

NOVA CLIMATE JOURNEY

In 2023, NOVA University Lisbon launched the Route Zero project to develop its Roadmap for Climate Neutrality and Resilience. This initiative, funded by the Environmental Fund, was formalized through a protocol signed during the annual NOVA Sustainability Days. Throughout 2024, the project has focused on building the technical and organizational foundations and capacitating human resources to establish a Climate Action Plan. This plan aims to achieve net-zero emissions and strengthen climate resilience across NOVA's operations and infrastructure, in alignment with the Paris Agreement and the 2030 Agenda for Sustainable Development.

The NOVA for the Globe platform, through its Academic Council and Operational Council, governs the Route Zero project, ensuring a coordinated approach to both climate mitigation and adaptation and resilience. Running until 2025, the project integrates multiple specialized components, requiring the training of a dedicated team and the adoption of innovative internal processes to address emerging challenges.

The Route Zero project remains at the core of NOVA's climate action efforts, laying the groundwork for a comprehensive Climate Action Plan. By the end of 2025, this initiative will provide a structured pathway to net-zero emissions and increased climate resilience, reinforcing NOVA's commitment to sustainability.

KEY DEVELOPMENTS IN 2024

2024 has been a particularly active year for sustainability at NOVA, especially in environmental areas, with several initiatives already contributing to the university's future **Climate Neutrality and Resilience Plan**.

1. Emissions Inventory and Sustainability Information System

In 2024, NOVA developed an autonomous sustainability information system, INNOVA. Initially designed to calculate NOVA's greenhouse gas (GHG) emissions, the system will later expand to include broader sustainability data and indicators.

2. Urban Waste Management

The **NOVA Zero Waste** working group, established in 2022, has continued to enhance waste management across NOVA's campuses. Key achievements include:

- The **second annual waste monitoring campaign**, assessing waste production across all schools, leading to improved procedures and data accuracy.
- The **implementation of targeted reduction measures**, guided by each school's **Waste Management Plan** and NOVA's **Zero Waste Policy** (approved in 2023). These include efforts to **reduce paper consumption** and **increase recycling rates** for paper, glass, and packaging waste.
- The **launch of organic waste collection** at the **Campolide campus**.

Additionally, following NOVA's participation in the RE-SOURCE program in 2023, FCT NOVA has partnered with the Swedish start-up NUDGD to develop a behavioral science-based approach to recycling. In 2024, a behavioral study targeted at FCT students assessed perceptions, knowledge, barriers, and opportunities related to recycling and waste reduction. This study has led to the identification of intervention areas and solutions, already in the implementation phase.

3. Sustainable Mobility

Following the first university-wide mobility survey in 2023, led by FCT NOVA, 2024 saw the analysis of mobility data and mapping of associated GHG emissions. By the end of the year:

- A group of master's students from FCT and FCSH, under the guidance of NOVA for the Globe, selected sustainable mobility at NOVA as the focus of their theses.
- Using the survey data, these students will propose sustainable mobility solutions, contributing to NOVA's integrated mobility strategy.

4. Sustainable Laboratories

The NOVA GreenLabs working group, composed of faculty and researchers from FCT, NMS, ITQB, and IHMT, continued its work in 2024. Key progress includes:

- The launch of the [My Green Lab](#) certification process in six laboratories across these units, marking a significant step toward internationally recognized sustainable lab practices.

5. Actions in our infrastructure

In terms of infrastructure, the activities carried out in 2024 were also aligned with the future Climate Neutrality and Resilience Roadmap, contributing to increased environmental sustainability, particularly in energy and water efficiency. The approval of several applications for European funding, notably under Measure 13 of the PRR, has helped accelerate the desired transformation. Additionally, investments in digitalizing systems have enabled performance monitoring and efficiency optimization.

The following analysis is structured by faculty and respective campus:

Faculty of Science and Technology – Almada (FCT NOVA)

- Call 01/C13-i03 – Support for the Renovation and Improvement of the Energy Performance of Service Buildings – *Building VII FCT – Integrated Project for Energy and Water Efficiency in Building VII of FCT* – Execution project under development.
- Call C13-i01; 02; 03 – Support for the Implementation of Renewable Energy Communities and Collective Self-Consumption – *NOVA FCT/SAS – Collective Self-Consumption at NOVA University Lisbon, Caparica Campus* – Awaiting evaluation.
- Implementation of paper consumption reduction measures.
- Launch of awareness campaigns:
 - Promotion of tap water consumption and reduction of single-use plastic bottles.

Faculty of Social Sciences and Humanities (NOVA FCSH)

- Call 01/C13-i03 – Support for the Renovation and Improvement of the Energy Performance of Service Buildings – *CAN – Integrated Energy and Water Efficiency Project at Colégio Almada Negreiros* – Tender launched for project execution.
- Partial replacement of the lighting system with LED technology.
- Partial replacement of faucets with higher water efficiency models.

NOVA School of Business and Economics (NOVA SBE)

- Preparation of the project, procedural documentation, and tender for the installation of solar panels and other measures aimed at improving campus energy efficiency.

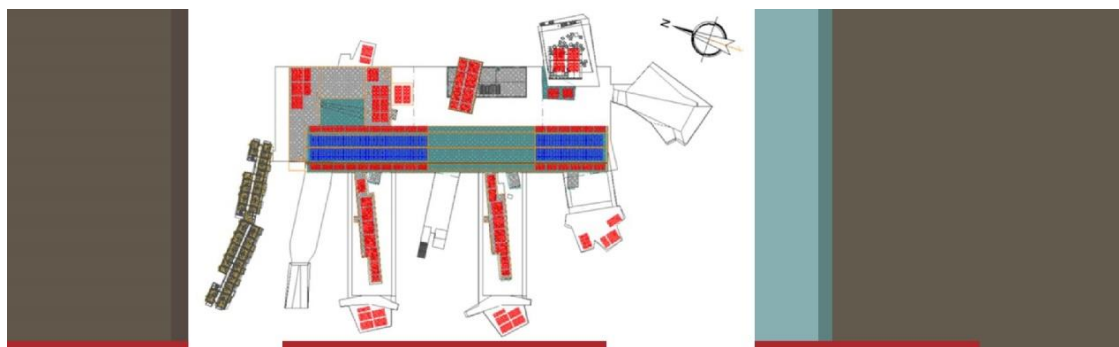


Figure 1- Project for the installation of solar in NOVA SBE Campus

Instituto de Tecnologia Química e Biológica António Xavier (ITQB NOVA)

- Call C13-i01; 02; 03 – Support for the Implementation of Renewable Energy Communities and Collective Self-Consumption – *ITQB and IBET – Collective Self-Consumption at NOVA University Lisbon in Oeiras* – Awaiting evaluation.
- Gradual transition of the lighting system to LED technology.

National School of Public Health (ENSP NOVA)

- Call 01/C13-i03 – Support for the Renovation and Improvement of the Energy Performance of Service Buildings – *ENSP – Energy Renovation Project* – Execution project completed.

Rectorate of NOVA University Lisbon

Campolide Campus

- Call C13-i01; 02; 03 – Support for the Implementation of Renewable Energy Communities and Collective Self-Consumption
 - *Rectorate, NOVA IMS, NOVA FCSH, NOVA LAW, and SAS – Collective Self-Consumption at NOVA University Lisbon, Campolide Campus* – Awaiting evaluation.
- Installation of electric vehicle chargers on the Campolide Campus, integrated into the Mobi-E Network.
- Conducting a hydrogeological and geophysical study to assess the feasibility of a water extraction borehole on the Campolide Campus.
- Installation of waste separation containers on the Campolide Campus – Phase 1.

Rectorate Building

Replacement of fan coil units with higher efficiency equipment in office spaces – Phase 1.

- Upgrade of the lighting system in Auditoriums A and B to LED technology.
- Update of the centralized technical management system, including the installation of new equipment and software version upgrade.

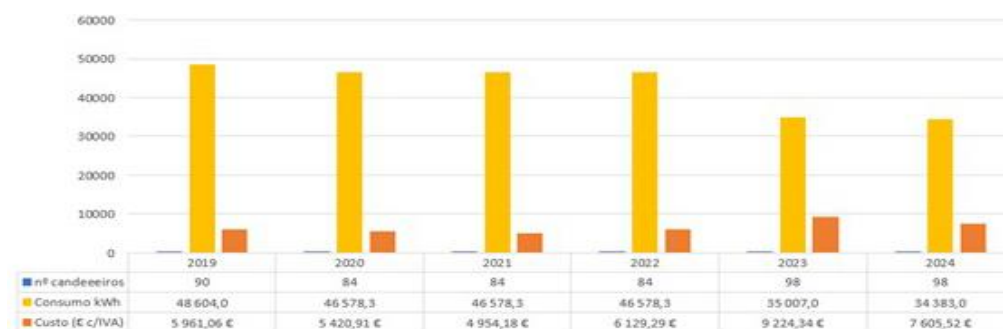


Figure 2- Electricity consumption at the Campolide Campus between 2019-2024

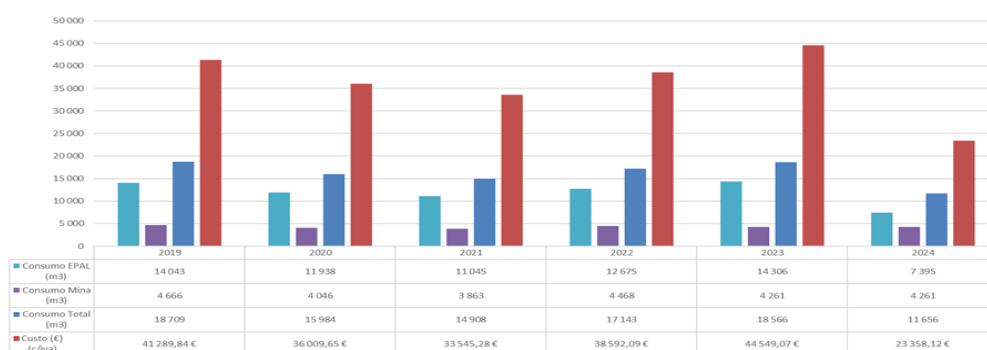


Figure 3- Water consumption for irrigation at the Campolide Campus between 2019-2024

Rectorate of NOVA University Lisbon (continued)

- Installation of an electric vehicle charger in a dedicated area for university-owned vehicles.
- Monitoring of the EcoAp program by ADENE – Resource Efficiency in Public Administration.
- Tracking, recording, and monitoring measures that contribute to achieving NOVA's sustainability goals within the Lisboa Sustentável Platform for the 2020-30 decade.

Social Action Services of NOVA University Lisbon (SAS NOVA)

Call 01/C13-i03 – Support for the Renovation and Improvement of the Energy Performance of Service Buildings

- Alfredo de Sousa Residence – Execution project completed.
- Fraústo da Silva Residence – Construction work initiated.
- Lumiar Residence – Ongoing construction work.

6. Community Engagement

Engagement with various internal and external stakeholders has also helped anticipate some of the challenges of the sustainability roadmap, particularly the need to keep the entire community united around a common goal.

NOVA Climate Journey – Students Bootcamp

In 2024, a key highlight was a renewed effort to strengthen relationships with students from the different NOVA Schools. Aimed at students from NOVA University Lisbon, the event took place on March 16, bringing together participants from all NOVA academic units. Focused on climate action, it sought to enhance knowledge on the topic and develop leadership skills to empower students to be part of the change. For NOVA, this was a moment to reinforce its commitment to climate transition and to establish itself as a university resilient to the challenges of the future.

NOVA Sustainability Days 2024

Over the last three years, NOVA has promoted its Sustainability Days, one or more days dedicated to sustainability. In 2024, special emphasis was given to the Route Zero project. In this way, after a day of conferences at the Rectory, we visited each NOVA School to make Route Zero and all the work carried out by the representatives of each School directly involved in the project known to the entire community, including teachers, researchers, students and employees. The evaluation of this activity was very positive, being a significant step towards the "ownership" of the project and its objectives by each school. Also in the context of the Sustainability Days, the first Route Zero Conference was promoted, with the theme "Financing the Climate Transition in Higher Education" in the auditorium of the Rectory on the Campolide Campus.

Zero Waste Group Brings Urban Waste Management Entities in the Lisbon Metropolitan Area

The Zero Waste Group organized the "NOVA Zero Waste: Collaboration for a Sustainable Future" workshop, held at NOVA SBE's campus. This event marked a significant milestone for all NOVA schools, reinforcing the university's commitment to sustainability and responsible waste management.

The workshop brought together representatives from all NOVA academic units, as well as key partners, including Sociedade Ponto Verde, the Municipalities of Oeiras, Cascais, and Almada, Cascais Ambiente, Tratolixo, Veolia, Valorsul, Amarsul, and Associação ZERO. Participants engaged in working sessions aimed at identifying potential improvements and synergies in waste management practices. A key highlight of the event was the signing of a Cooperation Agreement between the Lisbon City Council and NOVA University Lisbon. This agreement strengthens collaboration for a more efficient and sustainable waste management system across the university and its surrounding communities.