, research and development, education and reaching the decarbonization targets undertaken by Romania.

The three major investment projects of SNN are complementary, the Refurbishment of Unit 1 is in progress, it is fully managed by SNN, and the project of the CANDU and SMR units is developed with USA. The first two provide clean, base-load energy, and implicitly security in the provision and availability of the energy system, and SMRs provide flexibility, the possibility of economically and socially protecting the areas with decommissioned coal-based power stations, local development, jobs. Between high-power reactors and SMR there will be essential balance in production and decarbonization response, and energy system or regional necessities.

A. REFURBISHMENT OF UNIT 1 OF THE CERNAVODA NPP.
Another 30 years of operation after 2029, 5 million tons of CO2 avoided every year.

CANDU reactors have an initial lifecycle of 30 years.

Following a refurbishment process, this lifecycle can be extended by another 30 years, which SNN is currently doing with Unit 1, which was commercially started up in 1996. Unit 2 was started up in 2007, so Unit 2 would need to be refurbished in 2037.

Phase 1 for the Refurbishment of Unit 1 started in 2017 and was dedicated to identifying and defining the necessary activities for the refurbishment of Unit 1, so that it would operate for another lifecycle of 30 years. The final product of this phase was drafting the Feasibility Study, approved in GMS on 23.02.2022, at an estimated cost of the investment of EUR 1.85 million.

Phase 2 of the project starts after the approval of the feasibility study and involves ensuring the financial resources for the implementation of the Project for the Refurbishment of U1, preparing the performance of the activities that have

been identified and defined for the refurbishment of U1 in Phase 1 and obtaining all the necessary approvals and authorizations for the implementation of this project.

Phase 3 of the project starts with the shutdown of Unit 1 and consists of the actual performance of the works in the Project for the Refurbishment of U1, in the installations of the unit, and its restart, in order to be commercially operated for a new lifecycle of 30 years, after 2029.

In order to ensure the necessary human resources, SNN concluded a contract with a personnel recruitment company in order to employ 100 specialists, who will be part of the organizational structure of the project in Phase II. The employed specialists will go through a general and specific training process, until the start of Phase II of the project, so that Phase II would start with trained personnel. According to the high standards of SNN, some of the new employees will undergo on-the-job training at power stations in Canada, which have already had the experience of refurbishing nuclear units.

The refurbishment of Unit 1 means another 30 years of operation after 2029, at less than half the costs of a new nuclear reactor. Concretely, it means another 30 years without CO2 emissions. Regarding the costs, and implicitly the subsequent impact on the market, a NEA-OECD study confirms that extending the lifecycle of nuclear units incurs the lowest cost out of all the sources, including renewable sources, of CO2 (USD 35), compared with wind energy (USD 50) and solar energy (USD 94).

B. PROJECT OF UNITS 3 AND 4.

According to the strategy approved by the shareholders in 2021, it is estimated that Unit 3 will be connected to the network in 2030, and Unit 4 in 2031. The project will be implemented by a consortium of international companies, with expertise, in virtue of the Romania-USA IGA.
- 66% contribution of clean energy in the mix with 4 operational units
- 20 million tons of CO2 avoided every year
- clear social and economic advantages on local and national level and in the entire supply chain.

Stage 1, the current one, represents the preparatory stage, which started by capitalizing and operationalizing the project company, Energonuclear SA. This stage will last for 24 months, during which services of technical, legal and financial support will be contracted, engineering services for updating the technical procurement specification, launching and assigning the EPB contract (engineering, procurement and building), and conducting the necessary studies and assessments. EnergoNuclear S.A. (EN) started, in the beginning of September, purchasing engineering services for drafting and updating the necessary documentation for starting the Project of CANDU Units. On November 25, 2021, Energonuclear S.A., the project company, signed the first contract with Candu Energy, a member of the SNC-Lavalin Group and the Authority for Designing Units 3 and 4 and OEM Candu (the original manufacturer of the Candu technology). Within the contract, CANDU Energy will provide engineering services for drafting and updating the necessary documentation for initiating the Project of Units CANDU 3 and 4 (out of which, updating the main licensing documents, updating the nuclear security guides, updating the list of project modifications with nuclear security functions, etc.).

Stage 2 of the project (Preliminary Works) consists of performing preliminary works from Phase 1 of the EPB (engineering, procurement and building)

contract, and will last for 18-24 months. This stage will involve the performance of engineering works and analyses of the markets regarding the suppliers of equipment and the providers of services that are necessary for implementing the project, so that the total fixed price would result at the end of this stage. Also in this stage, the documentations for obtaining permits and approvals will be submitted, including from the European Commission, in virtue of article 41 of the Euroatom Treaty. At the end of this stage, the feasibility of the Project will be re-analyzed based on the new technical-economic indicators and the Final Investment Decision will be taken, which will allow the Project to move to Stage 3.

Stage 3 of the project actually consists of performing the building, assembly and start-up works at the site, which is estimated to last 69-78 months. It is estimated that Unit 3 will become operational after 2030.

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The project of CANDU units is included in the Energy Strategy of Romania 2019-2030 for 2050, and in the Integrated National Plan for Energy and Climate Change, as a pillar of the energy independence of Romania and of fulfilling all the decarbonization targets undertaken by Romania as a EU Member State.

The intention of the Romanian State and of SNN, according to the new strategy, is to implement this project in a European-Atlantic consortium, in virtue of the Agreement between the Government of Romania and the Government of the United States of America on the cooperation in relation to the nuclear-energy projects at Cernavoda and in the civil nuclear energy sector of Romania, signed in October 2020 in Washington DC by the governments of USA and Romania, subsequently approved by EC and ratified

by the Parliament of Romania in July 2021. Also, there is interest from USA, by US Exim, to finance Romanian nuclear projects with 7 billion dollars.

Romania needs new capabilities as a solution to decarbonization and transition, at the same time providing SEN: stability, safety, availability, and also social and economic effects: up to 19,000 indirectly generated jobs, 20 million tons of CO2 avoided every year with 4 operational units, the contribution of nuclear energy to the total energy production, on

national level: 36%, contribution of nuclear power to the total energy production without CO2 emissions, at national level: 66%, development of the internal supply chain, other collateral industries. Also, Romanian nuclear industry has the experience and capability to participate with important works and services in the new Cernavoda project, which it acquired by the operation and maintenance of its first two nuclear power stations.

C. SMALL MODULAR REACTORS (SMR).

In virtue of the Agreement between SNN and NuScale, NuScale will support Nuclearelectrica in assessing this technology and, together, the two companies will take measures for developing a NuScale power station with 6 modules, 462 Mwe, starting with 2027/2028. A NuScale power station with 6 modules will generate 193 permanent jobs, 1500 jobs during the construction period, 2300 jobs in manufacturing, and will avoid the release into the atmosphere of 4 million tons of CO2 a year.

The base-load nuclear technology of NuScale, safe, financially accessible, with zero CO2 emissions, will be mainly developed at the locations of the former coal-based power stations. Thus, it will support the Recovery and Resilience National Plan of the Government of Romania to decommission 4.59 GWe of coal capacity until 2032. By changing the goal of coal-based power stations, Nuclearelectrica and NuScale will help the communities and the work force participate in the transition to clean energy sources and, at the same time, it will continue providing local economic benefits.

Following this partnership, Romania has the potential of using small modular reactors for the first time in Europe, and thus of becoming a catalyst for the development of SMR in the region, and also a base for ensuring the operation of this new type of technology in other states. For this purpose, we will develop the first simulator for the control room of a modular reactor, which we will use for training the new generation of engineers.

Decommissioning old coal-based power stations in the entire EU, together with the improbability of building new coal-based power stations, is already leading to changes in the production of base-load energy and in the transportation infrastructure. Regarding the produced energy, a NuScale power station is similar to an existing coal-based power station and can be built at the same location, and can reuse the existing transportation infrastructure, which makes it an ideal solution for replacing a coal-based power station.

This agreement follows an MoU concluded in 2019 with NuScale and a grant of 1.2 million dollars granted by USTDA to SNN for assessing potential sites.

Romania has over 25 years of experience in safely operating one of the highest-performing power stations in the world, and a team of professional engineers, a globally-renowned local school of engineers, and a vast supply chain.

Approximately 70 concepts of SMR reactors are in progress, in various stages, with technological differences, a different implementation level, and various licensing levels, which proves the interest and innovation in this field and the efforts of regulatory agencies to license the SMR reactor. Countries such as France, UK, Poland, Bulgaria, USA and Canada are making intense efforts to implement SMRs. However, NuScale is the first SMR reactor which has received the design approval from the Nuclear Regulatory Commission of USA (NRC) and will follow all the necessary steps for obtaining the license in EU and in the countries that are interested in implementing it.

Social and economic effects and the environment footprint

Targets undertaken by Romania:

- **o reducing CO2 emissions by 55% until 2030,** compared to their level of 2005.
- reducing its dependency on energy imports from 20.8% today to 17.8% in 2030, **which means significant investments in production capabilities without carbon emissions or transition ones, with base load production, ensuring the stability of the national energy system**
- **reducing up to 4.59 GWe of generated coal-based energy until 2032,** which means the necessity of replacing these sources with other clean energy sources

The two nuclear units we operate contribute to the energy security of Romania, and also to reaching the decarbonization targets by

- **1400 MW of installed capacity**
- **18-20% of the necessary consumption**
- **33% of the total clean energy** in Romania.
- **170 million tons of CO2 avoided** since the start-up (**10 million tons of CO2 avoided every year** by operating the two units at Cernavoda)
- **11,000 jobs in the industry**

By extending the nuclear capacity with 2 new CANDU units in Romania

- **66% contribution of clean energy,**
- **20 million tons of CO2 avoided every year,**
- **over 19,000 jobs.**

By also considering the implementation of SMR:

- **462 MW installed**
- **4 million of CO2 avoided each year**
- **replacing coal-based power stations**

The refurbishment of Unit 1 also plays an important role in decarbonization.

- Nuclear lifecycle extension projects have the lower electricity cost out of all energy sources, including renewable sources. // 32 USD/MW
- For less than half of the cost of a new reactor, Romania will have the same nuclear power for another 30 years, under the same safety conditions
- Refurbishing cost - 32 USD/MWh, vs. 50 USD/MWh for wind energy and 56 USD/MWh for solar panels; **91 USD/MWh** for coal-based power stations.

Decarbonization is not possible without nuclear energy. Nuclear Energy is:

- A clean source of energy (lack of CO2 emissions), accessible and safe
- Availability 24/7, non-dependency on weather conditions
- Ensuring the stability and availability of the energy systems
- Providing backup for renewable sources, which are intermittent / SMR

CORPORATE GOVERNANCE

GRI 102-18, 102-22, 102-23, 102-24

1. GENERAL MEETING OF SHAREHOLDERS

2. THE BOARD OF DIRECTORS

3. EXECUTIVE MANAGEMENT

4. ADVISORY COMMITTEES

11 CORPORATE GOVERNANCE

GRI 102-18, 102-22, 102-23, 102-24

1. GENERAL MEETING OF SHAREHOLDERS

The corporate bodies of SNN, a company managed in a one-tier management system, are structured as follows: General Meeting of the Shareholders, the ultimate decision-making forum of the Company and the Board of Directors.

The updated form of the Regulation regarding the Organization and Performance of the GMS of SNN reflects all changes and additions of the legal provisions, set out in ASF Regulation No. 5/20218, Law No. 24/2017 on the issuers of financial instruments and market operations, as further amended and supplemented, the BSE governance code, Companies Law No. 31/1990, GEO No. 109/2011 on corporate governance of state-owned enterprises.

The General Meeting of Shareholders is the main corporate governance body of the Company, deciding on the activity, the economic and business policy of the company. SNN has established and implemented solid internal procedures governing the organization and development of GMS, as well as rules governing the legal and statutory activity thereof, in compliance with the Articles of Incorporation and the applicable law.

2. THE BOARD OF DIRECTORS

of the company is the Board of Directors and consists of 5 members, one executive member and 4 non-executive members. Directors may be dismissed anytime by the Ordinary General Meeting of Shareholders.

The members of the Board of Directors are obliged to exercise their mandate with prudence and diligence of a good administrator, with loyalty, on behalf of, and to the benefit of the company, and are not allowed to disclose confidential information and business secrets of the company.

Also, the BoD members undertake to provide the avoidance of a direct or indirect conflict of interests with the Company, and in case such conflict occurs, to refrain from discussion and vote on the respective matters, according to the current legal provisions.

The Board of Directors is composed of:

First name and surname	Age (years)	Qualification	Professional experience (years)	Position	Date of appointment	Date of mandate expiration
Elena Popescu	62 years old	Nuclear station engineer	36 years old	Non-executive member of the Board of Directors	28.09.2018 (final mandate for 4 years according to OGMS resolution 12/28.09.2018)	28.09.2022
Mihai Daniel Anitei	52 years old	Mechanical engineer	23 years old	Non-executive independent member of the Board of Directors	28.09.2018 (final mandate for 4 years according to OGMS resolution 12/28.09.2018)	28.09.2022
Cosmin Ghiță	32 years old	Economist	11 years old	Executive member of the Board of Directors	28.09.2018 (final mandate for 4 years according to OGMS resolution 12/28.09.2018)	28.09.2022
Remus Vulpescu	50 years	Legal Adviser	26 years	Non-executive independent member of the Board of Directors	28.09.2018 (final mandate for 4 years according to OGMS resolution 12/28.09.2018)	28.09.2022
					28.12.2017 (temporary mandate according to OGSM Resolution 10/20.12.2017)	28.04.2018
Teodor Minodor Chirică	76 years old	Engineer	52 years old	Non-executive member of the Board of Directors	19.12.2019	30.01.2020
					January 30th,2020 (mandate for 4 months, according to OGMS Resolution 1/January 30th,2020)	30.05.2020
					31.05.2020 (mandate extension for 2 months, according to OGMS resolution 6/28.05.2020))	31.07.2020
					July 27th, 2020 (permanent mandate according to OGMS Resolution no. 9/July 27th, 2020) following the completion of the selection procedure according to GEO 109/2011	28.09.2022

Information on other professional commitments and obligations relatively permanent of the BoD members

In compliance with the criteria stipulated in Section A4 of the Corporate Governance Code of BSE, the members of the Board of Directors having contractual relations with a shareholder holding over 10% of the voting rights, starting with January 1, 2016, are: Elena Popescu (General Manager of the General Division of Energy Policies within the Ministry of Energy).

First name and surname	Company	Occupied position	Period	Current position (Yes/No)
Elena Popescu	Ministry of Energy	Chief Executive Officer - General Division of Energy Policies	September 2013 – Present date	Yes
	Ministry of Energy	Adviser in the field of nuclear energy and European affairs	February 2013 – September 2013	No
	Energonuclear S.A.	Chairperson of the Board of Directors	2013 – Present date	Yes
	Permanent Representative Office of Romania to the European Union	Adviser for the nuclear field and international relations in energy	August 2007 - February 2012	No
	OPCOM	Chairperson of the Board of Directors	2015 – Present date	Yes
	CEO	Member of the Supervisory Board	2016 - 2017	No
	CEH	Member of the Board of Directors	2015 - 2016	No
	CNU	Member of the Board of Directors	2015 - 2016	No
Remus Vulpescu	Romaero S.A.	Chief Executive Officer and member of the Board of Directors	2016 – 2020	No
	International Association for Energy Economics	Member of the Board of Directors	2017 – Present date	Yes
	Cupru Min S.A. Abrud	Member of the Board of Directors	2016 – present date	Yes
	Fortus S.A. Iasi	Special Trustee	2015 – Present date	Yes
	Turnaround Management Association (SUA)	Member	2015 – Present date	Yes
	INSOL Europe	Member	2015 – Present date	
Mihai Daniel Aniței	Azomures	Chief Executive Officer	June 2012 – Present date	Yes
	Agriculture Committee of Fertilizers Europe	Chairperson	Septembrie 2012 – Prezent date	Yes
	Ameropa Grains	BoD Member	2016 – present date	Yes
	Chimpex	BoD Member	2016 – present date	Yes
	Oil Terminal	BoD Member	2016 – present date	Yes
Teodor Minodor Chirică	S.N. Nuclearelectrica S.A.	Expert	October 2017 - December 2019	No
	S.C. EnergoNuclear S.A.	Chief Executive Officer	November 2013 - October 2017	No

3. EXECUTIVE MANAGEMENT

Chief Executive Officer

The Board of Directors delegates the management of the company to one or several Directors, designating one of them Chief Executive Officer. The Chief Executive Officer represents the company in relation with third parties and in the court of law. The Chief Executive Officer is responsible for taking all the necessary measures related to the governing of the company, within the limits of the scope of business of the company and in compliance with the exclusive competences established by law or by the Articles of Incorporation for the Board of Directors and the General Meeting of the Shareholders. The Board of Directors can delegate one or several responsibilities indicated in the previous section (and which can be delegated) to the Chief Executive Officer.

The position of Chief Executive Officer of S.N. Nuclearelectrica S.A. was filled under a mandate contract following the resolution of the Board of Directors no. 2 of 04.02.2019. Mr. Cosmin Ghita was appointed in this position under a 4-year mandate, as of 11.01.2019. This decision was adopted following the Recommendation of the Nomination and Remuneration Committee dated January 22nd, 2019.

Branch Managers

Following the completion of the internal selection procedure, the position of Manager of Cernavoda NPP Branch is taken over by Mr. Valentin Nae, starting with October 19th, 2020.

The position of Manager of FCN Pitesti Branch: Starting with October 17th, 2019 and up to the present date, the position of Manager of FCN Pitesti Branch has been occupied by Mr. Sorin Popescu, following the decision of the Chief Executive Officer no. 345 of October 17th, 2019.

Chief Financial Officer

Mr. Paul Ichim occupied the position of Chief Financial Officer, on a temporary basis, since March 31st, 2020. Mr. Paul Ichim was appointed Chief Financial Officer with a 4-year term of office, starting with August 1st,2020, as a result of the completion of the selection procedure, organized in compliance with the provisions of GEO no. 109/2011. On 03.10.2021, the Board of Directors of SNN took note, by Resolution no. 171/06.10.2021, of Mr. Paul Ichim's resignation of his mandate of Chief Financial Officer of SNN. According to the concluded mandate contract, the mandate of Mr. Paul Ichim is to end following his resignation within 90 days of the resignation, namely as of 11.02.2022. Mr. Paul Ichim's mandate granted in virtue of the provisions of GEO 109/2011 started on 01.08.2020 and was supposed to cease on 01.08.2024.

As of 10.02.2022, based on the recommendation of the Nomination and Remuneration Committee, the Board of Directors of SNN appointed Mr. Dan Niculaie-Faranga as interim Chief Financial Officer, with a term of office of 4 months, from 11.02.2022 to 10.06.2022, inclusively, with the possibility of its extension, for justified reasons, up to maximum 6 months, in virtue of art. 64^2 of GEO 109/2011 as further amended and supplemented.

Cosmin Ghiță | Chief Executive Officer

Laura Constantin | Deputy Chief Executive Officer - Corporate Services

Melania Amuza | Deputy Chief Executive Officer - Commercial and Development

Deputy Chief Executive Officers

By the Decision of the Board of Directors no. 3 of February 4th, 2019, as a result of the Recommendation of the Nomination and Remuneration Committee of January 22nd, 2019, Mr. Dan Laurentiu Tudor was appointed Deputy Chief Executive Officer of S.N. Nuclearelectrica S.A. with a 4-year term of office, starting with February 11th, 2019.

Also, as of 01.02.2022, based on the organizational structure of SNN, approved by a Resolution of the Board of Directors, the position of Deputy Chief Executive Officer with a Mandate Contract shall be reorganized in the position of Corporate Service Deputy Chief Executive Officer, with an individual employment contract, and shall be transferred from the direct coordination of the Board of Directors to the direct coordination of the Chief Executive Officer of SNN. The position of Commercial and Development Deputy Chief Executive Officer and the position of Operations Deputy Chief Executive Officer were also created, both with individual employment contract, in the direct coordination of the Chief Executive Officer of SNN.

The three positions of Deputy Chief Executive Officer are designed to increase the efficiency of the activities and processes of SNN in relation to the complexity and duration of investment projects, the diversification of the human resources strategy, the procurement processes and the actual implementation of the stages related to the investment projects. As of 01.02.2022, the three positions are occupied according to the legal provisions and the provisions of the Collective Employment Contract within the Company, by SNN personnel. The position of Corporate Service Deputy Chief Executive Officer shall be occupied by Mrs. Laura Constantin, previously the Manager of the SNN Legal Division, and involves the coordination of the procurement, legal, human resources, communication and compliance processes. The position of Commercial and Development Deputy Chief Executive Officer shall be occupied by Mrs. Melania Amuza, previously the Manager of the SNN Investment Division, and shall involve the coordination of the investment processes, electricity transactions and mining licenses, and the position of Operations Deputy Chief Executive Officer shall be occupied by Mr. Romeo Urjan, previously the manager of the Operations Division, and shall involve the coordination of the activities of operation, production, nuclear safety independent evaluation, fuel, security, management systems and process analysis.

Romeo Urjan | Deputy Chief Executive Officer - Operations

Dan Niculaie Faranga | Chief Financial Officer

Valentin Ovidiu Nae | Manager of the Cernavoda NPP Branch

Sorin Popescu | Manager of the Pitesti FCN Branch

Executive managers in 2021

First name and Surname	Position	Starting date (since 2020)	Ending date(since 2020)
Cosmin Ghiță	Chief Executive Officer 4-year mandate.	Appointment for a 4-year mandate as of February 11th, 2019.	February 11th, 2023
Dan Laurențiu Tudor	Deputy Chief Executive Officer 4-year mandate.	Appointment for a 4-year mandate as of February 11th, 2019.	February 11th, 2023
Paul Ichim	Chief Financial Officer	Appointment for an interim mandate starting with March 31st, 2020	August 1st, 2020
		Appointment for a 4-year mandate starting with August 1st, 2020	August 1st, 2024
		Resignation from the mandate contract	February 11th, 2022
Valentin Nae	Branch Manager Cernavoda NPP	October 19th, 2020 (appointed Branch Manager at Cernavoda NPP following the contest organization)	N/A
Sorin Popescu	Branch Manager FCN Pitesti (employment contract)	October 17th, 2019 (appointed with delegation for a 6-month period)	April 17th, 2020
		April 17th, 2020 (extension of the delegation by 3 months)	July 17th, 2020
		July 18th, 2020 (appointed Branch Manager at FCN Pitesti following the contest organization)	N/A

4.ADVISORY COMMITTEES

According to the Articles of Incorporation of the Company and in compliance with G.E.O. no. 109/2011, the Board of Directors of SNN set up 4 advisory committees, made up of at least 2 members of the Board of Directors.

The Advisory Committee for Nomination and Remuneration
This committee was established according to art. 34 in GEO no. 109/2011, by Resolution no. 7 of the Board of Directors of April 26th, 2013.

The Advisory Audit Committee This committee was established according to art. 34 in GEO no. 109/2011, by Resolution no. 8 of the Board of Directors of April 30th, 2013.

The Advisory Committee for Nuclear Safety
This committee was established according to art. 34 in GEO no. 109/2011, by Resolution no. 27 of the Board of Directors of August 26th, 2013.

The Advisory Committee for Strategy, Development and Large Investment Projects This committee was established according to art. 34 in GEO no. 109/2011, by Resolution no. 27 of the Board of Directors of August 26th, 2013.

The Advisory Committees are in charge of performing analyses and elaborating recommendations for the Board of Directors, in the specific fields, being bound to periodically submit activity reports to the members of the Board of Directors.

The main responsibilities of the Advisory Committees are stipulated in the Internal Regulations approved by the Board of Directors, and available on the SNN website.

Each Advisory Committee has appointed a secretary and a chairperson.

By Resolutions of the Board of Directors no. 210/ 06.12.2019 and 75/17.04.2021, the chairpersons of the Advisory Committees are the following directors:

The Advisory Committee for Nomination and Remuneration	Remus Vulpescu
The Advisory Audit Committee	Remus Vulpescu
The Advisory Committee for Nuclear Safety	Teodor Chirică
The Advisory Committee for Strategy, Development and Large Investment Projects	Elena Popescu

THE ADVISORY AUDIT COMMITTEE

The role of the Advisory Audit Committee is to assist the Board of Directors in carrying out the duties thereof on internal audit and fulfils an advisory function in terms of the strategy and policy of the Company with regard to the internal control system, the internal audit and external audit, conflict of interest assessment, as well as the control of the risk management system.

From the functional perspective, the Advisory Audit Committee reports directly to the Board of Directors. Within SNN, there is an Internal Audit Department in charge of managing the internal audit activity within the company, reporting to the Board of Directors, from a functional perspective and to the Chief Executive Officer, from an administrative perspective.

The main responsibilities of the Advisory Audit Committee include functions of analysis, monitoring, supervision and facilitation, as follows:

- Approval of the multi-annual internal audit plan as well as the legislative documents elaborated by the Internal Audit Department;
- Regularly examines the efficiency of the internal control and risk management system;
- Monitors the application of the legal standards and internal audit standards, maintaining the authority, independence and impartiality of internal auditors;
- Monitors the compliance by the Company with the provisions of the legal framework, the Articles of Incorporation and the applicable internal regulatory documents;
- Analyses and approves the activity reports of the

Internal Audit Department, the transactions with the affiliates;
- Monitors the correctness and credibility of the financial information provided to the management of the Company and to external users;
- Supervises the activity of the internal auditors and financial auditors;
- Approves or proposes the approval addressed to the supervisory bodies or to the shareholders on the appointment, remuneration and revocation of the financial auditor;
- Ensuring that the executive bodies take the necessary remedial measures, in order to address the identified deficiencies;
- Preparation and submission of reports, upon request, to the Board of Directors.

In 2021, the Audit Advisory Committee congregated in 11 meetings during which recommendations were made to the Board of Directors of SNN on issues falling under the competence thereof, as follows:

- Report on the internal audit activity for 2020;
- Annual Management Financial Control plan;
- Annual and multi-annual internal audit plan;
- Quarterly report on risk management;
- Annual report on the assessment of the internal management control system;
- Individual and Consolidated Annual Financial Statements at the end of 2020, prepared in accordance with the International Financial Reporting Standards (IFRS - EU), based on the independent auditor's reports and the directors' annual report for 2020;
- Half-yearly report on the administration activity, drafted according to the legal provisions;
- Annual Conformity Plan.

In terms of the management of conflicts of interest, each member of the Board of Directors provides the avoidance of a conflict of interest directly or indirectly with the Company, and, in case of occurrence of such a conflict, abstains from debating and voting on such issues, in compliance with the applicable legal provisions.

In order to provide the correctness, the transactions with the concerned parties, the members of the Board of Directors use the following criteria, but without limitation thereto:

- Retaining the competence of the Board of Directors or GMS, applicable, to approve the most important transactions (according to the annex to the Articles of Incorporation on the competence limits);
- Requesting a prior opinion on the most important transactions from the internal control structures;
- Entrusting the negotiations, with regard to these transactions, to one or several independent directors or to the directors having no connections with such involved parties;
- Resort to independent experts.

The transactions concluded in 2021 with affiliates and reported to the capital market authorities of Romania and to the SNN shareholders, according to the provisions of art. 225 of Law no. 297/2004 and art. 82 of Law no. 24/2017 did not create problems in terms of potential conflicts of interests with the directors and managers of SNN.

The planning of the internal audit activities is done following an extensive risk assessment process (e.g. discussions with the heads of departments, results of the activities of the other monitoring departments, reports of the external control bodies of the Company, results of the previous audit reports). The Audit Advisory Committee assessed the internal control system, based on the questionnaire on the assessment of the implementation stage of the internal/managerial

control standards, consisting in the compliance in the internal managerial control activity with the standards stipulated in Order no. 600/2018.

ADVISORY COMMITTEE FOR NUCLEAR SAFETY

The Nuclear Safety Committee provides the Board of Directors with assistance and/or independent assessment in the field of nuclear safety and environmental protection, elaborating written recommendations in this respect.

The main duties of the Advisory Committee for Nuclear Safety are consultancy/assessment in fields such as:

- The strategic options of the Company related to nuclear safety, taking into account the existing situation and the regulatory framework applicable to the operating activities of Cernavoda NPP;
- Conclusions drawn from the review of certain design studies and the impact thereof on the systems, structures and components with critical nuclear safety functions;
- Fundamental decisions on nuclear safety, as well as on radiation protection, adopted within the Company and the two branches thereof;
- Framework and main criteria to be adopted for nuclear safety and for the management and quality assurance system;
- Conclusions of the impact studies on all types of emissions into the environment;
- Nuclear safety criteria, public health and environmental protection, applied in the relations with the subcontractors and providers;
- Elaboration and implementation of programs for the preparation of the nuclear safety culture for the personnel of the Company;
- General policy and regulations on the personnel and the competence requirements in the operation of the assets of the Company;
- Inspection of structures and components with critical security function;
- Independent control processes in matters of nuclear safety and radiation protection, related to the specific activities of the Company;
- Certification and licensing process;
- Analyses of reports of the operating events/incidents with potential impact on nuclear safety or radiation protection of the personnel;
- Analysis of any report on nuclear safety, prepared within the Company;
- Any matter for which the Board of Directors deems it necessary to consult the Advisory Nuclear Safety Committee.

The Advisory Committee for Nuclear Security was convened 4 times in 2021, in April, June, August and November.

THE ADVISORY COMMITTEE FOR STRATEGY, DEVELOPMENT AND LARGE INVESTMENT PROJECTS

The composition of the Advisory Committee for Strategy, Development and Large Investment Projects ("CSDPMI") is as follows (BoD Resolution no. 166/2.10.2018): Mrs. Elena Popescu - Chairwoman, and Mrs. Mihai Anitei and Cosmin Ghita, as members.

According to its own regulations, the Committee for Strategy, Development and Large Investment Projects performs analyses and elaborates recommendations for the Board of Directors of SNN with regard to:

- The global strategy for development, refurbishment, modernization, economic and financial restructuring of the Company, as well as the main development directions, the strategic goals of the Company and the ways to achieve them.
- Approval and implementation by the Board of Directors of large investment projects (projects the estimated value whereof exceeds the value of EUR 5 million), following the analysis of the specific documentation.

In 2021, the activity of the Advisory Committee for Strategy, Development and Large Investment Projects focused primarily on:

- Formulating a recommendation to the Board of Directors of SNN regarding the Strategy for continuing the Project for Units 3 and 4 of Cernavoda NPP and measures aimed at initiating the implementation of the Strategy and for company EnergoNuclear S.A. to become operational again, approved by OGMS Resolution no. 3/05.04.2021 and EGMS no. 4/05.04.2021;
- Formulating a recommendation to the Board of Directors of SNN regarding the Cooperation Agreement - a roadmap for implementing NuScale small modular reactors (SMR) in Romania, approved by Resolution of the Board of Directors no. 186/29.10.2021.

From the analysis of the activity of the Advisory Committee for Strategy, Development and Large Investment Projects, we consider that it allowed the creation/crystallization of a unitary and structured approach on the strategic development directions of SNN.

REMUNERATION OF THE MEMBERS OF THE BOARD OF DIRECTORS

GRI 102-35, 102-36

Detailed information on the remuneration of directors and managers in 2021 can be found in the **Report of the Nomination and Remuneration Committee**

12

REMUNERATION OF THE MEMBERS OF THE BOARD OF DIRECTORS

GRI 102-35, 102-36

In compliance with the provisions of Government Emergency Ordinance no. 109/2011, as further amended and supplemented, on the corporate governance of public enterprises, the remuneration policy and criteria of directors and managers within the unitary system are made public on the SNN website, in the "Investor Relations - Remuneration Policy" section.

Following the appointment of the members of the Board of Directors for a 4-year term, September 28th, 2019, until the approval of the goals and performance indicators established by the Management Plan with the management component included, the members of the Board of Directors benefited only from the fixed component.

By the Resolution of the Board of Directors no. 33/ March 7th, 2019, the management component of the Management Plan and the Management Plan in its entirety were approved.

In compliance with the current provisions, namely art. 37 of the Government Emergency Ordinance no. 109/2011 as further amended and supplemented, the fixed remuneration of the non-executive members of the Board of Directors may not exceed twice the average over the last 12 months of the average gross salary for the performed activity, according to the main scope of business registered by the Company, at class level, according to the classification of activities in the national economy, communicated by the National Institute of Statistics prior to appointment. The fixed remuneration of the executive members of the Board of Directors may not exceed 6 times the average over the last 12 months of the average gross monthly earnings for the performed activity, according to the main scope of business registered by the Company, at class level, according to the classification of activities in the national economy, communicated by the National Institute of Statistics prior to appointment.

The fixed and variable indemnity for the members of the Board of Directors is approved by the General Meeting of the Shareholders of SNN. The general limits of the remuneration of the managers (manager within the meaning of art. 143 of Law no. 31/1990) are approved by the General Meeting of the Shareholders; in virtue of these general limits, the Board of Directors establishes the amount of the managers' allowance. The fixed remuneration of managers with a mandate contract may not exceed 6 times the average gross salary for the performed activity, according to the main scope of business registered by the Company, at class level, according to the classification of activities in the national economy, communicated by the National Institute of Statistics.

As regards the remuneration of the members of the Board of Directors for 2021, they remained at the level established by the mandate contracts signed in 2018, considering the fact that they were no addenda in 2020. These are valid for the members of the Board of Directors who are in office at the end of 2021, respectively, Mr. Cosmin Ghita, Mr. Remus Vulpescu, Mr. Mihai Anitei, Mrs. Elena Popescu and Mr. Teodor Chirica.

As regards Mr. Teodor Minodor Chirica, on the date of appointment, respectively, in the Ordinary General Meeting of July 27th, 2020 until September 28th, 2022, the gross monthly fixed allowance of the elected director was approved, equal to twice the average over the last 12 months of the average gross monthly earnings for the activity performed according to the main scope of business registered by the company, at class level, according to the classification of activities in the national economy, communicated by the National Institute of Statistics prior to the appointment, as well as the annual variable component amounting to 12 fixed monthly allowances determined based on the financial and non-financial performance indicators - as they were negotiated with the current directors in office of the company and approved by the Ordinary General Meeting of the Shareholders by Resolution no. 3/April 10th, 2019.

Detailed information on the remuneration of directors and managers in 2021 can be found in the Report of the Nomination and Remuneration Committee.

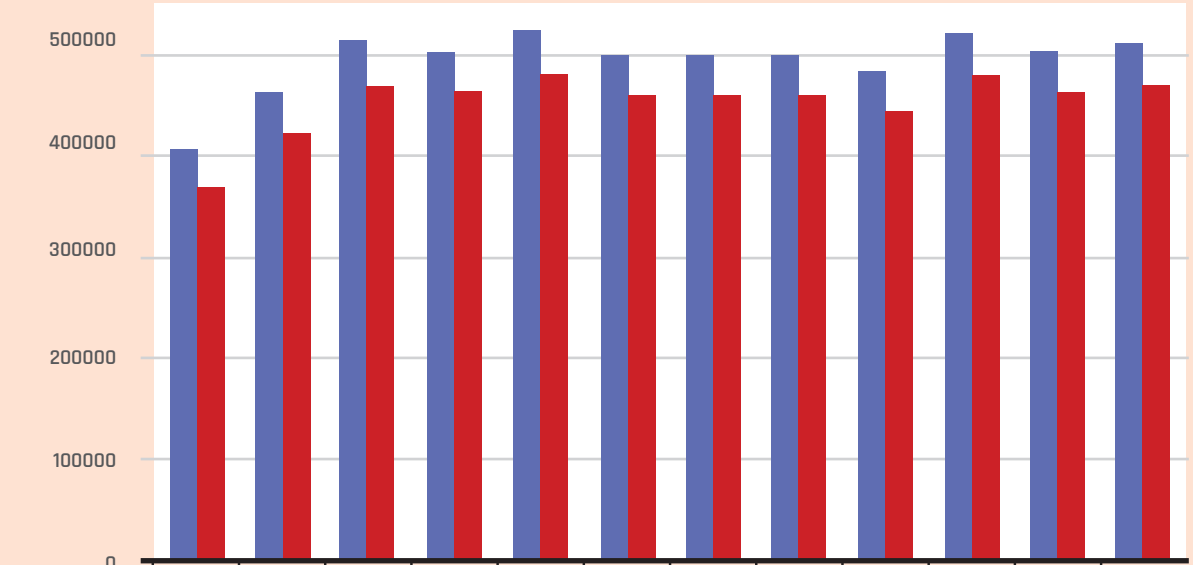
General limits of the remuneration of the executive director:

- Fixed, monthly allowance, between 5 - 6 times the average over the last 12 months of the average gross monthly salary for the activity performed according to the main scope of business registered by the company at class level, according to the classification of activities in the national economy, communicated by the National Institute of Statistics prior to the appointment;
- The annual variable component, between 24 - 36 times, the average monthly average gross salary for the activity performed according to the main scope of business registered by the company at class level, according to the classification of activities in the national economy, communicated by the National Institute of Statistics prior to the appointment.

13 OPERATIONAL RESULTS

GRI 302-1, 302-2, EU-30

Produced/net electricity U1 (MWh) 2021

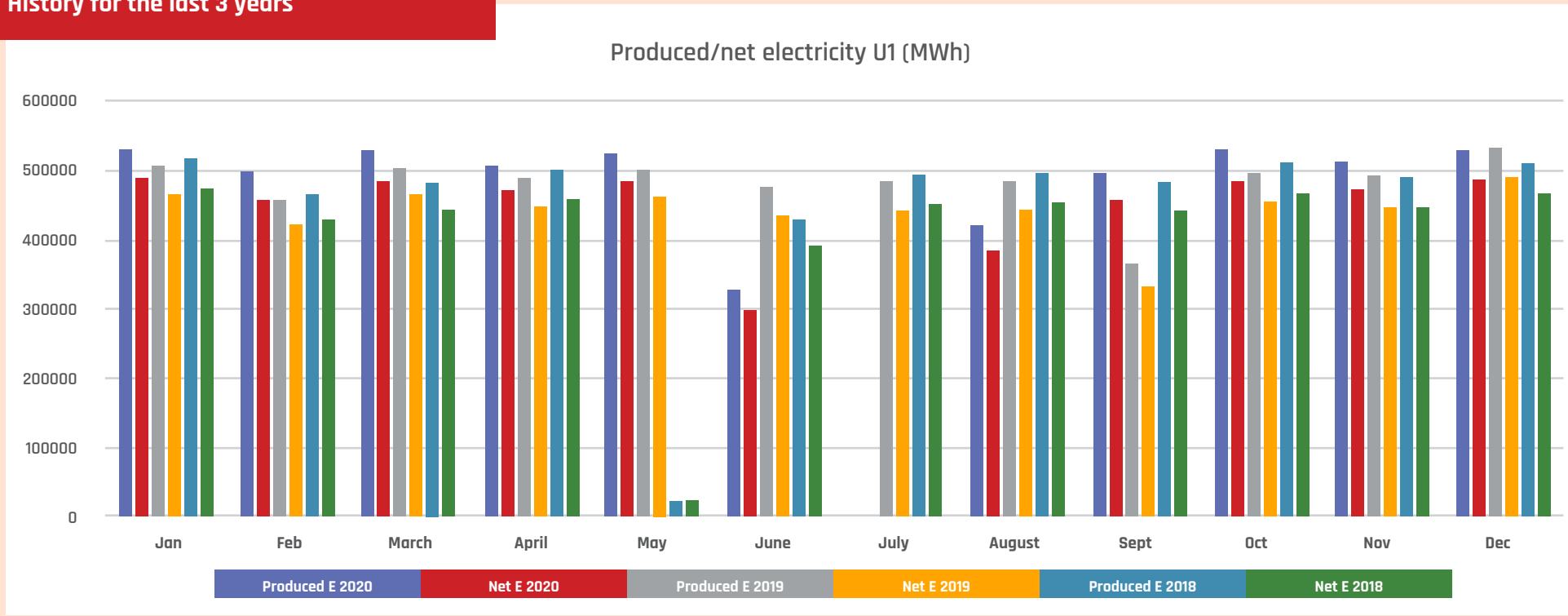


	Jan	Feb	March	April	May	June	July	August	Sept	Oct	Nov	Dec
Produced E	404478	461290	511607	502535	523570	500570	501375	501724	485866	521433	505050	509840
Net E	372171	424380	470492	462552	482515	460098	459041	459349	445821	479919	465001	469173

TOTAL 2021

Produced E	Net E
5 929 019	5 450 512
Own average technological consumption: 8.08%	

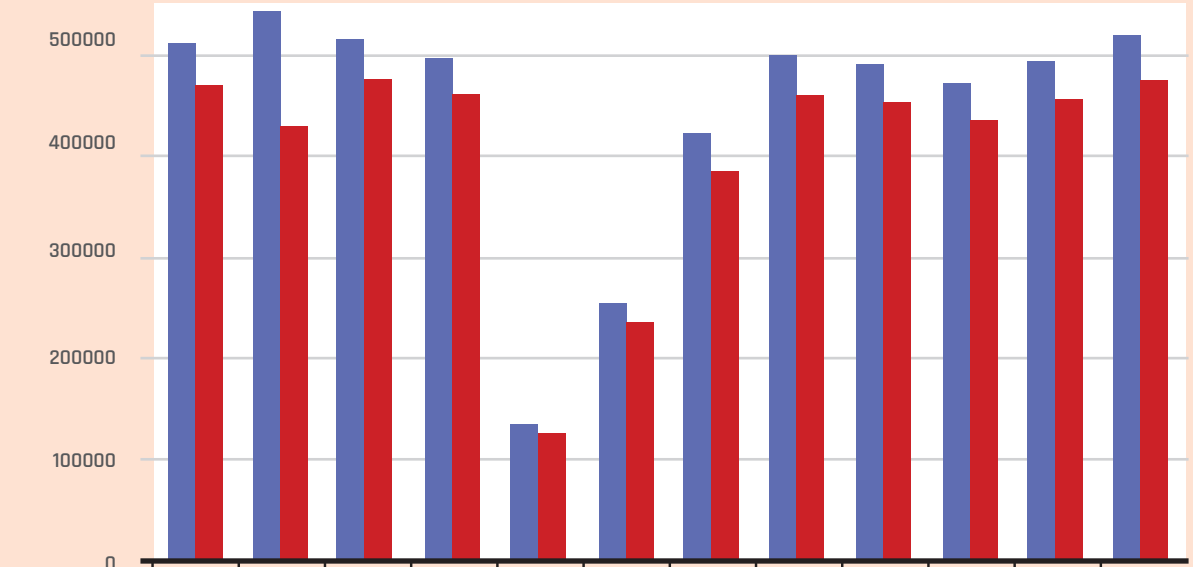
History for the last 3 years



	Jan	Feb	March	April	May	June	July	August	Sept	Oct	Nov	Dec
Produced E 2020	530432	496946	529568	508474	525488	324014	0	418822	495106	526477	512202	528376
Net E 2020	487268	456506	486927	468120	484151	298279	0	383418	454677	485077	472058	486770
Produced E 2019	505440	456608	504767	488819	502683	478970	485180	485838	362658	495619	490369	530924
Net E 2019	462883	418118	462230	447598	460473	437811	441747	442258	330205	452762	448752	487829
Produced E 2018	515163	464488	478885	496337	23123	428392	493408	495982	484546	509511	490090	506816
Net E 2018	472329	425724	439002	455147	21133	390620	450230	452090	442594	466789	448666	464173

Total 2020		Total 2019		Total 2018	
Produced E	Net E	Produced E	Net E	Produced E	Net E
5 395 904.0	4 963 253	5.787.876	5.292.668	5.386.742	4.928.499
Own average technological consumption: 8.02%		Own average technological consumption: 8.57%		Own average technological consumption: 8.52%	

Produced/ net electricity U2 (MWh) 2021



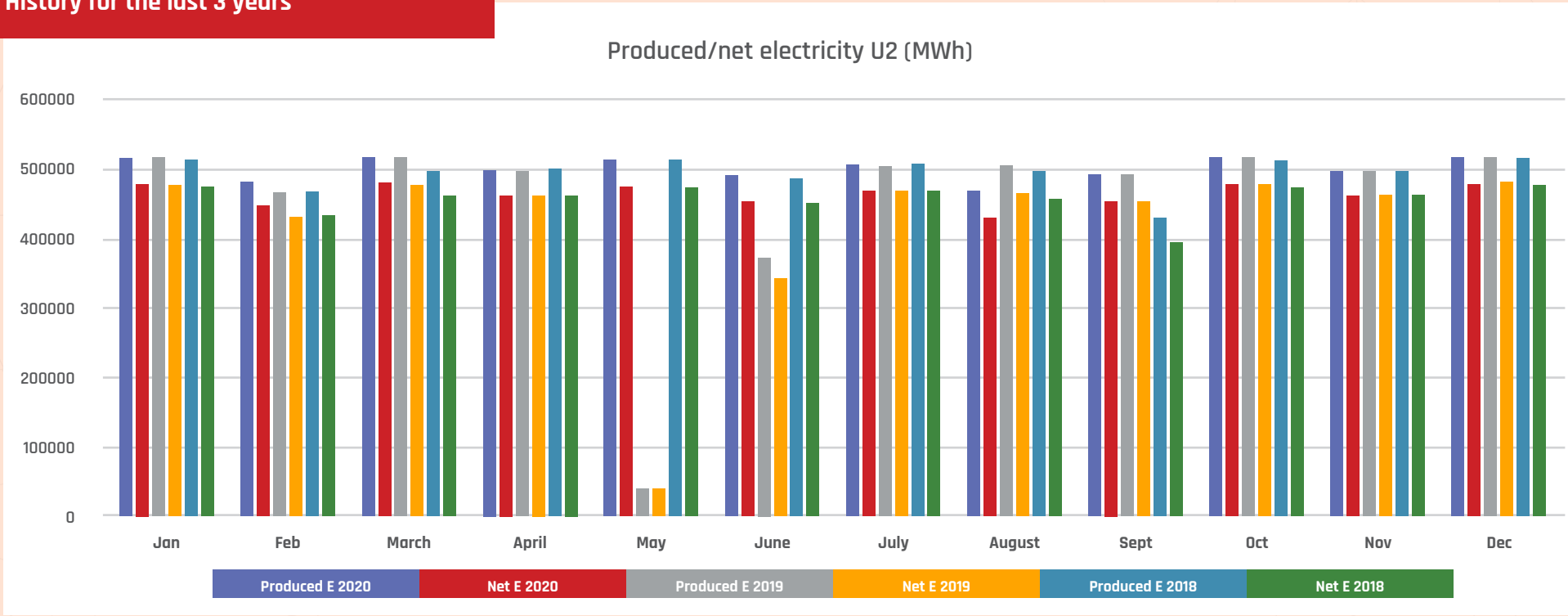
	Jan	Feb	March	April	May	June	July	August	Sept	Oct	Nov	Dec
Produced E	517194	569876	520688	504193	141501	261234	429047	506362	499095	480016	504268	521798
Net E	478600	434978	482167	466676	130921	240443	394307	466695	461483	443895	466969	483514

TOTAL 2021

Produced E	Net E
5 355 301	4 950 650

Own average technological consumption: 7.57%

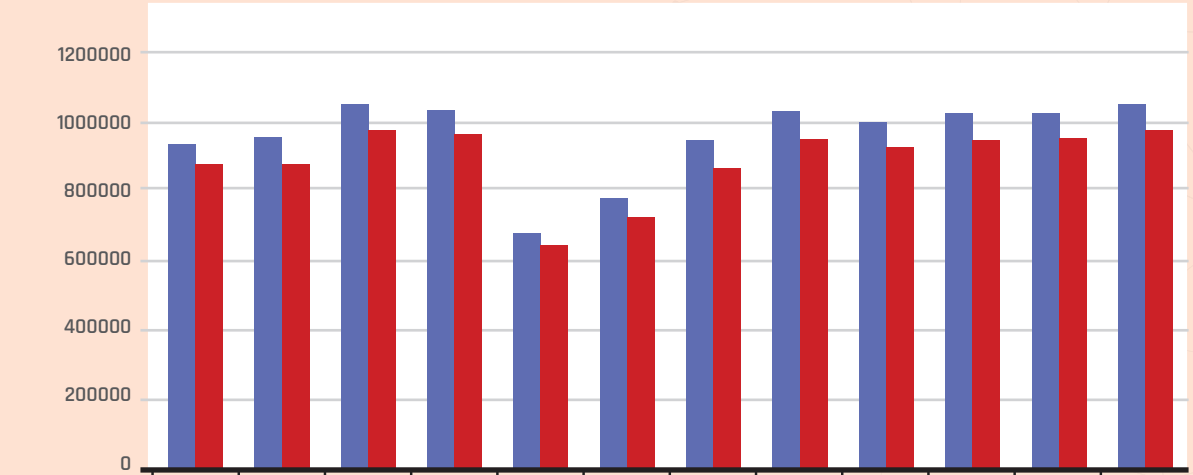
History for the last 3 years



	Jan	Feb	March	April	May	June	July	August	Sept	Oct	Nov	Dec
Produced E 2020	520917	487941	521720	504868	516612	497094	509397	470783	495831	520966	503571	520800
Net E 2020	482146	451531	482815	467194	477671	459334	469921	433659	457579	482130	465793	482045
Produced E 2019	521050	470153	520846	503167	39962	375326	508145	507427	497706	521128	505194	522187
Net E 2019	482036	434694	481563	465236	36911	346130	468261	467640	459431	482155	467905	483579
Produced E 2018	518704	471717	501670	505611	516767	492255	509888	501498	432506	516363	503577	520137
Net E 2018	479703	436316	463751	467891	477570	453191	469600	461048	398486	476886	465373	481024

Total 2020		Total 2019		Total 2018	
Produced E	Net E	Produced E	Net E	Produced E	Net E
6 070 500	5 611 815	5.492.291	5.075.542	5.990.693	5.530.839
Own average technological consumption: 7.56%		Own average technological consumption: 7.60%		Own average technological consumption: 7.68%	

Produced/net electricity U1 + U2 (MWh) 2021

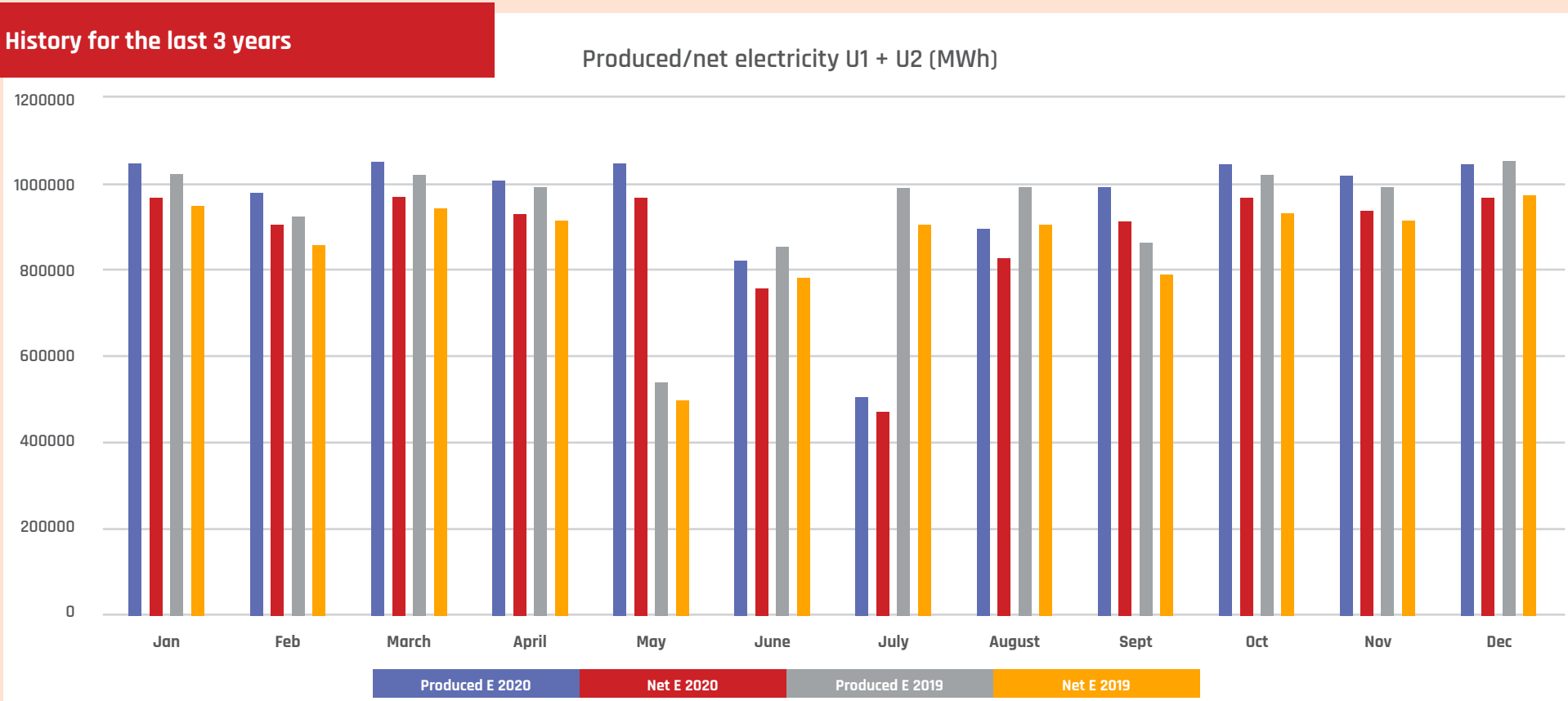


	Jan	Feb	March	April	May	June	July	August	Sept	Oct	Nov	Dec
Produced E	921642	931166	1032295	1006728	665071	761515	930451	1008086	984961	1001449	1009318	1031638
Net E	850771	859358	952659	929228	613436	700542	853349	926045	907303	923814	931971	952686

TOTAL 2021

Produced E	Net E
11 284 320	10 401 162
OWN TECHNOLOGICAL CONSUMPTION OF ELECTRICITY	
Cumulatively achieved in 2021: 7.82%	Provided in the project: max. 10.00%

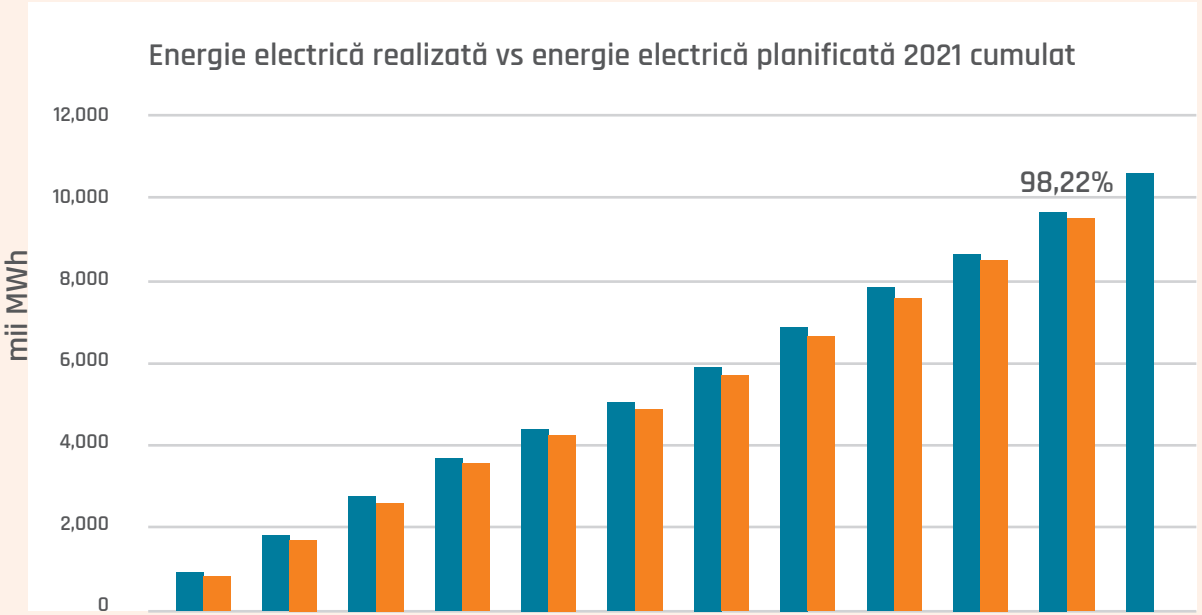
History for the last 3 years



	Jan	Feb	March	April	May	June	July	August	Sept	Oct	Nov	Dec
Produced E 2020	105349	984887	1051288	1013342	1042100	821108	509397	889605	990937	1047443	1015773	1049176
Net E 2020	969414	908037	969742	935315	961823	757613	469921	817076	912256	967207	937851	968815
Produced E 2019	1026490	926762	1025613	991986	542645	854296	993325	993265	860364	1016747	995563	1053111
Net E 2019	944919	858812	943793	912834	497384	783942	910007	909899	789637	934918	916658	971408

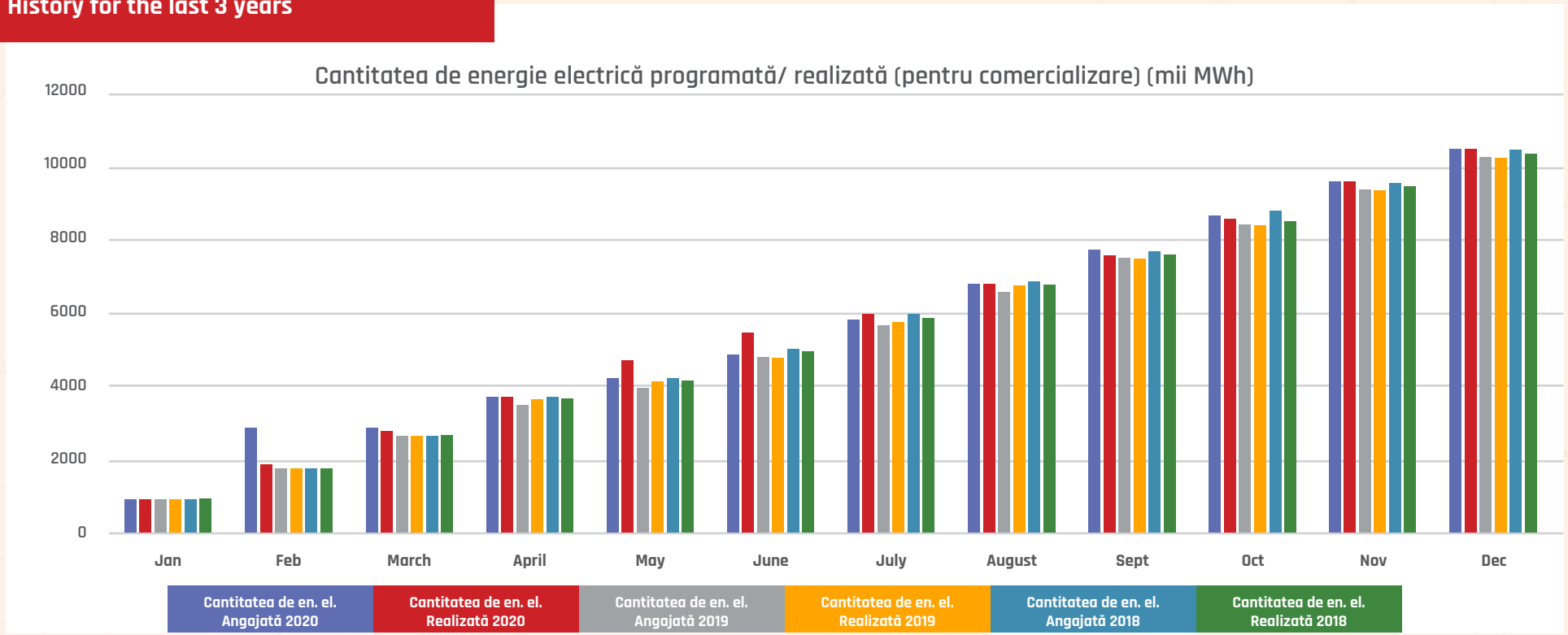
Total 2020		Total 2019	
Produced E	Net E	Produced E	Net E
11 466 405	10 575 068	11.280.167	10.368.211
Own technological consumption of electricity		Own technological consumption of electricity	
Cumulatively accomplished in 2020: 7.79%		Accomplished cumulatively in 2019: 8.08%	
Provided in the project: max. 10.00%		Provided for in the project: max. 10.00%	

Quantity of electricity programmed/produced (for sale) (thousands MWh) 2021



	Jan	Feb	March	April	May	June	July	August	Sept	Oct	Nov	Dec
Cantitate en. el. angajată	959	1,826	2,786	3,715	4,312	4,941	5,875	6,804	7,716	8,672	9,596	10,551
Cantitate en.el. realizată	847	1,706	2,659	3,588	4,195	4,890	5,739	6,665	7,572	8,493	9,425	

History for the last 3 years



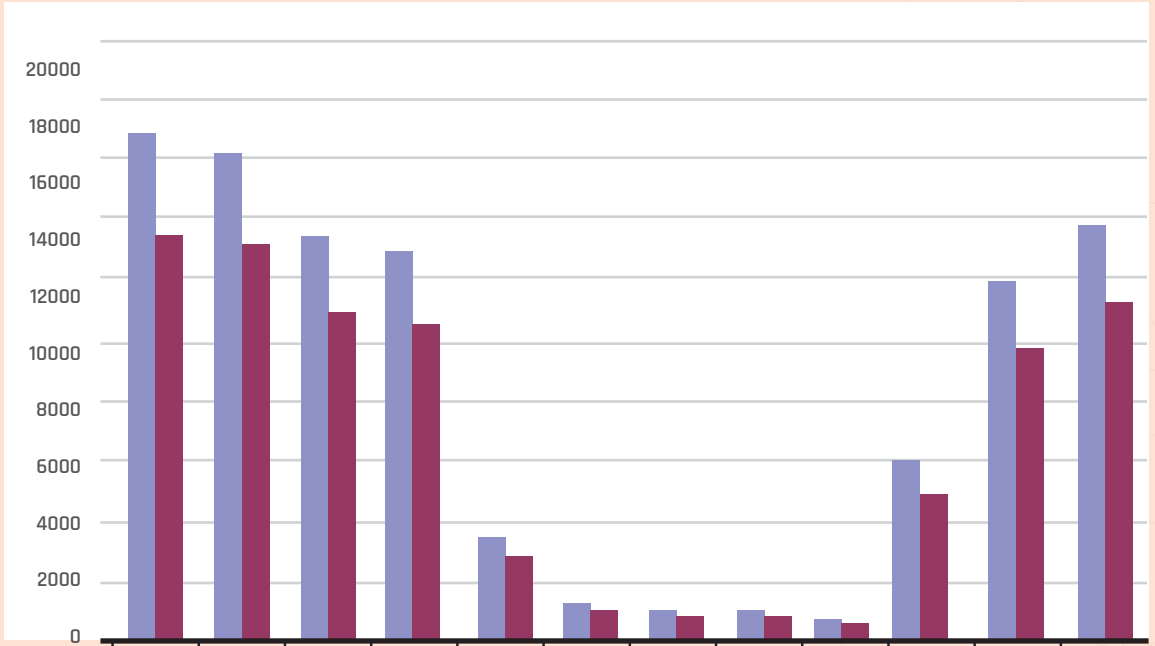
	Jan	Feb	March	April	May	June	July	August	Sept	Oct	Nov	Dec
Cantitatea de en. el. Angajată 2020	964	2866	2827	3759	4261	4953	5891	6822	7734	8691	9618	10578
Cantitatea de en. el. Realizată 2020	960	1877	2877	3783	4744	5499	5960	6772	7684	8651	9589	10558
Cantitatea de en. el. Angajată 2019	941	1791	2732	3486	3968	4814	5726	6634	7526	8461	9365	10228
Cantitatea de en. el. Realizată 2019	945	1798	2742	3654	4142	4919	5829	6739	7524	8459	9375	10347
Cantitatea de en. el. Angajată 2018	953	1815	2767	3687	4177	5032	5955	6876	7777	8722	9634	10581
Cantitatea de en. el. Realizată 2018	952	1814	2714	3637	4128	4969	5889	6802	7640	8584	9498	10443

Percentage achieved in 2020: 99.81%

Percentage achieved in 2019: 101.16%

Percentage achieved in 2018: 98.69%

Thermal energy delivered for heating/ sold (Gcal) 2021

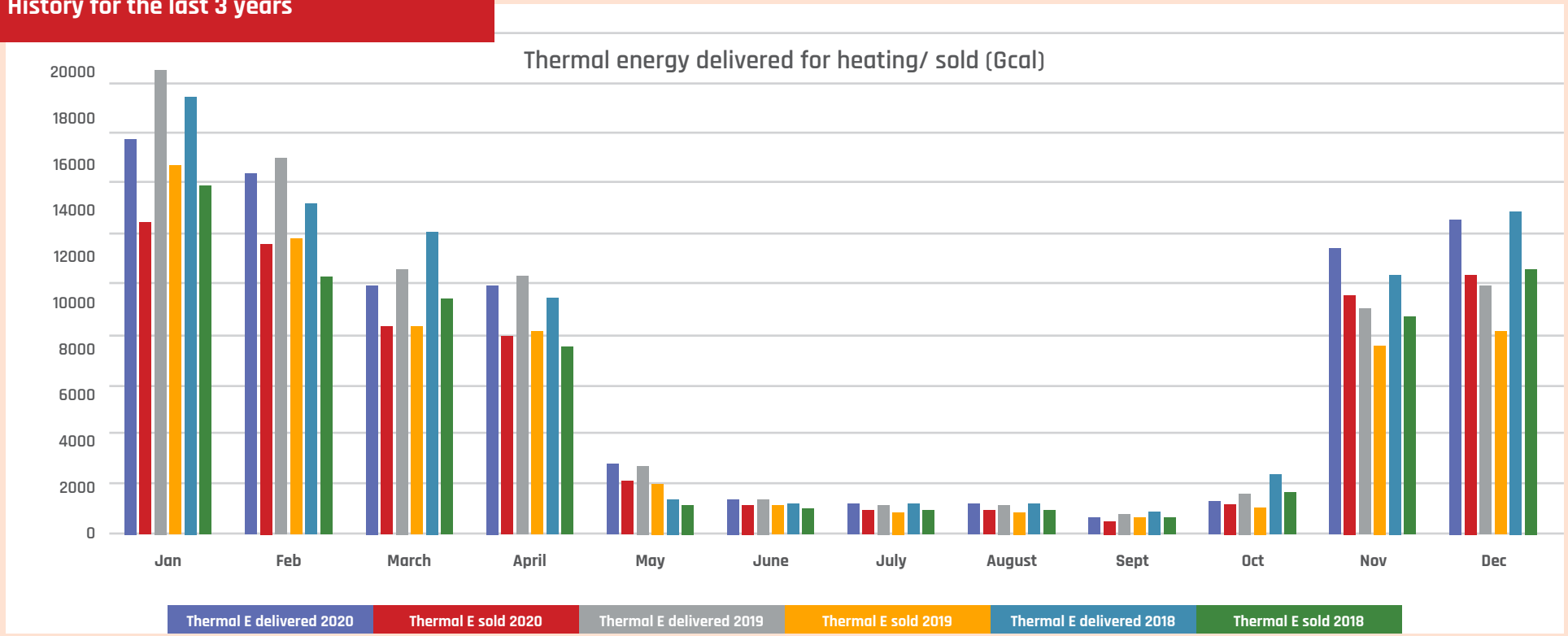


	Jan	Feb	March	April	May	June	July	August	Sept	Oct	Nov	Dec
Thermal E delivered	16792	16268	13694	12912	3584	1299	1020	1045	731	6074	11861	13800
Thermal E sold	13511	13181	11078	10612	2823	1045	876	913	635	4874	9973	11252

TOTAL 2021

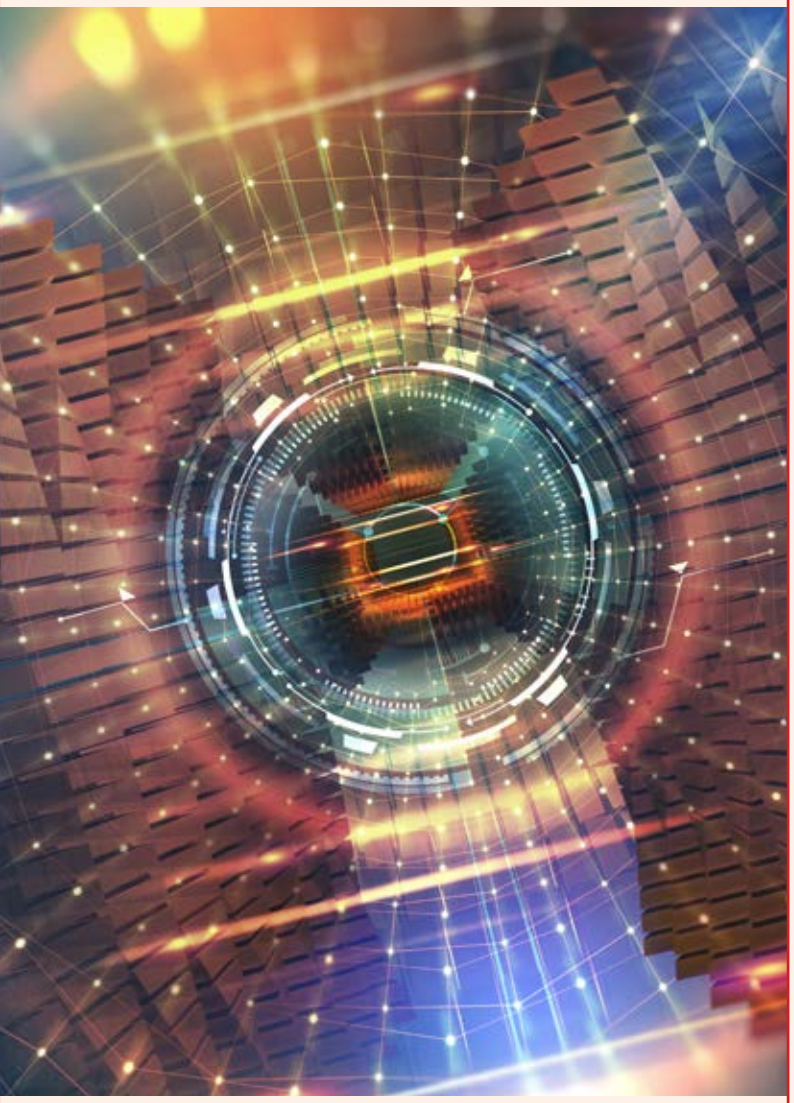
Thermal E delivered	Thermal E sold
99 081	80 771

History for the last 3 years

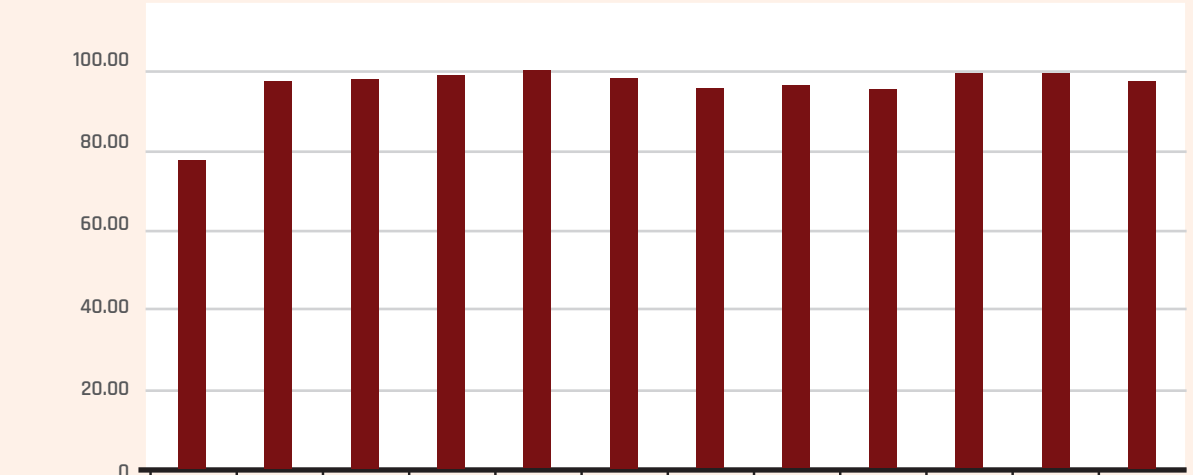


	Jan	Feb	March	April	May	June	July	August	Sept	Oct	Nov	Dec
Thermal E delivered 2020	15809	14400	10352	9824	2929	1398	1158	1166	750.93	1406	11455	12513
Thermal E sold 2020	12595	11567	8237	7946	2198	1150	996	1010	633	1148	9428	10283
Thermal E delivered 2019	18500	14945	10525	10310	8764	1439	1202	1148	894	1598	8983	10011
Thermal E sold 2019	14735	11816	8307	8112	2067	1184	937	915	721	1225	7576	8144
Thermal E delivered 2018	17427	13183	12054	9460	1501	1313	1212	1204	847	2356	10407	12836
Thermal E sold 2018	13977	10318	9354	7499	1205	1118	1005	1000	698	1682	8603	10479

Total 2020		Total 2019		Total 2018	
Thermal E delivered	Thermal E sold	Thermal E delivered	Thermal E sold	Thermal E delivered	Thermal E sold
83 260	67 189	82.320	65.737	83.799	66.940



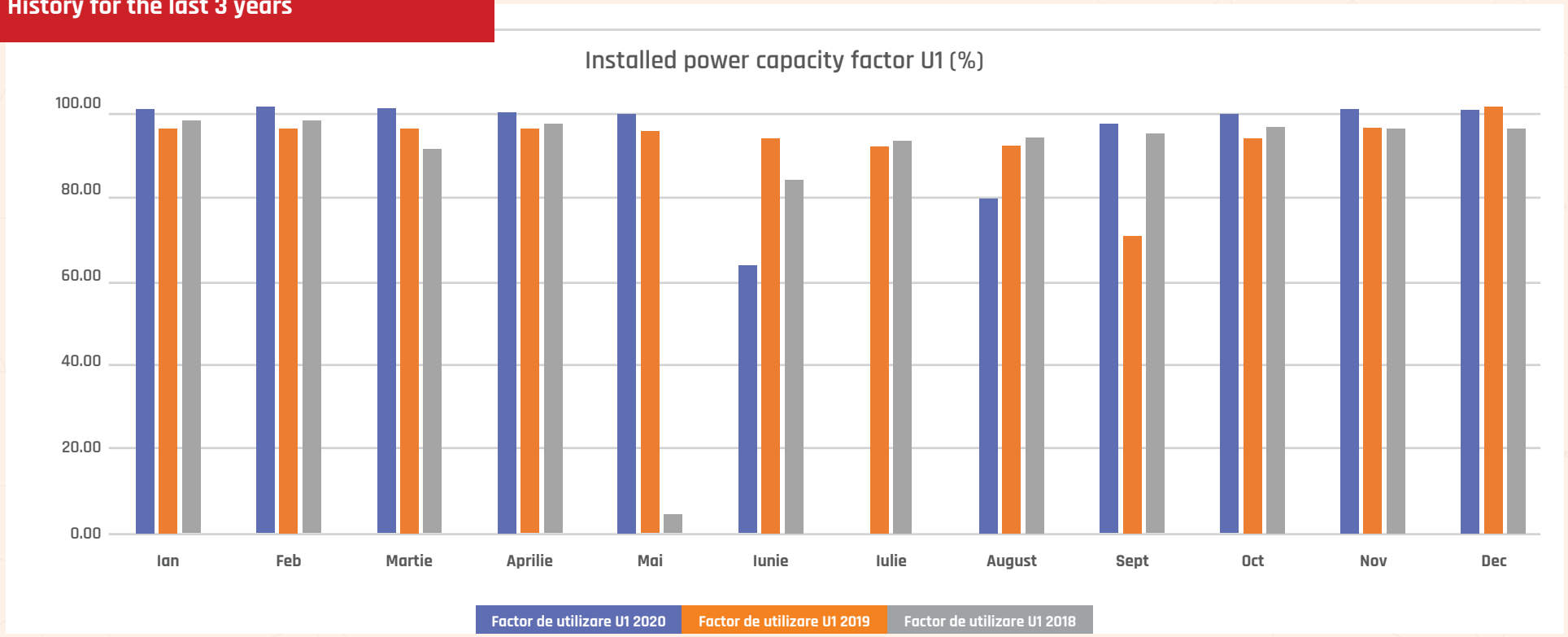
Installed power capacity factor U1 (%) 2021



	Jan	Feb	March	April	May	June	July	August	Sept	Oct	Nov	Dec
Factor de utilizare U1	77.19	97.78	98.08	99.21	99.86	98.59	95.66	96.70	95.58	99.58	99.81	97.71

Cumulated 2021 U1 96.19%

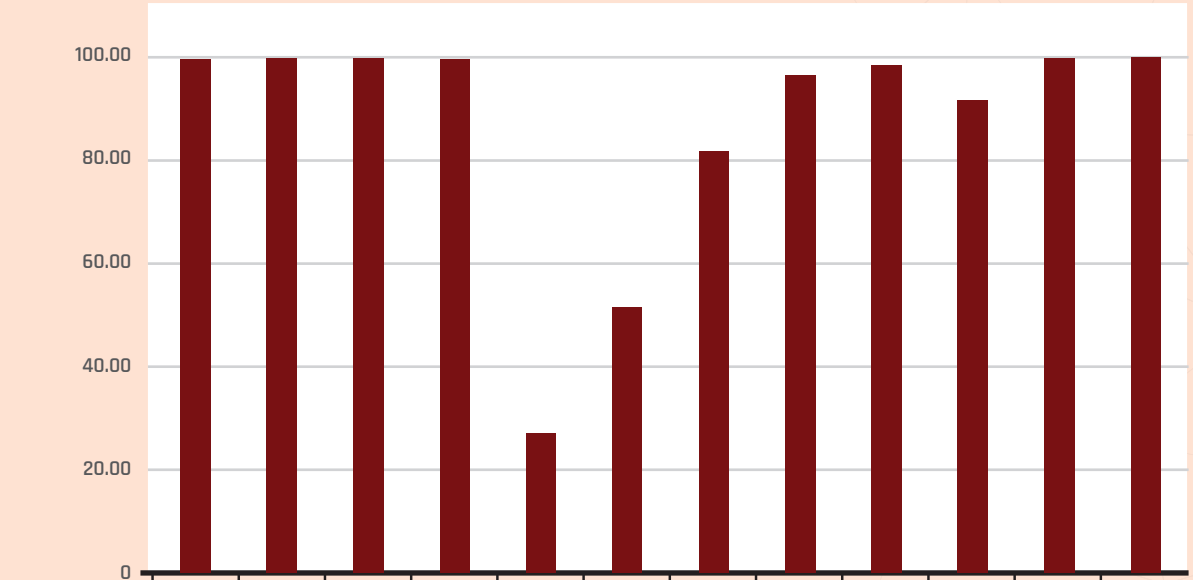
History for the last 3 years



	Ian	Feb	Martie	Aprilie	Mai	Iunie	Iulie	August	Sept	Oct	Nov	Dec
Factor de utilizare U1 2020	101.53	101.64	101.37	100.38	100.1	63.75	0	79.87	97.64	100.34	101.05	101.11
Factor de utilizare U1 2019	96.78	96.7	96.6	96.47	95.96	94.46	92.41	92.54	71.43	94.37	96.79	101.6
Factor de utilizare U1 2018	98.6	98.5	91.7	97.9	4.4	84.2	93.8	94.3	95.2	96.8	96.8	97

2020		2019		2018	
Prevăzut 2020	Cumulat 2020 U1	Prevăzut 2019	Cumulat 2019 U1	Prevăzut 2018	Cumulat 2018 U1
87.5% (țintă internă CNE)	87.29%	92 (țintă internă CNE)	93,86	87,4 (țintă internă CNE	87,31

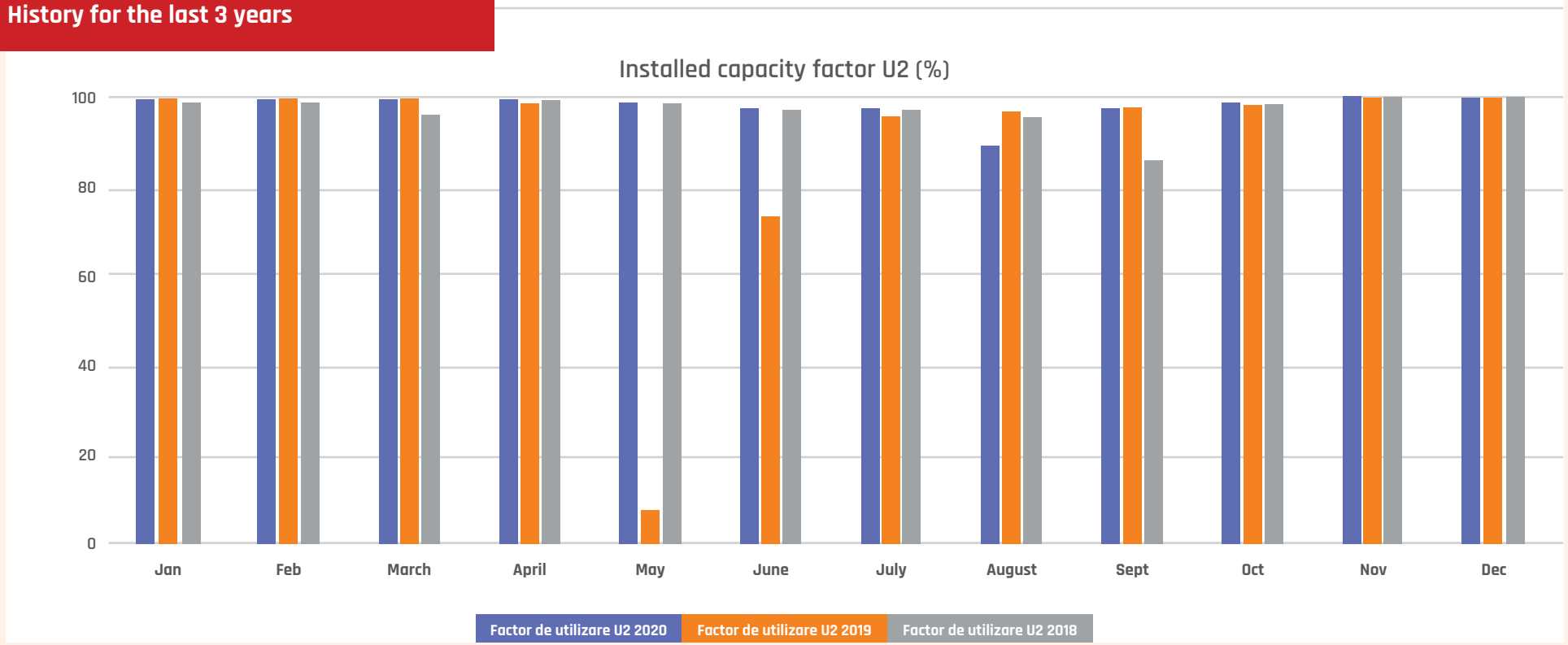
Installed capacity factor U2 (%) 2021



	Jan	Feb	March	April	May	June	July	August	Sept	Oct	Nov	Dec
Capacity factor U2	99.55	99.74	99.87	99.67	27.00	51.48	81.83	96.57	98.44	91.70	99.79	99.94

Cumulated 2021 U2 87.02%

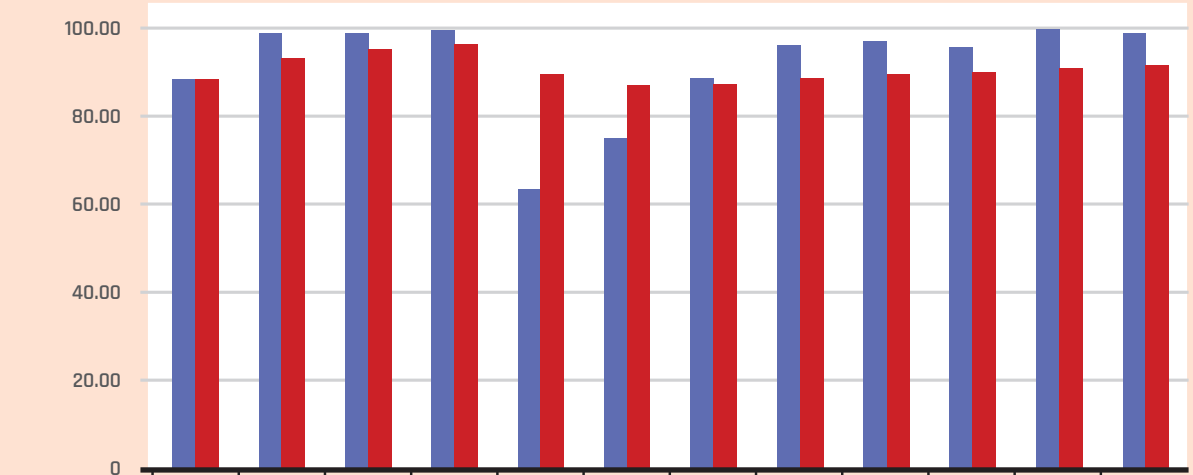
History for the last 3 years



	Jan	Feb	March	April	May	June	July	August	Sept	Oct	Nov	Dec
Factor de utilizare U2 2020	99.87	99.93	100.01	99.77	98.57	98.13	97.39	89.83	97.71	99.28	99.77	99.7
Factor de utilizare U2 2019	99.93	99.75	99.71	99.53	7.63	73.96	95.93	96.82	98.14	99.3	99.89	100.01
Factor de utilizare U2 2018	99.45	100.1	96.34	99.81	98.81	98.89	97.44	95.95	85.49	99.01	99.67	99.78

2020		2019		2018	
Estimated 2020	Cumulated 2020 U2	Estimated 2019	Cumulated 2019 U2	Estimated 2018	Cumulated 2018 U2
97% (internal NPP target)	98.32%	90 (internal NPP target)	89,18	99 (internal NPP target)	97,43

Installed power capacity factor U1 + U2 (%) 2021

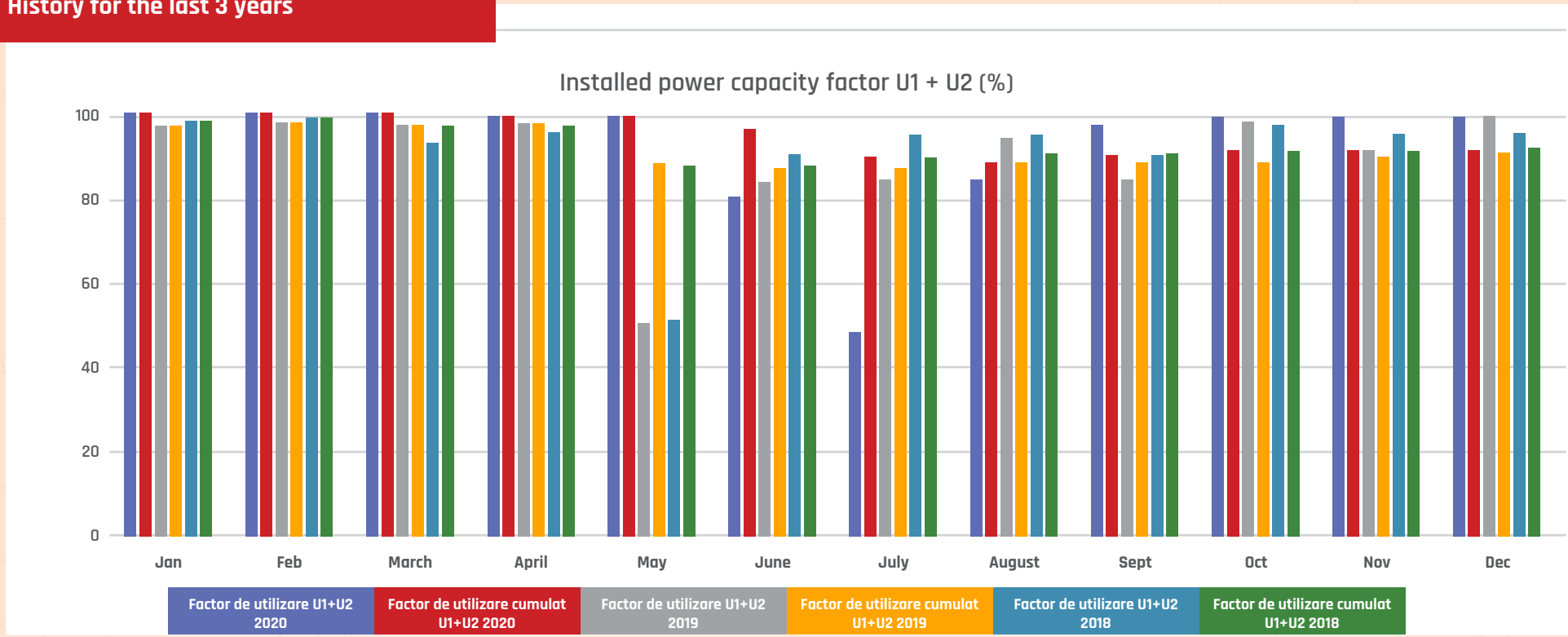


	Jan	Feb	March	April	May	June	July	August	Sept	Oct	Nov	Dec
Factor de utilizare U1+U2	88.37	98.76	98.97	99.44	63.43	75.03	88.75	96.14	97.01	95.64	99.80	98.83
Factor de utilizare cumulat U1+U2	88.37	93.3	95.25	96.3	89.55	87.14	87.38	88.50	89.43	90.07	90.94	91.61

Cumulated 2021 U1+U2: 91.61%

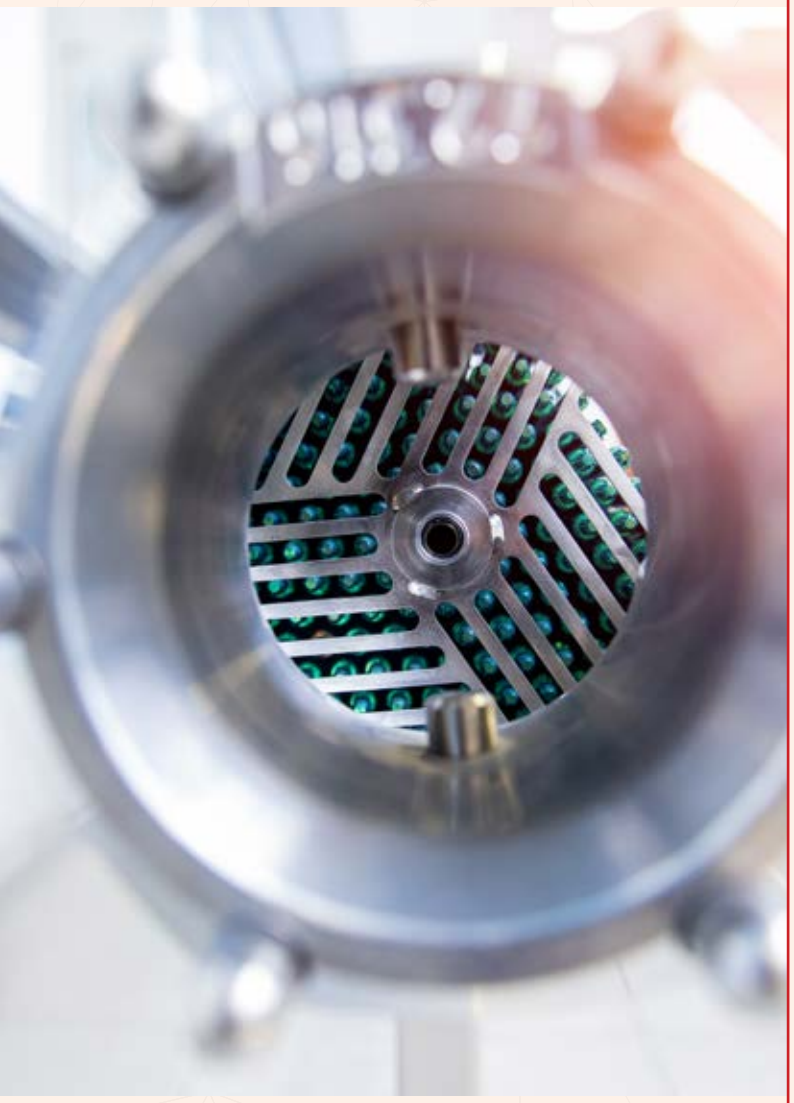
97% (internal NPP target)	**98.32%**	**90% (internal NPP target)**	**89.18%**	**99% (internal NPP target)**	**97,43%**

History for the last 3 years

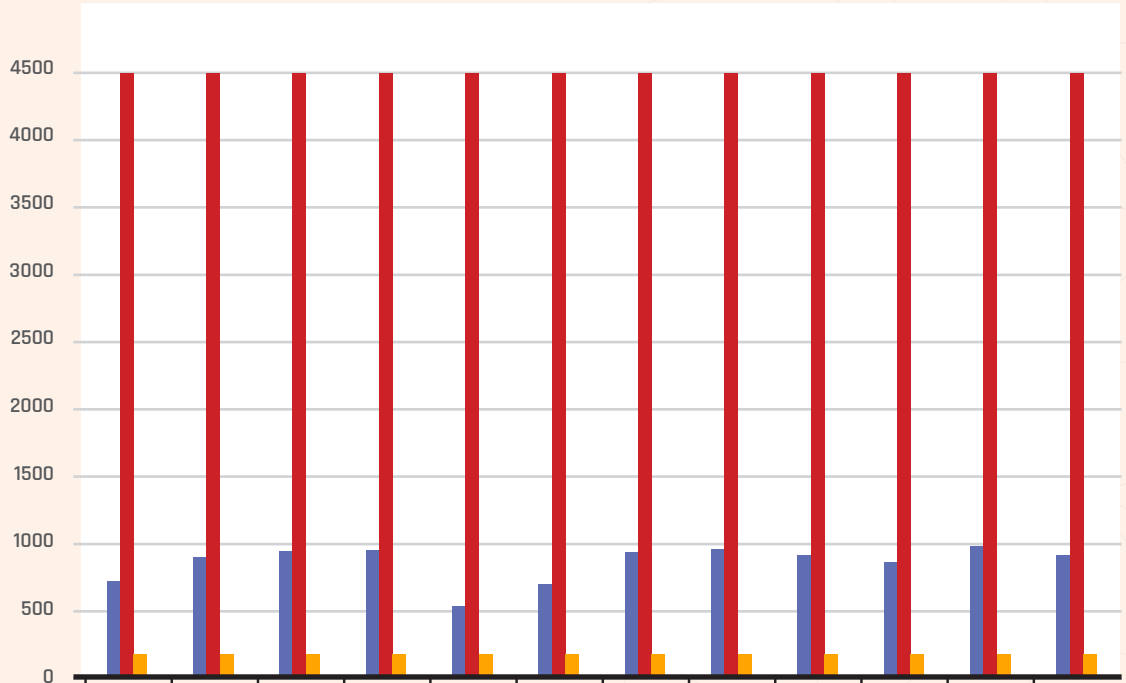


	Jan	Feb	March	April	May	June	July	August	Sept	Oct	Nov	Dec
Factor de utilizare U1+U2 2020	100.7	100.7	100.69	100.07	99.3	80.94	48.7	84.85	97.67	99.81	100.41	100.41
Factor de utilizare cumulat U1+U2 2020	100.7	100.7	100.73	100.57	100.32	97.12	90.07	89.41	90.31	91.28	92.1	92.8
Factor de utilizare U1+U2 2019	98.26	98.28	98.1	98	51.1	84.28	84.95	94.71	84.92	98.52	92.24	100.22
Factor de utilizare cumulat U1+U2 2019	98.26	98.28	98.28	98.1	88.88	87.92	87.92	88.91	89.11	88.9	90.55	91.52
Factor de utilizare U1+U2 2018	99.05	99.29	94.03	96.86	51.65	90.75	95.65	95.15	90.39	97.55	96.23	96.41
Factor de utilizare cumulat U1+U2 2018	99.05	99.16	97.4	97.77	88.3	88.7	89.72	90.41	90.41	91.18	91.81	92.37

Cumulated consumption 2020: 10 456	Cumulated consumption 2019: 10.396	Cumulated consumption 2018: 10.376

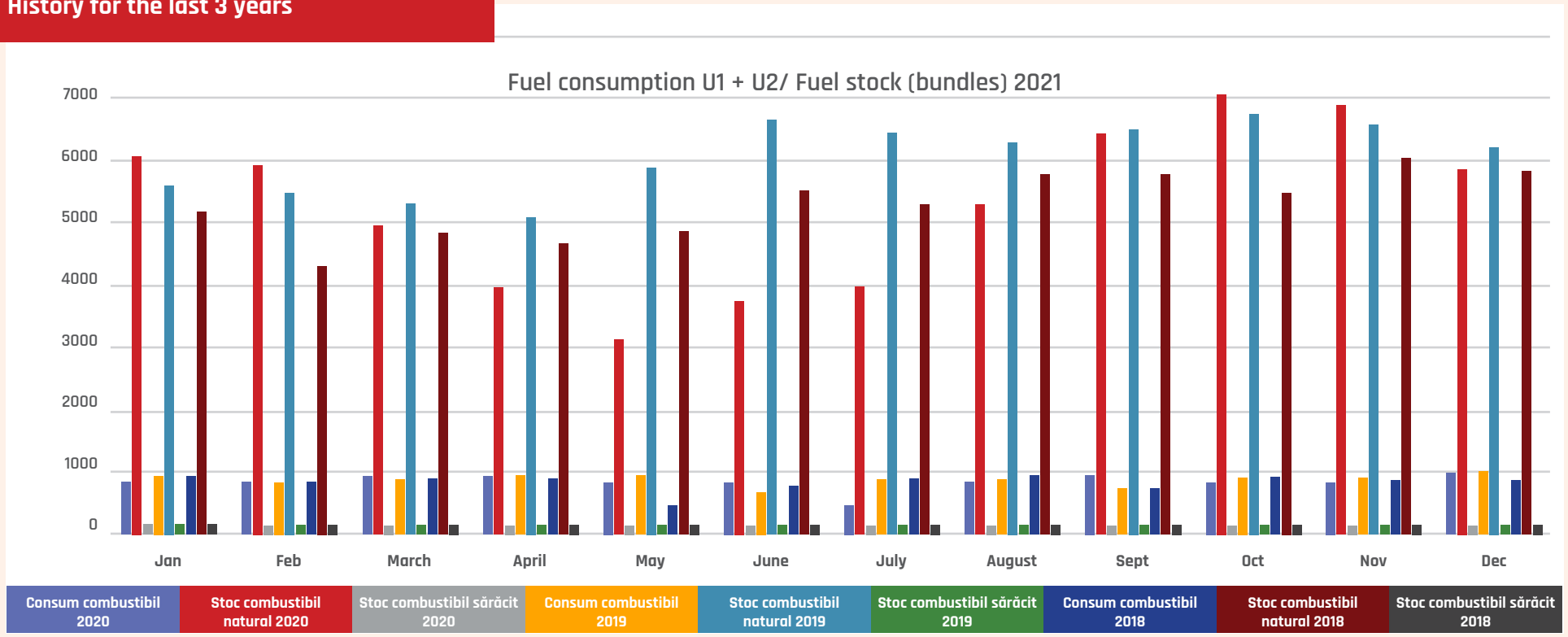


Fuel consumption U1 + U2/ Fuel stock (bundles) 2021



	Jan	Feb	March	April	May	June	July	August	Sept	Oct	Nov	Dec
Consum combustibil	728	904	944	952	536	704	936	960	920	864	984	920
Stoc combustibil natural	5879	5695	6191	5959	6143	6159	5943	5703	5503	6079	5815	5615
Stoc combustibil saracit	182	182	182	182	182	182	182	182	182	182	182	182

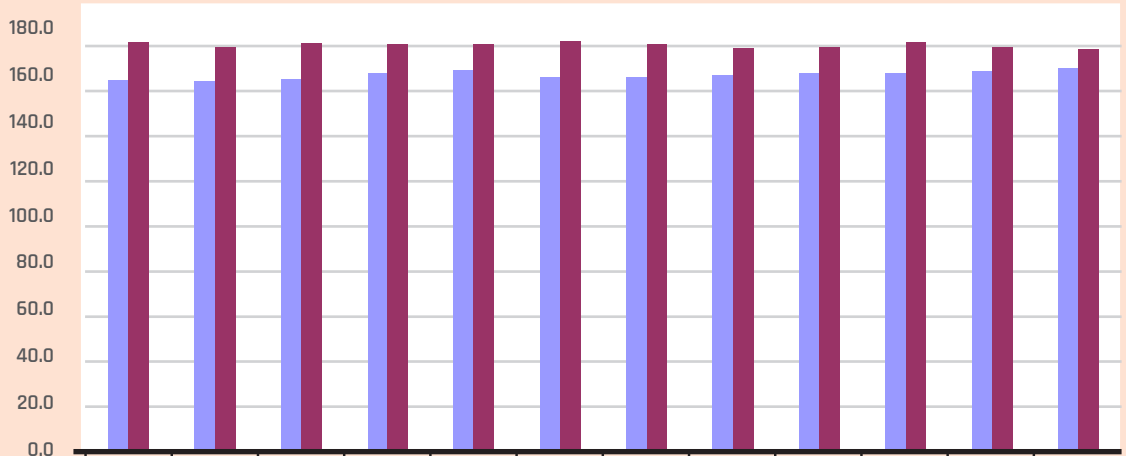
History for the last 3 years



	Jan	Feb	March	April	May	June	July	August	Sept	Oct	Nov	Dec
Consum combustibil 2020	896	856	944	976	872	792	512	864	992	848	880	1024
Stoc combustibil natural 2020	6083	5947	5003	4027	3155	3803	4015	5311	6479	7071	6911	5887
Stoc combustibil săracit 2020	186	186	186	186	186	186	182	182	182	182	182	182
Consum combustibil 2019	944	840	888	952	616	704	916	896	760	952	912	1016
Stoc combustibil natural 2019	5627	5507	5339	5107	5931	6667	6475	6329	6529	6747	6555	6259
Stoc combustibil săracit 2019	190	190	190	190	186	186	186	186	186	186	186	186
Consum combustibil 2018	944	840	928	928	496	800	928	976	760	852	920	904
Stoc combustibil natural 2018	5203	4363	4875	4667	4891	5531	5323	5787	5747	5515	6035	5851
Stoc combustibil săracit 2018	190	190	190	190	190	190	190	190	190	190	190	190

Cumulated consumption 2021: 10 352

Nuclear fuel burnup degree (MWh/KgU) 2021

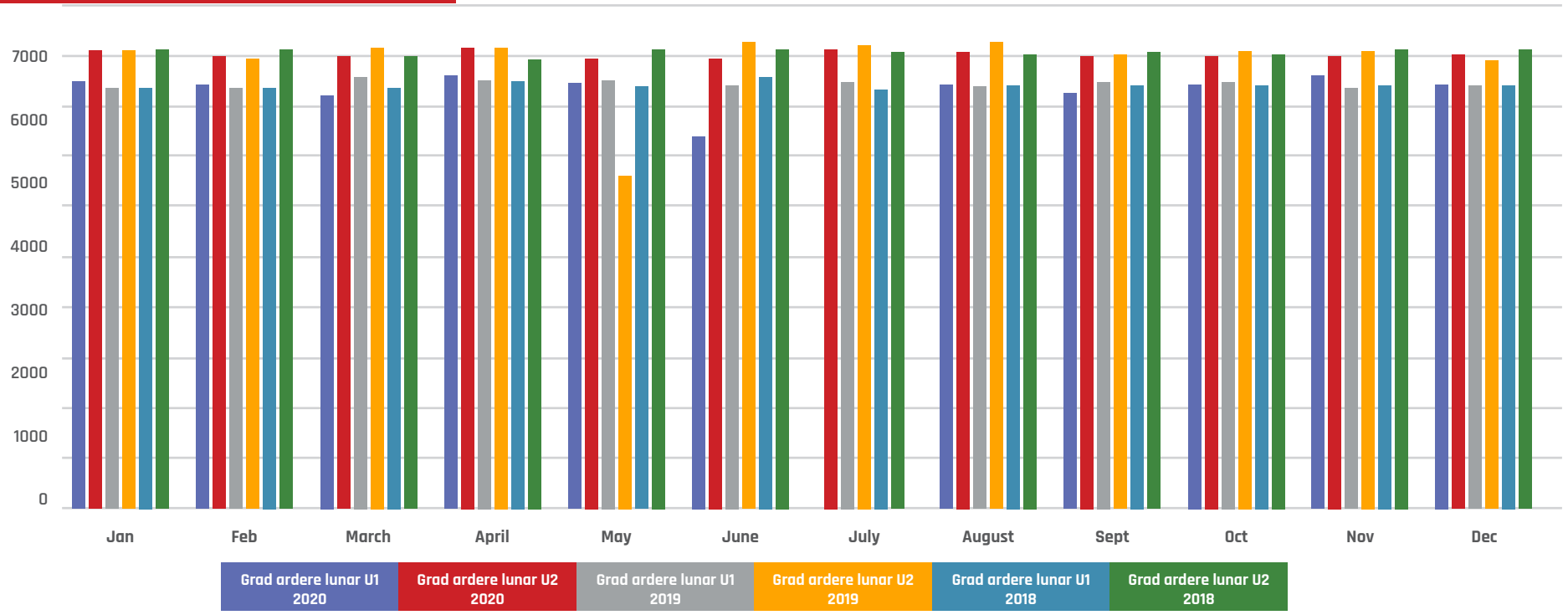


	Jan	Feb	March	April	May	June	July	August	Sept	Oct	Nov	Dec
Grad ardere lunar U1	164.6	164.2	165.0	167.7	169.2	166	166.19	167.0	167.7	167.8	168.5	170.2
Grad ardere lunar U2	181.6	197.6	181.0	180.9	180.6	182	180.6	179.0	179.6	181.7	179.4	178.5

Cumulated 2021: 173.6	Provided in the project: min 156.00

History for the last 3 years

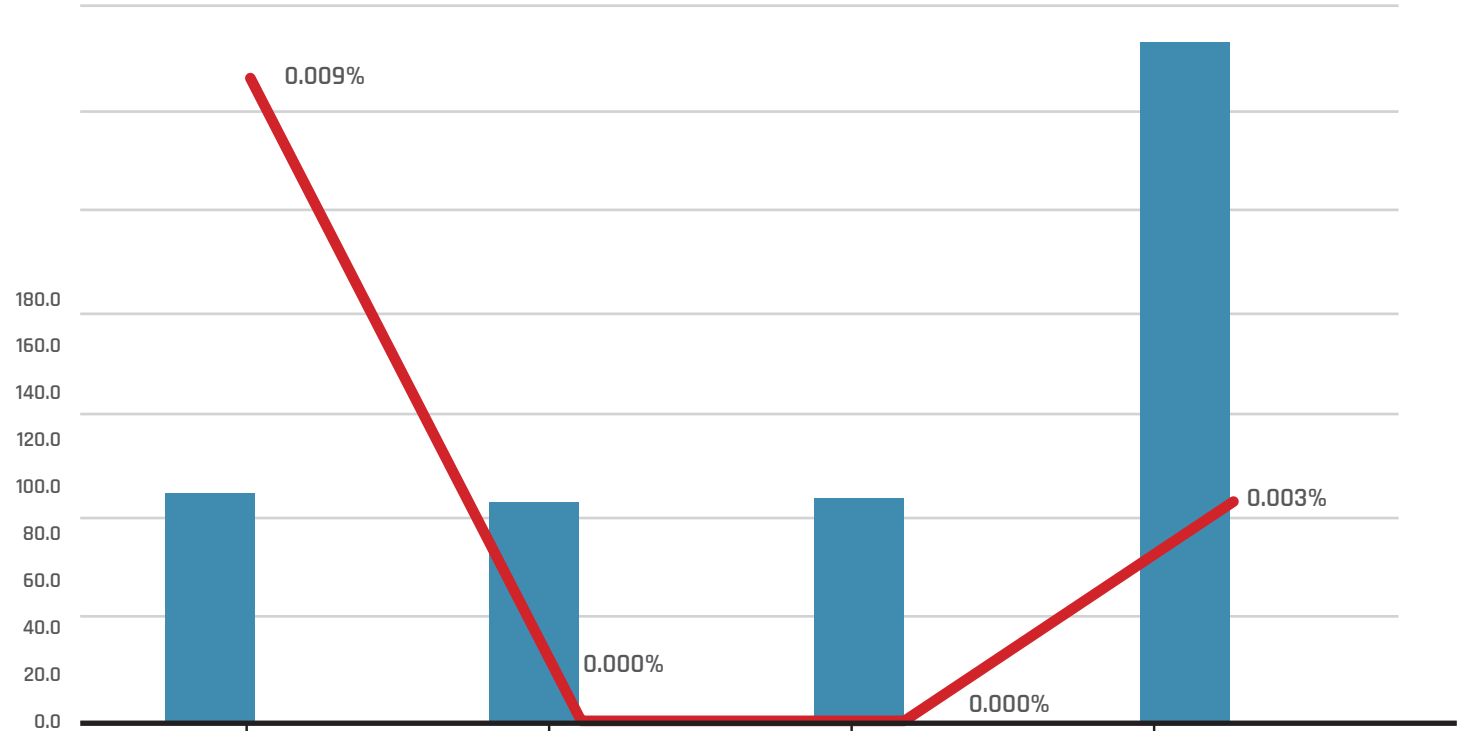
Nuclear fuel burnup degree (MWh/KgU) 2021



	Jan	Feb	March	April	May	June	July	August	Sept	Oct	Nov	Dec
Grad ardere lunar U1 2020	169.3	168.9	165.0	172.1	168.9	148.5	0	168.7	165	168.2	171.1	168.2
Grad ardere lunar U2 2020	181.6	179.8	179.3	182.4	178.5	180.7	182.6	181.0	179.3	179.1	180.2	180.2
Grad ardere lunar U1 2019	166.5	166.5	172	169.7	170.2	168.7	169.3	168.1	169.2	169.8	167.6	167.9
Grad ardere lunar U2 2019	182.12	178.4	182.8	182.3	131.8	185.1	183.7	186.6	179.6	181.3	181.7	177.7
Grad ardere lunar U1 2018	167.64	167.5	166.4	169.5	167.8	171.6	166.5	168.3	167.5	167.7	167.7	167.7
Grad ardere lunar U2 2018	182.1	181.6	179	178.6	181.9	182.4	181.2	180.4	181	180.2	181.8	181.8

Cumulated 2020: 91	Expected 2020	Cumulated 2019: 91,52	Expected 2019	Cumulated 2018: 92.37	Expected 2018: 93

Operational results - FCN PITESTI -



	2019	2020	2021	CUmulat 2019 - 2021
Achieved production (no. of fuel bundles)	11200	10800	11000	33000
No. of defects	1	0	0	1
Defect rate	0.009%	0.000%	0.000%	0.003%

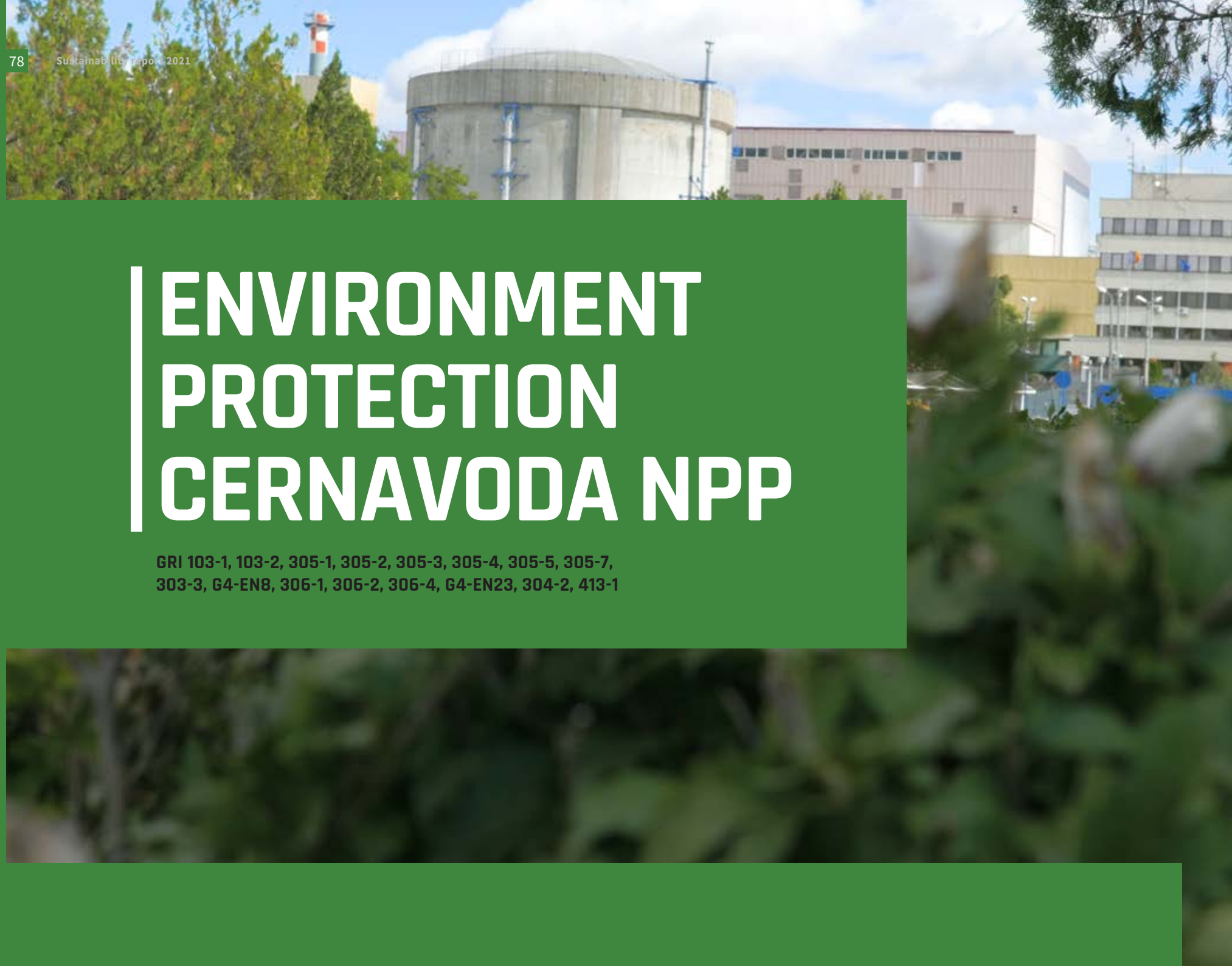
The malfunction rate relates to the manufactured quantity and the manufacture year of the FC notified as suspicious/non-operational.

14 ENERGY CONSUMPTION REDUCTION

GRI 302-4

CNE Cernavoda and FCN Pitesti are implementing the WoL project for Reducing energy waste, by applying technical solutions for the purpose of reducing useless energy consumption for the equipment from the informational infrastructure.

- Creating OUs on servers for the management of equipment;
- Creating policies and connections on servers, for ordering equipment;
- Configuring equipment by categories:
    - Workstation
    - Desktop
    - AIO
- Developing a WoL package messaging server for the data network;
- Generating WoL messages to OU stations;
- Configuring Security equipment for managing traffic through VPN;
- Effectiveness: out of 24h, the stations will remain on for 8h + operational demand through VPN; after 30 minutes of inactivity, the workstation will enter the Sleep mode and will await the WoL message in order to go into the PowerOn state.



ENVIRONMENT PROTECTION CERNAVODA NPP

GRI 103-1, 103-2, 305-1, 305-2, 305-3, 305-4, 305-5, 305-7, 303-3, G4-EN8, 306-1, 306-2, 306-4, G4-EN23, 304-2, 413-1

SNN / Cernavoda NPP promotes **the rational use of energy and natural resources,** by ensuring balance between environment, energy and economy.

Cernavoda NPP has established and implemented **specific requirements leading to the mitigation/removal of any potentially negative impact on the environment,** as a result of the performance of the activities of the plant.

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ENVIRONMENT PROTECTION CERNAVODA NPP

GRI 103-1, 103-2, 305-1, 305-2, 305-3, 305-4, 305-5, 305-7, 303-3, G4-EN8, 306-1, 306-2, 306-4, G4-EN23, 304-2, 413-1

Commitment for monitoring the environment footprint

SNN / Cernavoda NPP promotes the rational use of energy and natural resources, by ensuring balance between environment, energy and economy.

We consider that the used technologies, products and equipment that are purchased to fulfill the acceptability criteria in relation to the minimum technological impact on the environment and, within the limits of the obligation to maintain the design configuration of the nuclear power units, in the category of environmentally-friendly products and materials, with a low energy impact during the entire lifecycle.

It prevents the impact on the environment, and this relates both to its own operating activities and to those of its business partners.

This commitment is translated into:

- Integration of the sustainable development concept into projects and investments;
- Compliance with the national and community legislation and with the authorizations, protocols and agreements;
- Continuous improvement of the environment performance.

COMMITMENT FOR IMPLEMENTING THE ENVIRONMENT MANAGEMENT SYSTEM

The environment policy is part of the integrated policy of Cernavoda NPP. The environment management process is developed and applied by the Cernavoda NPP to ensure the protection and control of the environment during the performance of activities with direct or indirect potential environmental impact.

Cernavoda NPP has established and implemented specific requirements leading to the mitigation/ removal of any potentially negative impact on the environment, as a result of the performance of the activities of the plant.

The requirements set by the Cernavoda NPP derive both from the application of the regulations specific to the nuclear field and the applicable environmental legislation and from the voluntary adherence to the requirements of the ISO 14001: 2015 standard and to Regulation (EC) 1221/2009 on the voluntary participation of organizations in a Community eco-management and audit scheme (EMAS).

The conclusions of the annual audits carried out by the certification body demonstrate that we have a functional environmental management that is part of the organization’s integrated management system, which is continually improving, and it is aligned with international environmental and population protection requirements. The management of Cernavoda NPP pays particular attention to the aspects of communication and transparency towards all stakeholders: staff, population, local authorities,

national authorities, NGOs, media, aiming to create and maintain a realistic picture, based on facts and concrete data that will strengthen the positive characteristic of nuclear energy given the insignificant impact on the environment.

Risks associated with the conduct of activities are identified, evaluated, recorded, and measures are provided to prevent / minimize their occurrence by implementing a risk management process.

Cernavoda NPP implements and maintains a deep defence concept, which includes technical and procedural barriers to prevent and mitigate the effects of accidents, response to emergencies, taking into account equipment-related and human performance initiators, as well as credible severe external conditions (earthquakes, floods, bad weather, etc.) that may affect the operation of the plant.

Cernavoda NPP has established clear principles underlying the performance of activities that might have direct or indirect impact on the environment.

Environmental protection at Cernavoda NPP has been and is a permanent and responsible concern of all staff. Cernavoda NPP has established and implemented specific requirements leading to the mitigation of the impact on the environment, as a result of the performance of the activities of the plant.

Details of activities and results/ environmental performance are contained in the document "Environmental Statement" available to the public on the SNN website.

Currently, the Cernavoda NPP Branch owns certifications for environment protection system, as follows:

(i) The environment authorization for S.N. Nuclearelectrica S.A. - NPP Cernavoda branch - Unit 1 and Unit 2 of the Nuclear Power Station of Cernavoda issued by Government Resolution no. 84/15.02.2019, published in Official Gazette no. 152/26.02.2019. The Authorization covers all the assets and activities related to the operation of NPP Cernavoda Units 1 and 2, including both the nuclear component of the plant ant the classic one.

(ii) Authorization regarding the greenhouse gas emissions no. 38/2021, issued by the National Agency for Environment Protection for the period 2021 - 2030 which states that the start-up thermal plant, the diesel groups and the motor pump for the fire extinguishing system fall under the legislation regarding the reduction of greenhouse gas.

(iii) Water Management Authorization no. 72 of 06.09.2021, amending Authorization no. 58/01.07.2021, regarding: "Water supply and discharge of used water for U1 and U2 at CERNAVODA NPP" (valid until 30.06.2026), issued by the "Romanian Waters" National Administration.

(iv) Water Management Permit no. 230/December 4th, 2019 issued by “Apele Romane” National Administration on “Cernavoda Spent Fuel Storage Facility (DICA)” valid until June 30th, 2022. By means of this permit the “Apele Romane” National Administration gave the Company the right to use hydraulic structures and receptors for drainage of rainwater from the surface Repository Spent Fuel and evacuate rainwater Valley Cismelei, provided that quality indicators related to the presence of radioactive elements comply with the limits set by CNCAN.

The Company holds certificates on the environmental management system, as follows:

a) Certificate no. 56 on the Environment Management System of SNN - Cernavoda NPP Branch for the production of electrical and thermal energy, using nuclear resources and support and related activities, according to the provisions of standard SR EN ISO 14001:2015 (ISO 14001:2015), issued by IQNet and SRAC on May 7th, 2019 and valid until April 24th, 2022.

b) EMAS registration certificate no. RO-000017, registration date October 16, 2021, expiry date October 16, 2024

c) Certificate no. 402 on the occupational health and safety system according to ISO 45001:2018, recertification date: May 07, 2019, date of the last update: July 06, 2021, valid: April 24, 2022

The impact of the operation of the NPP on the environment is constantly monitored and reported in accordance with the requirements of the operation and environment authorizations. Cernavoda NPP observed in 2021 the limits for pollutants set in the environmental permits.

Managers' commitment on the level of the environment policy

- The responsibility of implementing a Management System according to the legal requirements and the CNCAN norms for Nuclear Management Systems and voluntarily integrates the requirements from management standards ISO-9001, ISO-14001, ISO-45001, ISO-17025, ISO-27001, including the requirements of the EMAS Regulations on the environment and audit community management system.
- Cernavoda NPP is determined to comply with nuclear excellency standards and is committed to continuously improve the performance of the organization by comparing it to the highest-performing nuclear power stations in the world.
- Any activity within Cernavoda NPP takes place only based on the approved documents which integrate the requirements from the applicable laws and standards. Any deviation from the documents of the management system is promptly reported, recorded and assessed in order to identify the causes and order the necessary measures.
- Risks associated with the conduct of activities are identified, evaluated, recorded, and measures are provided to prevent / minimize their occurrence by implementing a risk management process.
- Cernavoda NPP implements and maintains a deep defence concept, which includes technical and procedural barriers to prevent and mitigate the effects of accidents, response to emergencies, taking into account equipment-related and human performance initiators, as well as severe external conditions (earthquakes, floods, bad weather, etc.) that may

affect the operation of the plant.
- Nuclear safety and the safety of population, personnel and environment takes priority over the production aspects.
- Units are operated by strictly complying with the requirements form the operating authorizations and within the limits and conditions imposed by OP&P and the other documents approved by the authorities, any accidental violation is analyzed in detail and reported to CNCAN.
- Communication with regulatory authorities is open and based on trust.
- In order to carry out its activities, the company will only use employees who are trained, qualified and, as the case may be, authorized according to the requirements from the regulatory documentation.
- Cernavoda NPP makes sure that it has the necessary funds and resources in order to achieve high performance in all fields and commits to their efficient management.
- Cernavoda NPP makes sure that it has the necessary funds in order to improve or purchase high-performance technologies in order to prevent environment pollution and maintain clean environment.
- Cernavoda NPP commits to continuously improve the environment performance and comply with the obligations resulted from the applicable authorizations and legislative acts.
- Cernavoda NPP ensures the implementation and maintenance of the processes implemented for employees to be consulted and involved on all levels and for all the applicable functions, and for the employee representatives for development, planning, implementation, performance assessment and actions for improving the occupational health and safety management system.
- Cernavoda NPP pays great attention to the implementation of all the necessary measures for preventing major accidents in which hazardous substances are involved.

CONSULTING ENVIRONMENT STAKEHOLDER CATEGORY

The nuclear energy field has always been under the scrutiny of non-government organizations, because of the potential negative impact on the impact which a nuclear accident can have, by releasing radioactivity. The nuclear field is always regulated and inspected, and under the careful supervision of NGOs, inspection authorities, government organizations and the public. For this reason, Cernavoda NPP has always been encouraged to implement the newest standards in the field, in order to prove the care for the environment and for the public.

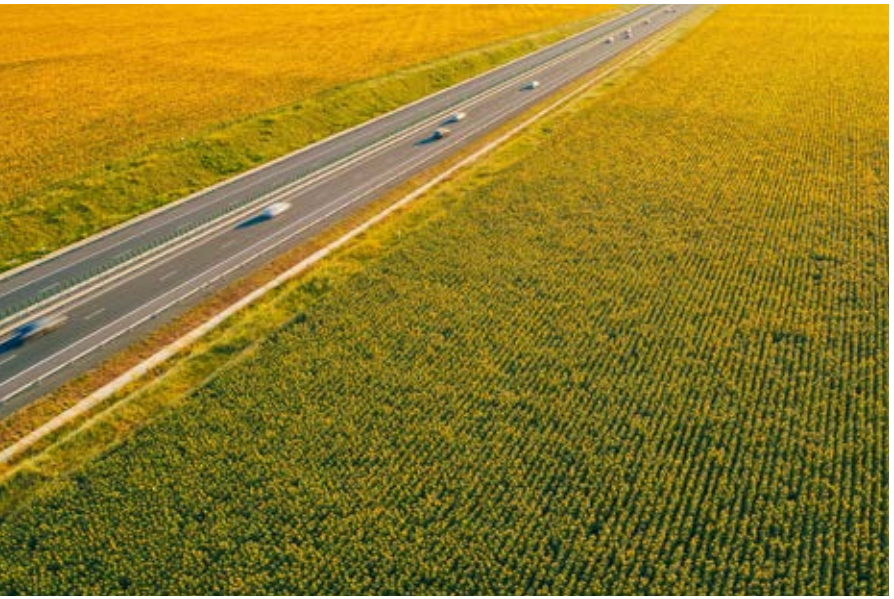
The most important stakeholders, in relation to Cernavoda NPP, are:

1. Government, Parliament, Ministries, Central authorities, Local authorities, Regulatory and inspection authorities. Cernavoda NPP is expected to comply with the legal requirements (namely, compliance obligations from authorizations, protocols, approvals, etc. or punctual requirements of the authorities) and to operate the nuclear power plant within the limits and conditions imposed by the signed authorizations or protocols. Cernavoda NPP is also expected to deliver under conditions of safety and security the quantity of energy that is estimated to be delivered, in order to contribute to ensuring the energy security of Romania;

2. Business partners (energy clients, energy carriers, consumers). Cernavoda NPP is expected to produce electricity and thermal energy by complying with all the legal requirements in the field of environment protection, by the voluntary implementation in its own operational system of the newest standards in the field of environment and occupational health and safety, making them trust that Cernavoda NPP is a reliable business partner. All the agreements signed with them regarding environment protection become compliance obligations (e.g., environment agreements with contractors, protocols, etc.).

3. NGO, Public, Local community, External organizations (WANO, INPO, etc.). The organization is expected to operate by ensuring the protection of the environment and of the general population, and these organizations need to be informed about the activities carried out by Cernavoda NPP, by complying with all the legal requirements in the field of environment protection. The aforementioned expectations are, for Cernavoda NPP, compliance obligations towards these entities. They also expect to be periodically informed on the environment performance, to be consulted in relation to future projects, to be consulted in the authorization process, according to the granted rights and the Aarhus Agreement and the legislative framework regulated on a national level. They expect to receive answers to their requests for information and concerns expressed via the channels used for communicating with SNN/NPP by the information centers, public relations departments and the locally organized advisory committee.

4. NPP employees, contractors. They expect their work to be acknowledged and rewarded according to their expectations in relation to the demanded performance, and they need a safe and healthy work environment. All the agreements signed with them regarding environment protection become compliance obligations (e.g., environment agreements).



The policy of Cernavoda NPP in the field of public relations is based on cooperation, honesty, trust and respect.

The main objective of Cernavoda NPP in the field of public relations consists of increasing the acceptance degree of nuclear energy, by earning the trust of the general population for this alternative of generating electricity. The development of relations with international organizations, with the organizations of the local and central administration, with the representatives of mass-media and those of the national and international civil society are also fields in which Cernavoda NPP acts in order to maintain a positive image of the company and increase the number of nuclear energy supporters.

In order to ensure a comprehensive approach of consulting the community, Cernavoda NPP has decided to supplement the community communication and consultation program by creating the Community Information and Consultation Council (CICC).

The purpose for which CICC was created is to identify the problems, concerns and interests of the community and provide to Cernavoda NPP consultation, advice, opinions on the expectations of the community in all the areas / fields of interest, in order to continuously improve the activities at the location and contribute to the welfare of the community.

Cernavoda NPP is also the largest employer in Cernavoda. The community also benefits from centralized heating with a thermal agent provided by the nuclear power station, the cheapest in the country.

The implementation of new projects at CNE represents opportunities for the people of the area (jobs, accommodation leasing and related services) The representatives of the local community deem that the operation of the nuclear power station and the new projects, due to these economic opportunities, have a positive social impact.

CARBON EMISSIONS AND THEIR INTENSITY

Producing electricity by nuclear technologies generate low quantities of CO2, derived from short periodical tests (approximately 2 hours / piece of equipment / month) in order to check the availability of the burning installation (diesel generators and boilers of the start-up power station), used only for supplying energy to the nuclear power units in case of class IV and III loss, as described in the GES Authorization of Cernavoda NPP.

Non-radioactive gaseous pollutants, generated from the activities at the location of Cernavoda NPP are:

- Emissions of CO2 from testing the backup and malfunction diesel generators, including other lower-capacity generators at the location and the testing of the boilers of the Start-up Thermoelectric Power Station,
- Car emissions from the fuel used by the vehicles for carrying people, commodities, etc.
- Car emissions from the fuel used by the machinery operated at the location for various works (cranes, excavators, trucks, etc.)

Both diesel generators and the start-up thermoelectric power station are equipment that is periodically tested, they only operate if the supply of electricity is lost, in order to ensure the necessary energy source for maintaining the functions for the security systems. In the normal operation/functioning configuration of the nuclear power units, this equipment is in standby. For this reason, the quantity of CO2 emissions is low at the location of the Cernavoda NPP, approximately 1,000 tons of CO2 a year. For example, 885 tons of CO2 was generated in 2020, and 1121 tons of CO2 was generated in 2021.

CO2 emissions from their testing are calculated according to the legislation on greenhouse-effect gas emissions by using the nationally-validated calculation methodology, based on the specific characteristics of the fuels (PCN and FE) and of the consumed quantities of fuel, and are reported to the National Environment Protection Agency according to the requirements from Greenhouse effect gas emission authorization no. 38/2021, with the verification and validation by the certified bodies and the annual compliance with the obligations of submitting EUA certificates related to the approved quantity of emissions.

USING HAZARDOUS CHEMICALS

Cernavoda NPP is an end-user, and hazardous substances and mixtures are purchased in order to be used in chemically controlling fluids from the circuits and equipment at the power station, for maintenance and repair activities, for laboratory tests and in activities/services of implementing the modifications/projects developed at the location. According to the requirements from the Environment Authorization of Cernavoda NPP issued by GR 84/2019 and the applicable national and community legislation, Cernavoda NPP has established and approved procedures on the management of chemicals that ensure rigorous quantity and quality inspections and the adequate monitoring and reporting to the certified authorities.

The administration and management of the chemicals used at Cernavoda NPP is based on:

- the national and community legislation (REACH, CLP regulations, etc.) in force, which regulates the conditions imposed on hazardous substances and mixtures, and the specific regulatory documents by categories of chemical substances/products,
- the approved requirements, limits and conditions from the authorizations and approvals in force issued by the regulatory and inspection authorities in the field of environment protection,

Chemicals that are purchased directly or by service contracts and used in activities within Cernavoda NPP are classified, packaged and labelled according to the legal requirements in force. We especially consider the adequate labelling by adequately marking all the information provided in the (EC) CLP Regulation and the international best practices (hazard icons, warning words, warning phrases (H) and precaution phrases (P), etc. which are taken over, as the case may be, from the containers in which hazardous substances and mixtures used on low-size containers for the activities from the technological installations of Cernavoda NPP.

The biocide products purchased directly or by service contracts are accompanied by the approvals issued by the Ministry of Health according to the legal provisions in force, quantitatively and qualitatively monitored under the same conditions provided in the procedures of Cernavoda NPP, related to the requirements and limits from the environment authorizations.

All the chemical products used within the activities at Cernavoda NPP, by direct purchase or by service contracts, are assessed/approved and included in the List of Approved Chemicals (Intranet app “Chemicals”). Within the activities at the NPP, only products that are found in this app are used.

For any operational package or work plan, in which substances or mixtures are used, the data sheet of the respective products is attached. Also, for the activities that use certain hazardous substances or mixtures in large quantities, the employees who will perform the activity are initially trained (IPEL) and the hazards and compensatory measures to be taken in case of accidental leaks are presented to them.

The emergency procedures related to the emergency plan at the location contain individual procedures for actions in case of leaks or contaminations with hazardous chemicals, as procedures that regulate the flow for notifying the authorities in case of reportable events. No reportable events have been recorded that can generate an impact on the environment and the population.

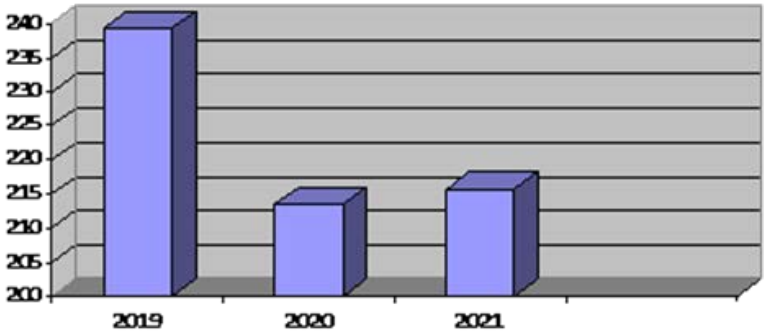
Comparisons between objectives and evolutions in time

The Cernavoda NPP branch implements an environment management system, certified based on the compliance with the ISO 14001 standard, and the first certification dates from 2005. As of 2018, the environment performance of Cernavoda NPP was also confirmed by the registration in the EMAS system, following the audits for the compliance with the requirements of the EMAS regulation and the national and community legislation in environment protection, and currently it is undergoing its second registration confirmed by the central environment authority. The environment declaration, as a fundamental document in supporting the EMAS registration, is updated on an annual basis and is posted on the website of the company, following the verification and acceptance by the certified bodies.

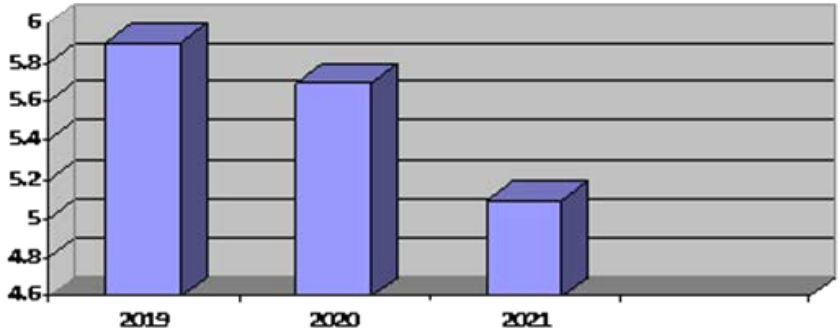
The environment statement of Cernavoda NPP states several indicators (representative for the environment performance of Cernavoda NPP) corresponding to the minimum requirements of the applicable standards and the specificity of the activities associated to the operation of nuclear power plants under safety and security conditions, among which the table below, which presents their evolution in the last three years:

Environment objective	Indicator	Indicator Measuring Unit	Unit	Target value 2022	2019	2020	2021
Sustainable water consumption	Using Danube water	m^3/MWh	U1+U2	239.82	239.22	213.47	215.78
Minimizing the generation of radioactive waste	Radioactive waste	cm^3/MWh	U1+U2	7.66	5.9	5.69	5.09
Air quality protection	Greenhouse effect gas emissions	g/MWh	U1+U2	344.53	301.59	85.54	108.03

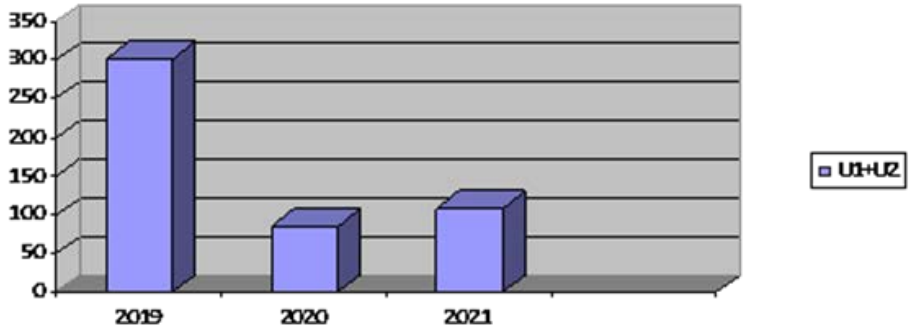
Danube water use



Minimizing the generation of radioactive waste



Greenhouse effect gas emissions



Significant information regarding the prevention and control of pollution

The construction of nuclear units provides technical, administrative and procedural means and measures for controlling and monitoring activities and equipment which can damage the personnel, the environment and the population, in order to eliminate and/or minimize the risks associated with environment factors.

The emergency plan of Cernavoda NPP, approved by the authority for regulating nuclear activities (CNCAN) contains procedures specific to certain types of emergencies and the response in case of an emergency, including for situations which can affect the environment and the population (chemical and radiological emergencies, etc.) and defining emergency teams with components and responsibilities that are adequate for the operational response

The technical measures regarding the prevention and inspection of pollutants mainly aim at the following:

- equipment for continuously controlling liquid and gaseous radioactive effluents
- in-depth defence - by physical barriers, preventing uncontrolled discharges in the environment (e.g. Active / inactive drainage system with controlled discharge, radioactive liquid effluent collection tanks for containing and monitoring the compliance with the approved discharge limits, containment filters, etc.)
- CNCAN-notified laboratories and adequate laboratory equipment for performing physical-chemical and radiochemical tests in order to monitor the environment
- materials and equipment for intervention in case of accidental leakage / pollution, including adequate protection and radiation-protection equipment by risk categories
- containers and other devices for the collection and containerization of spills and/or other substances and/or materials with the potential to affect the environment and personnel, as well as suitable waste storage containers by categories, conventional fuel tanks
- premises especially designed and authorized for the temporary storage of chemicals, materials of nuclear interest, conventional fuels, nuclear fuel, used fuel,

radioactive waste, non-radioactive waste (by category and class of storage), gas
- discharge collecting units (trafo, diesel tanks)

Procedural measures are represented by the set of procedures that regulate the use of chemicals, of inspecting radioactive and non-radioactive gaseous and liquid effluents, the management of non-radioactive waste, the management of radioactive waste, the inspection of radioactive materials and sources, the management of nuclear fuel, environment agreements with the contractors that provide services with potential environmental impact, emergency procedures, etc. These procedures take over the requirements, limits and conditions from the authorizations, approvals and protocols concluded with the regulatory and inspection authorities, as well as the applicable general and specific legislative requirements in the field of environment protection and radiation protection, establishing the operational procedures in Cernavoda NPP for all situations pertaining to the functioning/operation of nuclear power units: normal operation, abnormal situations, scheduled / unscheduled shutdowns, emergencies.

The administrative measures reflect the actions of the managers on matters of inspection, observation and guidance of the activities of the plant, and also the continuous assessment and reporting, both internally and to the inspection authorities, of all the results on environment protection, as derived from Environment and Operating Authorizations, and also from the Protocols concluded with local authorities and other competent inspection authorities.

Direct and indirect atmospheric emissions

The activities performed by Cernavoda NPP result in emissions of radioactive and non-radioactive gas effluents.

A. Non-radioactive gaseous effluents

Non-radioactive atmospheric emissions come from:

- burning fuels: results in CO2, powders, heavy metals, volatile organic compounds, etc.
- managing fuels: results in volatile organic compounds (COV).

It should be noted that the long-term impact of these radioactive emissions is insignificant, according to the environmental assessment studies conducted by independent third parties for Cernavoda NPP.

B. Radioactive gaseous effluents

The most important radionuclides analyzed at Cernavoda NPP are as follows:

- Tritium: A hydrogen isotope, emitting beta particles of very low energy. Its nucleus is composed of one proton and two neutrons.
- Carbon-14: radiocarbon or radioactive carbon is a radioactive isotope of carbon with an atomic nucleus containing 6 protons and 8 neutrons. Emits low-energy beta particles.
- Noble gases: Fission or activation products, with the chemical structure of noble gases. Mainly isotopes of xenon, Argon, Kripton.
- Aerosols: solid or liquid radioactive particles of very small size (between 0.01 and 100 microns), suspended in a gas.
- Iodine: Radioactive isotopes of iodine are fission products. The main isotope which is present in emissions is Iodine-131.

This control guarantees a low impact on the environment and the safety and health of the population. When calculating the emission limits in the atmosphere, the food chain and possible concentration phenomena in some species are taken into account.

Derived emission limits are the maximum allowed or authorized quantities for radionuclides that are released into the air, so that neither the health of the population nor the environment is affected.

The main pollutants found in the exhaust air from the Reactor Building and the Services Building, namely tritium, solid particles, iodine and noble gases, are taken over by the plant's ventilation systems and are properly treated by D2O vapor recovery systems and ventilation and air filtration systems. The air filtration process ensures the limitation of the discharges into the environment, within the limits approved by the CNCAN nuclear regulatory authority.

Contaminated or potentially contaminated air is collected by ventilation systems and is discharged through a common exhaust stack after filtration and monitoring. The monitoring of radioactive gas discharges is performed by continuously monitoring the exhaust air through the power station stack with the help of the Gaseous Effluent Monitor. Derived Discharge Limits for each radionuclide have been established for discharging potentially radioactive air. These limits were approved by the regulatory authority in the field, CNCAN.

Management, use and protection of natural resources (water, soil, etc.) and biodiversity protection

COOLING WATER

The source of cold water for the technological cooling water circuits of the Cernavoda NPP is the Danube River - race I of the Danube - Black Sea Canal, by the derivation canal.

The water captured through a free-level connection located on the derivation canal of the Danube-Black Sea Canal - diversion I, reaches the NPP distribution basin, from where, after mechanical cleaning in the U1 and U2 Sieve Room and pumping through the U1 and U2 Pump Room, ensures the cooling of the turbine condenser in Unit 1 and Unit 2, respectively, as well as of some heat exchangers in the two nuclear units.

The water taken from the Danube never goes into the primary circuit (the nuclear section of the power station).

Volumes and water flows authorized for the operation of the 2 units under permanent conditions, 365 days/year and 24 hours/day, according to the Water Management Authorization in force.

As the Danube River can provide the necessary flow rates for cooling, the operation of technological cooling water systems has been provided in an open circuit. Consequently, the input flow is equal to the output flow, and the water losses in the circuit are negligible. The water is returned to the Danube through the hot water canal (Seimeni discharge output), under normal operating conditions (98% of the Danube water returns to the river). At high Danube levels, the effect of taking over for Cernavoda is not felt. Cold water consumption for technological water circuits is strictly metered.

During the winter, a fraction of the hot water flow (25% ÷ 70%) is discharged in the NPP distribution basin, in order to prevent the formation of needle ice, by notifying the National Administration “Romanian Waters” / Dobrogea-Litoral Water Basin Administration without thermally influencing the water from the diversion canal and respectively race I of the Danube - Black Sea Canal.

According to the Water Management Authorization (GMS) the water temperature at the outlet of the plant must meet the following conditions:

- in race II of the Danube - Black Sea Canal, it will be maximum 10°C above the water temperature of the CDMN race I, so that the water temperature in this race, downstream of the canal discharge point, will not exceed 25°C.
- In the Danube, it will be maximum of 10°C above the temperature of the Danube river water, but not higher than 35°C, after crossing the mixing zone.

Cernavoda NPP has its own Chemical Water Treatment Plant (STA) which produces the demineralized water that is necessary for the technological process of producing electricity and heat. STA also neutralizes the technological water that returns to the emissary.

THE SUPPLY WITH DRINKING WATER AT THE LOCATION OF CERNAVODA NPP is ensured as follows:

- from underground, own sources, by in-depth drilling. From the deep wells (FJ1 and FJ2), in the CNE area, the water is extracted with submersible pumps and transported to the Drinking Water Treatment Plant (STAP) at the site.
- from the regional system of supplying drinking water to Cernavodă (operator S.C. RAJA S.A. Constanţa).

Cernavoda NPP holds Sanitary Operation Authorization no. 42 / 20.02.2012 issued by the Public Health Division of Constanţa, for FJ1, FJ2 and the Treatment and Chlorination Stations, an authorization that is annually renewed, by demonstrating the compliance with all its conditions.

RADIOACTIVELY CONTAMINATED USED WATER

The system for collecting radioactively contaminated wastewater is designed for collecting all the water-based radioactive waste resulted from the operation of the process systems of the nuclear power station and from the maintenance, review and decontamination operations, followed by the discharge into the discharge canal of the water from the condensers, by complying with the limits regulated for concentrations of radioactive materials when discharged into the emissary. The discharge is performed intermittently in the cooling water from condensers.

In order to ensure the adequate inspection and recording of radioactive discharges, the discharge of radioactive liquid effluents will be as follows:

- Before the contents of a tank are discharged into the cooling water canal of the condenser, the contents of the tank are recirculated in order to ensure good homogenization, and a representative sample is taken, to be measured in the laboratory, in order to determine the gamma and tritium radioactivity content.
- Depending on the results, the shift manager dispatch operator authorizes the discharge, or the water is contaminated.
- During discharge, the Liquid Effluent Monitor (MEL) monitors the global gamma activity that is being discharged and stops the discharge in the event of an unexpectedly large activity.

Annually, the dosimetry laboratory of the plant measures approximately 1400 samples of water discharged from the power station.

The results of the weekly radioactivity monitoring are centralized and compared with the administrative limits of Cernavoda NPP and with the undertaken environmental objectives.

In all the years of commercial operation (25 years U1 and 14 years U2), the discharges of radioactive liquid effluents were lower than the Derived Discharge Limit approved by the authorities and below those established in the environment objectives of Cernavoda NPP by implementing the Environment Management System.

WASTE MANAGEMENT

The activities carried out at Cernavoda NPP result in the following waste categories:

- Radioactive waste
- Non-radioactive waste

NON-RADIOACTIVE WASTE

Waste management requirements are set by general legislative acts (environment protection law, law on selective collection in public institutions, law on waste conditions, government resolution of waste classification) or specific to certain types of waste (e.g., for electric and electronic equipment waste, for capitalizable waste, for used oil, etc.).

By separate collection, the waste is easier to classify and hand over to the authorized companies with which Cernavoda NPP has concluded contracts for waste recovery and/or disposal. Another advantage of separately collecting waste is the possibility of capitalizing recyclable waste.

The biggest environment benefit of recycling is related to the conservation of energy and natural resources, to the prevention of pollution by using materials resulted from recycling in the manufacturing process, and less of the primary, raw ones.

A special category of waste is the waste from building works and demolitions, not contaminated with hazardous products. This waste is not taken to the landfill of the city but is used to restore roads or consolidate lands affected by landslides.

Also, chemicals are purchased in necessary quantities so as to avoid the formation of stocks that will expire and then be classified as waste.

The Cernavoda NPP has also introduced the obligation to selectively collect waste assimilated to household waste: paper, plastic, metal and glass, a requirement according to Law 132/2010. In this regard, since 2010, bins for the separate collection of wastepaper / cardboard, plastic, metal, glass have been purchased. They were placed in offices, in meeting rooms and in hallways.

The non-radioactive waste produced in the plant is collected by the operating personnel at the manufacture location in specialized containers for each type of waste. In this regard, the premises at the plant are provided with specific containers for each type of waste, in order to allow their selective collection.

The transfer of non-radioactive industrial waste to authorized recovery / disposal / storage units is carried out only in virtue of a contract with authorized economic agents, according to the law, for this operation and the respective waste category.

In case of hazardous waste, the carrier is required to have an accident response plan in order to limit the impact of the waste on the environment (the effects of accidental pollution), as required by law.

Cernavoda NPP, as a generator of waste resulting from its own activities, has the obligation to provide information and data required by the competent authorities according to the legislation on environmental protection and specific legislation on waste management.

At Cernavoda NPP, measures are implemented for reducing the quantity of waste.

An example of this is the introduction of the obligation to scan documents and their electronic transmission, by email, thus significantly reducing the amount of paper being used. Also, the electronic signature was introduced in 2020, as a measure specific to the COVID-19 pandemic. Another example is replacing single-use plastic glasses with recyclable paper cups.

RADIOACTIVE WASTE

Management policies and principles observe the national and international requirements regarding radioactive waste. Cernavoda NPP has the facilities required for the intermediate storage of radioactive waste, in secure installations for the personnel, as well as for the population and the environment.

Radioactive waste is the result of day-to-day maintenance activities, repairs, scheduled or unscheduled power plant outages, and is managed completely separately from conventional waste.

The radioactive waste generated as a result of these activities is represented by:

- solids (plastic, cellulose, glass, wood, purification filters, filters from ventilation systems etc.);
- organic liquids (oil, solvent, scintillator liquid);
- (flammable) organic solid-liquid mixtures;
- watery solid-liquid mixtures (slurry);
- solid and liquid chemical waste.

Their collection and sorting is carried out by qualified personnel, following rules and criteria specified by procedures. The sorting activity applies to all types of radioactive waste.

For each type of radioactive waste (solids, organic liquids, mixtures of solids and organic liquids, mixtures of solids and watery liquids and solid chemicals / liquids) various criteria are followed:

- source of origin (service building, reactor building)
- type of material (plastic, cellulose, metal, wood, oil, solvents etc.)
- content of radionuclide (short, medium or long lifetime)
- contact dose rate (weak active, medium active).

After the sorting, radioactive waste is stored in special stainless steel containers.

Organic liquid radioactive waste, (flammable) organic solid-liquid mixtures are stored in the service building and is subsequently solidified in order to eliminate potential flammability hazards.

Radioactive watery solid-liquid mixture waste (slurry) is stored in stainless steel barrels in the service building, and are subjected to a tarter treatment process for drying by methods of removing the water content.

Radioactive solid and liquid waste is kept in the service building in containers which are compatible with the chemical properties and are to be treated by authorized operators.

Radioactive waste management aims at identifying and controlling all radioactive waste produced and maintaining the generation of radioactive waste at the minimum practicable level.

The reduction of the volume of waste produced is achieved by compaction (using a hydraulic press), by applying treatment methods by burning radioactive solid waste that can be burnt and melting radioactive metal waste, by authorized external operators by the unconditional release of the waste from the authorization conditions of CNCAN.

The storage of solid or solidified radioactive waste is ensured throughout the period of operation of the power plant under optimum security and conservation conditions. The final disposal of these types of waste will only take place after the consolidation in solid, safe matrices, which would ensure that at least for 300 years these shall not have a negative impact on the environment.

The total volume of solid radioactive waste, for both units of NPP Cernavoda, generated in 2021, was 52.82 m3. In total, until the present, in 1996 - 2021, the total volume of solid radioactive waste, for both units, is of 1052.06 m3. The waste is stored within the protection fence of CNE Cernavoda, inside the Intermediary Storage for Solid Radioactive Waste.

CERNAVODA NPP'S POLICY FOR MANAGING THE FUEL USED

a) Wet storage in the used fuel pool of the unit for a period of minimum 6 years;

b) Dry storage for spent fuel in intermediate storage for a period of 50 years.

Spent Fuel Storage Facility ("DICA") is on the CNE Cernavoda site, transport being made on an internal road that allows maintenance of physical protection systems integrated.

The warehouse is gradually built, according to DICA Strategy for long-term development. To date, 12 MACSTOR 200 modules have been built.

ENERGY PERFORMANCE

In 2021, after transferring the Energy Manager to the direct subordination of Chief Eng. of DCL according to Resolution no. 4355 / 12.10.2020 for fulfilling the responsibility of Energy Manager and drafting the reports made to the Authorities and SNN, action plan U0/1/2-PA-20-0031 Implementation of an Energy Management Sub-process at Cernavoda NPP was implemented.

Thus, from the aforementioned action plan, actions were implemented during the last year, which consisted in carrying out a GAP analysis on the internal and European legislation and implementing the new legislative requirements in the Cernavoda NPP documentation. Actions # 3, 4, 5 and 6 were also implemented, which consisted in initiating and approving procedures for documenting this sub-process. The company initiated SI-01365-P104 Energy Management at Cernavoda NPP, PSP-P008-025 Manner of organizing activities regarding the production of thermal energy at Cernavoda NPP and reporting to authorities, PSP-P008-026 Manner of organizing activities regarding the production of electricity at Cernavoda NPP and reporting to authorities and PSP-Q008-007 Collecting, processing and reporting data and indicators for producing electricity and thermal energy.

MPC-18-031 Electricity forecast at CNE Cernavoda was also reviewed, a material that helps the people involved in this activity to understand and execute electricity forecasting routines at high standards.

In 2021, meetings took place on the electronic platforms (MS Teams and SKYPE) with Transelectrica UNO-DEN and Transelectrica OMEPA by which a useful exchange of information was performed, and the review of the Operating Agreement concluded between Cernavoda NPP and Transelectrica is considered for this year.

Also in December 2021, the Energy Manager participated with colleagues from the Technical Department in the National Symposium on Computer Science, Automation and Telecommunications in Energy, where he discussed with and established relations with companies in the field in order to exchange experience on energy management.

GREENHOUSE EFFECT GAS EMISSIONS IN CO2 EQUIVALENT TONS AND INTENSITY OF GREENHOUSE EFFECT GASES

Emissions of carbon dioxide from EU-ETS plants (backup and malfunction diesel generators, start-up thermoelectric station, diesel groups related to DICA, CCUA, access control gates, mobile diesel generators) within the system of selling greenhouse effect gas emission certificates, according to gas emission authorization no. 38/2021 and the related monitoring plan, are determined by calculation, according to the applicable legislation.

All Diesel generators and the Start-up Thermal Power Plant are equipment that is tested periodically, it only works continuously in emergency situations, and for this reason the amount of CO2 emissions is reduced at the Cernavoda NPP site. For example, in 2020, 885 tons of CO2 were generated, and in 2021, 1121 tons of CO2.

According to the EMAS Regulations, for greenhouse gases, the indicator "Greenhouse gas emissions" is calculated on an annual basis, which can be found in the Environmental Statement posted on the SNN website.

The indicator is calculated based on the CO2 emissions resulting from the diesel and CLU consumption of the EU-ETS CNE Cernavoda installations and is related to the net electricity production (g / MWh).

In the environment statement, Cernavoda NPP defined the following indicators:

- Danube water use. The indicator is calculated as follows: the volume of cooling water taken from the Danube in one year (m3) relative to the energy delivered by Cernavoda NPP in SEN (MWh).
- Radioactive waste. The indicator is defined as the volume of radioactive waste produced in a year compared to the net production of electricity.

IMPACT AND DEPENDENCIES ON THE NATURAL CAPITAL AND BIODIVERSITY

The Cernavoda NPP branch is located at a distance of over 1.8 km from natural monuments, protected natural areas, species or habitats of community interest. The location of the nuclear power station is not overlaid on community-interest protected natural areas.

The impact of the operation of Cernavoda NPP on the biodiversity in the area was analyzed in studies conducted in various stages, for the projects at the site. The conclusions of these studies were:

- since the two units of Cernavoda NPP became operational, no situation of radiological risk has been identified for the habitats and species of conservation interest in the protected natural areas;
- as a result of the implementation of all the measures for the correct operation of the Cernavoda NPP (U1 and U2) and for the monitoring of the environment, no radiological effects on the biota have been found so far;

The flora and fauna from the influence area of the Cernavoda NPP platform are not affected by the operation of the nuclear power station. The statement is supported by:

- environmental radioactivity monitoring programs implemented in the pre-operational and operational phase of Cernavoda NPP;
- studies on the impact of the operation of the Cernavoda nuclear power plant (U1 and U2) on the aquatic and terrestrial organisms in its area of influence, carried out in 2008-2012 and 2013-2016;
- the study for the adequate assessment of the environmental impact of Units 3 and 4 from Cernavoda NPP drafted in 2010 by INCDDD Tulcea;
- Level I and II environment balance sheet and report to the level I and II environment balance sheet for SNN S.A.- Cernavoda NPP Branch.

The study “Impact of the operation of the Cernavoda nuclear power plant on the aquatic and terrestrial organisms in its area of influence” (BIOTA study), which was conducted between 2008 and 2012 and continued between 2013 and 2016, did not show a significant impact of the Cernavoda NPP operation on the biota in the area.

The results and conclusions of the BIOTA Study are supported by the studies carried out for the renewal of the environment permit for SNN-Cernavoda NPP Branch, namely the “Environment Assessment Report, level II, for Cernavoda NPP”, conducted in 2017. The report was drafted based on the investigation plan and on the information provided by the Level II Environmental Report for the reauthorization of Cernavoda NPP Units 1 and 2, which consisted in investigations on the location of Cernavoda NPP and the area of influence of the plant, in order to ascertain the intensity of pollution by taking samples and physical-chemical and radiological tests and analyses. The determinations of the indicators of interest - sampling, preparation of samples, analyses and drafting the analysis reports - were performed by specialized laboratories.

ENVIRONMENTAL MONITORING PROGRAM AT CERNAVODA NPP

The Cernavoda Nuclear Power Plant has been developing socio-demographic studies since the early 1980s and has implemented environmental radioactivity monitoring programs.

The choice of the nuclear power plant site was done in line with the specifications of the Republican Nuclear Safety Norms, which provide both the factors to be taken into consideration when establishing the site in terms of nuclear safety, as well as the demographic criteria regarding the areas of exclusion and reduced population.

The factors that have been considered include, one the one hand, the physical characteristics of the site (seismological, geological, meteorological and hydrological), the socio-demographic and land use characteristics, on the other hand, and the reactor design features and the proposed operating mode (the use and maximum power level, nature and radioactivity inventory, technical norms and standards applied to the reactor design, nuclear security characteristics considered in the technical calculations of the facility and existing barriers in the release of radioactive materials into the environment).

In order to protect the population against the risk of exposure to radiation, around each reactor an exclusion area, with a radius of 1 km and a reduced population area of 2 km have been established.

For the most accurate estimation of the impact of the operation of the power plant on the environment, during the period 1984 - 1994 the pre-operational environmental monitoring program was carried out at the Cernavoda NPP. The measurements made within this program detected the environmental radioactivity changes that occurred following the Chernobyl accident in 1986. Starting with 1990, the values of radionuclide concentrations in the environmental factors returned to the normal values before 1986.

MONITORING THE RADIOACTIVITY OF ENVIRONMENTAL SAMPLES

The Nuclear Power Plant has implemented, starting with the commissioning of Unit 1, an environmental radioactivity monitoring program, based on the requirements of the national legislation and internationally validated practices in the nuclear industry. In compliance with international practices, the plant built and fitted its own Environmental Radioactivity Control Laboratory and established a network of sampling points or positioning continuous monitoring stations, in different locations within a radius of 30 km around the plant.

The routine environmental monitoring program elaborated at Cernavoda NPP was approved by CNCAN in 1995, after it was audited by AIEA [International Agency for Atomic Energy]. The implementation of this program commenced in March 1996.

In terms of the content of radioactivity, the following samples are collected and analyzed: air (deposition on particulate filters and iodine, water vapor in the air, carbon-14 in the air), water (Danube water, water infiltration into the soil, deep water, water from the Danube - Black Sea Canal, rainwater, drinking water), soil, spontaneous vegetation, fish sediment, meat (chicken, beef, pork), milk, vegetables (salad, spinach, radishes, cucumbers, tomatoes, green onions, peppers, cabbage, potatoes, green beans, eggplant), cereals (wheat, corn), fruits (strawberries, cherries, apricots, peaches, grapes), eggs, wet atmospheric deposits, DTLs (thermoluminescent dosimeters that measure the integrated dose range for 3 months).

Approximately 1200 samples from 115 locations are collected annually, in order to determine the radioactivity of the environment in the Cernavoda NPP area.

A network of 62 monitoring points with thermal-luminescent dosimeters (DTL) for the measurement of the gamma dose has been established around the power plant and across an area with a radius of 30 Km around the plant. Gamma spectrometry analyses, global alpha/beta analyses and specific assays for the detection of tritium and carbon C-14 were carried out through liquid scintillation spectrometry. Food samples for the analysis are procured from local producers or from the agri-food market in Cernavoda, Seimeni, Medgidia, Satu Nou. The results of the environment's radiological monitoring are compared with the results of the pre-operational environmental monitoring program carried out in the period 1984 – 1996. Up to now no changes in the radioactivity of the environment in the area of Cernavoda city have been detected, in relation to the period prior to the commissioning of the nuclear unit. The Environmental Control Laboratory of Cernavoda SNN is notified by CNCAN through Appointment certificate no. NPP LCM ODN 07/2018 valid until 08.11.2021, as Dosimetric Notified Body and Appointment certificate no. NPP LCM LI – 03/ 2019 valid until 31.05.2022 as a Testing Laboratory on environmental sample measurements.

In order to demonstrate the credibility of the environment measurements, the Environmental Control Laboratory participates in international intercomparison exercises.

The Environmental Control Laboratory is a member of the PROCORAD Association of France (Association for Radiotoxicological Measurements) and has been participating with good and very good results in intercomparison exercises for radioactivity measurements since 2002.

In 2005, the Environmental Control Laboratory was nominated by CNCAN as a member of IAEA's ALMERA Network (Analytical Laboratories for the Measurement of Environmental Radioactivity) and since 2006 it has participated annually in the performance tests organized within the network.

The Environment Control Laboratory participates in inter-comparison exercises periodically organized by the European Commission by the Joint Research Center laboratories.

LIQUID EFFLUENT PHYSICAL-CHEMICAL MONITORING PROGRAM

Cernavoda NPP is authorized (through Water Management Permit) to use water from the Danube River as cooling water, through the Danube - Black Sea Canal, pool I. The hot water is usually returned to the Danube via the Seimeni Canal or, by way of exception, to the Danube-Black Sea Canal, pool II.

For the chemical control of water in the secondary circuit of NPP, U1 and U2 specific chemicals are being used: hydrazine, morpholine, cyclohexylamine for the chemical conditioning of systems, hydrochloric acid, sodium hydroxide, ferric chloride, lime, Praestol and Nalco in the technological process for obtaining demineralised water in the Chemical Water Treatment Plant and bio acid as control/removal agent for the macrobiological load in the technological process water.

The program for the physical and chemical monitoring of the liquid effluent was designed and applied to check and control the quality of the water discharged from Cernavoda NPP and to demonstrate the observance of the requirements of the Environment Authorization and Water Management Authorization.

According to this program, all chemicals used for the chemical conditioning of the power plant systems are monitored in the liquid effluent.

Also, the treatments with control agent of the macrobiological load are carried out locally, only on the technological process water circuit, having the purpose of limiting the fixation and growth of shells in pipelines and equipment.

The chemicals used to obtain demineralised water are monitored and neutralized prior to the discharge into the effluent.

The concentrations of all these substances in the liquid effluent fall below the authorized discharge limit.

Studies have been conducted regarding the thermal impact of the discharge of hot water into the Danube and the Danube - Black Sea Canal and the temperature of the hot water discharged is measured so that it is within the limits set in the Water Management Authorization.

The non-radioactive gaseous effluent physical-chemical monitoring program is designed to allow for the determination of the concentrations of pollutants (other than radioactive ones) in environmental factors. This requirement is specific only to periods of continuous operation longer than 5 days for the stacks of the Stoppage Thermal Power Plant (according to the Protocol concluded with APM Constanta). The following pollutants are ascertained in the impact area of the emissions:

carbon dioxide, sulphur oxides, nitrogen oxides, suspended dust, etc. More information can be found in the previous chapters on greenhouse gas emissions.

RADIATION PROTECTION PROGRAM

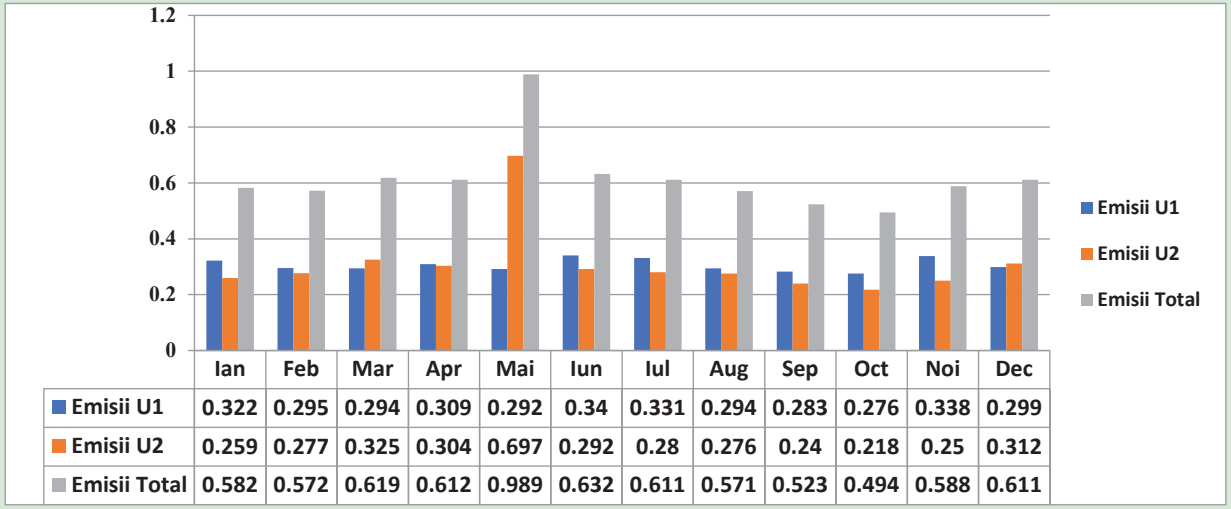
The main goal of the control process on the exposure to radiation is to keep exposure as low as reasonably achievable (the ALARA principle).

The efficiency of the NPP Cernavoda's policy regarding the ALARA principle is being monitored by determining, controlling and periodically reporting the performance indicators based on internal and external operational experience.

The performance indicators indicate the efficiency of the Radiation Protection programs in optimizing the exposure to radiations.

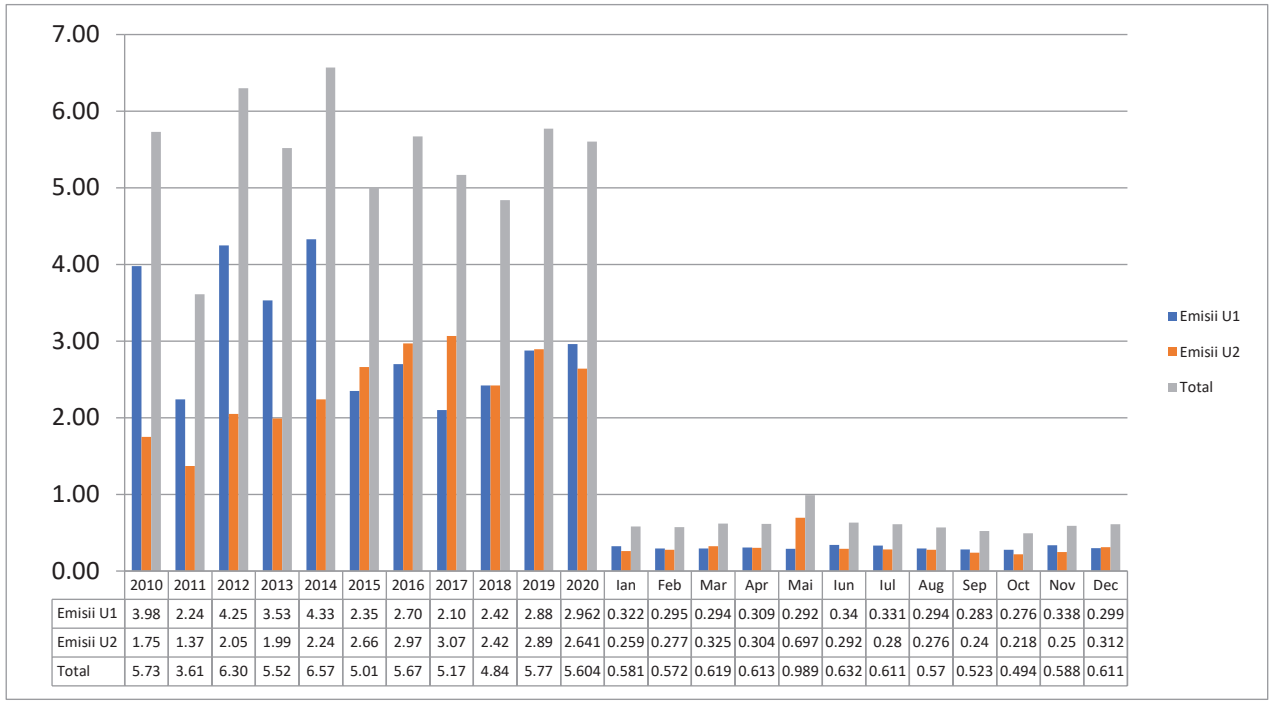
The radioactive emissions in water and air were kept quite below the authorized limits for the Power Plant. The actual annual dose for a person in the critical group, due to the radioactive emissions in the environment (Unit 1 and Unit 2) was 0.0074 mSv in 2021, whereas the annual average dose received by a member of the public in the natural background is of 2.4 mSv. More detailed information on the radiological impact are provided by the SNN report - "Environmental Report".

Radioactive emissions in the environment U1 + U2 in 2021 (microSv)



	Ian	Feb	Mar	Apr	Mai	Iun	Iul	Aug	Sep	Oct	Noi	Dec
Emisii U1	0.322	0.295	0.294	0.309	0.292	0.34	0.331	0.294	0.283	0.276	0.338	0.299
Emisii U2	0.259	0.277	0.325	0.304	0.697	0.292	0.28	0.276	0.24	0.218	0.25	0.312
Emisii Total	0.582	0.572	0.619	0.612	0.989	0.632	0.611	0.571	0.523	0.494	0.588	0.611

Radioactive emissions in the environment U1 + U2 (2010-2021) (microSv)



	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	Ian	Feb	Mar	Apr	Mai	Iun	Iul	Aug	Sep	Oct	Nov	Dec
Emisii U1	3.98	2.24	4.25	3.53	4.33	2.35	2.70	2.10	2.42	2.88	2.962	0.322	0.295	0.294	0.309	0.292	0.34	0.331	0.294	0.283	0.276	0.338	0.299
Emisii U2	1.75	1.37	2.05	1.99	2.24	2.66	2.97	3.07	2.42	2.89	2.641	0.259	0.277	0.325	0.304	0.697	0.292	0.28	0.276	0.24	0.218	0.25	0.312
Total	5.73	3.61	6.30	5.52	6.57	5.01	5.67	5.17	4.84	5.77	5.604	0.581	0.572	0.619	0.613	0.989	0.632	0.611	0.57	0.523	0.494	0.588	0.611

Dose restriction for Cernavoda NPP = 100 microSv/year/unit + 50 microSv/year DICA
Legal limit for the population (according to the Fundamental Radiation Protection Norm NSR01) = 1,000 microSv / year

INFORMATION REGARDING THE INDIVIDUAL DOSE MONITORING AND CONTROL (FOR PROFESSIONALLY EXPOSED PERSONNEL)

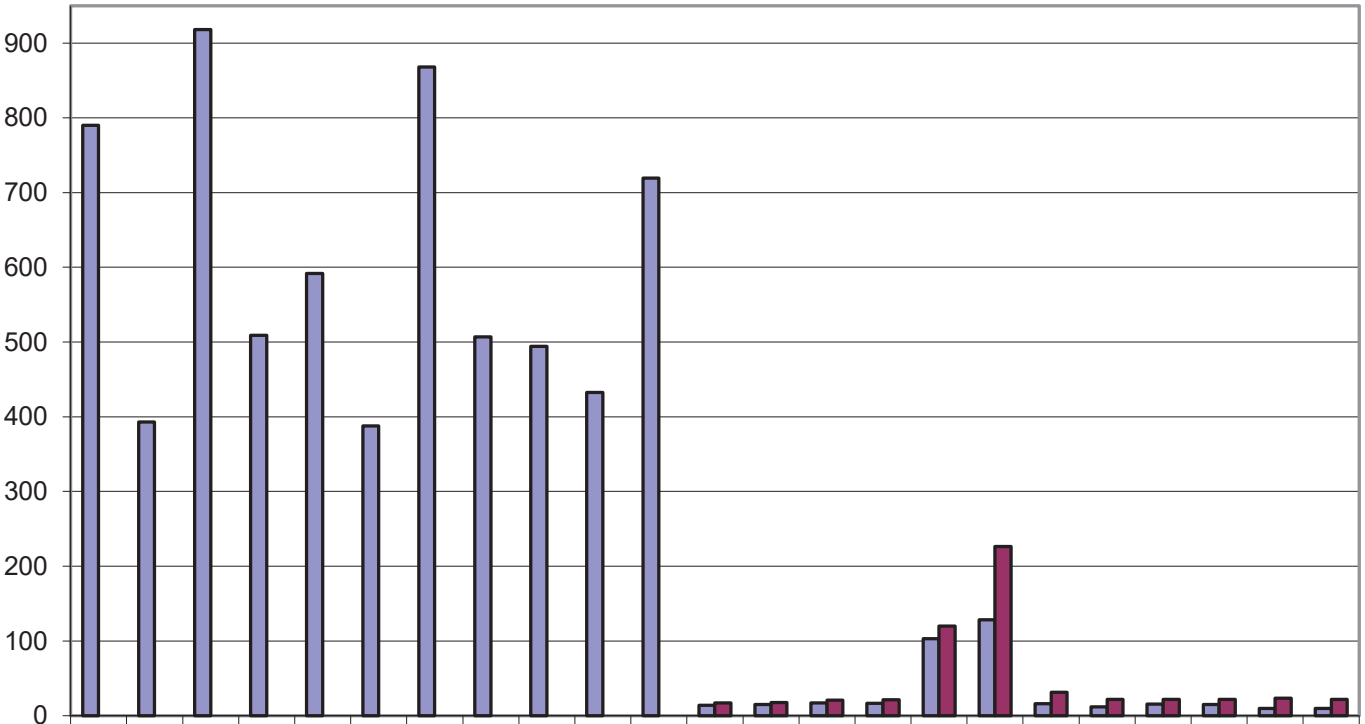
In 2021, the achieved collective dose was of 371.51 mSv/employee, the annual average dose for employees with recordable doses was of 0.53 mSv, and the individual maximum dose was of 7.77 mSv. The legal limit for the effective dose for the professionally exposed workers is of 20 mSv/year, and the administrative limit at NPP is 14 mSv/year. Neither of these limits was exceeded.

At the end of 2021, the internal collective dose was of 74.56 mSv/employee, representing 21% of the total dose within the Power Plant.

The Radioprotection Department periodically elaborates and sends reports on the evolution of the collective doses and of the ALARA performance indicators, thus raising the involvement of the personnel of the Power Plan in the control and optimization process for the professional exposure to ionizing radiation. The achievement of these goals is monitored via the ALARA process and the ALARA committees operate with excellent results. With an average dose per unit of 185.79 mSv/employee, Cernavoda NPP remains, according to the information to date, one of the highest performing power plants in the CANDU group.

No.	ALARA Indicator	Measuring U	Value
1	Maximum legal limit of the individual dose	mSv/an	20
2	Maximum administrative limit of the individual dose	mSv/an	14

Collective dose per power plant, U1 + U2 (Om*mSv)



	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	Ian	Feb	Mar	Apr	Mai	Iun	Iul	Aug	Sep	Oct	Nov	Dec
Doza colectiva	790	393	918	509	592	388	868	507	494.03	432.6	719.51	13.79	14.98	16.95	16.66	102.98	128.35	16.04	11.61	15.77	15.04	9.72	9.65
Tinta												17.26	17.75	20.99	21.40	119.70	226.20	31.60	22.10	22.00	22.10	23.29	21.61

Waste management (recycling rates)
Radioactive waste

The total volume of solid radioactive waste, for both units of NPP Cernavoda, generated in 2021, was 52.82 m3.

Non-radioactive waste

For 2021, Cernavoda NPP had a contract only for part of the recoverable waste, and the following quantities were handed over for recovery: 19150 kg of paper waste, 264 kg of plastic waste and 50 kg of glass waste, 251.72 tons of iron waste.

Also, household waste takeover contracts were effective, and the following quantities were taken over: 279.70 m3 of household waste (from the Cernavoda NPP site), 26,196 tons of household waste (from the Constanta accommodation premises) and 355,171 tons of household waste (from the Cernavoda accommodation premises).

ENVIRONMENT PROTECTION FCN PITESTI

GRI 103-1, 102-2, 303-3, 304-2, 305-1, 305-2, 305-3, 305-4, 305-5, 305-7, 306-1, 306-2, 306-4, G4-EN23, 307, 413-1

FCN Pitesti has established and implemented specific requirements leading to **the mitigation of the impact on the environment, as a result of the performance of its activities**

Regarding environment protection, FCN Pitesti promotes the rational use of energy and natural resources, **ensuring a balance between environment, energy and economy**

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16 ENVIRONMENT PROTECTION FCN PITESTI

GRI 103-1, 102-2, 303-3, 304-2, 305-1, 305-2, 305-3, 305-4, 305-5, 305-7, 306-1, 306-2, 306-4, G4-EN23, 307, 413-1

Commitment for monitoring the environment footprint

By the FCN Policy on Nuclear Safety, Quality, Environment, Occupational Safety and Health, FCN managers are committed to take all the necessary measures in order to monitor, assess and continuously improve environment performance, prevent pollution, use resources sustainably and preserve biodiversity.

FCN monitors, measures, analyses and evaluates environment performance by an annual process aimed at determining the progress on environment objectives, and the evolution of environment aspects with significant impact, by taking into account the requirements established by the permits issued by CNCAN, MMAP and by the environment agreements issued by ANPM and APM Argeș.

The characteristics of the activities that may have a significant environment impact are regularly monitored and measured, by using documented methods, and calibrated and verified measurement and monitoring equipment.

The results of the analysis and evaluation of environment performance are annually reported to the FCN managers by the Environment Performance Evaluation Report at FCN Pitești and constitute an input element for the analysis of the effectiveness and efficiency of the Integrated Management System.

The efficiency and effectiveness of the environment management system as an integral part of the management system of FCN Pitesti are analyzed on an annual basis and are presented in the Report on the assessment of environment performance at FCN Pitesti.

Commitment for implementing the environment management system

In FCN, an Integrated Management System (IMS) is continuously developed, implemented, monitored and improved, in accordance with Law 111/1996 on the safe conduct, regulation, authorization and control of nuclear activities, republished, as further amended and supplemented.

SMI ensures the identification and integration of all the legal requirements and specific regulations applicable to the performed activities, the nuclear quality and security requirements, protecting the employees' occupational health and safety, the requirements officially agreed with stakeholders, the financial and economic requirements and the requirements of voluntarily adopted standards.

The environment management system is an integral part of SMI within FCN Pitesti, which is certified / recertified in accordance with the requirements of standard SR ISO 14001: 2015 - Environment Management Systems - Requirements with user guide.

The environment policy is included in the FCN Nuclear Safety, Quality, Environment and Occupational Safety and Health Policy, and includes the managers' commitment to implementing and maintaining an environment management system.

The annual audits carried out at FCN Pitesti aim to maintain the certification of the Environment Management System and prove that FCN Pitesti has implemented a functional environment management system that ensures continuous improvement.

FCN Pitesti holds an Environment Permit issued by GR no. 24/2019, which is annually renewed; the last renewal took place in 2022 by Resolution no. 3 / 18.01.2022, valid for 04.02.2022-03.02.2023.

Management policy

By the Policy on Nuclear Safety, Quality, Environment, Occupational Safety and Health, the FCN managers undertake to take the necessary measures in for:

- Maintaining the ability of FCN to provide products and services that meet the requirements of customers, applicable regulations and stakeholders;
- Establishing and implementing nuclear safety standards and requirements and monitoring the performance of the entire organization;
- Continuous improvement of nuclear safety by periodic assessments, prompt implementation of identified corrective / preventive and improvement measures;
- Promoting and supporting a culture of nuclear safety at all levels, of behavioural patterns, values and beliefs, and of allocating responsibilities that lead to the continued development and maintenance of a safety culture;
- Identifying and ensuring the necessary resources for reaching the intended objectives;
- Monitoring, evaluation and continuous improvement of environment performance, pollution prevention, sustainable use of resources and conservation of biodiversity;
- Increasing the awareness, motivation and involvement of all the employees by acknowledging their contribution to improving the performance of the organization;
- Implementing a risk management process, so that the risks associated with the activities and objectives are identified, assessed and registered, and measures are taken in order to prevent / minimize their occurrence;
- Continuous improvement of the management system.

The FCN Manager accepts responsibility for the development and implementation of an Integrated Management System according to the legal requirements and the CNCAN Norms for nuclear management and security systems which voluntarily integrates the requirements from management standards SR EN ISO 14001: 2015 and SR EN ISO 45001: 2018, including Regulation (EC) no. 1221/2009 of the European Parliament and Council of November 25, 2009 on the voluntary participation of organizations in a community eco-management and audit scheme (EMAS) and Commission Regulation (EU) 2017/1505 of August 28, 2017.

The managers of FCN Pitești at all levels are directly responsible for the implementation of the requirements of the Management System and its continuous improvement.

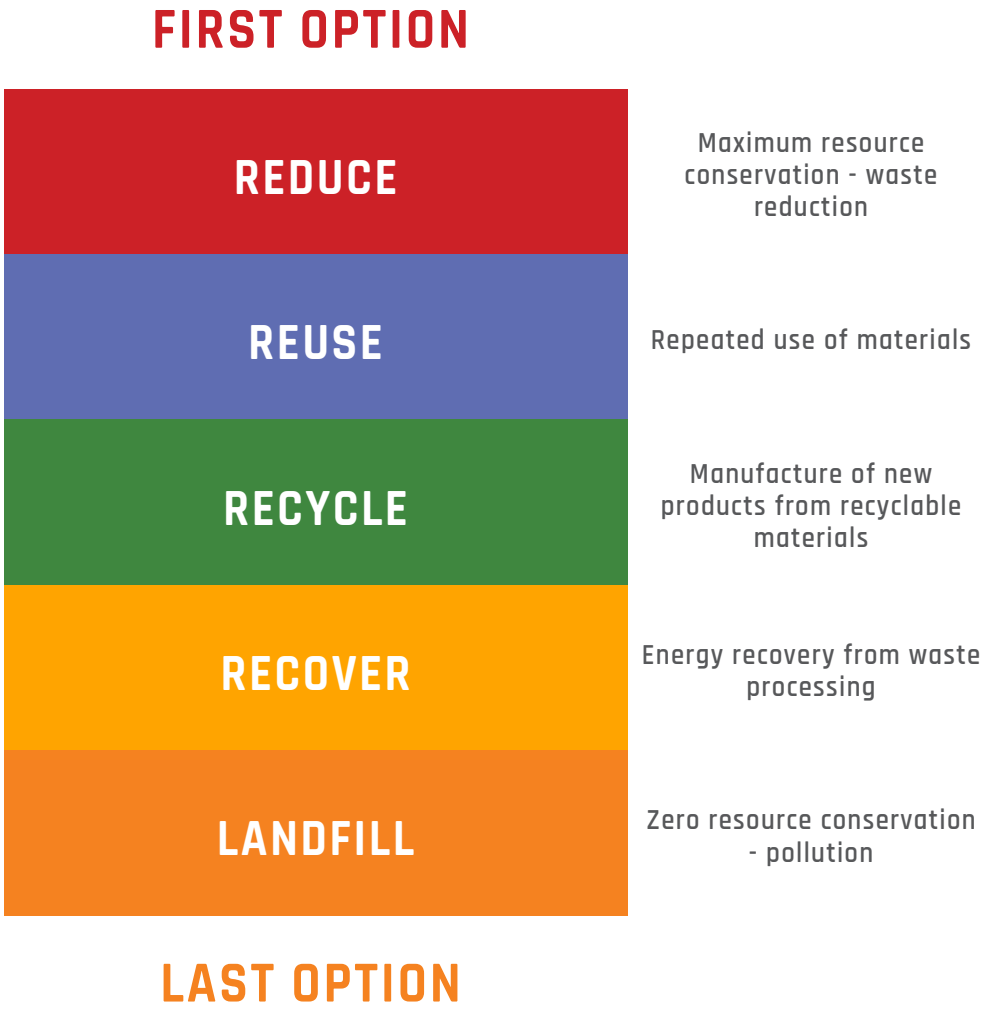
Commitment for reducing emissions and waste

Reducing waste and the quantities of generated waste represents a priority for FCN Pitesti. In this regard, several measures have been implemented in order to reduce stack emissions, for example the use of high-efficiency filters.

The reduction of the amount of waste was achieved mainly by the selective collection of recyclable waste, the periodic delivery of recoverable waste to authorized companies, and the control of purchased products, thus reducing in particular the amount of waste that should be delivered for final disposal in landfills.

In the waste management process, FCN Pitesti aims to save raw materials by reusing recyclable waste, so that the pressure on resource consumption is as low as possible.

In the waste management activity, FCN Pitesti takes into account the hierarchy of waste management; the first options are reduction / reuse, and the disposal of waste is applied only after all other means have been used.



COMMITMENT FOR RAISING AWARENESS ON ENVIRONMENT ASPECTS

FCN Pitesti is involved both in increasing the awareness of its own staff regarding the importance of environment protection, and of external staff, ensuring their training, identifying the environment aspects that may occur after the activity performed on the FCN Pitesti platform, implicitly keeping them under control so as not to become significant environment aspects.

COMMITMENT FOR ENVIRONMENT PROTECTION

The commitment to comply with legal requirements and pollution prevention has been included in the Nuclear Safety, Quality, Environment and Occupational Health and Safety Policy.

COMMITMENT FOR EFFICIENTLY USING RESOURCES AND ENERGY

The most efficient use of resources is a priority, and FCN Pitesti establishes performance indicators for two categories of raw materials, the processing efficiency of UO2 powder and the processing efficiency of Zy-4 units.

At the same time, performance indicators have been established, in order to reduce electricity consumption in relation to the number of nuclear fuel bundles produced and to reduce water consumption in relation to the average number of employees.

COMMITMENT ON REPORTING ENVIRONMENT ASPECTS

In accordance with the Communication Protocol concluded between FCN Pitesti and APM Arges, there is an obligation to notify the environment authorities of environment issues, possible uncontrolled emissions into the air, or accidental pollution. There have been no events/incidents with impact on the environment.

Carbon emissions and their intensity

The activities of FCN Pitesti result in no carbon emissions.

Using hazardous chemicals or biocides

FCN is a downstream user, and hazardous substances and mixtures purchased in order to be used in technological processes or laboratory tests are stored in their original packaging, they are stored depending on compatibility (the compatibility is determined by the personnel from the chemical test laboratory) in warehouses with controlled access.

When drafting the documentation for purchasing hazardous substances and mixtures, the company considers the requirements regarding their classification, packaging and labelling provided by EC Regulation no. 1907/2006, on the Registration,

Evaluation, Authorization and Restriction of Chemicals (REACH), as further amended and supplemented, and EC Regulation no. 1272/2008 on the classification, labelling and packaging of substances and mixtures, as further amended and supplemented

The hazardous substances and mixtures used within the FCN are accompanied by Safety Data Sheets, stored in the packaging of the manufacturer, and there are procedural requirements, both when ordering and when receiving, and during periodical inspections, to check the integrity and sealing of the packaging, correct labelling with information on the name of the product, the brand of the plant and the name of the manufacturer, the manufacture date, the warranty term, strictly necessary first aid data in order to avoid chemical hazards, for removing residual products and, as the case may be, product use restrictions. In case of accidental damage to the packaging, the chemical is transferred to other containers, compatible with its characteristics, making sure that they are clean, so as not to contaminate the product, to be properly labelled and to meet any other specific requirements.

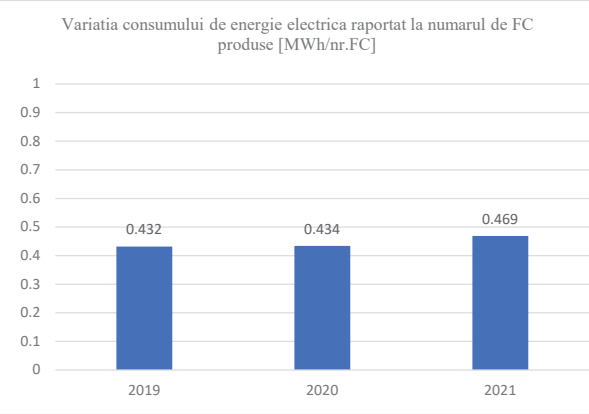
For the activities carried out at FCN Pitesti, in which dangerous substances and mixtures are used, Safety Data Sheets are provided.

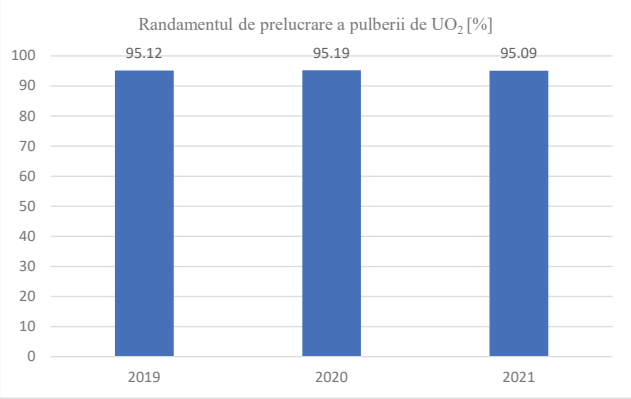
Comparisons between objectives and evolutions in time

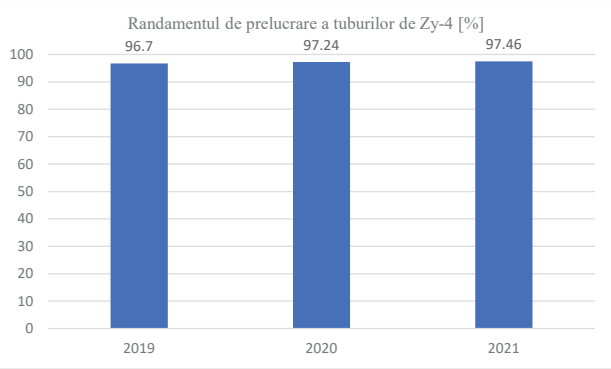
FCN Pitesti is an EMAS-registered organization, according to Regulation (EC) no. 1221/2009 of the European Parliament and Council of November 25, 2009 on the voluntary participation of organizations in a community eco-management and audit scheme (EMAS); therefore, the Environment Statement is drafted on an annual basis, and is validated by an accredited verifier.

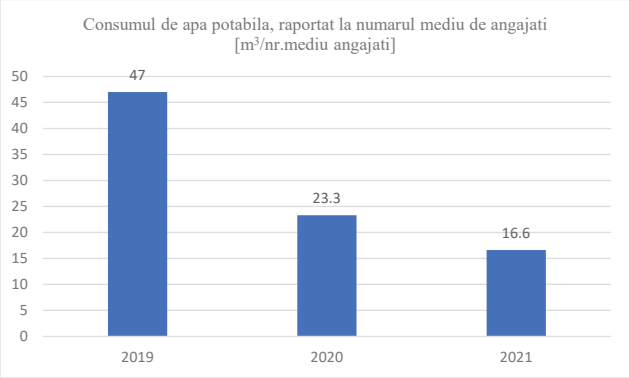
The Environment Declaration presents the evolution over the last three years of the performance indicators established according to Regulation (EC) no. 1221/2009.

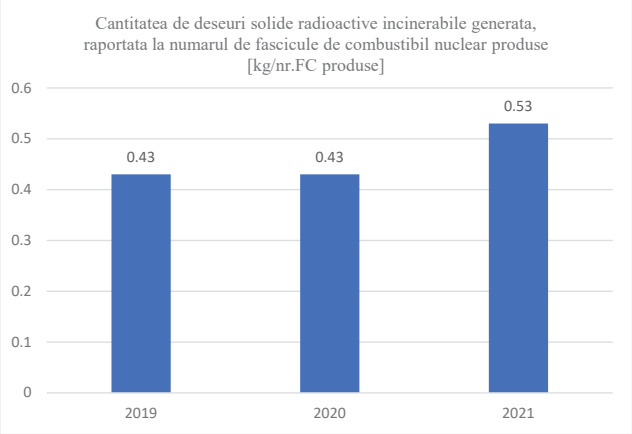
Environment objective	Indicator name	MU	Target 2021-2022	2019	2020	2021
Efficient energy use	Consumption of electricity / number of bundles manufactured	[MWh]/FC	Reduction by at least 0.01% compared to 2020	0,432	0,434	0,469
Rational use of materials	The processing yield of UO2 powder is the amount of uranium dioxide contained in the columns of UO2 pellets formed, relative to the amount of uranium dioxide contained in the UO2 powder released in the manufacture of the pellets.	%	at least 0.01% increase of processing yield compared to 2019	95,12	95.19	95,09
	Zy-4 sheath processing yield is the ratio between the number of Zy-4 sheaths found and the nuclear fuel bundle and the number of Zy-4 tubes launched in manufacturing	%	min 0.01% increasing processing yield compared to 2018	96.7	97.24	97.46
Increasing the efficiency of water consumption	Consumption of drinking water / average no. of employees	m^3/no. of employees	Reduction by at least 0.01% compared to 2020	47	23.3	16.3
Minimizing the generation of incinerable radioactive solid waste	The quantity of generated radioactive solid waste that can be incinerated, related to the number of bundles of nuclear fuel that are manufactured	[kg/ no. of FC) manufactured]	Max 0.56 (the maximum amount of incinerable radioactive solid waste generated according to the environment permit is 6.7 t, compared to the maximum authorized production)	0,43	0.43	0.53
Reducing emissions into the atmosphere [3]	Quantity of uranium released by radioactive gaseous effluents, related to the number of bundles of nuclear fuel that are manufactured	[mgU/FC]	maximum 83.33 mgU / FC (which represents 20% of the amount of uranium authorized to be discharged by radioactive gaseous effluents according to the environment permit, related to the maximum authorized production)	32,4	43,6	42.83

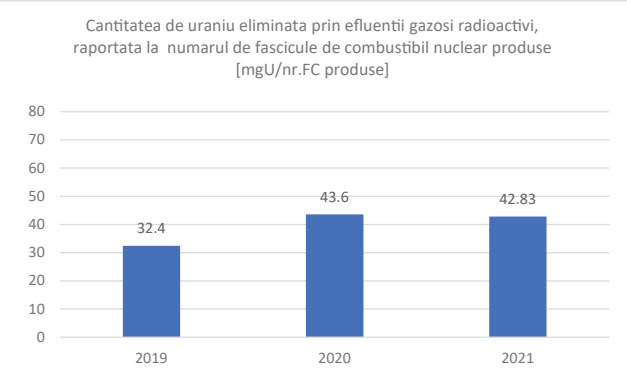

Variatia consumului de energie electrica raportat la numarul de FC produse [MWh/nr.FC]
1
0.9
0.8
0.7
0.6
0.5
0.4
0.3
0.2
0.1
0
0.432
0.434
0.469
2019
2020
2021


Randamentul de prelucrare a pulberii de UO2 [%]
100
90
80
70
60
50
40
30
20
10
0
95.12
95.19
95.09
2019
2020
2021


Randamentul de prelucrare a tuburilor de Zy-4 [%]
100
90
80
70
60
50
40
30
20
10
0
96.7
97.24
97.46
2019
2020
2021


Consumul de apa potabila, raportat la numarul mediu de angajati [m3/nr.mediu angajati]
50
45
40
35
30
25
20
15
10
5
0
47
23.3
16.6
2019
2020
2021


Cantitatea de deseuri solide radioactive incinerabile generata, raportata la numarul de fascicule de combustibil nuclear produse [kg/nr.FC produse]
0.6
0.5
0.4
0.3
0.2
0.1
0
0.43
0.43
0.53
2019
2020
2021


Cantitatea de uraniu eliminata prin efluentii gazosi radioactivi, raportata la numarul de fascicule de combustibil nuclear produse [mgU/nr.FC produse]
80
70
60
50
40
30
20
10
0
32.4
43.6
42.83
2019
2020
2021

ENVIRONMENTAL PROTECTION

The mission of FCN is to manufacture CANDU-6 nuclear fuel bundles under conditions of maximum safety, economic efficiency, care for people and the environment, by complying with the legal and regulatory requirements applicable to nuclear activities, environment protection, occupational health and safety.

FCN pays particular attention to identifying the needs and expectations of its customers and other stakeholders in order to provide high quality products and services that will allow it to remain technically and economically competitive.

Regarding environment protection, FCN Pitesti promotes the rational use of energy and natural resources, ensuring a balance between environment, energy and economy.

This commitment is translated into:

- integration of the sustainable development concept into projects and investments;
- complying with the environment legislation and agreements;
- continuous improvement of environmental performance

Within FCN Pitesti, environmental protection has been and is a permanent and responsible concern of all staff. FCN Pitesti has established and implemented specific requirements leading to the mitigation of the impact on the environment, as a result of the performance of its activities.

The environment protection activity is carried out in compliance with the provisions of the Environment Permit issued by GR no. 24/2019, requirements regarding air quality protection, water quality protection, waste management, noise, etc.

DIRECT AND INDIRECT ATMOSPHERIC EMISSIONS

The activities carried out within FCN generate gaseous effluents loaded with dust, air-carried powders with radioactive uranium/ aerosols and non-radioactive toxic components.

- **Radioactive pollutants:**
  - air-carried powders with uranium / radioactive aerosols - discharged and monitored by the three dispersion stacks (Stack 1, Stack 2 and Stack 3)

- **Non-radioactive pollutants:**
  - total powders, nitrogen oxides, hydrochloric acid - discharged and monitored by Dispersion Stack no. 1 (toxic components from the chemical test laboratory)
  - total powders, beryllium, acetone, alkyl, alcohols - discharged and monitored by Dispersion Stack no. 2 and the ventilation system related to Hall IV and Annexes
  - air-carried powders with beryllium / beryllium aerosols - discharged and monitored by the air ventilation installation related to the beryllium working area

USE AND PROTECTION OF NATURAL RESOURCES (WATER, SOIL, ETC.) AND BIODIVERSITY PROTECTION

At the level of FCN, drinking and fire water, industrial water, domestic water and treated industrial water are provided by RATEN - Nuclear Research Institute based on the agreement concluded between the parties.

In the manufacturing process of nuclear fuel bundles, industrial water is used in the heat exchangers related to various technological equipment.

Industrial water is prepared by ICN Pitesti and stored into 2 tanks of 1000 m3 each.

In order to save industrial water, FCN has been equipped with 2 industrial water recirculation systems that supply the equipment of the production line.

FCN has its own industrial water pumping system in the two aforementioned tanks, ensuring the following:

- supplementation water for the two recirculation systems;
- safety supply if there malfunctions in the two recirculation systems.

The drinking and fire-extinguishing water of FCN Pitesti is distributed from the pumping station related to ICN Pitesti.

UTILITIES ENSURED BY FCN: COOLING WATER, DEMINERALIZED WATER, HOUSEHOLD HOT WATER.

Since 2007, FCN has owned a solar installation for the production of domestic hot water composed of 30 solar panels with ethylene glycol as a transfer medium. FCN also owns the demineralized water production plant, the water needed in the technological process of producing nuclear fuel bundles.

FCN PITESTI DOES NOT DISCHARGE WATER INTO THE EMISSARY.

Used water is collected within the two stations owned by FCN:

- Residual Water Collection and Discharge Station (SCEAR)
- Radioactive Liquid Waste Collection Station (SCDLR)

Radioactively contaminated wastewater with a concentration of more than 1 mg U/l is transferred for uranium recovery to the ICN Radioactive Waste Treatment Plant (STDR-ICN).

Within STDR-ICN, the evaluation for uranium concentration is performed by applying physical cold control processes; the precipitation with trisodium phosphate and ammonia, followed by settling, filtration and drying results in solid uranyl phosphate which is returned to FCN under nuclear safety conditions. The uranium recovery yield is 99.9%. The amount of natural uranium recovered is included in the general balance sheet of the plant and is subject to nuclear safeguards controlled by the International Atomic Energy Agency (IAEA) and the European Atomic Energy Community (EURATOM).

Radioactive wastewater with a uranium concentration below 1 mg U/l is discharged from SCEAR-FCN to the Pitesti ICN Wastewater Treatment Plant (SE-ICN), which after treatment/purification discharges the resulting liquid effluents into the emissary (Doamnei River), in compliance with the requirements of the Water Management Authorization held by RATEN-ICN.

COMMITMENT ON CONSULTING STAKEHOLDERS ON ENVIRONMENT MATTERS

Due to the potential effect on the ability of FCN to consistently deliver nuclear fuel bundles that meet customer requirements and applicable legal and regulatory requirements, FCN ascertains:

- Stakeholders relevant for the management system;
- Requirements of these relevant stakeholders.

For this purpose, the following stakeholders were identified:

- SNN Headquarters - which waits for the fuel bundles delivered to Cernavoda NPP to ensure its planned and safe operation, to be manufactured in compliance with all legal and regulatory requirements, at a competitive price;
- The Cernavoda NPP branch as the main customer - which expects the delivered fuel bundles to fully comply with the specified requirements, thus contributing to the nuclear safety and economic efficiency of the plant;
- Shareholders - who expect both a high level of nuclear security performance and an increase in turnover and profit;
- Regulatory bodies (Ministry of Environment, Waters and Forests, National Commission for the Control of Nuclear Activities, National environment Guard) - which expect us to comply with all legal and authorization requirements, and achieve a high level of nuclear safety;
- External organizations in the nuclear field - waiting for FCN Pitești to be a promoter in the nuclear industry and a reliable partner;
- Non-Governmental Organizations, public - expecting FCN activities not to affect the environment, the health and safety of the population;
- RATEN-ICN - which expects FCN activities not to affect the environment, the health and safety of employees, and FCN Pitești to be a reliable partner.
- Suppliers - accept mutually advantageous, profitable and safe commercial relations;
- FCN personnel and unions - expecting trust, acknowledgment and active involvement and ensuring a healthy work environment.

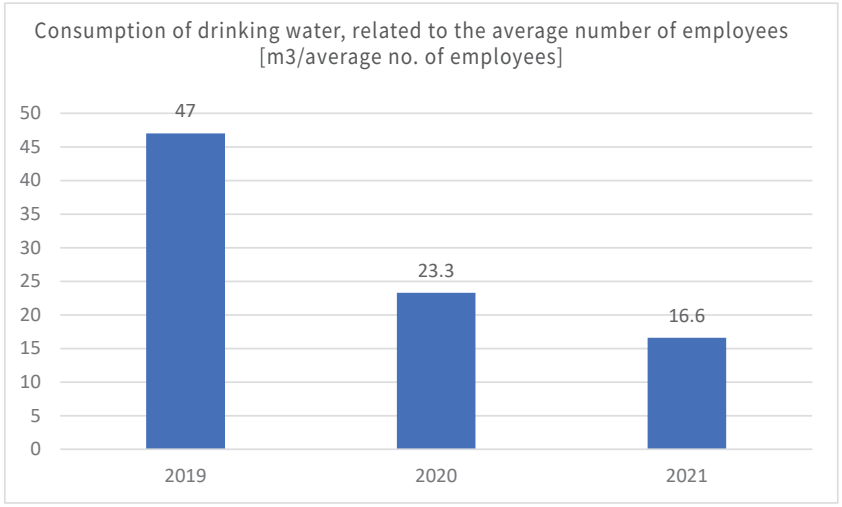
Stakeholder requirements and applicable legal and regulatory requirements are integrated into SMI processes, activities and documentation, and the verification, monitoring and control activities are aimed not only at meeting these requirements, but also at increasing stakeholder satisfaction.

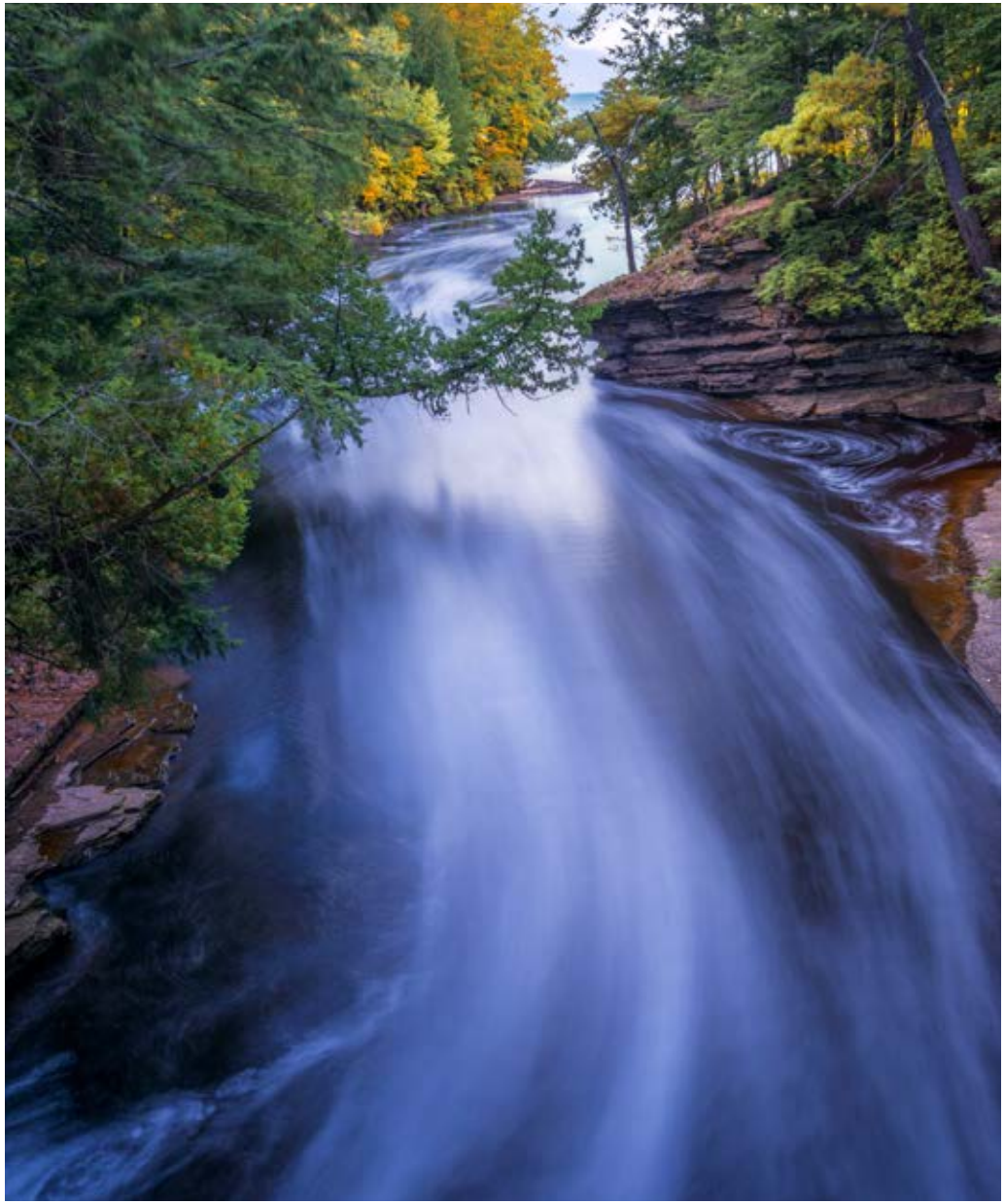
Water management - consumption reduction

Regarding the efficient use of water, FCN Pitesti has established a performance indicator, namely the reduction of water consumption in relation to the average number of employees, an indicator that is annually monitored and reported in the FCN Environment Statement, which is the basis for maintaining the registration in EMAS of FCN Pitesti.

Among the measures taken within FCN Pitesti in order to reduce water consumption we can list: permanent training of staff on efficient water use, checking facilities so that there are no leaks, replacement of sanitary appliances with sanitary appliances that have sensors.

The variation of the water consumption is presented in the chart below:





Waste management

In the processes of manufacturing, maintenance, technical quality control, supply and transportation, radiological protection, environment protection, medical emergencies, etc. a wide range of materials is used, and the following activities result in the following categories of waste:

- Radioactive waste contaminated with natural uranium
- Waste contaminated with Beryllium (dual-use material) - nonradioactive
- Non-radioactive industrial waste

Radioactive waste contaminated with natural uranium, generated within FCN, is:

Non-incinerable radioactive solid waste with low specific activity - DSRN (metallic objects, pipes, grinding stones, metal parts, subsets, epode, bricks, cables, debris, etc. - contaminated with natural uranium) which cannot be decontaminated and are of no interest in recovery is temporarily stored on the Temporary Radioactive Solid Waste Storage Platform (PDT) in metal barrels. The waste is then transferred / transported to the Feldioara Low-Activity Solid Waste Final Disposal Storage Facility of Feldioara, for final disposal.

Incinerable radioactive solid waste with low specific activity - DSRI (filters / pre-filters resulting from ventilation systems, protection equipment, paper, etc. - contaminated with natural uranium) - is temporarily stored on the Temporary Radioactive Solid Waste Storage Platform (PDT) in metallic barrels and/or raffia bags, and is subsequently transferred to STDR-ICN for incineration and the recovery of the uranium contained in the uranium-rich ash, which is returned under nuclear safety conditions.

Radioactive liquid waste with different concentrations of uranium derived from manufacture and quality control activities, are collected in stainless steel tanks within the FCN Radioactive Liquid Waste Collection Plant (SCDLR-FCN), which are transferred to the ICN Radioactive Waste Treatment Plant (STDR-ICN) for uranium recovery, where, by precipitation with trisodium phosphate and ammonia followed by settling, filtering and drying, results in solid and dry uranyl phosphate, which is returned to FCN under nuclear safety conditions.

Non-radioactive industrial waste

Selective collection is part of the recycling process, by which recyclable materials are collected and transported to recycling centers. The recycling process involves composting the waste, collecting it separately and treating the waste for reintroduction into the economic circuit. The goal of selective collection is environment protection. It also contributes to high efficiency in using resources.

Within FCN Pitești, waste is selectively collected, by types of waste, thus making it easier to classify and hand them over to authorized companies, based on service contracts .

In order to comply with the requirements of law no. 132/2010 within FCN Pitesti, the obligation of selective waste collection was introduced: paper, plastic, metal, glass.

In this regard, bins for collecting these types of waste were purchased, and placed in as many places as possible.

Another category of waste generated under the FCN is municipal waste, which is collected separately from waste that is recyclable / which can be re-capitalized, in containers marked for these types of waste.

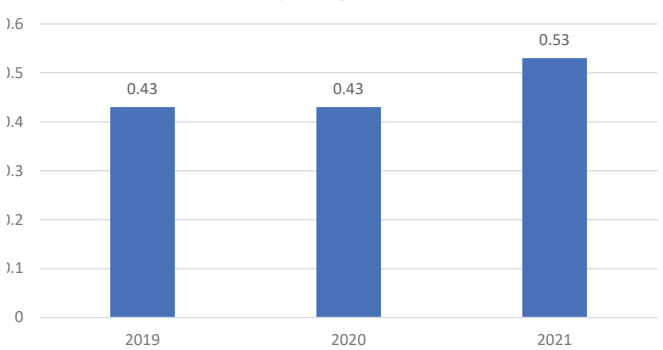
Waste contaminated with Beryllium (dual-use material) - nonradioactive

According to NGN-02 - Detailed list of materials, devices, equipment and other nuclear explosive devices, beryllium as a metal, alloys containing more than 50% beryllium, beryllium compounds, products made from these materials, including waste and scrap containing beryllium, are classified as dual-use materials.

Beryllium-contaminated solid waste resulting from beryllium deposition in the Assembly Section is managed in accordance with procedure CN-AD-40 “Collection, packaging and storage of beryllium-contaminated solid waste”. They are temporarily stored on the Radioactive Solid Waste Temporary Storage Platform (PDT) in metal barrels and handed over to authorized service contractors for treatment as hazardous substances.

Regarding incinerable radioactive solid waste, FCN Pitesti has set an objective, namely “minimizing the generation of incinerable radioactive solid waste”, and the target is “max. 0.56 (the maximum quantity of incinerable radioactive solid waste generated according to the environment authorization is 6.7 t, related to the maximum authorized production)”, and the values recorded in the last three years were below the planned target.

The quantity of generated radioactive solid waste that can be incinerated, related to the number of bundles of nuclear fuel that are manufactured [kg/ no. of FC manufactured]



Impact of transportation or using and removing products and services on the environment

FCN Pitesti performs the following types of transportation activities:

- Nuclear fuel bundles from/to Cernavoda NPP (Unit 1 and Unit 2)
- Sintering powder of UO2 from CNU Feldioara Branch to FCN Pitesti
- Non-compliant nuclear material
- Solid radioactive waste contaminated with natural uranium from FCN Pitesti to CNU Feldioara Branch
- Other transportation activities authorized by CNCAN

Radioactive materials is transported with authorized transportation means, with drivers certified for the transportation of hazardous goods, Class 7.

For each transport of radioactive material, dosimetric measurements are performed both on the transportation means and on the participating personnel, according to the Ionizing Radiation Protection Program for the activity of transporting radioactive material.

After each shipment and transfer of radioactive materials, a report will be drawn up on the shipment and transfer, which will be sent to CNCAN.

Emissions of other pollutants (measured in absolute value and intensity)

The activities carried out within FCN generate gaseous effluents loaded with dust, air-carried powders with radioactive uranium/ aerosols and non-radioactive toxic components.

- **Radioactive pollutants:**
  - air-carried powders with uranium / radioactive aerosols - discharged and monitored by the three dispersion stacks (Stack 1, Stack 2 and Stack 3)
- **Non-radioactive pollutants:**
  - total powders, nitrogen oxides, hydrochloric acid - discharged and monitored by Dispersion Stack no. 1 (toxic components from the chemical test laboratory)
  - total powders, beryllium, acetone, alkyl, alcohols - discharged and monitored by Dispersion Stack no. 2 and the ventilation system related to Hall IV and Annexes
  - air-carried powders with beryllium / beryllium aerosols - discharged and monitored by the air ventilation installation related to the beryllium working area

Determinations of non-radioactive pollutants are performed every six months, and the measured values are well below the legal limits.

Non-radioactive pollutant measurements - 2021

Stack nr.1

No running	Pollutant	Measured value 2019 [mg/Nm^3]		Measured value 2020 [mg/Nm^3]		Measured value 2021 [mg/Nm^3]		MAPPM order no. 462/1993 [VLE, mg/m^3]
		Half-year I	Half-year II	Half-year I	Half-year II	Half-year I	Half-year II	
1	Pulberi	1.95	2.12	2.3	3.28	2.84	3.23	50
2	NO_2	10.25	16.4	22.55	32.8	38.95	55.35	500
3	HCl	3.21	3.53	4.67	5.61	5.33	19.55	30

Stack no. 2

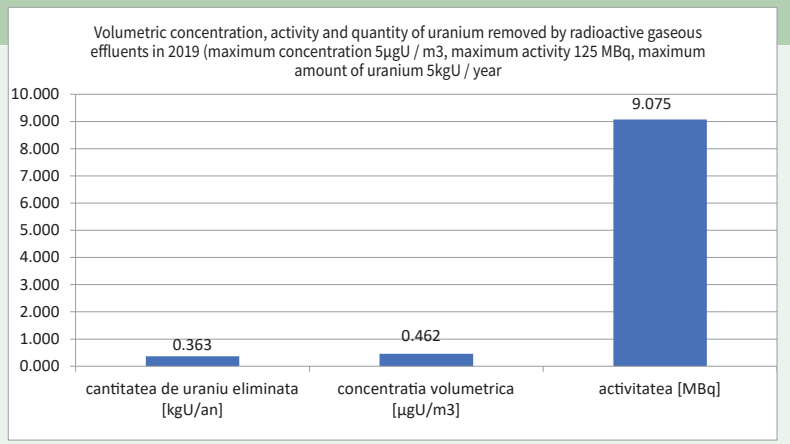
No running	Pollutant	Measured value 2019 [mg/Nm^3]		Measured value 2020 [mg/Nm^3]		Measured value 2021 [mg/Nm^3]		MAPPM order no. 462/1993
		Half-year I	Half-year II	Half-year I	Half-year II	Half-year I	Half-year II	[VLE, mg/m^3]
1	Total powders	1.28	1.59	1.82	2.25	2.21	2.52	50
2	Beryllium	<0.00019	<0.00018	<0.00018	<0.000175	< 0.00018	< 0.00018	0,1
3	Acetone	<0.0034	<0.0036	<0.0022	<0.0021	< 0.0022	< 0.0022	150
4	Isopropyl alcohol	<0.0034	<0.0036	<0.0022	<0.0021	< 0.0022	< 0.0022	150

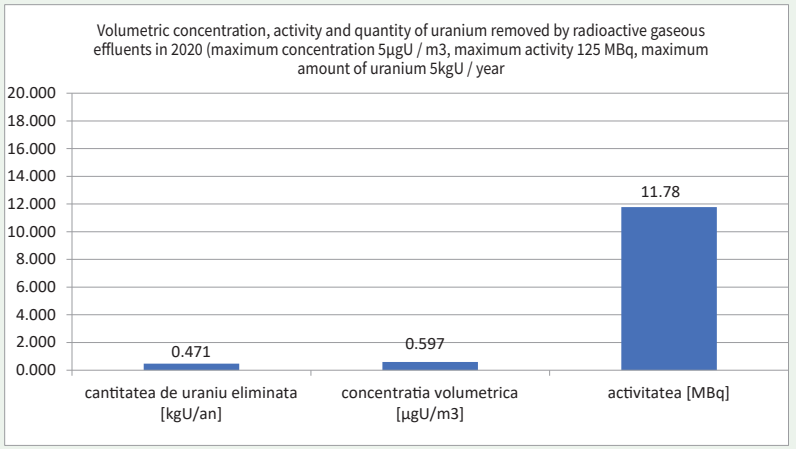
Beryllium deposit area ventilation discharge

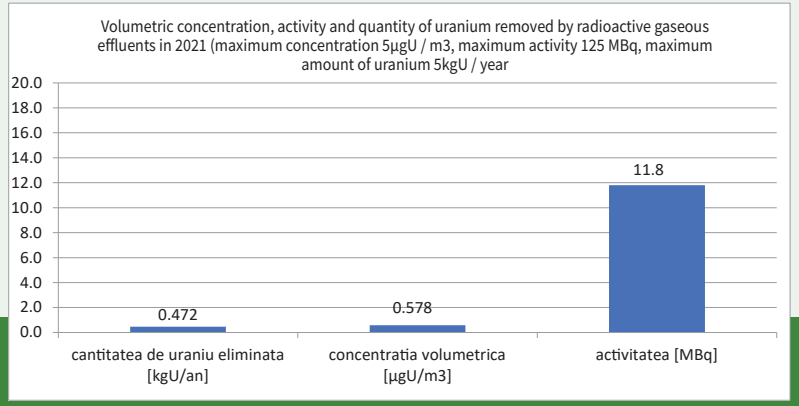
Nr. crt	Poluant	Measured value 2019 [mg/Nm^3]		Measured value 2020 [mg/Nm^3]		Measured value 2021 [mg/Nm^3]		MAPPM order no. 462/1993
		Half-year I	Half-year II	Half-year I	Half-year II	Half-year I	Half-year II	[VLE, mg/m^3]
1	Beryllium	<0.00021	<0.00018	<0.00018	<0.000168	< 0.00018	< 0.00018	0.1

The discharge of **radioactive gaseous effluents** from the ventilation systems is performed by three dispersion stacks and their monitoring is performed continuously by three Radioactive Gaseous Effluent Monitors.

The graphs below show the measured values for 2019-2021; these were below the limits provided by the operating permits issued by CNCAN and the Environment Authorization of FCN Pitești.





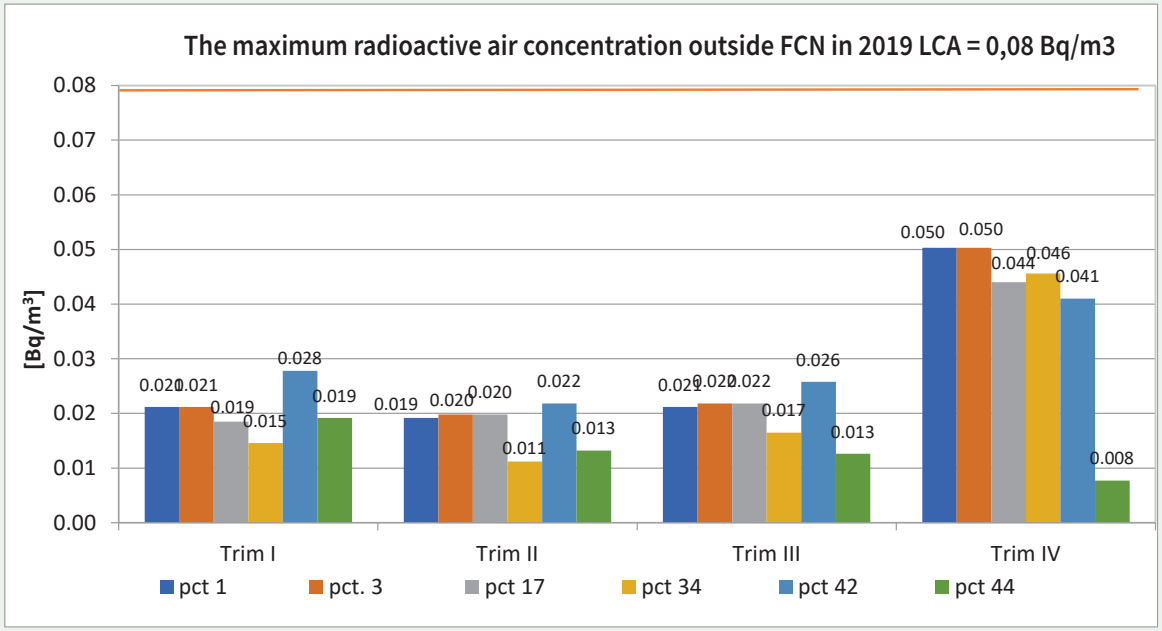


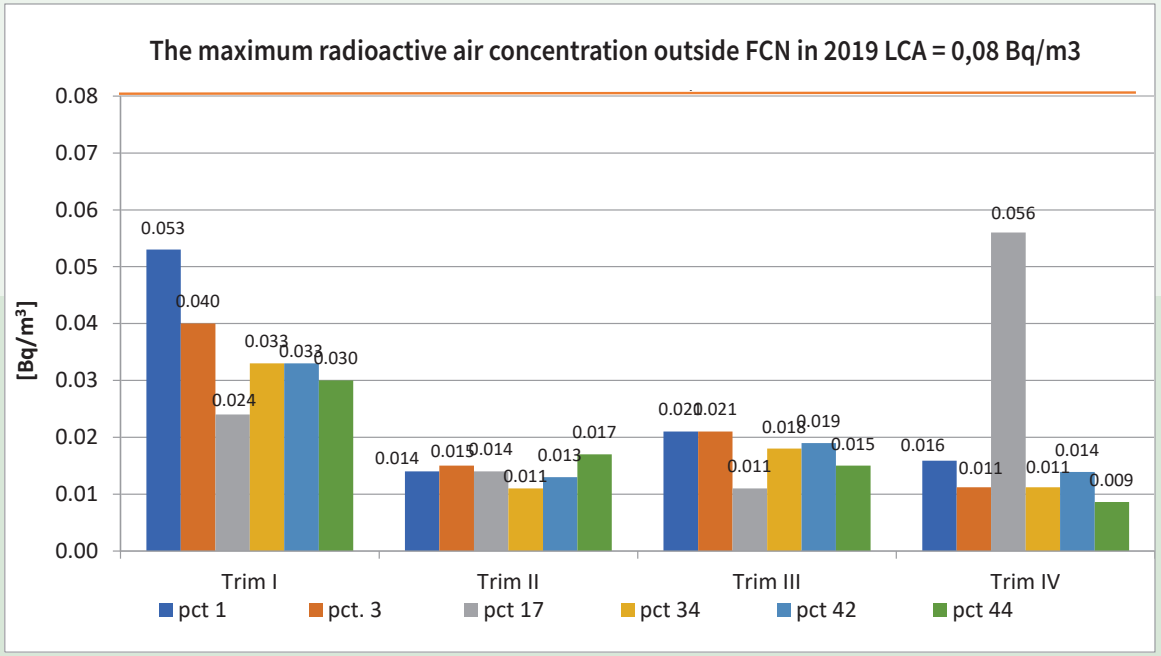
The monitoring of the radioactivity of the outside air and the monitoring of the beryllium concentration in the outside air are performed by 7 sampling points connected to the Central Aerosol Sampling System (SCPA).

Location of sampling points within the FCN perimeter:

- six points for uranium (1, 3, 17, 34, 42 - located outside Halls I, II and III and point 44 located outside Extension Hall V - loading pellets into sheaths), for which radiometric measurements are performed in the Laboratory for Personnel Radiation Protection and Dosimetry of FCN.
- a beryllium sampling point (45) located outside the beryllium working area (Beryllium Storage Area), for which chemical determinations are performed in the FCN Chemical Test Laboratory.

The graphs below show the measured values for 2019-2021; they were below the administrative control limits established in the Radiological Safety Manual.




The maximum radioactive air concentration outside FCN in 2019 LCA = 0,08 Bq/m3
[Bq/m³]
0.08
0.07
0.06
0.05
0.04
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0.020
0.021
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0.018
0.019
0.015
0.016
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0.056
0.011
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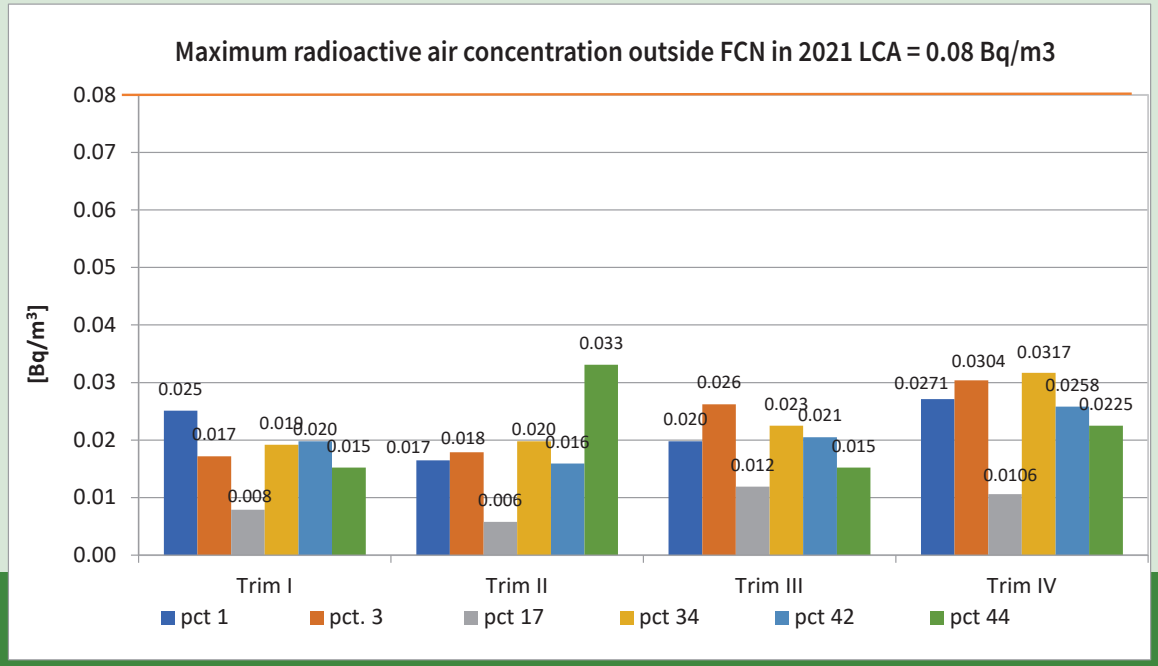
Trim I
Trim II
Trim III
Trim IV
pct 1
pct. 3
pct 17
pct 34
pct 42
pct 44


Maximum radioactive air concentration outside FCN in 2021 LCA = 0.08 Bq/m3
[Bq/m³]
0.08
0.07
0.06
0.05
0.04
0.03
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0.033
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0.026
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0.021
0.015
0.0271
0.0304
0.0106
0.0317
0.0258
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Trim I
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pct 42
pct 44

Monitoring the beryllium concentration in the outside air is performed on a monthly basis by the Central Aerosol Sampling System, point 45, and the administrative control limit is 0.009 µBe / m3.

The following table presents the values recorded in 2019-2021

Item no.	Month	Measured value 2019 [µgBe/m^3]	Measured value 2020 [µgBe/m^3]	Measured value 2021 [µgBe/m^3]
1	January	0.00032	0.00094	0.00060
2	February	0.00030	0.00030	0.00089
3	March	0.00058	0.00031	0.00052
4	April	0.00117	*	0.00142
5	May	0.00034	0.00086	0.00144
6	June	0.00099	0.00052	0.00074
7	July	0.00075	0.00032	0.00101
8	August	0.00162	0.00062	0.00076
9	September	0.00093	0.00190	0.00081
10	October	0.00077	0.00029	0.00114
11	November	0.00045	0.00055	0.00089
12	December	0.00126	0.00046	0.00051

**in 01.04-15.05.2020 the activity of FCN Pitesti was interrupted as scheduled, because of the COVID-19 pandemic*

Impact and dependencies on natural capital and biodiversity

The impact on biodiversity in relation to the operation of the analyzed unit is deemed as insignificant, because the following aspects have been taken into account:

- The specific activities of FCN do not damage the vegetation at the site because no activities / works are foreseen which result in the uncovering of the soil covered with herbaceous vegetation and no cutting of the woody vegetation.
- The functioning of the FCN does not result in loss of areas, fragmentation or alteration of habitats of conservation interest and habitats characteristic to species of wild flora and fauna in protected natural areas at national and community level due to the relatively large distances between FCN and them.
- by taking into account the specifics of the activities carried out within the analyzed objective, the forest vegetation in the vicinity is not affected by losses of areas, occupied by trees or by changes in the floristic composition.
- the operation of FCN does not influence the decrease of the population of the fauna of hunting interest or of the fish species from the watercourses from the neighbouring areas.
- the constructional features and positioning of FCN in a forest area do not cause any impact on bird migration, as there is no question of deviating of bird migration routes because of the existence and operation of FCN, and the maximum height of buildings is comparable to that of the trees from the neighbouring forest areas.

Environment management systems

According to Law 111/1996 on the safe performance, regulation, authorization and inspection of nuclear activities, republished, as further amended and supplemented, FCN develops, implements, monitors and continuously improves an Integrated Management System (IMS), which ensures the identification and integration of all the legal requirements and specific regulations applicable to the carried out activities, the nuclear quality and safety requirements, the requirements on environment protection, the requirements on employees' occupational health and safety, the requirements officially agreed with "stakeholders", the financial and economic requirements, and the requirements of voluntarily adopted standards, FCN has developed and implemented an Environment Management System - part of the Integrated Management System - which implements in all its activities the requirements of standard SR EN ISO 14001: 2015 and the requirements of the EMAS Regulation.

The continuous implementation, maintenance and improvement of environment management is based on the understanding of the context in which FCN operates, by taking into account internal and external issues that may affect the performance of environment management.

In addition to understanding the context in which it operates, FCN has identified relevant stakeholders for its environment management system, as well as their needs and expectations, which it agrees to satisfy: FCN personnel, SNN-Headquarters, SNN-Cernavoda NPP, RATEN-ICN Pitesti, regulatory and inspection bodies, Mioveni local community, NGOs, EURATOM/IAEA, suppliers. Stakeholder requirements and applicable legal and regulatory requirements are integrated into SMI processes, activities and documentation, and the verification, monitoring and control activities are aimed not only at meeting these requirements, but also at increasing stakeholder satisfaction.

The manner in which FCN meets the needs and expectations of its stakeholders, as well as the responsibilities of the involved departments, are detailed in specific procedures.

Internal and external communications on management and environment matters

On organization level, the internal and external communication process is organized in procedures. Internal communication provides information that is relevant to the environment management system, information on significant environment issues, environment performance, compliance obligations and recommendations for continuous improvement, in order to effectively implement its requirements.

External communication with regulatory and inspection bodies as well as with stakeholders (public, NGOs, media, etc.) regarding the environment impact of FCN-specific activities is carried out by SNN-Executive Managers or by the FCN manager with the approval the manager of SNN SA.

Identifying the products, activities and services that have a significant impact on the environment

Within FCN Pitesti, the identification of products, activities and services that have or may have a significant impact on the environment is established following an environment analysis. This is an initial analysis of the environment issues that derive from the activities carried out in FCN, their impact on the environment and their environment performance.

Environment Analysis involves identifying environment aspects, establishing and assessing the nature of the impact (direct, indirect, secondary, cumulative, short, medium or long term, permanent or temporary, positive or negative) and the necessary measures in order to eliminate or minimize any adverse effects on the environment.

Specific activities performed within FCN Pitesti include:

- operation of FCN installations and equipment;
- maintenance and repair activities;
- storage and transfer/transportation of materials;
- purchasing services/products/works;
- support and auxiliary activities.

The environment analysis involves the in-depth analysis of the following elements deriving from the specific activities of FCN Pitești:

- direct and indirect environment aspects
- impact on the environment
- environment performance

The environment analysis in FCN includes the following stages:

- identifying direct and indirect environment issues associated with all FCN activities taking into account the life cycle perspective of the nuclear fuel bundle and their environment impact (actual and potential, beneficial and harmful);
- defining criteria for assessing the importance of environment aspects and identifying environment aspects with a significant impact on the environment;
- an in-depth analysis of the environment performance arising from the specific activities of the FCN, the establishment of environment objectives, indicators and targets - is carried out according to the procedure CN-MM-06;
- establishing the necessary measures for removing or minimizing any negative effect on the environment;
- the annual analysis of the adequacy of the list of environment aspects by each department / division manager, directly or by their subordinate personnel, and its updating in case changes have been identified;
- identification of input and output data in all modes of operation (normal, abnormal, emergency), as these may lead to additional environment issues in an activity.

In the process of identifying direct environment issues, activities are analyzed by taking into consideration the following environment factors: air pollutant emissions, water pollutant discharges, soil and subsoil pollution, soil/ subsoil discharges, use of chemicals, resource consumption, waste generation, noise generation, heat emissions, radiations, vibrations.

In the process of identifying indirect environment aspects, the following aspects are taken into account: aspects related to the product life cycle, environment performance of contractors, subcontractors and suppliers, range and nature of services.

Assigned roles and responsibilities

Organization and operation, Nuclear Safety, Quality / Environment / Occupational Health and Safety Policy, as well as the FCN Objectives, highlight the commitment of the managers to the development and implementation of the Integrated Management System and the continuous improvement of its effectiveness.

Roles and responsibilities are clearly established by personnel job descriptions. In order to comply with the legislative requirements and ensure the efficient organization of the activity, the employees who are responsible for different fields of activity are appointed by decisions, for example: Management Representative for the Integrated Management System, responsible for environment protection, responsible for waste management, responsible for the activity with restricted explosives precursors, responsible for the management of substances classified as drug precursors, etc.

Environment matters

The ICN-FCN platform was placed on the current site based on a study conducted by specialized bodies, following which layout authorization no. 1392 / 15.10.1072 was issued, by taking into account, depending on the profile of the activities on the platform, the following:

a) The direct effect of nuclear activities on the population and the environment, both under normal operation and in case of a nuclear incident or accident
b) Quantities and removal methods for radioactive and non-radioactive waste
c) Density and age structure of the population in the area and its supply specificity
d) Relief of the land and geographical, weather and hydrological conditions in the location area
e) Social-economic units in the area, their importance and any implications

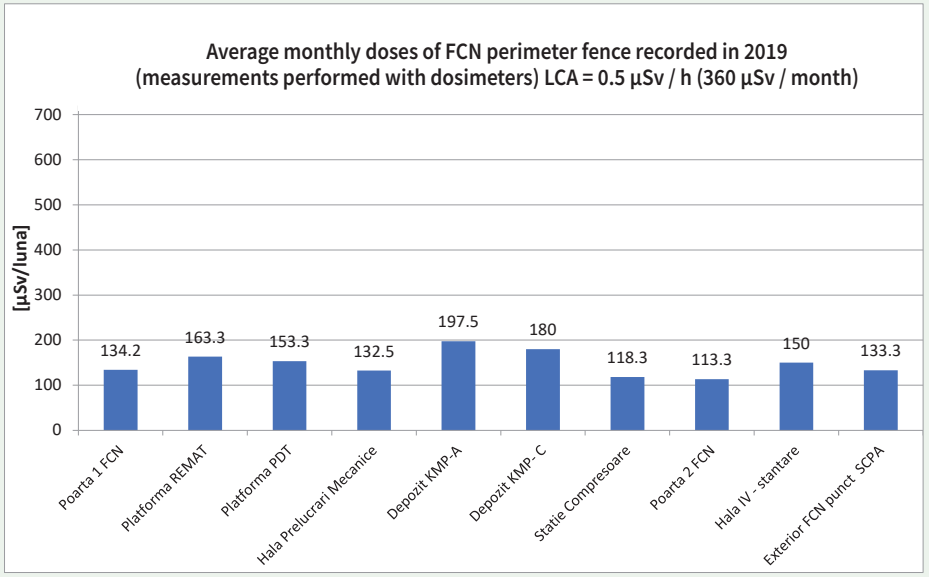
Adjacent to the ICN-FCN platform, there is the exclusion area and the low-population area For the adjacent area of the platform, based on the contracts for the provision of services for environment monitoring, ICN monitors the area and the reports, announcements and notifications to the competent bodies.

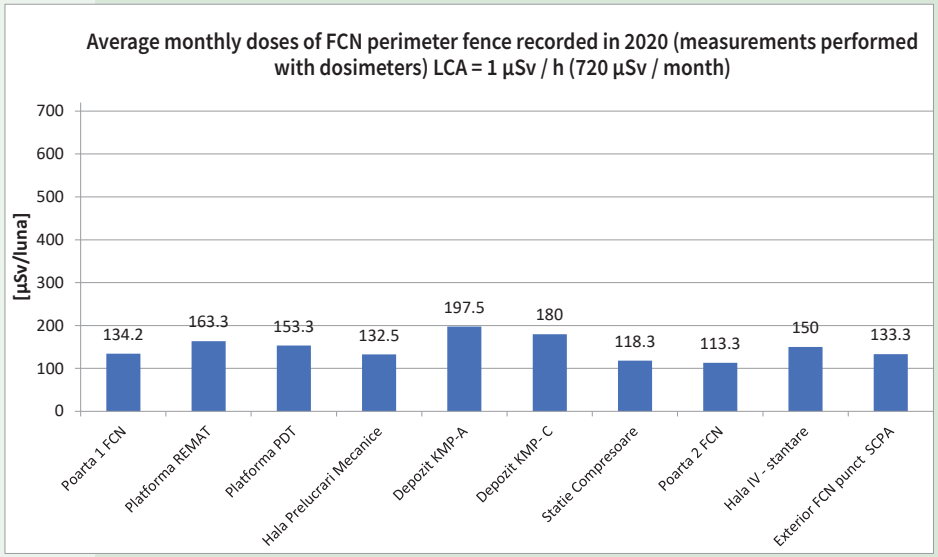
The radiological surveillance of the area adjacent to the ICN-FCN platform (exclusion area and sparsely populated area) is the responsibility of ICN. Radiological surveillance of environment factors (air, soil, vegetation, atmospheric deposits) is carried out within a radius of 12 km around the ICN-FCN platform, by APM Arges and the Arges National Environment Protection Agency (ANPM). The monitoring of the environment in the influence area of FCN-Pitesti is followed within the Standard Program (implemented according to Order no. 1978/2010) and the special program developed by the Environment Radioactivity Supervision Station (SSRM) within APM Arges.

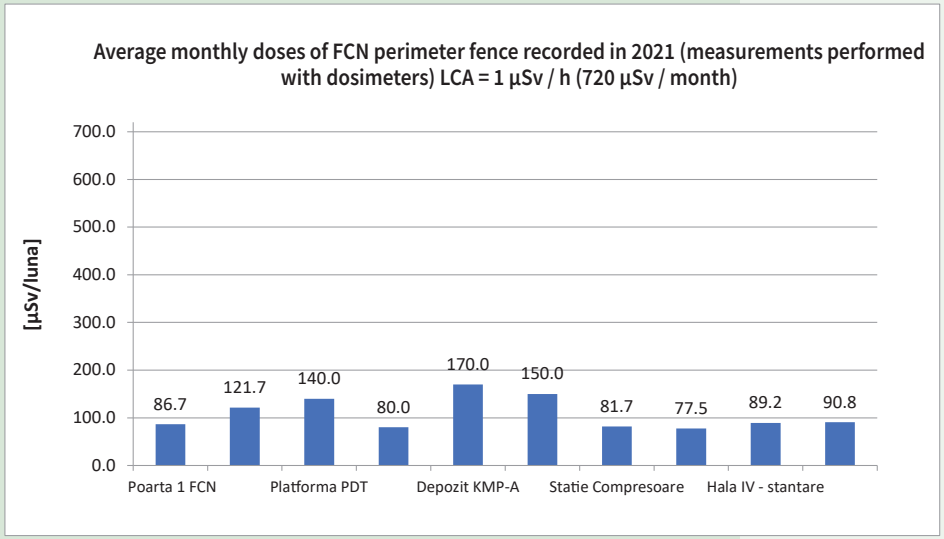
FCN Pitesti has implemented an environment radioactivity monitoring program, described in the Radiological Safety Manual, in which surface water, underground water,

soil and sediment samples are taken, in order to determine the concentration of natural uranium, global beta activity and gamma spectrometry, as the case may be, and dose measurements are made at the perimeter of FCN.

The values recorded in 2019-2021 for the average monthly doses at the level of the FCN perimeter fence were below the administrative control limits established in FCN. The recorded values are presented in the charts below.







In addition to monitoring the radioactivity of the environment, FCN Pitesti performs determinations of the concentration of beryllium in the air, lead in the soil, determinations of noise at the boundary of the enclosure.

The measured values were under the limits provided in the applicable legislation.

Considering the values recorded following the monitoring carried out for the ICN-FCN platform, we can conclude that the impact of the activity on the population and the environment is minimal.

Corrective actions for stimulating continuous improvement

In order to achieve its environment objectives, FCN Pitesti annually drafts the environment Management Program, within which measures, and actions are established that will lead to the achievement of the established targets and implicitly to the achievement of the environment objectives.

The monitoring of the registered results is performed monthly, and if there is a negative trend in reaching the targets, corrective actions are established.

When setting new environment targets, the previously recorded values are taken into account, so that the newly set targets lead to performance in the field of environment protection.

Environment performance records

In order to improve environment performance, FCN Pitesti annually sets its environment objectives, by taking into account the main indicators from Regulation (EC) no. 1221/2009 on the voluntary participation of organizations in a community system of environment management and audit.

By considering the main performance indicators defined in the aforementioned Regulation:

- Energy efficiency
- Material efficiency
- Water
- Waste
- Biodiversity
- Emissions

FCN Pitesti has established the following performance indicators:

Environment objective	Performance Indicator	Reporting frequency	Definition	Calculation method
Efficient use of electricity	Consumption of electricity related to the number of bundles manufactured	annually	The ratio between the consumption of electricity in a certain period of time compared to the number of nuclear fuel bundles manufactured in the same period of time	Annual consumption [MWh] / FC manufactured
Rational use of materials	The processing yield of UO2 powder is the amount of uranium dioxide contained in the columns of UO2 pellets formed, relative to the amount of uranium dioxide contained in the UO2 powder released in the manufacture of the pellets.	monthly	The quantity of uranium dioxide contained in the columns of UO2 pellets formed, relative to the amount of uranium dioxide contained in the UO2 powder released in the manufacture of the pellets.	Quantity of pellet columns of UO2 formed / quantity of UO2 powder launched [kg]
	Zy-4 tube processing yield is the ratio between the number of Zy-4 sheaths found in the nuclear fuel bundle, compared to the number of Zy-4 tubes launched in manufacturing	monthly	Number of Zy-4 sheaths found in the nuclear fuel bundle, compared to the number of Zy-4 tubes launched in manufacturing	According to the reports for monthly monitoring Zy-4 tube processing yield
Increasing the efficiency of water consumption	Consumption of drinking water, related to the average number of employees	annually	Drinking water consumption over a period of time, relative to the average number of employees in the same period	According to the utility agreement, reported in m3/ employee
Minimizing the generated quantity of incinerable radioactive solid waste	The quantity of generated radioactive solid waste that can be incinerated, related to the number of bundles of nuclear fuel that are manufactured	half-yearly	Amount of incinerable radioactive solid waste generated in a given period of time, related to the number of nuclear fuel bundles produced in the same period of time	According to the reports on radioactive waste, it is reported in tons / FC manufactured
Reducing emissions into the atmosphere	Quantity of uranium released by radioactive gaseous effluents, related to the number of bundles of nuclear fuel that are manufactured	Monthly	The amount of uranium discharged by radioactive gaseous effluents in a given period of time, relative to the number of fuel bundles produced in the same period of time	According to the environment monitoring reports, it is reported in mgU/FC manufactured

FC - nuclear fuel bundles

NOTE (1): There are 2 main indicators, provided by EU Regulation 1221:2009, which are not relevant for FCN Pitesti:

- *The indicator on Biodiversity Conservation is irrelevant because the sealed area (buildings, alleys and concrete technological platforms) represents more than 90% of the total area of FCN.*
- *The indicator on greenhouse gas emissions is irrelevant because the FCN activity does not involve processes with significant GHG emissions, which require monitoring.*

Regarding emissions, a specific indicator has been established regarding the amount of uranium discharged through radioactive gaseous effluents.

Managers' responsibility

Managers prove leadership and commitment regarding the integrated management system, by:

- undertaking liability for developing, implementing and ensuring the effectiveness of the management system;
- establishing and maintaining the FCN policy and objectives regarding nuclear safety, quality, environment, occupational health and safety, in accordance with the context and strategic direction of SNN-SA;
- increasing the awareness, motivation and involvement of all employees, in order to contribute to the effectiveness of the management system;
- promoting a process-based approach and risk-based thought;
- ensuring the availability of the necessary resources;
- communicating the importance of effective management and the compliance with the requirements of the management system;
- regular analysis of the integrated management system and the establishment of measures to promote continuous improvement.

FCN Piteşti is committed to achieving and demonstrating sustainable performance in the field of environment protection, by a proper management of activities / processes and products that can have a significant impact on the environment.

FCN management promotes the application of the requirements of the environment management system, is actively involved in the implementation and continuous improvement of environment performance and ensures the availability of the necessary resources.

The policy on nuclear safety, quality, environment, health and safety at work undertaken by the FCN manager is compatible with the strategic direction and context of the organization, is communicated to employees and available to stakeholders and provides the framework for setting environment objectives and is reviewed whenever is the case.

The development and implementation of Environment Management within FCN involves:

- Planning the implementation of the environment requirements in the development of programs and processes;
- Continuous assessment of the compliance obligations;
- Periodical assessment on management level of the effectiveness and efficiency of the Integrated Management System.

Internal environment audits

FCN has established and is implementing an audit process in order to assess the implementation and compliance of environment management activities with the requirements of the applicable standard.

Audits are carried out at planned intervals based on the annual plans approved by the FCN managers, by taking into account the importance of the activities, the changes that affect the organization and the results of previous audits.

Responsibilities and requirements for planning, conducting, documenting and reporting audit results and maintaining issued records are procedural activities.

FCN Pitesti has a process-based approach, and each process is audited at least every two years.

Employee training and awareness programs

FCN personnel is trained annually in the field of environment protection according to procedure CN-AC-28 “Personnel training and qualification”. The verification of the effectiveness of the awareness-raising and training actions is carried out according to the requirements of CN-AC-34 procedure “Verification of the knowledge acquired by the FCN personnel in awareness-raising and training actions”.

The FCN personnel is trained, and training effectiveness is assessed based on the planning established in the Framework program for raising awareness and training FCN personnel, code AQ-580 in each field: quality management system, environment, occupational health and safety, emergencies, radiological security, nuclear security, physical protection and classified information, nuclear guarantees, cyber security. The awareness of the environment protection personnel takes into account the environment policy, the environment aspects with significant impact, the implications of the non-compliance with the requirements of the environment management system or with the environment obligations of FCN, and the necessity for the efficient use of energy and resources. The identification of the need for training by external courses associated with environment management is performed by the Annual Vocational Training Plan in accordance with the requirements of procedure “Training and development of FCN personnel”, code CN-AD-60.

FCN management ensures the involvement of the personnel (by direct participation and information) in the process of continuously improving environment performance.

External environment audits

Annually, FCN Pitesti conducts two external audits, performed by the certification body SRAC CERT, in order to maintain the certification of the Environment Management System, implemented according to the requirements of SR EN ISO 14001:2015 and maintaining the EMAS registration, obtained by FCN Pitesti following the implementation of the requirements of Regulation (EC) no. 1221/2009 of the European Parliament and Council of November 25, 2009 on the voluntary participation of organizations in a community eco-management and audit scheme (EMAS), as further amended and supplemented.

Compliance with environment regulations

The activity of nuclear fuel production is carried out within FCN Pitești by complying with the compliance obligations resulting from:

- Environment regulations;
- Environment Authorization and other operating authorizations;
- Nuclear safety regulations, quality management, occupational health and safety, nuclear safeguards, physical protection, cyber security, emergency preparedness and responsiveness, radioactive material transportation regulations;
- Radiological security regulations;
- ISCIR requirements applicable to existing installations within the FCN, with other requirements of stakeholders regarding the developed and implemented management system;

FCN Pitesti permanently identifies the compliance obligations, and where unimplemented or partially implemented requirements are identified, actions and measures are established in order to ensure the compliance with the applicable legal requirements.

In order to carry out its activity in the field of environment protection, FCN Pitesti holds an Environment Authorization issued by GR no. 24/2019, and in accordance with the legislation in force, FCN Pitesti has the obligation to renew it on an annual basis. The approval of the environment permit is obtained only if the requirements in the field of environment protection have been observed, and the verification of their observance is performed by the representatives of the environment authority after the verification of the documents and the location.

Thus, by resolution no. 3/18.01.2022 (MMAP no. DEICP/29783/20.01.2022) the approval was obtained for 04.02.2022-03.02.2023, for the Environment Authorization issued by GR no. 24 / 25.01.2019 for FCN Pitesti.

PROTECTING PEOPLE

GRI 103-1, 103-2, 305-1, 305-2, 305-3, 305-4, 305-5, 305-7, 303-3, G4-EN8, 306-1, 306-2, 306-4, G4-EN23, 304-2, 413-1

The employees' rights and obligations are stipulated in the Collective Labour Agreement ("CLA") of SNN, in individual employment contracts ("IEC") and the Internal Regulations of the Company. The employees' rights and obligations of stipulated in the CLA are formulated in full observance of the human rights, the right to work in compliance with the applicable law, **employees benefiting from equal treatment, without discrimination, corresponding to the international standards** of the nuclear industry, in conjunction with the law and the motivational packages tailored to the macro - and micro - economic specificity in Romania.

17 PROTECTING PEOPLE

GRI 103-1, 103-2, 305-1, 305-2, 305-3, 305-4, 305-5, 305-7, 303-3, G4-EN8, 306-1, 306-2, 306-4, G4-EN23, 304-2, 413-1

Social and workforce aspects

The employees' rights and obligations are stipulated in the Collective Labour Agreement ("CLA") of SNN, in individual employment contracts ("IEC") and the Internal Regulations of the Company. The employees' rights and obligations of stipulated in the CLA are formulated in full observance of the human rights, the right to work in compliance with the applicable law, employees benefiting from equal treatment, without discrimination, corresponding to the international standards of the nuclear industry, in conjunction with the law and the motivational packages tailored to the macro- and micro-economic specificity in Romania.

The employees' activity is carried out according to the established work schedule, the job description, as well as the Internal Regulations ("IR"), updated in 2021 according to the organizational structure of the company, as of 15.07.2021, including all organizational entities within SNN, including within the Branches of the company, specifying the relations of subordination and coordination of processes, including between the head office and the branches. The updated Internal Regulations were approved by the Board of Directors of SNN by Decision no. 161/20.09.2021 ROF details the main activities, attributions, tasks of each SNN organizational entity, as well as the interface relations between the

processes performed by the functional compartments within the organizational structure of the Company. The manner of applying legal provisions and internal normative provisions regarding work discipline are set by Internal Regulations, revised in June 2021, applicable as of 11.06.2021.

The normative act that governs the labor relationships in the Company is the Labor Code - Law no. 53/2003, as further amended and supplemented, according to which, during 2021, between the Company's Board of Directors and its employees, represented by the Cernavoda NPP Union - union which is representative at unit level with legal personality, the Collective Employment Contract of SNN (CCM SNN) was signed and registered with the Bucharest Territorial Labor Inspectorate in period 01.10.2021 – 30.09.2023.

The company currently uses a standard CIM, both for employees under a fixed contract term and for those employed under an indefinite contract term. CIM implemented by CCM SNN contains provisions in accordance with the applicable legislation and complies with the clauses stipulated by Order no. 64/2003 regarding the approval of the framework model of the Individual Employment Contract.

The company assesses the employees thereof according to an internal procedure, yearly or periodically, every 3 - 6 months (in the case of the personnel under observation). The procedure for evaluating the results of the staff was revised at the end of 2020, it will be applied starting with 2021 and contains a methodology and a single form applicable to the entire company with individual key performance indicators (KPIs) derived from the general objectives of the company.

The Internal Regulations applicable at Company level, contain all the provision categories provided by the Labor Code. The Internal Regulations were made available to the employees, under signature, and are available on the Intranet page of the company and have full effect on the employees since the date of the publication. Social and labor-related aspects are transposed into SNN's Collective Labor Agreement ("CLA") and SNN SA's Internal Regulations ("IR").

The Collective Employment Contract on organization level includes all the rights and obligations of the parties, according to the Internal Regulations and the Conduct Code, and are transposed in the Individual Employment Contracts concluded with each employee, by complying with the right to free competition, fairness and equal opportunities, non-discrimination, transparency, equal treatment and accountability.

The employment is done following the selection and recruitment process, which is based on the provisions of the Labor Code, the Collective Labor Agreement negotiated between the representatives of the management and the representative trade unions according to Law no. 62/2011, Law on Social Dialogue and the internal procedures in force.

UNION RELATIONS

The relationship with the trade unions is permanent and consists in meetings/consultations with them, and the provisions of the SNN CLA are negotiated following permanent consultations of the Commission appointed by the management, as well as by the trade unions, according to the provisions of Law no. 62/2011.

HUMAN CAPITAL MANAGEMENT

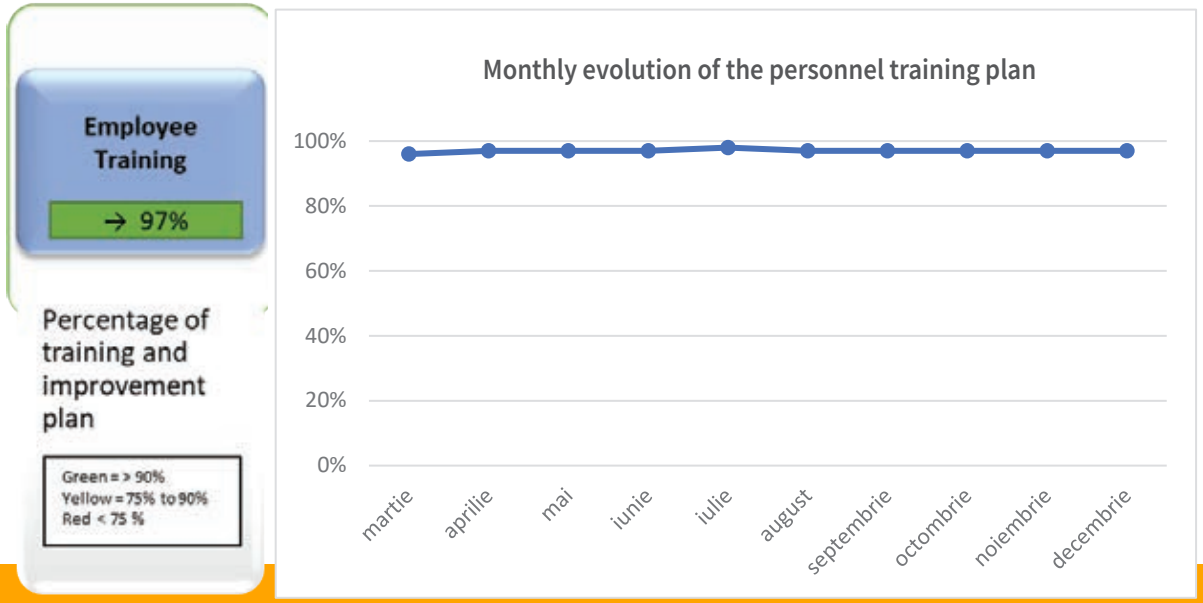
As far as the human capital management is concerned, the company is involved and constantly invests in the quality of workers, through continuous training and preparation and by promoting the meritocracy as component part of the motivation system documented and implemented within SNN SA.

In particular, the nuclear energy industry imposes on the personnel selected for positions of management, coordination and supervision of the activities within the processes carried out within the company requirements at the highest standards of professional competence and ethics in the specific field of activity, giving priority to nuclear safety considerations before any considerations of another nature.

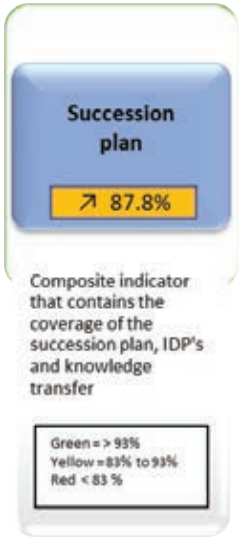
The significant aspects achieved in 2021 within SNN regarding the performance of the processes related to the workforce are summarized as follows:

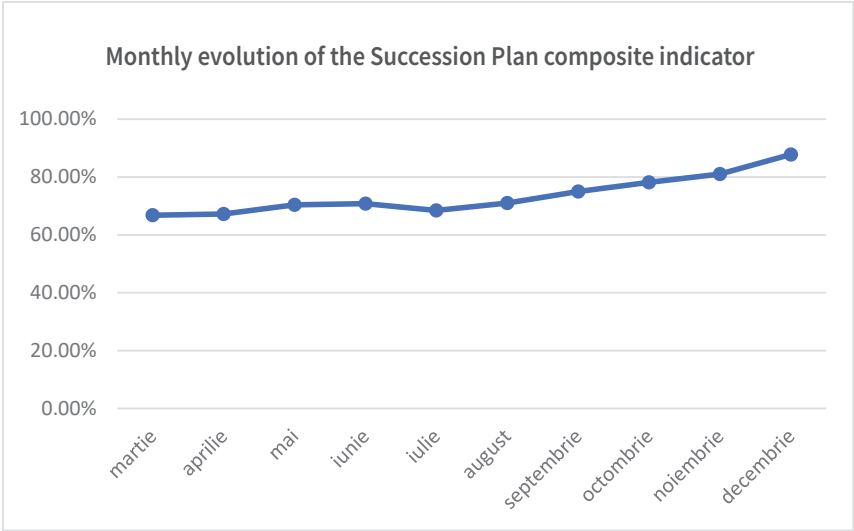
- A comprehensive process of succession planning was developed and implemented on corporate level. The overall process includes identifying, selecting and developing candidates for future leadership roles.
- Successor development is planned and monitored by newly developed individual development plans (IDPs). These PDI include elements such as: Short and long term goals, learning objectives and support activities, training needs / activities, as well as roles / experiential activities that are necessary for development. These PDI were developed based on comparative analyses from the industry.
- Corporate positions which are critical to the company's success have been identified and included in the succession planning process. Out of these 19 roles, 18 currently have identified successors, while the remaining role will be completed in early 2022;
- The specific procedures describing the succession planning process have been updated and harmonized between the SNN headquarters and the two branches;
- A Report Card at SNN level was developed and implemented in 2021, and it includes the main HR indicators in order to ensure a good visibility in the entire organization of the performance of HR processes. Briefly, the performance of these indicators in 2021 is as follows:

I. PERSONNEL TRAINING



II. SUCCESSION PLANNING

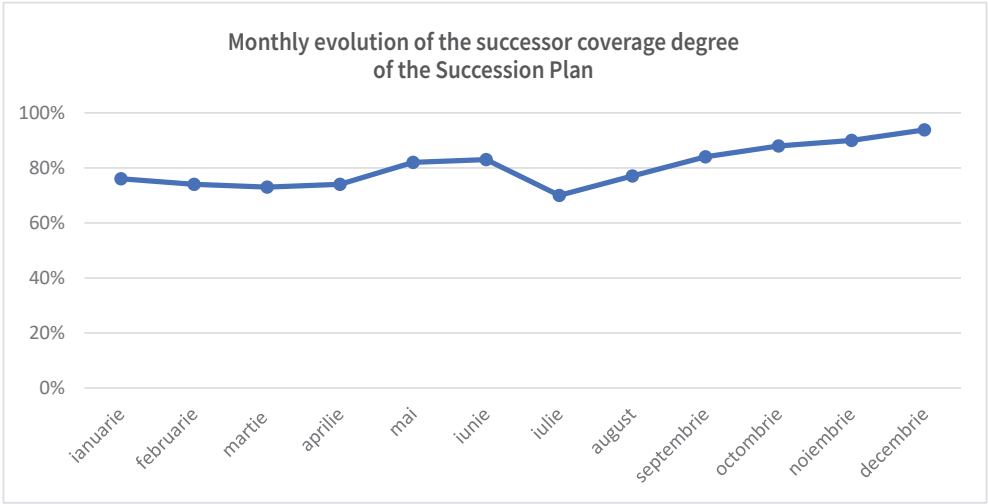




The indicator places the implementation of personnel training plans in the field of excellence as having a constant evolution and will be improved by the following strategic directions aimed at the transfer of knowledge and the development of the career plan:

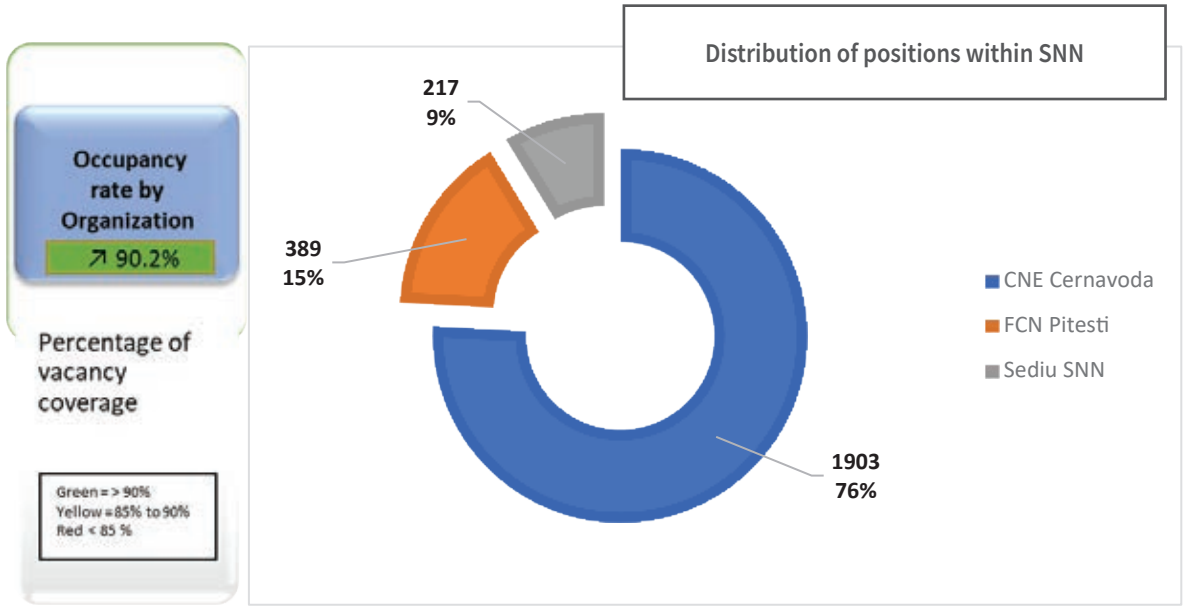
- Obtaining specialized consultancy in knowledge transfer management and career plan development;
- Updating the professional training programs available at the level of the training center of the company from Cernavoda NPP which are used for the training of the entire personnel within SNN;
- Attracting specialized consulting and training programs for trainers within the training center, for acquiring the available know-how at international level, especially in the nuclear energy industry;
- Development of leaders by dedicated training and coaching programs.

- The indicator on the management of succession plans established on the level of each unit within SNN is a composite indicator that includes the degree of coverage of sensitive positions within the company that require the appointment of successors, successor training and knowledge transfer by mentoring techniques.
- The indicator is located in the yellow area, mainly due to the transfer of knowledge, which requires time to mainly complete the mentoring programs with a period of at least six months or a year.
- The purpose of succession planning activities is to ensure that adequate resources are available to quickly fill a sensitive leadership / coordination position that has become vacant.
- The coverage with the successors was significantly improved in 2021, considering the measures adopted by the company's managers, in establishing a documented unitary framework for the management of the succession plan, and its evolution is presented in the following chart:



- This evolution is monitored on a monthly basis during MRM meetings, including the completion stage of the preparatory actions included in the Individual Development Plans established for each successor.
- The analysis of the progress recorded by the personnel included in the succession plan for sensitive management / coordination positions is conducted on an annual basis, within 10 days after the completion of the annual assessment of the successor's individual performance, by each line manager for the directly subordinated management/coordination positions, in cooperation with the potential successor's direct manager.
- The selected successors are included in the list of legal replacements of the holders of sensitive management / coordination positions within the SNN executive.
- The collective labor contract and the specific procedure for the promotion of employees have been updated, so that the succession plans can be capitalized.

III. ORGANIZATIONAL CHART OCCUPANCY DEGREE



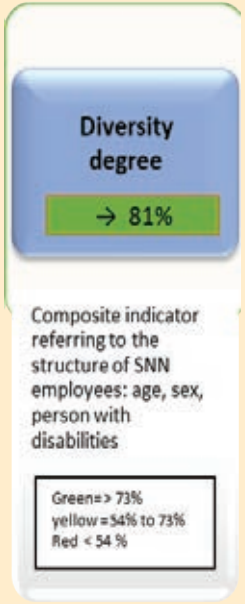
Following the monitoring of this indicator, prompt actions were established, in order to rethink the recruitment process, simplify bureaucratic formalities, use specialized recruitment services and digitize the recruitment process on company level.

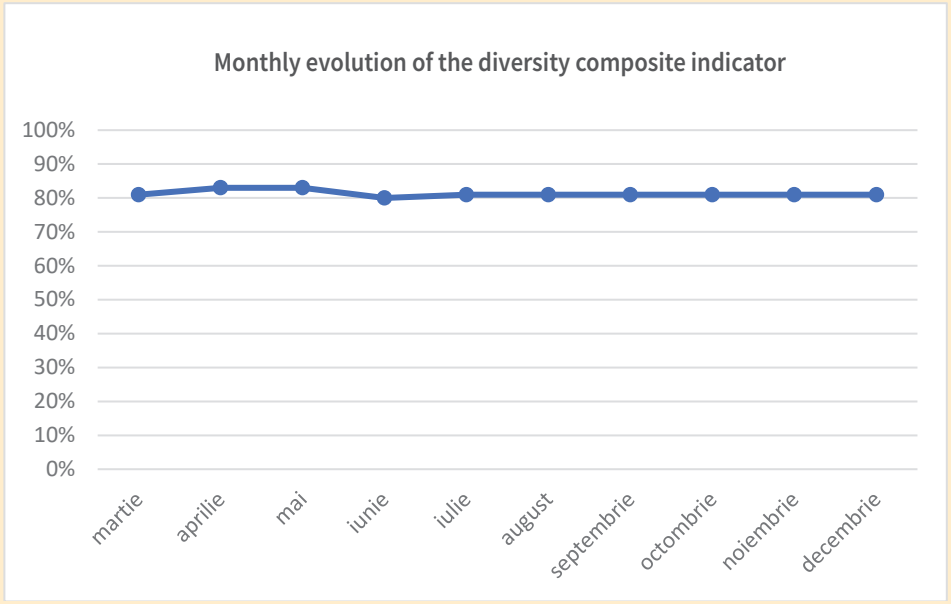
Strategic action directions in optimizing this indicator consist of:

- Conducting a professional analysis, with the approval of CNCAN, on the correct sizing of the necessary personnel and salaries competitive with the nuclear energy industry in the European Union for positions that are important for nuclear security, and also for support positions in comparison to the labor market, according to the requirements of the Fundamental Norms of Nuclear Security - NSN 21; study in progress, to be completed until April 2022;
- Involvement in the early training of the young generation of specialists, by participating in the "Educated Romania" national program;
- Involvement of SNN specialists in adapting university study programs and professional secondary studies in activity fields specific to the production of electricity from nuclear sources;
- Attracting partnerships for the training and coaching of young specialists, including SNN scholarship holders, in areas of specialization specific to the activities carried out within SNN and the development projects carried out within the company;
- Training courses in high performance units in the nuclear energy industry of the personnel who will ensure the operation and maintenance of both the refurbishment production capacities and the new investments in the production capacities of the company.

IV. DIVERSITY INDICATOR

A composite indicator that includes attracting and stability within the company of young specialists (under 30 years old), gender diversity and access of persons with disabilities to workplaces in the company.





The indicator has a constant cumulated evolution, is in the area of excellence, and the strategic directions of action consist of:

- Involvement of the company in the early training of the young generation of specialists in the nuclear energy industry, both by the strategic directions mentioned above and by supporting modernization laboratories, school workshops, internship programs, study facilities, school/university competitions or participation in thematic projects.
- Optimizing the management of internal communication by conducting research programs on employees' satisfaction with the culture and organizational climate, organizing thematic social actions in order to adapt behaviours to the mission, vision and values of SNN.
- Diversity tracking and monitoring are performed for the first time, and are part of a broader strategy to In addition to including these new measures in the SNN Report Card, a monthly management review is conducted at the top management level of the company, in order to analyze and discuss the progress made in each of these areas.
- A complex mentoring program has been implemented in order to help support the increased number of employees who require a development of leadership roles or for the positions that require tacit knowledge and specific skills.
- A management rotation program was implemented, and the first employee was from CNE to SNN; the program started in the summer of 2021 and continues in 2022. Future rotations between sites (CNE and FCN) to corporate, as well as from corporate to sites, are planned in order to help individual development and improve the alignment between different organizations.
- The collaboration with national universities and other educational institutions has been improved and formalized, with newly developed objectives for internships within the company, in order to hire directly from a group of university or vocational graduates in the technical field.

HIRING AND TRAINING

SNN maintains a tradition regarding the attention to the training of young specialists and the support of university study programs by supporting professional practice programs and involving the students in approaching current topics and of interest for SNN SA in practical academic works and those for taking the bachelor or master degree exams.

In 2021, the company started implementing the Program for training young specialists, by the "dual school" form, and concluded 3-year partnership contracts with professional education units, according to the applicable legislation in this field, and this program supplements the "Young Nuclear Specialist" program, initiated and implemented starting with 2021, in order to train a new generation of specialists, and will continue in the following years. The "Young Nuclear Specialist" program consists in granting scholarships in the university and professional environment, who will attend, during the entire period of the scholarship, professional training programs within SNN units, and at the end of the study program, they will work within the SNN units for at least 5 years.

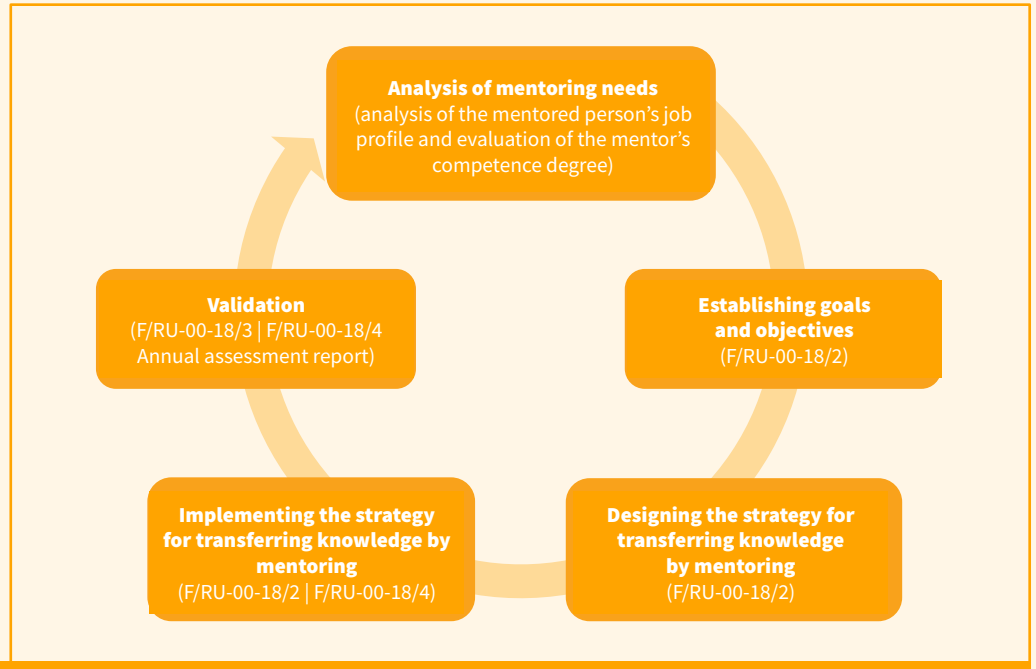
The management team of SNN SA intends to develop the collaboration with the university environment through a greater involvement regarding the training of practical skills of young people, becoming familiarized with their expectations and needs, and adapting their own existing programs mainly as part of the company's operating activities adapted thereto, in order to increase the attractiveness of SNN and the recognition of the employer brand.

With the promulgation of Law no.177 of July 19, 2018 on internship, SNN SA appreciated the significant contribution made by this legal provision in increasing the professional quality, both informal and formal, of young specialists, by attracting, motivating and actively involving them within the company, which was confirmed by the application within SNN in 2021 of this form of attracting and training young specialists.

MENTORSHIP

A crucial element in the management of succession programs is the transfer of knowledge by mentoring, so within the company, a unitary procedure was implemented, RU-00-18 “Development and implementation of mentoring practices within SNN”, which applies to the entire company, in order to ensure by mentoring the assimilation of knowledge and practices that are necessary for carrying out activities under quality and safety conditions, imposed by the technical requirements, guidelines and specific standards of nuclear safety, to the younger specialists from the company.

Mentoring is based on the individual mentoring plan established as a unit on company level, for each mentored person. The performance of the mentoring sessions is determined in accordance with the SAT (Systematic Approach Training) module, shown in the following diagram:



MEASURES DURING THE COVID 19 PANDEMIC

In the context imposed by the coronavirus pandemic, professional activities were maintained by implementing continuity plans on the level of each SNN unit, which contained the isolation of the essential personnel in order to ensure the operation of the production capacities within CNE Cernavoda. Also in this context, besides the sanitary protection measures, medical filter, covid testing and social distancing, the company adopted forms of remote working by allowing employees to work from home, and subsequently by introducing teleworking, a situation which required the adaptation of CCM and the related HR policies.

In 2021, 43 mentoring plans were established, out of which, until 31.12.2021, 24 plans were successfully completed.

The assessment of the mentoring process is carried out on an annual basis by an assessment conducted by an independent team appointed by a Resolution of the Chief Executive Officer for all the units of SNN, which presents the conclusions of the assessment in a report, whose conclusions will be taken into consideration when drafting / updating the mentoring Program created on the level of each unit within SNN.

Top management training is carried out on company level based on a training plan approved by CNCAN whose purpose is to ensure systematic professional training adapted to the nuclear specifics of the company's activity and the requirements of the nuclear safety culture.

Training programs include a general component and a component specific to each position.

General training is training common to all positions in the company, and consists of:

- Induction training for new employees (includes several issues, such as: Familiarization with the location of the unit, Organization and documentation, Basics of first aid, Overview of the company and production units, Nuclear safety culture, Access control and communications, Information security, Human resources procedures, Physical protection, Anti-fraud policy of SNN SA);
- Occupational safety training;
- Human performance training;
- Radiation protection training;
- Training in the field of integrated management system;
- Leadership management and training.
- Specific training varies from one function to another, according to the identified training requirements, and has the following components:
- Technical Training (Fundamental Sciences; Nuclear Technology; Power Plant Systems; Technological Manufacturing Processes; Nuclear Safety and Nuclear Safety Culture);
- On-the-job training (on-the-job practical training by specific courses, mentorship training).

SNN prioritizes the culture of nuclear safety, so it is promoted in all involved activities.

DEVELOPMENT ROTATIONS

Starting with 2021, within SNN, the rotation program was organized, which consists of the temporary occupation of a management position directly subordinated to the COO manager of operations, in order to mainly carry out:

- Drafting programs and the preliminary analysis of the documentation involved in coordinating the management of the technical process - production at the level of SNN branches;
- Participating under the coordination of the COO in monitoring the availability of resources necessary for subordinated processes, formulating proposals for improving contracts for the acquisition of equipment, services and specific maintenance works in branches;
- Formulation of proposals for the unitary implementation of production programs at the level of SNN and monitors their implementation, according to the approved BVC;
- Providing support for the coordination of activities to authorize the operation of branches and obtaining licenses;
- Formulation of proposals for updating the norms, instructions and regulations in the activity field or related to the technical process - production;
- The participation, at the request of SNN managers, in the stages of planning, development and monitoring of the performance of SNN development projects;
- Participation in the unitary development of the company's IT system from an organizational, technological and technical point of view.

OCCUPATIONAL HEALTH AND SAFETY

In accordance with the provisions of Law 319/2006 on occupational safety and health, all the workplaces within SNN identify hazards and assess the risks for each component of the work system, namely, implementer, workload, work means / work equipment and work environment.

Based on the assessment of occupational safety and health risks, Prevention and Protection Plans are established, the measures contained in them are analyzed during the Meetings of the Occupational Safety and Health Committee organized at company level in accordance with the applicable legal provisions. The measures contained in the prevention and protection plan have resources allocated for their implementation.

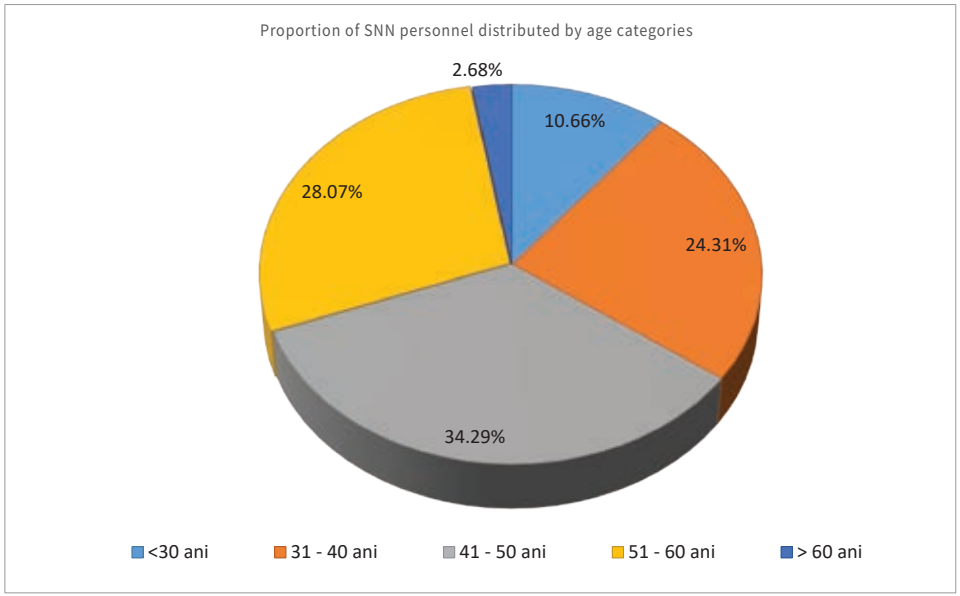
The training of SNN employees regarding occupational health and safety is carried out in accordance with the provisions of Law 319/2006 at employment, periodically and additionally, when necessary, based on programs and topics established at company level.

The health of SNN employees is monitored according to the provisions of GR 355/2007 on monitoring employees' health at the workplace by specialized contract-based occupational medicine services, each employee is examined by an occupational physician at least once a year, according to the professional risks identified for the activities carried out at his/her workplace, by constantly informing employees.

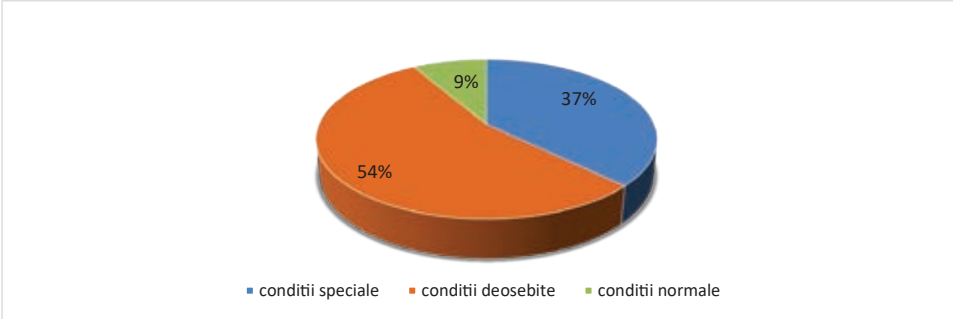
In 2021 there were no work-related accidents within SNN.

CENTRALIZED KEY PERFORMANCE INDICATORS (KPI) WITHIN SNN

STRUCTURE OF THE PERSONNEL BY AGE GROUPS

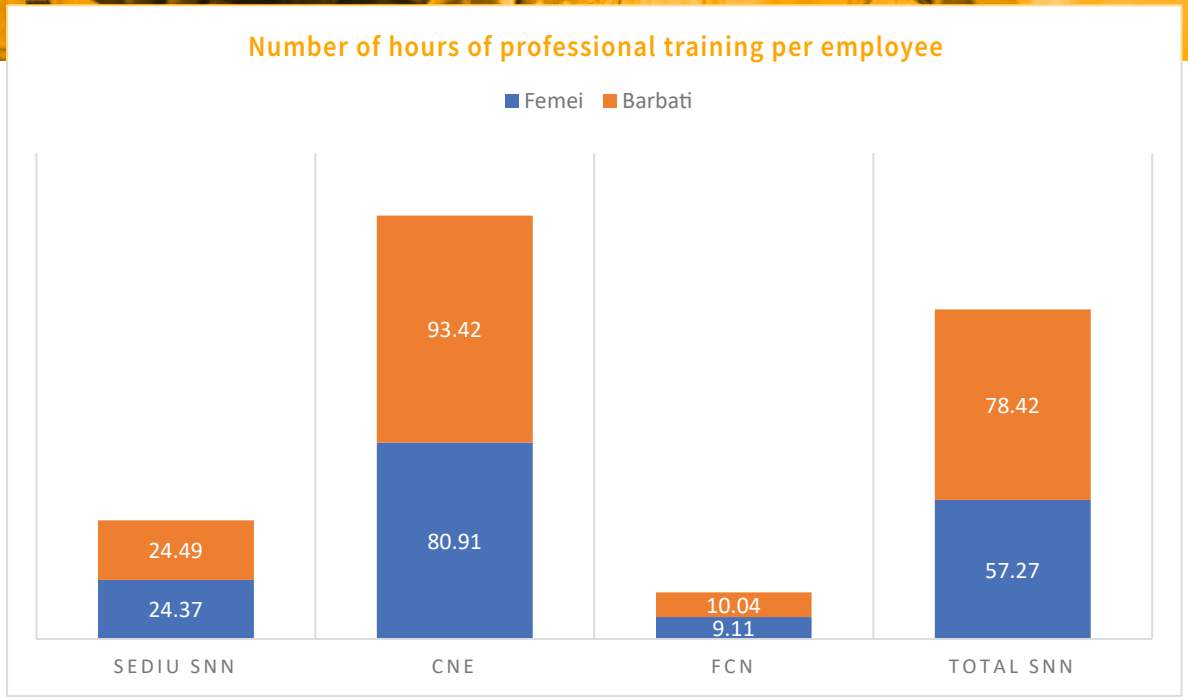


SNN EMPLOYEES BY WORKING CONDITIONS



The Turnover Rate is 9.6%, representing the fluctuation of unexpected staff departures from the company in 2021;

The average number of training hours per year for each employee is on average **79.5 h / employee per year,** in accordance with the initial and continuous training requirements established by the systematic training programs and the requirements imposed by CNCAN regulations and the specifics of the nuclear energy industry.


Number of hours of professional training per employee
Femei
Barbati
24.49
24.37
93.42
80.91
10.04
9.11
78.42
57.27
SEDIU SNN
CNE
FCN
TOTAL SNN

OBSERVANCE OF HUMAN RIGHTS

The human resources strategies and policies, the action directions of the administrative and executive management, aim for the observance of human rights in compliance with the international and national legislation. In this regard, Nuclearelectrica pays attention through its policies and strategies to: the principle of equality of rights and equality of chances, the right to life, health protection and the right to a healthy environment, the right to defence and non-discriminatory access to justice, individual freedom and the right of free circulation, freedom of expression, freedom of information, the right to elect and be elected, the right to work and the right to strike, the right to association, the protection of people with disabilities, the right to petition, the right to legislative initiatives, the protection of children and youth.

SNN recorded no cases with a major impact on human rights in relation to the current activity or the decisions adopted. The admission and settlement of any complaints, the mitigation of cases of human rights breached and the adoption of settlement measures are carried out according to the Ethics Commission Regulations.

By CCM SNN, the Internal Regulations of SNN SA and the specific procedures developed within the Company, the company manages the aspects related to ensuring human rights, including the freedom of association, preventing people trafficking for all forms of exploitation, forced labor or obligations related to child labor, working under precarious and unsafe conditions, and no such situations were reported in 2021.

18 FINANCIAL EVOLUTION

GRI 201, 201-1, 201-4

Indicator (Thousand RON)	12-month period that ended on December 31, 2021 (audited)	12-month period ended on December 31, 2020 (audited)	12-month period ended on 31 December 2019 (audited)
Production (GWh)*	10,377	10.558	10.347
Operating revenues, of which:	3,203,880	2.500.172	2.417.433
Revenues from the sale of electric power**	3,103,150	2.432.279	2.365.564
Operating expenses, less depreciation and amortization	(1,461,544)	(1.184.029)	(1.232.455)
EBITDA	1,742,336	1.316.143	1.184.978
Impairment and depreciation	(562,856)	(544.752)	(555.553)
EBIT	1,179,480	771.391	629.425
Net financial result	24,614	44.017	1.850
Net income tax expense	(167,832)	(116.086)	(95.608)
Net profit	1,036,262	699.322	535.667

**Electricity produced and delivered by Cernavoda NPP in the National Energy System.*

***Including revenues from the sale of thermal energy, insignificant in the total revenues.*

Indicator	Formula	m.u.	2021 (audited)	2020 (audited)	2019 (audited)
Profit indicators					
Return on assets	Net profit/Total assets	%	10.8%	7.9%	6.1%
Liquidity and solvability indicators					
Current liquidity ratio	Current assets/ Short-term debts	x	5.31	4.73	4.65
Quick liquidity ratio	Current assets - Inventories/Current liabilities	x	4.46	4.00	3.90
Patrimonial solvency	Equity/Total liabilities	x	6.64	5.68	4.97

	2021 thousand RON	2020 thousand RON	2019 thousand RON
A. Directly generated economic value	3,116,639	2,446,004	2,377,772
Income	3,116,639	2,446,004	2,377,772
B. Distributed economic values	2,664,109	2,343,145	2,262,559
Operating expenses	1,370,686	1,099,363	1,144,989
Personnel expenses	444,087	440,281	425,597
Payments to shareholders	471,877	498,279	378,943
Payments to the government	348,235	295,723	302,118
Community investments	7,998	9,500	10,911
C. Retained economic value	452,530	102,859	115,213

	2021	2020	2019	Explanations
1. Tax exemptions or tax credits;	n/a	8,002,247	n/a	The Romanian Government issued in 2020 several emergency ordinances on some fiscal measures in the context created by the Covid-19 pandemic, establishing procedural-fiscal measures to support the taxpayers paying corporate tax. Thus, under GEO no. 33/2020 and GEO 99/2020, the Company benefited from a bonus calculated on the corporate tax due, amounting to RON 8 million.
	7,221,810	9,499,748	10,897,352	Sponsorship
	16,148,244	n/a	n/a	Bonuses GEO 153/2020
	3,221,916	913,611	956,982	Reinvested profit
2. Allowances;	14,354,155	14,344,816	14,368,732	Subsidies for investment (long-term deferred income) were granted in 2007 and consisted of cancellation of penalties and liabilities related to the loan agreements. Subsidies are recorded in the profit and loss account as revenues over the period 2007-2026, for the remaining useful life of Unit 1.
3. Grants for investments, grants for research and development and other relevant types of grants;	1,313,068	n/a	n/a	Grant provided by the European Commission for "CYNERGY - the first ISAC for the Energy Sector in Romania"
4. Awards;	n/a	n/a	n/a	
5. Copyright exemptions;	n/a	n/a	n/a	
6. Financial assistance received from export crediting agencies;	n/a	n/a	n/a	
7. Financial incentives;	n/a	n/a	n/a	
8. Other financial benefits received or to be received from any government for any operation.	n/a	n/a	n/a	
9. TOTAL	42,259,194	32,760,422	26,223,066	

ETHICS, INTEGRITY AND CONFLICTS OF INTERESTS

GRI 103-1, 103-2, 102-16, 102-17, 102-25

Through this code of ethics and professional conduct of the Board of Directors, the members thereof adhere to a set of principles regarding **good governance, decisional transparency, integrity, impartiality, honesty, loyalty and the efficient management of the organization's resources** in view of achieving its goals.

19

ETHICS, INTEGRITY AND CONFLICTS OF INTERESTS

GRI 103-1, 103-2, 102-16, 102-17, 102-25

The members of the Board of Directors are obliged to exercise their mandate with the prudence and diligence of a good administrator, with loyalty in the best interest of the company, and without disclosing any confidential information and business secrets of the company. Through this code of ethics and professional conduct of the Board of Directors, the members thereof adhere to a set of principles regarding good governance, decisional transparency, integrity, impartiality, honesty, loyalty and the efficient management of the organization's resources in view of achieving its goals. The Code of Ethics and Professional Conduct defines the mission, vision, values and standards of professional conduct that the members of SNN's BoD must observe and apply in their activity carried out within the organization, in accordance with the business model and the organization's goals, as well as create the organizational framework for transposing such principles into procedures and policies applicable to all SNN employees. Also, the Code of Ethics and Professional Conduct defines guidelines and directs individual and group behaviours in the internal and external relationships of SNN's BoD.

https://www.nuclearelectrica.ro/ir/wp-content/uploads/sites/9/2019/08/Cod-de-etica-si-conduita.pdf

The provisions on the management of the conflict of interests are included in the Internal Regulations of the Board of Directors, as well as in the Code of Ethics of the Board of Directors.

The members of the Board of Directors will make decisions for the sole best interest of the Company and will not take part in the debates or decisions creating a conflict between their personal interests and those of the Company.

Each member of the Board of Directors ensures the avoidance of a conflict of interests directly or indirectly with the Company and, in case of such conflict, will refrain from debating and voting on such issues, in compliance with the applicable legal provisions.

The members of the Board of Directors present the SNN Board of Directors with information on any relationship with a shareholder directly or indirectly holding shares representing over 5% of all voting rights. This obligation refers to any relationship that may affect the position of the member on matters decided by the Board.

In order to provide the correctness of the transactions with the involved parties, the members of the Board of Directors resort to the following criteria, but without limitation thereto:

- Maintaining the competence of BoD or GMS, as applicable, to approve the most important transactions. In case of transactions with affiliates, SNN will comply with the provisions of art. 52 par. (5) in GEO no. 109/2011, as further amended and supplemented;
- Any transaction with a value equal to or higher than 5% of the net assets of the company is approved by the Board of Directors, following a mandatory opinion of the Advisory Audit Committee of the Board;
- Requesting a previous opinion on the most important transactions from the part of the internal control structures (The Advisory Audit Committee and Internal Audit Department);
- Entrusting the negotiations on these transactions to one or several independent directors or to the directors unrelated to such involved parties;
- Resort to independent experts.

Besides the compliance with the general legal provisions, SNN has established and implemented internal policies regulating in further detail the internal procedure on the disclosure of transactions between affiliates.

Thus, the Board of Directors informs the shareholders, within the first GMS following the conclusion of the legal deed, on any transaction with the directors or managers, with the employees, with the shareholders having control over the Company or with a company thereby controlled, by making available to the shareholders the documents reflecting the essential and significant data and information related to these transactions. At the same time, the Board of Directors informs the shareholders, within the first GMS following the conclusion of the legal deed, on any transaction concluded by SNN, as a public enterprise, with another public enterprise or with the tutelary public authority, if the transaction has an individual value or in a series of transactions, of at least the RON equivalent of EUR 100,000.

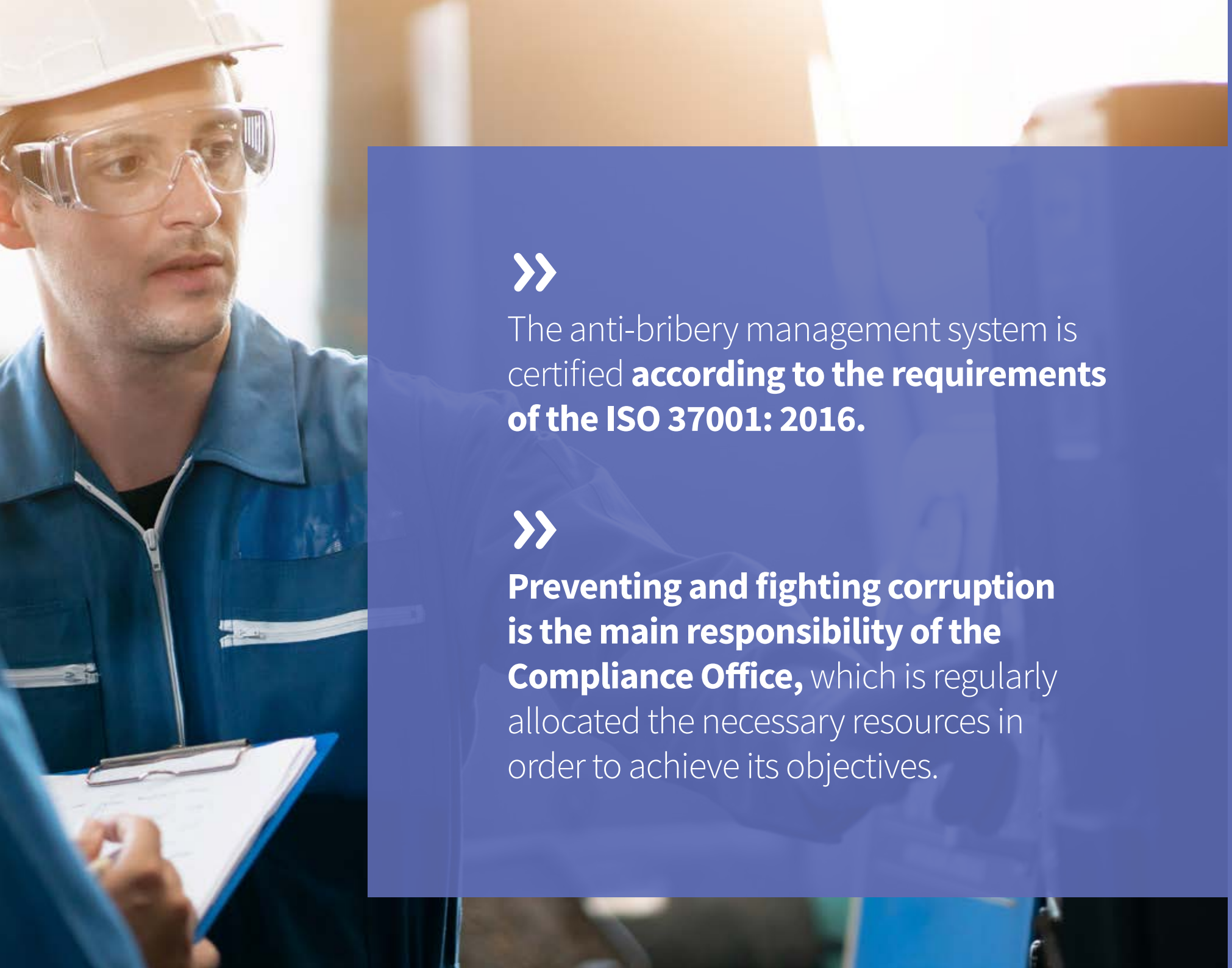
The Board of Directors approves on a quarterly basis an informative report on the purchase of goods, services and works the value whereof exceeds EUR 500,000/purchase (for the purchase of goods and works) and respectively EUR 100,000/ procurement (for services), report published on the website of the company in the section of Investor Relations/Periodic Reports.

The Board of Directors also approves and publishes, on a yearly basis, on the SNN website, a report on the sponsorships awarded over the previous year.

https://www.nuclearelectrica.ro/ir/raportari-periodice/

ANTI-CORRUPTION POLICY

GRI 103-1,103-2, 205-2



The anti-bribery management system is certified **according to the requirements of the ISO 37001: 2016.**

Preventing and fighting corruption is the main responsibility of the Compliance Office, which is regularly allocated the necessary resources in order to achieve its objectives.

20 ANTI-CORRUPTION POLICY

GRI 103-1,103-2, 205-2

The anti-bribery management system is certified according to the requirements of the ISO 37001: 2016. In order to ensure the integration of the requirements of the anti-bribery management systems in the processes of the company, the internal normative anticorruption framework was consolidated and developed by drafting policies and procedures, namely:

- The Anticorruption policy, designed to encourage and facilitate the activity of preventing and fighting corruption deeds, setting anticorruption principles for all employees, setting up a framework for setting, reviewing and achieving anticorruption objectives;
- The procedure "Manner of complying with the Anticorruption policy" which regulates the field and structure of the compliance function established in order to ensure the compliance with the principles set in the Anticorruption Policy;
- The procedure regarding the "Implementation of financial and non-financial anticorruption compliance inspections" that describes the manner of implementing relevant inspections for preventing, detecting and investigating corruption risks;
- The procedure for assessing business partners from the perspective of the risks associated to the anticorruption compliance system which describes the manner in which the analysis of commercial partners is performed in order to minimize the risks generated by the transactions performed by SNN S.A.;
- Procedure on "Identifying, assessing and preventing conflicts of interests"

The main criteria considered when assessing risks:

- Sanctions or authorization withdrawals
- Involvement of the company or its employees in litigations
- Losing strategic commercial partners
- Increasing the number of deficiency notifications
- Nature, size and complexity of processes and activities
- Anti-bribery management system of business partners: suppliers, clients and consultants
- Locations and activity sectors where the organization operates or estimates that it will operate

The anti-bribery management system developed by Nuclearelectrica is adapted to the requirements of the ISO 37001: 2016 standard and considers internal control procedures over the following processes:

- Declaring presents and other benefits;
- Preventing conflicts of interests, incompatibilities and pantouflage;
- Mandate of the ethics adviser and of the compliance officer;
- Protection of the integrity whistle-blower;
- Prevention measures for managing sensitive functions;
- Sponsorships, donations and other charitable activities;
- Employee deductions.

Preventing and fighting corruption is the main responsibility of the Compliance Office, which is regularly allocated the necessary resources in order to achieve its objectives.

S.N. Nuclearelectrica has created the Compliance function which is responsible for managing the anti-bribe management system. The compliance officer has long/important experience in Internal Audit and Compliance. The training program includes the regular participation in specific seminars and courses on fraud, corruption, ethics and integrity.

Nuclearelectrica has established mechanisms for monitoring and warning the occurrence of threats or non-compliant situations regarding breaches of ethics and integrity norms, such as:

- Periodical identification and assessment of corruption risks;
- Company's employees declaring potential conflicts of interests and using an app for declaring and consolidating the respective information;
- Anti-bribery contractual clauses included in contracts concluded with business partners;
- Periodical program of consultancy for employees established by the Ethics Advisers;
- Communication channels provided to the whistle-blower and analysis of complaints / notifications depending on their nature;
- Assessments of business partners regarding the anti-bribery management system;
- Internal inspections aiming at the occurrence of fraud and corruption situations;
- Analysis of sponsorship applicants in relation to their ethical behaviour.

We do not have pending or completed lawsuits regarding anti-competition behaviour.

The Ethics and Conduct Code establishes the principles that govern the ethics and professional conduct of Nuclearelectrica employees. The anti-corruption policy defines the corruption and bribery terms.

The “Facilitation payments” term is not defined in the Romanian legislation and is interpreted in the legislation as bribery.

Internal procedure AF-00-03 - Granting and accepting benefits - indicates the interdiction of granting any benefits to authorities, business partners or any other persons in order to facilitate approvals, authorizations or illegitimately obtaining a business decision. Also, Nuclearelectrica has a procedure dedicated to conflicts of interests. Employees are obligated to declare their personal interests which are contradictory to the interests of the company. The statement is renewed on an annual basis.

Warning system

The procedure aims to establish ways of reporting and dealing with irregularities and is designed to address issues of public interest that may include the non-compliance with SNN policies, procedures or applicable law.

The problems that can constitute deficiencies (without limitation) are: non-compliance with the Code of Conduct, non-compliance with policies and procedures, inappropriate issues regarding financial statements and employee relations, abuses, discrimination, corruption cases, thefts, money laundering, and any inappropriate behaviour that could damage the company’s reputation or any attempts to hide any of the above. e all of the above.

The company, as it acknowledges the essential importance of a clear and updated process regarding internal reporting and the protection of those that send such reports (the persons who send notifications), adopts this procedure in order to guide its personnel and to declare that it ensures their full confidentiality and protection, as part of its general responsibility towards its personnel, shareholders and clients.

1. PURPOSE

THE WHISTLEBLOWING PROCEDURE AIMS AT:

- to encourage its employees and third parties to feel confident in opening a discussion about serious issues, to question such issues and to act accordingly;
- to provide its employee and third parties with the ways to discus and be appreciated for any actions taken consequently;
- to ensure that its employees and third parties are receiving a reply related to the issues notified and that they know how to proceed when they are not satisfied by the actions taken;
- to assure again its employees and third persons with regard to the fact that, when they are presenting in good faith the issues they feel are real, they will be protected against any repercussions or victimization.

In particular, this procedure aims to establish the communication means and the process of receiving notifications regarding:

(a) inadequate actions and/or accounting and auditing practices that are contrary to international practices and applicable regulations; and

(b) fraud, corruption or conflicts of interests;
as defined in the SNN related policies / codes on fighting fraud and corruption, conflicts of interests.

However, by the communication channels described in this procedure, other alerts may be transmitted regarding the irregularities identified by the petitioners.

2. FIELD

The Whistleblowing Procedure is intended to provide support to individuals (permanent or part-time employees, contractors, suppliers, customers and other members of the public) who believe that they have discovered negligence, fraud or irregularities.

This procedure does not apply to personal complaints that refer to terms of employment or other aspects of the employment relationship or disciplinary issues.

The procedure is not intended to call into question the financial or business decisions taken by SNN and its branches, nor should it be used to reconsider issues that have already been addressed under disciplinary procedures.

The principles of this procedure are in accordance with the principles that govern the protection of whistle-blowers:

- the principle of legality, according to which public authorities and institutions have the obligation to respect the rights and freedoms of the citizens, procedural norms, free competition and equal treatment granted to the beneficiaries of public services, according to the law;
- the principle of the supremacy of the public interest, according to which the rule of law, integrity, impartiality and efficiency of public authorities and public institutions are protected and promoted by law;
- the principle of responsibility, according to which any person who reports breaches of the law is obligated to support the complaint with data or indications regarding the committed deed;

- the principle of abusive non-sanctioning, according to which persons who complain or report breaches of the law, directly or indirectly, cannot be sanctioned by applying an unfair and more severe sanction for other disciplinary breaches. In case of a public-interest warning, deontological or professional norms are not applicable in order to prevent the public-interest warning;
- the principle of good administration, according to which public authorities and institutions are obligated to carry out their activities in achieving the general interest, with a high degree of professionalism, under conditions of efficiency, effectiveness and economical use of resources;
- the principle of good conduct, according to which the act of warning in public interest regarding aspects of public integrity and good administration, is protected and encouraged, in order to increase the administrative capacity and the prestige of the public authorities and institutions;
- the principle of balance, according to which no person can use the provisions of the law in order to diminish administrative or disciplinary sanctions for a more serious deed;
- the principle of good faith, according to which the person who has submitted a notification is protected, being convinced of the accuracy of the status quo or that the deed constitutes a breach of the law.

Deficiencies mainly refer to, without limitation:

- Abuse of trust
- Corruption offenses, offenses assimilated to corruption offenses, offenses directly related to corruption offenses,
- Forgery and use of forgery crimes;
- Fraud and embezzlement on investment capital
- Theft and misappropriation
- Blackmail
- Forging documents and other manipulative actions with documents
- Robbery
- Manipulating market prices
- Insolvency crimes
- Constraints and threats
- Inside trading (illegal) and market manipulation activities
- Forging company records
- Computer crimes
- Forging, pirating products and brands
- Abuse in relation to private or business secrets
- Breaches related to accounting, financial-accounting inspections or internal audit;
- Breaching the legal provisions regarding public procurements and non-reimbursable financing;
- Anti-competition arrangements
- Money laundering
- Breaking representation and document signing rules
- Preferential or discriminatory practices or treatments in exercising attributions
- Breaching the provisions on incompatibility and conflicts of interests;
- Abusively using material or human resources of the company;
- Anti-competition practices;
- Work incompetence or negligence;
- Non-objective evaluations of the personnel in the process of recruitment, selection, promotion, demotion and dismissal;
- Breaches of procedures or establishing internal procedures by breaking the law;
- Any other serious breach of legislation or business ethics and conduct internal norms of the Company.

3. OPERATIONAL METHOD

Given that the reporting process is generally recognized as a key tool for detecting misconduct, it is important that employees fully understand the type of incidents they are ethically required to report.

COMMUNICATION CHANNELS

The company has established various communication channels that can be used by employees and third parties in order to express their complaints in accordance with the purpose of this procedure, as follows:

- Dedicated internet portal within SNN, www.nuclearelectrica.ro, section “indicate a deficiency”, where the Deficiency Reporting Form is available, who see format is presented in the annex to this Procedure;
- E-mail addresses sesizari@nuclearelectrica.ro and conformitate@nuclearelectrica.ro managed by the Compliance Desk within Audit and Risk Management Directorate;
- Mailing address;

Persons drafting a complaint may keep their anonymity but are encouraged to identify themselves (name and contact data), especially when additional verification is required. It is preferable for all notifications to comply with the whistleblowing form format.

INVESTIGATING COMPLAINTS BY THE COMPLIANCE OFFICE

All received reports are carefully investigated by the Compliance Office, in complete secrecy and confidentiality. The Compliance Office will select the appropriate notices for this procedure, will carefully review them, but may only act on those relating to fraud (including misconduct, accounting and auditing practices contrary to international practices and applicable laws), corruption and conflicts of interests. The other notifications that do not concern aspects related to the activity of the Compliance Office will be sent for resolution to the competent structure within the company.

Information can be provided anonymously; however, this means that the Compliance Office cannot contact the person who submitted the notification / report for additional information, making it more difficult to address the issue.

The person submitting a complaint is advised not to communicate to other persons, details of the aspects reported by him/her, given that such action could have a negative impact on any future investigation.

It is highlighted that all sent notifications are treated under strict confidentiality conditions by all the units involved in the Company.

4. PROTECTION MEASURES

CONFIDENTIALITY

All elements provided are treated the same as confidential and sensitive information.

When irregularities are notified, any person can assume that his/her identity will be known only to the employees investigating the relevant complaint. The identity of persons submitting a complaint shall be confidential as long as this aspect does not prevent or restrict the investigation.

However, the identity of the whistle-blower will have to be disclosed in the event of a legal obligation to do so.

ANONYMOUS ACCUSATIONS

Anonymous accusations are less credible, but they can be considered. In exercising this right, the factors which will be considered will include:

- Seriousness of the notified aspects
- Credibility
- Possibility of obtaining confirmation from independent and reliable sources

PROTECTION

This Procedure is designed to provide protection to employees who notify certain problems:

- in good faith;
- who reasonably believe that there is a case of negligence in service or incorrectness, as long as the disclosure has been made to an appropriate person.

The company will not allow any repressive action by the managers regarding the persons who denounce an irregularity in good faith, including if, based on the performed verifications, the aspects are not confirmed or are only partially confirmed.

Persons who draw up notifications may remain anonymous, but they are encouraged to identify themselves, especially if additional useful and relevant information is needed in order to investigate the reported case.

Notifications and warnings are received and analyzed by the Compliance Office, which decides whether they can be resolved by the office or by other certified and competent structures such as: Anti-fraud Office, Human Resource Strategy Division or Legal Division, etc.

Both employees and business partners or third parties have the opportunity and are encouraged to report non-compliant situations or acts / facts that may lead to violations of the law and procedures or the occurrence of non-compliant situations. For this purpose, there is a page on the website of the company dedicated to whistleblowing.

Received notifications are recorded in a special register. All notifications receive a reply within 40 days. Depending on their nature and materiality, they are reported to the Chief Executive Officer, who may decide to initiate an investigation. The annual report of the Compliance Office comprises a section which presents notifications and taken measures.

Employees and business partners can contact the Compliance Office by phone, during working hours.

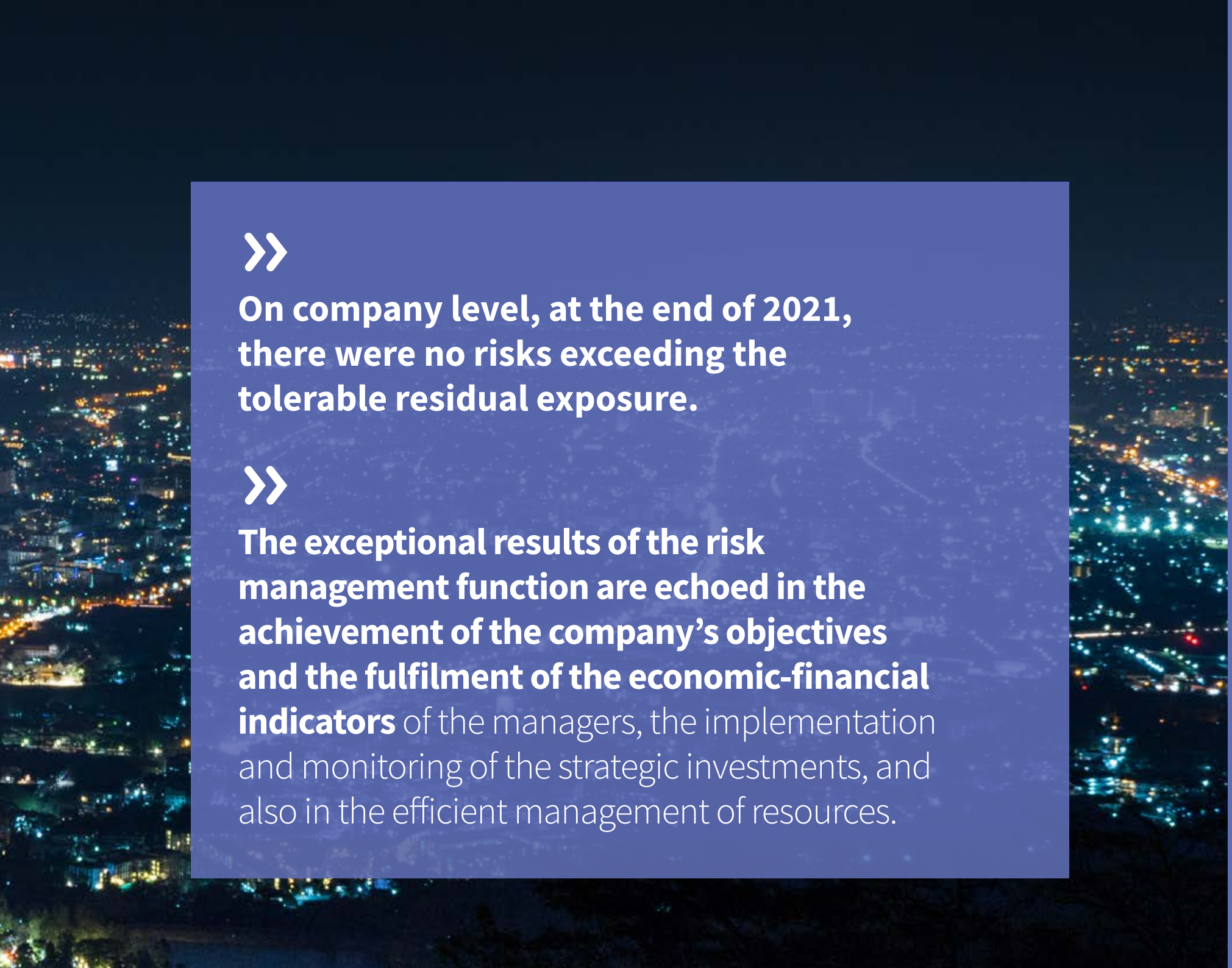
Ethics advisors have regular meetings with employees in order to provide consultancy on ethics and integrity.

Employees annually benefit from training programs on integrity themes. One of the themes approached by a dedicated course is whistleblowing.

The integrity warning procedure includes specific clauses that prohibit retaliation against employees who report in good faith non-compliances, breaches of procedures or norms.

RISK MANAGEMENT

GRI 102-11, 102-15, 102-30



On company level, at the end of 2021, there were no risks exceeding the tolerable residual exposure.

The exceptional results of the risk management function are echoed in the achievement of the company's objectives and the fulfilment of the economic-financial indicators of the managers, the implementation and monitoring of the strategic investments, and also in the efficient management of resources.

21 RISK MANAGEMENT

GRI 102-11, 102-15, 102-30

Risk assessment within SNN is done periodically (quarterly), according to procedure MR-00-01 - Risk management within S.N. Nuclearelectrica S.A., and the results are presented in the Risk management report, focusing on the main risks the Company faces.

The main categories of risks which are presented on a quarterly basis in the risk management report are:

- risks related to nuclear safety;
- risks of information security, control of guarantees and physical protection (protection of nuclear material and radioactive materials);
- compliance risks, divided into 3 subcategories, namely fraud risks, compliance risks (ethics, integrity, conflict of interests) and other compliance risks (regarding the compliance with the external regulatory framework (e.g., laws, ordinances, norms) and the internal regulatory framework (e.g., internal policies, processes, procedures).

Most of the risks in these categories are in the green area, having established control and monitoring tools to prevent their occurrence.

The risk register, which is also annexed to the Report, contains over 350 risks, out of which 90% are in the green area (low risks).

The risk tolerance limit of SNN, expressed as risk exposure, is 14, the risks with a lower score being considered tolerable, and those above this score being considered intolerable.

On company level, at the end of 2021, there were no risks exceeding the tolerable residual exposure.

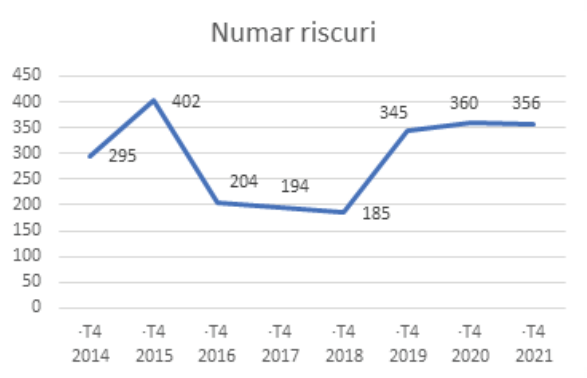
In 2014, SNN started the methodical and methodological organization of the risk management function at the level of the entire organization, as an integral part of the nuclear safety culture, but also in order to achieve the proposed objectives in terms of safety and economic efficiency. Thus, from 2014 until now, the evolution of the number of risks within the organization has fluctuated, depending on the organization and reorganization of the risk management function, the implemented best practices, and also on the recruitment of professionals in the field, who have actively contributed to the implementation and development of an internal culture based on risk identification, assessment and monitoring.

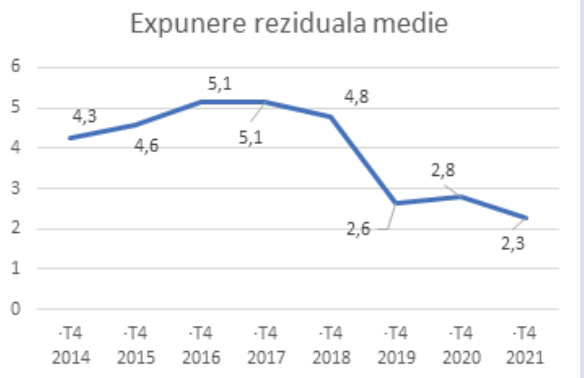
Starting with 2018, the risk management function was reorganized at company level, including and periodically analysing the risks identified and evaluated by the departments in the Branches and Headquarters. Thus, the company focused on implementing the risk management culture within the entire company, specialized consultancy was provided to the persons responsible for departmental risks, training sessions were organized on risk management issues, and the risk management employees understood and started to correctly apply the risk management methodology, avoiding the risk of over- or under-evaluating risks.

Regarding the average level of residual exposure of the identified risks, there is a tendency to decrease it, as a result of the reorganization of the risk management structure within the company and the actions taken at all levels, in a professional and efficient manner. The identified risks were carefully monitored, the actions for reducing them were efficient and effective, and SNN managed to comply with the objectives and economic-financial indicators, with unprecedented results in recent years.

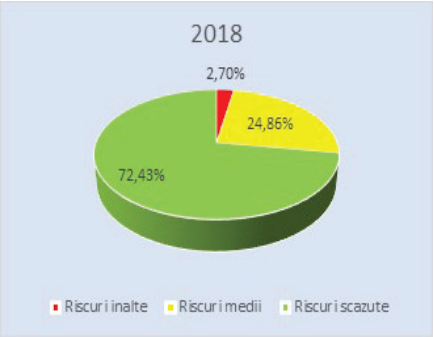
The same trend is observed in the pie-chart representations that illustrate the weight of small, medium and large risks, from 2014 until now. Thus, in recent years, high risks have been almost non-existent in the total risks, and the largest share is that of low risks, which shows that the risk management process is effective, and the permanent monitoring of control actions and tools, lead to the continuous improvement of results and to preventing the occurrence of significant risks.

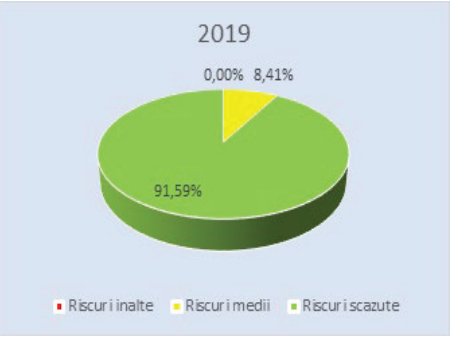
The exceptional results of the risk management function are echoed in the achievement of the company's objectives and the fulfilment of the economic-financial indicators of the managers, the implementation and monitoring of the strategic investments, and also in the efficient management of resources.

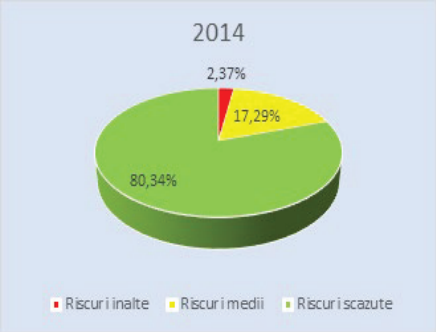


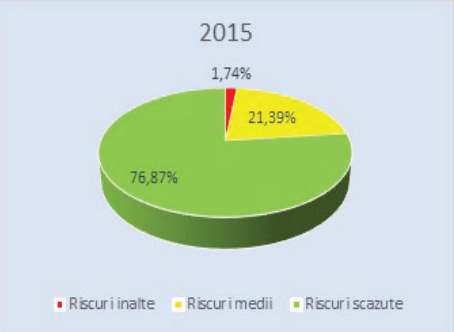


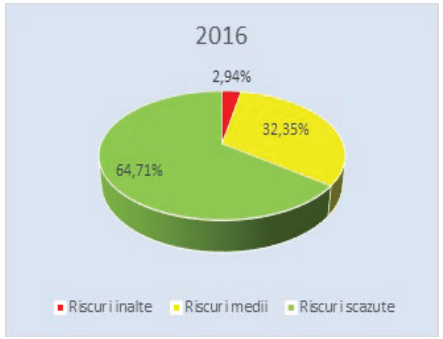
The risk management strategy adopted at SNN level takes into account the economic-financial objectives assumed by the managers by the Management Plan, the realities of the social and economic environment, as well as future technical-scientific evolutions. A defining element in order to streamline risk monitoring at the level of a growing company is the digitization process.

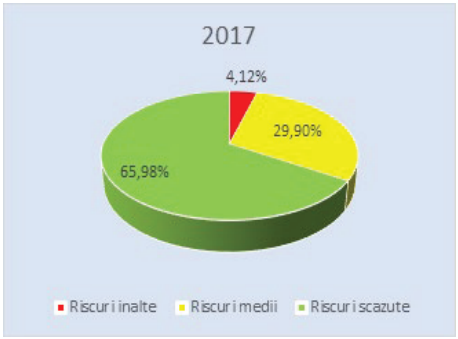












The development and implementation of software applications that support, improve and streamline the risk management process at SNN level is a permanent concern of the current managers.

Also, investments in human resources, the specialized courses organized by the risk management function for the employees of the entire company, lead to the consolidation and development of a Security culture, based on the identification, evaluation and monitoring of risks.

2014	Present	Future
• **Risk management based on risk charts and risk registers** • Department/branch organization • Risk registers by branches • Risk committees in branches • Down-top reporting • Information aggregation/ centralization in SMR	• **Risk management by software** • Organization and management centralized on organization level • Role risk register • Predefined functions and reports • Risk correlation - threats - vulnerabilities • **Setting risk profiles and risk tolerance limits** • **Assessment of commercial counterparty risk** • Risk reports and limits • **Managing banking counterparty / insurer risks** • **Checking and monitoring securities issued in favour of SNN** • **Analysis/involvement in strategic projects** • **Other monitored/analyzed risks:** **Other monitored/analyzed risks:** • Macroeconomic risk (national and international) • Market risk (including currency risk) • Climate risk • Demographic risk • Geopolitical risk/threats • Cyber risk • Personnel training	• **Integrated risk management** • **Multi-company perspective (Nuclearelectrica, Energonuclear, Feldioara, NuclearServ)** • **Increased activity digitalization**  ©2013, Committee of Sponsoring Organizations of the Treadway Commission (COSO). Used by permission.

COMPLIANCE FUNCTION

In order to promote and strengthen integrity in the carrying out of its activities, Nuclearelectrica has developed a compliance program comprising policies and principles meant to encourage and facilitate the activity of prevention, detection and fight against acts of corruption, in order to achieve the goals, set by joining the National Anti-Corruption Strategy. The leadership of Nuclearelectrica and its personnel comply with and maintain the zero-tolerance concept in terms of corruption, giving and taking bribes, being firmly committed to compliance with the national legislation and the applicable regulatory framework. The company ensures access to all necessary information resources and counselling in order to prevent the violation of the law or of the company's regulations.

The Chief Executive Officer and the management of the company support an organizational culture based on the principles of integrity. By allocating the necessary and sufficient resources to carry out the activity and granting the autonomy of the compliance function, the company recognizes the independence and importance of the function.

The company promotes the principles of ethics and compliance among the employees, collaborators and business partners thereof. To this end, in order to make them easier to understand and observe, the principles of ethics and integrity were formalized in 2021 by drafting guidelines, a Guide for Ethics Advisors and a Guide for Human Resource Recruitment.

Openness and transparency ensure credibility and trust between partners during trade negotiations. We protect the interests of our investors and of the company through a careful selection of our suppliers and partners. We consider that abidance by the compliance standards is a particularly significant factor in promoting our business relationships and we insist, including through contractual clauses, that our partners comply with the rules and regulations in force

In this regard, SNN suppliers with high-value of contracts and clients with negotiated contracts are assessed from the point of view of the general corruption risk. The Compliance Office has provided to business partners, classified into the medium risk category, excerpts from the compliance policies of SNN, in order to be taken into account by the managers and the employees involved in the negotiation / implementation of contracts and as best practices in developing its own anti-corruption management system.

The acceptance and granting of benefits is subject to certain rules intended to protect the company from deviations from ethics and any other non-compliance issues which could cause reputational, commercial, financial damages or could lead to legal sanctions. The gifts or benefits received by the SNN staff, falling under the provisions of the specific procedure, are assessed and recorded.

Managing conflicts of interests is very important in the protection and integrity of the business environment in the transparency of the decision-making process. In this regard, the Internal Regulations stipulate that all employees declare potential conflicts of interests by filling in statements, annually or whenever changes occur.

In the first quarter of 2021, SNN was subject to the supervisory audit carried out by the certification body, fulfilling the conditions for the implementation of the ISO 37001 standard - anti-bribery management system. On this occasion, the progress recorded in this segment was positively assessed.

After the company joined the World Economic Forum and the platform - Initiative for a Partnership Against Corruption, the Compliance Office prepared and presented the necessary documentation in the Technical, Economic and Scientific Committee of SNN, performed the endeavours requested by the Forum by filling in forms, statements and questionnaires prior to verifications, and attended virtual meetings with the members of the Forum.
As a result of these actions, SNN became, on 13.07.2021, the first Romanian partner of the World Economic Forum, and a member of the Initiative on Partnership Against Corruption.

The partnership with the World Economic Forum allows for increased international visibility, the coordination of collective actions on strategic issues of SNN, the participation in global initiatives, such as zero carbon emissions, clean energy consumption, the commitment to ethics and integrity and extended access to carefully selected information, reports, briefings, white papers.

The activity of the Compliance Office was extremely complex and laborious, and was carried out in the following fields:

- Communication;
- Procedures;
- Awareness and training;
- Consultancy;
- Inspection and investigations;
- Corruption risk assessment.

The main activities provided in the compliance program for 2022 are indicated below:

- Implementing the objectives and measures of institutional transparency and corruption prevention provided in the next National Anticorruption Strategy.
- Participation in government initiatives in the field of anti-fraud / anti-corruption, and in events organized by AMCHAM Romania on promoting integrity in the Romanian business environment.
- Participation in the platform “Initiative for a Partnership Against Corruption” and transfer of accumulated expertise, by improving the internal regulatory framework.
- Continuing the activities of controlling and monitoring risk areas and disseminating the principles of ethics and integrity to our employees and partners.
- Reviewing anti-corruption and anti-fraud procedures in order to reflect legislation changes They are mainly aimed at the recommendations regarding the integrity warning indicated by EU Directive 1937/2019 by the national legislative framework that will be adopted, as well as the legislative act that ensures the transition between the current National Anticorruption Strategy, 2016-2020, and the future strategic document.
- Planning training programs depending on the exposure of the personnel to specific risks.

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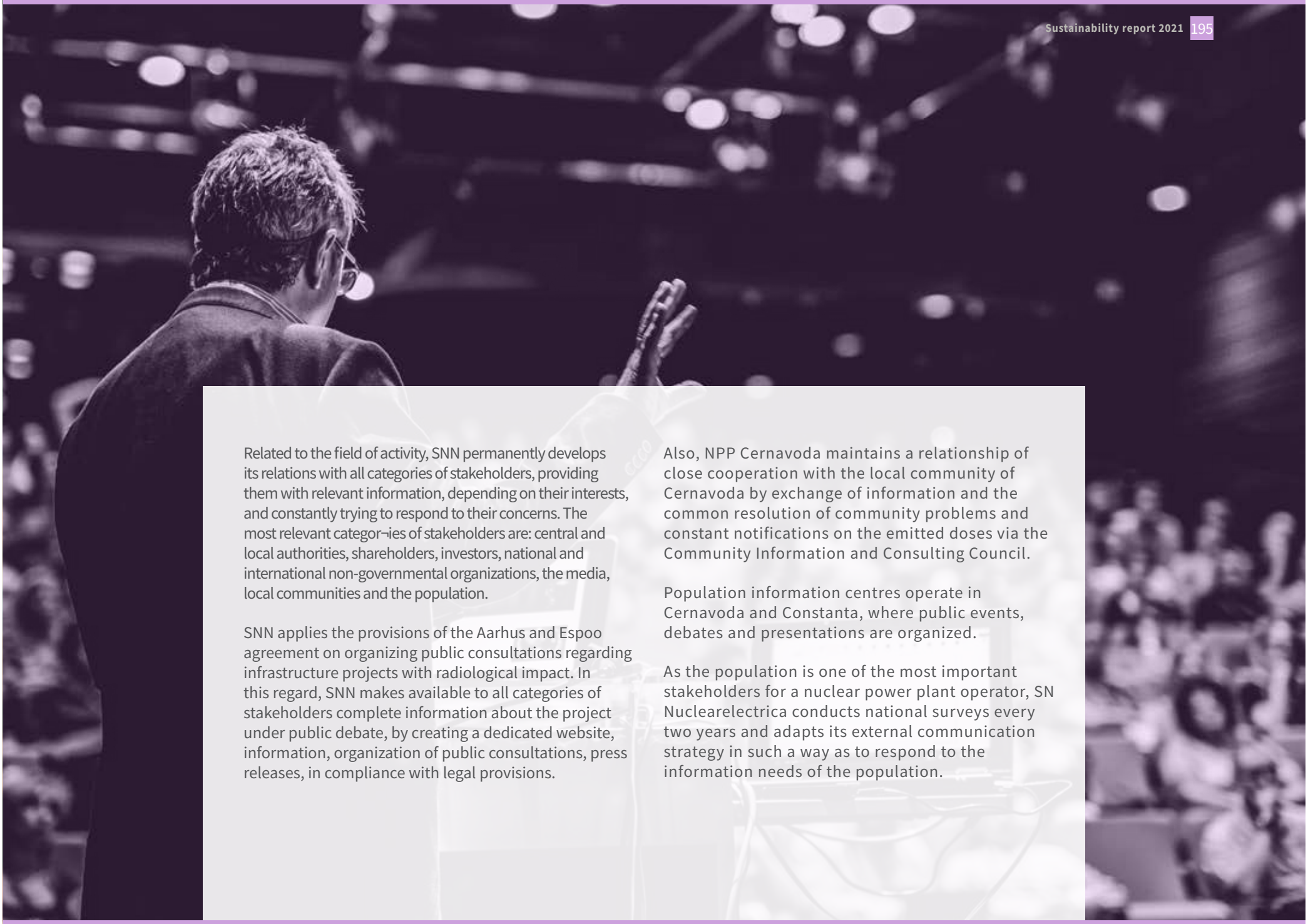
COMMUNITY AND STAKEHOLDER RELATIONS

GRI 102-40, 102-42, 102-43



Related to the field of activity, SNN permanently develops its relations with all categories of stakeholders, providing them with relevant information, depending on their interests, and constantly trying to respond to their concerns. The most relevant categor¬ies of stakeholders are: central and local authorities, shareholders, investors, national and international non-governmental organizations, the media, local communities and the population.

SNN applies the provisions of the Aarhus and Espoo agreement on organizing public consultations regarding infrastructure projects with radiological impact. In this regard, SNN makes available to all categories of stakeholders complete information about the project under public debate, by creating a dedicated website, information, organization of public consultations, press releases, in compliance with legal provisions.

Also, NPP Cernavoda maintains a relationship of close cooperation with the local community of Cernavoda by exchange of information and the common resolution of community problems and constant notifications on the emitted doses via the Community Information and Consulting Council.

Population information centres operate in Cernavoda and Constanta, where public events, debates and presentations are organized.

As the population is one of the most important stakeholders for a nuclear power plant operator, SN Nuclearelectrica conducts national surveys every two years and adapts its external communication strategy in such a way as to respond to the information needs of the population.

OPERATING AUTHORIZATIONS AND LICENSES

GRI 307

The company operates via the two Branches thereof, in virtue of the following main categories of particular authorizations, special licenses and specific rights:

1. **Site authorization no. I/605/September 30th, 1978,** issued by the State Committee for Nuclear Power;
2. **Authorizations in the nuclear field** i**ssued by the National Commission for Nuclear Activities Control** (CNCAN);
3. **Licenses issued by the National Energy Regulatory Authority** (ANRE);
4. **Other authorizations.**

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23

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3. Licenses issued by the National Energy Regulatory Authority (ANRE);
4. Other authorizations.

1. SITE AUTHORIZATION NO. I/605/SEPTEMBER 30TH, 1978, ISSUED BY THE STATE COMMITTEE FOR NUCLEAR ENERGY

The site authorization was issued for Cernavoda site for the construction of a CANDU-PHWR 4x660MWe nuclear power plant, made up of four nuclear reactors. The authorization was issued in virtue of Law no. 61/1974 and the Nuclear Safety Regulations for “Nuclear reactors and nuclear power plants” dated 1975 and provides for the main technical characteristics of the nuclear power plant.

2. AUTHORIZATIONS IN THE NUCLEAR FIELD ISSUED BY CNCAN

Pursuant to art. 8 par. (1) of the Law no. 111/1996, for the development of the activities and/or use of the sources contemplated by this law, the operators must obtain specific authorizations issued by CNCAN, in full observance of the specific authorization procedure specific to each type of activity or source. At the end of 2021, the following authorizations in the nuclear field are in force for SNN:

A. AUTHORIZATIONS ISSUED BY CNCAN IN THE NUCLEAR FIELD FOR CERNAVODA NPP SUBSIDIARY:

- Nuclear safety authorization for the operation and maintenance of Cernavoda Nuclear Power Plant, Unit 1, authorization no. SNN Cernavoda NPP U1 – 01/2013. The authorization was issued for a period of 10 years, starting with May 1st, 2013 until April 30th, 2023;
- Nuclear safety authorization for the operation and maintenance of Cernavoda Nuclear Power Plant, Unit 2, authorization no. SNN Cernavoda NPP U2 – 01/2020. The authorization was issued for a period of 10 years, starting with December 8th, 2020 until December 7th, 2030;
- Building permit for Modules 12, 13, 14, 15, 16 and 17 of the Intermediary Burnt Fuel Warehouse, permit no. SNN Construction DICA 02/2020. The authorization is valid until June 19th, 2025;
- Nuclear safety authorization for the operation and maintenance of modules 1, 2, 3, 4, 5, 6, 7, 8, 9,10 and 11 of the Intermediary Burnt Fuel Warehouse, authorization no. SNN DICA 06/2020. The authorization was issued on June 9th, 2020 and is valid until June 8th, 2023;
- Authorization for the quality management system for the operation, design, supply, repair and maintenance and use of software products, in the nuclear field. Authorization no. SNN CNE Cernavoda - 01/2021 is issued for a period of 2 years, from May 01, 2021 until April 30, 2023.

B. AUTHORIZATIONS ISSUED BY CNCAN IN THE NUCLEAR FIELD FOR THE NFP PITESTI BRANCH:

- Authorization for the Quality Management System in the nuclear field no. 20-026 issued according to Art. 24 of Law no. 111/1996, for production activities in the nuclear field, for 2 years, from September 18th, 2020 until September 17th, 2022;
- 9 authorizations for the performance of activities in the nuclear field:
  1. Authorization LP/007/2020 for owning ionizing radiation sources, radiologic installations with ionizing radiation sources, devices generating ionizing radiations, nuclear installations for processing and manufacturing nuclear fuel, nuclear raw materials, nuclear fuel, radioactive waste, materials of nuclear interest, equipment and devices provided in Government Decision no. 916/2002, valid from January 31st, 2020 until January 30th, 2022;
  2. Authorization LP/008/2020 for the use of closed ionizing radiation sources, radiological installations, equipment and devices generating ionizing radiations, valid from January 31st, 2020 until January 30th, 2022;
  3. Authorization LP/009/2020 for handling closed radiation sources, radiological installations with closed sources and radioactive waste, valid from January 31st, 2020 until January 30th, 2022;
  4. Authorization LP/010/2020 for the processing of nuclear raw materials, valid from January 31st, 2020 until January 30th, 2022;
  5. Authorization LP/011/2020 for the manufacture of nuclear fuel valid from January 31st, 2020 until January 30th, 2022;
  6. Authorization LP/012/2020 for the temporary storage of nuclear raw materials, nuclear fuel and radioactive waste, valid from January 31st, 2020 until January 30th, 2022;
  7. Authorization LP/013/2020 for the supply of nuclear raw materials, nuclear fuel, radioactive waste, materials of nuclear interest and double-use materials, valid from January 31st, 2020 until January 30th, 2022;
  8. Authorization FCN Transport_20/2018 for the transportation of radioactive materials, valid January 10th, 2019 until January 9th, 2024;
  9. Authorization PM/219/2021 for ownership of unpublished information, valid from 29.11.2021 to 28.11.2026.

- By Assignment Certificate no. NFP ODD 12/2020, CNCAN updated the appointment of the Radiation Protection laboratory and dosimeter personnel within NFP Pitesti as Dosimetry Body, valid from October 27th, 2020 until October 26th,2025.

C. AUTHORIZATIONS IN THE NUCLEAR FIELD FOR THE HEAD OFFICE:

- Authorization for the quality management system for management activities in the nuclear field. Authorization no. SNN EX-01/2021 was issued for a period of 2 years, from May 1st, 2021 until April 30th, 2023;
- Authorization no. PD/229/2021 for ownership of heavy water for Units 3 and 4, valid from October 17th, 2021 until October 25th, 2023.

D. FOR CERNAVODA NPP BRANCH, the company holds 18 CNCAN permits for management personnel, 5 CNCAN permits for personnel with specific training positions and 45 CNCAN permits for operational staff in the control rooms of the two Units. For the FCN Pitesti Branch, the Company holds 3 CNCAN operating permits for the personnel with management positions and 29 permits for carrying out activities in the nuclear field, level 2. The company also has 4 permits for management personnel from the Head Office and 4 approvals for members of the Board of Directors.

3. LICENSES ISSUED BY ANRE

According to the Regulation for the granting of licenses and authorizations in the electric power sector approved by the Government Decision no. 540/2004, the supply of electric power, the production of electric and thermal power in cogeneration are performed under certain licenses issued by ANRE in this respect.

On the date of the current report, the company holds the following licenses issued by ANRE:

1. License no. 5/December 3rd, 1999 for the production of electric power granted by the ANRE Decision no. 80/ December 3rd, 1999;
2. License no. 2218 / 27.05.2020 for the commercial operation of thermal energy production capacities, granted by ANRE Resolution no. 848 / 27.05.2020.
3. License no. 2236 / 30.09.2020 for the electricity supply activity, granted by ANRE Resolution 1715 / 30.09.2020, valid as of 21.10.2020.

The company complied, both over previous years and in 2021, with the provisions of the conditions associated to the aforementioned licenses.

License no. 5/December 3rd, 1999 authorizes the company to produce electric power by the commercial operation of the power capacities related to the electric power production units. The license came into force on December 3rd, 1999 and is valid for a period of 25 years. By the ANRE Decision no. 1683/November 1st, 2007, the license was amended to increase the installed capacity factor of the company from 706.5 MW to 1,413 MW and to approve other conditions associated to the license as well, after the commissioning of NPP Cernavoda Unit 2.

License no. 2218/May 27th, 2020 authorizes the Company to perform the commercial operation of the thermal power production capacity by the commercial operation of the power capacities related to the units of electrical and thermal power generation consisting of two heat exchangers with a total thermal power of 44 Gcal/h and 40 MW. The license came into force on May 27th, 2020 and is valid for a period of 25 years.

License no. 2236/30.09.2020 for the supply of electricity is valid as of 21.10.2020, for 10 years, and authorizes the Company to perform the activity of electricity supply on the energy retail market.

4. OTHER AUTHORIZATIONS

- ISCIR regulatory documents;
- Statements to the National Anti-Drugs Agency;
- Licenses issued by ANCOM. Cernavoda NPP obtained from ANCOM 4 licenses for the use of radio-electrical frequencies;
- Fire safety permits;
- Sanitary permits.

In the field of environmental protection, the permits and certificates were distinctly presented within the report.

NUCLEAR SAFETY

Permanent maintenance of a nuclear security level in all phases of performance and exploitation of the nuclear objectives and installations is of vital importance and represents the first priority for SNN.

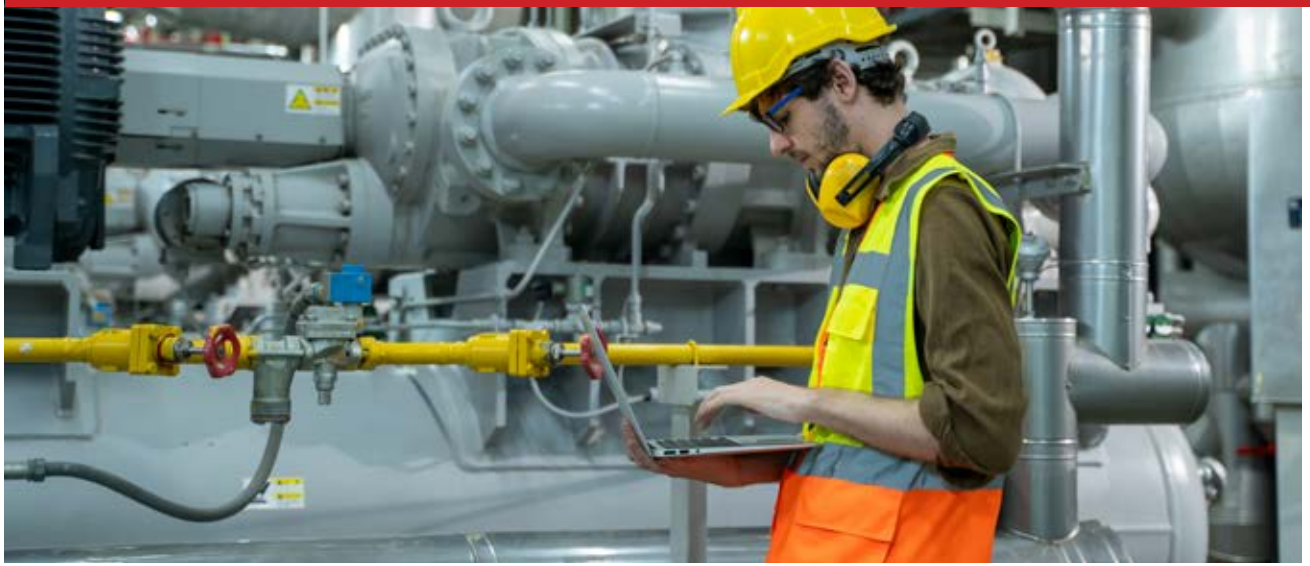
SNN developed a nuclear safety policy that was approved by CNCAN, with the purpose of maintaining a high and constant level of nuclear safety in all the phases of the commissioning and operation of nuclear installations. The nuclear safety policy provides performance warranties for all the significant activities regarding nuclear safety, in all the phases of installation and operation of nuclear facilities. This document confirms the fact that nuclear safety has the maximum priority.

Nuclear security as a field is a set of technical and organizational measures designed to:

- provide the operation of the nuclear plants under safety conditions;
- prevent and limit the damage thereto;
- provide the protection of the personnel, the population and the environment against radiation or radioactive contamination

The high level of nuclear safety is ensured by the design, construction and operation of the nuclear installations. The risk generated by the nuclear fuel in the reactors is minimal for the population and the environment, due to the fact that:

- The power of the reactor is under control;
- The fuel is cooled;
- The radiation is contained, all these taking place on a continuous base.



The nuclear safety philosophy of CANDU-type power plants is based on the concept of “deep defence”, providing a gradual protection in case of equipment defects, human errors, anticipated transient regimes in operation or accidents, including in the case of severe accidents. For the implementation of this concept, the project provides for a series of successive protective barriers to the uncontrolled release of radioactive materials into the environment. In addition to the five major barriers to the release of fission products to the population from a CANDU type plant: fuel matrix, fuel sheath, primary circuit enclosure, tire enclosure and exclusion zone, passive or active features were included in the systems design, intended to prevent or mitigate the consequences of a process failure or accident sequence, which could otherwise lead to the release of radioactive materials into the environment.

No CANDU type NPP recorded events or accidents posing a threat to the health and security of the population. In supplement of the measures intended for the fully safe operation of the plant, planning and preparation for emergency situations is a pre-requisite for the authorization of the operation of a nuclear power plant. Within Cernavoda NPP, the emergency preparedness is verified and improved by quarterly, yearly or general drills and exercises (once every 3-4 years).

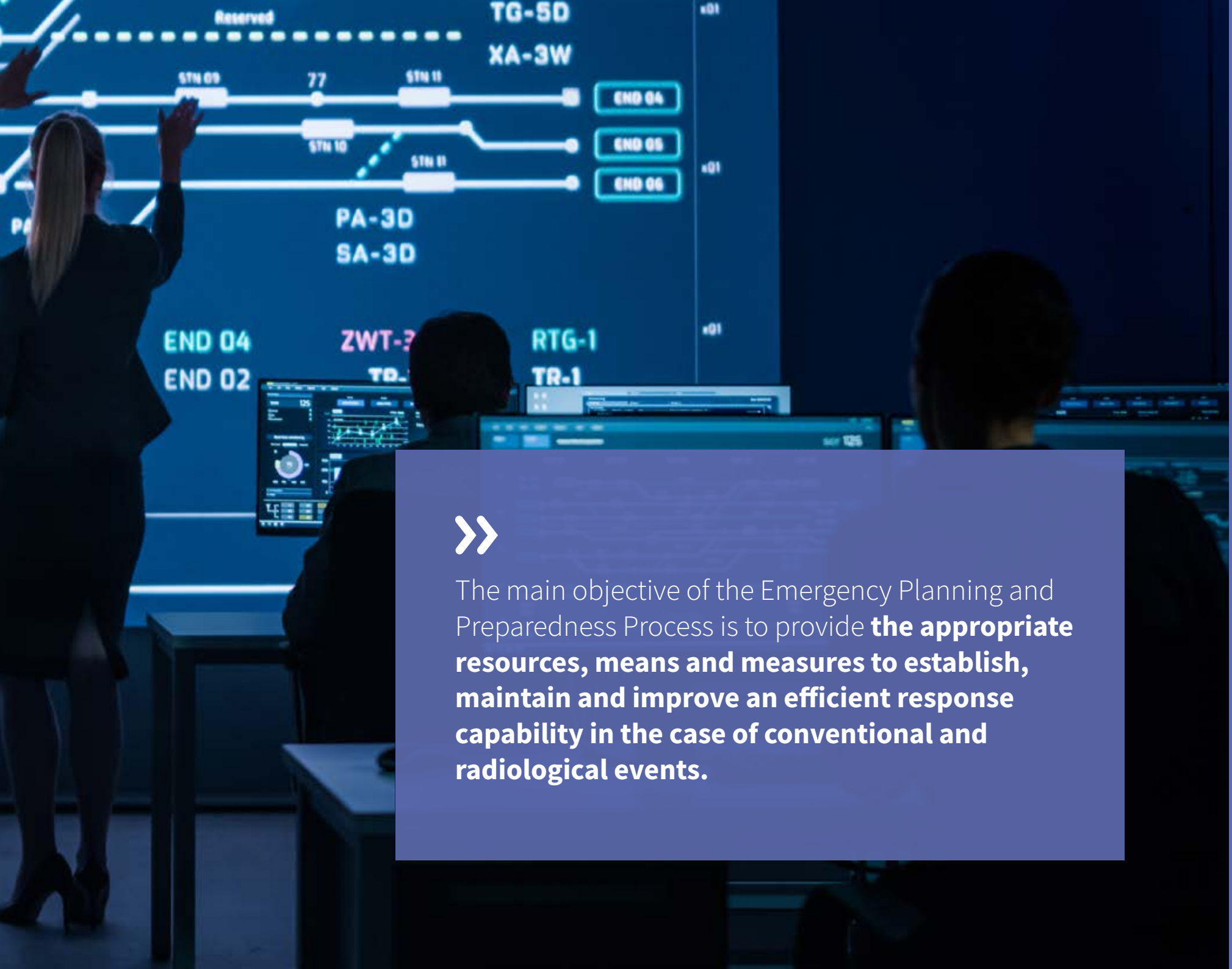
After the Fukushima accident, the European Commission and the Group of European Regulators of the SNN decided that the nuclear security of nuclear plants in Europe is to be reviewed based on transparent and extended risk assessments referred to as “Stress tests”. The technical purpose of these stress tests was defined considering the risks pointed out by the events occurred at Fukushima. The following issued were stressed: initiation events, such as earthquakes or floods, the consequences of losing the security functions during such events, as well as management difficulties of severe accidents.

Cernavoda NPP, along with AECL Canada and ANSALDO Italy, issued the “Reassessment report of nuclear security margins”. The assessment made proves the fact that Units 1 and 2 at Cernavoda NPP comply with the nuclear security requirements established by the project and that they can face severe earthquakes and floods, as well as the total loss of electrical energy and cooling water supply. Moreover, methods and procedures were planned for managing possible severe accidents. Methods to prevent and mitigate the consequences of accidents which may determine the melting of the active area were also identified.

In order to provide a good coordination with the relevant Local Public Authorities in terms of the response in emergency situations, Cernavoda NPP created two important facilities for Cernavoda town, namely: Local Center for Emergency Situations of Cernavoda Town-Hall and Personnel Decontamination Area, within Cernavoda Town Hospital.

PLANNING AND PREPARATION FOR EMERGENCIES

G4-DMA



The main objective of the Emergency Planning and Preparedness Process is to provide **the appropriate resources, means and measures to establish, maintain and improve an efficient response capability in the case of conventional and radiological events.**

24 PLANNING AND PREPARATION FOR EMERGENCIES

G4-DMA

Excellence in the operation of a technological installation with the complexity of a nuclear power plant cannot be achieved and maintained without taking into account the management of all emergencies. In such an emergency, the organization's response is prepared, so as to achieve the four objectives, in order of importance:

- Population protection;
- Environment protection;
- Employee protection;
- Protecting the installation and the investment.

The main objective of the Emergency Planning and Preparedness Process is to provide the appropriate resources, means and measures to establish, maintain and improve an efficient response capability in the case of conventional and radiological events.

Functionality of the process of emergency planning and preparedness is based on:

- emergency plan, emergency procedures and other additional documents;
- preparing the personnel for an emergency response. Emergency drills;
- emergency fittings and equipment;
- interface with public authorities and informing the public.

The on-site emergency plan, authorized by the "DOBROGEA" Emergency Situations Inspectorate of Constanta County and approved by CNCAN, describes in general terms the measures that are necessary to control and improve emergency situations and to

protect the population and personnel at the site in an emergency situation. The emergency procedures describe in detail the actions taken by the emergency response personnel in order to achieve the objectives of the emergency plan.

The responsibility for fulfilling the objectives of the response to emergency situations at the site belongs to the operating personnel of the nuclear power plant, distributed in the positions of the Organizational Structure for Emergency Situations of the Power Plant.

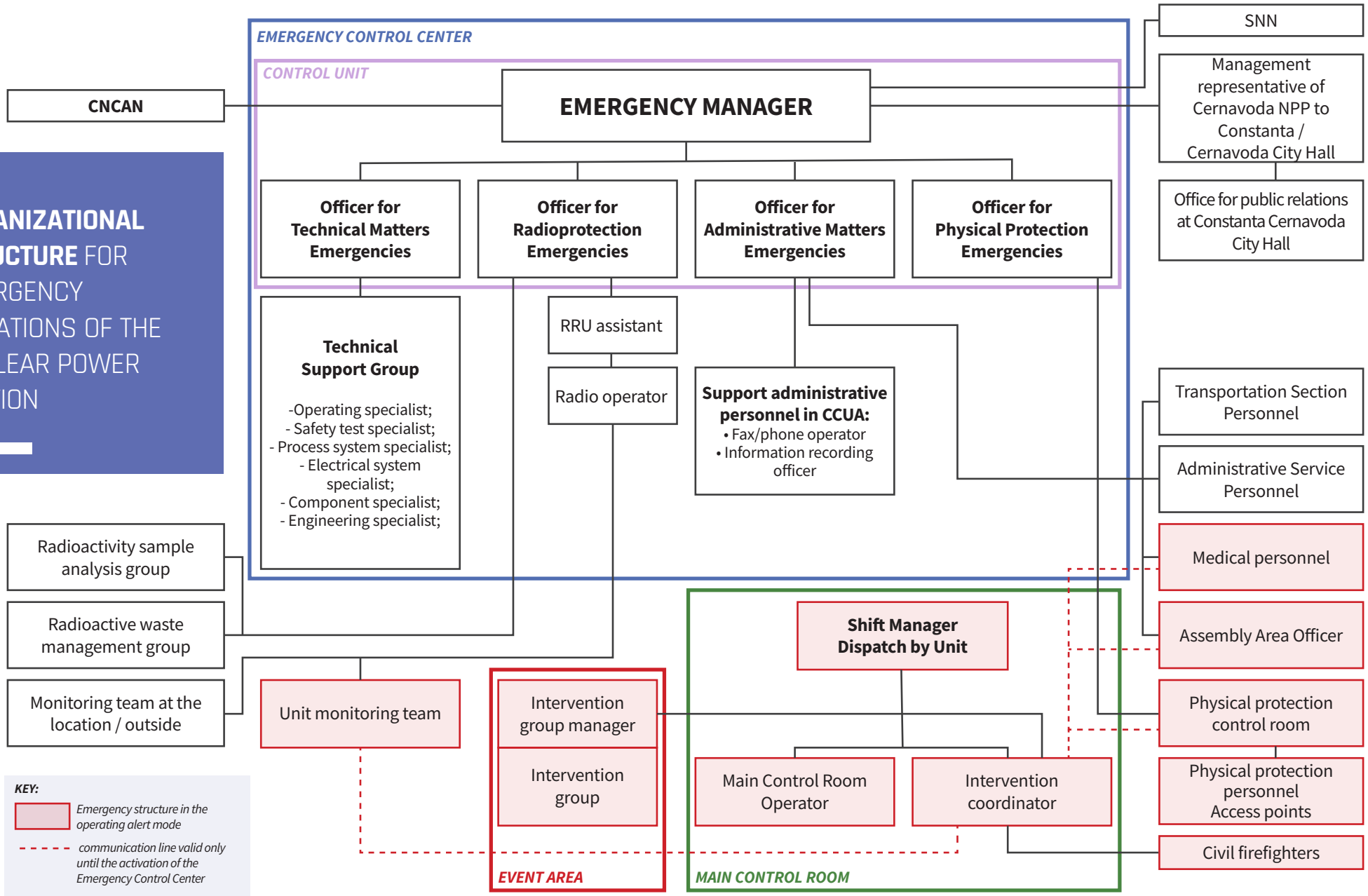
The Organizational Structure for Emergency Situations of the Plant is sized so that it can respond to any type of emergency situation, from medical incidents or fires to threats of physical protection and nuclear emergencies caused by malfunctions in the active area of the nuclear reactor.

The emergency preparedness program ensures:

- knowledge and skills that are necessary for the personnel with responsibilities in the Emergency Plan for a correct and efficient response in an emergency situation;
- general preparedness for emergencies of the personnel at the location;
- preparedness for emergencies of the contracting personnel and visitors.

Appropriate premises and arrangements are used for the emergency response, fitted with the necessary equipment to ensure the support for the emergency activities. All emergency arrangements and equipment are periodically checked and maintained in adequate operational condition.

ORGANIZATIONAL STRUCTURE FOR EMERGENCY SITUATIONS OF THE NUCLEAR POWER STATION



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25

SCHEDULED AND UNSCHEDULED SHUTDOWNS

EU-28, EU-29

In case of a nuclear power station, there are two major shutdown types: scheduled and unscheduled.

1. SCHEDULED SHUTDOWNS

The scheduled shutdowns, which in fact represent company projects, initiated approximately 24 months before the planned date, with a project management team, implementation schedule, human resources planning and appropriate budgeting. In the case of Cernavoda NPP, each nuclear unit is alternatively shut down, once every two years, for maintenance works, in May-June, for a period of approximately 30 days. In case of these scheduled shutdowns, the following programs are implemented: Corrective and preventive maintenance, mandatory inspections, mandatory testing, according to the requirements of the National Commission for the Inspection of Nuclear Activities (“CNCAN”), which can be performed only with the plant shut down and the implementation of project modifications on certain systems / equipment / components.

2. UNSCHEDULED SHUTDOWNS

These, in turn, can be of several types: (i) automatic disconnections of the reactor as a result of the intervention of the quick shutdown systems or (ii) controlled shutdowns as a result of the conservative decision of operators and (iii) controlled, preventive shutdowns, related to the necessity to carry out remedy or corrective maintenance works. Controlled shutdown decisions shall be taken in accordance with the nuclear safety rules and procedures applicable in such situations.

The number of unscheduled shutdowns cannot be precisely estimated at the beginning of each year, it can only be estimated based on own experience and international practices (other nuclear power stations); SNN annually estimates a number of hours of unscheduled shutdowns which are budgeted, in order to balance the production and comply with the electricity delivery contracts, and are specific to any type of reactor, and internationally notified, in the same manner as for Nuclearelectrica.

SNN through CNE Cernavoda is internationally listed with nuclear excellence and is one of the highest-performing companies from an operational point of view, globally. According to international statistics, with the 2 units in operation, in the country rankings, Romania ranks first in the world out of a total of over 400 nuclear reactors in terms of the installed power use factor.

Unit 1

Unscheduled shutdowns:
1. January 23, 2021, for 163 hours
2. September 18, 2021, for 53 hours
3. December 29, 2021, for 9.25 hours

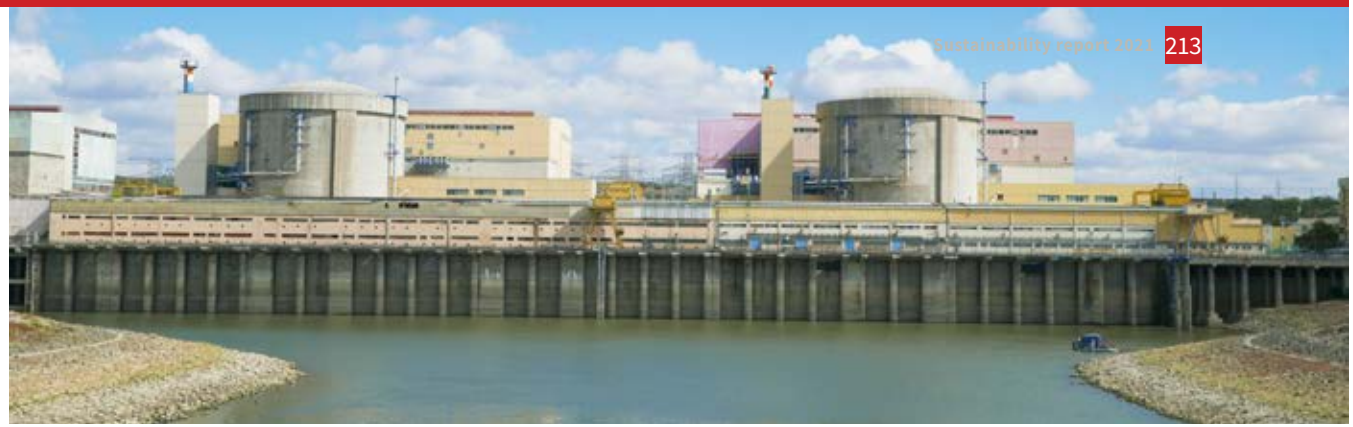
Unit 2

Scheduled shutdown: May 09, 2021; for 36.29 days (871 hours);

Unscheduled shutdowns:
1. July 10, 2021, for 51.6 hours
2. July 28, 2021, for 46.25 hours
3. October 14, 2021, for 53.41 hours

26 DECOMMISSIONING

G4-DMA



In accordance with Law no. 111/1996, as further amended and supplemented, and the specific national regulations issued by CNCAN, the decommissioning of the nuclear power units from Cernavoda NPP represents the last stage of their life cycle. This stage will take place after the final shutdown of the nuclear power units and a transition period from operation to decommissioning. The preparation for decommissioning is a complex process approached in stages, which is presented in the initial preliminary decommissioning plan, which is periodically updated during the of operation of nuclear facilities.

According to the national regulatory requirements issued by CNCAN and the recommendations from the specific AIEA standards, SNN implements a strategy for decommissioning Units 1 and 2 of Cernavoda NPP which considers the projects of the existing nuclear plants and those developed at the location of Cernavoda NPP, by also considering the interdependencies between plants, when planning the decommissioning activities. Also, the management of radioactive waste resulted from decommissioning, including its final storage, takes into account the provisions of the National Medium and Long Term Strategy on the safe management of used nuclear fuel and radioactive waste, approved by GR no. 102/2022.

The decommissioning of the nuclear power units of Cernavoda NPP requires an environment agreement and a CNCAN authorization.

According to GO 11/2003 as further amended and supplemented, and GR 1080/2007, the Radioactive Waste Nuclear Agency (“ANDR”) is responsible for collecting and managing the contributions paid to SNN for decommissioning nuclear power units and for permanently storing radioactive waste generated in the operation and decommissioning of the units, during the operation of these units.

In 2008-2021, SNN paid the following contributions to ANDR:

- Contributions for the decommissioning of each nuclear reactor in amount of 0.6 EUR/MWh of produced and delivered electricity in SEN;
- Contributions for the final storage of radioactive waste and used nuclear fuel, in amount of 1.4 EUR/MWh of produced electricity, delivered in SEN.

27 IMPLEMENTING PROCUREMENTS WITHIN SNN

GRI 204

SNN purchases products, services and works by applying Law no. 99/2016 on sectoral procurement and carries out the vast majority of procurement procedures on the SEAP electronic platform.

At the same time, for more complex projects, SNN initiates Market Consultation Announcements, which are also published in SEAP (https://e-licitatie.ro/pub/mc-notices/list/1). During the market consultation, meetings can be organized with interested suppliers; the aspects that are subject to consultation may concern potential technical, financial or contractual solutions to meet the needs of SNN.

Besides the “traditional” qualification criteria (regulated by Law 99/2016), such as similar experience, turnover, implementing quality systems such as ISO 9001 and/or ISO 14001, authorizations specific to the fields regulated by authorities such as ANRE, IGSU, ISCIR, etc. within tender procedures, authorizations specific to the nuclear field are usually requested, issued by the National Commission for the Inspection of Nuclear Activities (CNCAN).

If the products, services or works that constitute the scope of the procurement/contract have an impact on the environment, the qualification criteria must include specific requirements/criteria according to the national and international legislation in the field of environment protection and/or waste management, transportation and disposal (including hazardous waste), such as, without limitation: certification of the environment management system according to standard SR EN ISO 14.001, environment permit issued by the competent authorities in the field of environment protection, for waste collection, packaging, transportation, temporary storage, treatment, capitalization and disposal operations, as the case may be, an authorization for operations with substances from the category of classified substances issued by the National Anti-Drug Agency, certificate of registration in the "National Register of Developers of Environment Protection Studies", certificate of appointment as a notified body for the nuclear field, for laboratories that perform environment radioactivity tests.

CSR

GRI 102-43, 413

SNN develops its own corporate social responsibility programs but is also involved in supporting the initiatives of non-profit organizations in fields with a social impact such as: educational and research, humanitarian, cultural and environment.

With its actions, **SNN aims to respond to the community's real problem, to contribute to the change for the better** that the Romanian society needs for equality of chances, the increase of the standard of living and access to resources and, last but not least, for the growth of the future generation.

28
CSR

GRI 102-43, 413

Nuclearelectrica is a strategic company, with an important role in the security of the national energy system, acting in various roles in relation to several stakeholders. SNN constantly maps the interests and concerns of its stakeholders because sustainable development is possible only if SNN produces value for as many target groups as possible.

SNN, part of Romania's public life, contributes with its own resources to improving the quality of life in the communities targeted by CSR projects and the sponsorships granted by the company. SNN involvement in society is necessary, not only to ensure good economic results, but also to gain the respect and trust of the communities in which the company operates, contributing to the development of a sustainable and efficient Romanian society. CSR projects and sponsorships target the most urgent needs of communities and the environment, in view of actively participating in the improvement of living conditions, by supporting strategic partnerships with civil society.

Thus, investing a share of the annual profit of SNN in CSR actions and sponsorships is an integral part of the development strategy of the company for 2015-2025. The CSR and sponsorship strategy of SNN is in line with the company's business strategy, and the initiatives are correlated with the company's business goal and its important values. SNN develops its own corporate social responsibility programs but is also involved in supporting the initiatives of non-profit organizations in fields with a social impact such as: educational and research, humanitarian, cultural and environment.

The CSR and sponsorship strategy of SNN includes

principles related to the SNN business culture, such as: economic fairness, social fairness, fair behaviour, transparent relationships, integrity, moral principles, and community investments.

With its actions, SNN aims to respond to the community's real problem, to contribute to the change for the better that the Romanian society needs for equality of chances, the increase of the standard of living and access to resources and, last but not least, for the growth of the future generation. SNN wants to build a long-term trust relationship with employees, local communities, suppliers and partners, citizens, relationships that serve as a base for creating sustainable business models. Greater trust thus contributes to creating an environment in which SNN and its stakeholders may innovate and grow. SNN is aware that economic activities increasingly require an ethical foundation that places man, the environment and social considerations in the center of economic activity.

OBJECTIVES

By its CSR and sponsorship strategy for 2022, SNN seeks to achieve the following objectives:

- Creating and supporting a sustainable business model, with responsible management and global policies adapted to local issues;
- Increasing the level of trust and support for the SNN business model, and increasing the level of acceptance for the use of nuclear energy in Romania and of the company's investment projects;
- Addressing the real issues of the community;
- Developing relationships with the local community, NGOs, opinion leaders and increasing capacity at local level;
- Attracting and training young specialists;

SNN annually analyses and implements actions planned and targeted by CSR and sponsorships, focused on several identified social problems, within the estimated budget necessary for the implementation of CSR programs and in accordance with this strategy. In choosing the programs it will support, SNN contextually analyses the communities it operates in, with the purpose of identifying the social aspects that support or, on the contrary, hinder business, and the CSR projects designed by SNN are connected to the nature of the company's business, the welfare of employees or other categories of stakeholders. SNN has a proactive approach in identifying partners and potential beneficiaries of CSR projects and sponsorships and develops a transparent decision-making process, based on clear criteria. Social responsibility, regardless of the nature of its implementation, is an integral part of the company's vision and strategy, and SNN continues to support both the local community, and the initiatives leading to innovation and continuous development.

STRATEGIC DIRECTIONS IN 2021

CSR and sponsorship actions in which SNN was involved in 2022 targeted projects and groups of stakeholders whose funding needs fall into the fields presented below, selected based on the beneficial impact which SNN can bring in high-risk areas, in order to resolve major social problems within the Romanian society.

These fields and sub-fields are published by SNN at the site and promoted as such in order to inform potential applicants.

The main guidelines for CSR actions and sponsorships in 2021, in line with the specific nature of SNN's business, and aimed at promoting development and bringing added value in the communities where the company is operating, have targeted actions in the following areas of interest:

Fields	Campaign title
Educational:	"We grow with you" (the continuation of the program started in 2019)
Medical	"Healthy Romania"
Other projects: environment protection	"Romania Breathes"

	Education		Health		Medium		
	Invested amounts (RON)	Impact (persons)	Invested amounts (RON)	Impact (persons)	Invested amounts (RON)	Impact (persons)	Area (Ha)
2021	4.245.470,15	24.075	3.485.499,27	51.516	845.450	61.853	18
2020	509.812	6.025	8.254.040	2.563.000	-	-	-
2019	3.207.887,53	2.000.820	5.760.692,19	41.840	95.458	17.022	-

AFFILIATIONS

GRI 102-13

Maintaining by SNN of the status of member in national and international organizations identified as relevant and useful for the SNN activities regarding the exchange of information and experience and access to data from the nuclear field and regarding the reduction of the costs for independently performing several works and analyses, **represents a necessity for maintaining and improving operational results, as well as the safety and efficiency of the company.**

29 AFFILIATIONS

GRI 102-13

Maintaining by SNN of the status of member in national and international organizations identified as relevant and useful for the SNN activities regarding the exchange of information and experience and access to data from the nuclear field and regarding the reduction of the costs for independently performing several works and analyses, represents a necessity for maintaining and improving operational results, as well as the safety and efficiency of the company.

No No.	Organization	Description
1	**WANO -World Association of Nuclear Operators (Atlanta and London)**	WANO is an international organization of nuclear power station operators. The WANO mission is to maximize nuclear safety and reliability in the operation of nuclear power plants by exchanging information and encouraging communication, comparison and emulation between its members. WANO is organized into four regional centers: Atlanta, Paris, Moscow and Tokyo, and one coordination center in London. SNN is affiliated to the Atlanta regional center. The main programs of WANO are: • Peer Review • Operating Experience • Professional and Technical Development • Technical Support and Exchange In 2021, according to the program, the permanent monitoring activities of the WANO representative for Cernavoda (Performance Monitoring Leader) were continuously carried out.
2	**INPO-Institute of Nuclear Power Operators**	INPO is an American institute created in 1979 that carries out activities in support of the operation of nuclear power plants under conditions of safety and reliability. INPO members are US commercial nuclear power plants, as well as other international nuclear organizations. The activity areas of INPO include: - assessing the performance of member nuclear power stations; - training and accreditation of operators, in collaboration with the National Academy of Nuclear Training - analyzing events and exchanging operating experience information, - assistance to members in various fields.
3	**COG -CANDU Owners Group**	COG is a non-profit organization of CANDU nuclear power plant operators that provides a framework for cooperation, mutual assistance and information exchange in order to support and develop CANDU technology. COG members are CANDU operators in Argentina, Canada, Korea, China, India, Pakistan and Romania as well as the CANDU system designer, AECL-Canada.
4	**COG R&D Research and Development program**	The COG R&D program addresses current matters and matters of interest of the affiliated nuclear power plants, in order to ensure the support for a safe, reliable and economical operation of the CANDU power plants. The program includes 5 sub-programs: Fuel Channels (FC), Nuclear Safety and Licensing (S&L), Chemistry, Materials and Components (CM&C), Radiation Protection and Environment (HS&E), Thermohydraulic and Accident Calculation Codes (IST).
5	**COG JP&SProgram Joint Projects & Services**	Joint Projects and Services (JP&S) is one of the four programs managed by COG (CANDU Owner Group) in order to assist and coordinate the participating members that own CANDU plants, in initiating and jointly developing collaboration projects, with direct benefit in reducing costs, exchanging information and developing technical expertise.
6	**COG NSEA Nuclear Safety and Environment Program**	The NSEA program addresses matters related to nuclear safety design bases. It focuses mainly on addressing the generic actions of regulators, security assessments of new plant projects and providing the necessary support for the long-term safe operation of CANDU plants.
8	**Electric Utility Cost Group (EUCG)**	EUCG is an international energy industry cooperation group with a special section for the nuclear power industry, involving US nuclear power plants (22 companies) plus 11 other companies in Canada / France / China / Japan / Romania / Brazil / Mexico.

7	**PROCORAD**	Within PROCORAD, Cernavoda NPP, by the Environment Control Laboratory and the Individual Dosimetry Laboratory, participates since 2001 in inter-comparison exercises for radioactivity measurements in biological, effluent and environment samples: Free tritium in urine Organically bound tritium in urine Carbon-14 in urine γ and X emitters in urine Uranium in urine
8	**EPRI Electric Power Research Institute & Administration Fee**	EPRI is a non-profit organization funded by the utilities from the international energy industry, as well as by other governmental or public organizations, in order to ensure an organized framework in conducting specific research activities in the field of production, delivery and use of electricity.
9	**SNUG Snubber User Group**	The affiliation with the SNUG group (initiated in 2003) offered the possibility to access the SNUG (Snubber Users Group) proprietary documents that are necessary for the implementation, development and optimization of the Snubberi Program at Cernavoda NPP.
10	**Nuclear Procurement Issues Corporation (NUPIC)**	NUPIC is an organization that tracks significant challenges and issues in the nuclear industry that may influence the procurement, planning and management of activities.
11	**RAPIDPARTSMART**	RAPIDPARTSMART integrates the "OIRD" database by which, if one of the members (another nuclear power plant) identifies an obsolete product replacement solution, it is added to the database with complete information about the manufacturer and model of the replacing product and the technical equivalence evaluation.
12	**POMS**	By POMS, nuclear power plants identify "obsolete" products they have installed and replacement solutions for them; identify manufacturers of replacement products; identify multiple suppliers in order to replenish the spare parts stocks; can locate suppliers of products needed in an emergency.
15.	**ACCESS LICENSES AT IEEE STANDARDS**	IEEE standards provide technical information and verification / testing criteria as well as operating limits for electrical and electronic equipment, which are not specified in other documents. These standards are also referenced in EPRI documents and in WANO, INPO and COG databases.
18.	**Romanian Atomic Forum (ROMATOM)**	ROMATOM is a Romanian legal entity of private law, independent union nationally representative, without patrimonial or gain purpose, nongovernmental, non-profit, apolitical, consisting of associate or supporting members. Its members are Romanian and/or foreign legal entities whose scope of activity is the production of electricity and heat by nuclear processes or are suppliers of goods and providers of services in the Romanian nuclear industry, as well as other legal entities that operate in the energy field, in general, and nuclear energy, in particular, or activities related to the field of nuclear energy, research in the field of atomic and nuclear physics, as well as professional, technical or scientific associations, incorporated according to the Romanian legislation in force.

19.	**Romanian National Committee of the World Energy Council**	The Romanian National Committee of the World Energy Council, one of the founding members of the World Energy Council, has made over time substantial contributions to the development of the energy policy in our country and to the promotion of Romanian interests abroad. The mission of CNR - CME is sustainable energy development in Romania, by the efficient use of energy resources in all forms. CNR - CME, which currently reunites over 350 collective and individual members, aims at the active integration of energy policies in Romania in the major options and trends that are manifested worldwide.
22.	**Association of Electricity Suppliers of Romania (AFER)**	The status of SNN as a member of an independent professional organization, with the main scope of activity of establishing and maintaining a position of its members in the specific field not only for the supply, but also for the sale of electricity.
23	**Association for Investor Relations of Romania (ARIR)**	The Association for Investor Relations on the Romanian Stock Exchange is a non-governmental and non-profit organization which was incorporated in order to provide to current and potential issuers a platform for the development of professionals in the field of investor relations (IR) and to contribute to the implementation of best practices in investor communication and corporate governance. SNN is a founding member of ARIR
26	**World Economic Forum**	SNN is the first Romanian company accepted as a partner of the World Economic Forum. Joining the Anti-Corruption Partnership Initiative creates the opportunity to access best practices in the field of ethics and integrity, and to develop dialogue with forum members on these issues.
27	**UN Global Compact**	SN Nuclearelectrica SA is affiliated to UN Global Compact starting 14.03.2022.

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