Sustainable Development and Social Responsibility Plan

2025-2027

A WORD FROM THE CHAIRMAN AND CEO

Embarking on the environmental transition to consolidate research excellence

The CNRS intends to mobilise its research forces in all disciplines to contribute to the joint work towards a sustainable society and an inhabitable planet. The CNRS is one of the world's leading scientific contributors to the IPCC and the IPBES. The research carried out by CNRS teams has always been essential in building up a body of knowledge and alerting societies and decision-makers - whether in the fields of climate or biodiversity or more broadly within the framework of the United Nations' 17 Sustainable Development Goals[1].

This scientific influence is our duty and requires us to contribute to the development of the right solutions through our research and to cut the environmental footprint of our activities. We need to work more sustainably and pursue excellence in research to benefit society. This requires a proactive sustainable development policy to be implemented in the framework of a collective international effort - particularly the United Nations Framework Convention on Climate Change and the Paris Agreement - as well as the climate framework for higher education and research.

As soon as 2020, the CNRS committed to taking the environmental impacts of research into account through a sustainable development roadmap to be supplemented by a low-carbon transition plan in 2023.
In 2022, the CNRS's General Management referred this issue to its Ethics Committee, Comets. The opinion published by Comets stated "*taking into account the environmental impacts of research should be considered as part of research ethics, in the same way as respect for human beings or for animals subject to experiments. Like the notion of 'responsible research and innovation', research ethics implies thinking about the effects of research on society, so it is the collective responsibility of the research community as a whole to factor in its environmental dimension*."

The Comets' remarks invite us to take on this responsibility in its broadest sense, in terms of how research is conducted and of its objectives.

In January 2024, the CNRS, along with all national research organisations and the French National Research Agency (ANR), signed a declaration of commitment to work together on promoting socio-ecological transitions which is in line with France's goal of attaining carbon neutrality by 2050. This collective declaration testifies to our determination to respond to the challenges of the ecological transition in favour of sustainable development.

The CNRS deeply believes its employees to be its greatest asset and has therefore worked with a proactive policy aimed at attracting, supporting and developing talented individuals, whether scientists or research support staff members. The aim of this Sustainable Development and Social Responsibility Plan is to reinforce this policy through the development of skills and expertise. An ambitious new HR service offer is to be implemented that includes a policy to enhance attractiveness, training, internal mobility and indeed the policy's own efficiency.

I would like to warmly thank the sustainable development officers and groups who work hard on a daily basis. They have carried out GHG assessments and set up robust initiatives at the laboratory, Regional Office and CNRS Institute levels. They have already identified levers and tested and evaluated research practices reconciling innovation and sustainability to promote demanding, high-level research.

To build on this foundational work, the CNRS is now committing to an ambitious SD&SR plan through:

Stronger political and operational leadership for its approach. In this strategic plan covering the 2025-2027 period, the CNRS has identified over 100 structuring actions to guide future choices and action plans at all levels of the organisation.

Aligning the thematic plans that have already been launched and going further with actions that have already been undertaken. Our actions will notably enhance our HR and responsible purchasing policies, reduce our energy consumption, reinforce the decarbonisation of mobility and progress towards more responsible digital technology. We also aim to improve how we measure our impact while bolstering the promotion of laboratory initiatives and the development of the right skills for the transition.

A systemic and interconnected approach to actions. With this plan, we are also taking our impact on soil and biodiversity into account along with the preservation of water resources, the transition to sustainable food, and pollution and waste control. Beyond 'mitigation' alone, one of today's main challenges is to anticipate all risks to our scientific and technical potential and implement an 'adaptation' approach to prepare for these. Our commitment is part of France's national climate change adaptation plans (PNACC)[2] and must guarantee the robustness of our research capabilities throughout France.

Rethinking research practices on the collective scale. With this SD&SR plan we are actively contributing to reinforcing research into environmental impacts and supporting the entire stakeholder chain - from individuals to laboratories to supervisory authorities – in the integration of the environmental ethics dimension into research projects, from their initial development to technology transfer.

There are close links between the environmental and human dimensions of socio-ecological transitions. The environmental choices we are presenting in this plan are linked to the organisation of work, individual and collective practices, and social dialogue to enhance our quality of work and life.

I would like to thank each and every one of you for your commitment to implementing this plan and strengthening the CNRS's position as a leading public stakeholder in the environmental transition.

Antoine PETIT
CNRS Chairman and CEO

1 : https://www.cnrs.fr/en/our-challenges/sustainable-development

2 : https://www.ecologie.gouv.fr/politiques-publiques/adaptation-france-changement-climatique

The CNRS's commitments

STRATEGY AND GOVERNANCE

Putting SD&SR issues at the core of the organisation's strategic objectives.

The SD&SR plan is led by the CNRS's General Management which means the steering of the plan is placed at the highest level of the CNRS's governance. This SD&SR Plan systematically integrates environmental, economic and social considerations related to sustainable development into the CNRS's strategy, particularly:

- our purchasing policy, through the scheme promoting socially and environmentally responsible procurement to integrate social and environmental objectives into the CNRS's public procurement policy;
- the implementation of an adaptation strategy to prepare CNRS staff members and our scientific and technical assets for climate change.

The CNRS is also reinforcing national coordination through a re-designed scope:

- expanding and enhancing how we measure our impact (particularly the impact of purchasing) and monitoring the indicators in the plan;
- planning the allocation of resources for environmental transition through the implementation of a SD&SR skills plan and taking sustainability into account in the organisation's investments.

The CNRS wishes to involve all stakeholders in its approach by:

- mobilising internal stakeholders and networks and encouraging staff members to take an active part in the environmental and social transition process;
- relying on our Regional Offices to develop and share initiatives at the local level in collaboration with our partners;
- facilitating the sharing and promotion of actions and experiences implemented at all levels, particularly in our units.

Beyond rolling out the organisation's SD&SR policy, the overall ambitions are to make sure the approach is implemented at the regional level and to contribute to the ongoing environmental transition in the research sector.

RESEARCH AND INNOVATION

The environmental transition for innovative and sustainable research

The CNRS is one of the leading worldwide contributors of data and research that is used for IPCC and IPBES reports.

The CNRS wishes to carry on producing world-class research while respecting the planetary boundaries and the quality of life of its staff members. The organisation aims to create the right organisational and material conditions to transform its research practices and support its staff members in the environmental transition.

Therefore the CNRS's ambitions are to:

- continue developing environmental transition research programmes and promote innovation and knowledge transfer to society;
- actively contribute to the analysis and measurement of environmental impacts, particularly those of research (emission factors, life cycle analyses, etc.) and make these available to the community;
- promote sustainable research practices - from design to implementation - and support all research stakeholders in more effectively taking environmental transition objectives into account throughout a research project's entire life cycle - from the initial idea to submission, monitoring and technology transfer. To achieve this, the organisation will take environmental concerns into account to a greater extent in the assessment of researchers, and staff members more broadly. The environmental footprint of research activities will also be systematically assessed.

THE ENVIRONMENTAL TRANSITION

A broader scope of action for a systemic approach, above and beyond the carbon impact

The CNRS is now integrating the new planetary boundaries and challenges into its environmental transition strategy to provide systemic responses by:

- limiting pollution and waste, preserving water resources, soil and biodiversity;
- taking the increasing scarcity of some resources into account, anticipating risks and adapting to climate change.

The CNRS is also extending its policy of cutting its carbon footprint, with priority given to reducing its purchasing footprint.

A particular effort will be made on sharing scientific equipment across sites, in collaboration with the organisation's partners. The optimisation of purchasing will be encouraged and the organisation will work with its suppliers to promote the use of environmental criteria in contracts. Regarding its digital footprint, the CNRS is launching a national initiative to drive the use of responsible digital technology across the organisation and all its activities (digital technology for research and digital management).

The CNRS will continue to strive to reduce its energy consumption and professional travel. Indeed, the carbon footprint of the latter was already significantly reduced between 2019 and 2022.

SOCIAL RESPONSIBILITY

The CNRS has pursued a committed human resources policy for many years that is designed to respond to its staff members' expectations and to address social issues through them. The CNRS has taken part in the European Human Resources Strategy for Researchers (HRS4R) since 2017 with the renewal of its HRS4R label testifying to this commitment.

In the years to come, the CNRS's social commitment will take the form of skills development by offering a new range of HR services to staff members, including an ambitious attractiveness, training and internal mobility policy.

The organisation will develop and use the skills of its staff members by offering dedicated training, particularly for the environmental transition.

The development of human potential is a major issue for the CNRS. This is particularly reflected in the recognition of the work and commitment of the staff members who contribute the most to the organisation's reputation and to the advancement of research, through annual awards and so forth.

The CNRS is also committed to workplace diversity and gender equality and to employing disabled people. The organisation pays particular attention to combating conflicts and indeed all forms of discrimination and harassment. Strengthening its units and structures assigned to work these issues is thus one of this policy's components.

A word from our Deputy CEOs

The Sustainable Development and Social Responsibility Plan represents an important step for the CNRS.

A great deal of the research in our laboratories will contribute to finding the right solutions to the challenge of sustainable development. Research can itself be part of the solution so scientists also have a duty to set an example in respecting our environment while carrying out research of the highest international level. The actions presented in this plan testify to the CNRS's commitment to changing scientific research practices to serve a sustainable society.

Alain SCHUHL,
Deputy CEO for Science, chairman of the CNRS Sustainable Development Committee

From the standpoint of resources, I would sum up the ambition of the SD&SR Plan in three keywords - optimisation, attractiveness and cohesion.

The idea is to step up our responsible purchasing policy, optimise our use of resources, enhance our organisation's attractiveness and, finally, to bolster the cohesion between our teams, our activities and our regional levels.

Christophe COUDROY
Deputy CEO for Resources

Key figures on sustainable development at the CNRS

85%

of the carbon footprint
is linked to purchasing

6 to 7

tCo_2eq

The average figure of laboratories that have carried out their GHG assessments

14.7

tCo_2eq /agent

This average varies a great deal depending on scientific disciplines (2 to 35 tCo_2eq).

Purchases are the largest expenditure item for laboratories.

800

sustainable development officers have been identified

1

dedicated research network: the 1point5 'GDR' (or research network)

173

files submitted by our units in response to the CNRS call for transition initiatives

The CNRS's SD&SR Plan - why?

The CNRS has been committed for many years to combating discrimination and inequality in terms of gender and disabilities. Also, since 2019 the organisation has been working on the environmental footprint of its activities. A sustainable development roadmap was developed with an ad hoc committee set up in 2020 to oversee its implementation. A low-carbon transition plan was also developed for 2023, following the preparation of the organisation's 2019 greenhouse gas emissions report.

Now, the CNRS's Sustainable Development and Social Responsibility Plan is a further step forward as regards this commitment. The plan is based on Ministry of Higher Education and Research (MESR) specifications. The CNRS has seized this opportunity to:

- **Broaden its thinking on its environmental impact beyond just its GHG emissions;**
- **Align the objectives of our existing plans - multi-year real estate strategy, energy efficiency plan, mobility plan, disability plan, and professional equality action plan;**
- **Facilitate dialogue with our partners who use the same SD&SR reference framework;**
- **Take targeted measures and more specifically set quantified targets to reduce our carbon and energy footprint along with targets for our impact on biodiversity;**
- **Commit to an anti-discrimination policy to remove all obstacles to diversity;**
- **Integrate the fight against inequality into all CNRS policies;**
- **Implement the fifth CNRS action plan for equal rights and opportunities, participation and citizenship for the disabled.**

The CNRS's SD&SR Plan - how?

Cross-disciplinary work with the Institutes, functional departments and sustainable development officers in the regions and Institutes, led by the CNRS's General Management.

In April 2024 this plan's scope and structure were approved by the General Management which wished to go further than the Ministry of Higher Education and Research's mandatory scope stipulations.
The General Management supported taking a systemic and interconnected approach to impacts and actions. In this way, apart from energy efficiency, greenhouse gas emissions and biodiversity, issues like water conservation, pollution and waste and food were integrated. The overriding idea was also for this approach to permeate the CNRS's core professions, with a focus on research and innovation.
In the last quarter of 2023, there was an initial period of collective appropriation of the SD&SR reference framework before work began on the SD&SR Plan. This work brought together around 40 sustainable development officers from our Institutes and Regional Offices with representatives of CNRS functional departments for a four-day face-to-face conference in 2024.

A method involving collective intelligence workshops was used to jointly develop a Plan that takes scientific and administrative realities into account.

During the drafting phase, using a collaborative platform also made it easier to take the views and suggestions of the various stakeholders involved fully into account, following an iterative process. This also enabled a shared diagnosis to be made on the environmental focus area. Work was also carried out to ensure consistency with eco-responsible public services to construct a single set of indicators (see page 61).

The SD&SR reference framework - a shared tool in higher education and research.

The CNRS's SD&SR Plan was developed on the basis of the SD&SR shared reference framework from French Higher Education and Research which facilitates dialogue between partners and appropriation by and within research units.
This framework has also meant a shared diagnosis could be made of the various themes. Work has also been carried out to ensure consistency with the circular on eco-responsible public services to construct a single set of indicators.

How the Plan was developed

Appropriation du référentiel DD&RS et validation de la structure	Appropriation of the SD&SR reference framework and validation of the structure
Pôle / Réseau DD	SD Hub /Network
Représentants des directions fonctionnelles	Representatives of functional
Pôle national DD	National SD Hub
Réseau des référents instituts et délégations régionales	Network of Institute and Regional Office representatives
4 journées nationales + 1 plateforme collaborative	4 national days + 1 collaborative platform
Projet de schéma directeur DD & RS	SD&SR Plan project
21 fiches thématiques	21 thematic fact sheets
100 actions structurantes	100 structuring actions

Governance

The Plan is led by the General Management which is also responsible for governance.
The CNRS Scientific Direction (DGDS) is in charge of the Research and Innovation and Environmental Transition focus areas while the CNRS Resources Direction is responsible for the social aspect.

The operational implementation of the Plan, the rollout of actions and monitoring of indicators are carried out by the CNRS's Coordination Direction, functional departments, the Transversal Steering Support Mission's (MTAP) environmental transition centre, the Institutes and the Human Resources Department.

This Plan will be reviewed every three years and an annual dashboard will be presented to the General Management Committee and the Board of Trustees.

The environmental transition - a collective dynamic for continuous improvement.

This Plan is intended to guide the organisation's actions and encourage staff members to take an active part in this process. It will be monitored and communicated regularly to staff members and all stakeholders likely to enrich or participate in the approach and actions.

At all levels of the organisation (units, Institutes, Regional Offices and General Management directions), the impetus provided by each management structure to implement the Plan needs to be accompanied by careful consideration of existing initiatives and user feedback in a continuous improvement process.

CNRS Sustainable Development and Social Responsibility Plan

A systemic and interconnected approach to impacts and actions.

FOUR FOCUS AREAS:

1| STRATEGY
2| RESEARCH
3| THE ENVIRONMENT
4| SOCIAL RESPONSIBILITY

25 THEMES

100 STRUCTURING ACTIONS

1 Concevoir, piloter, gouverner la transition	1 Designing, managing and governing the transition
2 Anticiper les risques, préparer l'adaptation et la raréfaction des ressources	2 Anticipating risks, preparing for adaptation and scarcity of resources
3 Piloter des achats responsables	3 Managing responsible purchasing
4 Mesurer l'empreinte, évaluer les actions	4 Measuring the footprint and assessing actions
5 Planifier l'affectation de moyens à la démarche	5 Planning the allocation of resources to the initiative
6 Valoriser, communiquer, essaimer	6 Promoting, communicating and disseminating
7 Mobiliser les acteurs et les réseaux	7 Involving and driving stakeholders and networks
8 Territorialiser la transition environnementale	8 Embedding the environmental transition locally
9 Accompagner la transformation des pratiques de recherché	9 Supporting the transformation of research practices
10 Conduire une recherche d'excellence dans le domaine de la transition environnementale	10 Leading research excellence on environmental transition
11 Doter le CNRS d'un centre de competences en durabilité	11 Providing the CNRS with a **competence centre in**

	sustainability
12 Renforcer le dialogue science-société et le transfert des résultats de recherche	12 Reinforcing the dialogue between science and society and the transfer of research results
13 Accompagner le déploiement de l'éthique environnementale	13 Supporting the rollout of environmental ethics
14 Piloter une stratégie numérique responsable et resilient	14 Steering a responsible and robust digital strategy
15 Décarboner les missions et les déplacements professionnels	15 Decarbonising professional travel
16 Décarboner les mobilités de proximité	16 Decarbonising local travel
17 Réduire la consommation énergétique des bâtiments et des installations	17 Reducing the energy consumption of buildings and facilities
18 Préserver la ressource en eau	18 Preserving water resources
19 Préserver les sols et la biodiversité	19 Preserving soils and biodiversity
20 Maîtriser les pollutions et déchets	20 Controlling pollution and waste
21 Engager la transition vers une alimentation responsible	21 Starting the transition to responsible food consumption
22 Former pour la transition	22 Training for the transition
23 Promouvoir l'égalité professionnelle	23 Promoting professional equality
24 Promouvoir la santé, la sécurité, la qualité de vie au travail	24 Promoting health, safety and quality of life in the workplace
25 Agir pour l'emploi des agents en situation de handicap	25 Taking action in favour of the employment of the disabled

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STRATEGY AND GOVERNANCE

POLICY & STRATEGY
1 **Designing, managing and governing the transition strategy**
2 **Anticipating risks, preparing for adaptation and scarcity of resources**
3 **Managing responsible purchasing**

MANAGEMENT AND ROLLOUT
4 **Measuring the footprint and assessing actions**
5 **Planning the allocation of resources to the initiative**

STAKEHOLDERS
6 **Promoting, communicating and disseminating**
7 **Involving and driving stakeholders and networks**
8 **Embedding the environmental transition locally**

FOCUS AREA 2

RESEARCH AND INNOVATION

RESEARCH AND INNOVATION STRATEGY
9 **Supporting the transformation of research practices**
10 Leading research excellence on environmental transition

SCIENCE AND SOCIETY
11 **Providing the CNRS with a competence centre in sustainability**
12 **Reinforcing the dialogue between science and society and the transfer of research results**

ETHICS
13 **Supporting the rollout of environmental ethics**

FOCUS AREA 3

THE ENVIRONMENTAL TRANSITION

GHG EMISSIONS & RESOURCES
14 **Steering a responsible and robust digital strategy**
15 **Decarbonising professional travel**
16 **Decarbonising local travel**
17 **Reducing the energy consumption of buildings and facilities**
18 **Preserving water resources**

BIODIVERSITY
19 **Preserving soils and biodiversity**

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20 **Controlling pollution and waste**

FOOD
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24 Promoting health, safety and quality of life at work

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25 Taking action in favour of the employment of the disabled

FOCUS AREA 1

STRATEGY AND GOVERNANCE

POLICY & STRATEGY

1| DESIGNING, MANAGING AND GOVERNING THE TRANSITION STRATEGY

CONTEXTUAL ELEMENTS

Target reduction for France of

50%

in GHG emissions by 2030 (compared to 1990) under the Paris Agreement: (Source: SNBC-3)

The CNRS is the 1st contributor to the IPCC and the IPBES

The CNRS must adopt a SD&SR strategy that is consistent with its missions and meaningful for its staff members. This involves:

- Strengthening the governance of 'sustainable development and social responsibility' at all levels - from the General Management to research and administrative structures;
- Empowering all departments and units to implement the SD&SR Plan ;
- Ensuring the continuous improvement of the SD&SR approach;
- Steering and assessing the SD&SR policy.

Objectives

- A strategy that is worthy of the importance of both the issue itself and of the CNRS;
- A widely shared strategy that is regularly assessed and updated;
- A SD&SR approach integrated into the organisation's strategy, with SD&SR objectives and indicators shared collectively at all levels - from the General Management to CNRS units and General Management Directions.

STRUCTURING ACTIONS

- Lead strategic thinking by the General Management Committee reviewing the Plan and its indicators at least once a year, ensuring the SD&SR Plan aligns correctly with the Objectives, Resources, and Performance Contract (COMP);
- Develop the sustainable development committee into a steering committee for the SD&SR Plan's environmental segment;
- Involve stakeholders and experts to ensure the coordination of the various plans dovetails effectively with the SD&SR Plan (low-carbon transition, energy efficiency, mobility, etc.);
- Integrate SD&SR objectives into the roadmap at all management levels (Institutes, Regional Offices, functional departments) and into managers' job descriptions/mission statements;
- Integrate SD&SR indicators into the Regional Offices' dashboards.

• RELATED THEMES

5: Planning the allocation of resources to the initiative (p.22)
7: Involving and driving stakeholders and networks (p.24)
22: Training for the transition (p.53)

2| ANTICIPATING RISKS, PREPARING FOR ADAPTATION AND SCARCITY OF RESOURCES

Contextual elements

18,5 million people (27.4% of the French population) live in an area with a flooding risk

1.5 million French people are exposed to marine submersions

48% of mainland France is exposed to clay shrinkage and swelling

(source: DATALab 2023, MTECT)

x2 the cost of climate events in France over the last four years

(source: France Assureur)

Environmental changes like climate change and the growing scarcity of resources (water, metals, materials), energy costs and energy dependence are all significant risks for researchers and research activities. These risks need to be anticipated with adaptation strategies developed to maintain our human and technical research capabilities. Such strategies should go beyond mitigation alone and avoid choices that increase rather than reduce vulnerability (poor adaptation).

Objectives

- Identify research structures that are vulnerable to environmental changes. This mapping should also include the specific vulnerabilities of CNRS units in terms of their activities and location, and as regards a scarcity of resources;
- Plan and implement adaptation measures based on the inventory carried out, particularly to preserve our scientific and technical real estate (buildings, land, natural resources, equipment, data, etc.);
- Promote adaptation measures at site level;
- Raise awareness and develop the skills of management teams and key CNRS stakeholders as regards adaptation.

STRUCTURING ACTIONS

MAPPING AND PLANNING:

- Carry out inventories of research structures that are vulnerable to environmental changes like flooding, clay soil shrinkage and swelling, fires, rising sea levels, intense or long heat waves, droughts, etc.;
- Use the French National Climate Change Adaptation Plan as the basis to plan the adaptation of the CNRS's scientific and technical potential.

PREPARING AND ADAPTING:

- Adapt research and administrative buildings: particularly by insulating, increasing green spaces and tree cover around buildings, adapting building envelopes (glass, roofs, walls), installing shade structures over certain parking spaces, renovating heating, ventilation, air conditioning and control systems (particularly for technical and/or high-energy-consuming installations), recovering waste heat;
- Study the conditions for possibly shutting down certain installations during hot or cold periods according to the constraints of scientific continuity;
- Improve our water management, including supply, use and reuse (particularly for installations consuming large volumes of water like cooling systems and chemical processes, especially those in the driest regions);
- Promote the removal of impervious surfaces and rewilding of soils and adaptation measures towards clay shrinkage and swelling as needs evolve. Choose compact and technically simple building solutions while implementing innovative and proven technological systems that optimise performance levels.
- Use renewable energy sources as much as possible for self-production and self-consumption. Implement practices involving the reduction, reuse and recycling of materials and resources to manage their scarcity for research activities (e.g. helium recycling).

RAISING AWARENESS AND PROVIDING TRAINING:

- Inform and train research staff members on environmental risks and adaptation measures; develop a network of adaptation experts;
- Integrate adaptation issues into scientific foresight reports and the design of research projects, equipment and installations.

LEADERSHIP

Transversal Steering Support Mission (MTAP), Real Estate Policy Department, National Prevention and Security Coordination (CNPS), Institutes, Regional Offices.

RELATED THEMES

3: Managing responsible purchasing (p. 18)
10: Leading research excellence on environmental transition (p. 29)
13: Supporting the rollout of environmental ethics (p. 33)

FOCUS
RESEARCH
Towards risk and disaster management in an era of global change
With the 'Risks' Priority Research Programme and Equipment (PEPR), the CNRS and its partners are helping enhance our understanding of the natural and social processes that generate risks and disasters and developing innovative approaches and tools to address such events more effectively. Its ambition is to federate scientific communities and contribute to the development of a new national risk and disaster management strategy in this era of global change.

3| MANAGING RESPONSIBLE PURCHASING

Contextual elements

Purchasing represents 85% of the CNRS's GHG emissions at the institutional level (2022 report on greenhouse gas emissions)

Scientific facilities and equipment account for **70%** of the CNRS's capital expenditure

Purchases account for the largest part in analysis of the CNRS's environmental impact. The organisation's priority is to control the purchasing segments with the most impact such as scientific equipment, consumables and construction/renovation.
The CNRS needs to purchase more effectively and encourage all stakeholders in this sector (buyers, internal purchasing advisors, suppliers and funders) to integrate environmental issues into their work processes.
The current methods used to measure the emissions linked to purchasing (monetary ratios) do not allow for the quantification of gains made in terms of sustainability. Therefore, to measure progress in this area it is necessary to work firstly on the specific physical emission factors of research activities (equipment in particular) and secondly to be capable of quantifying the units purchased.

Objectives
- The rollout of the scheme promoting socially and environmentally responsible purchasing (SPASER), the operational formulation of the CNRS's sustainable purchasing policy: awareness-raising activities, training and the sustainable purchasing network;
- The development of the scheme to pool and repurpose equipment internally within French higher education and research, particularly for the most impactful purchasing segments (IT and scientific equipment, etc.) and the reinvestment by laboratories of any savings made, for example through climate change mitigation and adaptation measures;
- The implementation of the right conditions to prolong the working life of equipment;
- The enhancement of the scientific equipment offer from our suppliers (carbon footprint, recycling, delivery).

STRUCTURING ACTIONS
- Strengthen the pooling scheme for purchases of equipment and consumables - develop pooled purchases of equipment, promote the exchanges of existing equipment, roll out solutions for sharing stocks of equipment, consumables and supplies at laboratories and sites (e.g. setting up one-stop shops to manage consumables);
- Organise the end-of-life of scientific and IT equipment in particular in view of their recovery (recycling, pooling, other forms of recovery);
- Integrate environmental issues into the purchasing decision-making chain:
  - develop scheduled scientific equipment purchasing in the framework of unit management discussions;
  - roll out a model of environmental criteria and clauses for the various CNRS purchasing segments to be used by buyers and purchasing advisors;
- Roll out '*Jouvence*' Labs on sites linked to their local economic fabric to increase repairs of scientific equipment and drive innovation in the same way as 'Fablabs'. These '*Jouvence*' Labs will provide technical skills and equipment for manufacturing of spare parts and custom-made instruments in particular, along with scientific resource centre (donations or exchanges for repurposing);
- Promote the sustainability of funded research projects through continued negotiations with our partners and funders.
- Negotiate maintenance and end-of-life management contracts and guarantees with suppliers for purchases above the threshold for formal public procurement procedures (currently €143,000);
- Develop the sourcing of a range of reconditioned products;
- Roll out tools to raise awareness of real requirements in the context of research projects and research support work alike, particularly by developing a sustainable purchasing guide for advisors on scientific and everyday purchases.

Indicators
- The integration of environmental criteria and clauses in 100% of contracts in 2025 (public procurement and concession contracts);
- The ratio of the amount spent on second-hand equipment to total purchases.

Leadership
- Finance Department, Purchasing Department, Institutes, Regional Offices, units.

Related themes
5: Planning the allocation of resources to the initiative (p. 22)
9: Supporting the transformation of research practices (p. 27)
13: Supporting the rollout of environmental ethics (p. 33)
19: Preserving soils and biodiversity (p. 46)
20: Controlling pollution and waste (p. 48)
22: Training for the transition (p. 53)

Working towards socially and environmentally responsible public procurement
The CNRS's SPASER scheme for promoting socially and environmentally responsible public procurement involves all stakeholders in the procurement chain, including suppliers, buyers and purchasing advisors to drive product sustainability, digital sobriety and a circular economy.

4 | MEASURING THE FOOTPRINT AND ASSESSING ACTIONS

CONTEXTUAL ELEMENTS

A downward trend in emissions of 5% per year for higher education and research

An approximately 40% uncertainty factor assigned to purchases in the CNRS's greenhouse gas emissions report

6 of the 9 planetary boundaries have been exceeded[3]

To effectively steer the organisation's environmental transition and meet compliance requirements, it is essential for our actions to be assessed in advance and for us to measure and monitor our environmental impact. This requires the enhancement of the data used in the regulatory greenhouse gas emissions report and of feedback on steering indicators.

New metrics also need to be developed, particularly to:

- **limit the bias of the potential additional costs of more responsible purchasing caused by the use of monetary ratios in greenhouse gas emissions calculations coupled with a lack of physical emission factors;**
- **ensure the accounting of research-specific emissions, particularly involving research infrastructure and 'starred' infrastructure, and develop life cycle analysis of research programmes and equipment;**
- **measure other environmental impacts than GHG emissions, particularly impacts on biodiversity;**
- **assess the impacts on actions to promote the transition that have been taken or are planned.**

Objectives

- The CNRS is recognised for its expertise in methods for the accounting of environmental impacts (carbon, biodiversity, resources, life cycle analysis of research projects);
- The enhancement of GHG emissions accounting - procurement, information systems, waste, fugitive emissions and research and 'starred' infrastructures in particular;
- Systematising the use of data collection and reporting in information systems to enhance and simplify the calculation and monitoring of GHG emissions at all levels (organisation, Regional Offices, units);
- Expanding the scope of measurement of our environmental impacts, particularly to biodiversity and the development of environmental assessment;
- The integration of environmental indicators into the management and evaluation of activities (functional departments, Regional Offices, units).

An environmental assessment of engineering research projects
The CNRS wants to develop a multi-criteria methodology based on life cycle analysis to assess the environmental impact of research practices in relation to the expected results of research projects. Together with its partners, it created in 2025 the Transdisciplinary Unit for Guidance and Forecasting of the Environmental Impacts of Engineering Research (UTOPII), which will also be responsible for coordinating a network of environmental engineers and researchers.

3: https://www.statistiques.developpement-durable.gouv.fr/la-france-face-aux-neuf-limites-planetaires
4: https://www.kateraworth.com/doughnut/. This method has been used in particular by UNIL

STRUCTURING ACTIONS

- Contribute to the continuous improvement of specific tools in French higher education and research for measuring GHG emissions. Define a reference framework for research-specific emission factors in higher education and research, particularly by using the findings of the Labo 1Point5 GDR and tools from the French Environment and Energy Management Agency (Ademe).
- Continue making a regulatory greenhouse gas emissions assessment every three years.

- Measure the impact of CNRS activities on biodiversity at the level of the organisation and its main campuses. Test the Donut methodology[4] to assess the CNRS's impact on the nine planetary boundaries;
- Further develop environmental assessment with: methods for analysing the life cycle of research projects, equipment and facilities; assessment of the environmental impact of research infrastructure and 'starred' infrastructure, assessment of the impact of actions taken in favour of the transition;
- Develop a national and regional dashboard of indicators for the CNRS Plan;
- Encourage units to continue regular monitoring of their environmental impacts;
- Study the implementation of a shareable inventory of scientific instruments and consumables to help optimise purchases and usage;
- Monitor purchase volumes for scientific instruments and scientific consumables in terms of quantity rather than just in financial terms.

LEADERSHIP
CNRS Resources Direction (DGDR), Institutes, the Committee for Very Large Research Infrastructures, Transversal Steering Support Mission (MTAP), Financial Strategy, Real Estate and Modernisation Department (DSFIM), Accounts and Financial Information Department (DCIF), Information Systems Department (DSI).

Related themes
5: Planning the allocation of resources to the initiative (p. 22)
9: Supporting the transformation of research practices (p. 27)
17: Reducing the energy consumption of buildings and facilities (p. 42)
20: Controlling pollution and waste (p. 48)

5| PLANNING THE ALLOCATION OF RESOURCES TO THE INITIATIVE

CONTEXTUAL ELEMENTS

5 FTEs dedicated to environmental transition at the CNRS in 2025

Time required to complete a greenhouse gas emissions report for the organisation: Between 4 and 6 months

Time required to carry out a laboratory greenhouse gas emissions report:

Between 10 and 20 days per year

Implementing the establishment's environmental transition requires human and financial resources to:

- Steer the transition;
- Acquire new expertise (notably in specific professional areas);
- Develop an impact culture;
- Ensure the maintenance and/or repair of equipment and facilities;
- Lead scientific communities and professions.

OBJECTIVES

- **Allocate long-term human resources dedicated to the management and implementation of the SD&SR plan;**
- **Invest the necessary financial resources to implement the environmental transition effectively;**
- **Set up a SD&SR skills plan to anticipate the organisation's skills requirements and develop such skills among the staff members;**
- **Promote the value of staff members' investment in SD&SR, particularly for sustainable development officer roles.**

STRUCTURING ACTIONS

- Ensure that an environmental transition officer is appointed in each laboratory with a mission statement signed by the director;
- Appoint an environmental transition officer with a mission statement in each Regional Office and Institute;
- Roll out the environmental transition skills plan (recruitment, training and support components);
- Appoint experts in sustainable procurement, energy efficiency, responsible digital technology and sustainable mobility in the various professional sectors;
- Promote and develop skills in repairing scientific and IT equipment in particular, and network these skills;
- Take sustainability criteria into account in the organisation's investment planning;
- Gradually integrate environmental impact indicators into funding allocation criteria;
- Find external funding for the plan's implementation at all levels of the organisation.

INDICATORS

The percentage of units with a sustainable development officer with a mission statement.

LEADERSHIP

CNRS Resources Direction.(DGDR)

RELATED THEMES

9: Supporting the transformation of research practices (p. 27)
11: Providing the CNRS with a **competence centre in sustainability** (p. 30)
22: Training for the transition (p. 53)

Page 23

STAKEHOLDERS

6| PROMOTING, COMMUNICATING AND DISSEMINATING

Colonne gauche

CONTEXTUAL ELEMENTS

33,000 CNRS staff members with 120,000 working in joint CNRS units

Over 1000 CNRS structures (laboratories, support and research units, Regional Offices, research infrastructures)

87 environmental transition projects in laboratories supported by the CNRS since 2023

Given the size of the CNRS and its organisation throughout mainland France, in the overseas territories, internationally and across all scientific disciplines, the dissemination and adoption of the organisation's commitments need to be organised effectively.
It is also necessary to make sure actions and experiences are implemented at all levels (units, Regional Offices, functional departments, Institutes) and subsequently shared for assessment and dissemination.

OBJECTIVES

- **CNRS's SD&SR commitments and initiatives widely known and shared by staff members and partners;**
- **Permanent exchange and feedback mechanisms regularly held to disseminate and scatter collective actions;**
- **A call for initiatives for the transition with follow-up assessments and subsequent sharing of the actions taken to maximise their impact;**
- **The implementation of a SD&SR action kit in the units.**

STRUCTURING ACTIONS

- Design a communication plan to disseminate the SD&SR Plan and the actions taken, communicate regularly on tangible results, showcasing stakeholders and best practices;
- Organise mechanisms for sharing actions at all levels. Set up 'totem' hubs to promote exchanges and bring people together;
- Make the call for initiatives for transition a long-term fixture, assess and share the results of actions taken;
- Implement a guide for units to self-assess their commitments and organise events and methods (awards, testimonials, podcasts, etc.) to showcase such commitments.

INDICATORS

- Number of projects submitted in response to the call for initiatives.

LEADERSHIP

Transversal Steering Support Mission (MTAP), Communications Department, Mission for Transversal and Interdisciplinary Initiatives (MITI).

RELATED THEMES

1: Designing, managing and governing the transition strategy (p. 15)
7: Involving and driving stakeholders and networks (p. 24)

Promoting the environmental transition initiatives of our units
Since 2023, the CNRS has been supporting units in their environmental transition through an annual call for initiatives. This has now funded over 80 unit projects promoting sustainable mobility, biodiversity preservation, the drive to cut the use of plastics, energy performance and energy efficiency.

7| INVOLVING AND DRIVING STAKEHOLDERS AND NETWORKS

CONTEXTUAL ELEMENTS

> 800 sustainable development officers identified for 1000 CNRS units in 2025

To involve employees in the SD&SR transition, we need to:

- create the right material and organisational conditions at all levels;
- identify and mobilise the stakeholders that should be involved and integrated into the transition process at laboratory, site, region and international levels;

- develop a new cooperation culture to collectively identify sustainable solutions for communities and individuals;
- recognise and value the different commitment levels (individual, collective) of staff members, officers and managers.

OBJECTIVES

- **A trained SD&SR network that is equipped to carry out its missions;**
- **A dynamic coordination of the CNRS's SD&SR network;**
- **A broad association of all internal stakeholders involved in implementing the SD&SR Plan (transdisciplinary technology networks, authorities, National Committee, COMETS, monthly meetings);**
- **The CNRS should be positioned as a major stakeholder in external networks and among external stakeholders, particularly academic and business partners.**

STRUCTURING ACTIONS

MOBILISE AND UNIFY STAKEHOLDERS:

- Identify sustainable development officers for all units in the CNRS information systems and organisation charts;
- Define and support these officers' roles with a mission statement, networking with sites and our partners in joint research units;
- Provide the officers with effective resources (training, officers' online space, newsletter, action kits, assessment tools);
- Reinforce and enhance the coordination of sustainable development officers in units by Regional Offices and Institutes which themselves are coordinated at the national level;
- Recognise the contribution of staff members to the environmental transition in higher education and research by giving value to such activities in their annual reports.

MOBILISE MANAGERS:

- Train CNRS managers, particularly unit directors, on environmental issues (basic training, new unit directors);
- Integrate SD&SR issues into the job descriptions and assessments of managers;
- Integrate a section on SD&SR issues in the resource objective dialogues within our units.

MOBILISE CROSS-DISCIPLINARY TECHNOLOGICAL BODIES AND NETWORKS:

- Continue the integration of the environmental transition into the organisation's social dialogue process;
- Involve laboratory and/or department councils in defining the SD&SR strategy of our structures;
- Raise awareness of SD&SR issues among internal advisory bodies;
- Promote SD&SR culture in transdisciplinary technology networks;
- Launch calls for projects, particularly interdisciplinary ones, on environmental transition.

LEADERSHIP

Transversal Steering Support Mission (MTAP), Mission for Transversal and Interdisciplinary Initiatives (MITI), Human Resources Department.

RELATED THEMES

1: Designing, managing and governing the transition strategy (p. 15)
6: Promoting, communicating and disseminating (p. 23)
8: Embedding the environmental transition locally (p. 25)
22: Training for the transition (p. 53)

8| EMBEDDING THE ENVIRONMENTAL TRANSITION LOCALLY

CONTEXTUAL ELEMENTS

1100 laboratories under CNRS supervisory authority in France and internationally

17 Regional Offices

2/3 of CNRS staff members work on **11** major university sites

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To implement the SD&SR Plan throughout France's regions, the CNRS bases its work on:

- actions carried out in CNRS units that can be capitalised upon and promoted;
- the regions' own specific limitations and opportunities, particularly as regards everyday mobility, biodiversity, the energy transition of buildings and social responsibility objectives;
- the partnership dynamic that the joint research units operate within;
- the CNRS network of 17 Regional Offices.

The objective is to fully involve the whole organisation at national and local levels alike, particularly through the network of Regional Offices, to drive the momentum of the plan while developing and sharing initiatives.

OBJECTIVES

- **All of the CNRS Regional Offices will possess an SD&SR plan for their area;**
- **The Regional Offices will integrate SD&SR issues into their support tools for joint research units (new entrants' day, unit directors' meeting days, management dialogues, etc.);**
- **The Regional Offices will contribute to the implementation of the plan in coordination with local stakeholders such as academic partners, local authorities, socio-economic actors, etc.**

STRUCTURING ACTIONS

- Integrate SD&SR objectives into the roadmap for our Regional Offices and in the job descriptions and/or mission statements of regional officers;
- Strengthen the SD&SR organisation at the level of the Regional Offices to coordinate the community of sustainable development officers in CNRS units within their areas;
- Carry out a self-assessment and develop an environmental transition plan with an annual dashboard at the level of the Regional Offices' specific areas;
- Coordinate with local stakeholders (academic partners, local authorities, socio-economic stakeholders, etc.) to implement a site policy that dovetails effectively with this plan (mobility, outreach via the 'totem' hubs, '*Jouvence*' Labs, equipment sharing, etc.);
- Implement a mobility plan and appoint a mobility officer;
- Assign external funding in line with the objectives of the plan at the local level (calls for regional projects, Ademe, etc.).

LEADERSHIP

Regional Offices, regional scientific directors and their deputies, joint research units, support and research units.

RELATED THEMES

1: Designing, managing and governing the transition strategy (p. 25)
7: Involving and driving stakeholders and networks (p. 24)
9: Supporting the transformation of research practices (p. 27)

FOCUS AREA 2

RESEARCH AND INNOVATION

RESEARCH & INNOVATION STRATEGY

9| SUPPORTING THE TRANSFORMATION OF RESEARCH PRACTICES

CONTEXTUAL ELEMENTS

53% of CNRS emissions are linked to capital purchases

with 70% of those purchases related to research equipment

The CNRS is currently the leading contributor to the IPCC. However, the organisation's activities have a significant environmental impact as shown among other thingsby the results of its greenhouse gas emissions report. The new challenge for the CNRS is to produce world-class research while respecting planetary boundaries and the quality of life of its staff members. The CNRS must develop the right organisational and material conditions to transform its research practices and support its staff members in the transition. Along with 16 other national research organisations, the CNRS has committed to "*rethinking our working methods whenever necessary. This collective statement testifies to our determination to respond through our research and changes to practices to the challenges of the ecological transition for sustainable development.*" Statement of commitment by 16 French national research organisations on January 22nd 2024

OBJECTIVES

The CNRS is a world-class research organisation that promotes sustainable research practices and:

- **Contributes to the development of research assessment criteria;**
- **Develops sustainable, low-impact and innovative research practices to reduce its direct and indirect environmental footprint (energy resources, water, biodiversity, materials, plastics and chemicals, equipment and consumables) and its waste production;**
- **Contributes to cutting the environmental impact of research infrastructure in particular;**
- **Integrates environmental impact assessments into the design and implementation of its research projects and research topics;**
- **Advocates for research projects to be extended so better use can be made of results and the race for funding can be avoided;**
- **Supports staff members who wish to develop their activities to integrate environmental transition issues more effectively.**

STRUCTURING ACTIONS

CHANGES TO ASSESSMENT AND RECRUITMENT PRACTICES:

- Promote and attribute value to the use of greenhouse gas emissions reports and SD&SR action plans in laboratory assessments and the allocation of resources;
- Take into account the commitment of staff members to SD&SR issues in their assessments and promotion opportunities.

CHANGES TO RESEARCH PRACTICES:

- Develop an experimental tool to assess a research project's minimum carbon footprint;
- Integrate the environmental impact of research infrastructure into project design from the outset;
- Disseminate research protocols that reduce environmental impacts through the Institutes at the national level;
- Encourage and support the sharing, renewal, reuse and sustainability of equipment;
- Work with national and international funding agencies to reduce the environmental impact of research projects, particularly by extending the durations of projects beyond five years;
- Promote the 'FAIRisation[5]' of data to encourage the usage of existing data;
- Support staff members and groups that develop innovative actions to promote the environmental transition or target sobriety;

5. Fair data - Findable, Accessible, Interoperable, Reusable

Particle science - enhancing our understanding of the Earth system and the oceans

The CNRS and its European partners are developing a seabed telescope in the Mediterranean (KM3NeT-ORCA) to detect atmospheric neutrinos generated by the interaction between cosmic rays and molecules in the atmosphere. ORCA will also be equipped with multiple sensors to observe marine life, deep sea conditions and seismic activity in the Mediterranean.

Innovative materials

. The DIADEM (*Integrated Structures to Accelerate the Rollout of Emerging Materials*) Exploratory PEPR aims to assess every stage of the innovation chain 'from idea to object' in order to accelerate the design of more efficient, sustainable materials using non-critical and non-toxic raw materials. In this way the project objective is to transform sustainably and profoundly the way materials science is approached.

- Strengthen the network of facilitators to support CNRS units in developing their transition plans;
- Provide specific training for research staff;
- Raise awareness among staff assessment bodies.

LEADERSHIP

CNRS Scientific Direction (DGDS), Mission for Transversal and Interdisciplinary Initiatives (MITI), Institutes, National Programmes Mission, Human Resources Department, General Secretariat of the National Committee for Scientific Research (CoNRS), joint research units, support and research units.

RELATED THEMES

3: Managing responsible purchasing (p. 28)
10: 10 Leading research excellence on environmental transition (p. 29)
13: Supporting the rollout of environmental ethics (p. 33)

10| ENVIRONMENTAL TRANSITION RESEARCH EXCELLENCE

The CNRS is a leading research stakeholder in the environmental field. Its units produce a wealth of knowledge that can contribute to the environmental transition. To amplify the impact of its knowledge, the CNRS needs to foster an enhanced synergy between different scientific disciplines and intensify its dedicated sustainable innovation and environmental transition research.

OBJECTIVES

- **The CNRS should be a leading research stakeholder for the environmental transition;**
- **Develop disciplinary and transdisciplinary research programmes focusing on the environmental transition;**
- **Accelerate the transfer to society of sustainable and innovative solutions.**

STRUCTURING ACTIONS

- Promote a holistic approach to environmental issues (perception, politics, economics, awareness, interdisciplinarity) through calls for transdisciplinary projects;
- Promote innovation in specific areas relevant to the environmental transition through targeted calls for projects, particularly in the fields of:
  - energy (production, efficiency, storage, use);
  - biodiversity: analysis, protection and restoration of ecosystems, nature-based solutions;
  - recycling and biodegradable materials;
  - green chemistry;
  - physics and low-carbon engineering;
  - digital sobriety;
  - social and organisational innovation (e.g. holacracy, third spaces, collaborative modes, managerial innovation, etc.).

LEADERSHIP

CNRS Scientific Direction (DGDS), Mission for Transversal and Interdisciplinary Initiatives (MITI), Institutes, CNRS Innovation Direction (DGDI), National Programmes Mission (MiPN), Transversal Steering Support Mission (MTAP), joint research units, support and research units.

RELATED THEMES

9: Supporting the transformation of research practices (p. 27)
13: Supporting the rollout of environmental ethics (p. 33)

Assessing and reducing the plastic footprint of research
Through the Aquitaine Observatory of the Universe Sciences (OASU), the CNRS is supporting the inter-institutional Redplast project. Redplast aims to develop a library of simple, eco-friendly protocols to be made available to laboratories seeking to reduce their consumption of plastics. The project is also designing a calculator for the quantitative assessment of these protocols' environmental footprint. This library of protocols and the associated calculator could help drive the transformation of research practices.

SCIENCE AND SOCIETY

11| PROVIDING THE CNRS WITH A competence centre in sustainability

The CNRS is committed to transforming fundamental knowledge acquired from research into operational knowledge that can be used directly by citizens and public authorities. This includes recommendations, the promotion and dissemination of orders of magnitude and key figures, mapping, data visualisation, and so on. The overall objective is to establish a reliable and legitimate source of information.
This project is part of the CNRS's statutory missions, namely "*to contribute to the application and promotion of the results of this research*" and "*to develop scientific information and access to research work and data*".
The CNRS's 'EcoInfo' GDRS (*research and service network*) successfully carries out this mission on issues linked to responsible digital technology. 'EcoInfo' is also considered as a model whose use should be extended to all transition issues (mobility, biodiversity, climate, etc.) and used to foster dialogue between them.

Focus
ACTION
Transition 'totem' hubs
Resource and training centres will be experimented for researchers and students all over France in the framework of the 'Recyclability, Recycling and Reincorporation of Recycled Materials' acceleration PEPR. These 'totem' hubs will be organised into a network and hosted by higher education establishments. They will portray the involvement of public research stakeholders in circular economy issues and could be open to private companies or local authorities in the framework of collaborations and to the general public during scientific outreach events.

OBJECTIVES

Federate research efforts linked to the sustainability of ecosystems, climate and societies while promoting interdisciplinarity, creativity and serendipity.

- Provide a reliable source of information to support the transition process within the CNRS, French higher education and research (ESR) and society as a whole;
- Foster the circulation of facts, data and information that are the subject of scientific consensus;
- Establish the CNRS as a leader for the transition by setting up a recognised source of information to be used directly by citizens and thus contribute to links between research and society.

STRUCTURING ACTIONS

- Establish the resources required for the creation of the centre (team, website, etc.);
- Identify research topics for the centre and launch a call for volunteers within the communities;
- Define the centre's service offer:
  - Contribute to research on environmental impacts;
  - Support the general management and all CNRS structures in their strategies and actions linked to sustainability;
  - Identify and disseminate the latest knowledge on environmental transition issues;
  - Contribute to the training offer for the CNRS's transition;
  - Collaborate with civil society stakeholders, particularly by organising conferences or awareness-raising activities.
  - Foster interdisciplinary research on the transition through calls for projects, conferences and seminars.

LEADERSHIP

CNRS Scientific Direction (DGDS), Institutes, Mission for Transversal and Interdisciplinary Initiatives (MITI), Transversal Steering Support Mission (MTAP).

RELATED THEMES

5: Planning the allocation of resources to the initiative (p. 22)
9: Supporting the transformation of research practices (p. 27)

12| REINFORCING THE DIALOGUE BETWEEN SCIENCE AND SOCIETY AND THE TRANSFER OF RESEARCH RESULTS

CONTEXTUAL ELEMENTS

Over 250 parliamentary meetings since 2018 at the National Assembly, the Senate and in laboratories

2 cultural affairs and education committees invited to CNRS headquarters

Partnership agreements signed with 12 out of the 13 regions in mainland France,

France's Court of Auditors and *Gendarmerie Nationale*

1,500 start-ups from the CNRS

1 CNRS-company joint laboratory set up every fortnight

The CNRS in the top 10 of France's largest patent contributors

650 science outreach events involving the CNRS in 2023

Supporting public policy, technology transfer and scientific outreach have been part of the CNRS's DNA since its creation by the Nobel Prize winner Jean Perrin and the Minister Jean Zay in the late 1930s.
The CNRS is involved in a wide range of activities, including taking part in many numerous parliamentary hearings every year, organising laboratory visits for decision-makers, carrying out collective scientific assessments on subjects with significant societal implications, possessing a portfolio of 9000 patent families in partnership with other organisations, setting up start-ups and joint laboratories, taking part in government and intergovernmental scientific committees, teaching activities and producing books, exhibitions, conferences, debates, educational workshops.
CNRS staff members also take part in numerous outreach activities aimed at society every year. The CNRS will continue to transfer skills and information via its structures and staff members to contribute to a more sustainable society informed by science.

OBJECTIVES

- **Consolidate the CNRS's position as a leading technology transfer stakeholder and creator of entrepreneurial jobs;**
- **Reinforce the CNRS's position as a source of expertise to support public policy makers from ministries to local authorities, and in promoting major societal issues to young people and citizens;**
- **Position the CNRS as a major stakeholder in public policy responses to global changes like climate change, adaptation, biodiversity crisis, risks, etc.**

STRUCTURING ACTIONS

STRENGTHEN PARTNERSHIPS WITH THE BUSINESS SPHERE
- Generalise projects with a societal and environmental impact (PISE);
- Broaden support for prematuration and start-up development programmes with the support of transfer engineers.

REINFORCE SUPPORT FOR PUBLIC POLICIES AND CIVIL SOCIETY, PARTICULARLY IN THE FOLLOWING AREAS BY:
- Taking part in ministerial bodies (Higer Education and Research, Interior, Environment, Economy, Foreign Affairs);
- Taking part in parliamentary hearings, the Court of Auditors, the Economic, Social and Environmental Council, the *Conseil d'État*, etc.
- Providing support for decentralised government services and local authorities;
- Producing institutional expertise to inform decision-makers and citizens on major societal issues;
- Jointly organising institutional events to foster meetings between scientists and decision-makers;
- Taking part in partner committees and programme agencies;
- Training government officials for the environmental transition.

INFORMING SOCIETY TO SUPPORT ITS TRANSFORMATIONS
- Developing the transfer of CNRS expertise to support public policy responses to global changes in collaboration with key stakeholders like the Ademe, the Centre for Studies and Expertise on Risks, the Environment, Mobility and Urban Planning (Cerema) or *Météo France*;
- Extending the organisation of thematic years (biology, physics, geosciences, etc.) with the French Ministry of Education;
- Bolstering dialogue with citizens by setting up conferences and public debates, publishing informative books;
- Significantly developing participatory science projects and valuing these in staff members' assessment reports.

LEADERSHIP

CNRS Scientific Direction (DGDS), CNRS Innovation Direction (DGDI), Communications Department, Mission for Transversal and Interdisciplinary Initiatives (MITI), Institutes, National Programmes Mission (MiPN), Transversal Steering Support Mission (MTAP). joint research units.

RELATED THEMES

1: Designing, managing and governing the transition strategy (p. 15)
6: Promotion, communication and dissemination (p. 23)
7: Involving and driving stakeholders and networks (p. 24)
8: Embedding the environmental transition locally (p. 25)
10: Leading research excellence on environmental transition (p. 29)
11: Providing the CNRS with a **competence centre in sustainability** (p. 30)
22: Training for the transition (p. 53)

ETHICS

13| SUPPORTING THE ROLLOUT OF ENVIRONMENTAL ETHICS

The issue of research's environmental impact brings up many questions, particularly about the values and actual purpose of research and its place in society. It needs to be approached from a scientific, political as well as an ethical standpoint insofar as individual and collective reflection is required on the values that guide action, their consistency and the tensions that could potentially arise.

OBJECTIVES

- **Promote environmental ethics in the way research is carried out internally and with our partners. Roll out a culture of taking the socio-environmental impact into account in research practices and more generally in the definition of the organisation's research topics, methods and projects.**
- **Raise awareness on environmental ethics and promote the adoption thereof throughout the research community.**

Ethical responsibility
The CNRS Ethics Committee, COMETS, is a working group that examines the ethical issues raised by scientific research its practices, purposes and the new situations it creates. COMETS was notably asked by the CNRS Chairman and CEO to look into the environmental impact of research. Its opinion entitled – '*Integrating environmental issues into the conduct of research: an ethical responsibility*' - was published on December 5th 2022 and has become a reference document on environmental ethics in research.

STRUCTURING ACTIONS

- Design guidelines, recommendations for best practices and sustainable ethical solutions tailored to scientific communities. Offer tools that encourage reflection about practices, the choice of research subjects and responsible purchasing (decision tree, LCA methodology).
- Support researchers who want to change their research subject by providing training and helping to build bridges to other disciplines, for example through a dedicated and enhanced version of the '*Osez l'interdisciplinarité!*' programme set up by the Mission for Transversal and Interdisciplinary Initiatives;
- Promote the integration of sustainable practices right from the design stage of research projects to minimise environmental impacts. These include project life cycle analysis, the application of the 3Rs rule (replacement, reduction, refinement) and the assessment of positive versus negative impacts, particularly in CNRS-led calls for projects and when lobbying funders;
- Give greater value to research projects and results that incorporate sustainability;
- Integrate environmental ethics issues into training projects (national training actions or 'ANFs', thematic schools, presentations and webinars);
- Integrate the promotion of environmental ethical standards into training and the mission statements of unit directors.

INDICATORS

- 100% of CNRS internal calls for projects promote the integration of sustainable practices and encourage thought about environmental ethics;
- 100% of CNRS units possess the right tools for thought about practices (decision trees, etc.);

- The percentage of funding from the '*Osez l'interdisciplinarité!*' programme for thematic changes related to the environmental transition.

LEADERSHIP

Institutes, Transversal Steering Support Mission (MTAP), Regional Offices, joint research units, support and research units.

RELATED THEMES

3: Managing responsible purchasing (p. 18)
9: Supporting the transformation of research practices (p. 27)
10: Environmental transition research excellence (p. 29)

A variety of research tools to support the transition

A mathematics institute for planet Earth

This scientific interest network promotes and structures interactions between mathematics and other scientific disciplines to work on issues linked to planet Earth and the interdependence of humans and their ecosystem.

The CNRS sets up long-term observation systems for a wide range of physical variables to study the effects of climate change. For example, the 'ICOS-France-Atmosphère' (SIFA) national observation service is one of the largest European greenhouse gas monitoring networks. This French contribution to the European research infrastructure ICOS-ERIC's atmospheric observation network is essential for work on greenhouse gas balances throughout the European continent.

Federating research and energy

The CNRS Energy Unit is a structure that promotes and coordinates actions in the field of energy. Its work covers all aspects of safe, clean and efficient energy - from production and use (buildings, mobility, etc.) to distribution (electricity and heating networks, etc.). The CNRS Energy Unit also contributes to France's national energy research strategy (SNRE).

Towards digital sobriety

The 'EcoInfo' research and services network (GDRS) works to cut the environmental impact of information and communication technologies. 'EcoInfo' carries out monitoring, awareness-raising, training, communication and advisory work, particularly for government departments.

Research rooted in local communities

The work of the CNRS's '*Zones Ateliers*' (ZA, *long-term socio-ecological research sites*) focuses on functional units like a river and its catchment area, agricultural or urban landscapes, biodiversity (from Antarctica to sub-Saharan Africa), coastlines or even life in environments characterised by chronic natural or enhanced natural radiation. They use a specific scientific approach based on observations and experiments at these research sites to carry out long-term multidisciplinary research.

Transversality and interdisciplinarity

The Mission for Transversal and Interdisciplinary Initiatives (MITI) drives and involves scientific communities through its calls for projects and scientific outreach events covering topics as varied as the adaptation of living organisms, planetary boundaries and sustainability challenges, resources or sobriety. The MITI also steers cross-disciplinary technology networks that federate CNRS expertise around a given profession or technology. These networks work to capitalise on knowledge and acquire new expertise through training, information and knowledge dissemination activities. They particularly focus on eco-design and frugal approaches.

FOCUS AREA 3

THE ENVIRONMENTAL TRANSITION

GHG EMISSIONS & RESOURCES

14 | STEERING A RESPONSIBLE AND ROBUST DIGITAL STRATEGY

CONTEXTUAL ELEMENTS

13,911 laptops acquired in 2022 for the CNRS's 33,000 staff members

In France less than 50% of electrical and electronic equipment waste is sent for recycling

At the CNRS, the waste linked to laptops alone is estimated at 21 tonnes per year

In the 'Matinfo' market, environmental criteria account for 20% of the rating while the guarantees for laptops have increased from 5 to 7 years

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Digital technology has a strong impact on GHG emissions as well as mineral and water resources while generating waste that is difficult to recycle. In the research sphere, digital technology is playing an increasingly important role in all disciplines through the increased use of imaging, intensive computing and AI. It provides technical support for the management, automation, analysis, modelling and simulation of observational data.
Steering, avoidance and optimisation are the levers that need to be used to reduce the digital footprint.

OBJECTIVES

- **Measure the environmental footprint of digital technology at the CNRS level;**
- **Study the widespread implementation of an inventory of digital equipment intended to optimise its purchase and usage;**
- **Reduce the environmental footprint of digital technology at the CNRS. Integrate environmental transition issues into the design and implementation of research projects that use digital resources;**
- **Promote a culture of digital sobriety among staff.**

STRUCTURING ACTIONS

STEERING:

- Set up national steering for responsible digital technology that integrates management and research IT, based on the work of the 'EcoInfo' GDRS;
- Enhance the calculation of the digital footprint of research activities;
- Take stock of purchases/uses/end-of-life processing for management applications, user equipment and servers;
- Recruit and train BAP (branch of professional activity) E profiles with 'Green IT' skills.

AVOIDANCE:

- Recommend equipment is used at least as long as the guarantee period for digital terminals and equipment to extend their lifespan;
- Give preference to equipment with a high repairability index, extend warranty periods (seven years) to encourage repairs and facilitate the repair process in collaboration with suppliers;
- Standardise the configurations of digital devices intended for non-specific uses;
- Promote purchases of reconditioned equipment with an equivalent guarantee period to that of new equipment;
- Specify eco-design and accessibility criteria in the purchases of management applications.

Developing new components for a more frugal and sustainable digital world.
The aim of the SPIN PEPR is to promote a new cycle of innovations in spintronics by making frugality an essential performance criterion that is given equal weight as computing power, speed, miniaturisation and cost.
The Spintronics technique exploits the quantum property of electron spin to store information.

OPTIMISING:

- Continue the optimisation of the energy performance of large equipment and facilities as well as digital services;
- Monitor the energy and carbon performance levels of data centres and servers and develop waste heat recovery projects;
- Follow the recommendations of the European Code of Conduct for Energy Efficiency in Data Centres[6];
- Continue the server pooling policy by developing a range of services for laboratories;
- Roll out training on digital sobriety, ethical aspects and accessibility for buyers, decision-makers, large-scale users of digital solutions and IT professionals;
- Optimise experimental protocols that use intensive computing.

INDICATORS

- 25% of IT and telephone equipment should be repurposed or reused each year, subject to the availability of an inventory.

LEADERSHIP

CNRS Informatics, Information Systems Department (DSI), Ecoinfo.

RELATED THEMES

3: Managing responsible purchasing (p. 18)
9: Supporting the transformation of research practices (p. 27)
17: Reducing the energy consumption of buildings and facilities (p. 42)
20: Controlling pollution and waste (p. 48)

15| DECARBONISING PROFESSIONAL TRAVEL

CONTEXTUAL ELEMENTS

Professional travel accounted for 6% of the CNRS's emissions in 2022

1 Paris-New York return trip represents a French person's carbon budget as set out in the Paris Agreement (2 tCo_2eq)

Professional travel is only the third largest source of GHG emissions for the CNRS as a whole (6%) but can still be a significant source of emissions for certain laboratories. Professional travel by air accounts for 90% of these emissions. For a given scientific activity it is therefore essential to consider our actual needs and modes of travel, particularly air travel, and to identify alternative solutions for different types of work missions (land-sea missions, participation in conferences or juries, etc.).

OBJECTIVES

- **Develop alternatives to travelling;**
- **Massively increase the use of trains for professional travel, particularly in Europe, encourage people to use public transport and active mobility for the last few kilometres of the trip;**
- **Reduce the usage of private cars and the CNRS's car fleet;**
- **Raise awareness of alternative modes of transport among staff members;**
- **Optimize of professional travel by sea to limit the footprint.**

STRUCTURING ACTIONS

REINFORCING ALTERNATIVES TO TRAVEL:

- Promote online or hybrid events whenever possible;
- Combine several meetings or missions in a single trip.

DEVELOPING THE USE OF RAIL TRAVEL:

- Enable and promote train bookings for journeys within Europe in our booking tools;
- Promote the use of night trains as an alternative to air travel;
- Set up financial incentives to encourage people to switch from cars to trains.

REDUCING THE USE OF CARS:

- Continue the interministerial policy to reduce the number of cars on the road and promote car sharing on site.

RAISING AWARENESS AMONG STAFF MEMBERS:

- Raise awareness among CNRS staff members of lower-emission transport options – distribution of a decision tree, inclusion of environmental issues in mission memos, displaying the impact of staff travel in booking tools.

INDICATORS

- A 30% reduction by 2027 in professional travel expenditure compared to 2019 (DAE monitoring);
- A 30% reduction in one-way plane trips compared to 2019;
- A 6% cut in the CNRS's fleet of vehicles compared to 2019.

LEADERSHIP

Transversal Steering Support Mission (MTAP), Purchasing Department.

RELATED THEMES

9: Supporting the transformation of research practices (p. 27)
13: Supporting the rollout of environmental ethics (p. 33)

16| DECARBONISING LOCAL TRAVEL

CONTEXTUAL ELEMENTS

Private cars are the 1st source of emissions in France with

2 tonnes per habitant per year (which alone corresponds to the Paris Agreement objectives)

The French national low-carbon strategy (SNBC) sets the transport sector the target of cutting emissions by 28% by 2030 through the use of three levers - avoidance, substitution, optimisation.
The sixth IPCC report pinpointed cycling in particular as one of the solutions to be implemented.
The CNRS is contributing to the transition to sustainable mobility as an employer and public organisation. Local home/work and inter-site mobility is an effective introductory subject for raising awareness on environmental issues among staff members as well as a workplace health challenge.
The CNRS takes part in the ongoing transformation of travel patterns in France's regions, working alongside many local stakeholders. The development of public transport and active mobility reduces staff members' dependence on fossil fuel-based travel and the associated costs of car use. It also makes us collectively more resilient to crises.

OBJECTIVES

- **Replace certain modes of transport by encouraging a modal shift towards lower-emission transport and an increased uptake of active mobility and public transport;**
- **Optimise transport usage by promoting carpooling, working to cut fuel consumption and lowering the carbon intensity of the energy used;**
- **Steer the eco-mobility transition through the systematic use of site mobility plans.**

STRUCTURING ACTIONS

- Encourage sites to adopt a pro-cycling employer approach to obtain certification. Enhance the overall walkability and cycleability of CNRS campuses. Set up negotiations at each site with the local transport companies and local authorities to enhance connections to transport public, cycling and pedestrian networks;
- Carry out a regional inventory of areas where carpooling is possible and identify pilot sites;
- Provide eco-driving training for staff members using CNRS vehicles;
- Develop and pilot a CNRS mobility policy with a national representative and a representative in each Regional Office. Encourage Regional Offices to design and implement an employer and/or inter-employer mobility plan for each site.

The CNRS, a pro-cycling employer
The national '*Objectif employeur pro-vélo*' (*pro-cycling employers' objective*) programme is supported by the Ministry for Ecological Transition and aims to support employers in their active mobility policies. It means an employer can have a cycling climate assessment carried out at their site, draw up an action plan, obtain co-funding for facilities or training, and finally, if successful, obtain a label recognising their commitment that enhances their attractiveness.

Around 30 CNRS sites have registered with the programme, including the vast majority of our Regional Offices. Four CNRS sites have already been awarded a 'gold' certificate in recognition of their sites responding to all the needs of cyclists such as parking, changing facilities or bike repairs and promoting cycling in communications.

INDICATORS

- The proportion of sites that have an employer mobility plan;
- The ratio of parking areas equipped with bike parking facilities / total number of staff parking areas;
- The proportion of staff members receiving a sustainable mobility allowance and the proportion who benefit from subsidised public transport;
- A 25% cut to greenhouse gas emissions linked to local mobility in 2027 (SNBC).

LEADERSHIP

Financial Strategy, Real Estate and Modernisation Department (DSFIM), Transversal Steering Support Mission (MTAP), Regional Offices.

RELATED THEMES

2: Anticipating risks, preparing for adaptation and scarcity of resources (p. 16)
19: Preserving soils and biodiversity (p. 46)
24: Promoting health, safety and quality of life in the workplace (p. 56)

17| REDUCING THE ENERGY CONSUMPTION OF BUILDINGS AND FACILITIES

CONTEXTUAL ELEMENTS

The CNRS's energy costs: **€26 million** in 2022 = 6% of CNRS emissions in 2022 (scope: hosted units)

530 buildings managed by the CNRS spread across 102 sites

Proportion of structures hosted by the CNRS: 18%

The CNRS exercises ownership prerogatives over 917,000 m^2 with 90% dedicated to laboratory activities

Tertiary decree:

A 40% cut in the energy consumption of tertiary buildings by 2030

Energy savings achieved through the optimisation of ventilation in clean rooms:

A 50% cut in energy consumption

Faced with the energy crises of today and tomorrow, the CNRS must reduce its dependence on fossil fuels and lower its energy consumption to maintain its research activities at the highest level.
This requires action on the energy consumption of buildings (heating, air conditioning). Reducing the energy consumption of our equipment requires accelerating the optimisation of its energy performance. Furthermore, in the face of climate change, the effects of which are already being felt on our sites, it is a priority to adapt our buildings within the limits of available funds.

OBJECTIVES

- **Improve the energy performance of our most energy-intensive buildings;**
- **Enhance the technical management of energy consumption in buildings and improve thermal regulation systems.**

STRUCTURING ACTIONS

REDUCTION:

- Develop energy audits for buildings, particularly clean rooms, server rooms and the most energy-intensive technical infrastructures;
- Increase the implementation of insulation and solar protection systems for buildings;
- Increase the sharing of on-site premises.

STEERING:

- Measure and monitor the annual energy consumption per building using available tools;
- Inform units and the Institutes of their annual energy consumption;
- Install energy management systems to automate and optimise energy use based on actual requirements and weather conditions;
- Integrate environmental issues into works, construction and renovation contracts and the management of green spaces.

SUBSTITUTION

- Replace old oil and gas heating systems with reversible electric counterparts for heating and cooling if funding is available and connect to local urban heating networks wherever possible;
- Develop the use of carbon-free energy for building power supply, increase the share of renewable energy in the photovoltaic mix and geothermal energy;
- Encourage projects to recover the waste heat produced by technical equipment;
- Replace refrigerants with low-GWP fluids in existing refrigeration or air conditioning systems.

OPTIMISATION

- Investigate all possible improvement opportunities - particularly in the use and operation of buildings and technical installations - to reduce energy consumption and environmental impact without compromising scientific work;
- Bolster performance requirements in maintenance contracts (operation of installations, preventive maintenance, etc.) and set up contractual incentive schemes for service providers.

Solutions for sustainable cities
The 'Solutions for Sustainable Cities and Innovative Buildings' PEPR works on accelerating the transition to sustainable cities and buildings. It has been tasked with federating a community to find responses to the scientific, social and technical challenges associated with urbanisation through a multi-stakeholder approach that includes practitioners, industry, the local authorities, citizens and researchers. One example of the implementation of the PEPR's ideas at the CNRS is the recovery of waste heat from the Jean Zay supercomputer which will be used to supply the heating and cooling exchange network on the Paris-Saclay urban campus.

INDICATORS

A 25% reduction of the energy consumption of tertiary buildings in 2027 as compared to 2022 and assuming the same level of demand.

LEADERSHIP

Institutes' sustainable development officers, Real Estate Policy Department, Regional Offices.

RELATED THEMES

2: Anticipating risks, preparing for adaptation and scarcity of resources (p. 16)
3: Managing responsible purchasing (p. 18)
9: Supporting the transformation of research practices (p. 27)

18| PRESERVING WATER RESOURCES

CONTEXTUAL ELEMENTS

10,000 litres of water per day on average per person in France (direct and indirect consumption)

Water is a shared resource that we must preserve. For several years now, climate change has been affecting the availability of water resources, while various forms of pollution are impacting its quality.

Our research practices can directly or indirectly impact water consumption and quality through, for example, pollution from plastics, solvents or the production of scientific equipment. Moreover, the water and aquatic ecosystem crisis requires scientific expertise.

OBJECTIVES

- **Quantify and reduce water consumption across all our structures;**
- **Diagnose and reduce water pollution and effective protection of aquatic ecosystems;**
- **Support public water management policies.**

STRUCTURING ACTIONS

CONTROL OF DIRECT CONSUMPTION:

- Implement monitoring and steering of our water consumption at national and local levels via LOGIC;
- Organise an annual awareness-raising campaign for all staff members to promote water-saving behaviours;
- Roll out a water leak detection campaign and set up an associated maintenance action plan;
- Develop water recovery and wastewater reuse projects;
- Optimise the water consumption of data centre cooling systems.

CONTROL OF INDIRECT CONSUMPTION, REDUCTION OF POLLUTION AND PROTECTION OF ECOSYSTEMS:

- Evaluate the indirect water consumption linked to our activities;
- Reduce chemical, biological and physical pollution (including plastics) in laboratories by installing innovative purification systems;
- Reinforce aquatic ecosystems and use incentive schemes to promote their preservation and restoration;
- Continue and develop research into the water cycle to support public policy.

INDICATORS

A 15% reduction in drinking water consumption by 2027 as compared to 2022.

LEADERSHIP

Real Estate Department, Regional Offices, joint research units, support and research units.

RELATED THEMES

3: Managing responsible purchasing (p. 18)
9: Supporting the transformation of research practices (p. 27)
14: Steering a responsible and resilient digital strategy (p. 37)
19: Preserving soils and biodiversity (p. 46)

Water - a shared resource
The 'OneWater – Water as a Common Good' exploratory PEPR is a national research programme on inland freshwater jointly led by the CNRS, the French Geological Survey (BRGM) and the National Research Institute for Agriculture, Food and Environment (INRAE) and involving ten academic partners. In the current context of increased climatic and anthropogenic pressures on the environment, this programme's aim is to develop water research to shift the paradigm and restore water as a common good while helping to accelerate transitions and measuring the impacts of global changes on socio-ecosystems.

BIODIVERSITY

19| PRESERVING SOILS AND BIODIVERSITY

CONTEXTUAL ELEMENTS

11 million m² of land managed by the CNRS

Since 1900 40% of the world's amphibians, 33% of its coral reefs and 680 vertebrate species have disappeared

1 million animal and plant species are threatened with extinction in the coming decades, including 49% of the birds and 70-80% of the insect populations in mixed agro-industrial landscapes in Europe

24,000 hectares of natural, agricultural and forest areas are consumed on average per year in France

Objective

'Zero net land take' by 2050 (Climate and Resilience Law)

The erosion of the world's biodiversity is one of the major factors of the environmental crisis. The IPBES (International Panel for Biodiversity and Ecosystem Services) has identified five major causes – the changes in our usage of land and sea (destruction of habitats), the overexploitation of certain organisms, climate change, pollution and invasive exotic species.
The CNRS has pinpointed three sides to this issue – knowing about and understanding biodiversity, measuring our direct and indirect impacts on biodiversity, and developing the right strategy to preserve biodiversity that dovetails with other transition issues like low carbon or adaptation.
Soil preservation is essential given the environmental consequences of not doing so – the erosion of biodiversity, risk of runoff, the limitation of carbon storage, etc. - but the socio-economic consequences are also significant (cost of equipment, travel time, energy bills, loss of agricultural land, etc.). France has set itself the target of halving the rate of usage of natural and agricultural land. As a public sector organisation, the CNRS contributes to achieving these national objectives.
Another challenge for the CNRS lies in disseminating knowledge about biodiversity and soil issues and raising awareness thereof among its management and staff members in the same way as for climate issues.

OBJECTIVES

- **Understand, protect and sustainably manage the land and property on CNRS sites;**
- **Measure and reduce the overall and local impact on biodiversity of our activities;**
- **Avoid, reduce and compensate for our use of land, rewilding land wherever possible, and position ourselves to follow the regulatory de-artificialisation trajectory;**
- **Raise awareness among staff members, develop heritage-related professions and mobilise internal scientific expertise to work in favour of soil and biodiversity preservation.**

STRUCTURING ACTIONS

- Design an overall CNRS strategy for soil and biodiversity preservation which should include experimentation at pilot sites;
- Implement a participatory biodiversity inventory protocol at CNRS sites;
- Carry out a full assessment of the CNRS's impact on biodiversity, using the Global Biodiversity Score, for example;
- Enrich the CNRS's information system to understand and monitor changes in land use and coverage. This should incorporate data from inventory reports and the protection status of areas and will enable an annual assessment of the artificialisation/rewilding to be carried out;
- Design and roll out a best practice guidance for the management of sites, green spaces and buildings with a particular focus on biodiversity;

Generalise the application of the 'avoid, reduce, compensate[7]' sequence as regards the artificialisation of land due to buildings and facilities. Develop rewilding projects for areas that are artificialised;

Roll out training and awareness-raising initiatives on biodiversity issues for CNRS staff members in the framework of the environmental transition training plan, as well as specialised training for staff members working in the area of buildings and construction.

INDICATORS

The target for 2027 - 100% of CNRS sites committed to a biodiversity approach
- The percentage of real estate projects with DIE certification with an integrated criterion on the non-artificialisation of land;
- The proportion of green roof space for new buildings, extensions and renovations;
- The amount spent on synthetic fertilisers and plant protection products to manage green spaces;
- The proportion of green spaces, parks and gardens that have committed to a certification process;
- The net balance of land artificialisation (gross artificialisation – rewilding) in $m^{2.}$

LEADERSHIP

Transversal Steering Support Mission (MTAP), Regional Offices, research units.

RELATED THEMES

2: Anticipating risks, preparing for adaptation and scarcity of resources (p. 16)
16: Decarbonising local travel (p. 40)
22: Training for the transition (p. 53)
24: Promoting health, safety and quality of life in the workplace (p. 56)

7: https://www.ofb.gouv.fr/mettre-en-oeuvre-la-sequence-eviter-reduire-compenser

Diving into the heart of marine biodiversity to understand living organisms
The ATLASea exploratory PEPR is jointly led by the CNRS and the French Alternative Energies and Atomic Energy Commission (CEA). The project's aim is to sequence the genomes of 4500 marine species to develop a reference genomic database on marine organisms in the French exclusive economic zone. This will enable the understanding, protection and study all forms of life in their full diversity.

20| CONTROLLING POLLUTION AND WASTE

CONTEXTUAL ELEMENTS

6 million tonnes of plastic are used per year in research worldwide. On average each scientist uses around 20 times more plastic than the average person

Over 850 tonnes of IT equipment acquired each year by French Higher Education and Research via 'Matinfo'

13,911 laptops were acquired by the CNRS in 2022 which represents 21 tonnes of plastic and metal

135 tonnes of food waste in 2023 from catering at the CNRS

Purchase of basic paper for the CNRS: 184 tCo_2eq /year

The CNRS produces 'household' and food waste, waste from electrical and electronic equipment (WEEE), waste from healthcare activities with infectious risks and liquid or gaseous effluents that may sometimes be powerful greenhouse gases (e.g. fluorinated gases and refrigerant gases).
The organisation also produces volumes of waste that are specific to research, particularly large volumes of scientific consumables like cones, pipettes, Petri dishes, test tubes, and so on.
The organisation aims to avoid, substitute or optimise the use of these different types of waste with no impact on experimentation and the safety of staff members.
Regulatory compliance with the obligation to separate certain waste streams – '8-stream sorting' - across all sites requires national management and coordination procedures for the end-of-life of different types of waste. A particular focus on repurposing and recycling is also required.

OBJECTIVES

- **Measure the volume of waste and greenhouse gases;**
- **Manage the monitoring of waste linked to our activities, in particular plastics and WEEE;**
- **Develop and foster reuse, repurposing and recycling.**

STRUCTURING ACTIONS

REDUCING WASTE BY OPTIMISING RESEARCH PRACTICES AND EXPERIMENTAL PROTOCOLS:

- Develop and disseminate a library of protocols on alternatives to plastic in experiments;
- Develop alternatives to greenhouse gases.

PROMOTING REPAIR AND LIFE CYCLE MANAGEMENT:

- Include repair solutions and extended guarantee periods in scientific equipment contracts;
- Support the implementation on our sites of repair solutions for scientific and IT equipment;
- Promote and communicate the national equipment exchange programme (bourse nationale aux matériels);
- In procurement procedures, promote the inclusion in supplier evaluation criteria of:
  - The promotion of recycled products, particularly for construction and renovation contracts;
  - The repairability index, particularly for scientific equipment and materials markets;
  - The reduction of packaging for scientific consumables in particular.

MANAGING THE LIFE CYCLE:

- Set up a national coordination system to measure and monitor the end of life of WEEE;
- Study the generalised implementation of an inventory of scientific instruments, consumables and IT equipment to work towards optimising purchases, usage and end-of-life management;
- Develop and disseminate national procedures for the internal and external repurposing of equipment for each type of product and for end-of-life management.

INDICATORS

- 100% implementation of sorting at source (8-stream sorting).

LEADERSHIP

Institutes, Regional Offices, joint research units, support and research units.

RELATED THEMES

3: Managing responsible purchasing (p. 18)
9: Supporting the transformation of research practices (p. 27)
14: Steering a responsible and robust digital strategy (p. 37)
21: Starting the transition to responsible food consumption (p. 50)

Innovating with living organisms
The objective of the Solu-Biod PEPR is to promote scientific approaches that support the design, implementation and evaluation of nature-based solutions. Such approaches to ecosystem protection, restoration or management mean various societal challenges can be effectively addressed and have positive impacts on biodiversity and social, environmental and economic aspects.

21| STARTING THE TRANSITION TO RESPONSIBLE FOOD CONSUMPTION

CONTEXTUAL ELEMENTS

Over 1 million meals served in 2023 by CNRS catering per year

One meal with beef is equivalent to 14 vegetarian meals in terms of GHG emissions

Food plays a significant role in direct and indirect environmental impacts in terms of GHG emissions, biodiversity or water and soil pollution. Moreover, a more sustainable diet has very positive impacts on our health. The 2018 'Egalim' law in France reinforced in 2021 by the 'Climate and Resilience' law, sets out several provisions aiming at enhancing the quality and sustainability of meals served in collective catering. It notably stipulates daily vegetarian options in administrative collective catering.
As a public sector employer, the CNRS aims to reduce the environmental footprint of its work restaurants while guaranteeing acceptable subsidised prices for its staff members. The organisation also needs to systematically integrate these issues into its event catering services to further reduce its impact.

OBJECTIVES

- Effectively steer the SD&SR objectives on collective catering;
- Implement sustainable catering with our service providers that respects seasonality, uses products that are as organic and locally sourced as possible, contributes to the diversification of protein intake and offers attractive vegetarian meal options on a systematic basis;
- Promote healthier, more sustainable diets that are accessible to all;
- Raise awareness on the environmental issues surrounding food.

STRUCTURING ACTIONS

- Integrate specifications in our collective and event catering contracts that promote local, sustainable and high-quality sourcing along with a reduced use of plastic;
- Make product traceability, meal composition information (allergens, calories, ingredients, additives), Nutri-Scores and Eco-Scores more visible;
- Study the idea of CNRS restaurants joining the 'macantine.gouv' platform to track national objectives through standardised reporting;
- Raise awareness about the link between food and health and the importance of reducing food waste and the use of plastics.

INDICATORS

- 100% compliance with providing a daily vegetarian option when multiple choices are available;
- 50% of high-quality, sustainable products with 20% from organic farming and 100% high-quality, sustainable meat and fish products.

LEADERSHIP

Human Resources Department, Regional Offices, Purchasing and Innovation Department.

RELATED THEMES

3: Managing responsible purchasing (p. 18)
19: Preserving soils and biodiversity (p. 46)
25: Taking action in favour of the employment of the disabled (p. 58)

More sustainable food in CNRS restaurants
The introduction of environmental criteria in the catering contracts of three Regional Offices has contributed to a more sustainable food offer. In tangible terms, this means an improvement in the quality and quantity of vegetarian options, a reduction in the variety of food on offer to focus instead on product quality and limit waste, and a raised awareness among users.

FOCUS AREA 4

SOCIAL RESPONSIBILITY

22| TRAINING FOR THE TRANSITION

The CNRS Ethics Committee encourages the awareness-raising and training of staff members regarding the environmental dimension of research ethics. It also promotes the recruitment of staff members to organise and lead collaborative workshops and the development of an "*interdisciplinary culture of environmental impact*".
The current context of global change and the essential environmental transition has led the CNRS to anticipate the need for new key skills which have to be identified, developed and supported. Our organisation must properly equip staff members for this environmental transition, respond to a need for commitment to the transition and set up teams who are specialised in facilitating and supporting the transition.
These awareness-raising and training initiatives need to be bolstered for all staff and extended to fit with the scope of this SD&SR Plan. Skills development initiatives also need to be set up to reinforce the associated expertise in the organisation's different professions.

OBJECTIVES

- **A multi-year SD&SR skills development plan;**
- **Staff members trained on the environmental transition, particularly new arrivals;**
- **An active community of internal transition workshop leaders; 50% of CNRS staff members have taken part in a transition workshop (climate fresk or other workshops);**
- **An active community of transition officers to support CNRS units in collectively developing an action plan with their units' staff members;**
- **A training offer for all the organisation's SD&SR officers to begin in 2026. This should enable the creation of a professional career path at all levels of the organisation.**

STRUCTURING ACTIONS

- Integrate a SD&SR focus area into the organisation's training plan, into the relevant areas of knowledge and into transition management tools;
- Develop a skills framework for the environmental transition of research;
- Roll out a structured training offer with a core course for all staff members coupled with specialised training courses, particularly to train:
  - A community of internal environmental transition workshop leaders;
  - Sustainable development officers in carrying out their duties;
  - A pool of internal environmental transition facilitators;
- Integrate ecological transition modules into professional training courses - purchasing manager, information system manager, national committee member, unit director, administrative manager, and so on.

INDICATORS

- The percentage of staff members trained in and/or made aware[8] of the environmental transition (2027 target: 100%),% of new recruits,% of managers,% of unit directors (2027 target: 100%);
- The percentage of CNRS staff members who have taken part in a transition workshop (target: 70% by 2027);
- The number of internal transition workshop leaders (target: 500 in 2027);
- Number of transition officers (target: 250 in 2027);
- 100% of CNRS professions should include a transition module in their training.

LEADERSHIP

Transversal Steering Support Mission (MTAP), Human Resources Department, IFSeM (Ile-de-France Shared Services).

RELATED THEMES

3: Planning the allocation of resources to the initiative (p. 18)

Transition officers in CNRS units
Since 2023, CNRS has been training facilitation officers to support participatory approaches in the laboratories. The aim of this is to build up a facilitation community capable of working on behalf of a collective to enable all staff members to engage in developing jointly agreed solutions and to take action. Around 100 staff members have already received such training.

23| PROMOTING PROFESSIONAL EQUALITY

CONTEXTUAL ELEMENTS

39.7% is the proportion of women in the recruitment of research staff members (2023 data)

Reinforcing gender diversity and dealing with inequalities in research support professions, attracting new talent pools towards scientific studies, reducing the impact of becoming a parent on careers as well as integrating equality into all CNRS policies… There are all challenges that we need to deal with to progress further.

OBJECTIVES

- **Reduce gender-based pay gaps;**
- **Attract and retain talent;**
- **Recruit without gender bias;**
- **Promote equality in career progression;**
- **Take career breaks more effectively into account;**
- **Increase the visibility of women working at the CNRS;**
- **Promote a form of work organisation that is favourable to professional equality;**
- **Promote equality as a priority for the CNRS;**
- **Promote and value research into professional equality;**
- **Integrate equality into all of the CNRS's policies.**

STRUCTURING ACTIONS

- Apply the 'cascade promotion' principle whereby the proportion of women promoted should be greater than or equal to the proportion of women among staff members eligible for promotion;
- Raise awareness on gender bias in assessment criteria (e-learning module) and better take into account career breaks due to maternity leave;
- Renew the action plan for professional equality (2024-26);
- Raise awareness on and train CNRS staff members on harassment, sexual violence and discrimination issues.

INDICATORS

- The overall pay gap between female and male civil servants;
- The overall pay gap between female and male contract employees;
- The gap in grade promotions between women and men;
- The number of civil servants of the under-represented gender among the ten highest paid employees;
- The professional equality index.

LEADERSHIP

Human Resources Department, Institutes, Regional Offices.

A network for equality
The equality officers at the Regional Offices support the implementation of the action plan for professional gender equality. This network acts as a forum for sharing experiences that thereby legitimises gender equality initiatives and stresses the importance for the CNRS of gender equality issues in laboratories.

PREVENTION, QWL, OHS

24| PROMOTING PREVENTION, HEALTH, SAFETY AND QUALITY OF LIFE IN THE WORKPLACE

CONTEXTUAL ELEMENTS

117,594€ in funding for calls for occupational quality of life projects

593 workplace accidents and occupational illnesses

2269 - the number of staff members covered by one occupational doctor (number of staff members covered/number of full-time equivalent occupational doctors)

The CNRS's focus on prevention, occupational health, safety and quality of life enables the organisation to ensure the protection and well-being of its staff members, improve its competitiveness, strengthen its reputation and contribute to achieving sustainable development objectives.
These themes are important to the motivation, commitment and retention of our staff members. Fostering a high-quality workplace environment helps reduce accidents and occupational illnesses while ensuring the well-being of employees as well as the organisation's performance levels.
The CNRS has also committed to a policy of combating discrimination to remove any barriers to diversity and follows the strategic guidelines set out by the French Ministry of Higher Education and Research (MESR) on such issues.

OBJECTIVES

- **Promote a management culture focused on quality of life in the workplace (QWL).**
- **Enhance the integration of new arrivals;**
- **Enhance the continuity and quality of occupational health services;**
- **Strengthen the sense of belonging to the CNRS;**
- **Prevent occupational risks (OHS);**
- **Ensure the safety of staff members who travel for professional reasons;**
- **Anticipate and prevent psychosocial risks (PSR) and improve quality of life in the workplace;**
- **Ensure a good work-life balance;**
- **Reinforce the prevention of violence, discrimination, harassment and sexist behaviour.**

STRUCTURING ACTIONS

- Set up a management training for those concerned, the implementation of a training programme for new staff members and thesis supervisors;
- Set up an induction programme and disseminate specific guidelines and actions for PhD students and contract employees;

- Reinforce preventive medicine departments - enhanced information sharing between HR and medical services, better management of medical appointment scheduling, improving collective risk files through the use of dedicated software, continuing discussions with the DGAFP (*Directorate-General for Administration and the Civil Service*);
- The dissemination of information packages, the work of our Institutes in supporting researchers;
- Various occupational health and safety (OHS) actions such as exploiting the results of the radon measurement campaign, training safety officers (lasers, diving), distributing booklets on biological and chemical risks;
- Supporting CNRS units in risk management during professional travel - awareness-raising campaign, first aid training in isolated areas;
- Various actions on psychosocial risk prevention - updating the official psychosocial risk assessment document, developing a social barometer, defining transversal indicators (turnover, absenteeism, etc.) to gauge psychosocial risks, setting up a psychological support service for individuals and groups;
- Developing best practices for working from home, monitoring such practices and enhanced training;
- The creation of a dedicated unit for those reporting acts of violence, discrimination, moral or sexual harassment and sexist behaviour, rolling out a network of officers working on these issues.

INDICATORS

- The amount of workplace accidents and occupational illnesses;
- The percentage of employees covered by a doctor.

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LEADERSHIP

Human Resources Department, National Coordination of Preventive Medicine (CNMP), National Prevention and Safety Coordination (CNPS), regional prevention and safety engineers, human resources managers, occupational doctors, unit directors.

A challenge for the organisation
For the CNRS, health, safety and quality of life in the workplace is one of the priorities of its human resources policy. The call for projects on workplace quality of life is one of the actions in its plan. Every year, the CNRS Human Resources Department supports collective initiatives to foster a sense of well-being at work within our units.

25 | TAKING ACTION IN FAVOUR OF THE EMPLOYMENT OF THE DISABLED

CONTEXTUAL ELEMENTS

5.46% direct employment rate

9 digital accessibility audits have been carried out

The CNRS's disability policy promotes inclusion to help staff members with disabilities remain in employment and this needs to be a collective approach. This policy strengthens the CNRS as a whole and makes the organisation more collaborative, open and attentive to talent of all kinds.
The CNRS's fifth action plan for disability was rolled out in 2025 and the organisation's commitment to supporting the participation and citizenship of disabled staff members continues to underpin all our work processes. This integrated approach drives innovations that will benefit and improve the workplace quality of life of all our staff members. For example, the adaptations set up for the disabled (like improved digital accessibility) ultimately benefit all our staff members.
To sum up, the overriding aim of the CNRS's disability policy is to make the organisation inclusive, innovative and socially responsible.

OBJECTIVES

- **Develop an integrated disability policy which involves embedding disability awareness in all aspects of our activities and in successfully carrying out our research mission.**
- **Reinforce and drive recruitment, integration, support and career development for the disabled. The CNRS is committed to creating progressive and fulfilling career paths for disabled people by removing obstacles at every stage of their careers and promoting the value of their skillsets. This will include specific measures for adapting workstations, professional training and mentoring;**
- **Valuing the disabled and their inclusion. The CNRS's position goes beyond simple acceptance and aims to take disability into account in all its forms, recognising the richness it brings to our organisation and promoting an inclusion culture at all levels. Awareness-raising activities, inclusive events and internal and external communication all testify to the strength of this commitment.**

STRUCTURING ACTIONS

- Implement a dedicated disability policy;
- Increase recruitment opportunities for the disabled;
- Foster the recruitment and successful integration of the disabled;
- Foster professional development and retention in employment for disabled staff members;
- Develop communication, training and awareness-raising initiatives.

INDICATORS

Direct employment rate.

LEADERSHIP

Human Resources Department, Purchasing and Innovation Department, Financial Strategy, Real Estate and Modernisation Department, Information Systems Department (DSI), Regional Offices, regional disability officers, section disability officers.

Integrating and retaining disabled people in employment

This objective is being tangibly achieved at the CNRS through its integration into HR processes, particularly the recruitment of female and male researchers, engineers and technicians, and PhD students. Awareness-raising initiatives are being implemented at all decision-making levels with disability officers involved to identify and implement the necessary adjustments to workstations for disabled staff members from the recruitment stage. The CNRS has worked in collaboration with its social partners to develop its fifth Disability Plan for 2025-2028.

APPENDICES

Summary of indicators and deliverables by theme

FOCUS AREA 1	**STRATEGY AND GOVERNANCE**	DELIVERABLES • INDICATORS
	POLICY & STRATEGY	
1	**Designing, managing and governing the transition**	The SD&SR component of the roadmap for departments and Regional Offices The SD&SR section of Regional Offices' dashboards SD&SR objectives and indicators
2	**Anticipating risks, preparing for adaptation and scarcity of resources**	Inventory of research structures that are vulnerable to environmental change CNRS adaptation plan Training on environmental risks and adaptation measures
3	**Managing responsible purchasing**	The integration of environmental criteria and clauses in 100% of contracts in 2025 (public procurement and concession contracts) Environmental criteria and clauses matrix '*Jouvence* Labs' as pilot sites Sustainable purchasing guide *The 'spending on second-hand equipment / total spending on equipment' ratio*
	STEERING AND ROLLOUT	
4	**Measuring the footprint and assessing actions**	Reference framework for the emission factors of research activities A greenhouse gas emissions report every three years Opportunity analysis of the donutmethodology for the CNRS National and regional SD&SR dashboards Monitoring table of purchases of scientific instruments and consumables
5	**Planning the allocation of resources to the initiative**	SD&SR skills plan Recommendations to managers and recruitment competition juries A transition module in national vocational training programmes *Percentage of units with a SD officer possessing a mission statement*
	STAKEHOLDERS	
6	**Promoting, communicating and disseminating**	Communication plan Annual review of the call for initiatives Guide to self-positioning for our structures in terms of unit commitments
7	**Involving and driving stakeholders and networks**	Guide for SD&SR officers

		SD&SR officers mission statement template A call for environmental transition initiatives
8	**Embedding the environmental transition locally**	Environmental transition plan for Regional Offices Mobility plan for each Regional Office

FOCUS AREA 2	**RESEARCH AND INNOVATION**	DELIVERABLES • INDICATORS
	Research and innovation strategy	
9	**Supporting the transformation of research practices**	Environmental assessment tool for research projects Carbon accounting tool for research infrastructures
10	Leading research excellence on environmental transition	Raising awareness among staff members and departments responsible for technology transfer and research promotion about the links between research, technology, innovation and socio-environmental issues

	Science and society	
11	**Providing the CNRS with a Competence centre in sustainability**	Preliminary planning and services offered by the **Competence centre in sustainability**
12	**Reinforcing the dialogue between science and society and the transfer of research results**	
	Ethics	
13	**Supporting the rollout of environmental ethics**	100% of CNRS internal calls for projects promote the integration of sustainable practices and encourage reflection on environmental ethics 100% of units have tools at their disposal for reflecting on practices (decision trees, etc.)

FOCUS AREA 3	**THE ENVIRONMENTAL TRANSITION**	DELIVERABLES • INDICATORS
	GHG emissions & resources	
14	**Steering a responsible and robust digital strategy**	Responsible digital strategy steering committee A review of purchasing / usage / end-of-life processing for management applications, users' work equipment and servers *25% of IT and telephone equipment repurposed or recycled per year (subject to inventory availability)*
15	**Decarbonising professional travel**	*A 30% reduction in professional travel expenses compared to 2019 (DAE monitoring)* *A 30% reduction in one-way plane journeys compared to 2019* A 6% reduction in the fleet of CNRS vehicles compared to 2019
16	**Decarbonising local travel**	Percentage of sites possessing an employer mobility plan The proportion of parking spaces equipped with bicycle parking facilities /

		total number of parking spaces for staff members *A 25% reduction in greenhouse gas emissions linked to mobility in 2027 compared to 2022 (National Low-Carbon Strategy)* The proportions of staff members benefiting from sustainable mobility support and from public transport allowances
17	**Reducing the energy consumption of buildings and facilities**	An assessment of energy consumption in CNRS buildings for each Regional Office *A 25% energy consumption reduction in tertiary buildings in 2027 compared to 2022 on the basis of the same energy requirements* *A 7.5% reduction in rented or owned office space, in compliance with the circular dated February 8th 2023 on the doctrine of occupancy of State-owned tertiary buildings in 2027 in m^2 of gross usable area, monitored by the - DIE (State Property Department)*
18	**Preserving water resources**	Annual reviews of water consumption by Regional Offices A 15% reduction in drinking water consumption in 2027 compared to 2022
	Biodiversity	
19	**Preserving soils and biodiversity**	*Amount spent on synthetic fertilisers and plant protection products for land management* *The proportion of green spaces, parks and gardens involved in a certification process* *The net balance of land artificialisation (gross artificialisation - rewilding) in m^2* *Percentage of real estate projects with a DIE certification including a non-land artificialisation criterion* *The proportion of green roof areas in new buildings, extensions and renovations*

	Pollution & waste	
20	**Controlling pollution and waste**	National coordination of the measurement and monitoring of the end of life of WEEE Specifications for an inventory of scientific instruments , consumables and IT equipment National procedures for the internal and external reuse of equipment for each type of product and the management of their end of life *100% implementation of sorting at source (8 waste streams)*
	FOOD	
21	**Starting the transition to responsible food consumption**	Sustainable food specifications *100% compliance with having a daily vegetarian option if there are multiple choices*

FOCUS AREA 4	**SOCIAL RESPONSIBILITY**	DELIVERABLES • *INDICATORS*
	SD&SR SKILLS	
22	**Training for the transition**	The 'Environmental transition' in the information system (IS) and training reference framework A SD&SR skills reference framework for the CNRS *Percentage of staff trained in the environmental transition (target - 100% in 2027),* *Percentages of new recruits, managers and unit directors (target - 100% in 2027)* *Percentage of CNRS staff who have taken part in a transition workshop (target - 70% in 2027)* *Number of internal transition workshop facilitators (target – 500 in 2027)* *Number of transition facilitators (target – 250 in 2027)* *Percentage of professions that have a transition module in their training*
	EQUALITY, DIVERSITY, GENDER EQUALITY	
23	**Promoting professional equality**	*The overall pay gap between female and male civil servants* *The overall pay gap between female and male contract employees* *The gap in grade promotions between women and men* *The number of civil servants of the under-represented gender among the ten highest paid employees* *The professional equality index*
	PREVENTION, QWL, OHS	
24	**Promoting health, safety and quality of life at work**	*The amount of workplace accidents and occupational illnesses* *Percentage of employees covered by a doctor*
	DISABILITY	
25	**Taking action to promote the employment of the disabled**	*Direct employment rate*

Reference documents

FOCUS AREA 1

STRATEGY AND GOVERNANCE

SD&SR POLICY & STRATEGY

1: Designing, managing and governing the transition strategy

- 2024-2028 Objectives, Resources, and Performance Contract
- IPCC, AR6, Synthesis Report
- Structured inventory of impact reduction targets (National Low Carbon Strategy, Eco-Responsible Public Services, European Green Deal)
- The Ministry of Higher Education and Research's '*Plan climat biodiversité*'
- The Ministry of Higher Education and Research's '*Schéma directeur DD&RSE*'
- SD&&RS reference framework
- *Activités de recherche et RSO : quelle stratégie pour le CNRS ? Promotion colibri des cadres à haut potentiel, 2021*

2: Anticipating risks, preparing for adaptation and scarcity of resources

- National Climate Change Adaptation Plan (PNACC) – 3
- Roux-Dantec Senate report: '*Adapter la France aux dérèglements climatiques à l'horizon 2050*'
- WG2 of the AR6 (latest IPCC report)

3: Managing responsible purchasing

- National sustainable procurement plan
- SPASER scheme promoting socially and environmentally responsible purchasing

STEERING AND ROLLOUT

4: Measuring the footprint and assessing actions

- 2023 SPE circular
- Unil Donut - a navigation tool for ecological and social transition

5: Planning the allocation of resources to the initiative

- '*Sensibiliser et former aux enjeux de la transition écologique dans l'Enseignement supérieur*' report, Jean Jouzel, 2022

STAKEHOLDERS

6: Promotion, communication and dissemination

7: Involving and driving stakeholders and networks

8: Embedding the environmental transition locally

- *Guide des conférences des parties* (regional COPs)
- '*La planification écologique', Secrétariat général à la planification écologique*

FOCUS AREA 2

RESEARCH AND INNOVATION

RESEARCH AND INNOVATION STRATEGY

9: Supporting the transformation of research practices

- Opinion 43 from the CNRS Comets
- *'Stratégie Climat et Durabilité'*, EPFL
- CAP 2037, Unil
- Scientific Foresight reports, INSU, INP, INSB, INEE
- Research evaluation in the context of environmental challenges by the "*Sobriété et Recherche*" working group of scientific secretaries from the interdisciplinary sections and commissions of the National Committee (SSC), after consultation with the Conference of Presidents of the National Committee (CPCN) (October 2023)

10: Environmental transition research excellence

SCIENCE AND SOCIETY

11: Providing the CNRS with a competence centre in sustainability

- Missions of the 'Stockholm Resilience Centre' at Stockholm University or the '*Centre de Compétences en Durabilité*' at the University of Lausanne

12: Reinforcing the dialogue between science and society and the transfer of research results

ETHICS

13: Supporting the rollout of environmental ethics

- Opinion No. 2022-43 from the CNRS Ethics Committee

FOCUS AREA 3

THE ENVIRONMENTAL TRANSITION

GHG EMISSIONS & RESOURCES

14: Steering a responsible and robust digital strategy

- Ecoinfo
- '*Étude sur l'évaluation de l'impact environnemental du numérique en France et analyse prospective' (ADEME- ARCEP)*

15: Decarbonising professional travel

- 2020 survey by Labos 1Point5, '*Les personnels de la recherche face au changement climatique*'

16: Decarbonising local travel

- The French Government 's cycling and walking plan

17: Reducing the energy consumption of buildings and facilities

- '*Schéma pluriannuel de stratégie immobilière*' (SPSI)
- '*Plan de sobriété énergétique*'

18: Preserving water resources

- One Water PEPR
- *'Plan d'action pour une gestion résiliente et concertée de l'eau'*

BIODIVERSITY

19: Preserving soils and biodiversity

- IPBES reports, in particular the 2019 report and the 2024 Nexus report
- *'Stratégie nationale biodiversité 2030'*
- '*Loi Climat et Résilience'*

POLLUTION & WASTE

20: Controlling pollution and waste

- SPASER scheme promoting socially and environmentally responsible purchasing
- National sustainable procurement plan
- National Waste Prevention Plan

FOOD

21: Starting the transition to responsible food consumption

- 2023 annual statistical report on the implementation of supply targets set for collective catering (Egalim)
- Report of the UNIL Transition Assembly on the theme of food, 2024
- Report by the *Haut Conseil Sur Le Climat*, '*Accélérer la transition climatique avec un système alimentaire bas carbone, résilient et juste* (January 2024)

FOCUS AREA 4
SOCIAL RESPONSIBILITY

SD&SR SKILLS
22: Training for the transition

EQUALITY, DIVERSITY, GENDER PARITY
23: Promoting professional equality
- Law dated August 6th 2019 on the transformation of the civil service
- Law No. 2023-623 dated July 19th, 2023 aimed at enhancing women's access to positions of responsibility in the civil service
- Decree No. 2023-1136 on measuring and reducing the gender pay gap in the French State's civil service
- Decree No. 2023-1137 on the methods for calculating the indicators defined in Article 1 of the previous decree.
- Decree No. 2023-1398 on the methods for publishing indicators relating to equal opportunities and the actions taken to reduce inequalities in public research organisations
- HRS4R label action plan

PREVENTION, QWL, OHS
24: Promoting health, safety and quality of life in the workplace
- Health, safety and working conditions at the National Centre for Scientific Research
- The Ministry of Higher Education and Research's (MESR) *'Orientations Stratégiques'*
- National programme for the prevention of occupational risks and the improvement of working conditions
- HRS4R label action plan
- Action plan for improving working conditions 2023–2027
- Reference document for the assessment of occupational risks - created and updated
- Guide to the assessment of occupational risks
- Risk prevention booklets and guides
- Management plan and reference framework on managerial skills
- Guide on work-life balance setting out the various services the CNRS and its partners provide to support staff members in certain situations (parental support, family events, career breaks, etc.)
- Guide on support for staff members on sick leave

DISABILITY
25: Taking action in favour of the employment of the disabled
- '*Plan d'actions handicap*'
- '*Schéma pluriannuel d'accessibilité numérique*'

GLOSSARY

Adaptation: Adaptation to climate change refers to the process of adjusting to current or expected climate conditions, including climate variability and extreme weather events. The adaptation process addresses the consequences of climate change and is a complement to mitigation actions that aim to reduce the causes of climate change.

Environmental transition facilitators: Agents trained in facilitation methods who implement these in the framework of an environmental transition approach in CNRS units.

ESR: Higher Education and Research in France

GHG: Greenhouse gases.

Internal environmental transition workshop facilitators: Public sector officials who are trained to facilitate environmental transition workshops and carry out this role in the framework of their professional activities. Environmental transition workshops operate on the principle of collective intelligence and may include: *'Ma terre en 180 minutes'*, Climate Fresk, Biodiversity Collage, The Digital Collage

IPCC (Intergovernmental Panel on Climate Change): Assesses the state of knowledge on climate change, its causes and impacts. It also identifies the right options for limiting the extent of global warming, the severity of its impacts and for adapting to expected changes. The IPCC's reports provide regular updates on the most advanced knowledge and this scientific output is a core element in international climate negotiations. It also plays an essential role in alerting decision-makers and civil society.

IPBES (Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services): An independent intergovernmental body that provides decision-makers with objective scientific evaluations of the state of academic and non-academic knowledge on biodiversity, ecosystems and their benefits to individuals. It also provides tools and methods for protecting these vital natural resources and using them sustainably.

IR: Infrastructures whose scientific strategy and budgetary monitoring are the responsibility of research operators.

IR* (formerly known as TGIR – very large research infrastructures): Infrastructures which depend on national policy and receive budgetary funding from the Ministery of Higher Education and Research.

'*Jouvence*' Lab: These provide technical expertise and equipment on CNRS sites for the manufacture of spare parts, customised instruments and, when appropriate, a scientific resource centre (donations or exchanges for reuse) for the repair of scientific equipment and also innovation in the similar way to '*Fablabs*'. These '*Jouvence*' labs may be located at Totem hubs or rely on existing spaces or networks.

Research infrastructures and "star" research infrastructures (IR/IR*): A research infrastructure is characterised by being or providing essential, unique facilities, resources or services of national or even European or international scope whose purpose is to carry out and support research of excellence. This includes scientific facilities and equipment, resources like collections, archives and scientific data, digital services and infrastructure, and any other tools that are essential in supporting research and innovation at the highest level.

Totem hubs: Regional forums that promote and develop interactions between science, society and industry around sustainable development, recycling, repair and environmental innovation in the local ecosystem. '*Jouvence*' labs may also be associated with these sites.

SPASER (scheme promoting socially and environmentally responsible purchasing): The scheme "determines the policy objectives for purchases of goods and services with social elements aimed at contributing to the social and professional integration of disabled or disadvantaged employees and environmental elements that particularly aim to reduce greenhouse gas emissions and energy consumption, water and materials. It also determines the right procedures for the annual implementation and monitoring of these objectives and contributes to the promotion of product sustainability, digital sobriety and a circular economy."

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The following people took part in designing this SD&SR Plan:

Steering committee: Séverin Baron, Christophe Coudroy, Blandine de Geyer, Marie-Pauline Gacoin, Stéphane Guillot, Alain Schuhl, Claire Werlen

Editors: Séverin Baron, Blandine de Geyer, Stéphane Guillot

Environmental transition officers in scientific Institutes: Samuel Calvet, Julie Carimalo, Clément Dupuy, Vincent Gerbaud, Aymeric Histace, Nathalie Leresche, Sandrine Maljean-Dubois, Séverine Martrenchard, Veronique Mathet, Thierry Pellarin, Frédéric Restagno, Olivier Saut

Environmental transition officers in the CNRS's Regional Offices : Anne-Marie Badolato, Julien Baehl, Stéphane Bernier, Virginie Blanc, Marion Blin, Stéphane Bourles, Christophe Brun, Christelle Buon, Louise-Anne Cariou, Jean-Philippe Castelli, Bérengère Chamoret, Aurélie De Sousa, Dominique Duault, Baptiste Favard, Arnaud François, Patrice Guyomar, Claudia Jaeger, Emilie Jarde, Stéphane Laigle, Carole Le Contel, Mathilde Le Luyer, Virginie Mahdi, Carole Mainguy, Eric Migevant, Laurent Porret, Julie Quillé, Pierre Silveira, Liliane Tamain, Jenny Trevisan, Anthony Venier

Correspondents in CNRS functional departments: Céline Andreu, Fabrice Cocheteux, Aurore Debono, Maxime Lerolle, Laurent Malet, Laure Thiebault

Institute directors: Nicolas Arnaud, Christophe Besse, Stéphane Blanc, Lionel Buchaillot, Thierry Dauxois, Marie Gaille, André Le Bivic, Jacques Maddaluno, Adeline Nazarenko, Christelle Roy

Social responsibility themes: Gabrielle Inguscio, Hayfa Trabelsi

Graphic design, layout: Sébastien Chmiel

English translation: Inist-CNRS.- Richard Dickinson (translation), Marc Rubio (proofreading), François Debeaupuis (graphic support),

Photo credits: CNRS Images unless otherwise stated

CNRS
3, rue Michel-Ange
75794 Paris Cedex 16
FRANCE
+ 33 1 44 96 40 00
www.cnrs.fr