SOGIN
SUSTAINABILITY REPORT
2021

SOGIN

Sogin Sustainability Report for year 2021
Approved by Sogin Board of Directors on 30 May 2022

SO.G.I.N. S.p.A. – Società Gestione Impianti Nucleari per azioni (Nuclear Plant Management Company)
Registered Office: 51 C, via Marsala - 00185, Rome
Rome Business Register – Tax Code and VAT no.05779721009
R.E.A. reference no. 922437 – Court of Rome registration no. 130223/99
Company with a sole shareholder – Share capital of euros 15,100,000

INDEX

LETTER TO STAKEHOLDERS

Dear Stakeholder,
This year has been crucial for decommissioning. In 2021, Sogin recorded a 7% progress of decommissioning activities, against 28% reached over the previous twenty years of operations. This objective has been achieved thanks to the increasing advancement in production processes, the improvement of internal skills, and a more solid organizational structure.
10 years after the introduction of Legislative Decree no. 31 of 2010, on the siting of the National Repository and Technology Park intended to store all Italian radioactive waste, Sogin has obtained the authorisation to publish the National Charter of Potentially Suitable Areas and the Preliminary Design. On 5 January 2021, the public consultation was launched with 300 technical proposals and observations presented for the National Meeting that hosted more than 160 stakeholders, including institutions, local entities, associations, committees, managerial and workers' organisations, and individual citizens during nine meetings.
The achieved objectives include the completion of phase 1 of the Bosco Marengo FN deactivation plan, the first plant where all operations have been completed. In the IPU plant of Casaccia, Sogin conducted the operations to dismantle 56 Glove Boxes previously used to produce Plutonium-based nuclear fuel elements. In Latina, Sogin obtained authorisation to operate the Leco plant (Latina Extraction and Conditioning Plant), designed and realised to treat the radioactive sludge contained in an underground tank. The operation was completed at the beginning of 2022 as expected.
In 2021, we started developing sustainability in a cross-sectoral way, thus by engaging the Company's operative and strategic dimensions to disseminate and promote the culture of sustainability across the whole organisation and lay the foundations for the development of a Sustainability Plan in line with the targets of the 2030 Agenda and the Industrial Plan.
In terms of cultural change, we worked on cultural and process innovation and developed remote working. In 2020, we adopted this approach as an urgent and necessary measure to tackle the COVID-19 pandemic, and now, it has become our work methodology. The Sustainability Report also features new arrangements intended to create value and accurately and bluntly report our performance.
Technology innovation applied to decommissioning also made it possible to develop relevant projects to achieve our objectives. Two examples in this sense are the AIGOR system for sustainable and safe waste management and Survey 3D, designed to support decommissioning activities and plant 3D modelling.
Despite the limitations imposed by the pandemic, we are committed to establishing relationships with our Stakeholders, both at a national and international level.
We reconfirmed the Memorandum of Understanding with the Comando Tutela Ambientale e Transizione Ecologica dell'Arma dei Carabinieri (Carabinieri Unit for Environmental Protection and Ecological Transition) for the implementation of actions to eliminate, recover and ensure the safe storage of orphan radiation sources. Along with this 10-year MoU, we reconfirmed our role as international players by holding the IAEA Technical Meeting on Advancing Human Resource Development and Competence Building for Decommissioning in Caorso.
The contribution of Sogin and Nucleco's workers was fundamental to achieving successful results and implementing projects on innovative technology and cultural change. Without them, this would not have been possible. They proved to be highly professional and determined in their job performance, necessary skills to operate in a complex and evolving context like the energy sector.
They are the Group's driving force, and we owe them our positive results.

Chairman
Luigi Perri

CEO
Emanuele Fontani

METHODOLOGICAL NOTE

The Sustainability Report is an official source of information of Sogin. It includes significant figures on the economic, industrial, social and environmental performance of the Company and is intended for all its Stakeholders.
The document, approved by Sogin Board of Directors on 30 May 2022, refers to the financial year 2021 (01/01/2021 - 31/12/2021) and includes some relevant events occurred over the first half of 2022.
The accounting scope of the 2021 Sogin Sustainability Report covers the following:

- Sogin (Parent Company). The company in charge of the safe maintenance and dismantling of Italian nuclear plants and of radioactive waste management;
- Nucleco (of which Sogin holds 60% of its share capital), in charge of the treatment and interim storage of radioactive waste and sources resulting from medical and hospital activities and scientific and technological research activities.

To guarantee the comparability of data and information, and assess the trend of the two companies, the data and figures contained in the Report are compared, where possible, to those collected in the two previous financial years. The figures provided in the Report were accurately calculated according to the results of the financial accounts and other information systems used by the Companies. The use of estimates for the definition of indicators is limited and, where used, the modality applied for their quantification is indicated.
No limitations and changes to the previous Sustainability Reports have been adopted that can relevantly affect the comparability among periods.

ACCOUNTING PRINCIPLES AND STANDARDS

The report was prepared to provide reliable, complete, balanced, accurate, understandable and comparable information, in line with the Global Reporting Initiative Sustainability Reporting Standards requirements issued by the Global Reporting Initiative (GRI) in 2016, and according to the "in accordance-core" option. Starting from the 2019 Sustainability Report, the latest 2018 version of the GRI 303 (Water and Effluents) and the GRI 403 (Occupational Health and Safety) was adopted in the report. Moreover, starting from this accounting period, the Specific Standard GRI 306 (Waste), as updated in 2020, was adopted.
From the 2020 Sustainability Report on, the Specific Standard GRI 207 (Taxes) of 2019 was also adopted. Moreover, the document also complies with the principles of inclusiveness, impact, materiality, and compliance provided for in the AA1000 Accountability standard.
Any possible scope limitations are duly indicated in the report.
As in 2021, Sogin prepared a survey addressed to its internal and external Stakeholders, to investigate their opinion on the Sustainability Report. The survey is available in the sustainability section of sogin.it.
The document was drafted according to an internal procedure, issued in November 2020, according to the drafting standards, implementation stages, roles and responsibilities of the Stakeholders specified therein, to ensure full and accurate accounting to the Stakeholders.

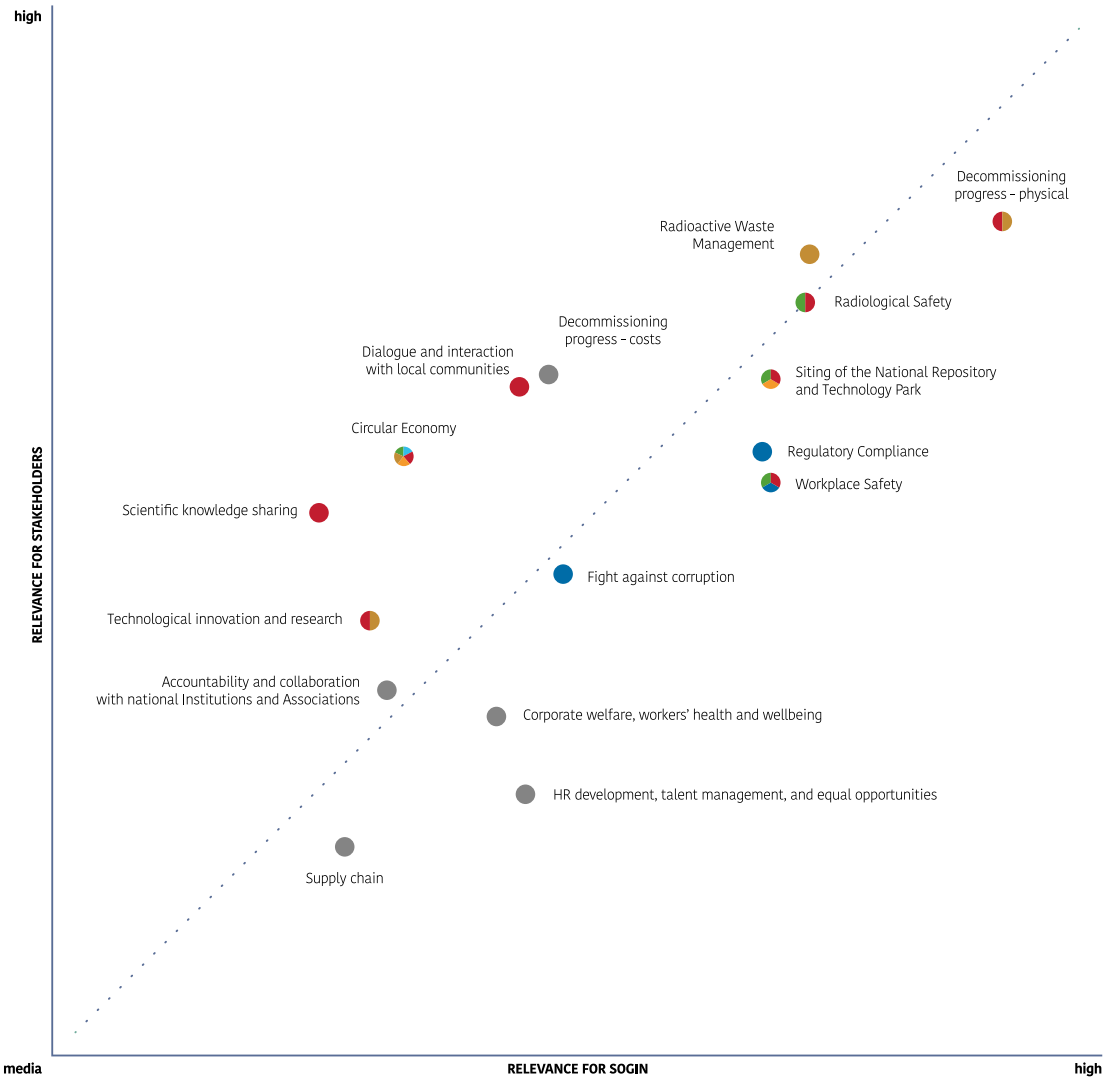
MATERIALITY ANALYSIS

A topic may be considered material if it generates a potential or actual impact of social, economic, or environmental nature on the organisation, or, if it significantly affects the evaluation of the organisation on behalf of the Stakeholders.

Accounting to the Stakeholders is carried out by considering the analysis of material topics relevant to Sogin and its Stakeholders, namely, through the so-called materiality analysis.
In 2021, no changes have occurred from the 2020 matrix. As accounted in the previous Report, the process includes an analysis of internal and external content such as: Industrial Plan, risk analysis, new sectoral legislation, press release, inspection trade unions acts, social media and analyses of the internal environment. Moreover, global macro-trends and comparisons with similar organisations in the sector are also considered.
The last materiality analyses were carried out in 2019 (by collecting the opinions of internal staff through a qualitative survey distributed to the corporate management) and in 2020 (through a survey provided to the main external Stakeholders via email; the survey was drafted after having identified 16 material topics and a list of potentially relevant Stakeholders).

The outcomes of the materiality analysis are summarised in the following matrix, divided into relevant topics for Sogin and its Stakeholders (high and medium significance).

MATERIALITY MATRIX



Each topic in the matrix is sited in a specific place based on its significance (highly relevant topics are placed in the upper right corner of the matrix, while less relevant topics are reported in the lower left corner). The colours used for the circles match those of the related SDGs (Sustainable Development Goals) for each topic. The chart resulting from the matrix shows the topics according to their relevance - most (1) and least relevant (16) -, and provides brief indications and the relevant SDGs.
The material topics that emerged are accounted in the 2020 Sustainability Report along with other 'less relevant' topics that, anyway, affect the relationship with the Stakeholders.
A bridging table, provided in the appendix of this document, combines the material topics detected through the analysis with the GRI reporting standards. Each topic is associated with the relevant GRI in a specific accounting scope.

CORRESPONDENCE BETWEEN THE MATERIAL TOPICS AND THE SDGs

	MATERIAL TOPICS	DESCRIPTION	SDGS
1	Decommissioning physical progress	Progress of dismantling works of nuclear power plants to release the sites free of radiological restrictions; critical issues connected to planned decommissioning activities and their implementation times, including with regard to the availability of the National Repository.	8, 12, 9
2	Radioactive waste management	Sogin radioactive waste management process - characterisation and classification, collection, transportation and radioactive waste management - and possible critical issues/negative impacts on the current management approach.	12, 9
3	Radiological Safety	Prevention of radiological accidents, assessment of the radiological monitoring system, trainings and awareness raising campaigns.	3, 8
4	Siting of the National Repository and Technology Park	Stages of the siting process, players involved in decision-making, Sogin planned and future actions on this topic, collaboration with the Stakeholders.	3, 8, 11
5	Legal Compliance	Actions designed to comply with the current regulations, constant monitoring of relevant legal changes and their prompt introduction into the internal regulations to prevent the infringement of laws or regulations which may result in reputational damage or sanctions (risk of non-compliance with the law).	16
6	Occupational Safety and Health	Prevention of occupational accidents, relevant training and awareness raising programmes. Specific activities to promote a culture of safety and health at the workplace.	3, 8, 16
7	Decommissioning Progress - Costs	Costs connected/related to the dismantling of nuclear power plants and the closing of the nuclear fuel cycle.	-
8	Dialogue and exchange with local communities	Past and future dialogue and exchange at a local level, analysis of resulting discussions, evaluation of Stakeholders' satisfaction, prevention of risks connected to Sogin reputation.	4
9	Circular Economy	Previous and future actions implemented by Sogin to adopt circular economy in decommissioning, by minimising waste and recycling most of the resulting materials.	3, 6, 8, 11, 12
10	Corruption prevention	Actions and strategies implemented by Sogin to monitor and prevent corruption.	16
11	Sharing of scientific know-how	Specific past and future actions/initiatives implemented by Sogin to spread knowledge and scientific culture in the field of nuclear decommissioning.	4
12	Technological innovation and research	Previous or planned actions and projects developed by Sogin to effectively face challenges in the decommissioning and radioactive waste management sectors. Possible partnerships with research institutes and specialised training centres operating in this sector at a national and international level.	4, 12, 9
13	Corporate Welfare, Health and well-being of employees	Initiatives offered to employees to foster the staff well-being in the company, increase welfare accessibility and promote engagement.	8
14	Accountability and partnership wit Institutions and Associations at a national level	Actions implemented by Sogin to develop constant relationships with national Institutions and Associations; identification of relevant partnerships for development; assessment of Stakeholders' satisfaction in relation to Sogin engagement and information approaches.	8, 16

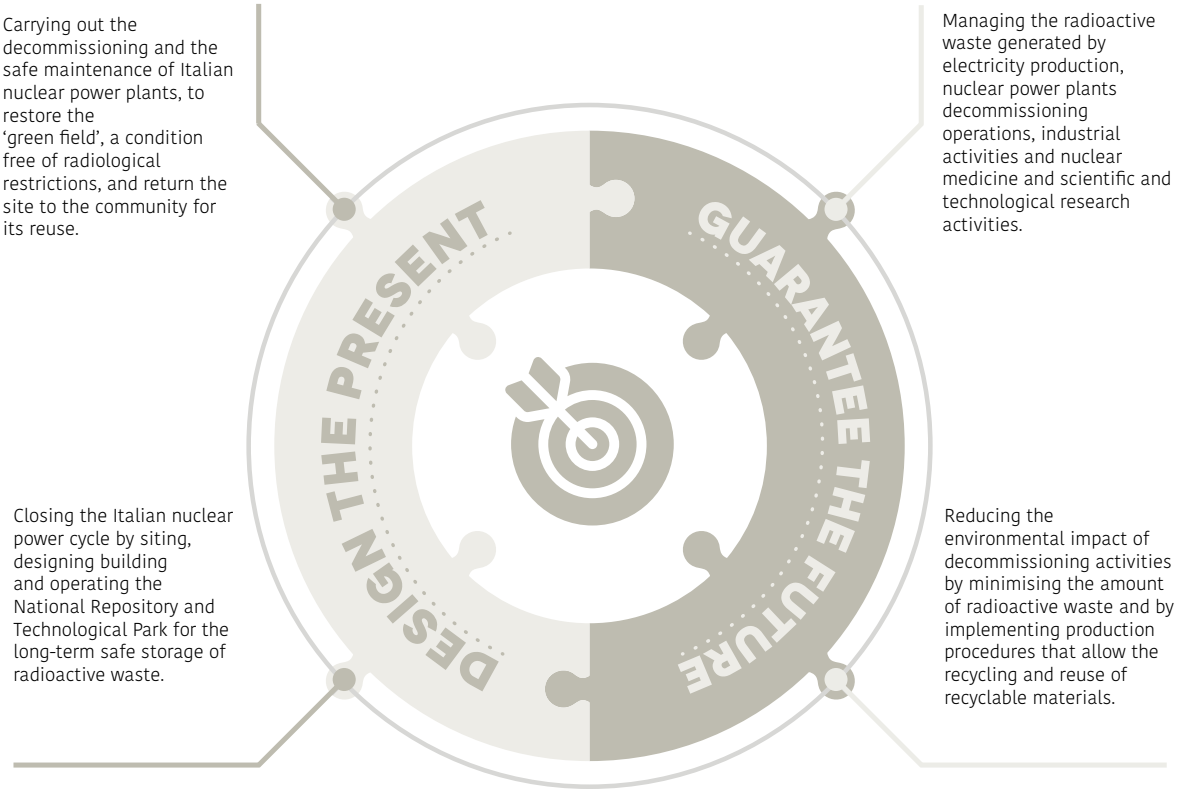
15	HR development, talent management and inclusion	Definition of designs for the development of specific training programmes for the Groups resources, assessment of individual performance, identification and allocation of planned objectives. Development actions to foster corporate social inclusion and ensure the respect for diversity.	4, 8
16	Supply chain	Engagement of qualified operators, promotion of commissioned plans, green procurement development, quality assessment in the procurement process and supplier listening channels.	8, 16

Further information on the materiality analysis can be found in the 2020 Sustainability Report, available on sogin.it.

01.
ABOUT US

SOGIN

Soginis is the State-owned company responsible for the Italian nuclear power plants decommissioning and radioactive waste management. Entirely owned by the Italian Ministry of Economy and Finance, Sogin works according to the strategic guidelines provided by the Italian Government.
Moreover, the Legislative Decree n. 31/2010 appointed Sogin the task of localizing, designing, implementing and managing the National Repository, a surface infrastructure intended for the safe storage of all radioactive waste. On 5 January 2021, Sogin published the CNAPI, the preliminary design of the National Repository and Technology Park, and the relevant documents required by the Decree on the website depositonazionale.it. The CNAPI - National Charter of Potentially Suitable Areas -, identifies 67 potentially suitable areas located across 7 Italian regions.
In 2004, Sogin acquired 60% of Nucleco, the national operator engaged in the integrated management of waste and radioactive sources, in the decommissioning of nuclear installations and in the decontamination of industrial sites.



Sogin mission is to close the Italian nuclear power cycle. In addition to the four Italian nuclear power plants of Trino (VC), Caorso (PC), Latina and Garigliano (CE), and the FN of Bosco Marengo (AL), Sogin manages the decommissioning of former fuel cycle research facilities such as EUREX in Saluggia (VC), OPEC and IPU in Casaccia (RM), ITREC in Rotondella (MT) and the ISPRA-1 reactor (VA).

NUCLECO

Nucleco is the Italian leading company in the sector of radiological services, radioactive waste management, decontamination and reclamation of industrial sites and nuclear power plants. The Company is specialised in the collection, treatment, conditioning and temporary storage of radioactive waste and sources resulting from nuclear medicine activities and scientific and technological research. Sogin holds 60% of Nucleco's share capital, while ENEA holds the remaining 40%.

DECOMMISSIONING

Thanks to innovative technical solutions, the Company carries out the decommissioning of nuclear power plants and treatment facilities (including those operating in the Uranium-Thorium and MOX - Mixed Oxide Fuel - cycles), while ensuring the highest safety standards in radioactive waste management.

INDUSTRY

It offers safe, environmentally friendly, and effective solutions for the management of materials containing natural radionuclides, NORM ((Naturally Occurring Radioactive Materials) and TENORM (Technically Enhanced Normally Occurring Radioactive Materials), produced in the petrochemical, Oil & Gas, mining and fertilizer production sectors.

BIOMEDICAL

It is qualified for the collection, treatment, conditioning and temporary storage of radioactive waste and sources resulting from nuclear medicine activities and scientific research managed by public and private entities.
The Company works in partnership with the main manufacturers of radiopharmaceuticals to minimise the volume of waste resulting from diagnostic and treatment interventions.

ENVIRONMENT

It deals with the traditional and radiological power plant reclamation, by providing its clients with expertise based on cutting-edge technology.

PRESENCE ABROAD

Thanks to its twenty-year experience in this sector, the Company takes part in nuclear decommissioning and radioactive waste management across several Countries, and has two offices abroad, in Moscow (Russia) and Bratislava (Slovakia).
Sogin presence abroad is intended to:

- Develop partnerships and relations with international bodies and foreign - public and private - operators, to foster know-how exchange in the decommissioning of nuclear power plants;
- Promote trade development by acquiring designs, studies, guidance and technical services related to plant dismantling, radioactive waste management, safety and radiological protection;
- Support Italian institutions in complying with the provisions laid down in international treaties and agreements.

SOGIN AND NUCLECO GOVERNANCE

The following chart shows the structure and roles of Sogin and Nucleco's governance bodies.

SOGIN				
SHAREHOLDERS' MEETING	**BOARD OF DIRECTORS (BoD)**	**BOARD OF STATUTORY AUDITORS**	**JUDGE FROM THE COURT OF AUDITORS**	**SUPERVISORY BODY**
	Appointed for the three-year period 2019-2021	In charge for the three-year period 2020-2022		In charge for the three-year period 2020-2022
The Company is a wholly owned subsidiary of the Ministry of Economic and Financial Affairs. It approves the Financial Statements, appoints and removes the members of the BoD and the Board of Statutory Auditors, and establishes their salaries. It appoints the company in charge of performing the statutory audit and defines its financial consideration.	The five members are appointed by the Shareholders' Meeting in compliance with the principle of gender balance. The BoD is responsible for the definition of corporate and Group strategies, and guidelines of the internal control system. It approves the Draft Budget, updates the Organisation, Management and Control Model, and adopts the Tree-year Programme for Corruption Prevention. It appoints the members of the Supervisory Body and defines their salaries, appoints the Manager in charge of drawing up the corporate accounting documents and the Manager for the Prevention of Corruption and Transparency.	It is the body in charge of monitoring the Company's compliance with laws and the articles of association, as well as with the principles of correct administration, the suitability of the Company's organisation, administrative and accounting system and its correct functioning.	The Judge monitors Sogin performance, given its nature of Company wholly owned by the Ministry of Economy and Finance. The Delegate Control Officer is entitled to take part in the meetings of the Shareholders' Meeting, the Board of Directors, the Board of Statutory Auditors and the Supervisory Body. With the functions of rapporteur, the Delegate drafts the Report through which the Court reports to the Parliament the outcomes concerning the supervision of the Company's financial management.	It monitors compliance, effectiveness, functioning and updates of the Organisation, Management and Control Model. It also shares functions with the Independent Assessment Body (OIV). On 25 February 2021, the Board of Directors appointed the new Supervisory Body following a public selection procedure for the recruitment of external members.
	Chairman Luigi Perri	Chairman: Salvatore Lentini	Delegate Control Officer: Rossana De Corato, Judge Substitute Control Officer: Maria Gabriella Dodaro, Judge	External member acting as Chairman: Francesco Santangelo, replaced by Gaetano Caputi from 25 February 2021 External member: Alessia Fulgeri replaced by Davide Albonico from 25 February 2021 on. Internal member: Pierfrancesco Baldassarri
	Deputy Chairman and CEO Emanuele Fontani Non-Executive Directors Raffaella Di Sipio, Luce Meola (up to 23 February 2022), Enrico Zio	Permanent Statutory Auditors: Cinzia Nava Enrico Maria Nadasi Deputy Statutory Auditors: Maurizio Accarino Luisa Foti		

NUCLECO			
SHAREHOLDERS' MEETING	**BOARD OF DIRECTORS (BOD)**	**BOARD OF STATUTORY AUDITORS**	**SUPERVISORY BODY**
	Appointed for the three-year period 2021-2023	In charge for the three-year period 2020-2022	Appointed for the three-year period 2018-2021
It consists of Sogin (holding 60% of Nucleco's social share) and ENEA (holding the remaining 40%). It approves the Financial Statements, appoints and revokes the Directors of the Board of Directors and the Board of Statutory Auditors, and establishes their financial considerations; it appoints experts for the statutory audit and establishes their financial consideration.	It consists of three members, appointed by the Shareholders' Meeting. The Chairman chairs the Meeting, summons and chairs the Board of Directors' meeting, defines the agenda and monitors the implementation of the resolutions. The Company management powers are appointed to the CEO, except for those otherwise explicitly reserved to the Board of Directors and those appointed to the Chairman. In the quality of Deputy Chairman, they replace the Chairman/ Chairwoman during the BoD meetings, without claiming additional compensation, in cases where he/she is absent or prevented from performing his/her assigned duties. Legal representation and signing powers are appointed to the Chairman/ Chairwoman and to the CEO.	It consists of three Permanent Statutory Auditors and two Deputy Statutory Auditors, appointed on 30 April 2020 by the Ordinary Shareholders' Meeting in compliance with the existing provisions on gender balance. The Chairman and one Deputy Statutory Auditor are designated by Sogin Shareholders, while two Permanent Statutory Auditors and one Deputy Statutory Auditor are designated by ENEA's Shareholders.	In compliance with the requirements of integrity, independence and functional autonomy, it consists of three members, of which two external and one internal member, appointed by the Board of Directors on 31 August 2018. The Supervisory Body is assigned the functions of the Independent Assessment Body for the evaluation of compliance with anti-corruption and transparency regulations. The external members of the Supervisory Body terminated their offices upon the appointment of the new Board of Directors on 23 June 2021. The current Members, in office as of 31 December 2021, hold the aforementioned offices, including in prorogatio, pending the appointment of the new Supervisory Body. The internal Member was appointed by the BoD on 3 August 2021.
	Chairwoman: Nadia Cherubini (In office since 6 March 2021 and reconfirmed on 23 June 2021) Deputy Chairman and CEO: Lamberto D'Andrea (In office up to 23 June 2021) Luca Cittadini (In office from 23 June 2021 to 9 March 2022) Marco Pagano (in office from 18 March 2022) Directors: Emilio Macci (in office from August 2020 up to 23 June 2021) Marco Pagano (in office from 23 June 2021 up to 18 March 2022) Michele Gili (in office from 13 April 2022)	Chairman: Cesare Carassai Permanent Statutory Auditors: Valentina Vaccaro Roberto Iaschi Deputy Statutory Auditors: Giulio Torlonia Angela Maria Rocca	Chairwoman: Mariangela Di Giandomenico External Member: Francesco Cardella Membro interno: Giuseppe D'Onofrio (In office up to 3 August 2021) Sara Travaglini (in office from 3 August 2021)

WORK PROGRESS, COSTS AND AUTHORISATIONS

Any activity carried out by Sogin is subject to systematic controls performed by competent authorities and institutions (i.e., MiTE – Ministry of Ecological Transition; ISIN (National Authority for Nuclear Safety and Radiological Protection; Regional and Municipal Authorities) in compliance with the guidelines provided by the International Atomic Energy Agency (IAEA) and the national regulation, among the most stringent in Europe.

PHYSICAL PROGRESS OF NUCLEAR DECOMMISSIONING

Sogin closed its 2021 balance with a physical progress of decommissioning activities carried out on nuclear power plants equal to 7.2%, far way higher than the initial target set at 6.6%. This increase resulted from remediation activities and process efficiency.
The Company implemented an accurate monitoring process that allows measuring the physical progress of decommissioning. This progress, and the economical one, confirm Sogin corporate effectiveness and efficiency. The activities to monitor compliance with the planned progress of works are divided according to a hierarchical structure and a set of coherent general and specific objectives. In compliance with Resolution no. 348/2021/R/EEL, Annex A, Article 15 of 3 August 2021 issued by ARERA (Energy Regulatory Authority), the Company updates its website with information related to the progress of decommissioning activities every three months.
In 2021, a new cost accounting method was adopted. The method provides for the introduction of cost recognition against the actual physical progress of the activities, and not only in relation to a mere commitment of expenditure. Its adoption also resulted in fewer management cost items passing from 5 to 3 (structural costs, progress costs and costs applicable to multiple years).

RECOGNITION OF INCURRED COSTS

Sogin operates according to the addresses issued by the former Ministry for Productive Activities (now Ministry of Ecological Transition) pursuant to art. 13, par. 4, of Decree Law n. 79/1999 implementing Directive n. 96/92/CE concerning regulations on the internal market in electricity. Sogin also complies with the regulations issued by ARERA.
All the activities related to the decommissioning of nuclear power plants are financed by the A2RIM tariff, through a regulatory framework defined by ARERA.
On 30 June 2020, Sogin submitted the documents related to the Full Decommissioning Plan for nuclear power plants and infrastructure, accompanied by a methodological note for the measurement of the physical progress of decommissioning activities. This note contains a proposal for the measurement of the physical progress of any relevant activity referred to under the nuclear contract (including implementation, engineering, licensing and contracting activities), and constitutes an important step forward to monitor the effectiveness of the contract.
With resolution no. 417/2020/R/eel (27 October 2020), the Authority launched a procedure to draft the provisions for the recognition of nuclear charges, in order to amend and integrate the 2013-2016 Criteria of Economic Efficiency for the regulatory period following year 2020 (third regulatory period). Moreover, the Authority considered to define an appropriate duration of the third regulatory period, that provides the possibility for Sogin to review the plans only after an adequate period of time. The third regulatory period for decommissioning activities has a duration of 6 years, starting from 1 January 2021 and up to 31 December 2026, and it divides into two three-years regulatory periods. On 30 April 2021, Sogin submitted a Full Plan - with changes compared to the Plan submitted on 30 June 2020. The last Plan includes costs and terms deviations due to the Covid-19 pandemic and the containment measures adopted by the Government.
According to the same resolution, the Authority also set out a review of the criteria of accounting separation. With resolution no. 93/2021/R/eel (9 March 2021), the Authority defined the “Criteria for the recognition of costs incurred for decommissioning activities” (Consolidated Text of Nuclear Decommissioning TIDECN 93/21) related to the third regulatory period and to the activities falling within the scope of nuclear charges, excluding works related to the National Repository and Technology Park design. Through the new (third) regulatory system, the Authority gave decommissioning activities a strong forward-looking connotation, thus requiring Sogin to commit to comply with the progress and cost forecasts.
With resolution no. 348/2021/R/eel of 3 August 2021, the Authority approved the Criteria for the recognition of costs incurred for the decommissioning activities of nuclear power plants, with the exception of activities related to the National Repository and Technology Park, for the 2021-2026 period;

it also provided final approval to the Consolidated Text on Nuclear Decommissioning (TIDECN) and defined the quantitative criteria for the application of the TIDECN in the first three-year regulatory period (2021-2023).
According to the same resolution, the Authority also approved the budget for the items related to nuclear charges for decommissioning activities of the first three-year regulatory period (2021-2023).
The new regulatory system is based on a mechanism for the recognition of the final costs incurred for the nuclear contract. Every year, Sogin adopts this mechanism to draft the final balance sheet of the previous year by 28 February, and submit it to ARERA for approval.
The Authority recognises the final costs incurred according to effectiveness and efficiency criteria, provided that they fall within the scope of nuclear charges as defined under Inter-Ministerial Decree of 26 January 2000 (as amended by Inter-Ministerial Decree of 3 April 2006).
The current system divides the costs of the nuclear contract into different categories and applies different recognition methods.
Therefore, the Authority defines the scope of the nuclear charges to be covered by the electricity tariff (A2RIM, former A2) by guaranteeing coverage of Sogin financial needs through specific allocations from the Fund for energy and environmental services.

AUTHORISATIONS

The main authorisation needed to dismantle a nuclear power plant is the Deactivation Decree issued by the Ministry of Ecological Transition, after consultations with the Ministry of Interior, the Ministry of Labour and Social Policies, the Ministry of Health, the Region, the concerned Autonomous Provinces and the ISIN.
This procedure, as defined under Articles 98 and 99 of Legislative Decree no. 101/2020, starts with the submission of the deactivation order by Sogin.
Legislative Decree no. 1/2021, amended by Law no. 27/2012, pursuant to Article 24 “acceleration of the deactivation and dismantling operations of nuclear power plants”, paragraph 4, states that, without prejudice to the specific procedures envisaged for the implementation of the National Repository and Technology Park as recalled under paragraph 3, the authorisation issued under Article 55 of Legislative Decree no. 230 of 17 March 1995 to carry out the deactivation designs, and the authorisations provided under Article 6 of Law no. 1860 of 31 December 1962, and under Article 148, paragraph 1-bis, of Legislative Decree no. 230 of 17 March 1995, issued from the enforcement date of the above mentioned Decree, are regarded as a statement of public utility, urgent measures, constitutes alternatives to urban planning tools, and replace any administrative procedures, authorisations, concessions, licenses, approval and administrative act, however defined, provided under the existing regulations, thus permitting the implementation of the works. To obtain an authorisation for work implementation or the dismantling of works involving changes to the existing plants, a reasoned opinion must be requested to the municipality or region where the works defined under this paragraph are located; these administrations must provide their opinion within 60 days from the request issued by the Ministry of Economic Development, without prejudice to the execution of the environmental impact assessment, if applicable.
Pending the release of the said decree, individual designs intended to progress with dismantling activities and implement temporary structures and works can be authorised, provided that they are necessary to advance with the decommissioning plan.
By means of the Legislative Decree no. 101/2020, the authorisations of individual designs can be obtained through the implementation of Article 233, paragraph 1 “Transitional measures for ongoing authorisation procedures (Article 148 of Legislative Decree no. 230 of 17 March 1995)” of Legislative Decree no. 101 of 2020 for specific operations and interventions, related to the deactivation and intended to ensure radiological protection for workers and the population in the most effective way.
After having obtained the deactivation decrees and the authorisations provided under Article 233 of Legislative Decree no. 101/2020, Sogin must submit any individual operational plans or detailed design reports to the approval of ISIN, by providing a description of the work to be implemented and any relevant assessment in terms of safety and radiological protection.
Legislative Decree no. 101/2020, published in the Official Journal of 31 July 2020, introduces Resolution 2013/59/EURATOM and updates the text with the Italian regulations on radiological protection; these regulations also include Legislative Decree no. 230/95, namely the legal reference in force upon the submission of deactivation orders for Sogin power plants and structures under decommissioning.

TAXATION

The fiscal approach of a company included under the list of the public administrations of consolidates profits or losses, like Sogin, and identified pursuant to the public accountability and finance law (Official Journal - General Series no. 229 of 30 September 2019), and deemed therefore to be among those included in the Index of Public Administrations (IPA), leaves few or no room for discretionary actions.
More specifically, Sogin established and maintains a set of internal regulations and procedures, stating the objectives, features and tax management approach, as well as any activity connected to data collection, measurement, management and tax risk monitoring.
Within the Company, the link between tax governance (namely all the regulations related to tax governance and tax risk management) and corporate governance is inherent in managing administrative and accounting operations.


AMSK 0387 95
AMSK 0274 95
Produttore: Sogin
Luogo di prod.: Bosco Marengo
Numero: AMSK038795
Anno di prod.: 1995
Livello di irraggiamento massimo a contatto: 0,320 µSv/h
Massa lorda: 796 Kg

02.
VALUE CREATION

SUSTAINABILITY

SUSTAINABILITY GOVERNANCE

In 2021, Sogin launched the preparation of the first Sustainability Plan. This plan envisages an analysis and in-depth study of the main topics connected to Sogin and Nucleco's core businesses, by including all corporate functions - both strategic and operational ones - in a cross-sectoral manner.
Sogin and Nucleco's Sustainability Plan envisages the following main objectives:

- Guaranteeing the consistency of the strategic sustainability guidelines with the objectives stated under the 2020-2025 Industrial Plan;
- Shifting the horizon from ex-post performance accounting and enhancement to ex-ante goal setting and action;
- Ensuring the definition of internal policies and procedures to integrate sustainability in the core business.

In the first half of the year, 21 one-to-one interviews have been carried out that involved all Sogin functions and part of Nucleco's functions for a total of 55 interviewees. The interviews aimed at analysing individual activities and supporting corporate functions in promoting a sustainable work approach. Based on the findings collected from the interviews, six sustainability drivers were detected and approved by the management. These drivers constitute the strategic structure of the Sustainability Plan.

CIRCULARITY	Sogin and Nucleco commit to plan, design and manage their activities according to the principles of circularity and sustainability, by mitigating and assessing their environmental, social and general impact. Moreover, the Companies commit to introduce sustainability criteria in their supply chains and across qualification processes carried out on suppliers.
VALUE SHARED WITH THE TERRITORY	Sogin and Nucleco strongly believe that a business must play an active role towards the Community close to which they operate. They also believe that the generated value cannot be limited to purely internal interests. Therefore, extending the said values to external Stakeholders and foster their participation and engagement is fundamental.
ENHANCEMENT OF COMPETENCIES	Sogin and Nucleco recognise the importance of knowledge and research, and, aware of the unique internal competencies developed over time, they commit to promote these two elements and disseminate them in a structured and consistent way, both internally and externally. In this perspective, the Companies emphasise the importance of knowledge transfer among businesses and across different generations to creating a shared value beyond their business operations. The Companies also commit to creating and enhancing international partnerships to foster collaboration and researches on the topics of circularity and sustainability.
ACCOUNTABILITY	Sogin and Nucleco base their work on transparency and accountability and commit to implement an assessment, monitoring and communication system to guarantee the utmost transparency of their activities. To this end, the Companies design a set of sustainability indicators in addition to the existing ones, aiming at including the ESG aspects in the planning and assessment tools used to evaluate the corporate governance, and the business economic and factual performance. Moreover, they commit to disseminate clear and complete information, by prioritizing dialogue and exchange with their Stakeholders.
ENGAGEMENT	While performing their activities, Sogin and Nucleco undertake to engage, discuss and open a dialogue with their Stakeholders (both internal and external) along all the stages of the process, by promoting a perspective of shared objectives.
ORGANIZATIONAL CULTURE	Sogin and Nucleco undertake to promote a change in the organizational culture that will result in a positive environment for innovation and the establishment of modern HR management systems. Therefore, they commit to promote diversity, remote working solutions, training programmes, professional and personal development of their staff, by introducing a set of performance assessment criteria that include the ESG variables.

The 6 drivers - related to the three dimensions of environmental, social and economic sustainability - identify the strategic and sustainable approach that the two Companies commit to adopt.
Moreover, the highly specialised know-how and innovative and sustainable radioactive waste management solutions emphasize the operations carried out in the sites to contribute to a sustainable green transition, including in terms of technology.
Sogin was established in 1999 to carry out the closure of the Italian nuclear supply chain. Therefore, given its core business and daily activities, it is an important player in terms of technology shift and advancement. Thanks to the expertise gained in the field of radiological and traditional reclamation, the Company can operate across several sectors requiring end of life management, like those interested by the ongoing green transition, in which companies play a paramount role.

In June 2021, a Sustainability Strategic Committee and a Standing Working Group were established. The sustainability control booth governs this whole process.

	STRATEGIC DIMENSION	
	SUSTAINABILITY STRATEGIC COMMITTEE	ADVISORY BOARD
CONTROL BOOTH In terms of Communication and Sustainability, it controls the sustainability planning process.	A representative of Sogin BoD, Nucleco's Chairman, and any competent officers, in charge of defining the companies' strategic commitments in terms of sustainability.	External experts specialised in sustainability matters strictly connected to the corporate core business in charge of supporting the process.
	OPERATIONAL DIMENSION	
	Standing Working Group It consists of experts in sustainability drivers and it works for the definition of objectives, targets and KPIs of the Sustainability Plan.	

The tasks of the Strategic Committee are as follows:

- Integrating sustainability in the core business;
- Defining strategic commitments and approaches for sustainability in line with the Industrial Plan, and promoting their implementation and formal recognition in writing through a planning document;
- Supporting the implementation of actions needed to reach the objectives defined in the Plan through careful monitoring.

The sustainability governance is divided into two different levels and engages the whole Group in its operations.
Between July and September 2021, the Advisory Board held four workshops to explain the topics connected to the sustainability drivers. These workshops were fundamental to train the members of the Standing Working Group and significantly contributed to raise awareness on the culture of sustainability.

The table below shows how sustainability is approached at an organizational level:

SUSTAINABILITY DRIVER		PILLARS OF THE INDUSTRIAL PLAN
CIRCULARITY	Design and implementation of decommissioning activities, industrial reclamations, and the National Repository in a circular perspective; this approach is intended to minimise and optimise Sogin use of resources and overall impact.	CORE BUSINESS
VALUE SHARED WITH THE TERRITORY	The mission fostered by the Company towards the territory - protecting the present and ensuring the future - aims at generating shared value to achieve the Sustainable Development Goals defined by the UN 2030 Agenda.	COUNTRY SYSTEM
ENHANCEMENT OF COMPETENCIES	Highly technical know-how enhancement and transfer fostered by the Group; competence maintenance, including to preserve a memory for future generations.	KNOW-HOW
ACCOUNTABILITY	Accountability towards external and internal Stakeholders, proved by clear, transparent and factual communication of Sogin sustainable strategy.	REPUTATION
ENGAGEMENT	Stakeholders' engagement, dialogue and exchange across all Sogin processes, in a perspective of inclusiveness and shared objectives.	
ORGANIZATIONAL CULTURE	Innovative cultural elements to promote the corporate change needed to achieve sustainability objectives and create a suitable environment for innovation.	

SOGIN FOR THE 2030 AGENDA

The UN 2030 Agenda for Sustainable Development, launched in September 2015, identifies 17 Sustainable Development Goals (SDGs) further broken down into common sustainable development targets based on crucial existing challenges.
Sogin 2021 Sustainable Report highlights the projects and activities implemented to achieve the SDGs set out by the 2030 Agenda and outlines the company's future commitments.
Sogin has already considered most of these objectives in the performance of its strategic activities and to guarantee the protection and safety of workers, citizens, the environment, and the whole Country system.
The following table reports all the implemented and planned actions that contribute to the achievement of the SDGs.

GOAL 3: ENSURE HEALTHY LIVES AND PROMOTE WELL-BEING FOR ALL AT ALL AGES

- Update of the Organization, Management and Control model including a new special section dedicated to "Environment, Health and Safety"
- Actions to promote health and safety at the workplace
- Actions to tackle the COVID-19 emergency
- Training and informative programmes on health and safety addressed to internal and external Stakeholders
- Promotion of diversity and equal opportunities
- Development of the Integrated Quality, Safety and Environment Management System
- Corporate Welfare
- 'Working Smart' Project

GOAL 4: ENSURE INCLUSIVE AND EQUITABLE QUALITY EDUCATION AND PROMOTE LIFELONG LEARNING OPPORTUNITIES FOR ALL

- Staff training specifically focused on safety, radioactive waste and nuclear fuel management
- Knowledge management for know-how integration, enhancement and sharing across men and women
- Partnerships with Universities and Research Entities
- Information projects addressed to local communities (schools, universities, associations)
- Promotion of diversity and equal opportunities
- Support provided for the education of the children of the Company's staff

GOAL 6: ENSURE AVAILABILITY AND SUSTAINABLE MANAGEMENT OF WATER AND SANITATION FOR ALL

- Monitoring operations and treatments to guarantee compliance with the limitations set out by law on discharges and into surface waters
- Radiological and traditional monitoring actions on underground waters located under the nuclear power plants

GOAL 8: PROMOTE SUSTAINED, INCLUSIVE AND SUSTAINABLE ECONOMIC GROWTH, FULL AND PRODUCTIVE EMPLOYMENT AND DECENT WORK FOR ALL

- UNI ISO 45001Certification
- Green procurement
- Promotion of a safe and protected workplace for all employees through information and awareness-raising campaigns
- SA8000 Standard
- 'Working Smart' Project

GOAL 9: BUILD RESILIENT INFRASTRUCTURE, PROMOTE SUSTAINABLE INDUSTRIALIZATION AND FOSTER INNOVATION

- Innovative and sustainable solutions for the management of radioactive waste (AIGOR project, 3D Survey, National Repository and Technology Park)

GOAL 11: MAKE CITIES AND HUMAN SETTLEMENTS INCLUSIVE, SAFE, RESILIENT AND SUSTAINABLE

- Specific sampling activities and environmental radiological monitoring actions on each site
- Actions to support local communities
- Localization of the National Repository and Technology Park for the final storage of radioactive waste
- Design of decommissioning operations to reduce long-term environmental impacts
- EMAS Registration
- Prompt reporting of events that are likely to impact the environment and affect the health of the population
- Verification of compliance with the limitations and/or reference levels set out by existing regulations and with the recommendations related to discharge limitations for each site
- 'Differenziamoci' Project
- Home-Work Transfer Plan
- Bike racks

GOAL 12: RESPONSIBLE CONSUMPTION AND PRODUCTION - ENSURE SUSTAINABLE CONSUMPTION AND PRODUCTION PATTERNS

- Sogin-ICQRF agreement to define specific radiological and chemical techniques and ensure traceability of agricultural and agri-food products
- Decommissioning and radioactive waste management operations
- Data digitization to ensure the traceability and integrity of radioactive waste and memory preservation for future generations
- Green procurement
- Awareness-raising actions
- Circular economy plan: minimisation of the waste produced and maximisation of materials to be sent for recovery

- Projects related to the EU Horizon 2020
- Plastic Reduction Project

GOAL 14: CONSERVE AND SUSTAINABLY USE THE OCEANS, SEAS AND MARINE RESOURCES FOR SUSTAINABLE DEVELOPMENT

- Underwater reclamation operations to remove contaminated or dangerous materials and protect the pelagic environment and species

GOAL 15: PROTECT, RESTORE AND PROMOTE SUSTAINABLE USE OF TERRESTRIAL ECOSYSTEMS

- Management of protected areas belonging to the sites
- Prompt interventions in case of non-compliance with environmental regulations
- Design of decommissioning interventions to reduce the environmental impact in the long-term
- Projects related to the EU Horizon 2020
- Plastic Reduction Project
- 'Differenziamoci' Project
- Cooperation protocol with the Special Commissioner for the reclamation of abusive landfills
- EMAS Registration
- Reuse of excavation earth
- Environmental restoration and renaturation of reclaimed areas
- Home-Work Transfer Plan
- Bike racks
- Prompt reporting of events that are likely to impact the environment and affect the health of the population
- Awareness-raising actions

GOAL 16: PROMOTE PEACEFUL AND INCLUSIVE SOCIETIES FOR SUSTAINABLE DEVELOPMENT, PROVIDE ACCESS TO JUSTICE FOR ALL AND BUILD EFFECTIVE, ACCOUNTABLE AND INCLUSIVE INSTITUTIONS AT ALL LEVELS

- Organization, Management and Control Model (MOCG) to prevent and tackle the perpetration of predicate offences for administrative liability as set out under Legislative Decree no. 231/2001, corruption and maladministration phenomena as under Law no. 190/2012
- Partnerships with Universities, Research Entities and the Industrial system
- Monitoring and preventive actions against corruption
- Institutional relationships at local, national and international levels

ENVIRONMENTAL COMMITMENT

Sogin environmental commitment has always covered different aspects. Along with procedures to comply with the existing environmental regulations, it includes voluntary actions that practically contribute to sustainable development.

COMPLIANCE WITH ENVIRONMENTAL REGULATIONS

In line with the provisions of the existing regulations on environmental impacts, Sogin launches proper procedures to assess whether a specific project carried out in the nuclear field may generate significant negative impacts on the environment.

The decommissioning of nuclear power plants and the implementation of specific infrastructure in the ex-ENEA nuclear sites are subject to an Environmental Impact Assessment (EIA) as provided under Legislative Decree no. 152/2006 (Environmental Regulations). Positive EIA decrees provide a set of specific provisions to guarantee that the assessed projects comply with environmental protection regulations and, if appropriate, define the necessary measures to avoid, prevent, reduce and, if needed, compensate any significant and negative environmental impacts. Based on the time schedule reported in the EIA decree, Sogin prepares the technical documents required to carry out the verification of compliance with the above-mentioned provisions. The concerned Authorities (Ministry Ecological Transition MiTE, Ministry of Culture-MiC, Regions, Superior Institute for Environmental Protection and Research-ISPRA, Regional Environmental Protection Agency-ARPA), based on their competencies and the scope of the EIA, evaluate these documents and issue Executive Decisions.

EIA DECREES FOR SOGIN SITES		
	SITE NAME AND YEAR THE DECREE WAS OBTAINED	**2021 - DECREES OF COMPLIANCE WITH THE PROVISIONS OF THE EIA DECREE**
NUCLEAR POWER PLANTS	Caorso, 2008	Compliance with provision 10 (Environmental Monitoring Report) for years 2019 and 2020.
	Trino, 2008	Compliance with provision 9 (Environmental Monitoring Report) for year 2020.
	Garigliano, 2009	Compliance with provision 1.7 (Environmental Monitoring Report) for the second half of 2020 and the first half of 2021.
	Latina, 2011	Compliance with provision A) 3.i (Assessment of worksites interferences) for the three-year period 2021-2023.
PLANTS	CEMEX Saluggia, 2008	Compliance with provision 6 (Environmental Monitoring Report) for the second half of 2019, the first and second half of 2020 and the first half of 2021.
	ICPF Rotondella, 2011	Compliance with provision 1.7 (Environmental Monitoring Report) and 1.8 (Report for the verification of environmental components) for the second half of 2020. Compliance with provision 1.g. (Study on Transports).

Some specific projects of national or regional relevance, including the amendments and extensions of the national projects listed under Annex II of the second part of Legislative Decree no. 152/06 and subsequent amendments and integrations, must undergo a screening before the EIA pursuant to Article 19 of Legislative Decree no. 152/06 and subsequent amendments and integrations, to evaluate whether the project can produce significant negative environmental impacts and must undergo the EIA procedure according to the provisions set out under section III of the second part of Legislative Decree no. 152/06 and subsequent amendments and integrations. (Article 5, let. m of Legislative Decree no. 152/06 and subsequent amendments and integrations).
Like the works subject to the issue of Environmental Compatibility Decrees, in case of work implementation, Sogin commits to comply with the environmental requirements defined in the screening provision for EIA eligibility, by submitting, where applicable, a request for verification of compliance.

STIPULATIONS OF NON-ELIGIBILITY FOR THE EIA AND RELEVANT COMPLIANCE WITH THE PROVISIONS SET OUT FOR SOGIN'S SITES - YEAR 2021		
	SITE, PROJECT, AND YEAR THE DECREE WAS OBTAINED	**2021 - DECREES OF COMPLIANCE WITH THE PROVISIONS OF THE STIPULATIONS OF NON-ELIGIBILITY FOR THE EIA**
NUCLEAR POWER PLANTS	**Caorso**, Update of radioactive waste management procedures and temporary on-site storage, 2013	Compliance with provision 3.b (Plan for the use of excavation earth)
	Trino, Update of radioactive waste management procedures and temporary on-site storage, 2015	
	Trino, Construction of a treatment and conditioning plant for exhausted ion-exchange resins of Trino Nuclear Power Plant	
PLANTS	**ICPF Rotondella**. Campaign for waste treatment (EWC Code 16.10.02) for a duration not exceeding 120 days, through a mobile installation located on-site, 2020.	Amendment of provision no. 3

Moreover, pursuant to Article 6, paragraph 9 of Legislative Decree no. 152/06, the applicant can request the Competent Authority to carry out a Preliminary Assessment of the projects requiring changes or extensions of previously authorised works - either implemented or to be implemented -, for which no significant and negative environmental impacts are expected.
During 2021, this procedure was requested for two projects. The outcomes of the assessment are reported below:

PRELIMINARY ASSESSMENT YEAR 2021	
CAORSO	Given the absence of significant and negative environmental impacts, no further EIA procedures have been arranged for the project "Update of radioactive waste management procedures and temporary on-site storage - change in the construction site set up stage for the demolition of the mat foundation of the ERSBA 2 Building".
TRISAIA	Further verifications need to be carried out for the project "Change in preparatory works" through a Screening procedure for EIA eligibility pursuant to Article 19 of Legislative Decree no. 152/2006.

RECLAMATION PROCEDURES

The provisions set out under the EIA provisions include the launch of monitoring campaigns on the environmental matrices of each site, to be implemented regularly based on the site's specific features. In compliance with the provisions of the environmental compatibility decrees, Sogin constantly monitors the quality of environmental components (atmosphere, surface waters, underground waters, landscape and noise) through a set of regular surveys scored according to duly selected biological, chemical and physical indicators.
These monitoring procedures, or so-called traditional monitoring, are carried out on the four nuclear power plants, the ICPF plant in Rotondella and the CEMEX complex in Saluggia, for the following purposes:

- Verifying compliance with the impact provisions postulated in the EIA
- Guaranteeing full control of the environmental situation over the different stages of operations
- Acquiring data to record evolutions in the environmental situations in relation to the operations
- Assessing evolutions of the environmental situation through comparison between the ante operam and current status of the work and, in case of anomalies, establishing and implementing corrective actions

The outcomes of these monitoring procedures are regularly recorded in an environmental report and, following validation on behalf of the Ministry of Ecological Transition - MiTE -, they are made available in the RE.MO. (Monitoring Network) portal on the sogin.it website

RECLAMATION PROCEDURES				
In case the monitoring campaigns record values that exceed the limits for permissible contamination concentrations (CSC) for the land and underground water matrices, Sogin, as the company in charge of the plant management, activates the reclamation procedure as provided under section IV of Legislative Decree no. 152/2006:				
Launch of the reclamation procedure through communication of potential contamination to the entities involved.	Draft and submission of the characterisation plan, accompanied by an investigation proposal, based on a preliminary conceptual model of the site (detection of contaminant source, migration pathways, exposure modalities and targets).	Approval of the characterisation plan on behalf of the Conference of Services constituted by the local entities in charge of monitoring (Region, Province, ARPA, Municipality, Local Healthcare Unit - ASL).	Implementation of the investigation plan aimed at verifying the conceptual model as rebuilt, and input data acquisition for the site-specific Healthcare Risk Analysis (AdR) to identify Concentrations exceeding the Risk Threshold (CSR).	Approval of the site-specific Healthcare Risk Analysis on behalf of the Conference of Services and definition of subsequent actions.

In case Concentrations exceeding the Risk Threshold are detected, the following actions are implemented:

Draft and submission of the Executive Reclamation Project (POB) or the Executive Safe Containment Project (MISOP), accompanied by relevant monitoring plan.	Draft and submission of the Executive Reclamation Project (POB) or the Executive Safe Containment Project (MISOP), accompanied by relevant monitoring plan.	Execution of the actions provided under the Executive Reclamation Project or in the Executive Safe Containment Project.	Execution of the approved monitoring plan.

In case Concentrations not exceeding the Risk Threshold, the following actions are implemented:

Execution of a monitoring plan, as already suggested in the site-specific Healthcare Risk Analysis, to evaluate evolutions of the anomaly detected.

In 2021, the Company carried out reclamation procedures on the sites of Caorso, Latina, Garigliano, Trino and Rotondella. Moreover, the reclamation procedures were also launched in the Bosco Marengo site, in which contamination was discovered in 2016 following a characterisation campaign carried out autonomously by Sogin on the site's underground waters. In conclusion, following the characterisation of land and water (underground and surface waters) intended to collect data to draft the Environmental Impact Study, a reclamation procedure was launched in the ISPRA-1 site pursuant to Article 245 of Legislative Decree no. 152/2006.

SUSTAINABLE USE OF RESOURCES

For several years, Sogin launched actions to promote the adoption of sustainable lifestyles, based on an informed use of resources.

In 2021, the Plastic Reduction Project to foster a reduction of single-use plastics at the workplace, has continued.
The project's guidelines include:

- promoting awareness-raising campaigns on reducing the use of single plastics among workers;
- minimising waste; this objective is also part of the Company's circular economy strategy for nuclear decommissioning.

For many years, Sogin has contributed to the programme launched by Azienda Trasporti di Roma (Rome's Public Transport Company) to reduce the use of individual vehicles and increase that of public transports. In 2021, the staff employed in the Rome's headquarters received 230 annual transport passes for free (250 passes issued in 2020).
For the Rome's Headquarters, Sogin drafts a Home-Work Transfer Plan and submits it to the Municipality of Rome. This plan is drafted by processing data collected among the workers employed in the Headquarters following a survey accessible by all employees.
Since 2017, the Rome Headquarters has been equipped with 20 cycle racks for the staff and with new food and beverage vending machines (free loan for use) which resulted in 50% energy saving.

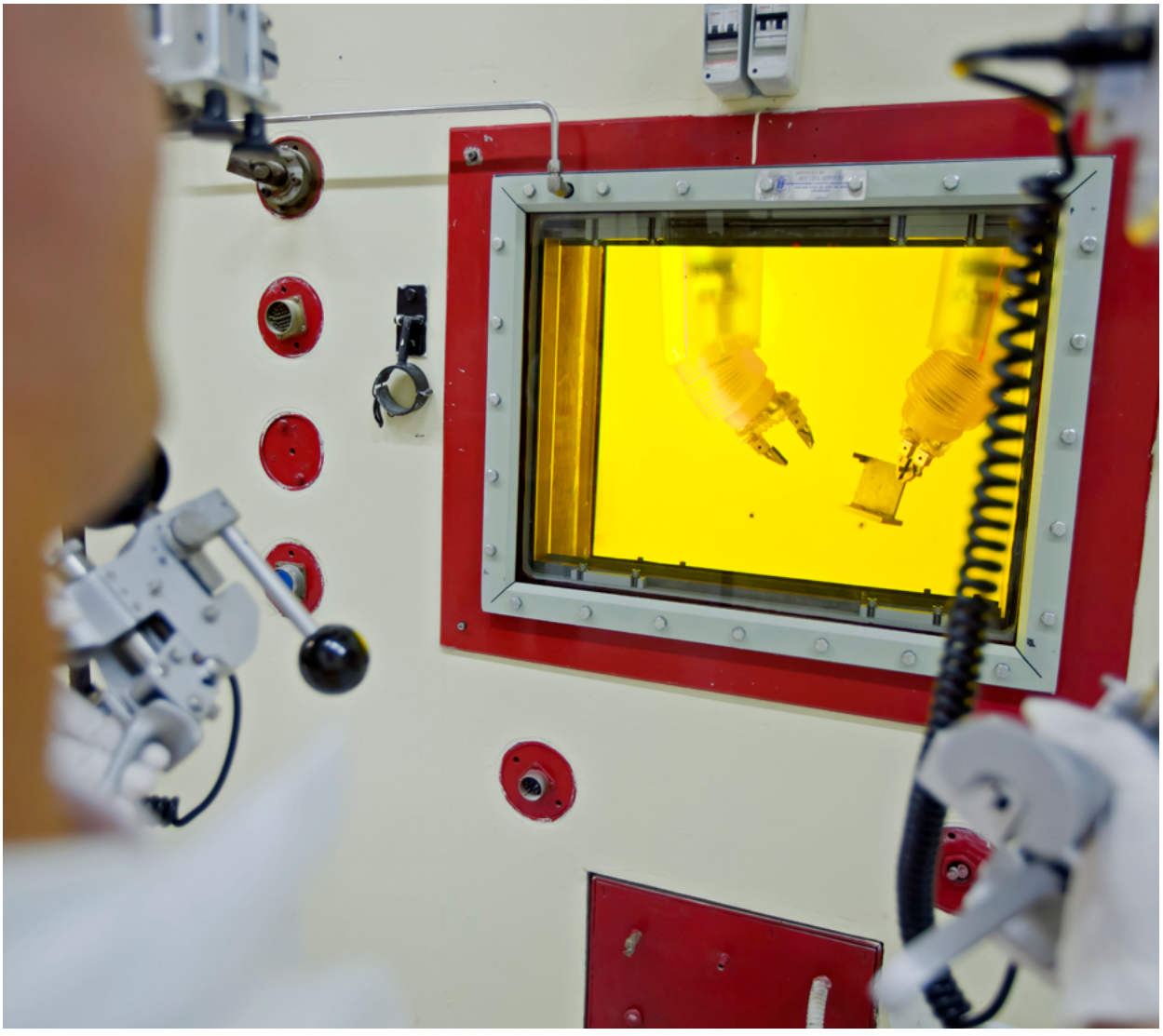
Since 2018, Sogin has voluntarily carried out the Energy Audit of the Company, namely the audit of energy uses and consumption to identify relevant energy flows and improve corporate energy efficiency.
The project to replace neon lights with LED lights across all our offices and sites was completed years ago.
We expect to provide the Energy Audits of all Sogin's sites by 2023. This activity will be carried out once every 4 years.

Starting from 2017, Sogin started and promoted the separate waste collection through an action called "Differenziamoci". With this action, Sogin equipped its central offices and sites with trash bins for separate waste collection divided by plastic, paper, and undifferentiated waste, as well as specific containers for the collection of empty toners.

In 2021, the Company reviewed its remote work procedures to meet the needs of the employees and improve production while complying with the containment measures imposed by the pandemic, its evolution over time and seasons and the virus modifications. The remote work approach adopted from March 2020, resulted in a reduction of the environmental impact for home-work transfers.
In 2021, Sogin further developed a "less paper and more technology" work approach, by implementing a set of measures to reduce paper consumption significantly. For instance, using the Office 365 cloud service to share digital documents and avoid printed ones, and the distribution of the corporate magazine SoginNews in digital format.

With the introduction of the new Minimum Environmental Criteria (CAM) issued by the MiTE in July 2021, and in line with the guidelines provided in the MiTE document "Handbook on how to save on fuel and CO2 emissions from vehicles", Sogin is transforming its corporate fleet by hiring Hybrid Clean and Green Vehicles for its staff.

On 26 March, the Company took part in **M'illumino di Meno**, an initiative on energy efficiency promoted by Rai Radio 2 through a campaign dedicated to Sogin and Nucleco's staff. In this regard, the Company contributed by drafting a manual on energy efficiency and sustainable lifestyles at home and the workplace.



EMAS REGISTRATION

The EMAS (Eco-Management and Audit Scheme) is an open audit tool promoted by the EC and made available to private and public companies and organisations to evaluate and improve their environmental performance and draft an Environmental Declaration to share relevant information with the concerned Stakeholders.
Starting from 2014, Sogin has been carrying out the EMAS registration under the Regulation (EC) 1221/2009 (as amended by EU regulations 2017/1505 and 2018/2026), proving its commitment in achieving high environmental performances during its operations.
The EMAS registration was originally implemented in Caorso power plant, followed by Trino and the EUREX plant of Saluggia, while the authorisation procedure to register Rotondella plant is still in progress.

EMAS REGISTRATION		
SITE	**REGISTRATION**	**RENEWAL**
CAORSO	2015	2012 - Validation of the 2nd issue of the 3rd edition of the Environmental Declaration (pending endorsement by the EMAS Committee)
TRINO	2015	2021 - 1st emission of the 3rd edition of the Environmental Declaration
SALUGGIA	2017	2021 - 2nd update of the 2nd edition of the Environmental Declaration
ROTONDELLA	2021 - on-site validation - Registration procedure in progress	
NUCLECO	2019	021- Validation of the new Environmental Declaration needed to renew the EMAS Registration for 2021-2023.

ENVIRONMENTAL RADIOLOGICAL PROTECTION

Each year, Sogin carries out hundreds of samples and measurements, based on a specific radiological environmental monitoring in each site. This aims at ensuring a regular control of the radioactivity level in the environmental matrixes (atmosphere, surface water, underground water, soil and grass, sediments, soil depositions) and in the food matrixes (meat, fodder crops, fish and eggs). Monitoring is implemented through environmental and radiological surveillance networks, installed in each nuclear power plant since its building.
Specific interest matrices and frequencies of sampling and measurement are defined for each site. Over the years, these networks have been checked and adapted according to the local environmental conditions and the different configuration of the plants.
Radiological monitoring aims at:

- **Checking the main radiological means of contamination;**
- **Monitoring the radiological impact on environment and food chains to assess the extent the population or specific groups are potentially exposed to ionizing radiations resulting from the project activities**
- **Verifying compliance with the limitations and/or reference levels set out by existing regulations and the recommendations related to discharge limitations for each site**
- **Promptly notifying possible environmental impacts or possible health consequences on people.**

The type and frequency of sample and measure reported in the monitoring programme are previously communicated and authorised by the Regulatory Body (ISIN), which receives an annual information report on the environmental radiological condition. Meanwhile, ARPA Agencies (Regional Agency for the Protection of the Environment) carry out a similar monitoring and surveillance activity.

DISCHARGE FORMULAS

Sogin carries out environmental and radiological monitoring to verify compliance with the limits and/or reference levels under the current legislation and ensures the values are in line with those of the specific release procedure in use in each site.

Discharge formulas define the maximum level of radioactivity that can be discharged by a specific plant over a calendar year, according to the provisions set out by the regulatory body.

As for Trino, Caorso, Garigliano, Latina and Bosco Marengo sites, such formulas are defined by Ministerial Decommissioning Decrees, under Article 98 of Legislative Decree No. 101 of 2020, according to the principle of non-radiological relevance, namely an effective dose of 10 ms/year for the population.

The approval of Decommissioning Decrees for the sites of Casaccia, Saluggia and Rotondella is still in progress. Its completion will result in an update of discharge formulas. Currently, the discharge formulas used by these sites are those defined under the operating license. If needed, the Regulatory Body adopts new provisions in addition to the previous.

The maximum quantity of liquid and gas effluents to be discharged is defined in line with a non-relevant radiological effective dose on the population, in other words, the discharge procedure may be 100% implemented without significant impacts on environment and population. The discharge formula is defined according to several factors: the nature of the operations carried out in the plant, the fluctuation range of natural radiations, the critical routes of exposure (how the released radioactivity can be reabsorbed by the population, such as by ingesting the fish of the river or by eating vegetables from local crops, which are part of the food chain).

Formulas are regularly updated according to the new regulatory standards on radiological protection and nuclear safety and following changes in the plant's configuration.

In all Sogin sites, the annual implementation of discharge formulas results in some percentage points, thus, impacts on the population and the environment are not significant in terms of radiological protection.

Further details on the discharge formulas adopted in each site are available at sogin.it

IMPLEMENTATION OF DISCHARGE FORMULAS IN SOGIN SITES

	2021	2020	2019
SITE	**AERIAL DISCHARGES - USE %**		
Caorso	0.04	0.02	0.02
Latina	<0.01	<0.10	<0.10
Trino	0.56%	7.64	2.95
Garigliano	<0.01	<0.01	<0.01
ISPRA-1	<0.01	<0.01	0.001
Bosco Marengo	0.01	0.02	0.03
Casaccia	<1.80	<1.40	<1.50
Saluggia			
Alpha	0.025	0.020	0.036
Beta-gamma	0.031	0.037	0.031
Rotondella			
Particulate	0.07	0.07	0.07
Noble Gasses	4.26	3.90	4.15
SITE	**LIQUID DISCHARGES - USE %**		
Caorso	<0.01	0.04	<0.01
Latina	17.11	<0.6	0.19
Trino	<0.01	<0.01	<0.01
Garigliano	0.33	0.07	0.04
ISPRA-1*	n.a.	n.a.	n.a.

Bosco Marengo**	0	0	0
Casaccia***	n.a.	n.a.	n.a.
Saluggia	0.003	0.004	0
Rotondella	0.12	0.11	0.36

*Liquids are conferred to the Liquid Effluents Treatment Facility of the JRC-ISPRA(STEEL).
**No liquid effluents were discharged in 2021.
***No discharge formulas are provided for liquids as they are conferred to Nucleco.

RADIOLOGICAL MONITORING

The following tables report the concentration of radioactivity detected in the main environmental and food components and the Level of Investigation (LI) calculated for each radionuclide in the following matrices.
The sea water matrix is monitored by the surveillance networks of the plants that discharge liquid effluents into the sea (Latina and Rotondella).
The clean river water matrix is, instead, monitored by surveillance networks in plants that discharge liquid effluents in surface rivers (Caorso, Trino, Garigliano, Casaccia, Saluggia).
Due to the nature of the plant and its operations, in the Bosco Marengo site the Uranium concentration is exclusively monitored, and it must be lower than the non-radiological relevance.
The outcomes of the environmental surveillance of Casaccia and ISPRA-1 facilities for year 2021, will be available in July 2022, following the issue of the ENEA and JRC-ISPRA Reports.

The outcomes of the environmental surveillance are compared with the reference levels expressed in terms of activity concentration in the specific sampled matrix, and they classified in:

- Recording level, value of radionuclide concentration in a specific matrix above the minimum detectable concentration (MDC);
- Investigation level, radioactivity concentration value over which further investigations should be implemented;
- Intervention level, radioactivity concentration level at which mitigative mitigating actions should be adopted.

FOOD MATRIX – MILK - SOGIN						
U.M. BQ*/LITRE	**2021**		**2020**		**2019**	
	STRONTIUM-90	**CAESIUM-137**	**STRONTIUM-90**	**CAESIUM-137**	**STRONTIUM-90**	**CAESIUM-137**
Livello di indagine	0.36	3.90	0.36	3.90	0.36	3.90
Caorso	0.057	<0.02	0.044	<0.02	0.018	<0.02
Latina	<0.0257	<0.0181	<0.016	<0.019	0.061	0.05
Trino	0.0099	<0.047	0.004	<0.05	0.009	<0.10
Garigliano	<0.041	<0.104	<0.043	<0.02	<0.036	<0.02
ISPRA-1	n.a.	n.a.	0.11	0.614	0.091	0.51
Bosco Marengo	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Casaccia	n.d.	n.d.	0.0038	0.023	0.004	0.0193
Saluggia	<0.011	<0.046	<0.020	<0.08	<0.010	<0.04
Rotondella	<0.018	<0.095	<0.018	<0.093	0.02	<0.077

*The Becquerel is the unit of measurement used for radioactivity and it equals to one nuclear disintegration per second.

ENVIRONMENTAL MATRICES - SOIL - SOGIN						
U.M. BQ*/LITRE	**2021**		**2020**		**2019**	
	TOTAL URANIUM*	**CAESIUM-137**	**TOTAL URANIUM***	**CAESIUM-137**	**TOTAL URANIUM***	**CAESIUM-137**
Level of investigation	17.000 ppm	198	17.000 ppm	198	17.000 ppm	198
Caorso	n.a.	3.40	n.a.	6.10	n.a.	2.99
Latina	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Trino	n.a.	17	n.a.	13.2	n.a.	22.7
Garigliano	n.a.	4.86	n.a.	4.58	n.a.	4.53
ISPRA-1	n.a.	n.d.	n.a.	88.0	n.a.	41.5
Bosco Marengo	0.52	n.a.	0.88	n.a.	0.57	n.a.
Casaccia	n.a.	n.d.	n.a.	4.50	n.a.	3.35
Saluggia	n.a.	18.9	n.a.	15.1	n.a.	11.5
Rotondella	n.a.	2.67	n.a.	3.68	n.a.	1.93

*Uranium concentrations are measured in parts per million (ppm).

ENVIRONMENTAL MATRIX – CLEAN RIVER WATER – SOGIN						
U.M. BQ*/LITRE	**2021**		**2020**		**2019**	
	CAESIUM-137	**STRONTIUM-90**	**CAESIUM-137**	**STRONTIUM-90**	**CAESIUM-137**	**STRONTIUM-90**
Level of investigation	1.34	0.17	1.34	0.17	1.34	0.17
Caorso	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Latina	0.0703	0.0181	<0.010	<0.019	<0.010	<0.0010
Trino	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Garigliano	<0.0786	n.a.	<0.002	n.a.	<0.017	n.a.
ISPRA-1	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Bosco Marengo	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Casaccia	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Saluggia	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Rotondella	<0.01	<0.038	<0.01	<0.050	<0.012	<0.045

*The Becquerel is the unit of measurement used for radioactivity and it equals to one nuclear disintegration per second.

Like Sogin, also Nucleco performs regular monitoring of liquid and aerial discharges to comply with the discharge formula defined in the operating license. The effective dose which may not be exceeded for an individual, calculated by summing liquid and aerial discharges is lower than 10ms/year.

NUCLECO AERIAL AND LIQUID DISCHARGES			
	2021**	2020 **	2019 *
	USE %		
Aerial discharges	<1	<1	<1
Liquid discharges	No commitment	No commitment	0.198

*Nucleco licenses do not include discharge formulas for gas effluents; licenses only set the release limit within a maximum dose of 10 micro sievert to the population, including both aerial and liquid discharges. Since the amount of aerial effluents is estimated around 1 ms, the value 10% is reported.

**The values in italics refer to the effective dose, expressed in μSv/year, and assessed on a representative person.

ENVIRONMENTAL INDICATORS

PERFORMANCE INDICATORS	UDM	SOGIN 2021	NUCLECO 2021	GROUP 2021	GROUP 2020	GROUP 2019
GRI 301-1: MATERIALS CONSUMED						
RENEWABLE MATERIALS CONSUMED						
Paper	ton	8.79	0.56	9.35	13.43	20.81
Other renewable material	ton	0	0	0	0	0
NON-RENEWABLE MATERIALS CONSUMED						
Metals	ton	3,371	85	3,456	659	300
	Casks	730	0	730	12,595	2,982
Lubricants machine	l	1,428	0	1,428	17,268	8,838
Industrial Gases	m^3	120,542	11	120,553	120,855	76,826
Cement/Concrete	m^3	4,953	0	4,953	546	1,151
Other	ton	1,841	0	1,841	54	50
GRI 302-1: ENERGY CONSUMPTION WITHIN THE ORGANIZATION						
TOTAL CONSUMPTION ENERGY	**GJ**	**150,509**	**7,617**	**158,126**	**186,174**	**172,733**
Methane	GJ	19,489	2,409	21,899	24,117	23,927
Petrol	GJ	150	0	150	124	136
Diesel	GJ	26,548	937	27,486	23,827	25,877
Electricity	GJ	102,613	4,269	106,883	92,349	105,408
Electricity from renewable sources	GJ	15,024	0	15,024	12,316	15,085
Other	GJ	1,706	0	1,706	45,757	17,385
GRI 303-3: WATER WITHDRAWAL BY SOURCE*						
WATER WITHDRAWAL SOURCE	**ML**	**13,036**	**107**	**13,143**	**4,432**	**5,862**
Well	ML	378	107	485	421	606
River	ML	1,163	0	1,163	846	4,928
Seawater	ML	11,178	0	11,178	2,873	0

Groundwater surface	ML	215	0	215	173	212
WATER RESOURCES OWNED BY THIRD PARTIES COMPONENTS, OF WHICH:	**ML**	**102**	**0**	**102**	**120**	**115**
Aqueduct	ML	33	0	33	38	38
Well/other owned by third parties	ML	69	0	69	83	77
WATER WITHDRAWAL FROM WATER-STRESSED AREA	**ML**	**11,759**	**107**	**11,865**	**3,510**	**636**
Well	ML	334	107	441	386	420
River	ML	157	0	157	140	122
Seawater	ML	11,178	0	11.178	2,873	0
Groundwater surface water	ML	0	0	0	0	0
WATER RESOURCES OWNED BY THIRD PARTIES COMPONENTS, OF WICH:	ML	90	0	90	111	94
Aqueduct	ML	21	0	21	29	18
Withdrawal from well owned by third parties	ML	68	0	68	82	76
WATER WITHDRAWAL BY SOURCE, DIVIDED INTO FRESHWATER AND OTHER SOURCES	ML	1,854	107	1,961	1,230	5,818
Freshwater	ML	1,843	107	1,950	1,220	5,409
Other types	ML	10	0	10	10	9
GRI 303-4: WATER DISCHARGE						
Total water discharge	**ML**	**1,503**	**0**	**1,503**	**1,160**	**5,589**
Well	ML	275	0	275	225	231
River	ML	1,163	0	1,163	846	5,299
Seawater	ML	12	0	12	11	9
Groundwater surface water	ML	0	0	0	0	-
WATER RESOURCE OWNED BY THIRD PARTIES COMPONENTS, OF WICH:	**ML**	**53**	**0**	**53**	**78**	**50**
Aqueduct	ML	6	0	6	15	4
Withdrawal from well owned by third parties	ML	48	0	48	64	45
TOTAL WATER DISCHARGE DIVIDED INTO FRESHWATER AND OTHER SOURCES	**ML**	**1,498**	**0**	**1,498**	**941**	**5,544**
Freshwater	ML	1,486	0	1,486	930	5,534
Other types of water	ML	12	0	12	11	9

TOTAL DISCHARGE DIVIDED INTO WATER-STRESSED AREAS DIVIDED INTO FRESHWATER AND OTHER SOURCES	**ML**	**231**	**0**	**231**	**21**	**9**
Freshwater	ML	219	0	219	10	-
Other types of water	ML	12	0	12	11	9
GRI 305-1: DIRECT (SCOPE 1) GHG EMISSIONS						
Direct (Scope 1) GHG emissions	tCO2	3,333	205	3,537	6,599	13,480
GRI 305-2: ENERGY INDIRECT (SCOPE 2) GHG EMISSIONS						
Indirect GHG emissions (Scope 2)	tCO2	8,979	374	9,352	9,209	10,980
GRI 306-3: WASTE GENERATED						
TOTAL WASTE GENERATED	**ton**	**51,878**	**27,546**	**79,424**	**30,404**	**24,319**
Companies:	ton	15,934	27,546	43,480	17,925	4,970
Suppliers:	ton	35,944	0	35,944	12,479	19,349
TOTAL WASTE GENERATED: HAZARDOUS	**ton**	**770**	**26,899**	**27,669**	**9,379**	**6,415**
Companies:	ton	39	26,899	26,938	4,744	3,190
Suppliers:	ton	731	0	731	4,635	3,225
TOTAL WASTE GENERATED: NON HAZARDOUS	**ton**	**51,108**	**647**	**51,755**	**21,025**	**17,904**
Companies:	ton	15,896	647	16,543	13,182	1,780
Suppliers:	ton	35,213	0	35,213	7,844	16,124
TOTAL WASTE DIRECTED TO DISPOSAL	**ton**	**44,884**	**26,892**	**71,777**	**19,765**	**8,037**
TOTAL WASTE DIRECTED TO DISPOSAL: HAZARDOUS	**ton**	**612**	**26,892**	**27,504**	**9,294**	**7,097**
Companies:	ton	28	26,892	26,920	4,718	3,897
Suppliers:	ton	583	0	583	4,576	3,200
TOTAL WASTE DIRECTED TO DISPOSAL: NON HAZARDOUS	**ton**	**44,273**	**0**	**44,273**	**10,471**	**940**
Companies:	ton	17,207	0	17,207	5,802	443
Suppliers:	ton	27,065	0	27,065	4,669	497
TOTAL WASTE RECOVERED	**ton**	**10,328**	**654**	**10,982**	**6,951**	**17,006**
TOTAL WASTE RECOVERED: HAZARDOUS	**ton**	**129**	**7**	**136**	**85**	**46**
Companies:	ton	13	7	20	25	20
Suppliers:	ton	116	0	116	59	26
TOTAL WASTE RECOVERED: NON HAZARDOUS	**ton**	**10,199**	**647**	**10,846**	**6,866**	**16,960**

Companies:	ton	2,086	647	2,733	3,692	1,333
Suppliers:	ton	8,113	0	8,113	3,175	15,627
WASTE STOCKS STORED TEMPORARY	**ton**	**378**	**0**	**378**	**3,712**	**1,303**
TEMPORARY STOCKS STORED WASTE HAZARDOUS	**ton**	**33**	**0**	**33**	**4**	**1,282**
Companies:	ton	1	0	1	4	1,282
Suppliers:	ton	32	0	32	0	0
WASTE STOCKS STORED TEMPORARY NON-HAZARDOUS	**ton**	**345**	**0**	**345**	**3,709**	**21**
Companies:	ton	311	0	311	3,709	21
Suppliers:	ton	35	0	35	0	0
OTHER ALLOCATION	**ton**	**0**	**0**	**0**	**0**	**0**

INNOVATION

Sogin has constantly committed to adopting innovative solutions and technologies to improve its management and industrial processes in the fields of decommissioning and radioactive waste management, an expanding sector that requires qualified staff and expertise.
This approach has been included in Sogin strategy, as defined in the new Industrial Plan that recognizes innovation as a strategic driver to achieve the corporate mission. In this perspective, Sogin defined the 4.0 digital innovation & industry programme for 2020-2022, based on an Open approach to promote culture, processes and technology.
Sogin considers innovation as closely related to sustainability, recognized as another fundamental element in the corporate mission. While implementing decommissioning activities and the safe maintenance of nuclear power plants, the Company has regularly adopted strategies to reduce the environmental impact of its operations. This strategy is implemented from the very early design stage and includes measures to minimise the quantity of radioactive waste generated and maximise the waste directed to recovery.

INNOVATION CULTURE

Sogin and Nucleco adopt innovative technology solutions for nuclear decommissioning, radioactive waste management and industrial reclamations. These solutions - integrated in a circular economy strategy - aim at ensuring maximum safety, minimising waste production and improving competitiveness in the reference markets.

SURVEY 3D

Nucleco launched the 3D Survey project to develop the 3D models of complex and simple plants. In a BIM-Oriented approach, the Company uses 3D modelling techniques and Laser Scans to support Decommissioning activities.
The 3D Survey allows creating 3D models of the plants (or single components) with relevant geometrical and physical data of the elements represented and their radiological features calculated through specific measurement procedures. This procedure requires the use of dedicated instruments, i.e., Laser Scanner and Gamma Camera.
Thanks to virtual reproduction and 3D Modelling, anyone can 'surf' the work premises at a remote location and design the necessary operations, thus reducing the exposure of employees to radiations. Moreover, workers can use this instrument to plan and simulate dismantling and maintenance interventions, collecting physical and radiological data from all the plant's systems and components, and much more.
The 3D Survey is the first step towards the introduction of new technologies and innovative systems integrated in all corporate processes.
Soon, this experimental activity might also be adopted by traditional industrial plants.

'IDEE ALTA ATTIVITÀ' (HIGH ACTIVITY IDEAS) CONTEST

In the first half of 2021, Sogin and Nucleco launched the contest 'Idee ad Alta Attività'. The contest is addressed to those who want to propose innovative solutions and technologies to improve decommissioning, safety (workers, plants, environment, citizens), traditional and special waste management procedures. 44 resources, divided into 8 teams took part in the contest. On 30 June, during the Innovation Day, the 5 finalist teams presented their projects. The winning team presented the BIMTOPORAD project, an innovative solution for integrated management of radiological and dosimetric data employing 3D models.

PROCESSES DIGITIZATION

In 2021, the Companies continued to digitize their processes. The main actions implemented in this regard included the following:

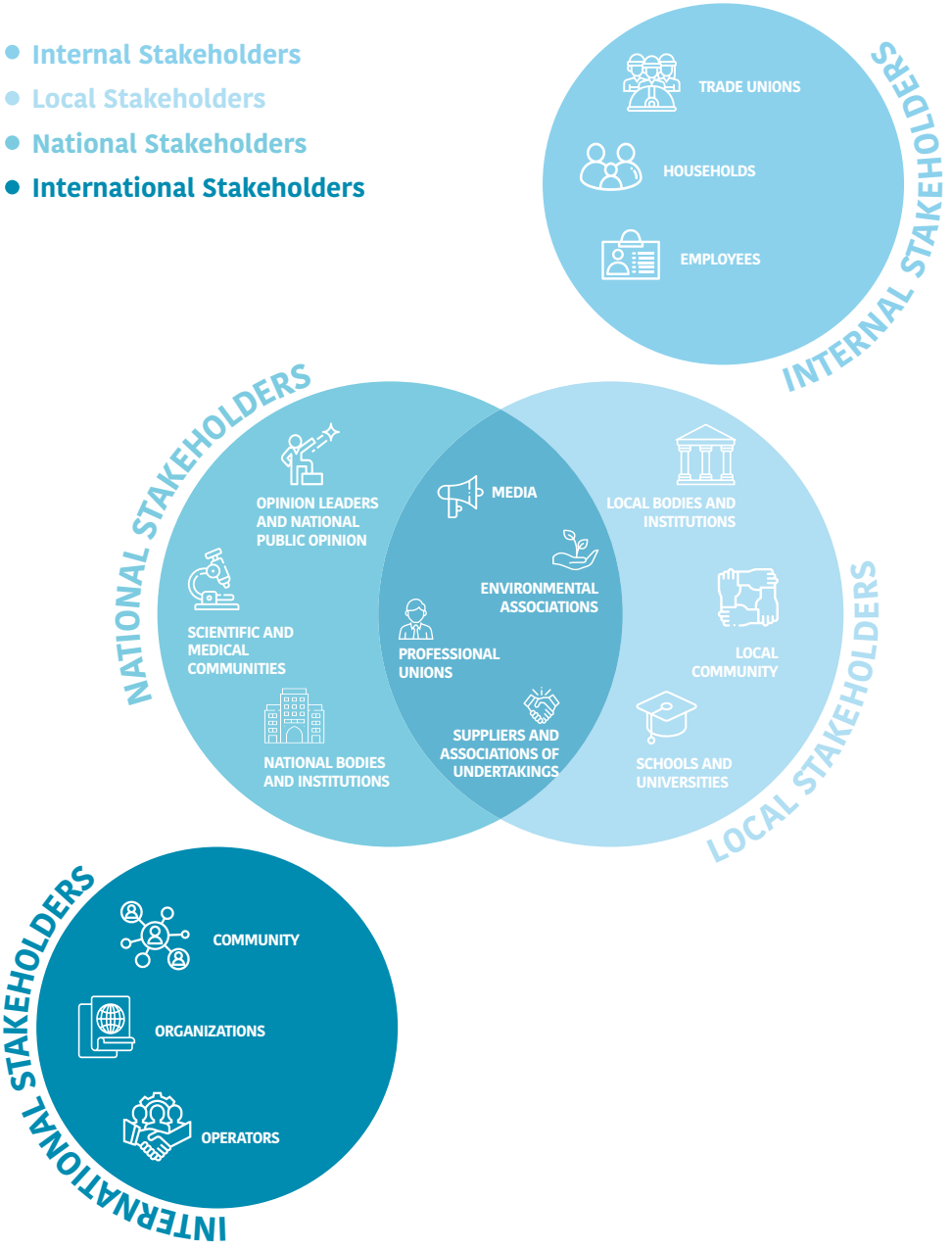
- **Automation** of work processes through RPA (Robotic Process Automation). This approach minimises working time and reduces the possibility of errors due to erroneous data typing to a minimum. This technology automates repetitive manual activities with low-added value, namely processes with few exceptions based on well-defined rules. The Business process selected for the RPA was the Registration of Payable invoices. The automation resulted in the following advantages:
  - improvement of the control capacity over the whole process;
  - chronological record of the activities;
  - automation and support to processes performed outside regular working hours;
  - reduction of incidence of errors.
- **Integration** of digital platforms through micro-services technologies allowing communication among different corporate software, thus ensuring data availability, unambiguity and integrity. After the integration process is completed, the e-Business Intelligence software used by Sogin will ensure the detailed processing of reports related to the physical and economic progress of decommissioning, Project Risk Management and Enterprise Risk Management.
- **Interoperability** between external platforms of the Public Administration and the Authorities, to guarantee compliance with the communication and data transmission obligations.
- **Semantic search** applied to specific processes allowed quicker and more efficient access to information. Given the unlinked and uneven nature of data, at the beginning, the information could not be accessed from a single access point, thus making consultation more complicated for users. The use of a semantic search engine resulted in an easier searching approach and in the possibility to extract useful information from a multitude of - more or less structured - data.

ASSET

In 2021, the Companies improved the IT individual tools distributed to the staff and adopted cutting-edge personal devices to meet the need for stronger IT performance and lower energy impact. The massive distribution of cutting-edge individual mobile IT tools reflects the need for innovative mobility and remote working and improves the efficiency and availability of the companies' IT services. This element of technological innovation also features an improvement of collaborative instruments and VPN (Virtual Private Network) services, used by the Company to access its resources and data through an encrypted network regardless of the user's physical location. In addition to the previous, in 2021, the Company launched the design, planning and contracting procedures to implement further corporate IT services on the cloud platform, such as, for instance, mailbox and VoIP services.

STAKEHOLDERS' MAP

Sogin recognizes as its Stakeholders all the parties concerned that may affect or be affected by the achievement of the company's objectives.
Stakeholders are identified and classified according to their degree of influence on corporate decisions and their interest on the Company's activities.
These two aspects are evaluated in terms of decision-making powers, legal or contractual obligations and connections with corporate strategies.
Relations with stakeholders are based on ongoing dialogue, sharing objectives and transparency.
This customized instrument varies according to the Stakeholder to be informed or engaged, and aims at collecting the Stakeholder's expectation and needs and inform them about the Company's achieved objectives and planned activities.
As in 2020, also in 2021, Sogin developed its Stakeholders' relationships remotely due to the healthcare emergency. This resulted in significant limitations in the exchanges. The most important activity with the Stakeholders implemented by Sogin 2021, consisted in launching a public consultation on the National Repository and Technology Park.



PEOPLE

Sogin believes in the value of people and constantly commits to promote their active role, inside and outside the Company. Sogin prioritizes the development and integration of its employees.
In 2021, Sogin care for people clearly appeared in the Company's commitment in facing the COVID-19 emergency through specific measures proving Sogin and Nucleco's commitment to safety.
In 2021, the SMS service launched in 2020 was reconfirmed and used to communicate the internal preventive measures adopted by the Company and the Institutions to tackle the spread of coronavirus. The Company regularly updated its internal communication channels with the introduction of corporate and institutional preventive measures and reference regulations.

EMERGENCY JOINT COMMITTEE FOR COVID-19
In 2021, the "Joint Committee under item 13 of the Protocol of 14 March 2020", established to face the COVID-19 emergency, continued their work.
Also in 2021, the Committee played a relevant role in promptly defining the enforcement of the special legal provisions adopted during the emergency, and to carry out a regular monitoring of the enforcement of the measures to ensure safety of workers. More specifically, during the last year, the Committee carried out screening and monitoring to check the staff positivity to Covid-19.

WELFARE AND PREVENTION

The blood donation campaign launched by Sogin in collaboration with EMA-ROMA (Association of voluntary blood donors) through the InSalute programme also continued. Blood is donated and collected to tackle stock shortages.
From its launch (24 November 2020) the campaign saw 4 blood collection events and the participation of 70 employees for a total of 56 blood units donated to the patients of the Policlinico Tor Vergata in need for transfusions.
Voluntary screening actions were also carried out across Sogin sites to tackle the spread of the COVID-19 pandemic.
In 2021, the Company organized 8 screening campaigns in the headquarters to minimise the spread of the COVID-19 disease.

COVID SCREENING SOGIN 2021

SITE	SCREENING NUMBER
Bosco Marengo Plant	246
Trino Nuclear Power Plant	190
Saluggia Plant	286
Ispra-1	3
Caorso Nuclear Power Plant	218
Casaccia Plant	338
Latina Nuclear Power Plant	178
Garigliano Nuclear Power Plant	284
Rotondella Plant	154
Rome's Offices	1,020
TOTAL	**2,917**

DIALOGUE AND ENGAGEMENT

One of Sogin and Nucleco's priority lies in understanding and assessing corporate people's needs. In 2021, the staff was invited to fill in 4 surveys aimed at identifying their expectations, needs, issues and adaptability to the new environment.

- **#ValoreD4STEM**, a survey prepared by Valore D for associated businesses, focusing on women employed in STEM fields. The aim of the survey is to get to know these women, investigate their motivation and expectations, and better understand their work environment.
- **Working in the new normality**. This survey, launched in June 2021, aimed at discovering the new work organization developed during the healthcare emergency, highlighting new relational and working approaches between co-workers and managers/collaborators. 648 resources from Sogin and Nucleco took part in the survey.
- **Leadership in the new normality**. This survey, addressed to Sogin managers, investigated leadership in the new changed context. 29 resources took part in the survey.
- **ATAC survey on home-work transfers**. The survey, addressed to the employees working in Rome's headquarters, was designed to investigate the workers' habits and needs in relation to home-work transfers. 164 resources took part in the survey.

DIVERSITY AND INCLUSION

In 2021, Sogin offered its staff several training, development and awareness-raising programmes focused on the topics of diversity and inclusion.

- Sogin joined the initiatives of the European Diversity Month by promoting the campaign "More diversity, more value: Sogin Group's inclusive path". During the campaign, Sogin published three interviews related to these topics on the "Momenti D Valore" MS Stream channel;
- Moreover, Sogin women received the anonymous survey "Women in the Nuclear Energy Sector" promoted by the Nuclear Energy Agency (NEA). This survey investigates women's perception of gender balance at the workplace;
- The corporate policy adopted in Rome's Headquarters was integrated to allow pregnant Sogin employees to park their car in the corporate garage.
- In 2021, Sogin Assessment centre supervised 45 assessments carried out on corporate resources aspiring to managerial or individual jobs of a more technical nature. One third of this group are women.

At the end of the year, Sogin recorded a positive trend in terms of **positions held by women in management or relevant positions, with more than 33% women.**
This is an important percentage considering that in 2020 ISTAT data recorded that 24.9 % of college graduates between 25 and 34 years old have a degree in science and technology areas and that only 17 % of these are women.
Out of all women employed in Sogin, 71% has a STEM degree. Analogously, 65% women employed by Nucleco has a similar degree.

MEMBERSHIP TO VALORE D

Again in 2021, Sogin and Nucleco joined Valore D - the first Italian business association dedicated to promote gender balance and inclusive culture across organizations and companies - and offered their workers a consolidated and varied training offer on diversity and inclusion.
Valore D training programmes divide into individual and group courses, aimed at developing professional and personal growth, as well as the exchange of best practices with other businesses. In 2021, the training offer included the following:

- 3 individual training courses with a duration of 2/3 days offered to middle and senior managers to support career development, foster professional identity and develop new leadership models;
- 1 annual intercompany mentorship (P.O.W.E.R.) for 1 mentor and 1 mentee offered to 2 middle and senior managers;
- 3 Sharing Labs, a one-day training course on HR Agility and related topics;
- 10 training days organized by the Association.

Moreover, during 2021, the association launched a new series of Valore D Talks. These meetings, open to the corporate staff, encourage dialogue on Diversity and Inclusion.
For the first time, in February, Sogin and Nucleco took part in the International Day of Women and Girls in Science by promoting the #ValoreD4STEM survey. The survey findings were made public in July.

In November, Sogin in collaboration with Valore D, joined the InspirinGirls project and launched the "Call for Role Models". 6 women will implement this project in 2022 and share their work and life experience with students enrolled in secondary schools. The call aims at encouraging young girls to recognize their talent, and tackle gender stereotypes and biases, mostly in relation to STEM subjects, which are often regarded as male-dominated sectors.

WELFARE

In 2021, the project "NoiSoginWelfare", launched in 2017, continued. In addition to the possibility for workers to obtain a Performance Result Bonus (PdR) free of taxes thanks to the 100% tax wedge reduction, to support its employees in such a complex moment, Sogin developed a welfare scheme connected to the achievement of decommissioning targets.
As for the welfare for the performance-related Result Bonus (PdR), workers can access an online platform to choose the share to be allocated to the welfare and obtain a 'welfare budget' that they can use for specific services and goods. Each employee's budget was then increased by an amount equal to 19% of the amount allocated to welfare that the Company was entitled to.
In 2021, 15% of the welfare beneficiaries converted their Result Bonus. 60% of them, allocated part of the welfare budget to a supplementary pension fund, while 20% used part of their budget to pay for their children's education and 15% used it for online purchases on e-commerce platforms or vouchers. The remaining budget was allocated to transportation fees and interest payments.
Again in 2021, Sogin organized a series of online information meetings on welfare; the Company also opened a web-point service to provide workers with customized advice. The project dissemination and information was launched through open webinars and online information meetings addressed to homogeneous groups.
From October 2020 to March 2021, the workers were offered the possibility to access additional bonuses by converting the accrued sum into vouchers usable on the online platform. The Company allocated an on top sum equal to 20% of each employee's budget.

INDUSTRIAL RELATIONSHIPS

By maintaining a constant dialogue with trade unions, the Company aims to reduce employment-related litigations.
To pursue this objective, Sogin decided to engage all Social Partners in this regard. After the Protocol and commitment ratified on 4 March 2020, Sogin concluded an Agreement with Trade Unions on 12 January 2021 to implement Article 5 of the CCNL (National Collective Employment Contract) related to amicable settlements of litigations supported by the competent trade unions.
In 2021, the Company settled 12 litigations amicably, with the applicants' discontinuance of their appeals.
In terms of management, the Company concluded 16 employment-related litigations; 2 litigations resulted in rulings in favour of the Company, while the remaining ones with a settlement agreement between the parties.
On 17 July 2021, the Company issued a regulation for extraordinary remote work to establish the workers' timetable and availability, their log out times and a list of good practices needed to perform their work remotely.
In addition to the previous, preventive measures were introduced to provide parental support in case of school quarantines. Moreover, workers were offered the chance to use the hours and unused holidays collected in the Hours Solidarity Bank established in 2020 by the union agreement.

STAFF WELLBEING

HEALTHCARE AND OCCUPATIONAL INJURIES

For Sogin employees and dependent family members, insurance coverages for health care are provided through the Supplementary Healthcare Fund for Employees (FISDE) offered by the Enel Group. In the field of accident insurance, the Company has taken out accident policies reserved for staff on duty. The same type of supplementary health care is provided for managers, but with the Associazione Sanitaria Integrativa Dirigenza Energia e Multiservizi (ASEM) (Integrated Energy and Multiservices Management Healthcare).

PENSION FUNDS
In addition to the usual pension schemes, Sogin offers its employees the possibility to receive supplementary pension benefits through membership of the Employees' Pension Fund (FOPEN) and the Managers' Pension Fund (FONDENEL). Starting from 2007, as provided for by the law, each employee can allocate their employee severance indemnity to the pension fund.

ARCA SERVICES
ARCA, the leisure association of employees working in the electricity sector, has the task of promoting cultural and sporting initiatives and events aimed at providing moments of aggregation for employees and their families. It also organizes trips and holiday packages through preferential agreements with important tour operators. The same service is offered to corporate managers by ACEM, Associazione Culturale Energia e Multiservizi, which takes care of all the recreational aspects of the category.

LOANS AND AGREEMENTS
Sogin, in line with the actions taken in the electricity sector and within the limits of the available resources stated under the second level trade union bargaining agreement, grants preferential loans to employees for the purchase or renovation of owned homes and for special personal needs.
Like in the People Care project, many agreements have also been stipulated with commercial businesses (Food & Beverage, Healthcare & Wellness, Shopping, Facilities).

TRAINING

The management of human resources mainly aims to enhance the professional competences – both technical and managerial – in the field of nuclear decommissioning and radioactive waste management, and to foster individual's growth and development paths.
For this reason, Sogin implements training and learning programmes according to the office, skills, and potential of each resource, and to corporate needs. As in 2021, Sogin held training courses to meet the new needs arising from organisational changes, updates in the legal framework, and new technologies, or, more generally, in line from the changes in the reference context.
The training activities implemented involved almost all the staff. Training courses focused, among others, on safety culture and on raising the staff awareness on specific topics.
More specifically, Sogin prepared and held a specific training course ("Refresher Training for Workers") to train the staff on 'near misses' and how to use a dedicated software to report such events.
Moreover, the refresher courses started in 2020 and provided to all the concerned workers/operators/managers under Legislative Decree no. 101/2020 and the training courses on the IPOD software for work leaves, were concluded.
Training activities divided into the following:

2021 TRAINING FIELDS
Technical-specialised training: training on digitalisation of corporate processes and technical aspects of the core business held in collaboration with the Radwaste Management continued. Main areas: • administrative/management; • environment (environmental reclamations, environmental protection, monitoring systems); • risk; • waste; • IPOD software; • Labs certifications; • Use of software for PM and Near Misses.
Regulatory Updating on: • Refresher course on regulatory updates concerning radiological protection following the enforcement of Legislative Decree no. 101/2020, administrative responsibility of the Entities under Legislative Decree no. 231/01, Personal Data Management (DPO) and ADR regulations; • Refresher courses on safety management in the workplace (ISO 45001); • Training on quality, traditional, industrial and digital safety and security; • Legislative Decree no. 231/01 and Sogin MOCG - provided as a refresher course to Workers under Legislative Decree no. 81/08
On-the-job training: designed to transfer the know-how to the workers employed in the plants.

Radwaste Management School (RaMS)

The Radwaste Management School is Sogin training centre that ensures high-level professional updating and promotes managerial and technological innovation. The training offered by the school relies on the experience and specialized know-how in the field of safety, and contributes to make the Group a major player in the national and international industrial panorama. Founded in 2008, the school can be accessed by professionals coming from institutions and companies and contributes to the dissemination of a safety management model for industrial processes. The RaMS is one of the strategic assets Sogin and Nucleco rely on to achieve their mission. Nuclear decommissioning and radioactive waste management are complex time-consuming activities that require high-level expertise and multidisciplinary skills.

The dissemination and development of specialized know-how is part of Sogin and Nucleco's strategy to guarantee maximum safety, transfer skills to future operators and satisfy the increasing - international and national - demand for specialized knowledge in this sector.

RaMS Objectives

Provide training to the staff of Sogin Group, specifically focused on safety, radioactive waste and nuclear fuel management.

Ensure integration, enhancement and sharing of the knowledge management system.

Engaging Universities and training centres to strengthen the training network and offer.

Training "future operators" such as university and high school graduates specialized in decommissioning and radioactive waste management

The training programme of the Radwaste Management School (RaMS) ensures the best standards of innovation, multi-disciplinarity and a specific focus on decommissioning and radioactive waste management. The programmes include training on technical and scientific matters, such as nuclear power plant technology, decommissioning, radiological protection and radioactive waste management. The programmes are designed to meed the newest legal requirements and foster corporate safety culture. To meet the training obligations imposed to Sogin and Nucleco's staff, the courses are constantly updated as provided under Legislative Decree no. 81/2008 (Consolidated Act on Health and Safety at the Workplace) and Legislative Decree no. 101 of 31 July 2020 on nuclear matters, implementing Directive 2013/59/Euratom laying down basic safety standards for protection against the dangers arising from exposure to ionising radiation. The RaMS is recognized by the National Nuclear Safety Authority (ISIN)

as an organization qualified to provide specific training courses for Sogin and Nucleco's staff and their external suppliers acting on behalf of Sogin.

OUR CERTIFICATIONS

UNI EN ISO 9001/2015
(Quality Management System)

ISO 14001/2015
(Environmental Management System)

ISO 45001
(Workplace Health and Safety Management System)

The School is also constantly committed in developing partnerships with accredited bodies, universities, scientific associations, research, and development bodies, also at an international level. It is involved in university training, through seminars and graduate and post-graduate courses.
In 2021, the School continued offering the "Insieme ce la faremo" training programme in digital mode. The programme consisted in more than 50,000 training hours in 2020-2021. RaMS Square meetings were also offered to Sogin and Nucleco through Microsoft Teams. Among these, 7 meetings were provided by Competent Physicians and one meeting focused on the "Life-cycle of the Contract".

RAMS PERFORMANCE 2021

TRAINED STAFF	COURSES OFFERED	TRAINING HOURS 2020-2021	TEACHING HOURS	TEACHING HOURS PROVIDED BY SOGIN AND NUCLECO'S STAFF
1005 people received training which recorded 3,802 participants (3,663 from Sogin, 134 from Nucleco and 5 external participants)	281 editions	About 53,000 *	2,058.5	620

*2020 and 2021 figures are reported together, by considering that most of the planned training courses were provided earlier during the pandemic

TRAINING COURSES PROVIDED IN 2021 BY THE RAMS

HOURS DIVIDED BY TYPE AND RECIPIENTS	HOURS
NUCLEAR SAFETY	5,211.75
Hours provided to Sogin Staff	4,761.5
Hours provided to Nucleco Staff	440.25
Hours provided to the staff of external entities or companies	10 (Competent Physicians)
SAFETY IN THE WORKPLACE*	9,484
Hours provided to Sogin Staff	9,414
Hours provided to Nucleco Staff	70
Hours provided to the staff of external entities or companies	0
TECHNICAL AND SPECIALIZED TRAINING (HELD BY RAMS FROM 2021)	1,293.5
Hours provided to Sogin Staff	1,255
Hours provided to Nucleco Staff	38.5
Hours provided to the staff of external entities or companies	0
TOTAL	**15,989.25**

*Including training on Legislative Decree no. 231/01, valid as Workers' Refresher course under Legislative Decree no. 81/08

TRAINING HOURS PROVIDED BY RAMS IN 2021 - DIVIDED BY GENDER				
	NUCLEAR SAFETY	SAFETY IN THE WORKPLACE	TECHNICAL-SPECIALISED TRAINING	TOTAL
WOMEN	**1,561.5**	**1,726**	**499.5**	**3787**
Sogin	1,447.5	1,716	461	3,624.5
Nucleco	114	10	38.5	162.5
MEN	**3,640.25**	**7,758**	**794**	**12,192.25**
Sogin	3,314	7,698	794	11,806
Nucleco	326.25	60	0	386.25
TOTAL	**5,201.75 ***	**9,484**	**1,293.5**	**15,979.25 ***

* 10 training hours provided to external staff (Competent Physicians) must be added to the total hours

	NUCLEAR SAFETY	SAFETY IN THE WORKPLACE	TECHNICAL-SPECIALISED TRAINING	TOTAL
MANAGERS	**112**	**183**	**29.5**	**324.5**
Sogin	112	183	29.5	324.5
Nucleco	0	0	0	0
EXECUTIVES	**1,230.5**	**1,414**	**425**	**3,069.5**
Sogin	1,172	1,408	411	2,991
Nucleco	58.5	6	14	78.5
EMPLOYEES	**3,267.25**	**5,331**	**827.5**	**9,425.75**
Sogin	2,927.5	5,295	803	9,025.5
Nucleco	339.75	36	24.5	400.25
WORKERS	**566**	**2,407**	**11.5**	**2,984.5**
Sogin	524	2,379	11.5	2,914.5
Nucleco	42	28	0	70
FELLOWSHIP/ TRAINEESHIP	**0**	**0**	**0**	**0**
Sogin	0	0	0	0
Nucleco	0	0	0	0
EMPLOYEES SECONDED BY ENEA	**26**	**149**	**0**	**175**
TOTAL	**5,201.75 ***	**9,484**	**1,293.5**	**15,979.25 ***

*10 training hours provided to external staff (Competent Physicians) must be added to the total hours

HR DEVELOPMENT

In 2021, an assessment centre was established to assess whether the skills of employed people were in line with their professional profile. The assessment was carried out on:

- Corporate employees selected to take on technical and managerial positions (17 resources);
- Corporate employees engaged in managerial growth (11 resources) and career development (17 resources) paths.

The assessment included technical, psychological and behavioural tests and final interviews. These tests were considered to make managerial and/or organizational choices.

WORKING SMART PROJECT
In 2021, Sogin launched the Working Smart Project that will continue in 2022. The project aims at promoting a new work culture based on flexibility and organization; this approach lays the foundations for a true mindset change by considering stages, cycles and objectives and led to a cultural and organizational change management.
The project started in June with the survey "Working in the new normality" addressed to the corporate employees; The survey allowed collecting precious information to define the project's training and awareness-raising actions. The project kicked off from July with meeting with all Sogin and Nucleco's Executives and Managers. The workshops for Middle Management started in September: 196 resources took part in the workshops for an average of 6 hours each.
From the end of November, the project offered 90-minutes Live Webinars to the remaining corporate staff; more than 600 people participated in these meetings which ended by the end of January 2022. Overall, the project engaged about 80% of the corporate staff.

PRINCE2 FOUNDATION
In June 2021, the Company held a Prince2 Foundation course for a structured approach to project management (to obtain the first part of the certification with the PRINCE method). The course fulfilled the corporate needs in terms of compliance with the requirements to take part in international tenders.

AGILING INNOVATION LAB GROUP – SMART MINDSET
The Company awarded the finalist teams of the contest "Idee ad Alta Attività" (internal contest on innovation) with the training programme Agiling Innovation Lab Group - Smart Mindset, held in May 2021. Thanks to this programme, 18 resources from Sogin and Nucleco acquired knowledge related to the use of Smart Mindset and Scrum framework in developing and drafting a design.

HEALTH AND SAFETY

Sogin considers the health and safety of its staff to be a priority asset for the Company.
Sogin and Nucleco fostered safety culture among their employees. Both traditional and radiological safety are included in continuous training programmes; moreover, safety is the focus of an eight-points safety improvement plan:

COMMUNICATION AND CORPORATE IMAGE
Legal updates for the company activities are regularly published on internal communication channels and distributed to the corporate staff. The Company celebrated the World Day for Safety and Health at Work focusing on near misses and the promotion of safety culture.

CULTURE
aiming at disseminating and consolidating the safety culture among people and through sectoral partnerships, engagement strategies and information campaigns ("PRINT", memorandum of understanding ratified with other electricity suppliers, i.e., TERNA, Edison and ACEA to define practical and legal measures for the reduction of electric hazards in interchange facilities and bordering areas). Safety Walk across Sogin production sites.

TRAINING, INFORMATION AND COACHING
Health and Safety Officers were provided specific training to use the "ESS-NEAR MISS" software, an application designed to record near misses in the organization. Moreover, the staff was trained on how to fill in Work programmes properly to harmonize the operations management and reduce, or prevent, risks arising from interferences.

MONITORING
through a set of indicators subject to regular checks. More specifically, statistical indicators related to work accidents for Sogin and its contractors are developed on a monthly basis. The Company carried out monthly COVID-19 checks to detect positive cases among its employees and third parties, by also recording the number of screening swabs executed by the production units.

CORPORATE STANDARDIZATION:
Done through exchanges between the Officers in charge of Prevention and Protection measures (RSPP), Executive Safety Coordinators (CSE) and Corporate Safety Officers on risk assessment and

existing and/or planned prevention and protection measures;
RSPP met once or twice per week with the CSP/CSE to define the said measures. A Coordinator was appointed for the Competent Physicians authorised by each production unit, to harmonize health protocols and health monitoring actions. The physicians, Coordinator and the employees of the Safety area held regular meetings.

SAFETY MANAGEMENT COMPUTERIZATION
Carried out through the implementation of safety and health management software applied to the plants, machinery and equipment maintenance, PPEs management and chemical risk assessment for health and safety.
A centralized system accessible from a unified platform for PPE distribution is in place for all Sogin's employees; this centralized system is designed to ensure cost, time and quality efficiency in terms of legal compliance. The Company implemented a software to record "near misses". The "IPOD-Lavori" software underwent some changes.

HEALTH
The RaMS Square initiative allowed a team of qualified Physicians to provide training courses on smoking, work-related stress and COVID-19 prevention measures.

WORKSITE
Inspections on operating construction sites were carried out during the Safety Walk in the production units to assess safety compliance.

JOINT BILATERAL COMMITTEE ON SAFETY
Given the significance of safety and environmental-related issues for the electricity sector, the Company established a Joint bilateral committee on safety consisting of corporate and trade union representatives. The Committee was established to discuss possible improvement actions and joint initiatives to ensure high safety standards within Sogin.
In this framework, the Company carried out Covid-19 screening campaigns across all its offices.

WORLD DAY FOR SAFETY AND HEALTH AT WORK 2021: WHY REPORTING NEAR MISSES IS IMPORTANT
On 28 April, Sogin presented its contribution to the World Day for Safety and Health at Work 2021 with the event "Near misses: the importance of reporting them". The World Day for Safety and Health at Work of 2021, established in 2003 by the International Labour Organization (ILO), revolved around the slogan Stop the pandemic: safety and health at work can save lives". Internal and external experts took part in the event that featured the presentation of 2020-2021 data on Health and Safety at work and the "Near Miss" project. More specifically, this project includes the new reporting system (ESS) developed by Sogin and the software training programme addressed to the employees.

TRADITIONAL SAFETY
In 2021, as in the previous two years, no cases of occupational diseases were reported among Sogin employees or the staff of supplier firms working in Sogin sites.
The following tables provide a picture of accident indices among the resources employed by Sogin, Nucleco and supplier firms.
Accident rates are calculated by considering the total number of accidents occurred over the reporting period, both during transfers and at work. Starting from 2018, the events which have resulted in up to 3 days of absence from work are also included among the injuries; said events, following the issue of Circular Letter n. 42 of 12 October 2017, must be communicated to INAIL. In the past, this communication obligation was only required for the accidents involving an absence of more than 3 days from work.

GRI 403-9: ACCIDENT INDICES - SOGIN EMPLOYEES						
	2021		2020		2019	
	No.	RATE	No.	RATE	No.	RATE
RECORDABLE ACCIDENTS FOR SOGIN EMPLOYEES (Accidents occurred during home-work transfers are included) Ratio between the number of recordable work accidents and hours worked (multiplied by 200,000)	4	0.56	2	0.28	6	0.87
ACCIDENTS THAT RESULTED IN WORKING DAYS LOST Ratio between the number of recordable work accidents resulted in working days lost and hours worked (multiplied by 200,000)	4	0.56	2	0.28	6	0.87
OCCUPATIONAL ACCIDENTS WITH SERIOUS CONSEQUENCES Ratio between the number of serious accidents (excluding fatalities) and hours worked (multiplied by 200,000)	0	-	0	-	0	-
FATALITIES Ratio between the number of fatalities and the hours worked (multiplied by 200,000)	0	-	0	-	0	-
ACCIDENTS OCCURRED DURING HOME-WORK TRANSFERS (Including accidents occurred on transport not arranged by Sogin)	4	n.a.	2	n.a.	5	n.a.
HOURS WORKED	1,435,079	n.a.	1,450,944	n.a.	1,382,367	n.a.

GRI 403-9: RECORDABLE WORK ACCIDENTS - SOGIN EMPLOYEES - DIVIDED BY GENDER AND SITE									
	2021			2020			2019		
	TOTAL	WOMEN	MEN	TOTAL	WOMEN	MEN	TOTAL	WOMEN	MEN
Total recordable accidents	4	1	3	2	0	2	6	3	3
Caorso	1	0	1	0	0	0	0	0	0
Garigliano	0	0	0	0	0	0	0	0	0
Latina	0	0	0	0	0	0	0	0	0
Trino	1	0	1	0	0	0	0	0	0
Bosco Marengo	0	0	0	0	0	0	0	0	0
Casaccia	1	0	1	0	0	0	0	0	0
Saluggia	0	0	0	0	0	0	0	0	0

Rotondella	0	0	0	0	0	0	0	0	0
ISPRA-1	0	0	0	0	0	0	0	0	0
Rome's Offices	1	1	0	2	0	2	6	3	3
Foreign Offices	0	0	0	0	0	0	0	0	0

GRI 403-9: ACCIDENT INDICES - NUCLECO'S EMPLOYEES

	2021		2020		2019	
	No.	**RATE**	**No.**	**RATE**	**No.**	**RATE**
RECORDABLE WORK ACCIDENTS - NUCLECO'S EMPLOYEES Ratio between the number of recordable accidents and the hours worked (multiplied by 200,000)	1	0.47	2	1.10	7	4.14
ACCIDENTS THAT RESULTED IN WORKING DAYS LOST Ratio between the number of recordable work accidents resulted in working days lost and hours worked (multiplied by 200,000)	1	0.47	2	1.10	7	4.14
OCCUPATIONAL ACCIDENTS WITH SERIOUS CONSEQUENCES Ratio between the number of serious accidents (excluding fatalities) and hours worked (multiplied by 200,000)	0	-	0	-	0	-
FATALITIES Ratio between the number of fatalities and the hours worked (multiplied by 200,000)	0	-	0	-	0	-
ACCIDENTS OCCURRED DURING HOME-WORK TRANSFERS (Including accidents occurred on transport not arranged by Sogin)	0	-	1	n.a.	1	n.a.
HOURS WORKED	422,436	n.a.	364,878	n.a.	337.877	n.a.

GRI 403-9: RECORDABLE WORK ACCIDENTS - STAFF OF SOGIN'S CONTRACTORS - DIVIDED BY GENDER AND SITE

	2021			2020			2019		
	TOTAL	**WOMEN**	**MEN**	**TOTAL**	**WOMEN**	**MEN**	**TOTAL**	**WOMEN**	**MEN**
Total recordable accidents	3	1	2	5	1	4	6	1	5
Caorso	0	0	0	0	0	0	2	0	2
Garigliano	0	0	0	0	0	0	2	0	2
Latina	0	0	0	1	0	1	1	0	1
Trino	0	0	0	0	0	0	0	0	0
Bosco Marengo	0	0	0	0	0	0	0	0	0
Casaccia	1	0	1	1	1	0	0	0	0
Saluggia	0	0	0	0	0	0	0	0	0
Rotondella	2	1	1	3	0	3	0	0	0
ISPRA-1	0	0	0	0	0	0	0	0	0

Rome's Offices	0	0	0	0	0	0	1	1	0
Foreign Offices	0	0	0	0	0	0	0	0	0

GRI 403-9: ACCIDENT INDICES - STAFF OF SOGIN CONTRACTORS

	2021		2020		2019	
	No.	**RATE**	**No.**	**RATE**	**No.**	**RATE**
Recordable work accidents 3 for Sogin employees Of which:	3	0.58	5	0.99	6	1
Work accidents working days lost	3	0.58	5	0.99	6	1
Work accidents with	1	0.19	0	-	0	-
Fatalities	0	-	0	-	0	-
Accidents occurred during work-home transfers	0	-	0	-	1	-
Hours worked	**1,036,425**	**n.a.**	**1,010,973**	**n.a.**	**889,941**	**n.a.**

RADIOLOGICAL SAFETY

Decommissioning and radioactive waste management operations are carried out according to specific rules and regulations aimed at guaranteeing the radiological protection of employees, people, and the environment, in line with the highest standards of nuclear safety. The potential radiological impact resulting from usual operations is constantly monitored under the Legislative Decree no. 101/2020, through specific environmental and physical surveillance systems. The following tables summarise the maximum doses of radiation exposure for the employees working in the sites in 2021. The reported doses have been defined by the Qualified Expert, namely the person appointed by the employer to ensure the health surveillance of corporate staff and the radiological safety of people and environment. The Qualified Expert works in concert with the competent physician, who, in turn, guarantees the workers' health surveillance on behalf of the employer.

The limit on the effective dose for workers' exposure is 20 mSv/year and it includes dose contributions from external radiations and internal contamination. The results of the physical surveillance on the employees working in Sogin sites are significantly lower than the limits set out in the Legislative Decree no.101/2020.

External radiation is produced by radiation sources that are external to the body, while internal radiation is caused by direct contamination of the body with radiological substances, ingestion, inhalation and/or dermal absorption.

The maximum effective individual dose is the dose absorbed by the exposed employee, which, due to the work performed over the year in the abovementioned site, was exposed to a greater exposure resulted from the sum of external and internal radiations.

A Millisievert (mSv) equals 0.001 Sievert (Sv). The Sievert is a derived unit of the effective dose, which results from the absorbed dose calculated on the type of incident radiation and the specific irradiated organ and/or body tissue, and it is used to calculate the biological effects of the exposure to ionizing radiations.

MAXIMUM EFFECTIVE INDIVIDUAL DOSE - SOGIN – 2021		
Site	**MAXIMUM EFFECTIVE INDIVIDUAL DOSE**	**TYPE OF EXPOSURE**
	mSv/year	**External/internal Radiation**
Caorso	0.524	External Radiation
Latina	0.130	External Radiation
Trino	0.876	External Radiation
ISPRA-1	0.015	External Radiation
Garigliano	0.250	External Radiation
Bosco Marengo	0.350	External Radiation
Casaccia	0.100	External Radiation
Saluggia	0.100	External Radiation
Rotondella	0.150	External Radiation

MAXIMUM EFFECTIVE INDIVIDUAL DOSE - NUCLECO - 2021		
	MAXIMUM EFFECTIVE INDIVIDUAL DOSE	**TYPE OF EXPOSURE**
	mSv/anno	**Irraggiamento Esterno o Interno**
Nucleco Staff	1,85	External Radiation
Staff from External Firms	0,45	External Radiation

INDUSTRIAL SAFETY

Sogin manages nuclear and industrial safety for the following purposes:

- Protection of people and corporate assets
- Physical protection of installations, materials and activities
- Management of information, installations, technologies and materials subject to formal obligation of secrecy.
- Management of critical infrastructures subject to specific protection measures for reasons of public safety, order and civil protection
- Mandatory training for employees with security clearance, on classified information and nuclear security, in partnership with institutions, public bodies, universities and research institutes

In 2021, Sogin conducted the training “Safety Management in the nuclear field”, as provided under DPCM no. 4 of 6November 2015 and subsequent amendments and integrations. Training was provided in the central offices and the sites. However, given the containment measures imposed by the pandemic and in compliance with the regulations on administrative protection of state secret, classified information and exclusive disclosure, the courses were provided in distance learning mode.
Nucleco’s staff was offered a 4-hours training course on “Basic Security in the nuclear field” in partnership with the Radwaste Management School. The training course, divided into 4 learning modules, was held in distance learning.
Moreover, during the year, Sogin continued its partnership with the first and second-level International CBRNe Master Courses of Università di Tor Vergata, directed by the Radwaste Management School.
As for the International Master Program in International Security Studies (Ethics and Security) of the Scuola Sant’Anna di Pisa, students were offered an online training course on: “Security management in Sogin”. The course analysed the instruments for physical protection against “Malicious acts”, the national security system and intelligence and the new hybrid threats.

YOU4CYBERSECURITY COURSE

Again in 2021, the Company held the You4CyberSecurity course, the training programme for digital security launched in 2020. The course, offered to the corporate staff, is intended to raise awareness on digital security:

- 6 campaigns with training modules in 2021, in addition to the 6 campaigns offered in 2020, totalling more than 7,300 hours completed over the last year; 101 hours out of the total were offered to external collaborators;
- 2 campaigns involving phishing simulations. The results obtained in 2021 recorded 11% of global corporate risk, compared to 26% in 2020;
- Contest among corporate offices to award the most "Cyber safe" environment; participants were provided the possibility to access a Scoreboard to see their performance.

TWORKING TABLE ON CYBERSECURITY BY FORUM PA

On 24 June, during the annual FORUM PA titled "Connecting Country's vital energies", 25 public administrations held a working table on "Cybersecurity for public institutions to improve the resilience of the Country System"; Sogin was invited to take part in the meeting and share its experience.

- More specifically, the working table provided public administrations with an opportunity to investigate an integrated and homogeneous approach for preventing and solving cybersecurity threats. The participants also discussed the Funds allocated to the National Resilience and Recovery Plan (PNRR), the Cybersecurity National Scope and the impact of Cybersecurity on local PAs.

HR KPIS

GRI 102:8 - INFORMATION ON EMPLOYEES AS OF 31 DECEMBER DIVIDED BY GENDER, PROFESSIONAL PROFILE, CONTRACT TYPE AND PLACE OF WORK

WORKFORCE BY GENDER

		SOGIN 2021			NUCLECO 2021			GROUP 2021			GROUP 2020	GROUP 2019
		P	FT	TOT.	P	FT	TOT.	P	FT	TOT.	TOT.	TOT.
Women	No.	252	0	**252**	41	8	**49**	293	8	**301**	294	**296**
Men	No.	629	0	**629**	195	18	**213**	824	18	**842**	852	**850**
Total, of wich:	**No.**	**881**	**0**	**881**	**236**	**26**	**262**	**1,117**	**26**	**1,143**	**1,146**	**1,146**
Full Time	No.	866	0	**866**	236	26	**262**	1.102	26	**1,128**	1,130	**1,125**
Part Time	No.	15	0	**15**	0	0	**0**	15	0	**15**	16	**21**

WORKFORCE BY PLACE OF WORK

		SOGIN 2021			NUCLECO 2021			GROUP 2021			GROUP 2020	GROUP 2019
		P	FT	TOT.	P	FT	TOT.	P	FT	TOT.	TOT.	TOT.
Caorso	No.	94	0	**94**	8	3	**11**	102	3	**105**	110	**110**
Garigliano	No.	62	0	**62**	22	0	**22**	84	0	**84**	84	**86**
Latina	No.	86	0	**86**	11	0	**11**	97	0	**97**	100	**98**
Trino	No.	64	0	**64**	11	1	**12**	75	1	**76**	82	**79**
Bosco Marengo	No.	35	0	**35**	7	1	**8**	42	1	**43**	43	**40**
Casaccia	No.	58	0	**58**	2	0	**2**	60	0	**60**	60	**62**
Saluggia	No.	48	0	**48**	7	1	**8**	55	1	**56**	56	**56**
Trisaia	No.	60	0	**60**	17	0	**17**	77	0	**77**	77	**79**
Ispra	No.	5	0	**5**	11	1	**12**	16	1	**17**	15	**11**
Rome's Headquarters	No.	364	0	**364**	138	19	**157**	502	19	**521**	513	**518**
Foreign Offices	No.	5	0	**5**	2	0	**2**	7	0	**7**	6	**7**
Total	**No.**	**881**	**0**	**881**	**236**	**26**	**262**	**1,117**	**26**	**1,143**	**1,146**	**1,146**

Please note that the variance between the number of employees (including new fires and terminated contracts) as of 31.12.2020 and the number of employees as of 31.12.2021 results from the settlement rehire of three employees in 2020.

SELF-EMPLOYED WORKERS, OR NON-EMPLOYED BY THE ORGANISATION, WORKING UNDER THE GROUP SUPERVISION

		SOGIN 2021	NUCLECO 2021	GROUP 2021	GROUP 2020	GROUP 2019
Trainees	n.	0	6	6	7	7

WORKFORCE BY GENDER

		SOGIN 2021	NUCLECO 2021	GROUP 2021	GROUP 2020	GROUP 2019
Men	%	71.40%	81.30%	73.67%	74.35%	74.17%
Women	%	28.60%	18.70%	26.33%	25.65%	25.83%

401/-1: NEW EMPLOYEE HIRES AND EMPLOYEE TURNOVER DIVIDED BY AGE, GENDER AND GEOGRAPHICAL AREA

NEW HIRES

		DIVIDED BY GENDER				
		SOGIN 2021	NUCLECO 2021	GROUP 2021	GROUP 2020	GROUP 2019
Men	No.	0	39	39	31	38
Women	No.	0	12	12	8	15
Total	**No.**	**0**	**51**	**51**	**39**	**53**

		NEW HIRES DIVIDED BY AGE				
		SOGIN 2021	NUCLECO 2021	GROUP 2021	GROUP 2020	GROUP 2019
<30 y	No.	0	16	16	13	7
30-40 y	No.	0	20	20	14	26
41-50 y	No.	0	9	9	7	16
>50 y	No.	0	6	6	5	4
Total	**No.**	**0**	**51**	**51**	**39**	**53**

		NEW HIRES BY PLACE OF WORK				
		SOGIN 2021	NUCLECO 2021	GROUP 2021	GROUP 2020	GROUP 2019
Caorso	No.	0	6	6	6	5
Garigliano	No.	0	0	0	0	5
Latina	No.	0	0	0	2	5
Trino	No.	0	6	6	6	2
Bosco Marengo	No.	0	3	3	5	0
Casaccia	No.	0	0	0	0	1
Saluggia	No.	0	4	4	3	0
Ispra	No.	0	3	3	4	1
Trisaia	No.	0	0	0	0	0
Rome's Headquarters	No.	0	29	29	13	34
Foreign Offices	No.	0	0	0	0	0
Total	**No.**	**0**	**51**	**51**	**39**	**53**

		HIRE RATE BY GENDER				
		SOGIN 2021	NUCLECO 2021	GROUP 2021	GROUP 2020	GROUP 2019
Men	%	0.00%	14.89%	3.41%	2.71%	3.32%
Women	%	0.00%	4.58%	1.05%	0.70%	1.31%
Total	**%**	**0.00%**	**19.47%**	**4.46%**	**3.40%**	**4.62%**

		HIRE RATE BY AGE				
		SOGIN 2021	NUCLECO 2021	GROUP 2021	GROUP 2020	GROUP 2019
<30 y	%	0.00%	6.11%	0	0	0.60%
30-40 y	%	0.00%	7.63%	1.75%	1.22%	2.27%
41-50 y	%	0.00%	3.44%	0.79%	0.61%	1.40%
>50 y	%	0.00%	2.29%	0.52%	0.44%	0.35%
Total	**%**	**0.00%**	**19.47%**	**4.46%**	**3.40%**	**4.62%**

		HIRE RATE BY PLACE OF WORK				
		SOGIN 2021	NUCLECO 2021	GROUP 2021	GROUP 2020	GROUP 2019
Caorso	%	0.00%	2.29%	0.52%	0.52%	0.44%
Garigliano	%	0.00%	0.00%	0.00%	0.00%	0.44%
Latina	%	0.00%	0.00%	0.00%	0.17%	0.44%
Trino	%	0.00%	2.29%	0.52%	0.52%	0.17%
Bosco Marengo	%	0.00%	1.15%	0.26%	0.44%	0.00%
Casaccia	%	0.00%	0.00%	0.00%	0.00%	0.08%
Saluggia	%	0.00%	1.53%	0.35%	0.26%	0.00%
ISPRA	%	0.00%	1.15%	0.26%	0.35%	0.08%
Trisaia	%	0.00%	0.00%	0.00%	0.00%	0.00%
Rome's Headquarters	%	0.00%	11.07%	2.54%	1.13%	2.97%
Foreign Offices	%	0.00%	0.00%	0.00%	0.00%	0.00%
Total	**%**	**0.00%**	**19.47%**	**4.46%**	**3.40%**	**4.62%**

TERMINATED CONTRACTS

		TERMINATED CONTRACTS DIVIDED BY GENDER				
		SOGIN 2021	NUCLECO 2021	GROUP 2021	GROUP 2020	GROUP 2019
Men	No.	23	27	50	30	19
Women	No.	5	2	7	10	5
Total	**No.**	**28**	**29**	**57**	**40**	**24**

		TERMINATED CONTRACTS BY AGE				
		SOGIN 2021	NUCLECO 2021	GROUP 2021	GROUP 2020	GROUP 2019
<30 y	No.	1	4	5	4	2
30-40 y	No.	3	12	15	8	7
41-50 y	No.	3	5	8	4	4
>50 y	No.	21	8	29	24	11
Total	**No.**	**28**	**29**	**57**	**40**	**24**

		TERMINATED CONTRACTS BY PLACE OF WORK				
		SOGIN 2021	NUCLECO 2021	GROUP 2021	GROUP 2020	GROUP 2019
Caorso	No.	7	4	11	7	9
Garigliano	No.	1	0	1	2	1
Latina	No.	3	0	3	1	0
Trino	No.	3	5	8	1	1
Bosco Marengo	No.	0	4	4	4	1
Casaccia	No.	3	0	3	0	2
Saluggia	No.	2	3	5	1	1
Ispra	No.	0	3	3	0	0
Trisaia	No.	0	0	0	1	0
Rome's Headquarters	No.	9	10	19	23	8
Foreign Offices	No.	0	0	0	0	1
Total	**No.**	**28**	**29**	**57**	**40**	**24**

		TERMINATION RATE BY GENDER				
		SOGIN 2021	NUCLECO 2021	GROUP 2021	GROUP 2020	GROUP 2019
Men	%	2.61%	10.31%	4.37%	2.62%	1.66%
Women	%	0.57%	0.76%	0.61%	0.87%	0.43%
Total	**%**	**3.18%**	**11.07%**	**4.99%**	**3.49%**	**2.09%**

		TERMINATION RATE BY AGE				
		SOGIN 2021	NUCLECO 2021	GROUP 2021	GROUP 2020	GROUP 2019
<30 y	%	0.11%	1.53%	0.44%	0.35%	0.17%
30-40 y	%	0.34%	4.58%	1.31%	0.70%	0.61%
41-50 y	%	0.34%	1.91%	0.70%	0.35%	0.35%
>50 y	%	2.38%	3.05%	2.54%	2.09%	0.96%
Total	**%**	**3.18%**	**11.07%**	**4.99%**	**3.49%**	**2.09%**

		TERMINATION RATE BY PLACE OF WORK				
		SOGIN 2021	NUCLECO 2021	GROUP 2021	GROUP 2020	GROUP 2019
Caorso	%	0.79%	1.53%	0.96%	0.61%	0.78%
Garigliano	%	0.11%	0.00%	0.09%	0.17%	0.09%
Latina	%	0.34%	0.00%	0.26%	0.09%	0.00%
Trino	%	0.34%	1.91%	0.70%	0.09%	0.09%
Bosco Marengo	%	0.00%	1.53%	0.35%	0.35%	0.09%
Casaccia	%	0.34%	0.00%	0.26%	0.00%	0.17%
Saluggia	%	0.23%	1.15%	0.44%	0.09%	0.09%
Ispra	%	0.00%	1.15%	0.26%	0.00%	0.00%
Trisaia	%	0.00%	0.00%	0.00%	0.09%	0.00%
Rome's Headquarters	%	1.02%	3.82%	1.66%	2.01%	0.69%
Foreign Offices	%	0.00%	0.00%	0.00%	0.00%	0.09%
Total	**%**	**3.18%**	**11.07%**	**4.99%**	**3.49%**	**2.09%**

GRI 401-3: EMPLOYEES WHO TOOK A PARENTAL LEAVE						
		EMPLOYEES WHO TOOK A PARENTAL LEAVE				
		SOGIN 2021	NUCLECO 2021	GROUP 2021	GROUP 2020	GROUP 2019
Men	No.	9	3	12	30	35
Women	No.	38	3	41	59	56
Total	**No.**	**47**	**6**	**53**	**89**	**91**

		EMPLOYEES THAT RETURNED TO WORK AFTER PARENTAL LEAVE				
		SOGIN 2021	NUCLECO 2021	GROUP 2021	GROUP 2020	GROUP 2019
Men	No.	8	3	11	30	34
Women	No.	36	3	39	55	51
Total	**No.**	**44**	**6**	**50**	**85**	**85**

GRI 404-1: AVERAGE HOURS OF TRAINING PER EMPLOYEE				
		AVERAGE HOURS OF TRAINING PER YEAR		
		GROUP 2021	GROUP 2020	GROUP 2019
Internal Staff	hours	28,636	45,893	32,757
Of which, Sogin:	hours	18,115	33,494	27,751
Of which, Nucleco:	hours	10,521	12,399	5,006
Other Staff provided to external staff, not employed by the Company)	hours	426	1,014	1,624
of which, trainees	hours	106	584	462
of which, collaborators	hours	22	0	16
Total	**hours**	**29,062**	**46,907**	**34,381**

		TOTAL ANNUAL TRAINING HOURS PER TYPE		
		GROUP 2021	GROUP 2020	GROUP 2019
New hires	hours	41	1,067	0
Managers	hours	3,135	394	1,187
Specialized technician	hours	5,914	3,823	7,191
Nuclear and Traditional	hours	19,972	41,590	25,323
Training on the job	hours	0	33	680
Total	**hours**	**29,062**	**46,907**	**34,381**

		AVERAGE TRAINING HOURS PER GENDER (PRO CAPITE) GROUP		
		GROUP 2021	GROUP 2020	GROUP 2019
Men	hours	25	42	28
Women	hours	22	38	31
Total	**hours**	**24**	**40**	**29**

		AVERAGE TRAINING HOURS DIVIDED BY EMPLOYEE CATEGORY (PRO CAPITE)		
		GROUP 2021	GROUP 2020	GROUP 2019
Managers	hours	22	11	14
Executives	hours	23	26	27
Employees	hours	25	43	31
Workers	hours	26	52	26
Total	**hours**	**24**	**33**	**29**

GRI 405-1: EMPLOYEES DIVIDED BY EMPLOYEE CATEGORY, GENDER AND AGE AS OF 31 DECEMBER

		TOTAL WORKFORCE BY EMPLOYEE CATEGORY										
		SOGIN 2021			NUCLECO 2021			GROUP 2021			GROUP 2020	GROUP 2019
		WOMEN	MEN	TOT	WOMEN	MEN	TOT	WOMEN	MEN	TOT	TOT	TOT
Managers	n.	0	24	24	1	0	1	1	24	25	27	27
Executives	n.	64	145	209	6	15	21	70	160	230	230	237
Employees	n.	181	335	516	40	99	139	221	434	655	649	636
Workers	n.	7	125	132	2	99	101	9	224	233	240	246
Total	**n.**	**252**	**629**	**881**	**49**	**213**	**262**	**301**	**842**	**1,143**	**1,146**	**1,146**
Managers	%	0.00%	2.72%	2.72%	0.38%	0.00%	0.38%	0.09%	2.1%	2.19%	2.36%	2,36%
Executives	%	7.26%	16.46%	23.72%	2.29%	5.73%	8.02%	6.12%	14.00%	20.12%	20.07%	20.68%
Employees	%	20.54%	38.02%	58.57%	15.27%	37.79%	53.05%	19.34%	37.97%	57.31%	56.63%	55.50%
Workers	%	0.79%	14.19%	14.98%	0.76%	37.79%	38.55%	0.79%	19.60%	20.38%	20.94%	21.47%
Total	**%**	**29%**	**71%**	**100%**	**19%**	**81%**	**100%**	**26%**	**74%**	**100%**	**100%**	**100%**

AVERAGE NUMBER OF EMPLOYEES BY EMPLOYEE CATEGORY

	SOGIN GROUP	
	31/12/2021	31/12/2020
Managers	26	28
Executives	228	231
Employees	651	634
Workers	240	245
Trainees	6	9
Total	**1,151**	**1,148**

AVERAGE NUMBER OF EMPLOYEES

	SOGIN	
	2021	2020
Managers	25.25	27.64
Executives	210.36	212.94
Employees	520.29	522.90
Workers	138.67	153.66
Total Employees	**894.58**	**917.14**

GRI 405-1: EMPLOYEES DIVIDED BY EMPLOYEE CATEGORY, GENDER AND AGE AS OF 31 DECEMBER

		WORKFORCE BY GENDER									
		MANAGERS	EXECUTIVES	EMPLOYEES	WORKERS	TOTAL	MANAGERS	EXECUTIVES	EMPLOYEES	WORKERS	TOTAL
		no.	no.	no.	no.	no.	%	%	%	%	%
SOGIN 2021	<30 y	0	0	9	5	14	0.00%	0.00%	1.02%	0.57%	2%
	30-40 y	0	6	214	63	283	0.00%	0.68%	24.29%	7.15%	32%
	41-50	1	62	151	38	252	2.61%	7.04%	17.14%	4.31%	31%
	>50 y	23	141	142	26	332	0.11%	16.00%	16.12%	2.95%	35%
	Total	**24**	**209**	**516**	**132**	**881**	**2.72%**	**23.72%**	**58.57%**	**14.98%**	**100%**
NUCLECO 2021	<30 y	0	0	19	10	29	0.00%	0.00%	7.25%	3.82%	11%
	30-40 y	0	5	79	43	127	0.00%	1.91%	30.15%	16.41%	48%
	41-50	0	9	17	25	51	0.00%	3.44%	6.49%	9.54%	19%
	>50 y	1	7	24	23	55	0.38%	2.67%	9.16%	8.78%	21%
	Total	**1**	**21**	**139**	**101**	**262**	**0.38%**	**8.02%**	**53.05%**	**38.55%**	**100%**
GROUP 2021	<30 y	0	0	28	15	43	0.00%	0.00%	2.45%	1.31%	4%
	30-40 y	0	11	293	106	410	0.00%	0.96%	25.63%	9.27%	36%
	41-50	1	71	168	63	303	0.09%	6.21%	14.70%	5.51%	27%
	>50 y	24	148	166	49	387	2.10%	12.95%	14.52%	4.29%	34%
	Total	**25**	**230**	**655**	**233**	**1,143**	**2.19%**	**20.12%**	**57.31%**	**20.38%**	**100%**
GROUP 2020	<30 y	0	0	21	27	48	0,00%	0,00%	1,83%	2,36%	4%
	30-40 y	0	7	305	111	423	0,00%	0,61%	26,61%	9,69%	37%
	41-50	4	78	161	61	304	0,35%	6,81%	14,05%	5,32%	27%
	>50 y	23	145	162	41	371	2,01%	12,65%	14,14%	3,58%	32%
	Total	**27**	**230**	**649**	**240**	**1,146**	**2.36%**	**20.07%**	**56.63%**	**20.94%**	**100%**
GROUP 2019	<30 y	0	0	15	35	50	0,00%	0,00%	1,31%	3,05%	4%
	30-40 y	0	12	318	111	441	0,00%	1,05%	27,75%	9,69%	38%
	41-50	3	79	144	62	288	0,26%	6,89%	12,57%	5,41%	25%
	>50 y	24	146	159	38	367	2,09%	12,74%	13,87%	3,32%	32%
	Total	**27**	**237**	**636**	**246**	**1,146**	**2.36%**	**20.68%**	**55.50%**	**21.47%**	**100%**

GRI 405-1: DIVERSITY OF THE BOARD OF DIRECTORS (BOD) BY GENDER AND AGE				
DIVERSITY OF SOGIN BOARD OF DIRECTORS BY GENDER				
		2021	**2020**	**2019**
Men	No.	3	3	3
Women	No.	2	2	2
Total	**No.**	**5**	**5**	**5**

DIVERSITY OF SOGIN BOARD OF DIRECTORS BY AGE				
		2021	**2020**	**2019**
<30 y	No.	0	0	0
30-40 y	No.	0	0	0
41-50 y	No.	3	3	3
>50 y	No.	2	2	2
Total	**No.**	**5**	**5**	**5**

GRI 405-2: RATIO OF BASIC SALARY AND REMUNERATION OF WOMEN TO MEN BY EMPLOYEE CATEGORY						
RATIO OF BASIC SALARY AND REMUNERATION OF WOMEN TO MEN BY CATEGORY						
		SOGIN 2021	**NUCLECO 2021**	**GROUP 2021**	**GROUP 2020**	**GROUP 2019**
Managers	%	0.00%	0.00%	69.82%	71.60%	71.32%
Executives	%	95.57%	108.13%	96.50%	100.43%	94.76%
Employees	%	96.97%	99.53%	98.42%	99.59%	98.21%
Workers	%	99.80%	94.29%	99.98%	100.74%	101.06%

RELATIONS

Establishing a relationship with Stakeholders generates shared value. Based on this principle, the Company constantly commits to develop collaborations and relationships with third parties such as media, associations, institutions, training and research centres, schools, universities, to share its know-how, exchange knowledge and experiences towards continuous improvement. Therefore, in spite of the limitations imposed by the pandemic, also in 2021, Sogin managed to develop and consolidate its connections at the national level.

MEDIA, WEB AND SOCIAL

Media relationships are fundamental for the Company to provide accurate and transparent information on its corporate mission. This is done through several communication channels (i.e., press, we, tv and radio). Moreover, the Company pays attention to promoting relationships that allow its employees to share information on their job according to the three main drivers (information, listening and dialogue) used by Sogin and Nucleco for their external communication.
In this regard, this section reports a summary of the Company's relationships with media during 2021, with a specific focus on the activities carried out during the Public Consultation.

Main media relations activities in 2021:

- 5 January - Publication of the public notice on five national newspapers informing the readers about the availability of the National Charter of Potentially Suitable Areas (CNAPI) online.
- Partnership for the realization of the TV news on decommissioning operations and the construction of the National Repository and Technology Park, broadcast on 15 January during the TV programme 'Titolo V' (Rai3), supervised by Giampiero Marrazzo and recorded in Latina Nuclear Power Plant.
- 29 March - interview to Sogin CEO during the live radio programme Caterpillar (Rai, Radio2) on the initiative "M'illumino di meno", the day dedicated to energy efficiency and sustainable lifestyles organized by Caterpillar and Rai Radio 2. The 2021 edition focused on small and big "Species Jumps". Sogin took part in the event and shared its experience with circular economy.
- Partnership to realize one episode of the TV programme Sapiens, un solo Pianeta (Rai3) broadcast on 24 April. The episode, presented by Mario Tozzi and recorded in Garigliano Nuclear Power Plant, focused on decommissioning and the National Repository project.
- 9 July - meeting with two newspapers from Piacenza in Caorso Nuclear Power Plant: Libertà and Rai-TGR Emilia-Romagna to explain the dismantling activities carried out in the site.
- 29 July - Draft and dissemination of the press release: "Sogin: The Shareholders' Meeting approves the Groups Financial Statements for year 2020" on the approval of Sogin 2020 Separate and Consolidated Financial Reports.
- Partnership for the reportage by Lorenzo Pinna broadcast on 4 August during an episode of Superquark (Rai1) on the National Repository for radioactive waste and the Technology Park with an interview to Sogin CEO.
- Assistance during the interview to Emanuele Fontani, CEO, realized by Marco Patucchi and published by La Repubblica on 3 August.
- 7 September - Draft and dissemination of the press release: "Radioactive waste: launch of the Seminar on the National Repository".
- 24 November - Draft and dissemination of the press release: "Radioactive waste: completed the Seminar on the National Repository".
- 29 November - Press conference at the presence of local journalists and the Decommissioning Officer of Caorso Nuclear Power Plant for the IAEA Technical Meeting on Advancing Human Resource Development and Competence Building for Decommissioning held from 29 November to 3 December in the premises of the plant.
- 14 December - Draft and dissemination of the press release: "Carabinieri and Sogin intensify their collaboration for decommissioning and radioactive waste management", informing about the extension of the MoU.
- 23 December - Draft and dissemination of the press release: "Sogin: data on decommissioning progress available online" informing about the progress achieved by the Company during 2021.

OVERALL FIGURES ON MEDIA APPEARANCES	FIGURES ON MEDIA APPEARANCES CONCERNING THE NATIONAL REPOSITORY AND TECHNOLOGY PARK
12,656 total media appearances	11,883 total media appearances
3,561 articles published in the press	3,312 articles published in the press
8,177 articles published on the Internet	7,684 articles published on the Internet
918 radio and TV news	887 radio and TV news
21 press releases	8 press releases
5 press visits/meetings	

DIGITAL CHANNELS AND SOCIAL MEDIA COVERAGE

Digital channels are fundamental for Sogin to reach a broad audience - media, institutions and the public opinion - and spread information concerning its corporate mission.

On its two official websites (sogin.it for Sogin and nucleco.it for Nucleco), Sogin publishes institutional information and content of general interest; moreover, further digital content is published on the official website of the National Repository for radioactive waste (depositonazionale.it). Overall in 2021, Sogin published 74 news, including press releases and notes.

Moreover, the Company ensures social media coverage to inform its Stakeholders about the latest activities and provide them with spaces for dialogue to promote transparency and sharing. Overall in 2021, the Company published about 140 news across its social media profiles. Sogin profile, alone, recorded 20K views and an increasing involvement of Sogin employees through LinkedIn. With 10,044 followers, Sogin profile reconfirms the positive trend in terms of followers.

SOCIAL COVERAGE		
YOUTUBE CHANNEL: SOGIN CHANNEL	**LINKEDIN SOGIN, NUCLECO AND RAMS PROFILES**	**INSTAGRAM @OPENGATE_SOGIN**
OBJECTIVES	**OBJECTIVES**	**OBJECTIVES**
Information and transparency through the dissemination of digital content on decommissioning operations, the National Repository and Technology Park design and other corporate initiatives Increasing and enhancing the brand	Enhancing the skills and competencies of Sogin and Nucleco's employees in the field of decommissioning & waste management; Increasing and enhancing the brand reputation; Promoting Stakeholders' engagement Intensifying website visits and traffic	Highlighting corporate events and activities; Creating a social space to promote sharing and engagement; Increasing and enhancing the brand reputation; Intensifying website visits and traffic

In 2021, digital communication mainly aimed at supporting the process for defining the location of the National Repository and Technology Park during the public consultation phase; the consultation, launched with the publication of the National Charter of Potentially Suitable Areas (CNAPI) was also advertised on Sogin LinkedIn profile with a post that recorded more than 11K views, a peak in 2021. During this phase, as provided under the legislation, the Company organized the National Seminar, fully held online on seminariodepositonazionale.it, the website that hosted the public debate by ensuring full transparency and immediacy. Featuring the logo designed for the Seminar, a linear graphic and a user-oriented surfing experience, the website clearly reported the Agenda with all the meetings and provided live access to the working sessions on all relevant subjects for a total of 45 hours of live streaming.

Along with digital communication on nuclear decommissioning and the National Repository and Technology Park, the Company also focused on three additional elements: enhancement of know-how, sustainability and innovation.

MAIN INFORMATION CAMPAIGNS ON SOCIAL CHANNELS

#NOISOGIN, HUMAN RESOURCES AND KNOW-HOW ENHANCEMENT
Through its web platforms and social channels, Sogin advertised all the initiatives and projects designed to enhance its high-level technical projects. Each project reported the hashtag #NoiSogin to recall the value of the corporate community. For instance, among the others, the Company published: content on the professional growth and successes of its employees (i.e., the appointment of Decommissioning Officers), or information related to participation to international sectoral conferences where Sogin shared its experience (i.e., the IAEA "International Conference on Radioactive Waste Management: Solutions for a Sustainable Future" or the DEM 2021 "International Conference on Decommissioning Challenges: Industrial Reality, Lessons Learned and Prospects".

#SOGINSOSTENIBILE, COMMUNICATION ON SUSTAINABILITY
Over the last years, Sogin had the chance to define and develop a new brand identity based on sustainability. The definition process ended in 2021 with the launch of the logo SoginSostenibile. In 2021, the Company sponsored the actions implemented in the field of sustainability (marked with the hashtag #SoginSostenibile) across all its corporate profiles. The posts published during the year include those related to the Festival dello Sviluppo Sostenibile (Sustainable Development Festival), Ecomondo, or the EMAS Registration.

#SOGININNOVA, INNOVATIVE TECH SOLUTIONS AND A NEW INTERNAL CONTEST ON INNOVATION
In 2021, Sogin and Nucleco continued with the enhancement of corporate innovation. The Company provided information on the innovative technological solutions adopted during the year; these includes the AIGOR software (Radioactive Object Management Software) and the Survey 3D, and the first internal contest "Idee ad alta Attività" dedicated to innovation.

To comply with the legal requirements and obligations connected to Sogin presence on the Internet, and given the intense media exposure following the public consultation on the National Repository and Technology Park, at the beginning of 2021, the Company issued a Social Media Policy and Guidelines on the use of social networks.

- The Social Media Policy, addressed to web and social users, provides information on content and publication settings adopted by Sogin and Nucleco; therefore, it can be used as a handbook and a tool to foster a conscious use of communication means.
- The two Guidelines, prepared for Sogin and Nucleco's employees, respectively, provide indications on how to protect the Company's reputation and image when publishing corporate news and subjects on the employees' personal profiles, and also focus on personal branding.

INSTITUTIONS

Sogin relationship with local and national institutions is expressed by the Company's commitment to create opportunities of discussion based on transparency and complies with the reference legislation. In this regard, again in 2021, Sogin organized meetings to explain the main aspects of decommissioning and the procedures to define a location for the National Repository for radioactive waste following the CNAPI publication.

INSTITUTIONAL VISITS AND HEARINGS
In 2021, given the limitations imposed by the pandemic, the visits of local and national representatives to Sogin plants and sites suffered a slowdown.
On 8 May, a parliamentary delegation visited the ITREC plant in Rotondella and the CEMERAD repository in Statte. The same delegation visited the Latina nuclear power plant on 3 June to carry out a survey.
On 31 March and 6 April 2021, Sogin took part in a parliamentary hearing with the Unified Committees on Productive Activities and Environment of the Chamber of Deputies. The hearing was held to discuss

the National Repository and Technology Park and the National Charter of Potentially Suitable Areas. On 25 May, the Parliamentary Investigation Committee for illicit activities connected to waste and environmental violations, held a hearing with the Sogin Chairman and CEO, via video conference. The hearing is part of the Committee's research on radioactive waste management; this topic is also the focus of the report approved by the Committee on 30 March.

DIALOGUE WITH INDEPENDENT BODIES

Sogin has a dialogue with all the independent bodies that contribute to provide proper information on decommissioning activities in Italy.

The Ministry of the Environment and Protection of the Land and Sea established an Environmental Observatory for Garigliano nuclear power plant through a specific Decree. The Observatory is a permanent body in charge of monitoring all dismantling operations carried out in the plant.

MEMORANDUM OF UNDERSTANDING WITH THE ENVIRONMENTAL PROTECTION UNIT OF CARABINIERI

On 13 December 2021, Sogin signed an extension of the MoU ratified with the Environmental Protection Unit of Carabinieri; the memorandum aims at fostering collaboration for the recovery and safety management of orphan radiation sources. The Memorandum, now at its third extension, lasts three years and provides indications on mutual training activities; it also extends collaboration between the parties by developing joint actions, analyses and the assessment of risk profiles related to trade flows, to guarantee more efficiency in the management of nuclear contracts and tackle illicit traffic of radioactive waste and materials.

PROTOCOL FOR THE RECLAMATION OF ILLEGAL LANDFILLS

Again in 2021, the Company continued the implementation of the actions provided under the "Collaboration Protocol for the promotion of environmental sustainability and the implementation of best practices in the reclamation sector" ratified between Sogin and the Extraordinary Commissioner for the Reclamation of Illegal Landfills in December 2020. This agreement aims at fostering a collaboration for the restoration of illegal landfills across the national territory and to ensure environmental and land protection, and the community well-being. As provided under the Protocol, Sogin and Nucleco place the expertise of their technicians and their best instruments at the service of the Extraordinary Commissioner to support him in the restoration of landfills.

PROTOCOL WITH THE MINISTRY OF AGRICULTURAL POLICIES ON THE TRACEABILITY OF AGRICULTURAL AND AGRI-FOOD PRODUCTS

In 2021, the Company continued the activities defined under the Agreement with the Anti-Fraud Inspectorate of the Ministry of Agricultural Policies (ICQRF) in September 2020 aimed at developing innovative solutions to ensure the traceability of agricultural and food products based on their isotope content.

The agreement aims at launching experimental research for the employment of radio-chemical techniques to verify the accuracy and effectiveness of the requirements set out for the origin of agricultural and agri-food products. The agreement aims at defining specific radio-chemical techniques to protect and promote food and obtain a single fingerprint indicating the origin of each given product.

RELATIONSHIPS WITH LOCAL ENTITIES

During 2021, the Company held institutional and technical meetings to update the Municipalities, Provinces and Regions hosting Sogin sites on the latest decommissioning operations.

The most relevant meetings held during the year are reported below. Many of them were held via video conference, due to the current health emergency.

- Participation in the Piemonte Regional Council Meeting open to the public to discuss the National Repository and Technology Park.
- Meeting held in Lazio Region Offices at the presence of Sogin Chairman and CEO and the Regional Councillor for Green Transition and Digital Transformation, Mrs. Roberta Lombardi.
- Participation in RemTech Expo 2021, the annual event focused on the reclamation of contaminated sites and land protection and restoration.
- Institutional presence at the Rimini Fair during Ecomondo, the reference event for Green Transition and new circular economy models.

CONFERENCES OF SERVICES
As set out in the legal provisions regulating the approval of reclamation procedures for a contaminated site, on 25 February 2021, Sogin took part in the Conference of Services for the approval of the MISO project - pilot project for the reclamation of Bosco Marengo site.
On 15 June 2021, Sogin also joined the Conference of Services for the reclamation of the Latina Nuclear Power Plant, during which the Company was assigned the task of developing the Reclamation Project (POB/MISO).

COMMUNICATION PLANS UNDET EIA PROVISIONS
Compliance with the provisions set out by EIA Decrees provides the obligation for Sogin to draft communication plans and submit them to local entities for preliminary approval.
Each communication plan provides different actions, such as the development of the RE.MO. portal (Monitoring network), the preparation of information booklets, the organization of visits to the sites, press conferences, and Regional Transparency Tables.

TRANSPARENCY TABLES
The Regions where the sites under decommissioning are located, summon the Transparency Tables, which are regular meetings set out under regional laws and resolutions; these meetings provide a chance for Sogin and local Stakeholders (citizens, institutions and associations) to exchange information on the progress of dismantling and radioactive waste management operations, and focus on environmental protection and safety.
During 2021, the Piemonte Region summoned 2 Transparency Tables (20 January and 10 February, respectively) to discuss the definition of the location, construction and exercise of the National Repository and Technology Park.

SOGIN AND THE FIRE DEPARTMENT
On 7 June, a delegation from the Nucleco NBCR unit (Nuclear, Biological, Chemical and Radiological Unit) and the fire department of Naples and Caserta held a meeting in Garigliano Nuclear Power Plant. During the meeting, Sogin technicians showed the fire-fighting systems in place and the equipment intended for radiation protection, and brought the 12 foremen of NBCR into the control room, the reactor premise and the temporary repository.

ENVIRONMENTALIST ASSOCIATIONS

Despite the different communication approaches employed due to the pandemic, during 2021, the Company fostered continuous dialogue with the environmentalist associations working across the Regions where the nuclear power plants and premises under decommissioning are located. It also involved the associations interested in discovering more about the design and implementation of the National Repository and Technology Park.

“LIBELLULE” (DRAGONFLIES) PROJECT IN CAORSO
In 2021, Sogin opened the Caorso Nuclear Power Plant to the Odonata Association. This entity works to study and protect dragonflies in Italy. During the visit, the scholars and experts observed and recorded the species, that provide a bio-indicator for the site’s environmental health.

PARTNERSHIP WITH EDUCATIONAL ENTITIES

Sogin promotes relationships with educational centres and entities, mostly across the territories concerned with its interventions. These relationships aim at sharing the Company's know-how and promoting multi-level partnerships.

UNIVERSITÀ DELLA TUSCIA
On 15 April, Sogin held a class for the engineers enrolled in the course Technologies for Nuclear Fusion offered by Università della Tuscia. The 2-hour class focused on the "Radiation protection system", as defined by the International Commission of Radiation Protection (ICRP), and its implementation according to the international (Directive 2013/59/Euratom) and Italian legal framework (Legislative Decree no. 101/20). More specifically, the students received information on the principles of radiation protection, exposure, criteria for the optimisation of radiation doses, radiation protection scope and the effects of ionizing radiations.

UNIVERSITÀ TOR VERGATA (ROME)
On 23 and 24 April, Sogin held a course for the students enrolled in the II-level Master on Physical and Radiation Protection Agents of the "Università degli Studi di Roma Tor Vergata". The Master programme aims at training professionals for the assessment of risk and protection measures arising from the use of ionizing and non-ionizing radiations in the health, industrial and research sectors. During the classes (held in two days for a total of 8 hours), Sogin explained the requirements to become a Radiation Protection Officer and the importance of obtaining au authorisation from this professional to perform the activities involving radiological risks and ensure the safety of workers and citizens.

ISTITUTO OMNICOMPRENSIVO NARNI AMELIA
On 30 April, Sogin held a class for 30 eighth-grade students enrolled in the Istituto Omnicomprensivo Narni Amelia- Augusto Vera. During the class, the Company explained daily decommissioning operations, by focusing on its commitment to sustainable development, environmental care, and the safety of the territories where the nuclear power plants are located. The meeting appealed and engaged the young students who posed many questions and showed interest for the subjects presented.

HIGH SCHOOL IN CLASSICAL STUDIES TITO LIVIO OF MILAN
On 11 May, Sogin held a class for the high school students of Liceo Classico Tito Livio of Milan. During the class, Sogin retraced the history of nuclear power exploitation and its work, by focusing on current and past projects implemented in Trino Nuclear Power Plant.

ASSOCIATION OF ENGINEERS OF MILAN
On 15 September, Sogin held a presentation during a course offered to experts in radon reclamation, pursuant to Article 15 of Legislative Decree no. 101/2020, organized by the Association of Engineers of Milan. The presentation included a speech by an expert in charge of radon reclamation actions; the professional delved into aspects related to indoor radan accumulation mechanisms, and, supported by the radiation protection officer, provided information on the preliminary assessment to be carried out before siting construction materials which, given their radionuclide content, may significantly cause radiation exposure in life and work places.

SCUOLA SANT'ANNA OF PISA
On 9 December, Sogin presented a report of its activities during the course "Ethics and Security" included in the Master's Degree on International Security Studies offered by Scuola Sant'Anna of Pisa.

SMES DAY 2021
On 13 December, Sogin hosted 122 students from the schools Galileo Galilei di Santhià (Vercelli) and Bonfantini (Novara) in virtual mode, and explored the Trino Nuclear Power Plant with them. The students had the chance to know the origins of Sogin work and delve into the past and current decommissioning projects carried out in this site. This event was held in collaboration with Confindustria Novara Vercelli Valsesia during the XII edition of the "SME's DAY" - the national SMEs day for businesses and students sponsored by Confindustria since 2010.
Due to the limitations imposed by the pandemic, the 2021 edition was held on digital platforms and recorded great participation and interest on behalf of the students.

EVENT PARTICIPATION

SODALITAS FOUNDATION
In February, the Company joined the "Sodalitas Call for Future" community, composed by the companies committed to implement actions for the sustainable future of the Country. In this regard, Sogin contributed with the project "Sogin for a 'Circular' Nuclear Decommissioning", designed to achieve the SDGs set out by the 2030 Agenda. The project was published on the digital platform sodalitascallforfuture. it along with other business actions to build a sustainable future accepted by "Sodalitas Call for Future". These actions will be presented to about 2 million students enrolled in 7,500 secondary schools which adhered to the "Together for Future" contest; this initiative aims to encourage students to think about a sustainable future by preparing proposals and explaining their expectations.

REMTECH 2021
Again in 2021, Sogin and Nucleco took part in RemTech Expo 2021, the annual event dedicated to the reclamation of contaminated sites, land protection and restoration. The event was held in virtual and presence mode from 20 to 24 September in Ferrara. The Companies joined the 25th edition of the Expo with one exhibition and two presentations:

- The conference on "Reclamation technologies for contaminated land: innovative solutions, best practices and sustainable management", held on 23 September, with the presentation of the reclamation of the Former Shooting Range (Ex Poligono di tiro) in Punta della Contessa (Brindisi).
- The Round Table on "Employment of restored areas to prevent soil consumption", organized by the Extraordinary Commissioner for the Reclamation of Illegal Landfills, held on 24 September.

Among the Remtech events held on digital platforms, on 20 September, Sogin participated in the webinar of the Italian Radiation Protection Association (AIRP) titled "CNAPI Charter: Meaning, issues and perspectives".

ASVIS SUSTAINABLE DEVELOPMENT FESTIVAL
Sogin took part in the 5th edition of the Sustainable Development Festival organized by ASviS (Italian Alliance for Sustainable Development) and held from 28 September to 14 October 2021. The event consisted of 17 days focused on the SDGs of the 2030 Agenda. More specifically, on 5 October, the Company took part in the event on "Sustainability as a competitive value in the supply chain" to illustrate some innovative and sustainable solutions applied to radioactive waste management (i.e., the Aigor software and the Survey 3D, a technology developed by Nucleco for radiological characterisation and the creation of 3D models for the design of dismantling and decontamination operations.

WEBINAR CONFINDUSTRIA VERCELLI VALSESIA
On 14 October, Sogin took part in the webinar "Mobility Manager - the new professional for corporate sustainability", organized by Confindustria Novara Vercelli Valsesia in partnership with Confindustria and Edenred. The meeting focused on the role of the mobility manager according to the new regulations, and on the provisions and obligations set out under Decree 110 of 12 May 2021, and the relevant benefits for businesses. During the event, Sogin shared its sustainable mobility actions and presented the outcomes of the survey on home-work transfers.

ECOMONDO 2021
On 27 October, during the 24th edition of Ecomondo (the event on green transition and new circular economy models), Sogin held the conference "Transiting from nuclear to traditional energy: best practices for the reclamation of contaminated sites". The event provided an opportunity to delve into know-how transfer in the nuclear and traditional fields, and present the projects designed by institutions and sector operators.

CONNEXT 2021
Sogin took part in Connext 2021, the national meeting of Confindustria industrial partners. The event, held from 2 to 3 December at the MiCO in Milan, is an extraordinary chance of exchange for medium, big businesses and innovative start-ups. For this edition, Sogin prepared two events: a webinar held before the beginning of the event and a seminar in presence.

More specifically:

- On 30 November, the webinar "**Decommissioning market, distinctive elements and perspectives**", analysing the strengths and improvement solutions for the decommissioning and radioactive waste management markets.
- On 2 December, the seminar "**Innovation as a driver to business sustainable development**", devoted to innovation solutions applied to businesses.

INTERNATIONAL BODIES

Due to its public nature and relevant expertise in decommissioning and nuclear radioactive waste management in Italy, Sogin fosters a dialogue with world nuclear experts, and it is part of the most relevant international forums, initiatives and working groups from relevant international organisations, such as:

The International Atomic Energy IAEA of the United Nations.

The Nuclear Energy Agency - NEA of the OECD – Organisation for Economic Cooperation and Development.

The bodies of the European Commission engaged in the nuclear field, i.e. the Directorate-General Energy (DGENER), the Joint Research Centre and the EURATOM Supply Agency.

Moreover, Sogin assists the Italian Government, its bodies and other national institutions involved in the nuclear sector, by providing its expertise in international institutional meetings.

Since 2019, Sogin has been recognised and appointed IAEA Collaborating Centre. It supports the Agency in the framework of the "Nuclear Power, Fuel Cycle and Nuclear Science" programme, through:

- Research and develop activities in the field of robotics and characterisation systems, including in collaboration with international bodies and entities;
- Know-how sharing and training events;
- Implementation of innovative tools to plan, design and execute decommissioning and waste management operations.

RELATIONSHIPS WITH THE INTERNATIONAL ATOMIC ENERGY AGENCY

The Company took part in the 65th IAEA General Conference held in Vienna from 20 to 24 September; during the event, it represented Italian institutions and presented the digital innovation in decommissioning and radioactive waste management during the "Digitalization in Support of Planning and Implementation of Nuclear Decommissioning" side event.
From 29 November to 3 December, Sogin hosted the Technical Meeting on Advancing Human Resource Development and Competence Building for Decommissioning, organized by the IAEA, in the Caorso Nuclear Power Plant. The technical meeting focused on the definition of strategies to develop and maintenance of competencies in the field of decommissioning and radioactive waste management; moreover, it was an opportunity to share innovative experiences and solutions. The meeting saw the participation of 40 technicians and scientific experts from different Member States, who discussed the application of digital and innovative technologies on decommissioning, the relevance of transferring high-level know-how to future generations, and the need to implement world databases and networks to promote knowledge and competence exchange.
During the year, Sogin also took part in exchanges promoted by the Agency, including the following meetings: Derivation of Specific Clearance Levels for Materials Suitable for Recycling, Reuse or Disposal in Landfills, Consultancy Meeting to Develop an Implementation Plan for the Project on Decommissioning in the Context of Circular Economy, Nuclear Decommissioning in the Context of Sustainability and Circular Economy, International Conference on Radioactive Waste Management: Solutions for a Sustainable Future" e il "Technical meeting on the global Status of Decommissioning.

RELATIONSHIPS WITH OECD/NEA

Sogin continued its relationships with the OECD/NEA and participated in the meetings of the Steering Committee (highest body of the Agency) and the Committees on Radioprotection and Public Health, Radioactive Waste Management, Decommissioning Legacy Management, Nuclear Law. In addition to the previous, Sogin collaborated on relevant decommissioning and waste management projects, such as the "Cooperative Programme on Decommissioning".

Similarly, Sogin is part of the NEST -Nuclear Education Skills and Technology international cooperation programme, aiming at developing skills in the field of nuclear technology and science. The Company was awarded and appointed as a member of the Forum on Stakeholder Confidence (FSC), a forum in which the Member States can share and update best practices, and foster the Stakeholders' engagement in radioactive waste management. From 12 to 14 October, Sogin took part in the annual meeting of the Forum on Stakeholder Confidence of the OECD/NEA.

OTHER INTERNATIONAL COLLABORATIONS

In 2021, Sogin supported national institutions in providing figures and details related to the nuclear sector in Italy. Sogin provided the said institutions with several contributions on "Nuclear Technology Review e Nuclear Safety Review 2021", an update of the "Country Nuclear Power Profiles (CNPP) 2021" by IAEA, and a series of proposals and improvement suggested in the NEA Strategic Plan (2023-2028) and in the "NEA Survey of Female Employment in Nuclear Organisations".

During the year, Sogin strengthened its collaboration with South Korean companies operating in the decommissioning and waste management sectors; these relationships were made possible thanks to the Italian Embassy in Seoul and the Italian Trade Agency that organized a meeting with the Korea Atomic Energy Research Institute (KAERI) to investigate collaborations to promote technological innovation in decommissioning and radioactive waste management; the collaboration was further intensified by Sogin participation in the Nuclear Decommissioning Business Forum 2021, organized by the Korea Atomic Industrial Forum. These activities were also recognized by the Ambassador of the Republic of South Korea to Italy, who invited Sogin to a bilateral meeting to receive an updated overview of this collaboration. From13 to 15 September, Sogin was in Avignone to take part in DEM2021 "International Conference on Decommissioning Challenges: Industrial Reality, Lessons Learned and Prospects", organized by SFEN (Société Française d'Énergie Nucléaire), in partnership with Orano, Westinghouse and CEA. The event - with 11 technical tables - was a unique chance for nuclear operators to share their worldwide experience in decommissioning. It saw the participation of more than 200 scientific and research centres, legal experts and companies operating in decommissioning and radioactive waste management from Europe and the world.

During Session 03, "Development of New D&Ds' Technologies", Sogin shared two presentations "Reclamation of an Underground Storage of Radioactive Waste – Irreversible PIT 7.1" and "Graphite management for decommissioning of Latina NPP reactor".

Sogin also took part in the two technical sessions on "Buildings and Sites Rehabilitation" and "Material and Radioactive Waste Management".

CHINESE AUTHORITIES LEARN DECOMMISSIONING

Sogin's learning activities in the framework of the Sino-Italian Capacity Building for environmental protection (SICAB) resumed in November with the training course "Nuclear Waste Management and Decommissioning". As a partner of the project promoted by MiTE "High-training services in sustainable development and environmental management in the framework of the Italian-Chinese bilateral cooperation agreement", that also includes SICAB, Politecnico di Milano requested Sogin to provide 81 employees with a series of on-line learning activities. The students included governmental and non-governmental employees working in the nuclear sector in the People's Republic of China; among these, there is the Nuclear and Radiation Safety Centre (NSC), which ratified a Cooperation Agreement with Sogin in 2019. The training activity, held from 15 to 25 November, included different sessions: an introduction on decommissioning and radioactive waste management, and several specific lessons (i.e., spent fuel cycle; waste from reprocessing operations). Moreover, two lessons focused on monitoring procedures to detect defaults/anomalies, failure diagnostics, nuclear power plants predictive maintenance, and safety monitoring standards

for reprocessing plants. The final session of the course divided into 5 two-hours lessons, held remotely by Sogin and Nucleco's experts.

FOREIGN OPERATORS

Sogin creates and consolidates relationships with the most relevant foreign operators, both from the private and public sectors, to share know-how and experiences and generate advantageous collaborations to grow in the world decommissioning market.
The most relevant collaboration agreements ratified and enforced by Sogin and international partners in 2021 are listed below:

- Agreement with EDF (Electricité De France) - to exchange technical and scientific knowledge for the dismantling of nuclear reactors;
- Agreement with MRI (Mitsubishi Research Institute, Inc.), to create future industrial and nuclear collaborations between Italy and Japan;
- Agreement with the Nuclear and Safety Radiation Center (NSC) to exchange know-how and develop decommissioning and radioactive waste management operations;
- Agreement with SURAO, the Czech state-owned company responsible for the radioactive waste repository of Dukovany, to exchange know-how related to radioactive waste management;
- Agreement with ENRESA (Empresa Nacional de Residuos Radiactivos SA), the Spanish state-owned company in charge of waste management and the construction of a repository for low and medium-activity waste, aimed at exchange useful information and know-how in radioactive waste management;
- Agreement with ANDRA (Agence Nationale Pour La Gestion Des Déchets Radioactifs), the French state-owned company in charge of radioactive waste disposal and management;
- Agreement with ONDRAF (Organisme National Des Déchets Radioactifs Et Des Matières Fissiles Enrichies), the Belgian state-owned company in charge of waste management and the construction of the Dessel repository, to exchange useful information and know-how in radioactive waste management;
- Agreement with ITER (International Fusion Energy Organization), the international organization consisting of members from EU, Russia, China, Japan, USA, India and South Korea, for the creation of an experimental nuclear fusion reactor. This scientific and technical agreement focuses on relevant topics such as radioactive waste and nuclear infrastructure management and the assessment of nuclear engineering and nuclear safety projects;
- Agreement with ARAO, technical organization of the Slovenian State (TSO) operating in the waste management sector, to exchange information and know-how in the field of radioactive waste management.

PROJECTS WITH THE EUROPEAN COMMISSION

In 2021, Sogin continued the implementation of the Horizon 2020 Programme of the European Commission. The projects foster Sogin partnership with non-EU research centres and companies to investigate matters related to its core business:

SHARE (STAKEHOLDERS-BASED ANALYSIS OF RESEARCH FOR DECOMMISSIONING)
It aims at identifying and presenting Research&Innovation needs to the European Commission; these proposals will be used to define the European roadmap for nuclear plants decommissioning, improve safety, reduce expenditure and minimize environmental impacts. In March 2021, during the international workshop DigiDecom2021, the international scientific community presented and validated the outcomes of the Gap Analysis. The project will conclude in March 2022 with the publication of the Strategic Research Agenda and RoadMap.

PREDIS (PRE-DISPOSAL MANAGEMENT OF RADIOACTIVE WASTE)
It aims at detecting and implementing waste management strategies and innovative technologies in the pre-disposal stage, to allow reducing the waste volume and optimising waste treatment procedures. Sogin takes part in the Work Packages, dedicated to the overall strategy for radioactive waste management and treatment, organic liquids conditioning, and the monitoring of final products in the storage phase. During 2021, Sogin held several workshops and webinars to disseminate the preliminary outcomes of the project: The Company also completed the SoTA (State of The Art in packaging, storage, and monitoring of cemented waste) document, drafted according to a survey filled in by the managers

of storage repositories. The document provides an overview of the current international situation in terms of cemented radioactive waste management stored in specific facilities. It specifically focuses on degradation issues, and will be used as a basis to develop innovative monitoring systems and ensure long-term security. https://predis-h2020.eu

INNO4GRAPH (INNOVATIVE TOOLS FOR DISMANTLING OF GRAPHITE MODERATED NUCLEAR REACTORS)
It aims at developing and sharing innovative decommissioning methods and tools for European Graphite-moderated reactors.
Sogin is one of the businesses assigned to this project, coordinated by EDF in partnership with 13 entities from Italy, France, Spain, UK and Lithuania; the project aims at developing a prototype system to assess the state of conservation of graphite blocks in Latina Nuclear Power
Plant.inno4graph.eu/

MICADO (MIGRANT INTEGRATION COCKPITS AND DASHBOARDS)
The project is designed to find new solutions for non-destructive radiological waste characterization using a digitisation process.
Sogin contributes by providing technical support in the definition of the system requirements, technology development and the implementation of the final simulation, expected by the end of 2022. micadoproject.eu/

CLEANDEM (CYBER PHYSICAL EQUIPMENT FOR UNMANNED NUCLEAR DECOMMISSIONING MEASUREMENTS)
It aims at developing new technological solutions for non-destructive radiological characterization during D&D operations. Sogin is involved in the definition of system requirements and use scenarios; moreover, it leads the Work Package on training and final simulation.

Within the framework of the Horizon Europe programme of the European Commission, in 2021, Sogin and other major players in decommissioning and waste management presented a project proposal for the call NRT-01-08: Towards a harmonised application of the international regulatory framework in waste management and decommissioning.

SUPPLY CHAIN

RELATIONSHIPS WITH ECONOMIC OPERATORS

The relationships with the economic operators who take part in tender and contracting procedures for work, service and supply contracts and the qualification system, as well as in those resulting from the conclusion of the relevant procurement contracts or subcontracting authorization contracts, are developed in compliance with the provisions set out by the "Code of Public Procurement" under Legislative Decree n. 50/2016 and subsequent amendments and integrations, and with the guidelines of the National Anti-corruption Authority (ANAC).
To ensure the participation of all economic operators in the reference market during the selection phase, Sogin complies with the principles of integrity, good faith, professional fairness, transparency, sustainability, worker protection/safety, respect for the environment, free competition, equal treatment and non-discrimination.
Moreover, to contract works, services and supplies involving special technology to highly-qualified economic operators, Sogin borrows on the internal qualification system. While performing its activities, Sogin maintains constant relationships with the economic operators representing an excellence in the national and international industrial sector for their technological skills, know-how and specialization; this approach aims at creating a decommissioning supply chain able to seize the opportunities resulting from the closure of the nuclear fuel cycle.

GREEN PROCUREMENT

Based on the provisions of the National Plan for Green Public Procurement, Sogin specifies minimum requirements to be included in its tender rules to promote the use of technologies with a low environmental impact and adopt more sustainable consumption and production models. Starting from 2017, the Company has adopted a specific guideline to include the Minimum Environmental Criteria (CAM) in its tenders; this indication is constantly updated and implemented according to the reference regulations.
In 2021, Sogin established new working teams in its Procurement & Contract unit. These teams are intended to review and standardise the procedures implemented by the contracting authority, both internally and externally, and guarantee compliance with the regulations on sustainability.
Sogin adopted all necessary actions to implement sustainability processes related to the qualification and assessment of the economic operators, and the review of procurement strategies adopted by the Italian contracting authorities.

COMPRAVERDE FORUM
On 6 October, Sogin took part in the Compraverde Forum 2021, the national event dedicated to Green Public Procurement, and presented the Company's vision on sustainability across supply chains. The Compraverde Forum is a reference event in Europe for Green Procurement services, goods, projects and policies. It involves private and public entities and the major players engaged in the implementation and dissemination of green procurement for sustainable goods and services, and in the green transition for production and consumption models.

SUSTAINABILITY MONITOR REPORT
Sogin held a speech during the presentation of the Sustainability Monitor Report, the first sustainability report on the supply chains of large Italian companies.

E-PROCUREMENT AND IMPROVEMENT TO PROCESSES

Sogin is equipped with an E-procurement system that allows the management of tendering and selection procedures through a computerized system.
Following their registration, the economic operators can access the qualification system and apply to the tenders online through the dedicated platform. This system allows verifying the documents attached to the reports for the statements released to the possession of participation requirements and the absence of excluding factors; the system also allows opening, assessing the bids, accessing the bidders' classification and awarding the tender.
By accessing the "Suppliers" section on sogin.it, economic operators can access the necessary modules and information.

These modules are constantly updated according to the latest regulatory developments.
In 2021, the Company issued n. 578 contracts for a total amount of EUR 176.5 million (EUR 264.1 million in 2020), of which EUR 87.9 million related to the commensurate amount (EUR 217.0 million in 2020).
In 2021, to comply with the regulatory updates adopted during the year, Sogin launched a process to adapt to the contract procurement general conditions for works, services and supplies, contractual schemes and decisions to contract, by also including specific clauses in relation to Minimum Environmental Criteria (CAM), life cycle cost and social clause.

VERIFICATION OF REQUIREMENTS FOR ECONOMIC OPERATORS

In compliance with the current regulations, Sogin verifies that the economic operators possess the necessary requirements and do not fall under the exclusion clauses; this process is carried out during the qualification phase and tendering procedures for contractors and sub-contractors, up to the execution of the procurement contract.
In implementation of the Legality Protocol, ratified in 2011 and renewed in 2016 with the Prefectures of the provinces where decommissioning operations are taking place (Alessandria, Caserta, Latina, Matera, Piacenza, Roma, Vercelli), Sogin also carries out anti-mafia checks on the tenders not provided under the above-mentioned regulation, and the economic operators that, in any way, take part in the execution of works, services, rent, transportation or materials supply. At the award stage, Sogin assesses the bid suitability and, if any, excludes any anomalous rebates which may affect labour costs, quality and work safety.
The economic operators must declare to be aware of and consent to the provisions laid down in Sogin Organization, Management and Control Model under Legislative Decree no. 231/2001, which includes the Ethical Code and the Three-year Plan for Corruption Prevention, containing measures to prevent and tackle predicate offences for administrative responsibility, frauds, corruption and maladministration under law no. 190/2012. Nucleco also requires its economic operators to release a similar statement.

In conclusion, contracts have specific clauses providing for the following:

- Economic operators must issue a self-certification to prove that they comply with specific social obligations (i.e., measures to protect the workers and their fundamental rights, the principle of equal treatment and non-discrimination, the protection from child labour, etc.);
- Sogin is entitled to carry out the verification of the requirements stated by the production units or the economic operators' offices.

JOINT RESPONSIBILITY

In line with the best practices of the Italian contracting authorities and in compliance with the current regulation, Sogin performs regular checks on all contracting, sub-contracting and related companies to verify compliance with the workers' rights and the principles of social ethics and transparency, by limiting the risk of "joint and several liability of the principal".
Sogin implemented a homogeneous and joint computerized system to identify all the external employees working in a given contract on a daily basis. Moreover, it carries out massive documentary checks to ensure that the companies working with Sogin comply with salary, social security and insurance obligations.
This activity also includes random checks performed in the working sites. In the event of non-compliance with the employees of external companies working with Sogin and upon official and written request on behalf of the concerned parties, the Company - as the contracting authority -, launches a replacement procedure and provides for the direct payment of the unpaid accrued amounts.
At the end of 2019, the enforcement of Legislative Decree 124/2019 converted into Law no. 157/2019, introduces fiscal responsibility for contracting authorities under Article 4. Therefore, Sogin verifies the contractors, sub-contractors and related parties' fiscal compliance, provided that they meet the following three requirements:

- Firms with contracts with a total annual amount exceeding EUR 200,000;
- Workforce mainly employed in the principal's business premises;
- Employment of capital goods belonging to the Principal or anyway ascribable to the Principal.

VENDOR RATING

The vendor rating process aims at analysing and improving the suppliers' performance, thus providing more transparency between the contracting authority and the contractor. The activity requires Sogin to assess all the contracts ratified, excluding those not exceeding EUR 10,000, professional assignments, subscriptions, leases, utilities, sponsorships and partnerships with entities and institutions.

The assessment is carried out according to the following parameters: compliance with the technical specifications, flexibility/promptness, staff expertise, equipment and instrument suitability, compliance with the execution times and overall evaluation of the performance. As for the works, the assessment related to safety in the workplace and environmental management was also included.
In the event the supplier shows a unsatisfactory performance trend, this may impact the qualification outcomes - in case of a qualified operator - or the likelihood to be assigned future contracts by Sogin. Negative qualification assessment may result in exclusion from the tendering procedures and rejection of qualification requests. This applies to both qualified and non-qualified suppliers.

QUALIFICATION SYSTEM

Since 2010, Sogin has adopted a Qualification System to identify the economic operators to be included during the launch of tendering procedures. The qualification rules adopted by the Company comply with the sectoral regulations and the provisions stated in the guidelines of the National Anti-Corruption Authority (ANAC). Once registered, the economic operators' subscription has an unlimited duration.
The current "Regulation for the establishment and management of a Qualification System for the awarding of works, services and supply contracts of Sogin S.p.A.", issued under Articles 36 and 134 of Legislative Decree no. 50/2016, provides for the possibility to access tenders enlisted in the Register for:

- Works categorized up to class VIII, conventionally fixed at EUR 20,658,000;
- Engineering services not exceeding EUR 3 million;
- services and supplies not exceeding EUR 10 million;

The Qualification System is managed through a digital platform integrated in the Sogin E-procurement system (as defined in the previous sections of this report). Both systems can be accessed through the Procurement Portal, available in the corporate website.
The economic operators can log in to the portal at any moment and submit a qualification application for each commodity category. The operator's application is then processed and examined by the competent unit; finally, the qualification Board resolves on the admissibility or non-admissibility of each commodity based on the requirements defined in the qualification rules and specifications.

NUMBER OF CATEGORIES	NUMBER OF ECONOMIC OPERATORIS	TENDERS ENLISTED IN THE REGISTER	VALUE OF THE TENDERS ENLISTED IN THE REGISTER
180	822 (1,630 categories assigned)	104	EUR 86.7 million (EUR 93.3 million in 2020)

ORDERS ISSUED AND SUPPLIERS' GEOGRAPHICAL DISTRIBUTION

The performance of decommissioning and radioactive waste management operations generates value for the territory by contributing to the industrial and economic development of local business fabrics.
The following tables show the absolute and percentage value of the orders issued by Sogin, divided by type and geographical distribution of the clients.

VALUE OF THE ORDERS ISSUED BY SOGIN DIVIDED BY TYPE

	2021	2020	2019	2021	2020	2019	2021	2020	2019
Type	**AMOUNTS (EUR MILLION)**			**PERCENTAGE STRUCTURE OF THE AMOUNTS**			**NUMBER OF ORDERS**		
Supplies	16.1	19.1	17.6	9.1%	7.2%	15.8%	119	160	181
Works	83.4	130.3	29.8	47.2%	49.3%	26.8%	66	75	61
Services	77,2*	114,7**	64***	43.7%	43.5%	57.4%	393	443	419
Total	**176.7**	**264.1**	**111.4**	**100.0%**	**100%**	**100%**	**578**	**678**	**661**

*of which EUR 18.9 million for nuclear fuel (2 contracts).
** of which EUR 4 million for nuclear fuel (2 contracts).
*** of which EUR 9.3 million for nuclear fuel (6 contracts).

VALUE OF SOGIN'S ISSUED ORDERS BY SITE						
SITE	**2021**		**2020**		**2019**	
	EUR MILLION*	**%**	**EUR MILLION**	**%**	**EUR MILLION**	**%**
Bosco Marengo	1.8	1.0	14.2	5.4	3.4	3.1
Caorso	45.3	25.6	13.4	5.1	9	8.1
Casaccia	8.4	4.7	8.5	3.2	6.2	5.6
Garigliano	22.4	12.7	25.5	9.7	8.9	8
Latina	10.3	5.8	32.2	12.2	8.7	7.8
Saluggia	3.8	2.1	119.5	45.2	11.1	10
Rome Headquarters	48.2	27.3	23.4	8.9	38.6	34.6
Trino	13.3	7.5	17.2	6.5	7.6	6.8
Rotondella	7.2	4.1	9.4	3.6	17.6	15.8
ISPRA-1	1.3	0.7	0.9	0.3	0.3	0.3
Multisite**	14.8	8.4	ND	ND	ND	ND
Total	**176.7**	**100**	**264.1**	**100%**	**111.4**	**100%**

* Please note that the amounts and totals in EUR million related to individual sites are rounded amounts.
** Accounting for multisite contracts takes place from the 2021 reporting.

As for Nucleco, the table shows the suppliers' geographical distribution divided into Regions and the expenditure (%) in relation to the purchases made in 2021.

Reference Region	Number of Contracts	Contract amount in thousand EUR	Incidence on total value
Abruzzo	2	136	1.0%
Basilicata	3	155	1.1%
Campania	3	767	5.4%
Emilia-Romagna	10	2,151	15.2%
Lazio	50	4,826	34.1%
Liguria	1	77	0.5%
Lombardia	31	3,664	25.9%
Piemonte	14	1,616	11.4%
Puglia	7	323	2.3%
Toscana	2	194	1.4%
Trentino-Alto Adige	1	35	0,2%
Veneto	3	205	1.4%
Total 2021	**127**	**14,150**	**100%**

In 2021, Nucleco mainly ratified contracts with two Regions, Lombardia and Lazio.
The high absolute and percentage amount for Lazio Region is mainly due to no. 3 contracts, equalling a total of EUR 2.1 million.
As far as Region Lombardia is concerned, high absolute and percentage values are mainly related to no. 5 contracts, equalling a total of EUR 2.2 million.

ECONOMIC VALUE FOR STAKEHOLDERS

VALUE CREATION AND DISTRIBUTION

The following table reports figures on the creation and distribution of economic value generated by Sogin and Nucleco in the 2019-2021 three-year period.
The table is drafted in compliance with the GRI Standard requirements and it is based on a reclassification of the income statement reported in the Consolidated Financial Statement as on 31 December 2021. It reports:

- The generated economic value corresponds to the measurable economic wealth, produced by Sogin and Nucleco over the year (it includes the value of production, income from participating interests, income and financial charges, changes in ongoing commissioned works and increases in fixed assets for internal work);
- The distributed economic value is a qualitative-quantitative indicator of the Company's social impact and value distribution to the Stakeholders' categories;
- The economic value retained within the Companies corresponds to the wealth ensuring economic sustainability, and it is reinvested in innovative instruments and services to foster continuous improvement.

SOGIN AND NUCLECO GROUP VALUE CREATION AND DISTRIBUTION				
Figures in EUR million	**2021**	**2020**	**DELTA**	**2019**
Economic Value Created	233.55	204.54	**14%**	213.71
Fuel management and reprocessing activities	22.7	5.1	**345%**	29.3
Economic Value Distributed (EVD)	**212.42**	**179.98**	**18%**	**191.45**
Operating Costs	110.94	81.14	**37%**	98.36
Employee wages and benefits	92.92	88.86	**5%**	86.98
Payments to providers of capital	0.63	1.33	**-53%**	0.03
Payments to government	2.77	3.57	**-22%**	1.82
Value distributed to Shareholders	5.15	5.08	**1%**	4.25
Community investments	0.00	0.00	**0.00**	0.00
Retained Economic Value	**21.13**	**24.57**	**-14%**	**22.26**

*The value distributed to Shareholders in 2019 was restated following an integration in respect of dividends distributed.

The economic value distributed in 2021 is equal to EUR 212.4 million, recording an increase (against EUR 179.98 million in 2020).

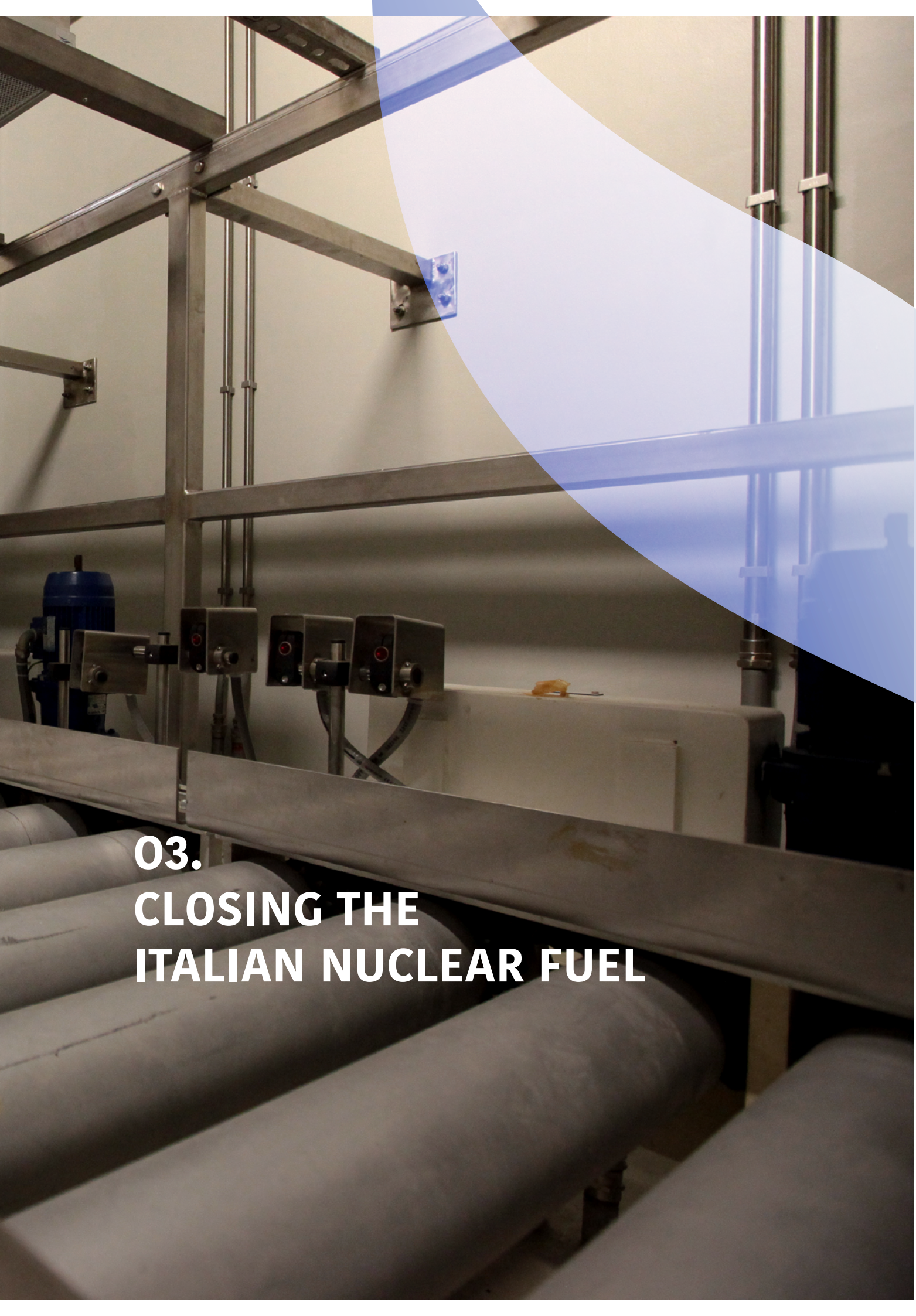
- **Operating Costs (value distributed along the supply chain):** equal to approx. EUR 110.94 million, it is the share of value distributed to the Group suppliers. The entry includes the purchase costs of raw materials, ancillary and consumables, costs for the use of services, for the execution of works and for the use of third-party assets;

- **Employee wages and benefits:** equal to EUR 92.92 million, it is the share of generated economic value distributed to employees, via salaries and wages, social security contributions, severance schemes and services provided to employees (meal services, tickets). Year 2020 records a positive efficiency trend, started in the previous years;

- **Payments to providers of capital:** equal to approx. EUR 0.63 million, it corresponds to the interest due from Sogin Group to its capital providers. Interest payable and other financial charges essentially refer to the interest payable to the CESI supplier, against payment of receivables due from Region Campania;

- **Payments to government:** equal to approx. EUR 2.77 million; it corresponds to the share of economic value allocated to the Government, by means of tax and social security levy (direct, indirect taxation and paid taxes).
- **Value distributed to Shareholders:** equal to approx. EUR 5.15 million, it is the economic value share distributed by the Company's sole Shareholder, as dividends.

The value that Sogin and Nucleco did not distributed to their Stakeholders, was retained by the Companies as amortisation and depreciation and provisions for reserves and risk funds. It is employed to ensure the sustainable growth of the two Companies.



03.
CLOSING THE ITALIAN NUCLEAR FUEL

Closing the Italian nuclear fuel cycle is necessary to free the areas and lands of the nuclear power plants from radiological restrictions and return them to the community; this complex task can be achieved through the decommissioning programme and the safety storage of the resulting radioactive waste.
Back in 1987, with a resolution to interrupt the production of energy from nuclear sources, Italy was one of the first Countries to face nuclear decommissioning. This choice was reconfirmed through a referendum in 2011.
Further details on the history of decommissioning in Italy are provided on sogin.it (decommissioning section).

NUCLEAR DECOMMISSIONING

Decommissioning is the last stage of a nuclear power plant life cycle, after its building and operation stage. Decommissioning includes the following operations:

- Safe maintenance;
- Removal of spent nuclear fuel;
- Decontamination and dismantling of the plant's premises;
- radioactive waste management and storage in interim storage facilities;
- Radiological characterisation and release of the site.

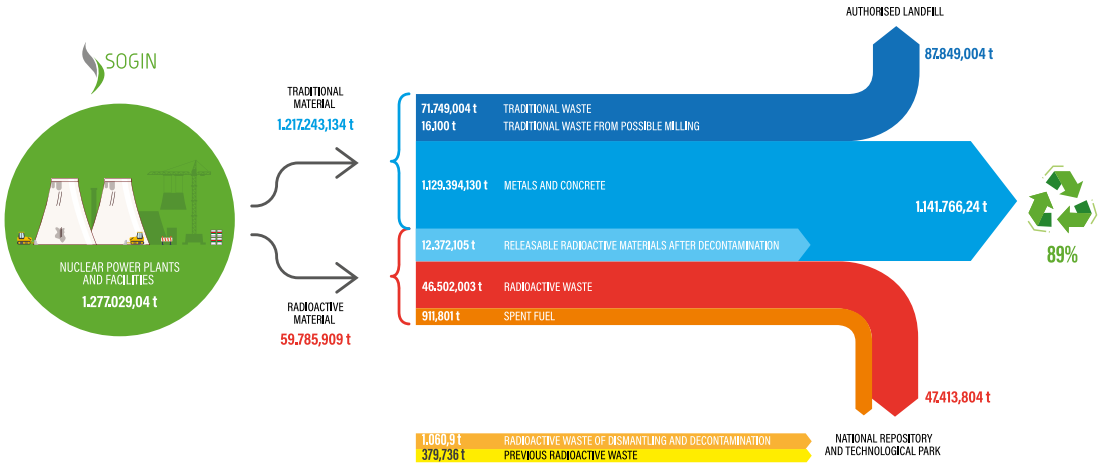
After the completion of decommissioning operations, the conditioned waste, previously stored in the site's temporary repositories, will be ready for conferment to the National Repository. At this stage the area becomes a brownfield site.
With the conferment of the waste to the National Repository, the site will become a greenfield, namely a site free from radiological limitations and ready for reuse.

WASTE MANAGEMENT

During the life cycle of a nuclear power plant, that includes the operation period and the decommissioning stage, two main types of waste are produced:

- non-radioactive waste, resulting from standard industrial processes, which, in turn, is divided into several categories (i.e., hazardous, special waste, etc.).
- Radioactive waste, characterised by a radiological content, is divided into categories according to radionuclide concentration and radioactivity decay time.

In a nuclear power plant, materials such as copper, iron and concrete have no radiological constraints; therefore, they are isolated from radioactive ones and sent for recovery or reused in the site. Two examples of reuse are the dismantling of civil works of the Off-Gas building in Caorso Nuclear Power Plant and the reclamation of the pits of Garigliano nuclear power plant. In the first instance, the demolition of the Off-Gas building in Caorso generated approx. 7,000 tons of (non-radioactive) concrete, which was partly reused to fill the pits resulted from the dismantling of underground systems close to the plant. In the second instance, the excavation made to recover the radioactive waste buried in the trenches resulted in reusable land that was later employed to fill the pits produced by the said excavations. In both operations, the materials underwent radiological checks to verify compliance with release limit values.
In other instances, the materials resulted from dismantling are sent to recovery and treatment centres to be reused in the production cycle. Overall, the dismantling of the eight nuclear sites will allow recycling more than one million tons of materials, equal to an estimated 89% of all dismantled materials.



NON-RADIOACTIVE WASTE MANAGEMENT

Non-radioactive wastes are classified with an EWC (European Waste Code), managed according to standardised procedures and correctly conferred to the authorised entities, by prioritising, in case reuse is not possible, their recovery or final disposal. In this regard, Sogin works at an early phase of the decommissioning to minimise the volume of non-reusable wastes and maximise the production of those sent for recovery. The Company ensures traceability of all wastes, from dismantling to demolition to the final treatment facility or disposal site.

RADIOACTIVE WASTE MANAGEMENT

Radioactive waste management is a complex activity that is carried out during the whole life cycle of a nuclear power plant, from the operation to the dismantling.
Radioactive wastes are collected and subsequently isolated from the surrounding environment for the time necessary to allow their radioactivity levels to decay until they are no longer dangerous for the human health and the environment.

RADIOACTIVE WASTE MANAGEMENT PROCEDURES

Characterisation
It entails the performance of a series of analysis and tests on the waste to identify its chemical, physical and radiological features. These tests can be carried out at different stages of the radioactive waste management:

- At an early stage, to define treatment and conditioning methods;
- At an intermediate stage, to monitor the process trend;
- At a final stage, to verify the accuracy of the treatments and conditioning carried out on the waste.

Treatment
At this stage, the radioactive waste undergoes specific operations to alter its physical shape and/or chemical composition. These operations reduce the waste volume or prepare it for conditioning. Each waste is treated according to its specific features: physical and geometrical shape, type of material, radiological and chemical content.

Conditioning
After treatment, radioactive wastes is transformed into a final product (conditioned radioactive waste + container) that can be handled and stored in a temporary storage facility before conferment to the National Repository. The final product is physically and chemically stable which ensure structural resistance and the insulation of their radiological content. Conditioning generally involves a cementation process, through technologically advanced cementitious materials according to the waste type. Conditioning methods may vary according to the chemical and radiological features of the waste.

Storage
After treatment and conditioning, the waste is stored in specific temporary repositories until its radiological levels decade to lower levels and it can be disposed of in the most suitable way.

Disposal
It is the final stage of radioactive waste management, in which the radioactive waste is sent to a final repository to be disposed of. The final destination (surface or geological repositories) is determined by the waste radioactivity level.

RADIOACTIVE WASTE CLASSIFICATION

There are several categories of radioactive wastes, corresponding to different management options that depend on the radionuclide content and the period employed by radioactivity to decay.
The radioactive wastes in Italy are classified under ministerial decree of 7 August 2015 which divides them into 5 categories according to their radioactivity level (short-lived waste, very low-level waste, low level waste, intermediate level waste, high level waste) that define their specific disposal procedure.

AIGOR: AN INNOVATION IN WASTE MANAGEMENT

In 2021, the development of AIGOR project (IT Software for the Management of Radioactive Objects), launched in 2019, continued; this software enables the extension of the stringent procedures adopted for radioactive waste management to any sources and materials, including releasable ones, which account for previously produced materials, or those that will result from future nuclear decommissioning activities.
The purpose of this new software is to optimise material management, by accurately monitoring all adopted procedures and their outcomes (i.e., in terms of final volumes and related radioactivity), or checking the progress of the management procedures in place for each waste. Accurate analysis of radioactive waste management flows through AIGOR will allow a 5 to 10% reduction of the waste resulting from nuclear decommissioning, thus improving storage capacity.

During 2021, 4 software features were developed:

1. Introduction and verification of all the software functions;
2. Following the issue of Legislative Decree no. 101/2020 and, more specifically, the opening of the ISIN institutional website (STRIMS - System for the Traceability of Solid Wastes and Sources), an interface was added to connect AIGOR and STRIMS in an interoperability system;
3. Extension of the management system to sources in use (sealed and not-sealed), high-activity sources, machinery that employ radiations, and to notify shipments;
4. Creation of an IT exchange hub for the National Repository, to allow access to all necessary information collected by the Company's central offices. This hub will feature specific design and management functions after the construction of the Repository.

Thanks to this system, all corporate activities in the field of radiological protection will be collected and analysed in a single environment, thus allowing forecasts and planning of related management operations.
In conclusion, the completion of these changes will result in the following:

- As for radioactive wastes, Sogin will increase the number of waste information records (now 400) to 40,000; each record will provide information on a single waste. Moreover, the waste records in use now consist of 25 fields, while the new ones will have about 930 fields (moving from 10,000 to 37,000,000 processed information, with at least one third of completed fields, thus improving the level of detail provided for radioactive wastes a thousandfold);
- As for the sources, the site-related management will become centralized to integrate procedures for the management of spent sources; overall, this system will collect thousands records for the sources in use (both sealed and not-sealed);
- As for the National Repository, the new system will allow live updates on data and access to information such as estimated future production, and process traceability. Moreover, third parties will have the chance to upload their data in the hub linked to the National Repository, thus improving the quality of information even outside the Sogin system.

The AIGOR implementation and the alignment with the obligations set out under Legislative Decree no. 1010/2020, will lead to the full standardisation of corporate management and administrative procedures on radioactive wastes, sources in use and machinery employing radiations.
The system will be also equipped with a validation mechanism for the changes occurred in the records. The admissibility of changes will be defined by Sogin through public and permissionless blockchains. In this way, data and process integrity and information security are further ensured, allowing their conservation for future generations.
Over the next years, AIGOR will be further integrated with the management systems, allowing direct data acquisition through different technologies. This 4.0 industrial system will result in fully integrated and optimised processes and impacts, including in the field of circular economy, placing Italy at the cutting edge of this sector in Europe.

SOGIN RADIOACTIVE WASTES INVENTORY

The following tables list Sogin Inventory of Radioactive Wastes as on 31 December 2021.
The wastes reported in the table are divided into “to be treated”, namely wastes pending treatment and conditioning before conferment to the National Repository, and “final products”, or wastes ready to be conferred to the National Repository.

SOGIN RADIOACTIVE WASTES INVENTORY AS ON 31/12/2021

Unit of measurement: cubic metres (rounded to cubic metres for single category and type of wastes in each site)

	Short-lived radioactive wastes		Very low-level wastes		Low-level waste		Intermediate level waste		High level waste		Total		Note
	2021	2020	2021	2020	2021	2020	2021	2020	2021	2020	2021	2020	
Caorso	0	0	847	828	353	988	0	0	0	0	1,200	1,816	1
Final products	0	0	112	103	10	8	0	0	0	0	122	111	
Pending treatments	0	0	735	725	343	980	0	0	0	0	1,078	1,705	
Garigliano	0	0	1,268	1,673	1,138	1,142	85	90	0	0	2,491	2,905	2
Final products	0	0	55	55	923	921	85	90	0	0	1,063	1,066	
Pending treatments	0	0	1,213	1,618	215	221	0	0	0	0	1,428	1,839	
Latina	0	0	1,631	786	292	641	467	422	0	0	2,390	1,849	3
Final products	0	0	16	18	26	2	94	89	0	0	136	109	
Pending treatments	0	0	1,615	768	266	639	373	333	0	0	2,254	1,740	
Trino	0	0	1,154	989	316	221	44	65	0	0	1,514	1,275	4
Final products	0	0	0	35	0	78	0	3	0	0	0	116	
Pending treatments	0	0	1,154	954	316	143	44	62	0	0	1,514	1,159	
Bosco Marengo	0	0	214	172	353	328	1	0	0	0	568	500	5
Final products	0	0	213	164	350	323	1	0	0	0	564	487	
Pending treatments	0	0	1	8	3	5	0	0	0	0	4	13	
Casaccia	0	0	0	0	2	3	517	460	0	0	519	463	6
Final products	0	0	0	0	0	0	0	0	0	0	0	0	
Pending treatments	0	0	0	0	2	3	517	460	0	0	519	463	
Saluggia	0	0	1,627	1,426	473	633	774	565	0	0	2,874	2,624	7
Final products	0	0	337	298	86	86	1	34	0	0	424	418	
Pending treatments	0	0	1,290	1,128	387	547	773	531	0	0	2,450	2,206	
Rotondella	0	0	3,214	2,657	297	674	311	194	0	0	3,822	3,525	8
Final products	0	0	1,056	882	245	220	182	163	0	0	1,483	1,265	
Pending treatments	0	0	2,158	1,775	52	454	129	31	0	0	2,339	2,260	
Cemerad	29	25	182	265	413	244	1	1	0	0	625	535	9
Final products	0	0	0	0	0	0	0	0	0	0	0	0	
Pending treatments	29	25	182	265	413	244	1	1	0	0	625	535	
ISPRA-1	0	0	108	90	4	3	1	1	0	0	113	94	10
Final products	0	0	0	0	0	0	0	0	0	0	0	0	
Pending treatments	0	0	108	90	4	3	1	1	0	0	113	94	
Total	**29**	**25**	**10,245**	**8,886**	**3,641**	**4,877**	**2,201**	**1,798**	**0**	**0**	**16,116**	**15,586**	
Final products	0	0	1,789	1,555	1,640	1,638	363	379	0	0	3,792	3,752	
Pending treatments	29	25	8,456	7,331	2,001	3,239	1,838	1,419	0	0	12,324	12,014	

Changes from the previous year depend on reclassifications resulted from new radiological characterisation and/or reassessment of treatment operations and storage volumes, or are due to the production and management of radioactive waste during 2021. The main activities performed in this year include:

5. **CAORSO:** production of wastes (i.e., technological materials, debris, sludge, resins, etc.), release of removable materials (i.e., debris and technological materials) and shipment of casks containing sludge and resins abroad for incineration.
6. **GARIGLIANO:** shipment of metals abroad for smelting and return of the overpacks resulted from supercompaction.
7. **LATINA:** production of wastes from decommissioning (i.e., land collected from reclamation activities, technological materials, metals, concrete debris) and from previous treated wastes, with the production of final products (sludge) resulted from conditioning in the LECO plant.
8. **TRINO:** production of wastes during planned dismantling and safe maintenance operations, reassessed the need to treat previously conditioned wastes, waste shipment to Nucleco for the launch of new supercompaction campaigns and return of the overpacks produced by previous campaigns.
9. **BOSCO MARENGO:** production of final products resulting from treatment and conditioning performed in Nucleco. The wastes to be treated are VLLW and LLW divided into 9 Overpacks CC-380 previously conditioned and inserted in 5 CP-5 2 containers.
10. **CASACCIA:** repackaging of previous wastes, production of ILW resulting from the plants operations and safety maintenance.
11. **SALUGGIA:** production of conditioned wastes resulted from treatment in Nucleco, production of new wastes and shipment of wastes to Nucleco for treatment.
12. **ROTONDELLA:** repackaging of previous wastes, production of wastes from safety and maintenance operations, reclamation/decommissioning and treatments (i.e., TAF plant, technological wastes, supercompaction, etc.).
13. **CEMERAD:** in 2021, no wastes were shipped to foreign plants
14. **ISPRA-1:** production of technological wastes.

The following table reports the inventory of Nucleco's radioactive wastes as on 31 December 2021; these wastes include those directly managed by the
subsidiary company, as well as those resulted from decommissioning operations in Casaccia site and from industrial, research and medical and health activities. The latter, after
treatment and conditioning, are assigned to ENEA according to the Integrated Service by-law, as established by CIPE resolution
Of 1 March 1985, aimed at centralizing the management of wastes resulted from medical, industrial and research activities in Italy.

INVENTORY OF RADIOACTIVE WASTES STORED IN CASACCIA AND MANAGED BY NUCLECO AS ON 31.12.2021

Unit of measurement: cubic m

	Short-lived radioactive wastes	Very low-level waste	Low-level waste	Intermediate-level waste	High-level waste	Total
Conditioned	0	2013	2046	313	0	4372
Non-conditioned	413	1143	1899	153	0	3608
Transited	0	287	16	0	0	303
Total	**413**	**3443**	**3961**	**466**	**0**	**8283**

The wastes produced by Sogin and managed by Nucleco, return to their sites of origin after treatment and conditioning. Exception is made for the wastes produced in Casaccia, which are stored in Nucleco storage facilities and reported in the inventory of the subsidiary Company.

FUEL AND NUCLEAR MATERIALS MANAGEMENT

Nuclear power plants and research reactors operate by burning-up nuclear fuel; this procedure is triggered by the interaction of neutrons and the materials contained in fresh fuel. This reaction, called nuclear fission, occurs in the reactor.

At the end of its lifecycle the fuel contains about 97% of the radioactivity of the nuclear site and it is defined “irradiated”.
The preliminary operation for the most complex decommissioning activities involves the dry storage or reprocessing (back-end stage) of the spent fuel after it was burned-up in the reactor and cooled in the ponds. In the first instance, the spent fuel is stored within special casks in temporary storage facilities, and subsequently disposed of in a suitable site (Once-through Fuel Cycle). In the second instance, instead, reprocessed spent fuel is recovered and reused in a nuclear power plant (Closed Fuel Cycle).

IRRADIATED FUEL SPENT ABROAD

The overall amount of the irradiated nuclear fuel resulted from the operation of the Italian nuclear power plants amounts to about 1,864 tonnes, 99% of which was sent abroad for reprocessing.
An estimated 913 tons out of the total amount have been reprocessed abroad under the terms of former contracts ratified with Enel, while the remaining nuclear substances have already been transferred. The remaining 951 tons are included under the reprocessing contracts ratified by Sogin with the French Company ORANO (previously AREVA) and the British Company Nuclear Decommissioning Authority (NDA). 938 out of the previous total have already been shipped to reprocessing plants.

IRRADIATED NUCLEAR FUEL SENT ABROAD (UNDER THE CURRENT REPROCESSING CONTRACTS)

Destination	Mass*	Number of elements/Type	Origin	N. of executed shipments
UNITED KINGDOM (Sellafield - Dounreay) 1969-2005**	716.3 t***	50.893 + 19 rods/ BWR, PWR, MAGNOX	Garigliano, Trino, Latina	102
FRANCE (La Hague) 2007-2015	190.4 t	1,032 + 6 rods/ BWR	Caorso	16
	16.8 t	52 PWR cruciform fuel elements Trino 48 PWR squared fuel elements Trino 48 BWR semi-rods Garigliano	Avogadro Repository	5
	14.5 t	47 PWR fuel elements of which: 39 UO2 elements 8 MOX elements	Trino	2
Total	938 t			

*Mass (in tons) of heavy metal before radiation.
** In 2014, the NDA finalised the treatment of the last Sogin fuel batch located in Sellafield, in the UK.
***The reported quantity includes the fuel resulted from 19 rods sent from Garigliano to Dounreay (Scotland) by ENEA: the contract ended in July 2017 during the negotiations with the NDA on the replacement, minimisation and return of residual materials.

NUCLEAR IRRADIATED FUEL MANAGED BY SOGIN STILL LOCATED IN ITALY

Destination	Mass*	Number of elements/Type	Origin	N. of executed shipments
FRANCE (La Hague)	13.2 t*	64 fuel elements 63 MOX BWR Garigliano 1 PWR squared fuel element Trino	Garigliano, Trino, Latina	3
	0.115 t**	Barrette, spezzoni e campioni	Caorso	TBD
	1.679 t**	64 elementi Elk River (Uranio arricchito e torio)	Avogadro Repository	TBD

*Mass (in tons) of heavy metal before radiation.
** Mass of heavy metal after radiation. Value according to the Euratom report.

RESIDUALS FROM REPROCESSING

Based on the contracts ratified with the French company ORANO and the English Company NDA, the residuals resulted from reprocessing will return to Italy to be temporarily stored in a long-term storage area designed for highly-radioactive waste belonging to the National Repository (CSA).

- **Residuals from France:** based on the agreements ratified with ORANO, after the reprocessing of the waste quantity provided under the contract, including the wastes pending shipment, 15.4 m3 of highly-radioactive vitrified waste and 47.6 m3 of compacted metal residuals, net of transport and storage casks, are expected to return to Italy.
- **Residuals from the UK:** as under the agreement ratified between Sogin and NDA on 17 July 2017 to replace the residuals resulted from the reprocessing of Italian fuel in the UK (as defined in the Directive of the Ministry for Economic Development of 10 August 2009), Italy will only receive highly-radioactive vitrified residuals with a volume ranging between 19 and 20.5 m3, net of shipment and storage casks.

IRRADIATED FUEL FROM FUEL CYCLE FACILITIES

The management of fuel cycle facilities, appointed to Sogin in 2003, involved the management of the fuel located in the sites of Casaccia and Rotondella facilities. The current programmes provide for the conferment of the fuel to the National Repository for dry storage, after being treated and stored in metallic casks. Almost all this material consists of 64 Elk River fuel elements of US origin for a total weight of approx. 1.7 tons.

SOGIN NUCLEAR MATERIALS RESULTED FROM REPROCESSING ABROAD

The following table reports the quantities of Uranium and Plutonium recovered by Sogin from foreign reprocessing facilities.

	NUCLEAR MATERIALS			
	Allocated quantities		Estimated total quantity at the end of the allocation to UK and, in case of transfer completion and implementation of reprocessing in France	
	Uranium	Fissile Plutonium	Uranium	Fissile Plutonium
	[t]	[kg]	[t]	[kg]
UK (Sellafield)	701	1,074*	701	1,074*
FR (La Hague)	190.6	0**	228	164***

* Total quantities allocated to Sogin by NDA as on the date of allocation.
**The Plutonium resulting from reprocessing of nuclear fuel delivered to France at 31/12/2021 was transferred for valuable consideration
based on the agreements ratified between Sogin and ORANO.
*** Quantity calculated as on 31/12/2021, with estimated decay based on Enel figures collected upon the reactor unloading. The quantity reported in the table corresponds to the estimated quantity of fissile Plutonium which was not transferred to ORANO. Figures rounded to the nearest integer value.

According to the Directive of the Ministry for Productive Activity n. 5023/2006, the fissile materials resulted from reprocessing in France and the UK should be transferred for valuable consideration. Sogin no longer holds fissile plutonium in France, following the transfer of ownership of the fuel shipped so far under the shipment and reprocessing contract, and the Plutonium resulted from virtual reprocessing of Sogin irradiated fuel share at Creys Malville plant.
Among the materials allocated to Sogin after fuel reprocessing in the UK, there are the materials allocated according to the agreements ratified with NDA in 2017 (agreement of “Replacement and Minimisation” and virtual fuel reprocessing in Dounreay) and in 2019 (non-standard virtual fuel reprocessing of Trino and Garigliano).
In February 2019, the NDA notified Sogin of the availability of the Uranium and Plutonium recovered from the reprocessing of irradiated nuclear fuel of Trino under the 1974 agreement.

SITES UNDER DECOMMISSIONING

Trino Nuclear Power Plant (VC)

The “Enrico Fermi” Nuclear Power Plant in Trino is the plant that recorded the best performance benchmark in Italy. It was also the first experience in the history of the Italian nuclear industry.

Saluggia EUREX Plant (VC)

The EUREX plant was employed to conduct studies on the reprocessing of irradiated nuclear fuel, and separate the fissile materials suitable for reuse.

Bosco Marengo FN Plant (AL)

Bosco Marengo (Fabbricazioni Nucleari) Nuclear Fabrications plant produced fuel elements to supply Italian and foreign nuclear plants.

Caorso Nuclear Power Plant (PC)

Caorso nuclear power plant was the largest operating plant in Italy. Although its short period of operation (from 1981 to 1986), this nuclear power plant produced approx. 29 billion kWh.

OPEC and IPU Plants in Casaccia (RM)

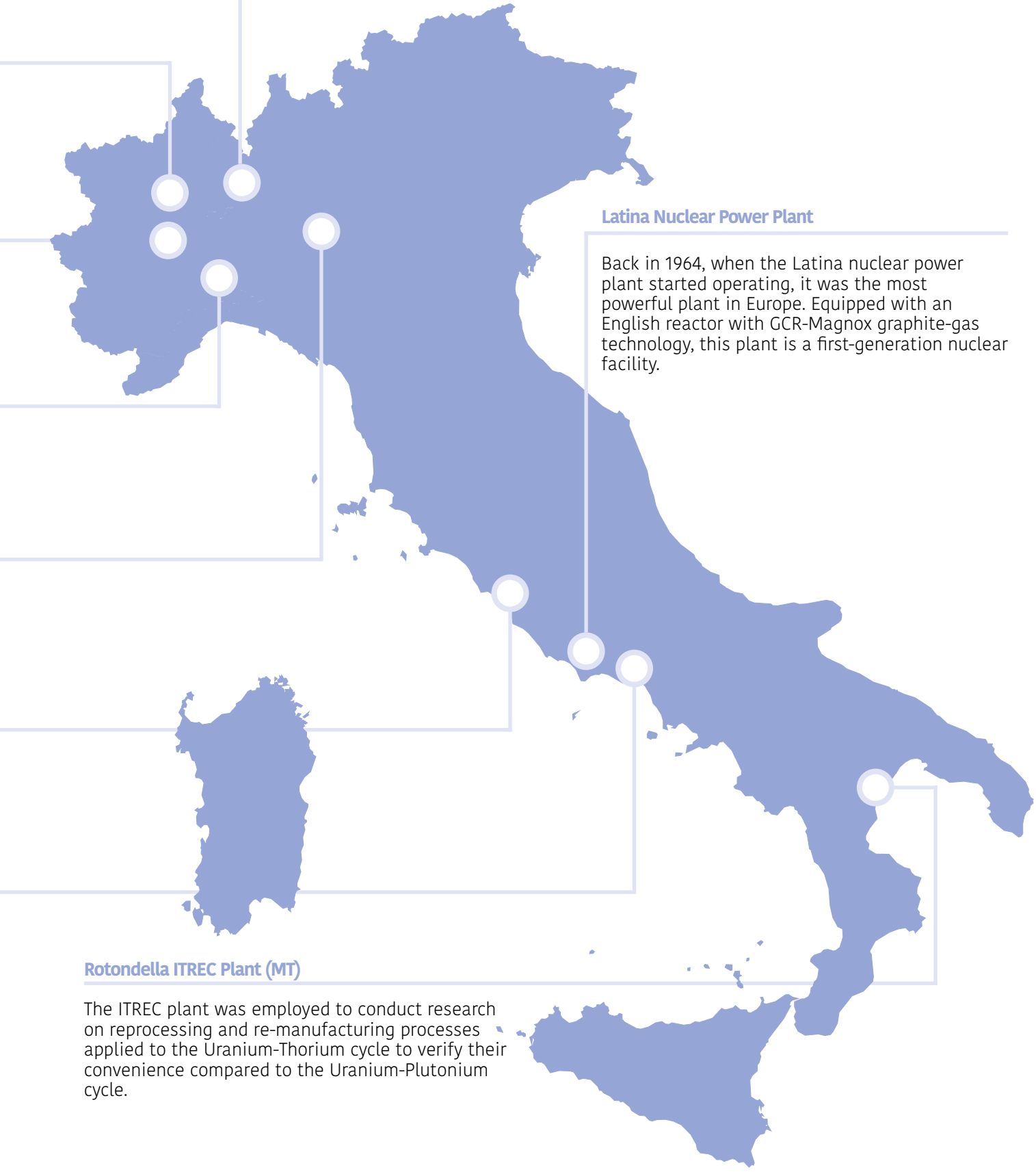
OPEC-1 plant, located in the Casaccia Research Centre, was the first plant in Italy that performed research and analysis on nuclear fuel elements after radiation.

Garigliano Nuclear Power Plant (CE)

The “Garigliano” nuclear power plant in Sessa Aurunca hosted the first BWR reactor (Boiling Water Reactor) operated in Europe. Like Trino and Latina facilities, this power plant belongs to the first generation of nuclear power plants.

ISPRA-1 Reactor (VA)

The ISPRA-1 reactor, latest version of the Chicago-Pile 5 designed and developed by Enrico Fermi, was the first Italian research reactor.



Latina Nuclear Power Plant

Back in 1964, when the Latina nuclear power plant started operating, it was the most powerful plant in Europe. Equipped with an English reactor with GCR-Magnox graphite-gas technology, this plant is a first-generation nuclear facility.

Rotondella ITREC Plant (MT)

The ITREC plant was employed to conduct research on reprocessing and re-manufacturing processes applied to the Uranium-Thorium cycle to verify their convenience compared to the Uranium-Plutonium cycle.

CAORSO NUCLEAR POWER PLANT

EMPLOYEES	94
STORED RADIOACTIVE WASTES (M3)	1,200
DECOMMISSIONING START DATE	1999
BROWNFIELD	2031

ONGOING PROJECTS AND OPERATIONS

In 2021, Sogin continued working in the **turbine building** to realize a temporary storage area (buffer area) and a Waste Treatment Station (WTS) for the management of radioactive waste that will result from the dismantling of the plants and components of the reactor building. Moreover, SAT (Site Acceptance Tests) on the CRP1 overhead cranes were launched.
During the year, the construction works for the **Waste Route** were completed. The Waste Route is an infrastructure connecting the reactor building with the turbine building to allow the safe handling of the materials resulted from the dismantling of the reactor systems.
As for the activities to adjust the two temporary repositories for low-level waste to the new safety standards, in 2021 **Repository no. 2** was demolished and rebuilt. All the elevation walls, both external and internal, were completed, the roof support structure was laid, the overhead crane runways were installed, and FAT (Factory Acceptance Test) was carried out.
In 2021, Sogin contracted the adaptation works for the **ERSMA Repository**, a storage for intermediate-level wastes; moreover, the Company prepared the Demolition Executive Project (PED).
For the site's safe maintenance these actions were implemented: completion of the new Environmental Laboratory and the new deferrization plant; completion of the last extraordinary maintenance activities for the medium voltage supply line.

#SOGINSOSTENIBILE - RADIOACTIVE RESINS AND SLUDGE TREATMENT

In 2021, Sogin continued the shipment of radioactive resins and sludge to the Slovakian plant of Bohunice. During the year, Sogin carried out 14 shipments for a total of 2,668 radioactive casks removed from the sites. Once in Bohunice, the wastes undergo incineration and conditioning, resulting in a 90% reduction in volume. The ashes obtained from the treatment are conditioned in capsules and inserted in a cement matrix within stainless steel containers with a capacity of 440 litres. After conditioning, the final products will return to Caorso and be stored in the site's temporary repositories. In 2021, the company generated about 161 tons of pre-treated resins. 155 tons out of the total were incinerated and resulted in 16 final products. After the transfer of resins and sludge, accounting for an estimated 70% of the wastes currently stored in Caorso, the three temporary repositories of the site will be emptied and adjusted to the current safety standards, without having to build other temporary storage facilities. In April 2022, the transfer of radioactive sludge and resins to Slovakia was completed.

MAIN AUTHORISATIONS OBTAINED IN 2021

During 2021, the Caorso Nuclear Power Plant did not obtained authorisations.

PROCEDURA DI BONIFICA

In the framework of groundwater monitoring launched in 2012, in October 2016, exceedance of CSCs for the parameter PCB (polychlorinated biphenyls) was detected for a single sampling point located within an impermeable baffle. A subsequent analysis carried out on water samples collected from external sampling points, showed that the potential contamination was contained.

- In April 2021, joint sampling with ARPAE was carried out to verify that the PCB concentrations in surface water table were lower than the CSCs provided in Table 2, Annex 5 under Title V of Section IV of Legislative Decree no. 152/06 and subsequent amendments and integrations.
- In June 2021, ARPAE submitted the findings of the tests showing that PCB was still present.
- In July 2021, another joint analysis was carried out with ARPAE and a pump & treat system was launched (this land reclamation system pumps up the contaminated groundwater to treat it on the surface)
- In August and September 2021, the pump & treat system underwent maintenance checks to adjust functioning
- Since the end of November 2021, the system has worked regularly and efficiency tests to check the PCB reduction are now in progress.

GARIGLIANO NUCLEAR POWER PLANT

EMPLOYEES	62
STORED RADIOACTIVE WASTES (M3)	2,491
DECOMMISSIONING START DATE	1999
BROWNFIELD	2026

ONGOING PROJECTS AND OPERATIONS

The operations to restore the flooding systems of the ponds and the reactor channel in the **reactor building** started. More specifically, an inspection was carried out in the Vessel (premise L42), to verify the liner resistance before the execution of cutting operations on the internals, which will be performed under water heads. During these operations, the fuel grapple will be also restored. During the plant operation, this system allowed clasping the fuel elements safely and handling them within the vessel and the pond. The preliminary works to dismantle the thermal cycle plants in the **turbine hall** continued. The stand alone testing of the treatment stations installed in the "control floor" was executed; the stations will be employed to cut and decontaminate the systems and components of the thermal cycle. In 2021, the activities to remove the waste buried in **trench number 1** were completed, and non-contaminated excavation land was used to fill the pit.

As for the **former Compactor**, in 2021, the preliminary activities to adjust it to a temporary repository were concluded and characterisation operations were launched.

In 2021, the Company also launched the Detailed Technical Design phase for the implementation of **Repository D2** for the management and safely storage of wastes resulting from future decommissioning operations. ISIN approved the Design at the end of December.

As for the Transportation and treatment of metallic materials, in 2021 four shipments were carried out in ISO-container IP2, resulting in an estimated 240 tons of material delivered to the Cyclife Sweden AB smelting facility, in Sweden. Moreover, in December the first treatment campaign was launched. Approximately one tenth of the quantity originally shipped will return to the site. These materials will be stored in the temporary repositories located on-site pending their shipment to the National

Repository, once completed. This is a common method in this industry, as it allows reusing most of the dismantled metal while also significantly reducing the quantity of radioactive waste produced.

#SOGINSOSTENIBILE - IMPLEMENTATION OF A NEW TREATMENT SYSTEM FOR RADIOACTIVE LIQUID WASTES (NEW RADWASTE)

In 2021, the new treatment system for radioactive liquid wastes (New Radwaste) was completed and functional tests produced a positive result. The new system, equipped with evaporation and drying plants, will minimize the production of secondary wastes resulting from the purification of radioactive liquids; once decontaminated, the latter will be drained in the Garigliano river.
The evaporation/drying plant and the new tanks to collect effluents before and after treatment, are installed in renovated premises which previously accommodated the old treatment system.
The issue of the authorisation to operate the plant on behalf of ISIN is still pending.

MAIN AUTHORISATIONS OBTAINED IN 2021

AUTHORISATIONS
Approval of the Dosimetric Verification Plan to Manage the excavation land resulted from Trench no. 1
Approval of the Detailed Plan for the Adaptation of the Ex-ECCS temporary Repository
Approval of the Operative Plan for the Extraction of sludge and solids from containers T12, T13 and T26
Approval of the Technical Report for the implementation of Repository D2 that will be adjusted to store radioactive
Authorisation to operation of restored auxiliary systems in the Reactor building

RECLAMATION PROCEDURE

The performance of the environmental monitoring activities provided under the environmental compatibility decree led to discover concentrations of trichloromethane, fluorides and Methyl-T-Butyl Ether (MTBE) in ground water exceeding the CSCs. This resulted in the need to launch the reclamation procedure. In 2021 there are no updates on the reclamation procedure.

LATINA NUCLEAR POWER PLANT

EMPLOYEES	86
STORED RADIOACTIVE WASTES (M3)	2,390
DECOMMISSIONING START DATE	1999
BROWNFIELD (END OF PHASE 1)	2027

ONGOING PROJECTS AND OPERATIONS

As for the **Facility for the treatment of materials**, in 2021 plants and civil works were completed. The Facility will be employed to treat slightly contaminated metals resulting from the demolition of the six boilers of the nuclear power plant (approx. 3,600 tons), the dismantling of the effluents treatment plant (approx. 20 tons) and the reclamation of the premises of the reactor building (approx. 130 tons).
In October 2021, the operation of the LECO (Latina Extraction and Conditioning) plant was authorised; this system is designed to extract and condition the sludge generated during the plant previous operations in cementitious matrix. 15 m3 of radioactive sludge were extracted, shipped and conditioned in cement matrix; the operation, in line with the programmed time frame, started in November 2021 and ended in Spring 2022. Approximately 70 final products resulted from sludge extraction and conditioning were skipped to the temporary repository of the nuclear power plant, pending their final conferment to the National Repository, once completed. Moreover, in 2021, civil works were completed for the new **Active Effluents Treatment Plant (ITEA)**, designed to treat the liquids generated during the decontamination of decommissioned materials and washing of PPEs. The ITEA plant will be built in an area close to the building that houses the current active effluents treatment plant which, in turn, will be dismantled. As far as this plant is concerned, during the year, Sogin continued the removal of the old line used for the transportation of active effluents and completed the implementation of safety measures in the pit and foundations. Moreover, during the year, Sogin completed the **removal and reclamation of asbestos containing materials (ACMs)** as well as the clearance of the components from the water supply plant connected to the old **fire-fighting** system (more specifically, the pumps located under the bridge of SP42 (Province Street no. 42) in Borgo Sabotino).

#SOGINSOSTENIBILE - DEMOLITION OF THE BOILERS SCREENS

In 2021, all the material resulted from the demolition of the screens located outside the reactor building was sent to recovery: 1,173 tons including cement, iron and wood.
The demolition works, launched in August 2020, ended in October. The engineering solution adopted ensured the maximum safety during the performance of works and the minimum environmental and structural impact in terms of dust generation. Specifically, each screen consisted of two parts: An upper horizontal element (approx. 145 tons) connected to the reactor building and a lower vertical element (approx. 50 tons) removed from the boiler. To remove such elements, Sogn executed a controlled demolition with overhead cut at an elevation of 50 m, operated with a diamond wire machine. Once cut, each block was placed on the ground and transferred to another area to separate the iron from the concrete parts.

MAIN AUTHORISATIONS OBTAINED IN 2021

AUTHORISATIONS
Request to operate the LECO plant for extraction and conditioning of radioactive sludge (Article 93 of Legislative Decree no. 101/2020).
Operating Plan for the transportation and smelting of radioactive metallic materials. Act of approval ISIN/ AA/2021/06/LATINA.
Notification to Lazio Region - Regional Directorate for Environmental Policies and Waste - Unit for Extraction Operations, related to the increase in the repository storage capacity for mineral oils not exceeding 20 m3.
Operating Licence for an engine-generator > 1KW, issued by Gaeta Customs Office.
Acquisizione dell'autorizzazione ai soli fini idraulici per l'occupazione temporanea di aree del demanio idrico fluviale.
Agreement between Lazio Region, Sogin and the Municipality of Latina to recover the bridge on "Canale Mascarello" (Mascarello Channel) as a balancing and compensatory environmental measure.

RECLAMATION PROCEDURE

In the performance of the environmental monitoring activities to verify environmental compatibility, in December 2013 Sogin carried out checks on groundwater through the piezometers located on-site. The inspection led to discover anomalous concentrations of chloride and vinyl. Consequently, a reclamation procedure was launched.

- In April 2021, a communication was sent to the Conference of Services to notify CSCs values exceeding the threshold defined by the site-specific health risk analysis.
- In June 2021, the Conference of Services held a meeting to request the preparation of the reclamation plan or MiSOp.
- In October 2021, Sogin submitted the Reclamation Operating Plan: Phase 1
- In November 2021, the Municipality of Latina invited the Conference of Services to request integrations or issue an opinion by December 2021. Sogin is waiting for the opinion that will be provided by the Conference.

TRINO NUCLEAR POWER PLANT

EMPLOYEES	64
STORED RADIOACTIVE WASTES (M3)	1,514
DECOMMISSIONING START DATE	1999
BROWNFIELD	2031

ONGOING PROJECTS AND OPERATIONS

In 2021, the Detailed Technical Design for the dismantling of the vessel primary system was completed. The vessel was employed to cool the reactor during the plant's operation. Moreover, the Company concluded the extraordinary maintenance operations needed to open the vessels (i.e., installation of a service gangway in the reactor cavity; the adaptation of two overhead cranes located in the container and in the reactor's auxiliary building, respectively).
The vessel dismantling operations will be performed under water head; therefore, the previous systems and plants employed to flood the vessel pond will be restored.

In 2018, Sogin developed the Detailed Technical Design for the main decommissioning operation that involves dismantling the primary circuit and related auxiliary systems. In 2021, the contract for the Detailed Technical Design and execution of the activities with Nucleco was ratified. In the last quarter of the year, Sogin received the Detailed Technical Design for the monitoring stage. In April 2022, the Company received the authorization issued by the Supervisory Body.
During the year, the removal of the **"activated" components from the purifier pond** continued in the auxiliary plant building. These components include pieces and chips resulted from the cutting operations on the reactor thermal screen, carried out during the plant's operation. More specifically, part of the chips and pieces were moved to make room for the components needed to transfer the pieces of the thermal screen. After the pool was emptied and decontaminated, the auxiliary plant building will undergo adjustments before the installation of a cementation station for the radioactive wastes produced during the site's decommissioning. In 2021, in the framework of the project for the partial

dismantling of the turbine building, Sogin carried out works to adjust the area before the building.
As for the alternative RadWaste with evaporator, which will be employed in the treatment of liquid streams generated during decommissioning activities, the Company completed the installation of mechanical and electrical components in the plant.
In the framework of decommissioning preliminary operations, the Company completed the works related to the adjustment and replacement of the low-pressure fire-fighting system; this system was old and presented worn sections. This renovation activity will result in increased safety and energy and cost efficiency for the plant.

#SOGINSOSTENIBILE – SMELTING OF METALLIC MATERIALS

Smelting is a decontamination process to treat the metals resulted from dismantling operations; its strategical nature has a double result: the material decontamination and the volume reduction of the final waste to be conferred to the plant's temporary repositories. More specifically, smelting applies to the metallic materials resulted from the dismantling operations of the primary and auxiliary systems, as well as from all the systems connected to the nuclear island (i.e., ponds, radioactive liquid and gas treatment plants, maintenance equipment, etc.). Smelting generates metal ingots and metal scraps. These materials contain most of the radioactivity of the overall materials sent for treatment. Due to the lack of Italian smelting facilities authorised to treat radioactive metallic materials, smelting is carried out in Studsvik (Sweden). The Italian smelting facilities only treat materials that comply with their acceptability requirements, which include both radiological and physical-chemical features (i.e., they do not treat materials containing organic substances, asbestos or rubber). Smelting results in:

- **Recyclable materials:** ingots that can be recycled in the Country in which the smelting facility is located;
- **Non-recyclable materials** the estimated overall quantity of non-recyclable materials is equal to 1 cubic metre per 10,000 kg smelted materials. These materials return to Sogin and include: non-releasable ingots free of radiological restraints in the Country in which the smelting facility is located; secondary conditioned waste (such as slags, powders, refractory materials).

MAIN AUTHORISATIONS OBTAINED IN 2021

AUTHORISATIONS
Detailed Design Report for the Adjustment of the temporary repository no. 2 for radioactive waste.

RECLAMATION PROCEDURE

In September 2015, to define the qualitative features of the "groundwater" component before starting adaptation operations of the "Test Tank" into a temporary Repository, Sogin launched an environmental monitoring campaign. The laboratory analysis performed on ground water samples outlined some anomalous concentrations of metals, such as aluminium, arsenic, iron, and manganese.

- The operations provided in the approved Monitoring Plan for Groundwater continued regularly in 2021.

BOSCO MARENGO FN PLANT

EMPLOYEES	35
STORED RADIOACTIVE WASTES (M3)	568
DECOMMISSIONING START DATE	2005
BROWNFIELD (END OF PHASE 1)	2021

ONGOING PROJECTS AND OPERATIONS

In February 2021, after completing the works to adjust premise B106 to a temporary repository, Sogin carried out all functional tests on the systems that produced positive result, and launched an inquiry to obtain an operating licence. In September, after the premise was authorised to operate, Sogin drafted and approved surveillance standards. Between November and December, all overpacks and supercompacted wastes stored in the temporary buffer (BLD11) were transferred to the Repository B106. As for solid wastes, in 2021 Sogin continued to confer the wastes in 220-litres tanks to the Nucleco plant to undergo supercompaction and cementation. More specifically, between November 2017 and November 2021, a total of 1,604 waste drums was transferred; among these, 1,279 conditioned final products are stored in B106 before their conferment to the National Repository.

Moreover, during the year, ISIN issued the authorization to resume excavation, removal and characterisation activities on the man-made constructions and the lands located in the site's clearance area. In September, following anomalous findings detected by ISIN, the activities were once again interrupted. The site conducted in-depth investigations which findings must be evaluated by the Supervisory Body.

At the end of 201, all decommissioning operations included under Phase 1 of the Global Decommissioning Plan were completed, making the Bosco Marengo site the first Italian nuclear power plant where Sogin completed its decommissioning operations.

#SOGINSOSTENIBILE - TREATMENT OF RADIOACTIVE LIQUID WASTES

In November, Sogin completed the treatment and conditioning of approx. 1.3 m3 of radioactive organic liquid wastes: oily mixtures produced during the supercompaction campaign conducted on radioactive wastes in 1995, mineral oils recovered from the machinery in use during the previous production cycle and other substances employed for previous decontaminations. The operations, authorized by ISIN, were performed in two different stages. The first stage, launched in September, involved the solidification of organic liquid wastes. This process involved the solidification of the oily liquid part carried out by adding a copolymer and followed by the cementation of the water-polymer mixture that resulted in a monolith ready to be shipped. The second stage, launched in November in the Nucleco's plants in Casaccia, involved the cementation of the solidified waste within a 380-litres overpack. The conditioned final products returned to Bosco Marengo in December and were stored in the B106 Repository.
This activity featured the use of an innovative and efficient conditioning method applied to organic liquid wastes deemed not suitable for the homogeneous cementation processes in use on aqueous liquid wastes. Moreover, the safety level was further increased by treating the waste within its original container, which also resulted in a reduction in secondary wastes produced.

MAIN AUTHORISATIONS OBTAINED IN 2021

AUTHORISATIONS
Authorisation to resume operations for the removal of man-made materials in the clearance area - ISIN Protocol no. 467/U of 25/01/2021.
Authorisation to clearance and resumption of final dismantling - ISIN Protocol no. 0001119 of 23/02/2021.
Approval certificate for materials not included in the fissile classification I/01/FE (Rev.1) - ISIN Protocol no. 0001146 of 23/02/2021.
Approval Act of the Operational Plan for treatment, transportation and conditioning activities performed on radioactive liquid wastes - document ISIN /AA/2021/08/BOSCOMARENGO protocol no. 0004954 of 30/07/2021.
Authorization to operation for the temporary repository B106 issued by ISIN – protocol no. ISIN 0005747 of 20/09/2021 with Annex Doc. ISIN / AA/2021/10/Bosco Marengo (Sep. 2021) "Requirements for the operation of the temporary repository B106 for radioactive wastes".
Approval of Surveillance Rules for the operation of the temporary repository B106 Protocol no. 0006356 of 15/10/2021.
Notice to the Province of Alessandria for the change of the overall storage capacity for mineral oils and LPG
Authorization for the temporary incrementation of waste water discharge flow.

RECLAMATION PROCEDURE

In 2016, a qualitative characterisation campaign conducted on the site groundwater showed the presence of some carcinogenic aliphatic and chlorinated compounds (tetrachloroethylene, dichloroethylene and trichloromethane and chromium VI) exceeding the Threshold Contamination Concentrations (CSCs). This event resulted in the need to launch a reclamation procedure.

- The MiSOp project - pilot tests for the containment of the tetrachloroethylene detected in the NO sector within the site's scope - was completed in December 2020 and submitted to the Conference of Services.
- In January 2021, Sogin requested a technical meeting with the Province of Alessandria, ARPA (AL), and the Municipality of Bosco Marengo. During the meeting, Sogin presented the MISOp project: pilot tests
- In February 2021, the Municipality of Bosco Marengo convened a Conference of Services to examine the documents submitted by Sogin
- In April 2021, Sogin forwarded additional integrations and clarifications as requested by the Conference of Services.

CASACCIA IPU AND OPEC PLANTS

EMPLOYEES	58
STORED RADIOACTIVE WASTES (M3)	519
DECOMMISSIONING START DATE	2003
BROWNFIELD	2029

ONGOING PROJECTS AND OPERATIONS

As far as the dismantling of Waste A and B, concerning the underground system for the collection of OPEC-1 radioactive effluents, consisting of collection tanks and plants, in 2021, the Detailed Design for the second dismantling phase was approved. Following the approval of the Design by ISIN, the Company will open the working site and complete the dismantling operations of the plant and premises where the tanks were located.

As for the dismantling of the **56 Glove-boxes**, during the year Sogin finalized the operations on the last Glove-boxes (further information is provided in the box #SoginSostenibile).

In the field of radioactive waste management, in 2021, the Company continued the treatment and conditioning of the solid radioactive wastes resulted from the plant's operation and decommissioning through Nucleco's facilities. More specifically, 151 casks underwent treatment for a total volume of 34 cubic metres. As far as the liquid wastes stored in IPU and Nucleco's temporary repositories are concerned, in 2021, Sogin started supplying the facilities with a prototype Glove-box designed for the cementation of aqueous liquids. The characterisation of the remaining liquid organic wastes to define the most suitable final treatment and conditioning methods started in 2020 and ended in March 2022.

In OPEC-1, blanks were launched to define the characterisation and management methods for wastes contained in TSR tanks (Remote manipulation of radioactive substances), namely the solid wastes resulted from the activities carried out in hot cells during the plant's operation.

Moreover, in 2021, the preliminary design was concluded and the final project for the implementation of the Alfa Compacting Station (treatment plant for intermediate-level wastes) and the new repository for the temporary storage of intermediate-level conditioned radioactive waste were launched. In conclusion,

in the framework of the IPU plant adaptation and dismantling preliminary works, the electrical system renovation was launched while the works for the implementation of the new tank storage system of the nuclear storage room continued.

#SOGINSOSTENIBILE - GLOVE BOXES DISMANTLING

The Glove Boxes are confined safety cabinets used to manipulate Plutonium for research purposes and the production of nuclear fuel elements during the operation of the Plutonium Plant. Overall, there are 56 obsolete Glove Boxes, divided in four levels of complexity, related to size and radiation content. The **first glove box** was dismantled in 2010. From 2012 to 2014, the site was cleared from first and second-level Glove Boxes. In 2016 third-level Glove Boxes were also dismantled and operations were started for the most complex remained (fourth-level Glove Boxes). Some Glove Boxes, included in the 56 intended for disposal, will remain available and operating to manage the residual nuclear materials and liquid wastes stored in the nuclear storage room. The Glove Boxes dismantling, carried out internally, was executed in alpha sealed containment curtains (TATA) supplied with gloved tunnels allowing the employees to operate from the outside. Each Glove Box was dismantled according to several phases: design and supply of the necessary equipment, preliminary reclamation and preparation of the Glove Box, setting of the dismantling workstation, handling and introduction of the Glove Box into the containment curtain, dismantling of the Glove Box and the curtain, workstation disassembly.
These operations require the management of the solid radioactive wastes produced; these wastes must be compacted, according to their Plutonium content, in existing plants or in the Alfa Compaction Station, to become final products suitable to be stored in the National Repository. Compacted materials present a 1:3 reduction in volume.

MAIN AUTHORISATIONS OBTAINED IN 2021

AUTHORISATIONS
Authorization for the plant's modification to allow the removal of Tovaglieri tower and ASSO infrastructure (Article 6 of Law 1860/62 and subsequent amendments and integrations and Article 233 of Legislative Decree no. 101/2020)
Approval of the Radiological Characterisation Plan for the materials resulting from the refurbishment of the floor of the IPU laboratories

ROTONDELLA ITREC PLANT

EMPLOYEES	60
STORED RADIOACTIVE WASTES (M3)	3,822
DECOMMISSIONING START DATE	2003
BROWNFIELD	2035

ONGOING PROJECTS AND OPERATIONS

During the reclamation of Pit 7.1 occurred in 2021, following the characterisation of the internal areas of “Capannone Fossa” and the definition of the trench area, Sogin executed and concluded the release of the Systems, Structures and Components (SSC), the management of wastes produced and the Pit filling operations. The working site was then made available for future decommissioning activities. As for the Si.RI.S. project (Solid waste storage), related to the treatment of solid radioactive wastes resulting from ITREC operation and previous decommissioning operations, in 2021, Sogin continued the characterisation, supercompaction and insertion in cement matrix of very-low level radioactive wastes contained in 380-litres overpacks.

The plant’s pond also stores 64 elements of irradiated fuel (Uranium-Thorium cycle) coming from the Elk River reactor. The elements, encapsulated in stainless steel containers, are located along the side walls of the ponds in metal racks. In 2021, the manufacturing of casks and other accessories continued; they included the manufacturing of all forgings and baskets. In addition to the previous, the documents to conduct a preliminary sampling on the water contained in the capsules was submitted to the Supervisory Authority for approval.

The ITREC plant also houses the TAF plant (groundwater treatment plant), which is a collection and treatment movable plant for groundwater designed to eliminate non-radiological pollutants from water through chemical and physical processes. In 2021, the plant was employed to test 106 Samples, treat 10,530 m3 of water and produce 2,400 kg of dehydrated sludge. These operations lasted 211 days.

Finally, in 2021, the documents for the preliminary tendering procedures to contract the treatment and conditioning of the organic liquid wastes located on site were finalized.

#SOGINSOSTENIBILE - FINAL PRODUCT CEMENTATION PLANT

Between 1975 and 1978, a nuclear test campaign was conducted in the ITREC plant on 20 fuel elements irradiated in the Elk River reactor. The tests produced three separate radioactive liquid streams, including a stream defined "final product", containing recovered fuel (Uranium and Thorium) and the fission products in a nitric solution. The estimated 3 m3 of radioactive liquid solution are currently stored in a stainless steel tank located within a concrete cell in the Waste-1 area of the plant.
To dispose of the "final product" through cementation, Sogin launched the implementation of the ICPF plant (Plant for the Cementation of the Final Product), which will be used for the liquid conditioning. The project envisages the construction of two connected buildings: A treatment building and a temporary repository (DMC3/DTC3) to safely store 166 final products resulting from the operations, cemented wastes and, in a specific area, the two casks containing the fuel elements (currently located in the pond).
As for the building adjusted to repository, in 2021, Sogin worked to cast the reinforced concrete of the structure up to an elevation of + 10.55 m; moreover, lay the irons and beams of a portion of the slab up to an elevation of + 12.55 m, complete the fabrication of the three overhead cranes that will be placed to serve the repository, and installed the XH3202 overhead crane on-site, which will be used for the future handling of casks. As for the treatment building, the structure will be placed on the area previously occupied by Pit 7.1, to allow a significant recovery of the land and avoid using other areas of the site.

MAIN AUTHORISATIONS OBTAINED IN 2021

AUTHORISATIONS
Approval of the Operating Regulations pursuant to Article 89 of Legislative Decree no. 101/2020 (protocol no. 46034 of 20/09/2021)
Communication of a non-substantial change pursuant to Article 6, para. 1 of Presidential Decree no. 59/2013 for the disposal of P7.1;
Communication to the Potenza Customs Office related to the operation of "Smaller Plants" (diesel repositories ranging from 10 to 25 m3) pursuant to Article 25 para. 4 of Legislative Decree no. 505/95.

RECLAMATION PROCEDURE

During the monitoring plan required to implement the ICPF plant and the first preliminary campaign held in line with the EIA Decree, some chemical parameters (Trichloroethylene, chromium VI, iron, total hydrocarbons) exceeding the CSCs were detected in the groundwater under the ENEA site in Rotondella. Sogin notified these anomalies to the competent authorities and launched the reclamation procedure.

- In January 2021, Sogin and ENEA presented the outcomes of the procedure in reply to the requests made during the technical meeting held in December 2020.
- In March 2021, following the opinion issued by ARPAB in January, Sogin and ENEA amended their proposals
- In June 2021, Region Basilicata convened a technical meeting
- In September 2021, following a note issued by ARPAB in August, Sogin and ENEA submitted clarifications and observations, and made themselves available for another technical meeting.
- In November 2021, following a note issued by ARPAB to request updates on the MiSOp, Sogin forwarded its observations and provided the requested information, by stressing, once again, the need for a technical meeting.

SALUGGIA EUREX PLANT

EMPLOYEES	48
STORED RADIOACTIVE WASTES (M3)	2.874
DECOMMISSIONING START DATE	2003
BROWNFIELD	2035

ONGOING PROJECTS AND OPERATIONS

In 2021, the civil works for the treatment plant of the CEMEX plant (EUREX Cementation Plant) continued. This plant is designed to solidify approx. 300 m3 of liquid radioactive wastes located on-site through cementation; the resulting products will be later stored in the annex D3 temporary repository, which construction ended in March 2020.
Given the radioactivity of the liquids to be treated, the implementation of the CEMEX project is complex. In fact, it requires all operations to be controlled remotely to ensure maximum safety for the workers, the citizens and the environment.

During the year, the programme for the dismantling of the UMCP facility (Manual Unit for Plutonium Conversion) also continued. The operation involved the implementation of a conventional testing area to run mock-up tests on the equipment and plant, and allow the training of the operators. Moreover, in 2021, the conditioning of 135 tons of solid wastes classified as IFEC was completed. The Company also continued the characterisation and conditioning of metallic solid wastes contained in RIBA™ containers; as on the end of the year, conditioning and treatment was completed for 38 tons of material out of the total (43 tons). As for the **organic radioactive SW (Solvent Waste)**, the design of the extraction facility to be employed in the storage tank was approved and the tendering procedure for waste management was launched. As for the safety measures adopted in the site, Sogin concluded the waterproofing operations in Area 800 (Liquid waste tanks area), and installed new emergency power units. Finally, over the year, Sogin completed the first phase of destructive tests on the excavation land resulted from the movement of sub-services.

#SOGINSOSTENIBILE - D2 TEMPORARY REPOSITORY

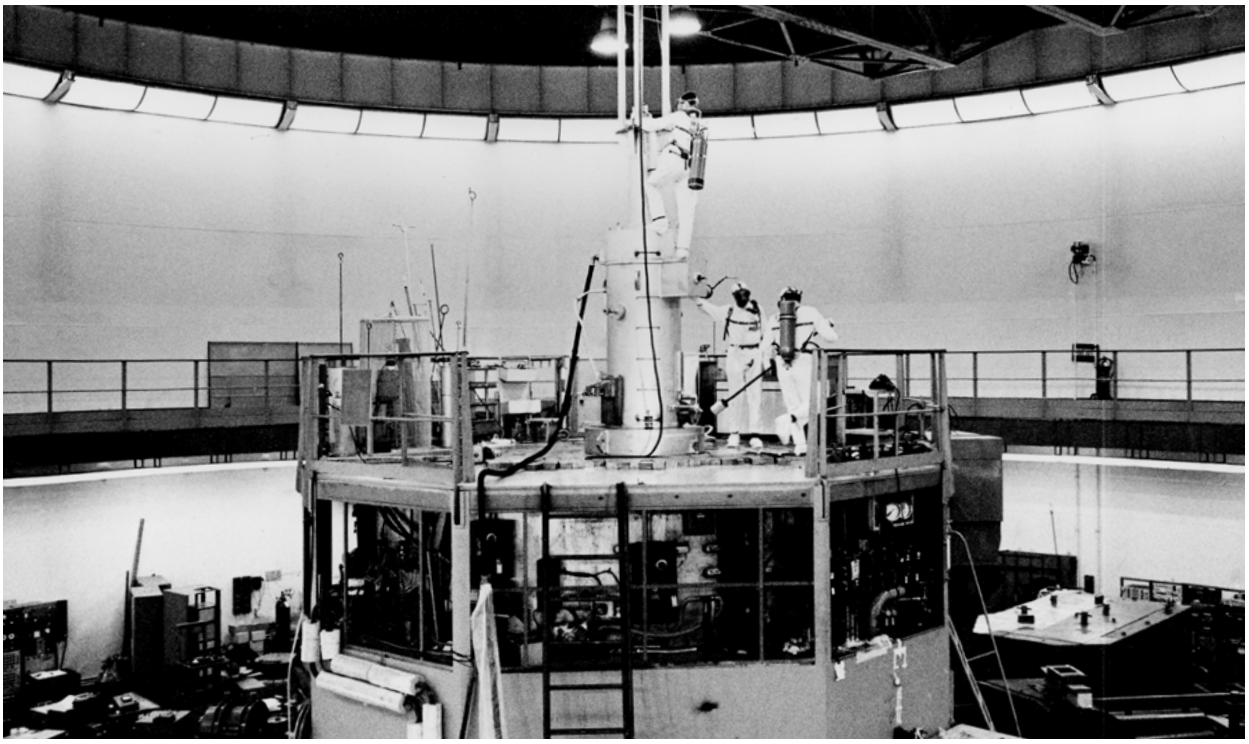
The D2 Temporary Repository was implemented between 2011 and 2015 to store the radioactive wastes located in Building 2300 and other buffer areas of the site, before their conferment to the National Repository.
Designed according to the best international standards, the D2 repository has an estimated overall volume of
25,000 m3, that includes a handling area, technical and logistical supporting services and pathways to allow all materials to be monitored. In 2019, Sogin started the transfer of radioactive wastes (overpack, non-conditioned tanks and other types of packages).
From the launch of the programme and over 2021, Sogin transferred a total of 1,200 packages, equal to 800 m3 (of which 700 are conditioned).
Thanks to the equipment in use in the repository (roll-over cages and remote-control systems), the safety level of the site improved and the storage capacity for radioactive waste increased.

MAIN AUTHORISATIONS OBTAINED IN 2021

AUTHORISATIONS
Operating Plan for Decontamination, cutting and repackaging activities performed on unpacked radioactive wastes. Approval Act ISIN/AA/2021/15/EUREX.
Operating plan for the characterisation, treatment and conditioning of solid radioactive wastes in oil drums. Approval Act ISIN/AA/2021/14/EUREX.

ISPRA-1 REACTOR

EMPLOYEES	5
STORED RADIOACTIVE WASTES (M3)	113
DECOMMISSIONING START DATE	2019
BROWNFIELD	2034



ONGOING PROJECTS AND OPERATIONS

After taking over the reactor, Sogin launched and completed the design procedure to draft the documents required to submit the request the plant decommissioning. These documents were submitted to the Ministries and competent Entities on 29 April 2020. The reactor decommissioning will be divided into three phases:

- Preliminary activities and dismantling of auxiliary systems and components;
- Dismantling of the reactor, gamma cell and pond;
- Final reclamation of the site.

These activities will be launched following the issue of relevant authorizations on behalf of the Control Authorities involved in the dismantling application.
In 2021, the campaign for the radiological characterisation of systems, structures and components of ISPRA-1 envisaged the collection of physical samples in the plant and the execution of radiochemical tests on the said samples to define the plant's radiological inventory and mapping and proceed with decommissioning operations.

#SOGINSOSTENIBILE - POND RECLAMATION PROJECT

Since the early management of the site, Sogin launched a project for the pond reclamation. The project involves emptying the pond of the water contained (190 m3).
The pond can only be emptied after having purified the contained water through a dedicated filtration and treatment system based on the selectivity of ion exchange resins, used to detect the radionuclides in the pons. This system was previously employed by Sogin in the pond reclamation in Saluggia. The

emptying operations are conducted in separate lots (5m3 each), to allow their final treatment of liquid effluents according to the storage capacity of the Ispra CCR centre. The final water discharge is done in compliance with the discharge formula adopted by the CCR. During 2021, 60 m3 of water were removed from the pond.

MAIN AUTHORISATIONS OBTAINED IN 2021

AUTHORISATIONS
Following the submission of the Preliminary Design for the "Adaptation of the premises to areas suitable for the creation of radiological management and monitoring stations for potentially releasable materials", pursuant to Article 233 of Legislative Decree no. 101/20, on15 December 2021, Sogin received a Ministerial Decree authorizing the plant adaptation.
Following the submission of the Global Characterisation Plan for the Plant, requested by ISIN to approve the discharge limits proposed by Sogin in relation to the removal of solid materials, on 2 August a Ministerial Decree was issued.

RECLAMATION PROCEDURE

During the first campaign of preliminary characterisation activities carried out on surface land, water and groundwater to draft the environmental impact study, some chemical parameters (iron, manganese and trichloroethylene) exceeding the CSCs were detected in the groundwater under the ISPRA-1 site. Sogin notified these anomalies to the competent authorities and launched the reclamation procedure.

- In May 2021, pursuant to Article 245 of Legislative Decree no. 152/2006 and subsequent amendments and integrations, the potential contamination of the groundwater under the site was communicated.
- In June 2021, Sogin submitted the characterisation plan to the Conference of Services. Sogin is waiting for the Conference to be convened.


FUCINA ITALIA
Fucina Italia
ANNO: 2018
NF. 670
Portata 50/1t

04. NATIONAL REPOSITORY AND TECHNOLOGY PARK

COUNTRY-PROJECT

The National Repository is the infrastructure designed to safely store all Italian radioactive wastes in a single place. It is a Country-Project intended to achieve the centralized, safe and efficient management of the existing radioactive wastes and those that will be produced over the next 50 years. The Repository will collect the radioactive wastes resulting from the decommissioning of nuclear power plants and facilities and the performance of nuclear medicine, industrial and research activities. The National Repository will consist of premises for the final storage of VLL and LL radioactive wastes, as well as premises for the long-term storage of IL and HL wastes, before their future and final conferment to a geological repository.
Once constructed, it will be possible to close the Italian nuclear cycle and conclude the dismantling of plants, to return the former nuclear sites to the communities for reuse.
With the National Repository, Italy will catch up with other European Countries that already implemented, or are currently implementing, similar repositories in their countries, and enhance the know-how achieved so far. The Italian design envisages the construction of a Technology Park, namely a research centre on energy, waste management, and sustainable development, to foster international collaborations.

TECHNICAL FEATURES

Structurally, the National Repository will consist of a series of engineering nature-based barriers to confine radioactivity; the structure will be designed according to the best international experiences and the standards issued by IAEA and ISIN. The engineering barriers will be made of specific reinforced concrete blocks design to confine the radioactivity of the waste for the time necessary for its decay to levels comparable to environmental radioactivity changes. More specifically, big containers made in special concrete (modules) will be placed in reinforced concrete structures (cells). The modules will encapsulate the so called “final products”, the metallic tanks containing conditioned radioactive wastes. Once filled, the cells will be covered by an artificial hill made of inert and impermeable materials; this layer will ensure higher protection, improve the infrastructure visual impact and attunement within the surrounding environment.

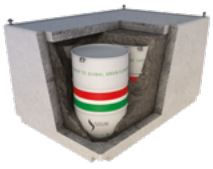
MULTI-BARRIER SYSTEM

01

FINAL PRODUCT

The radioactive wastes contained in metallic tanks (final products), are conditioned in a cement matrix and shipped to the National Repository.

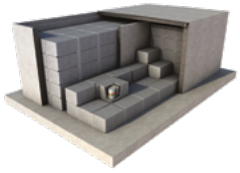
02



MODULE

The final products are placed and cemented in special concrete modules (3 m x 2 m x 1.7 m), designed to withstand 350 years.

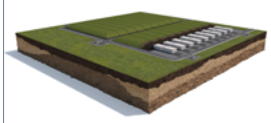
03



CELL

Each cell in reinforced concrete (27 m x 15.5 m x 10 m), designed to last at least 350 years, can store 240 modules.

04



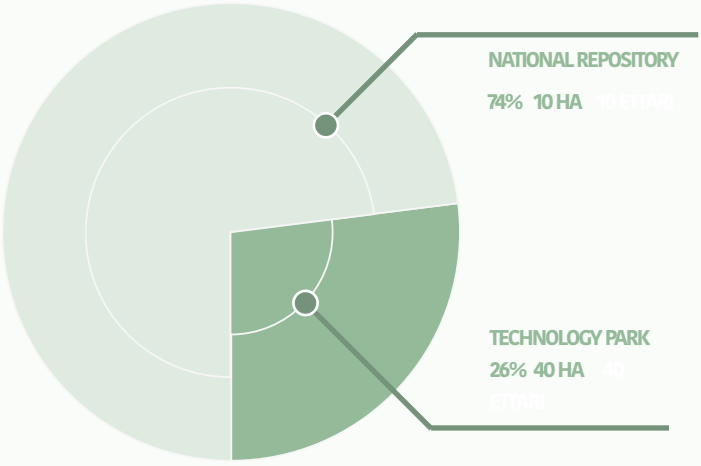
MULTILAYER HILL

Artificial structure arranged to cover the cells.
It is made of layers of different materials to prevent rainwater infiltrations, isolate the wastes from the environment and improve the visual impact of the structure.

SURFACE OF THE NATIONAL REPOSITORY AND TECHNOLOGY PARK

WHAT SURFACE AREA WILL NATIONAL REPOSITORY OCCUPY?

The National Repository will occupy a surface area of 110 ha, 20 of which intended for the storage of radioactive wastes and divided as follows: 10 ha occupied by VLL and LL waste disposal facilities, a Module Disposal Unit (USM) surrounded by a series of engineering barriers and a nature-based barrier provided by the geological conformation of the site; and 10 ha for the four IL and HL waste storage premises, the High Activity Storage Complex (CSA).
The remaining 90 ha will consist of clearance areas and other systems and plants required for the Repository to operate.



RADIOACTIVE WASTES: TYPES AND QUANTITIES

The Repository will allow the final storage of VLL and LL wastes. Moreover, a building complex designed to store the casks containing IL and HL wastes (including non-reprocessable fuel and residuals resulted from the reprocessing of irradiated fuel carried out abroad) for a limited amount of time, pending their final storage in a geological repository.
The total quantity of wastes results from the waste census carried out on the existing wastes stored across temporary repositories in Italy, and from the estimated quantities that will result from the safe maintenance and dismantling of nuclear power plants, and other activities such as scientific research and medical and industrial applications that will be produced in the future.

Therefore, the inventory of wastes to be shipped to the National Repository after conditioning, and, more specifically, that of estimated wastes may vary; so, it is constantly monitored and updated.

Also for 2021, the total estimated quantity is 95,000 m3 of radioactive wastes ready to be shipped to the National Repository and divided as follows: 78,000 m3 of VLL and LL wastes, and approx. 17,000 m3 of IL and HL wastes, further divided into 60% energy-generated waste and 40% resulting from other activities.

PUBLIC CONSULTATION

The procedures to define the National Repository and Technology Park location, design and operation are provided under Legislative Decree no. 31/2010, under which this task is assigned to Sogin.
For the first time in Italy, all the territories are involved by law in deciding the location of a major work of this kind. The Decree guarantees integration between technical and scientific aspects and information, transparency and engagement procedures.
Pursuant to Legislative Decree no. 31/2010, Sogin drafted an official proposal for the Charter of Potentially Suitable Areas (CNAPI), by adopting the localization criteria defined under the Technical Guidelines no. 29 of ISPRA (now ISIN - National Inspectorate for Nuclear Safety and Radiological Protection) and the requirements provided under the IAEA Guidelines.
These criteria account for a set of requirements and assessment factors to be employed in the identification of suitable areas guaranteeing the integrity and safety of the National Repository in the long term.

The criteria in use to define the Repository location include: Exclusion Criteria for the areas with features that cannot guarantee the fulfilment of safety requirements for the citizens and the environment; Analysis Criteria, assessing the areas identified after the application of the Exclusion Criteria.
Sogin drafted and submitted the CNAPI proposal to the Supervisory Body, which erifiedv the correct application of the criteria and validated it. Subsequently, the Body submitted the proposal to the competent ministries (Ministry of Economic Development and Ministry of the Environment and the Protection of the Land and Sea) to obtain the authorization to publish it, issued on 30 December 2020. On 5 January 2021, Sogin published the CNAPI, the preliminary design of the National Repository and Technology Park, and the relevant documents required by the Decree on the website depositonazionale.it. The CNAPI identifies 67 potentially suitable areas located across 7 Italian regions.

I PHASE

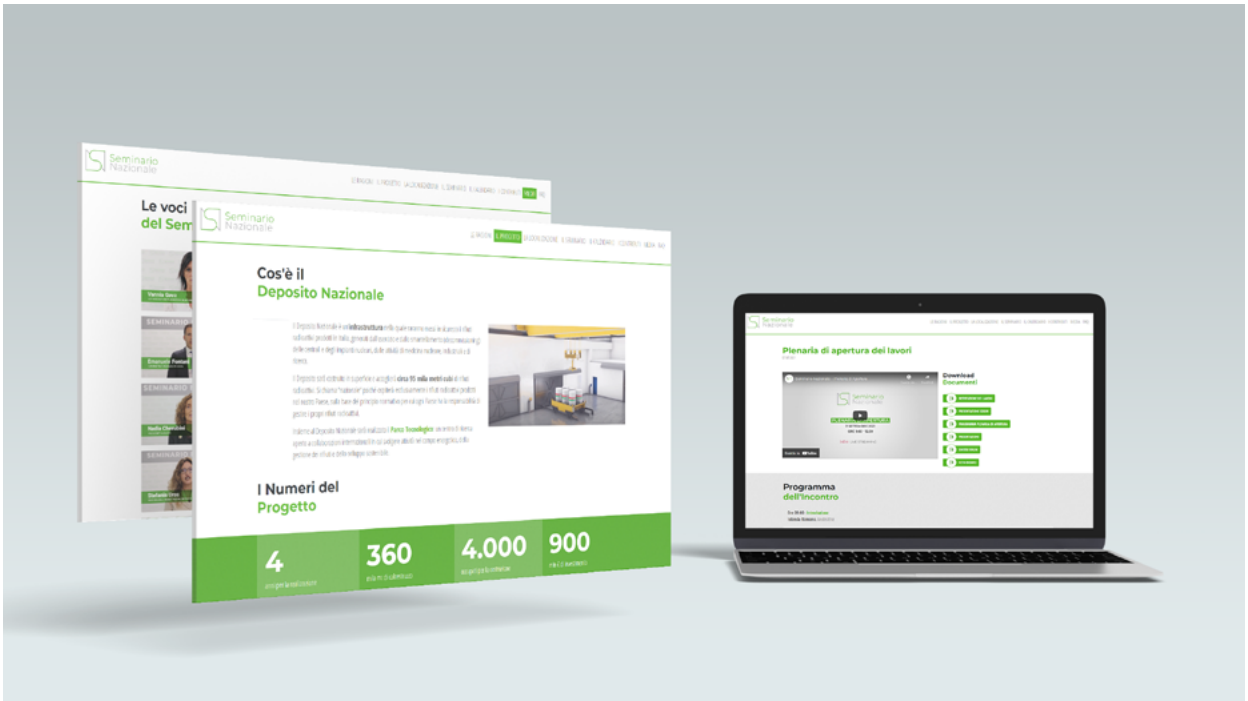
The CNAPI publication opened the first Public Consultation - that lasted 180 days - which involved Regions, Local Entities and all the Stakeholders that had the opportunity to share observations and technical proposals with Sogin in relation to the CNAPI and the preliminary design. The Public Consultation aimed at reaching a joint and shared decision on the location of the National Repository. This first phase resulted in the publication of more than 300 observations and technical proposals, for a total of +20,000 pages of acts, documents, studies, technical reports and maps.

NATIONAL SEMINAR

The observations emerged during the first stage were further studied and analysed during the National Seminar, that was launched on 3 August 2021 through a press release published on national and local newspapers across the areas concerned with the CNAPI. More than 450 Stakeholders defined under Legislative Decree no. 31 of 2010 were invited to join the Seminar along with those who submitted the technical proposals and observations during the first phase of the consultation. The event was held between 7 September and 24 November 2021, on line and in presence to ensure the maximum safety and maximise participation. it consisted of 9 meetings: two plenary sessions (opening and closing sessions) and 7 working sessions (1 national and 6 local sessions) with the participation of the Regions involved in the CNAPI. Some of the local sessions were held over different days and streamed live on seminariodepositonazionale.it. More than 160 Stakeholders from Institutions, Local Entities, Associations, Committees, workers' organisations, local trade unions, as well as individual citizens took part in the National Seminar. During the first public consultation stage, the participants submitted about 200 questions to which a reply was provided, either in written or orally, during the live stream. The works ended on 15 December 2021 with the publication of the final remarks, made available on seminariodepositonazionale.it and depositonazionale.it.

II PHASE

The II phase of the Public Consultation started on 15 December 2021, following the publication of the Seminar's final remarks. This phase, with a duration of 30 days as provided under Legislative Decree no. 31/2010 and subsequent amendments and integrations, allowed the Stakeholders to present further observations and technical proposals that emerged after the National Seminar. Based on the 600 questions, observations and technical proposals submitted, Sogin drafted a proposal for the Charter of Suitable Areas (CNAI) and, on 15 March 2022, forwarded it to the Ministry for Environmental Transition. The legislation provides for the Ministry for Environmental Transition, having received positive opinion on behalf of ISIN, to approve the Charter by issuing a Decree in agreement with the Ministry of Infrastructure and Sustainable Mobility. The map will be subsequently published on Sogin websites, as well as on the websites of the two Ministries and ISIN. The publication of the CNAI will launch the negotiation phase intended to collect non-binding expressions of interest on behalf of the Regions and Local Entities where the suitable areas have been identified. In this phase, the entities will reach a joint decision on the location of the National Repository.



INFORMATION EVENTS ON THE PROJECT AND THE DEFINITION OF ITS LOCATION

During 2021, Sogin took part in many events held by third parties to provide information on the public consultation and the DPNT project.

SICILY HIGHER TRAINING SCHOOL ON RADIATION PROTECTION

On 10 February, Sogin participated in the webinar "The Charter of Potentially Suitable Areas to locate the National Repository for radioactive wastes, organized by the Sicily Higher Training School on Radiation Protection "Silvia Mascolino" (SSFSR) in partnership with the Municipality of Petralia Sottana (Palermo). During the meeting, Sogin presented the design of the National Repository, a focus on the National Charter for Potentially Suitable Areas, and the criteria employed to locate the Repository; the adoption of these criteria allowed identifying the 67 potentially suitable areas.

AIAT PUGLIA

On 15 February, Sogin joined the information webinar "Focus on the National Repository for radioactive waste. Environmental engineering for the community", organized by AIAT Puglia in partnership with the Association of Environmental and Land Engineers, and with the patronage of Politecnico di Bari and the Association of Engineers of Bari Province. During the seminar, the Company presented the National Repository design, the National Charter of Potentially Suitable Areas to locate the facility, and the criteria adopted to draft this project.

UNIVERSITY OF PISA

On 5 March, Sogin took part in the webinar " National Repository: Safe management of the Italian radioactive waste", held by the Faculty of Civil and Industrial Engineering of the University of Pisa. During the webinar, the Company illustrated the project of the National Repository and Technology Park.

TRADE UNIONS

On 9 March, Sogin met the union federations of OOSS Flaei, Filctem, and Uiltec to analyse matters related to the National Repository and Technology Park. During the meeting, Sogin presented the project of the National Repository and Technology Park, as well as its advantages for the local community inhabiting the final area, and the public consultation procedure with instructions on how to participate in the event. The meeting ended with a short Q&A during which trade unions' representatives showed great interest in the project.

ASSOCIATION OF ENGINEERS

On 18 March, Sogin took part in the webinar "The Publication of the Charter of Potentially Suitable Areas to locate the National Repository for radioactive waste and spent fuel", organized by the Association

of Engineers of Rome. During the seminar, Sogin presented the design of the National Repository with a focus on the CNAPI and the drafting criteria adopted; the meeting also provided information on the procedure implemented to locate the facility.

POLITECNICO DI MILANO
On 22 April, Sogin took part in the meeting on the National Repository held by the Nuclear Engineering Department of Politecnico di Milano in the framework of the initiative "Passion in action - Nuc@ POLIMI: tra passato, presente e futuro". More than 170 students had the chance to discuss the design of the National Repository for radioactive wastes, CNAPI and its implementation criteria.

UNIVERSITY OF PAVIA
On 3 May, Sogin took part in the webinar "Radioactive wastes and National Repository: State of the art" organized by the Coordination Office for Right to Education of the University of Pavia, in partnership with the Student Association "Il Grillaio Parlante". More than40 students had an opportunity to discuss the design of the National Repository for radioactive wastes and the CNAPI.

DISASTER MANAGEMENT SCHOOL IN NUORO
On 7 May, Sogin held a class for Nuoro Disaster Management School. Established through an agreement between the University of Sassari, Uninuoro and the National Disaster Management Association, the School provides education to future Disaster Managers. During the class, Sogin presented its core activities by focusing on the radioactive waste management, the National Repository Design and the criteria adopted to find the most suitable location.

UNIVERSITY OF PADOVA
On 20 May, Sogin held a seminar for the students enrolled in the Engineering Master's Degree Course on Civil and Industrial Safety of the University of Padova. During the Seminar, the Company gave a presentation on the National Repository Design, the CNAPI and their drafting criteria.

POLITECNICO DI MILANO
On 18 May, Sogin took part in the seminar organized by Politecnico di Milano for the students enrolled in the course on "Transport of Radioactive Contaminants", offered by the Department of Nuclear Engineering. More specifically, the speeches focused on: "Post Closure Safety Assessment for a surface disposal facility for radioactive wastes, and the development of Safety Assessment numerical models for surface disposal facilities for radioactive wastes."

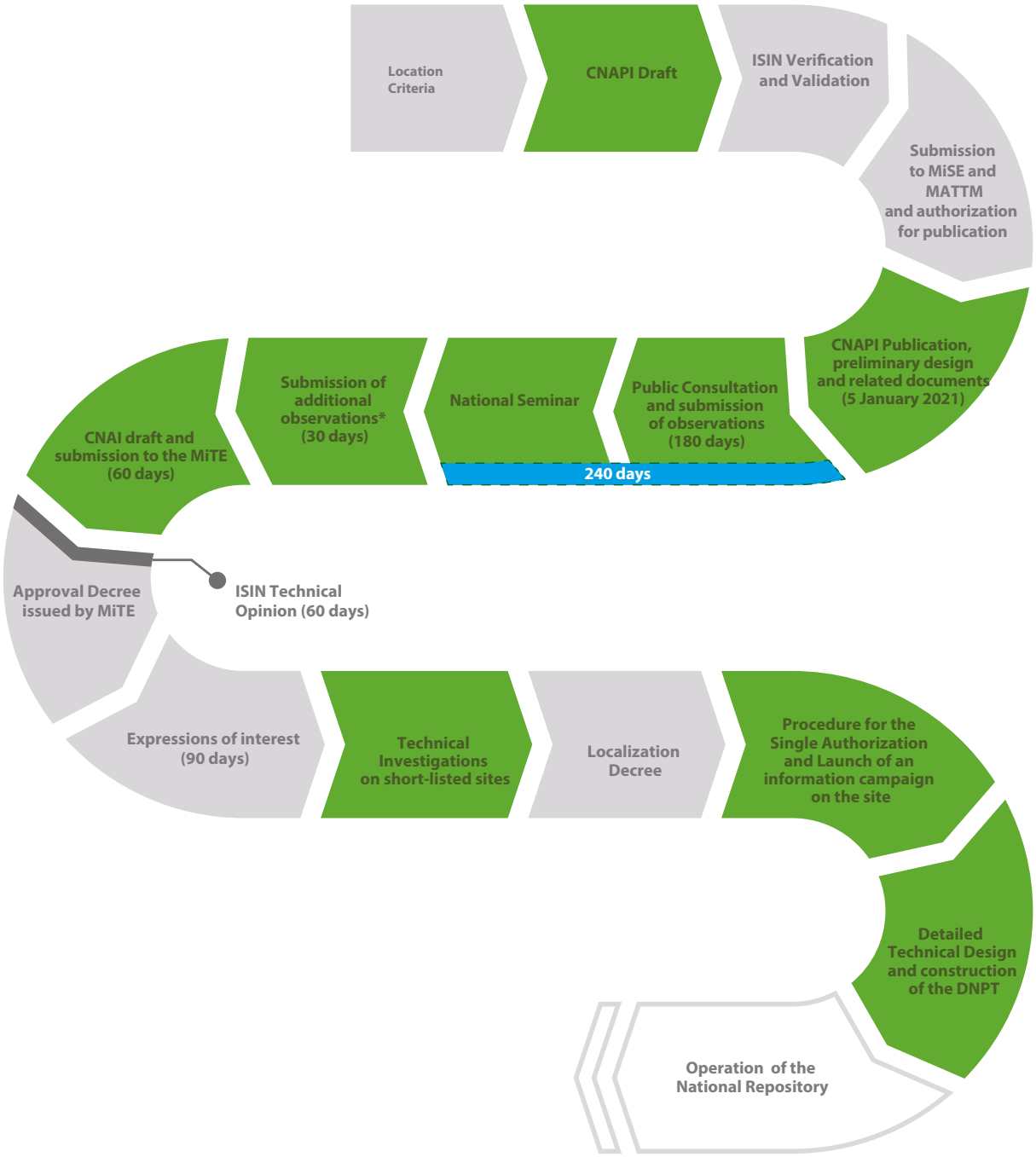
CLUB OF AGENCIES
On 26 and 27 May, Club of Agencies (CoA) held its 69th meeting. The CoA is a forum established by several organizations to exchange information on waste management and disposal. The CoA, which includes Sogin in its members, holds two annual meetings. On 27 May, Sogin presented its radioactive waste management strategy in Italy, and provided a focus on the National Repository.

PROCEDURE TO DEFINE THE REPOSITORY LOCATION AND IMPLEMENTATION

KEY:

CNAPI: National Charter of Potentially Suitable Areas CNAI: National Charter of Suitable Areas
DNPT: National Repository and Technology Park
ISIN: National Inspectorate for Nuclear Safety and Radiation Protection
MATTM: Ministry of the Environment and Protection of the Land and Sea
MiSE: Ministry of Economic Development
MiTE: Ministry for Environmental Transition

Activities entrusted to Sogin
Activities not entrusted to Sogin



* Osservazioni formalmente trasmesse a Sogin e al Ministero dello Sviluppo Economico
** La CNAI viene pubblicata sui siti internet di Sogin, dei Ministeri competenti e dell'ISIN

05.
MARKET ACTIVITIES

MARKET ACTIVITIES IN ITALY AND ABROAD

Sogin has been one of the first companies to face the challenges of nuclear decommissioning and dismantling worldwide. In Italy, Sogin works to achieve the decommissioning of four nuclear reactors featuring three different technologies. Moreover, it deals with the deactivation of five research facilities (nuclear fuel cycle) previously managed by ENEA. Thanks to their know-how, Sogin and Nucleco are able to detect and seize opportunities in the international decommissioning and radioactive waste management market. Both Companies offer decommissioning services across Europe and Asia. Their offer ranges from the design to the implementation phase, including operations for the safe management and maintenance of the radioactive wastes produced.

ITALY

FORMER CEMERAD REPOSITORY

Appointed by the special Commissioner for the implementation of the safe maintenance and management of the Former Cemerad Repository, located in the Municipality of Statte (Taranto), Nucleco is committed to carry out the removal, safe maintenance, and hazardous and radioactive waste management operations, as well as in the reclamation and environmental restoration of the area. The strategy, outlined by the Company and approved by the Commissioner, envisages the safe maintenance of an estimated 17,000 radioactive casks located in the area and the site release, including existing installations, without radiological restrictions. The last shipment, made at the end of 2020, resulted in the removal of more than 13,600 casks. Among the estimated 3,000 casks still stored in the Statte site, 900 casks still require the completion of transportation and approval documents on behalf of the final recipient, while the remaining casks are ready for shipment. In November 2020, the activities were interrupted due to the exhaustion of the economic budget provided under the Collaboration Agreement. However, in 2021, a procedure was launched for the implementation of inspections on the site (two inspections per month). Waste management activities, which had already begun off-site, also continued during the year, particularly at the Integrated Service operators and in Nucleco.

FORMER SHOOTING RANGE “PUNTA DELLA CONTESSA”

In 2017, Nucleco was awarded a contract with the NATO Support Procurement Agency (NSPA) for the environmental reclamation services (land and sea) of the shooting range facility of the Italian Air Force in “Punta della Contessa”. The areas subject to reclamation are in a site of National (SIN) and Community (SIC) interest in Brindisi. In 2021, reclamation operations at sea ended and Areas 1, 2, 3 and 4 underwent renaturation. Reclamation also occurred on approximately 50% of the surface of Area 5. The demolition of the two towers and part of the offices was also carried out. To complete the operations, the Company will perform the removal of asbestos from the three ponds, the reclamation of the remaining land in Area 5 and the area renaturation.
Given the need to interrupt the operations from April to July to allow the migration of marsh bird species, the works are expected to end by December 2022.

POLITECNICO DI MILANO
In 2021, Nucleco continued providing support to Politecnico di Milano to achieve the deactivation plan of the research reactor L54M of "CESNEF". More specifically, Nucleco had to perform the "Radiological Investigation on the land close to the reactor building through the implementation of destructive measures".

EXTRAORDINARY COMMISSIONER FOR THE RECLAMATION OF ILLEGAL LANDFILLS
To anticipate the collaboration agreement with the Extraordinary Commissioner, in 2020, Nucleco carried out a radiological investigation in Nicotera landfill to assess the absence of radioactive pollutants.
The said Agreement on design and characterisation, paved the way to new assignments for Nucleco:

- Investigation in the framework of the "Characterisation Plan" Legislative Decree no. 152 of 3 April 2006 and
- subsequent amendments and integrations for the former landfill of Piano Perina in the Municipality of Riano;
- Investigation in the framework of the "Characterisation Plan" Legislative Decree no. 152 of 3 April 2006 and subsequent amendments and integrations for the former RSU "Fornace" landfill in the Municipality of Trevi nel Lazio.
- Investigation in the framework of the "Characterisation Plan" Legislative Decree no. 152 of 3 April 2006 and subsequent amendments and integrations for the former RSU "Carpineto" landfill in the Municipality of Trevi nel Lazio.

IROM
In 2021, Nucleco continued works for the reclamation and radiological characterisation from natural Uranium of the IROM industrial facility, located in Poggibonsi (Siena). The operation aims at releasing the area and plant's systems and storing non-releasable contaminated materials in a temporary storage facility. Upon the request of ARPA Toscana, in 2021, Nucleco performed radiological characterisation on two sliding containers.

ARCADIS
In 2021, under the mandate of the insolvency practitioner of Capra Metal Refinery, ARCADIS contracted the on-site radiological characterisation of several packages of radioactive materials contaminated by 137Cs to Nucleco.

GSK PFIZER
In 2021, Nucleco was contracted by GSK Pfizer to carry out tests to verify the presence of Radon in the air and perform the analysis of sludge resulting from the disposal plant of waste water in Aprilia (Latina).

AVOGADRO REPOSITORY
Nucleco defined operating procedures and offered its engineering expertise to draft the Operating Plan for the reclamation of 4 contaminated cockpits in Avogadro Repository. Subsequently, the Company carried out the reclamation of the cockpits and released the discharge line without radiological restrictions.

MARKET ACTIVITIES ABROAD

Sogin and Nucleco offer highly specialised services in the field of nuclear decommissioning and radioactive waste management to public and private Authorities and Entities operating in the international market. The main projects launched, completed, and/or implemented in 2021 are listed below.

SERVICES FOR THE ISPRA JRC-LMR
In 2014, Nucleco was awarded a 4-year contract (subsequently extended by 8-years) to provide assistance to the JRC employees in testing radioactive and potentially radioactive samples, performing chemical, radiological and radiometric analysis, and collecting data on-site. In 2020, the need for an additional resource emerged that resulted in a tendering procedure to hire a laboratory assistant for the performance of technical inspections and audits. This resourced was integrated in the basic service. In 2021, the actions provided under the Specific Contracts defined by the above mentioned Contract, also continued.

“PROJECT IMPLEMENTATION ASSISTANCE” AT ISPRA JRC
In 2017, Sogin was awarded the provision of highly qualified technical services to the EU JRC (Joint Research Centre) in Ispra (VA) within the framework of the “Decommissioning and Radioactive Waste Management (D&WM)” programme. In this regard, in 2021, Sogin supported the JRC in the review of decommissioning plans and provided specialized support in relation to licensing and archiving and the management of radioactive wastes and nuclear materials.

SUPPORT FOR THE CHARACTERISATION OF THE JRC/ITU IN KARLSRUHE
In 2013, Nucleco was awarded a four-year contract (with subsequent renewal) to perform the radiological characterisation with gamma-ray spectroscopy and neutron coincidence counting at the Institute of trans-Uranium elements of the JRC/ITU of Karlsruhe (Germany) of the European Commission. The contract also includes the maintenance and calibration of measurement systems, the analysis of these findings, data integration from different measurement systems, design and implementation of gamma-ray spectroscopy tests through the ISOCS (In Situ Object Counting Sistem) system.
In 2021, the Specific Contracts defined under the General Contract also continued.

TECHNICAL ASSISTANCE TO JAVYS FOR THE DECOMMISSIONING OF V1 NUCLEAR POWER PLANT IN BOHUNICE
The management and technical consulting services provided to the State-owned Slovakian Company JAVYS (Jadrová A Vyraďovacia Spoločnosť) for the decommissioning of the V1 facility in the nuclear power plant of Bohunice, equipped with 2 pressurized reactors VVER 440-230, continued in 2021. Sogin is especially supporting JAVYS in managing the dismantling operations, supporting the Project Management, procurement, and engineering aspects. More specifically, in 2021, Sogin has continued monitoring on-site operations, and reviewing the decommissioning plan, which includes removing and dismantling the two reactors and the big components of the primary circuits, as well as managing radioactive wastes and arranging the site release.

FEASIBILITY STUDY ON NUCLEAR SUNKEN OBJECTS IN THE ARCTIC SEA
At the request of the European Commission, since 2017, Sogin leads an international group of companies (German, English, Norwegian) to carry out a study that will detect the hazardous nuclear sunken objects in the Artic Sea of Russian origin (nuclear submarines, nuclear reactors, etc.) and to draft and propose a project for their recovery and safe maintenance, based on a feasibility study.
After the development of an inventory, classification and listing of the sunken objects according to their hazardousness for the people and the environment, the consortium, led by Sogin, defined an Action Plan for the recovery of 2 nuclear sunken submarines and the monitoring of 4 objects containing nuclear fuel, located in the Arctic Sea.
The operation ended in 2021 with the shipment of recovered materials and the final review and submission of relevant documents.

GLOBAL PARTNERSHIP
Within the scope of the Global Partnership programme (G8 of Kananaskis, Canada, 2002), on 5 November 2003 the Governments of the Italian Republic and the Russian Federation ratified a cooperation agreement covering the dismantling of disused nuclear submarines of the Russian navy and radioactive waste and spent nuclear fuel safe management. This agreement - ratified by the Italian Parliament by Law n. 160/2005 - is one of the most successful international collaborations in the field of disarmament and non-proliferation. The operations defined in the agreement are managed by a Steering Committee made up of members of the Italian Ministry for Economic Development and Rosatom, which defines and monitors Sogin actions and operations.
More specifically, Sogin deals with activities of general coordination and manages the administrative and operative aspects of the projects.
The procedure to implement a plant for the treatment of existing and future liquid radioactive wastes in Andreeva Bay continued in 2021. Moreover, a tanker for the shipment of radioactive wastes to Andreeva Bay was supplied and warranty repair works were carried out on the Rome-Moscow tug.

06. ORGANIZATION MANAGEMENT AND CONTROL

ORGANIZATION, MANAGEMENT AND CONTROL MODEL

Sogin and Nucleco have adopted an Organization, Management and Control Model (MOCG) to prevent and tackle the perpetration of predicate offences for administrative liability as set out under Legislative Decree no. 231/2001, corruption and maladministration phenomena as under Law no. 190/2012.
An integral part of this Model consists of the Ethical Code, namely the Charter of Principles to direct and rule the organisational and individual behaviours to be complied with on behalf of those engaged in the Company's mission and have an interest in pursuing it.
Sogin and Nucleco can exercise autonomous supervisory powers to guarantee their exemption from administrative liability as under Legislative Decree no. 231/01 and they can prevent corruption and maladministration phenomena as under Law no. 190/2012.
The Model and the Ethical Code are recommendations issued by the Board of Directors. Monitoring its functioning, effectiveness, application and review is a task assigned to the Supervisory Body (ODV).
Sogin Organization, Management and Control Model consists of all the structures, documents (resolutions, organizational provisions, etc.), and directives shaping the Company's organization; moreover, it includes all internal regulations (guidelines, regulations, procedures, operating instructions, etc.) regulating its functioning. This Model is defined according to the legal provisions and the By-laws giving the Company's nature and technological, economic, social and environmental value of its activities.
The Model responds to requirements aimed at substantiating its exempting effectiveness under Legislative Decree no. 231/01 and achieving the most suitable conditions for preventing corruption phenomena under Law no. 190/2012. In a logic of consolidation, the Model also includes the prevention measures to corruption and maladministration offences defined under Law 190/2012, and updated annually in the Three-Year Plan for Corruption Prevention and Transparency (PTPCT).
Without prejudice to the functions of the Supervisory Body and the Officer for Corruption Prevention and Transparency (RPCT), the management is in charge of implementing the OMCM according to their specific role in the company. The management defines the policies, regulations, procedures and documents of the internal regulations; these, and the "Special Sections" are integrated in the so-called "Protocols for the prevention and fight" against the offenced defined under Legislative Decree no. 231/01 and L. no. 190/2012. Consequently, the OMCM is subject to continuous adjustment interventions put in place, by top management, each in their own areas of competence, to seize opportunities for improvement, detected as a result of the exercise of the functions carried out by the bodies, figures and structures in charge of supervising, monitoring and performing internal control activities (Level II and III), in relation to the levels of effectiveness, efficiency, compliance and containment of risks that corporate action, inherently, entails.
For further details, please refer to the two documents published in sogin.it.
The Nucleco's Organization, Management and Control Model was not amended in 2021, due to the lack of new legislative updates of the Legislative Decree no. 231/2001. The current Model 231, updated as on October 2020, complies with the current standards.

CORRUPTION PREVENTION AND TRANSPARENCY

Sogin and Nucleco appointed a Corruption and and Transparency Prevention Officer.
The Companies' BoDs updated and approved the Three-Year Corruption Prevention and Transparency Plan for 2021-2023.
The measures provided in the Plan are part of the Organization, Management and Control Model, and aim at preventing corruption and maladministration and ensure full accessibility to the data and information that Sogin and Nucleco are required to publish and update on their official websites ("Transparency" section).
During the year, under the responsibility of Sogin RPCT and in collaboration with the structures managing civic access, two petitions for generalized civic access were implemented, one for simple civic access and one for documental access. moreover, the register of civic access, published in the "Transparency" section of the website, was updated. No civic access request was made to Nucleco.
To encourage whistle blowing practices, Sogin and Nucleco employ digital platforms that guarantee the anonymity of the whistle-blower. No alleged unlawful actions were reported to Sogin or Nucleco in 2021. The refresher course on corruption prevention and transparency was completed during the same year; the course, held through an e-learning platform, was addressed to the Members of the Board of Directors, the Board of Statutory Auditors, the Supervisory body and the employees of Sogin and Nucleco. In the education framework, Sogin and the Employees, Company, Services and RaMS offices prepared two new training programmes, one on corruption prevention and one on transparency for the employees working in these areas.

PROTECTION OF PERSONAL DATA

Sogin appointed a Data Protection Officer (DPO) as required under the Regulation (EU) 2016/679 (General Data Protection Regulation - GDPR). As highlighted below, legal compliance with the GDPR was ensured in 2021.

- Regular monitoring was performed and the following documents were updated as appropriate:
    - mapping of personal data processing as under Article 4 of the GDPR and Data subject Processing Register as under Article 30 of the GDPR providing information on each mapped processing activity;
    - Risk assessment as under Article 32 of the GDPR, in particular in relation to the risks arising from accidental or unlawful destruction, loss, alteration, unauthorised disclosure of, or access to personal data processed, to ensure an appropriate level of security;
    - Impact assessment, as under Article 35 of the GDPR, on the personal data that, due to the nature, scope, context and purposes of processing, are likely to result in a high risk to the rights and freedoms of natural persons;
    - Disclosures/consent forms to request the processing of personal data to the data subjects;
    - Corporate procedures, policies and contracts;
    - Appointment letters for Data Managers, System Administrators and other operators involved in data processing.
- Management of the requests to ensure the rights of the concerned parties also continued.
- As far as training is concerned, in 2021 training on the protection of personal data was provided through the company e-learning platform.

INTERNAL CONTROL

The Internal Control System consists of the bodies, offices and structures in charge of monitoring, checking and supervising the adequacy and functioning of the organizational, administrative and reporting approach and mission of the company.
The System ensures the achievement of the objectives defined by the Board of Directors, in line with the reference regulations and the by-laws, by monitoring on:

- the efficiency and effectiveness of corporate processes;
- the protection of the asset and value of activities;
- the reliability and integrity of reporting and management information and reporting system for the stakeholders;
- the legal compliance and consistency with internal procedures.

It includes the corporate bodies (the Board of Statutory Auditors, the Board of Directors, the Supervisory Body), the Internal Auditing, other officers involved in the corporate governance (i.e., the Corruption Prevention and Transparency Officer, the Controller, the DPO) and the senior decision-makers responsible for the performance of line checks.
Along with the checks performed by the Board of Statutory Auditors, the Board of Directors (members and delegates), and the Supervisory Body, the OMCM provides the following articulation of the OMCM:

TYPE	ARTICULATION
LINE CHECKS	• appointed to all corporate offices; • regularly performed in the business processes by those who carry out, manage or coordinate a given activity; • aimed at guaranteeing the correct performance of corporate operations.
SECOND-LEVEL CHECKS	• Periodically carried out by the following offices: risk management, compliance, and verification of the Integrated Management System for Quality, Safety and Environment, Management Control, Executive in charge and Data Protection Officer, etc.; • aimed at monitoring, analysing and identifying opportunities for improvement and/or possible adjustments for senior decision-makers.
THIRD-LEVEL CHECKS	• carried out by the Internal Audit function which directly reports to the Senior Management on the design and overall functioning of the Internal Control System.

Following the organizational arrangements made in 2020, the Internal Control Function (or Internal Auditing Function or Internal Audit) is assigned to the "Internal Audit, Risk Management, Presidio 231 e Sistema di Gestione Integrato", which, also in 2021, continued reporting directly to the Board of Directors.
The internal audit process is one of the audit macro-processes operated by the company in implementation of the provisions set out by Sogin Organization, Management and Control Model, which provides for the Company to establish a third-level internal control system, according to Article 21.2 of Sogin By-laws. The Article states the following: "The officer in charge of the Internal Audit reports to the Board of Directors or to the specific committee established within the Board". The Function also carries out internal auditing functions as established under paragraph 3, let. b) of Article 6.
The internal auditing process applies to any organizational domain in Sogin, without limitations, to meet the information needs required to support and qualify the decision-making processes implemented by the corporate governance; this includes administrative, control and supervisory bodies, other senior decision-makers entrusted with governance, coordination and management tasks across the organization.
More specifically, the Internal Auditing offers assurance and counselling services.
The assurance services are intended as the examination of evidence to confirm the adequacy and functioning of the Internal Control and Risk Management System implemented by the Company across its organizational areas; counselling services involve, instead, the performance of actions to support, assist and facilitate the collection of evidence and/or information qualifying and integrating the decisions made by the internal client who requested the service. Counselling services can also include training activities to promote the culture of control, monitoring and supervision for corporate protection.
The assurance services (or "audit") are carried out according to an annual plan subject to approval by the Board of Directors; the Board can amend and integrate the plan, including upon the request of the entities belonging to the corporate governance.
The counselling services are, instead, implemented upon the request of internal clients who need information and/or evidence, collected through professional methods, to fulfil their monitoring, control or validation requirements; when counselling services are intended to collect evidence and/or information of the performance of one or more internal performance, they are defined internal investigations; when they are intended to collect information and/or evidence on the existence, functioning, performance of one or more checks, supporting or rebuilding a decision-making process and/or ascertaining events, acts, provisions and/or behaviours, they are defined smart audit. The training activities are defined as educational & training services.
Moreover, the Internal Audit also carries out monitoring (so-called Follow-up) on the progress and effectiveness of the initiatives implemented by the competent entities after the checks and assurance verifications reported for the previous year. The corrective and/or improvement actions are implemented by the top management, their delegates according to their offices and competences, by considering the International Professional Practices Framework of the Institute of Internal Auditors. According to the standard, the internal audit is not entitled to make or implement management decisions or actions. In April 2021, upon the proposal of the Internal Audit, the Board of Directors resolved on the approval of:

- The internal audit strategic-management guidelines for the three-year period 2021-23;
- The mandate conferred to the Internal Audit, intended to support and frame the implementation of the strategic-management guidelines for the three-year period 2021-23;
- The annual internal audit plan defining the annual priorities for 2021.

In implementation of the mandate, the audit and follow-up reports are submitted to the Board of Directors, the Board of Statutory Auditors, the Supervisory Body, the Anti-corruption and Transparency Officer, the Specific Controller and the Chief Risk Officer, as well as to the audited entities and/or to the parties concerned with the outcomes of the audit.
The Internal Audit launched and processed 15 actions, 12 of which included audits, follow-ups and inspections provided under the 2021 internal audit plan approved by the BoD, and 3 smart audit requested by the CEO. According to the 2021 plan and in continuity with the approach implemented in the previous year, the internal audit focused on assessing the effectiveness, efficiency and conformity of the management and execution of procurement contracts, with a specific attention to maintenance contracts and vendor rating, and extended the audit to further areas, such as the training and development of human resources and the integration and adequacy of ICT systems.
In December 2021, upon the request of the Internal Audit, the Board of Directors resolved on approving the following:

- The internal audit strategic-management guidelines for the three-year period 2022-24;
- The mandate conferred to the Internal Audit, intended to support and frame the correct implementation of the strategic-management guidelines for the three-year period 2022-24;
- The annual internal audit plan defining the annual priorities for 2022.

During the same meeting, the BoD also approved the management procedure for the internal audit, by strengthening the control of corporate governance in the implementation of the guidelines and mandate conferred to the internal audit.
As provided under Article 21.2 of the By-laws, the Officer in charge of the Internal Audit reported to the BoD in 2021. The reports included the following information:

- Progress of the current plan;
- Internal Audit performance;
- general assessment of the overall functioning of the Internal Control and Risk Management systems;
- Resources available for the implementation of planned actions.

RISK MANAGEMENT

Sogin risk management system is designed according to the public nature of the Company and peculiarities of the sector in which it operates.
The system aims at containing compliance, strategic, and operational risks, as well as environment, security, and health-related risks. Said risks include internal and/or external events which may affect the implementation of processes and the development of projects,impacting on the achievement of the corporate objectives and reputation.
The strategic-organizational objective is to gradually increase the Company ability to detect and manage the risks and opportunities that may affect the achievement of corporate objectives; moreover, it supports and qualifies the decision-making processes of the corporate governance and other senior decision-makers entrusted with supervisory, direction and coordination tasks related to corporate processes and/or designs.
Achieving this objective is also necessary to maintain high standards in environmental protection, security, compliance and quality, and consolidate the ability of the Company to fulfil the information requirements of ARERA in relation to the estimated changes in decommissioning programmes.
In this regard, the Company has its own Risk and Opportunity Management Integrated Model, that adjust the best standards and practices at a national and international level to Sogin organizational and sectoral nature, thus, with a view to improve the decision-making processes and corporate management harmoniously.
In 2021, in continuity with the initiatives implemented in the previous year, organizational and management solutions directed at strengthening Sogin risk management system were capitalized.
Again in 2021, the Enterprise Risk Management (ERM) and the Project Risk Management (PRM) fostered the promotion and coordination of risk management processes and opportunities carried out by the management; this action aimed at ensuring that all risks and opportunities are correctly identified, managed and monitored in line with the guidelines of the BoD and the plans established by the function “Internal Audit, Risk Management, Presidio 231 e Sistema di Gestione Integrato”. In this regard, they are also entrusted the management of risks and opportunities emerging in their areas of competence.
This approach was capitalized by the Board of Directors with the approval of the new “Guidelines to draft the Risk and Opportunity Intergrated Management Model (GI-RO)” during a meeting held on 8 April 2021. The document defines new strategic and organizational approaches to develop the model

and its management procedures for 2021-23. It also defines the criteria, materiality thresholds and risk tolerance and opportunities admissibility levels, and identifies the corporate areas that need to be prioritized.
Subsequently, in December 2021, upon the proposal of the "Internal Audit, Risk Management, Presidio 231 e Sistema di Gestione Integrato", the BoD consolidated the Risk Management Model with the approval of the strategic and organizational guidelines for 2022-24 (adjusted according to the results achieved in 2021).
The "Internal Audit, Risk Management, Presidio 231 e Sistema di Gestione Integrato" function, in fact, provided the BoD with information related to the results of the 2021 Risk Management, and issued the first annual report with the ERM and PRM assessments. The BoD approved the management procedure suggested by the Project Risk Management and strengthen the control of corporate governance on the implementation of the Risk Management guidelines for Project Risks.
In Nucleco, during 2021, the correlation matrix of processes sensitive to crime-risks and their specific control protocols was created, which, attached to the Management and Control Model pursuant to Legislative Decree No. 231/2001, represents the adequacy of the system of control protocols adopted by the Company.

TECHNOLOGICAL AND MARKET RISK	The technological and market risk in Nucleco is connected to the specificity of the plants and equipment and the waste treatment processes and progressive reduction of space in storage facilities. To minimise this risk, Nucleco constantly renews its equipment and instruments; it verifies the possibility to extend the scope of waste treatment technologies through agreements with other stakeholders to access existing foreign systems and technologies.
CREDIT RISK	Exposure to potential losses resulting from the failure of the parties to comply with their obligations. In this regard, please note that the main clients of Nucleco are its shareholders, Sogin and Enea, and public institutions such as the European Commission and public and/or private entities like hospitals, institutes and factories. The analysis of the Company payables shows that most of the payables are represented by Sogin and ENEA; the remaining part includes payables from private clients and public Entities. Given the payables nature, the credit risk is possible due to the general economic crisis, that does not affect the business continuity of Nucleco.
LIQUIDITY RISK	The liquidity risk is represented by the lack of financial resources to cover the cash-flow requirement. Nucleco mainly performs activities for its shareholders, ENEA and Sogin, under active contract that constitute most of the profit generated by the company's sectoral activity in 2021. Currently, the liquidity risk is not relevant since cash flows resulting from corporate management and the current financial and asset structure enable managing cash commitments without borrowing from banks.
INDUSTRIAL RISK	Generally speaking, the industrial risk in connected to the presence of facilities that employ or store toxic, hazardous, flammable or explosive substances needed for their production, thus presenting a major accident risk for the citizens and the environment. Currently, the major accident industrial risk is connected to the possible external release of radioactive material. This accident is likely to be excluded, however, in the event of such an emergency, the types of wastes processed or stored by Nucleco would cause a radiation exposure of 2.7 mSv for each individual living at a distance of 1-km from the premises; this dose is similar to the average annual dose resulting from natural radioactivity. The only not-negligible collateral effect to which the Company would be exposed is the loss of reputation, as specified in the following section.

LEGAL RISK	The legal risk results from the likelihood for major restrictions in the technical regulations issued at a national and international level, sectoral regulations and general ones, which may induce Nucleco to be incapable of fulfilling the new regulations in terms of activities and outcomes. Supported by the parent company (Sogin), the competent structures, and the technical structures (ENEA) which report to the holder of authorization procedures, Nucleco is attentive to the reference regulatory framework to remain up to date with sectoral and general norms. A specific attention is provided to the environmental regulations, mostly in terms of developments or updates in Legislative Decree no. 152/2006 "Environmental regulations", that also includes the Single Environmental Authorization (AUA) achieved by Nucleco for the discharge of the effluents resulted from treatment in the ITLD22 plant and to release emissions in the atmosphere. As for possible new risks arising after the enforcement of Legislative Decree no. 101/2020 of 31 July 2020, which repealed Legislative Decree no 230/95 and implemented Directive 2013/59/Euratom laying down basic safety standards for protection against the dangers arising from exposure to ionising radiation, the Company immediately conducted a study to investigate possible effects on Nucleco's operations, and it systematically updates operational instructions and procedures by assessing possible critical events which may emerge in terms of risks.
REPUTATIONAL RISK	This risk is connected to the loss of trust o n behalf of the public opinion and main stakeholders, and to the negative image that may arise from actual or supposed adverse events. Nucleco mitigates this risk, as outlined in the corporate Ethical Code, by accurately analysing ingoing and outgoing information and communication; this task is performed with the support of Sogin competent office and ENEA's technical structures, that report to the holder of authorization provisions. The ISO 9001 (Quality), ISO 14001 (Environment), ISO 45001 (Safety in the workplace) and standard 8000 (Social Accountability), as well as the company's compliance with the national provisions on transparency, ethics and anti-corruption measures, highlight the Company's commitment towards the public opinion and mitigate the reputational risk.
ADMINISTRATIVE RISKS	In 2021, Nucleco continued updating and reviewing its management-administrative procedures (ruled by an organic set of regulations) and implementing integrated computer systems. This approach fosters integration with the parent company, thus strengthening internal control and mitigating administrative risks which may arise in case of failure to comply with regulatory obligations. No adverse events which may result in the commission of specific administrative offences were reported to competent supervisory bodies (Board of statutory auditors - internal and the Audit Firm and Manager appointed by Sogin - external).
RISKS RELATED TO THE COVID-19 HEALTH EMERGENCY	The health emergency affected economies worldwide; to tackle this phenomenon, the Company made great efforts and took the necessary decisions to minimise the risk of contagion from corona virus. In line with the decrees and protocols issued to tackle and contain the spread of COVID-19 in the workplace, the Company provided for the necessary actions to ensure continuity in production in the Complex of Nucleco Installation in the RC of Casaccia and in external sites; it achieved so, by rotating the employees residing at the locations where the activities were carried out and making massive use of so-called "smart working" (work from remote) for other employees, performing periodic sanitization, purchasing valveless FFP2 masks, sanitization products, common equipment and machines. Based on the Company operations and the effects of the COVID-19 pandemic, as emerged from the assessments carried out, no elements impacting on the business continuity were detected.

COMPLIANCE SYSTEM

Sogin has a specific structure to manage compliance risk, evaluate and monitor the corporate compliance with sector regulations, control their effective enforcement, and check progress and outcomes.
Art. 14 of the new regulation on corporate crisis under Law 155/2017 states the need to "establish appropriate organisational set-ups to promptly detect possible crisis and the loss of business continuity". Said provision aims at avoiding an overlapping among different offices, in charge of monitoring the corporate internal compliance.
This structure, operating in line with the principles of awareness, reputation, accountability, risk mitigation, and risk management, carries out a set of precautionary activities to ensure that the Company complies with sector regulations, protect it from regulatory and reputational risks, strengthen the corporate reputation and ensure competitiveness and trust from the Stakeholders.
By defining several best practices, this structure can bolster the corporate Offices and help them achieving corporate goals, without breaching or misinterpreting the current regulations. This activity is

carried out by verifying the correctness of corporate procedures and policies and compliance with first and second-level regulations (laws and regulations).
More specifically, in July 2021, the Company issued the corporate Compliance Plan following the performance of several activities required to its preparation (interviews, questionnaires with specific areas).
In June 2021, twp "Circular letters on Compliance" (no.1/2021 and no. 2/2021) were issued.
Between July and November 2021, the Compliance Manual was prepared.
The Office also supported the definition and restatement of 35 corporate documents (technical, general, environmental, HR, procurement and quality).
Among these, the most relevant are:

- the general conditions for work, service and supply contracts;
- the standard outlines of procurement contracts for Works Services and Supplies;
- the Information Security Policy guideline;
- the Data Management for the evaluation of environmental performance guideline, with which the operating procedures governing the collection of quantitative and qualitative data preparatory to the drafting of the Sustainability Report (in accordance with the document "G4 Sustainability Reporting Guidelines "1) and relating to Sogin environmental performance in accordance with the provisions of EC Regulation 1221/09 EMAS (as amended by EU Regulations n.1505/2017 and n.2026/2018) and UNI EN ISO 14001:15 have been defined;
- the radon dosimetry guideline, by which the operating procedures have been defined to comply with the provisions of Legislative Decree No. 101/2020 regarding the general requirements of the required radon measurements and those of the dosimetry service that performs the measurements;
- the Management Procedure - Operational modalities for developing and updating general time schedules and measuring the physical and economic progress of projects, defining the criteria, operating procedures and responsibilities for the development and updating of General Time Programs (GTPs) and related progress targets and for the detection of periodic progress of decommissioning activities inherent to power plants and facilities (excluding fuel cycle closure activities), as defined in the Resolution of the Regulatory Authority for Energy Networks and Environment (ARERA) August 3, 2021 348/2021/R/EEL.

INTEGRATED MANAGEMENT SYSTEM

The strategic and organizational objectives of Sogin Corporate Management System and the approach used by the Company to create value and foster constant improvement through a Management System in line with the ISO 9001, ISO 14001/EMAS and ISO 45001 standards, are collected in the Integrated Management System Policies and in the provisions defining its organizational structure.
The Company decided to be certified for ISO 9001, ISO 14001, ISO 45001 and undergo EMAS registrations to comply with legal requirements; moreover, it has recognized that the ability to contextualize, integrate and align corporate management with ISO requirements can help remove constraints and/or seize opportunities that may affect the effectiveness, efficiency and ensure compliance of corporate action with the achievement of institutional objectives.
To achieve this objective, the Company adopted a specific organizational structure, divided according to the following tasks:

- The control and support to the development of the Corporate Management System, in terms of macro-processes for second-level checks, is assigned to the "Internal Audit, Risk Management, Presidio 231 e Sistema di Gestione Integrato" function;
- The development of the Corporate Management System is assigned to the top management, which has leadership and coordination powers across different areas of competence.

In view of the sector in which the Company operates, the Company Management System is developed according to the reference standards for Quality (UNI EN ISO 9001), Environment (UNI EN ISO 14001) and Safety (ISO 45001), and the Safety Standards issued by the IAEA (International Atomic Energy Agency).

OUR CERTIFICATIONS		
UNI EN ISO 9001	**UNI EN ISO 14001**	**UNI ISO 45001**
Quality management systems: the standard defines the requirements for quality management in an organization. The requirements are of “general nature” and may be implemented by any kind of organization.	Environmental Management Systems: the standard certifies that the organisation has an appropriate management system for monitoring the environmental impacts of its activities, and systematically seeks to improve it in a consistent and efficient way.	Management systems for safety and occupational health: it certifies that the organization has healthy workplaces, prevents employees from work-related accidents and diseases and commits to constantly improve its performance in this regard.

The competent entities for Quality, Safety and Environment competent structures verified the implementation and improvement of the Integrated Management System through audits carried out on single corporate units. These audits, held in remote in 2021 due to the health emergency, showed compliance with the reference regulations.
Alignment to the standards is also periodically verified by a certified external entity, which assesses compliance with the regulation across the company’s processes and activities; also in 2021, the verification carried out by the certification entity to maintain the certification ended on 30 November with a positive outcome.
During the verification, held on the Casaccia, Latina, Caorso sites and on some processes supporting the headquarters, compliance with the regulations was detected in the following:

- Design and implementation of decommissioning operations on nuclear plants;
- Nuclear, energy and environmental engineering and supply services on behalf of third parties;
- Preparation and supply of training services on radiological protection and nuclear safety in decommissioning, market activities, engineering processes leadership and supporting processes, including in terms of radiological protection and nuclear safety.

In June 2021, Nucleco renewed the UNI EN ISO 14001 certification (Environmental Management System). The management systems for Safety and Health of Employees and Social Accountability required a visit on behalf of the Certification Body, which validated the Company’s compliance with ISO 45001 and SA8000. The ISO 45001 (Health and Safety of Employees) standard will be verified and renewed in 2022.


SELEZIONE ASSI
PULSANTE
SALITA
DISCESA
TRASLAZIONE SINISTRA
TRASLAZIONE DESTRA
ROTAZIONE ORARIA
ROTAZIONE ANTIORARIA
SELEZIONE ASSI
0-TRASLAZIONE ROTAZIONE
1-SOLLEV. AUSILIARIO
2-SOLLEV. PRINCIPALE N.1
3-SOLLEV. PRINCIPALE N.2
4-SOLLEV.PRINCIPALI N.1+2

07.
APPENDIX

GRI REFERENCE TABLE

TOPICS	GRI REFERENCE STANDARDS INTERNAL SCOPE OF REPORTING	SCOPE OF REPORTING	
		INTERNAL	EXTERNAL
ACCOUNTABILITY AND PARTNERSHIP WITH INSTITUTIONS AND NATIONAL ASSOCIATIONS	GRI 201: ECONOMIC PERFORMANCE 2016	✓	
	GRI 415: PUBLIC POLICY 2016	✓	
	GRI 419: SOCIOECONOMIC COMPLIANCE 2016	✓	
DIALOGUE AND EXCHANGE WITH LOCAL COMMUNITIES	GRI 413: LOCAL COMMUNITIES 2016	✓	
DECOMMISSIONING PHYSICAL PROGRESS	GRI 302: ENERGY 2016	✓	
	GRI 303: WATER AND EFFLUENTS 2018	✓	
	GRI 305: EMISSIONS 2016	✓	
LEGAL COMPLIANCE	GRI 207: TAXES 2019	✓	
	GRI 307: ENVIRONMENTAL COMPLIANCE 2016	✓	
	GRI 419: SOCIAL AND ECONOMIC COMPLIANCE 2016	✓	
CORRUPTION PREVENTION	GRI 205: CORRUPTION PREVENTION 2016	✓	
CIRCULAR ECONOMY	GRI 301: MATERIALS 2016	✓	
	GRI 306: WASTE 2020	✓	
RADIOACTIVE WASTE MANAGEMENT	GRI 306: WASTE 2020	✓	
DNPT LOCALIZATION	GRI 203: INDIRECT ECONOMIC IMPACTS 2016	✓	
	GRI 413: LOCAL COMMUNITIES 2016	✓	
RADIOLOGICAL SAFETY	GRI 403: HEALTH AND SAFETY IN THE WORKPLACE 2018	✓	
SAFETY IN THE WORKPLACE	GRI 403: HEALTH AND SAFETY IN THE WORKPLACE 2018	✓	
SUPPLY CHAIN	GRI 204: SUPPLY PRACTICES 2016	✓	
	GRI 308: ENVIRONMENTAL ASSESSMENT ON SUPPLIERS 2016	✓	
	GRI 414: SUPPLIER SOCIAL ASSESSMENT 2016	✓	
HR DEVELOPMENT, TALENT MANAGEMENT AND EQUAL OPPORTUNITIES	GRI 401: EMPLOYMENT 2016	✓	
	GRI 402: LABOR MANAGEMENT RELATIONS 2016	✓	
	GRI 404: TRAINING AND EDUCATION 2016	✓	
	GRI 405: DIVERSITY AND EQUAL OPPORTUNITY 2016	✓	
CORPORATE WELFARE, HEALTH AND WELL-BEING OF EMPLOYEES	GRI 401: EMPLOYMENT 2016	✓	
DECOMMISSIONING PROGRESS - COSTS	N/A	✓	
SHARING OF SCIENTIFIC KNOW-HOW	N/A	✓	
TECHONOLOGICAL INNOVATION AND RESEARCH	N/A	✓	

GRI CONTENT INDEX

GRI STANDARD	DISCLOSURE	PARAGRAPH	PAGE NUMBER OR LINK	OMISSIONS OR LIMITATIONS
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	102-2 Activities, brands, products and services	About us Market Activities	12 - 13 120 - 123	
	102-3 Location of the Headquarters	Inside front cover	2	
	102-4 Place of operations	About us Closing the Italian nuclear fuel cycle	12 - 13 82	
	102-5 Features and legal form	Sogin and Nucleco Governance	15 - 16	
	102-6 Markets served	About us Market Activities	12 - 13 120 - 123	
	102-7 Scale of the organization	About us HR KPIs	12 - 13 55	
	102-8 Information on employees and other workers	HR KPIs Stakeholder Map	55 40	
	102-9 Supply chain	Supply chain	74	
	102-10 Significant Changes to the organization and its supply chain	Methodological Note Supply chain	6 74	
	102-11 Precautionary Principle	Integrated Management System	132 - 133	
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	102-13 Membership of associations	Relations Other international collaborations	68 - 69 71 - 72	
STRATEGY				
GRI 102: GENERAL DISCLOSURES 2016	102-14 Statement from senior decision-maker	Letter to Stakeholders	5	
ETICA E INTEGRITÀ				
GRI 102: GENERAL DISCLOSURES 2016	102-16 Values, principles, standards and norms of behavior	About us Sogin and Nucleco Governance	12 - 13 15 - 16	
GOVERNANCE				
GRI 102: GENERAL DISCLOSURES 2016	102-18 Governance structure	Sogin and Nucleco Governance	15 - 16	

STAKEHOLDER ENGAGEMENT				
GRI 102: GENERAL DISCLOSURES 2016	102-40 List of stakeholder groups	Stakeholder Map	40	
	102-41 Collective bargaining agreements	People	41 - 44	
	102-42 Identifying and selecting stakeholders	Materiality analysis Stakeholder map	6 - 9 40	
		Materiality analysis Stakeholder map	6 - 9 40	
	102-44 Key topics and concerns raised	Materiality analysis Stakeholder map	6 - 9 40	
REPORTING PRACTICE				
GRI 102: GENERAL DISCLOSURES 2016	102-45 Entities included in the consolidated financial statements		6	
	102-46 Defining report content and topic Boundaries		6	
	102-47 List of material topics		6 - 9	
	102-48 Restatements of information		6	
	102-49 Changes in reporting		6	
	102-50 Reporting period		6	
	102-51 Date of most recent report		6	
	102-52 Reporting cycle		6	
GRI 102: GENERAL DISCLOSURES 2016	102-53 Contact point for questions regarding the report	Outside back cover	150	
	102-54 Claims of reporting in accordance with the GRI Standards		6	
	102-55 GRI content index		137	
	102-56 External assurance		146	

SPECIFIC				
ECONOMIC				
Economic performance (Accountability and partnership with institutions and national associations)				
GRI 103: MANAGEMENT APPROACH 2016	103-1 Explanation of the material topic and its Boundary	Materiality analysis Economic value for Stakeholders GRI Reference Table	6 - 9 78 - 79 136	
	103-2 The management approach and its components	Economic value for Stakeholders	78 - 79 for further details please refer to the consolidated financial statements of Sogin Group as on 31.12.2021	
	103-3 Evaluation of the management approach	Economic value for Stakeholders	78 - 79 for further details please refer to the consolidated financial statements of Sogin Group as on 31.12.2021	
GRI 201: ECONOMIC PERFORMANCE 2016	201-1 Economic Value directly created and distributed	Economic value for Stakeholders	78 - 79	
	201-4 Financial assistance received from government	Economic value for Stakeholders	78 - 79	
INDIRECT ECONOMIC IMPACTS (DNPT LOCALIZATION)				
GRI 103: MANAGEMENT APPROACH 2016	103-1 Explanation of the material topic and its Boundary	Materiality Analysis National Repository and Technology Park GRI Reference Table	6 - 9 112 - 116 136	
	103-2 The management approach and its components	National Repository and Technology Park	112 - 116	
	103-3 Evaluation of the management approach	National Repository and Technology Park	112 - 116	
GRI 203: INDIRECT ECONOMIC IMPACTS 2016	203-1 Infrastructure investments and services supported	National Repository and Technology Park	112 - 116	
	203-2 Significant indirect economic impacts	National Repository and Technology Park	112 - 116	
SUPPLY CHAIN				
GRI 103: MANAGEMENT APPROACH 2016	103-1 Explanation of the material topic and its Boundary	Materiality analysis Supply chain GRI Reference Table	6 - 9 74 - 77 136	
	103-2 The management approach and its components	Supply chain	74 - 77	
	103-3 Evaluation of the management approach	Supply chain	74 - 77	
GRI 204: SUPPLY CHAIN 2016	204-1 Proportion of spending on local suppliers	Supply chain	74 - 77	

SUPPLY PRACTICES 2016				
CORRUPTION PREVENTION				
GRI 103: MANAGEMENT APPROACH 2016	103-1 Explanation of the material topic and its Boundary	Materiality analysis Organization, management and control GRI Reference Table	6 - 9 126 - 133 136	
	103-2 The management approach and its components	Organization, management and control	126 - 133	
	103-3 Evaluation of the management approach	Organization, management and control	126 - 133	
GRI 205: ANTI-CORRUPTION 2016	205-3 Confirmed incidents of corruption and actions taken	Organization, management and control	126 - 133	
TAXES (LEGAL COMPLIANCE)				
GRI 103: MANAGEMENT APPROACH 2016	103-1 Explanation of the material topic and its Boundary	Economic value for Stakeholders GRI Reference Table	78 - 79 136	
	103-2 The management approach and its components	Economic value for stakeholders	78 - 79	
	103-3 Evaluation of the management approach	Economic value for stakeholders	78 - 79	
GRI 207: TAX MANAGEMENT APPROACH 2019	207-1 Approach to tax	Economic value for stakeholders	78 - 79	
	207-2 Tax governance, control, and risk management	Economic value for stakeholders	78 - 79	
	207-3 Stakeholder engagement and management of concerns related to tax	Economic value for stakeholders	78 - 79	
ENVIRONMENTAL				
MATERIALS (CIRCULAR ECONOMY)				
GRI 103: MANAGEMENT APPROACH 2016	103-1 Explanation of the material topic and its Boundary	Materiality analysis Closing the Italian nuclear fuel cycle GRI Reference Table	6 - 9 82 136	
	103-2 The management approach and its components	Closing the Italian nuclear fuel cycle Sustainability	82 22	
	103-3 Evaluation of the management approach	Environmental indicators	35	
ENERGY (DECOMMISSIONING - PHYSICAL PROGRESS)				
GRI 103: MANAGEMENT APPROACH 2016	103-1 Explanation of the material topic and its Boundary	Materiality analysis Closing the Italian nuclear fuel cycle GRI Reference Table	6 - 9 82 136	
	103-2 The management approach and its components	Closing the Italian nuclear fuel cycle Sustainability	82 22	
	103-3 Evaluation of the management approach	Closing the Italian nuclear fuel cycle	82	

GRI 302: ENERGY 2016	302-1 Energy consumption	Environmental indicators	35	

WATER AND EFFLUENTS (DECOMMISSIONING - PHYSICAL PROGRESS)				
GRI 103: MANAGEMENT APPROACH 2016	103-1 Explanation of the material topic and its Boundary	Materiality analysis Closing the Italian nuclear fuel cycle GRI Reference Table	6 - 9 82 136	
	103-2 The management approach and its components	Closing the Italian nuclear fuel cycle Sustainability	82 22	
	103-3 Evaluation of the management approach	Closing the Italian nuclear fuel cycle	82	
GRI 303: WATER AND EFFLUENTS MANAGEMENT APPROACH 2018	303-1 Interactions with water as a shared resource	Closing the Italian nuclear fuel cycle	82	
	303-2 Management of water discharge-related impacts	Closing the Italian nuclear fuel cycle	82	
GRI 303: WATER AND EFFLUENTS 2018	303-3 Water withdrawal	Environmental indicators	35 - 36	
	303-4 Water discharge	Environmental indicators	35 - 37	

EMISSIONS (DECOMMISSIONING - PHYSICAL PROGRESS)				
GRI 103: MANAGEMENT APPROACH 2016	103-1 Explanation of the material topic and its Boundary	Materiality analysis Closing the Italian nuclear fuel cycle GRI Reference Table	6 - 9 82 136	
GRI 103: MANAGEMENT APPROACH 2016	103-2 The management approach and its components	Closing the Italian nuclear fuel cycle Sustainability	82 22	
	103-3 Evaluation of the management approach	Closing the Italian nuclear fuel cycle	82	
GRI 305: EMISSIONS 2016	305-1 Direct (Scope 1) GHG emissions	Environmental indicators	37	
	305-2 Energy indirect (Scope 2) GHG emissions	Environmental indicators	37	

WASTE (CIRCULAR ECONOMY, RADIOACTIVE WASTE MANAGEMENT)				
GRI 103: MANAGEMENT APPROACH 2016	103-1 Explanation of the material topic and its Boundary	Materiality analysis Closing the Italian nuclear fuel cycle GRI Reference Table	6 - 9 82 136	
	103-2 The management approach and its components	Closing the Italian nuclear fuel cycle Sustainability	82 22	
	103-3 Evaluation of the management approach	Closing the Italian nuclear fuel cycle	82	

GRI 306: WASTE MANAGEMENT APPROACH 2020	306-1 Waste generation and significant waste-related impacts	Closing the Italian nuclear fuel cycle	82	
	306-2 Management of significant waste-related	Closing the Italian nuclear fuel cycle	82	
GRI 306: WASTE 2016	306-3 Waste generated	Environmental indicators	37 - 38	

ENVIRONMENTAL COMPLIANCE (LEGAL COMPLIANCE)				
GRI 103: MANAGEMENT APPROACH 2016	103-1 Explanation of the material topic and its Boundary	Materiality analysis GRI Reference table	6 - 9 136	
	103-2 The management approach and its components	Organization, management and control	126 - 133	
	103-3 Evaluation of the management approach	Organization, management and control	126 - 133	
GRI 307: ENVIRONMENTAL COMPLIANCE 2016	307-1 Non-compliance with environmental laws and regulations	No sanctions for violation of environmental laws and regulations were recorded in 2021	142	

ENVIRONMENTAL ASSESSMENT ON SUPPLIERS (SUPPLY CHAIN)				
GRI 103: MANAGEMENT APPROACH 2016	103-1 Explanation of the material topic and its Boundary	Materiality analysis Relations with suppliers GRI reference table	6 - 9 74 - 77 136	
	103-2 The management approach and its components	Supply chain	74 -77	
	103-3 Evaluation of the management approach	Supply chain	74 -77	
GRI 308: SUPPLIER ENVIRONMENTAL ASSESSMENT 2016	308-1 New suppliers that were screened using environmental criteria	Supply chain	74 -77	

SOCIAL				
Employment (HR development, talent management and equal opportunities; corporate welfare, health and well-being of employees)				
GRI 103: MANAGEMENT APPROACH 2016	103-1 Explanation of the material topic and its Boundary	Materiality analysis Value Creation - People GRI Reference Table	6 - 9 41 136	
	103-2 The management approach and its components	Value creation - People	41	
	103-3 Evaluation of the management approach	Value creation - People	41	
GRI 401: EMPLOYMENT 2016	401-1 New employee hires and employee	HR KPIs	56 - 58	
	401-3 Parental leave	HR KPIs	59	

LABOR/MANAGEMENT RELATIONS (HR DEVELOPMENT, TALENT MANAGEMENT AND EQUAL OPPORTUNITIES)				
GRI 103: MANAGEMENT APPROACH 2016	103-1 Explanation of the material topic and its Boundary	Materiality analysis Stakeholder map GRI Reference Table	6 - 9 40 136	
	103-2 The management approach and its components	Stakeholder Map	40	
	103-3 Evaluation of the management approach	Stakeholder Map	40	
GRI 402: LABOR/MANAGEMENT RELATION 2016	402-1 Minimum notice periods regarding operational changes operating	Stakeholder Map	40	

HEALTH AND SAFETY IN THE WORKPLACE (RADIOLOGICAL SAFETY; SAFETY IN THE WORKPLACE)				
GRI 103: MANAGEMENT APPROACH 2016	103-1 Explanation of the material topic and its Boundary	Materiality analysis Value creation. Health and safety GRI Reference Table	6 - 9 48 - 49 136	
	103-2 Management approach and its components	Value creation. Health and safety	48 - 49	
	103-3 Evaluation of the management approach	Value creation. Health and safety	48 - 49	
GRI 403: HEALTH AND SAFETY IN THE WORKPLACE MANAGEMENT APPROACH 2018	403-1 Occupational health and safety management system	Value creation. Health and safety	48 - 49	
	403-2 Hazard identification, risk assessment, and incident investigation	Value creation. Health and safety	48 - 49	
	403-3 Occupational health services	Value creation. Health and safety	48 - 49	
	403-4 Worker participation, consultation, and communication on occupational health and safety	Value creation. Health and safety	48 - 49	
	403-5 Worker training on occupational health and safety	Value creation. Health and safety	48 - 49	
	403-6 Promotion of worker health	Value creation. Health and safety	48 - 49	
GRI 403: HEALTH AND SAFETY IN THE WORKPLACE 2018	403-9 Work-related injuries	Value creation. Health and safety	48 - 49	

TRAINING AND EDUCATION (HR DEVELOPMENT, TALENT MANAGEMENT AND EQUAL OPPORTUNITIES)				
GRI 103: MODALITÀ DI GESTIONE 2016	103-1 Explanation of the material topic and its Boundary	Materiality analysis Value creation - Training GRI Reference Table	6 - 9 44 - 45 136	
	103-2 Management approach And its components	Value creation - Training	44 - 45	
	103-3 Evaluation of the management approach	Value creation - Training	44 - 45	
GRI 404: FORMAZIONE E ISTRUZIONE 2016	404-1 Average hours of training per year per employee	HR KPIs	59 - 60	

LOCAL COMMUNITIES (ACCOUNTABILITY AND PARTNERSHIP WITH INSTITUTIONS AND NATIONAL ASSOCIATIONS; DIALOGUE AND EXCHANGE WITH LOCAL COMMUNITIES; DNPT LOCALIZATION)				
GRI 103: MANAGEMENT APPROACH 2016	103-1 Explanation of the material topic and its Boundary	Materiality Analysis Relations GRI Reference Table	6 - 9 63 136	
	103-2 The management approach and its components	Relations	63	
	103-3 Evaluation of the management approach	Relations	63	
GRI 413: LOCAL COMMUNITIES 2016	413-1 Operations with local community engagement, impact assessments, and development programs	Relations	63	
	413-2 Operations with significant actual and potential negative impacts on local communities	Relations	63	

SUPPLIER SOCIAL ASSESSMENT (SUPPLY CHAIN)				
GRI 103: MANAGEMENT APPROACH 2016	103-1 Explanation of the material topic and its Boundary	Materiality analysis Supply chain GRI Reference Table	6 - 9 74 - 77 136	
	103-2 The management approach and its components	Supply chain	74 - 77	
	103-3 Evaluation of the management approach	Supply chain	74 - 77	
GRI 414: SUPPLIER SOCIAL ASSESSMENT 2016	414-1 New suppliers that were screened using social criteria	Supply chain	74 - 77	

PUBLIC POLICY (ACCOUNTABILITY AND PARTNERSHIP WITH INSTITUTIONS AND NATIONAL ASSOCIATIONS)				
GRI 103: MANAGEMENT APPROACH 2016	103-1 Explanation of the material topic and its Boundary	Materiality Analysis Relations GRI Reference Table	6 - 9 65 - 67 136	
	103-2 The management approach and its components	Relations	65 - 67	
	103-3 Evaluation of the management approach	Relations	65 - 67	
GRI 415: PUBLIC POLICY 2016	415-1 Political contributions	Relations	65 - 67	

SOCIOECONOMIC COMPLIANCE (ACCOUNTABILITY AND PARTNERSHIP WITH INSTITUTIONS AND NATIONAL ASSOCIATIONS; LEGAL COMPLIANCE)				
GRI 103: MANAGEMENT APPROACH 2016	103-1 Explanation of the material topic and its Boundary	Materiality analysis GRI Reference table	6 - 9 136	
	103-2 The management approach and its components	Organization, management and control	126 - 133	
	103-3 Evaluation of the management approach	Organization, management and control	126 - 133	
GRI 419: SOCIOECONOMIC COMPLIANCE 2016	419-1 Non-compliance with laws and regulations in the social and economic area	In 2021, proving that the Group operates in compliance with all applicable laws and regulations, there were no monetary and/or non-monetary penalties received for violating laws and regulations in the socioeconomic area	142	
DECOMMISSIONING PROGRESS - COSTS				
GRI 103: MANAGEMENT APPROACH 2016	103-1 Explanation of the material topic and its Boundary	Materiality analysis Closing the Italian nuclear fuel cycle GRI Reference Table	6 - 9 82 136	
	103-2 The management approach and its components	Closing the Italian nuclear fuel cycle Sustainability	82 22	
	103-3 Evaluation of the management approach	Closing the Italian nuclear fuel cycle Sustainability	82 22	
SHARING OF SCIENTIFIC KNOW-HOW				
GRI 103: MANAGEMENT APPROACH 2016	103-1 Explanation of the material topic and its Boundary	Materiality analysis Value creation - Training GRI Reference Table	6 - 9 44 - 45 136	
	103-2 The management approach and its components	Value creation - Training	44 - 45	
	103-3 Evaluation of the management approach	Value creation - Training	44 - 45	
TECHONOLOGICAL INNOVATION AND RESEARCH				
GRI 103: MANAGEMENT APPROACH 2016	103-1 Explanation of the material topic and its Boundary	Materiality analysis Closing the Italian nuclear fuel cycle GRI Reference Table	6 - 9 82 136	
	103-2 The management approach and its components	Closing the Italian nuclear fuel cycle Sustainability	82 22	
	103-3 Valutazione delle modalità di gestione	Closing the Italian nuclear fuel cycle Sustainability	82 22	

Independent auditor's report on Sustainability Report 2021

SO.G.I.N. SpA

Independent auditor's report on Sustainability Report 2021

To the Board of Statutory Auditors of SO.G.I.N. SpA
pursuant to Article 34 paragraph 4 of Law Decree No. 73/2022

We have been engaged to undertake a limited assurance engagement on the Sustainability Report of SO.G.I.N. Group (hereinafter also the "Group") for the year ended 31 December 2021.

Responsibilities of the Directors for the Sustainability Report

The Directors of SO.G.I.N. SpA (hereinafter also the "Company") are responsible for the preparation of the Sustainability Report in accordance with the *"Global Reporting Initiative Sustainability Reporting Standards"* issued by GRI - *Global Reporting Initiative* (the "GRI Standards") as updated in 2020, as illustrated in the "Methodological note" section of the Sustainability Report.

The Directors are also responsible for such internal control as they determine is necessary to enable the preparation of a Sustainability Report that is free from material misstatement, whether due to fraud or error.

The Directors are also responsible for defining the sustainability performance targets of the SO.G.I.N. Group, as well as for identifying its *stakeholders* and material topics to be reported on.

Auditor's Independence and Quality Control

We have complied with the independence and other ethical requirements of the *Code of Ethics for Professional Accountants issued by the International Ethics Standards Board for Accountants*, founded on fundamental principles of integrity, objectivity, professional competence and due care, confidentiality and professional behaviour.

Our firm applies *International Standard on Quality Control 1 (ISQC Italia 1)* and, accordingly, maintains a comprehensive system of quality control including documented policies and procedures regarding compliance with ethical requirements, professional standards and applicable legal and regulatory requirements.

Auditor's Responsibilities

Our responsibility is to express a conclusion, based on the procedures performed, on whether the Sustainability Report complies with the requirements of the GRI Standards. We conducted our work in accordance with *"International Standard on Assurance Engagements ISAE 3000 (Revised) - Assurance Engagements other than Audits or Reviews of Historical Financial Information"* (hereinafter also "ISAE 3000 *Revised*") issued by the *International Auditing and Assurance Standards Board* (IAASB) for *limited assurance* engagements. That standard requires that we plan and perform procedures to obtain limited assurance about whether the Sustainability Report is free from material misstatement.

The work performed was less in scope than in a reasonable assurance engagement conducted in accordance with ISAE 3000 *Revised* and, consequently, we did not obtain assurance that we became aware of all significant facts and circumstances that might be identified in a reasonable assurance engagement.

The procedures performed on the Sustainability Report were based on our professional judgement and included inquiries, primarily of personnel of the Company responsible for the preparation of the information presented in the Sustainability Report, inspection of documents, recalculations and other procedures designed to obtain evidence considered useful.

In detail, we performed the following procedures:

1) We analysed the process of definition of the material topics reported on in the Sustainability Report, with reference to the method of their identification in terms of priority for the various categories of stakeholders and to the internal validation of the results of the process;

2) We obtained an understanding of the processes underlying the generation, collection and management of significant qualitative and quantitative information included in the Sustainability Report.

   In detail, we inquired of and discussed with management personnel of SO.G.I.N. SpA and we carried out limited analyses of documentary evidence, in order to obtain information about the processes and procedures supporting the collection, aggregation, processing and submission of non-financial information to the corporate function in charge of the preparation of the Sustainability Report.

Furthermore, for significant information, taking into account the activities and characteristics of the Group:

- at the level of SO.G.I.N. SpA, as "parent company":

  a) with reference to the qualitative information presented in the Sustainability Report, we carried out interviews and obtained supporting documents to verify its consistency with available evidence;

  b) with reference to quantitative information, we performed both analytical procedures and limited tests to verify, on a sample basis, the accuracy of data aggregation.

- for the site of Garigliano, which we selected based on its activities, contribution to performance indicators at a consolidated level and location, we carried out meetings during which we met the persons responsible and obtained documentary evidence, on a sample basis, about the correct application of the procedures and calculation methods applied for the indicators.

Conclusion

Based on the work performed, nothing has come to our attention that causes us to believe that the Sustainability Report of the SO.G.I.N. Group for the year ended 31 December 2021 is not prepared, in all material respects, in accordance with the requirements of the GRI Standards as illustrated in the "Methodological note" section of the Sustainability Report.

Rome, 14 July 2022

PricewaterhouseCoopers SpA

Signed by

Pierpaolo Mosca
(Partner)

This report has been translated from the Italian original solely for the convenience of international readers. We have not performed any controls on the Sustainability Report 2021 translation.

SOGIN
2021 SUSTAINANABILITY REPORT

Edited by Sogin Communication and Sustainability Office

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