# Index

A WORD FROM THE RECTOR ........................................................................................................ 5
A comprehensive University ........................................................................................................... 7
NOVA International Development ............................................................................................... 9
  International networks ................................................................................................................ 10
NOVA Community ........................................................................................................................ 11
  STUDENTS .................................................................................................................................. 13
  ALUMNI .................................................................................................................................... 15
The Sustainability Map .................................................................................................................. 17
ACTIVITY ....................................................................................................................................... 19
RESEARCH ................................................................................................................................. 21
  NOVA SCIENCE | The Research Units ...................................................................................... 23
EDUCATION ....................................................................................................................................... 93
  EDUCATION ............................................................................................................................. 95
  Science, Technology, Engineering and Mathematics (STEM) ...................................................... 97
Society ........................................................................................................................................ 105
  Health ...................................................................................................................................... 113
OTHER PROGRAMS .................................................................................................................... 121
  NOVA Foundation Program - SUPERNOVA ........................................................................... 122
  NOVA Doctoral School ............................................................................................................. 123
  Lifelong Learning .................................................................................................................... 123
  VOLUNTEERING AT NOVA .................................................................................................... 127
VALUE CREATION & INNOVATION at NOVA ............................................................................. 129
  NOVA IMPACT | Value Creation & Innovation at NOVA .......................................................... 131
  Entrepreneurship Training at NOVA ......................................................................................... 133
  Intellectual Property .................................................................................................................. 135
  Entrepreneurship ....................................................................................................................... 136
  Social Innovation ...................................................................................................................... 137
  CoLABs ................................................................................................................................... 138
ORGANIZATIONAL SUSTAINABILITY ....................................................................................... 139
  Organizational Sustainability ...................................................................................................... 142
Environmental Impact .................................................................................................................. 143
  Campolide Campus .................................................................................................................... 145
  Caparica Campus ...................................................................................................................... 149
  Carcavelos Campus ................................................................................................................... 150
“NOVA University, as a global and civic university strongly committed to the sustainable development of our society, will lead by example.”

A WORD FROM THE RECTOR

João Sàágua
NOVA University Lisbon
Sustainability is the main challenge of this century. It focuses on meeting societal needs and projects of the present without compromising the ability of future generations to meet their own needs and to flourish by developing their own life-projects.

In order to achieve the goals established in the Paris Agreement, the UN Sustainability Agenda and, more recently, the European Green Deal and COP 26 (Glasgow) for a fairer, greener and more prosperous society, we need to encourage a more responsible and sustainable way of living, to promote joint-efforts between people and organizations, and to have mission-oriented approaches.

Of course, those goals should be achieved, over the years, or decades, by implementing ambitious actions plans with impingements in global politics and global economy. As such, they address to governments, corporations and society, at large. But both the design of each action plan and its implementation, will be necessarily knowledge based. That why Universities, in particular, cannot be alienated from this process; on the contrary, they are privileged partners for governments, industry and civil society, since they have the necessary knowledge to address global challenges in an effective and innovative way. NOVA University, as a global and civic university strongly committed to the sustainable development of our society, will lead by example.

By creating and disseminating science-based evidence in a wide range of knowledge areas, and at the same time, becoming a more sustainable place to work and study, with less impact on environment, NOVA can make the most significant difference and become a driving force for sustainability.

As Rector of this University, I am aware of the many scientific and institutional practices with a strong emphasis on sustainability that are carried out in our Schools and it is with great pride that I applaud each and every one of them. But it is important to map down the different initiatives, policies and activities that contribute to NOVA’s sustainability performance and start assessing the University’s impact as a transformative agent of society.

NOVA’s Sustainability Map is our first step in that direction. Our ambition with this report is to consolidate key information that is scattered across the University, inspire our Community to adopt best practices already implemented by other NOVA Schools, support the development of a NOVA Sustainability Plan and communicate our key outputs and outcomes both internally and externally.

I would like to thank everyone who contributed to the preparation of this document and, most importantly, to the results hereby presented, with the expectation that together we can keep improving NOVA’s impact in society and stand out as a true sustainable university.
A comprehensive University

NOVA University Lisbon is a public institution of higher education. Its mission is to serve society locally, regionally, and globally, advancing and disseminating knowledge and understanding across cultures, societies, and people.

Located in Lisbon area, NOVA is a young and comprehensive European university. It is active in a wide set of areas ranging from engineering and technology, humanities, medicine, health and life sciences, economics and management, social sciences, law and data and information science.

NOVA is also a global and civic university. Global, as its teaching and research follow an international agenda with quality recognized by its partners abroad; and civic, because it is committed to the development of society, culture, and economy in the metropolitan area of Lisbon, in the country, in Europe and also in Portuguese-speaking countries, reinforcing centuries of common history.
Schools

With 9 schools, more than 21,000 students (that includes over 3,400 international students from 110 nationalities), an alumni community with over 100,000 members, 2,500 professors and researchers, and approximately 1000 non-academic staff, NOVA stands out for its culture of internationalization in teaching, research, and its commitment to the great challenges of society.

Impact Rankings

NOVA University Lisbon ranks 53rd worldwide in the Times Higher Education (THE) Impact Rankings 2021. NOVA ranks second in Portugal, and as a young European university NOVA ranks 6th. NOVA stands out in the following positions among young European universities in these SDGs:

• 2nd in SDG 5 (Gender Equality)
• 5th in SDG 3 (Health and Well-Being)
• 5th in SDG 17 (Partnership for the Goals)
• 5th in SDG 9 (Industry and Innovation)
• 8th in SDG 16 (Peace, Justice & Strong Institutions)

This ranking reflects data from 2019.

NOVA 4 The Globe

NOVA 4 The Globe is an interdisciplinary platform that promotes dialogue within NOVA’s community across different areas of knowledge towards sustainability.

This platform seeks to enhance the societal impact of NOVA University in the community, and to facilitate its organizational transformation towards sustainable best practices, complying with the Green Deal, the Paris Agreement, and the Sustainable Development Goals (SDGs).

NOVA 4 The Globe develops the annual Impact Report for the University.

Mission: to promote interdisciplinary collaboration across NOVA’s different Academic Units, guided towards the Green Deal and the SDGs.

Vision: to integrate a network of Young European Universities and global partners that develop interdisciplinary research with impact, becoming a reference in the commitment to the sustainability agenda.
NOVA International Development

NOVA University Lisbon positions itself as a young European, comprehensive, research-based university. As a young institution we are adaptive and reactive to the needs of society, encompassing concerns on how to contribute to a more sustainable future.

Our vision of being a global and civic University reflects not only the need to focus on a meaningful impact both for the local and regional communities we interact with, but also to be well grounded and significant for the larger values that we represent globally as a European institution. Those values should drive our collaborations, our research and teaching agendas, and help preparing the coming generations for an increasingly volatile future.

NOVA, as a Portuguese institution, is part of an Iberian identity, deeply enrooted in the historical definition of European culture. As such, NOVA has developed an international strategy with three strong pillars, based on its natural geographical, historical and cultural identity:

- Europe, as we are first of all an European institution, funded and inspired by the mission and values of an aligned Europe;
- The Mediterranean, by geographic proximity and cultural affinity, as this region is the birthplace of our fundamental character and concept of civilization;
- The South Atlantic, as Portugal is the only European country with cultural and linguistic well-grounded feet in both of its sides, encompassing Africa and Latin America, main drivers for the future.

**Europe**

**European Networks:** YERUN (Young European Research Universities Network), UNICA (Universities of European Capital Cities) and EUA (European Universities Association).

**Rankings:** QS (benchmarking) and THE (Times Higher Education)

**Projects:** LEAD (Leadership of Chinese and European Universities); Portfolio on digital transformation (BLA, ENLIVEN, BLUES); Development of European Universities Alliance.

**Mediterranean region**

**Egypt:** Development of NOVA CAIRO Campus

**International Credit Mobility projects (ICM):** JAMIES, Mare Nostrum, NOVA ICM

**Cooperation projects:** INSITES and e-VIVA

**South Atlantic**

**Cooperation projects:** UDI-AFRICA SQUARE, FORINT, IMPALA, VIADUCT, jean monnets

**Joint Degrees:** Crossways

**Jean Monnet:** Viaduct, Atlantic Studies, Ocean ID

**NOVA-LANCASHER for Sustainability**

Since the partnership was established in 2018, NOVA and Lancaster University have promoted collaborative research among some faculty members of both institutions. In 2019, several research conferences played an important role to foster a collective agenda. Structured around a mutual concern around global challenges, three main drivers of action have been defined in 2020:

Health | Digital Transformation | Sustainability
International networks

The recognition of NOVA’s quality, both in teaching and in research, guaranteed by international accreditations and high positions in prestigious rankings in all areas of knowledge among young European Universities, guarantees NOVA’s participation in important international academic networks. This engagement allows privileged visibility and ease of partnerships with top-level international institutions and leverages the fulfilment of strategic objectives, including the work developed by NOVA’s strategic platforms (e.g. NOVA for the Globe, NOVA Tourism and Hospitality, among others). It facilitates students and researchers’ mobility, the development of joint programs and projects and their funding, leading to a significant (positive) impact on NOVA's international reputation. NOVA’s commitment with sustainability is also scaled-up as a result of this process.

YERUN

Of all the networks that NOVA is part of, one of the most strategically important is YERUN because it positions NOVA as what it essentially and distinctively is: a young, European University focused on knowledge and research. This shared identity provides a better base for successful partnerships. YERUN fits in the youth, dynamic and innovative spirit of NOVA, allowing us to be part of a united and strong voice for Young European Research Universities. YERUN has a most relevant advocacy role inside the EU agenda.

CESAER

NOVA was one of the founders of this network. CESAER fits in a context of excellence in the area of Science and Technology, allowing us to be part of a united and strong voice in European Science and Technology. CESAER is a network that allows an adequate benchmark of our brand and quality internationally, allowing for coherent innovation and sharing of best practices in leading institutions. It also advances reflection and understanding of the role of science and technology in knowledge societies for a sustainable future.

UNICA

UNICA fits with NOVA’s identity of a metropolitan, urban university. It allows us to be part of a strong network of Universities in capital cities, close to the governments, and with a strong capacity of influencing European HE Strategy. Most of the Working Groups set up in the UNICA network are directly linked to some of the most relevant SDGs (e.g.: UNICA Green, University, Culture & the City Group), so this activity provides significant support to the NOVA4theGlobe platform.
NOVA Community

The NOVA Community ("Comunidade NOVA") was initially conceived as an instrument with a dual purpose. On the one hand, to reach students, alumni, their employers and partner organizations in order to foster a more effective placement of the talent generated by NOVA in the global job market. On the other hand, by involving (current and past) employees, professors, researchers, visitors and co-authors, including them in a dynamic and permanently active community. This instrument is nowadays part of the backbone of NOVA’s development strategy. The outcomes of this instrument may be perceived at two different levels:

**Collaborative work**

Acting as a catalyst for interdisciplinary work between different schools. It also provides the different core services with useful tools that enable the mobilization of this human capital.

The main outcome may be perceived though the effective responses to the individual needs of each school and to the strategic objectives of the University.

**Capacity building**

Acting as an enabler and key disseminator of the best practices that are being produced within the global community that integrates the university’s DNA, with an active engagement of people and organizations from classic to emerging markets.

The main outcome may be perceived by the reinforcement of NOVA’s brand and the key contributions to the internationalization strategy of the University.

**FACULTY**

Faculty are a key stakeholder of NOVA’s community. Their mission is to serve the society at the local, regional and global level, through the progress and dissemination of knowledge and understanding between cultures, societies and people, by way of a teaching and research of excellence.

NOVA’s Community of faculty is composed by 4680 members. That includes former or current Professors (3771 members, with 1181.5 still working at NOVA) and 909 Researchers (484.5 still doing research at NOVA).

**EX FACULTY**

The impact generated by NOVA would not be possible without the talent, effort and dedication of its faculty members that enhanced education and research to outstanding levels. These include those who have left the organization and are now helping other organizations to thrive, but also those who retired. NOVA thanks them for all the years of dedication.
STAFF

NOVA Community of Technical Staff is the engine that supports the three pillars of NOVA’s mission. This community is composed by specialized members with a wide range of different expertise and experience most critical to support the delivering of the university’s education, research and third mission. NOVA Community of Technical Staff is composed by 3800 (including former and past) employees (1059,1 still active).

ORGANIZATIONS

Organizations play an important role at NOVA at various levels. From public to private, and representing the three sectors of activity, they consolidate their relationship with NOVA through its different Community members. In some cases, NOVA establishes this connection through the different networks where it is represented. Organizations generally support its activity, namely public institutions, but also its faculty members, connecting to their research and stimulating knowledge transfer. They also engage with executive training to strengthen individual and collective knowledge, but above all, they welcome NOVA’s students when they integrate the job market.

Public Institutions

Public institutions are particularly relevant to universities, namely as regulators. The relationship with Municipalities is also particularly relevant to NOVA, spread across 4 cities in the Lisbon Metropolitan area.

Corporations

Corporate partnerships involve applied research, executive education, and recruitment. This support is also expressed through donations, to facilities, endowed chairs, awards, or scholarships.

Civil Society

Civil Society organizations, but also their people, partner with NOVA to change the world. They also welcome students to work with them, as professionals or volunteers.

Sustainable Campus Network

The network promotes sustainability issues in Portuguese universities and polytechnics, encouraging the implementation of the principles and practice of sustainable development in the environmental, social, and economic areas. It seeks to share knowledge, initiatives and success stories, as well as to promote joint actions within the Sustainable Campus theme.

Observatório da Responsabilidade Social e Instituições de Ensino Superior (ORSIES)

The Observatory reinforces the awareness and civic action of the community of Higher Education Institutions, seeking to develop common, shared actions with social impact. It seeks to share methodologies, instruments, experiences, and good practices, also mobilizing other stakeholders, nationally and locally.

EX STAFF

The impact generated by NOVA would not be possible without the talent, effort and dedication of its technical staff. These include those who have left the organization and are now helping other organizations to thrive, but also those who retired. NOVA thanks you for all the years of dedication.

Ex staff

2737

Retired in 2020

477
STUDENTS

Student are the keystone of NOVA’s community, truly international. With over 100 nationalities they are natural bearers of Nova’s International brand as a University of Excellence. This is the natural result of NOVA’s culture of diversity and inclusion. The work performed by NOVA through its inclusive policies, academic curricula and sustainable-driven research priorities provides agency, empowers, amplifies and mobilizes the talent generated by NOVA to tackle the developmental challenges of societies. NOVA applies innovative models and strategies that have proven to be efficient to cultivate in students an SDGs-oriented and cross-cultural interculturality culture.

The Student’s Community generates relevant externalities through the development of curricular and extra-curricular activities with the social sector, actively contributing to positive local externalities in the communities where they operate.

<table>
<thead>
<tr>
<th>Undergraduate Students</th>
<th>Master Students</th>
<th>PhD Students</th>
<th>Students by subject area:</th>
</tr>
</thead>
<tbody>
<tr>
<td>20.888</td>
<td>2.179</td>
<td></td>
<td>STEM*:</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Medicine:</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Arts &amp; Humanities / Social Sciences:</td>
</tr>
</tbody>
</table>

*STEM: Science, Technology, Engineering and Mathematics.

<table>
<thead>
<tr>
<th>Academic Year</th>
<th>16/17</th>
<th>17/18</th>
<th>18/19</th>
<th>19/20</th>
</tr>
</thead>
<tbody>
<tr>
<td>Portuguese</td>
<td>17 607</td>
<td>17 550</td>
<td>17 435</td>
<td>17 620</td>
</tr>
<tr>
<td>International</td>
<td>2 205 (11%)</td>
<td>2 527 (13%)</td>
<td>3 061 (15%)</td>
<td>3 408 (16%)</td>
</tr>
<tr>
<td>Total</td>
<td>19 812</td>
<td>20 077</td>
<td>20 496</td>
<td>21 028</td>
</tr>
</tbody>
</table>

“ITQB NOVA has a laid back atmosphere in which people help each other. It is a great place to study and it is one of the best institutions in Portugal. Even in the pandemic, ITQB has always given me all the means and opportunities to develop my thesis.”

Gonçalo Manteigas

<table>
<thead>
<tr>
<th>Program</th>
<th>Entry year</th>
</tr>
</thead>
<tbody>
<tr>
<td>Integrated MSc in Electrical and Computer Engineering</td>
<td>2017</td>
</tr>
</tbody>
</table>

“I joined FCT in 2017 and it has been an amazing journey. There are plenty of student groups and activities where I have participated rewarding me with friendships and academic experiences. FCT is unique.”

Rita Almeida Neves

<table>
<thead>
<tr>
<th>Program</th>
<th>Entry year</th>
</tr>
</thead>
<tbody>
<tr>
<td>MSc in Economics</td>
<td>2020</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Program</th>
<th>Entry year</th>
</tr>
</thead>
<tbody>
<tr>
<td>MSc in Biochemistry for Health</td>
<td>2018</td>
</tr>
</tbody>
</table>
First degree students: 9,503
First degree international students from developing countries: 312
Starting a first degree: 2,928
First generation students starting a first degree: 1,047

“I started in ENSP as a master’s student, went through a research fellow and now as a PhD student, I found in this place an extraordinary vibrant environment that allowed me to develop work on vulnerable population, health inequalities and infectious diseases, on which I’m developing my thesis on COVID-19.”

Marta Moniz
Program: PhD in Public Health
Entry year: 2019

“I can tell you that becoming a NMS student was the best decision of my life. At NMS there is a family atmosphere, of friendship between all who study here, regardless of the course. I think that the complete integration environment we live here few other places have.”

Afonso Andrade
Program: Integrated MSc in Medicine
Entry year: 2016

“Since little, I’ve been hyper-aware of the importance of sustainability. My awareness started in my science classes with discussions about climate change. Then, throughout my undergraduate law studies at Nova School of Law I’ve been able to understand how Law is a powerful instrument to advance the sustainability efforts.”

Dusse Djabula
Program: BSc in Law
Entry year: 2018

“As an Angolan nurse, I chose the Institute of Hygiene and Tropical Medicine because it is a scientific reference in the field of tropical health. Three aspects characterize my experience: hospitality of academic services, networking with several foreign PhD students, as well as scientific quality and humanity of my supervisors.”

Dinamene Oliveira
Program: PhD in International Health
Entry year: 2013

“My experience at NOVA IMS has been great and challenging in many ways. The chance of learning another culture and a complete Degree Program made me more independent and prepared for the world job market.”

Júlia Souza Cibulski
Program: BSc in Information Systems
Entry year: 2018
ALUMNI

The Alumni are another keystone of NOVA’s community. It includes all those who were involved and transformed by their experience at NOVA. This international community of “ambassadors” from over 100 nationalities are natural bearers of NOVA’s International brand as a University of Excellence. This is the natural result of NOVA’s culture of diversity and inclusion. The work performed by NOVA through its inclusive policies, academic curricula and sustainable-driven research priorities provides agency, empowers, amplifies and mobilizes the talent generated by NOVA to tackle the developmental challenges of societies. NOVA applies innovative models and strategies that have proven to be efficient to cultivate in students an SDGs-oriented and cross-cultural mindset.

The Alumni Community also generates relevant externalities at various levels. They act as mentors, “ambassadors”, lecturers, project partners, donors, active facilitators in talent recruitment and global job placement, or even social advocates.

Graduates by subject area:

<table>
<thead>
<tr>
<th>Subject Area</th>
<th>Graduates</th>
<th>First degree Graduates</th>
</tr>
</thead>
<tbody>
<tr>
<td>STEM</td>
<td>1,038</td>
<td>287 (27.6%)</td>
</tr>
<tr>
<td>Medicine</td>
<td>740</td>
<td>291 (39.3%)</td>
</tr>
<tr>
<td>Arts &amp; Humanities / SS</td>
<td>2,575</td>
<td>1,188 (46.1%)</td>
</tr>
</tbody>
</table>

“Nova SBE gave me the opportunities and the tools to survive — and actually enjoy! - the challenging job market process. Nova SBE recruits in the international market. As a result, it trains students to meet the high standards required to compete with students from other top schools.

Since an early stage, I was encouraged to think deeper about my research, to find alternative explanations for my results, and to develop my critical thinking. These are essential hard skills, but they are not enough to succeed in the job market. Soft skills such as communication and inter-personal skills are critical.”

Diogo Mendes

“Being at FCT NOVA was one of the best experiences of my life. It was a demanding period but the people, the environment, the spirit made it all worth it and fulfilling. It conveys a sense of belonging like no other, truly a second home.”

Joana Páris Pereira

“[I feel I was prepared to work in the pharmaceutical area. Although I am no longer in research, I have the tools to understand the scientific development taking place in my company.”

Katharina Dores

Program: Integrated MSc in Computer Science and Engineering 2019
Software Engineer, EID

Program: MSc in Biochemistry for Health 2015
Assistant Professor, Stockholm School of Economics

Janssen - Johnson & Johnson, Portugal
“It was an unprecedented experience. Today, this qualification gives me greater visibility in academic and professional levels, in my country and across borders. I feel empowered to teach, investigate, and plan and guide projects in the spectrum of my specialty.”

Franco Cazembe Mufinda
Program: PhD in Public Health
Graduation year: 2014
Secretary of State for Health, Health Ministry of Angola; Professor at Namibe Polytechnic School, Mandume Ya Ndemufayo University

“NMS provided me with a unique academic training, with clinical experiences at national and international level. I got rich in extracurricular activities and grew up with the spirit of companionship and mutual help that characterize its student community. I now face the challenges of the medical profession with more confidence, humanism and critical thinking for the future.”

Afonso Andrade
Program: Integrated MSc in Medicine
Graduation year: 2019
General Training Internal Physician, SESARAM, Funchal

“My experience as an MSc and PhD student at IHMT-NOVA has greatly influenced my academic and scientific career. I received advanced training in Biomedical Sciences, which gave me the opportunity to continue my postdoctoral studies abroad. Recently, I returned to Portugal with an MSCA-IF to do research at IHMT-NOVA.”

Liliana Rodrigues
Program: PhD in Biomedical Sciences (Microbiology)
Graduation year: 2010
Senior Technician, IHMT-NOVA

“During my undergraduate degree course, I managed to acquire skills that fit current business requirements, because, in addition to the excellence that NOVA IMS accustomed and instilled in us, we also developed strong technical and soft skills that place us in an excellent market position.”

Miguel Santos
Program: BSc in Information Systems
Graduation year: 2019
Azure Support Engineer, Microsoft

Keep in touch! novacommunity@unl.pt
The Sustainability Map

NOVA’s Sustainability Map explores NOVA University Lisbon’s activity in 2020. With a strong ambition to become NOVA’s Sustainability Report, this first Edition reflects the effort to map all the different contributions from internal and external stakeholders that actively co-create NOVA’s sustainability performance. Although not exhaustive, reflecting all the activities development along the way, it is a useful complement to NOVA’s Activity and Financial Report.

Sustainability is embedded in NOVA’s DNA. Its core activities promote knowledge and education paving the way to improve its economic, environmental, and social impacts. Structured around NOVA’s three missions, the present report highlights key outputs, outcomes, and impacts. NOVA’s commitment to the Sustainable Development Goals (SDGs) is fully expressed in the way information is organized, with a strong effort to link the activities with the global Agenda.

Universities play a critical role in advancing the SDGs, and it is now time for NOVA to consolidate its journey. This document establishes the baseline and paves the way moving forward.

Process

Anchored in NOVA 4 The Globe’s Operational Council 4 Sustainability, this document reflects a collective outlook about NOVA’s activities towards sustainability.

To guarantee a collective engagement and accurate information, three main questionnaires were developed. Targeting the right contacted points in the Rectory and the Schools, they were able to summarize the activity across NOVA’s three missions and organizational performance.

- Research
- Education
- Other activities and consumptions.

Methodology

Direct and indirect impacts are described across the document, in no particular order or reference.

NOVA’s Sustainability Map is an extensive list of different impactful activities related to its community. Anchored in small narratives, this report is inspired by the REF Impact Case Studies (ICS), which describe how research, conducted during a specific time-frame at a named institution, resulted in change, had an effect on or benefited culture, the economy, the environment, health, public policy, quality of life or society, using qualitative and quantitative evidence.
Acknowledgments

This report is a collective work from different stakeholders at NOVA. Information is all around, and from central departments to NOVA’s nine Schools, a strong sense of belonging allowed this project to successfully accomplish its initial goals. Thank you all!

Community

NOVA’s sustainability performance is directly and indirectly credited to different internal and external stakeholders. NOVA’s Community includes students, alumni, current and retired faculty and staff, and organizations.

Structure

NOVA’s Sustainability MAP is structured around NOVA’s three missions: Research, Education, Value Creation and Innovation. A fourth dimension, institutional, accounts for the University’s ecological and social footprint, its infrastructure, people, and governance. The last chapter discusses the prospects of the activity in the upcoming year, setting goals and compromises.

• Research
• Education
• Value Creation and Innovation
• Organizational Sustainability
• Future

Sustainable Development Goals (SDGs)

The 2030 Agenda for Sustainable Development, adopted by all United Nations Member States in 2015, provides a shared blueprint for peace and prosperity for people and the planet, now and into the future. At its heart are the 17 Sustainable Development Goals (SDGs), which are an urgent call for action by all countries - developed and developing - in a global partnership. They recognize that ending poverty and other deprivations must go hand-in-hand with strategies that improve health and education, reduce inequalities, and spur economic growth – all while tackling climate change and working to preserve our oceans and forests.
ACTIVITY

This section describes NOVA University Lisbon’s core activities, which follow its three missions: Research, Education, Value Creation and Innovation. Sustainability emerges directly and indirectly bringing different stakeholders together to co-create impact. Each chapter reflects one of the three missions.
RESEARCH

As sustainability requires a systemic approach focused on knowledge and on technological and social innovation, Universities create the perfect environment to achieve excellence. In NOVA’s case, research is motivated by the challenge of tackling societal problems and offers a comprehensive understanding of effective solutions to accomplish the targets. Leading by example, NOVA is committed towards common goals and recognises the importance of a sustainable approach moving forward. NOVA impact is entailed by a multi-disciplinary and disruptive research community, thus placing NOVA in a unique position at national level. Through high-quality research, NOVA creates momentum to raise awareness and capacity building, and produce knowledge that contributes for the development of society towards a more inclusive and sustainable one.

National and international cooperation boost resource usage and diversity more efficiently and provide the necessary environment to engage different stakeholders. The impact of NOVA’s research, through a gendered lens, is the highest in terms of proportion of publications by female authors nationally. NOVA’s commitment towards Gender Equality has been expressed in its Strategic Plan and places NOVA aligned with the UN SDG 5 targeted to achieve gender equality and empower all women and girls. This commitment has also been translated in NOVA’s participation in the European project SPEAR to support the implementation of Gender Equality Plans in Academia and Research.
NOVA SCIENCE | The Research Units

NOVA’s disruptive contribution to innovation relies on high-quality education and research, and combines fundamental research with collaborative agendas. The impact of NOVA’s research has been demonstrated by its quality: NOVA currently hosts 39 R&D Units, 23 of which represent partnerships with other national institutions, and 92% are considered units of excellence. This places NOVA in the top 3 of national universities with international recognition.

NOVA prioritises the technological and scientific systems sustainable growth, in line with national Science and Technology policies. As a consolidated community, NOVA strives to attract significant resources from different funding mechanisms, which allows the highly qualified talent to thrive in its unique environment.

NOVA’s Research Infrastructures

Through its 15 Research Infrastructures, NOVA coordinates 5 of them and contributes to several sectors ranging from health to circular economy, from genetically tractable organisms to data management and data analysis or even from bioimaging and advanced microscopy to digitalization of objects in social sciences, arts and humanities. These Research Infrastructures are part of the Portuguese Roadmap Infrastructures funded by the national Foundation for Science and Technology (FCT).

NOVA 4 The Globe

NOVA 4 the Globe Council for Research is composed by 9 academics representing each Academic Unit of NOVA. This council is responsible for proposing new thematic lines of research in line with the UN Agenda 2030 and the European Commission’s Green Deal, explicitly identifying international and interdisciplinary synergies, according to the University’s competences, interests and research agendas.

NOVA Research Portal

NOVA Research Portal was launched in February 2019 as a public source, with the objective of increasing the impact of NOVA’s scientific production and research community, and features validated data in NOVA’s Current Research Information System (CRIS) - PURE.

Approximately 3.250 individual researchers can access Pure directly, and NOVA’s nine academic units have so far uploaded publications affiliated with around 8.240 NOVA researchers. In terms of content, PURE already has 67.680 validated scientific outputs (in all types), of which 51.000 are peer-reviewed articles*.

Santander-Nova Collaborative Research award 2020

NOVA University Lisbon and Banco Santander distinguish pioneering research projects developed by young researchers from NOVA, involving at least two different academic units of the University. The 13th Edition had not one, but two winners.

* Data collected in 18/10/21.
During 2020, NOVA promptly responded to COVID-19 pandemic with a large number of activities combining 45 initiatives, 25 new partnerships, and 1.6M € for research, distributed over more than 30 projects. NOVA also had a social role by assisting with the testing in nursing homes through a protocol with the authorities, and by ensuring remote monitoring for COVID patients.

In September 2020, NOVA University Lisbon hosted the third edition of the NOVA Science Day. The event was dedicated to Sustainability and the Sustainable Development Goals (SDGs) established by the United Nations. As in previous editions, the Santander-NOVA Collaborative Research Award 2019/2020 was also announced.

90 Segundos de Ciência is a project that aims to give voice to Portuguese researchers and their research nationwide and to those doing it abroad. It is a very successful project coordinated by ITQB and FCSH from NOVA, and Antena 1, with the support of Novartis and Santander Universidades that was distinguished with the Gulbenkian Knowledge Prize in 2019.

The national and international impact of NOVA’s research publications has been demonstrated after winning a national call that allows the research community to create Digital Object Identifier (DOI), and is illustrated by the 15.5% of all publications in the top 10% of the most cited worldwide. Furthermore, in 2020, 50.2% of all publications have international collaboration involving more than 12,700 researchers.

Welcome to our Research Units!
Centre for Physics and Technological Research – CEFITEC

CEFITEC brings together 14 researchers devoted to exploring Engineering Physics activities, merging selected topics in Physics, Chemistry, Materials Science and Engineering.

Actual CEFITEC expertise focuses on Surface Science, Vacuum Technology, Atomic and Molecular Interactions and Solar Pumped Lasers. It is our goal to achieve technological developments based on firm scientific grounds. Therefore, our research ranges from basic principles, to proof of concept, system prototype and, in some cases, deployment in operational environment. For this purpose, CEFITEC has well equipped laboratories and a multidisciplinary research team, with a strong experimental background.

**PROJECT**

**IONGAUGE**

The ionisation gauge is the only vacuum gauge type for high and ultrahigh vacuum which is used in accelerators and vacuum processes. This project provided the relevant parameters for an ISO standard gauge so that the new gauge is more accurate, robust and long-term stable, with known relative gas sensitivity factors.

**Funding Source:** EURAMET  
**Partner Entities:** 9  
**Principal Investigators:**  
Karl Jousten  
Orlando Teodoro

**Target:** 9.5  
Enhance scientific research, upgrade the technological capabilities of industrial sectors in all countries, in particular developing countries, including, by 2030, encouraging innovation and substantially increasing the number of research and development workers per 1 million people and public and private research and development spending.
Reactions in Tirapazamine Induced by the Attachment of Low-Energy Electrons: Dissociation Versus Roaming of OH

The present study focuses on the electron capture mechanism of tirapazamide, radiosensitizer, describing the action mechanism of such drug at the molecular level.

**Target:** 17.7

Promote the development, transfer, dissemination and diffusion of environmentally sound technologies to developing countries on favourable terms, including on concessional and preferential terms, as mutually agreed.

**OTHER HIGHLIGHTS**

Under a contracted license with NOVA University Lisbon, Amorim Cork introduced in the production line of natural cork stoppers a technology developed at CEFITEC to eradicate the 2,4,6-trichloroanisole which is the known source of cork taint in wine. The full processing capacity is 700 M corks per year. Each cork has a negative carbon footprint higher than 300 g of CO2.

The company Amorim Cork is also fully supporting one PhD workplan running at CEFITEC aimed to understand the chemistry of 2,4,6-trichloroanisole on cork and the impact of thermal processes on the properties of cork.

**Target:** 9.4

By 2030, upgrade infrastructure and retrofit industries to make them sustainable, with increased resource-use efficiency and greater adoption of clean and environmentally sound technologies and industrial processes, with all countries taking action in accordance with their respective capabilities.

**EVENT**

**PHOTOPTICS 2020 - 8th International Conference on Photonics, Optics and Laser Technology**

This conference was related with optical systems which are ubiquitous with applications covering medical sciences, spatial exploration, telecommunications, information processing, industry and military/weaponry technology.

**Target:** 7.a

By 2030, enhance international cooperation to facilitate access to clean energy research and technology, including renewable energy, energy efficiency and advanced and cleaner fossil-fuel technology, and promote investment in energy infrastructure and clean energy technology.
UCIBIO combines key expertise in Biological Sciences, its key strengths supported on a broad scope of fundamental and applied research, standing at the interface of Chemistry, Biology and Engineering to address pertinent questions at atomic, molecular, sub-cellular and cellular levels, including cell-to-cell interactions and population evolutionary dynamics. UCIBIO research has an impact in sustainable, bioeconomy and circular economy and is aligned with the UN Sustainable Development Goals, namely Goal 3 that aims to ensure health and well-being, Goal 6 to promote sustainable management of water and sanitation, and Goal 14 for sustainable use of marine resources.

**PURE - Precisely Patterned Nanofibers for High Performance Bioseparations**

PURE envisions the pioneering of precisely functionalized purification nanofibers using principles of scalable biotechnological processes. Scientific and engineering principles on living organisms are combined to produce the biobased adsorbents of the future, putting Europe in the forefront of sustainable and patient-oriented biopharma. PURE brings together leading scientists and a SME as a highly interdisciplinary team with expertise in biology, chemistry, computational modelling, materials science, bioprocess engineering and applied social sciences.

**Funding Source:** EU  
**Partner Entities:** 4  
**Principal Investigators:**  
Cecília Roque
Toward the mechanistic understanding of enzymatic CO2 reduction

The paper reports the structural and biochemical characterization of a protein capable of fixing carbon dioxide (CO2) from the atmosphere, thus indicating new ways to solve one of the biggest current challenges for the planet's sustainability: carbon neutrality.

OTHER HIGHLIGHTS

Paula Videira, investigator at UCIBIO, says they are testing components that neutralize the capacity of the virus to infect cells.
VICARTE aims at disclosing and reinterpreting traditional techniques, exploring their translation into contemporary applications, to design sustainable practices and transmission of traditional knowledge. Encouraging the sharing of know-how between generations through collaborations with artists and artisans on the international and local levels as a stimulus for the creation of a renewed market.

VICARTE develops new sustainable glass and ceramic materials with remarkable optical and structural properties that can open innovative creative pathways in the art and design fields, encouraging and facilitating the development of new forms and products. This research is focused on the promotion of sustainable industrial growth by contributing to a strategic shift from cost-based manufacturing to more flexible production processes of high added value.

PROJECT
Craft-HUB - Investigate and Document Craft Skills and Processes

Craft Hub is focused on Craft in the context of cultural heritage and its continuing relevance in contemporary practice. The project activities involve investigating and documenting craft skills and processes; their differing application in creative practice across Europe; and questions of cultural specificity & individual motivations of practitioners.

Funding Source: Creative Europe
Partner Entities: 9
Principal Investigators: Kieran Comerford

Target: 11.4

Strengthen efforts to protect and safeguard the world’s cultural and natural heritage.
PUBLICATION

Tunable white emission of silver-sulfur-zeolites as single-phase LED phosphors

Metal clusters confined inside zeolite materials display remarkable luminescent properties, making them very suitable as potential alternative phosphors in white LED applications. However, up to date, only single-color emitters have been reported for luminescent metal-exchanged zeolites. In this study, we synthesized and characterized white emitting silver-sulfur zeolites, which show a remarkable color tunability upon the incorporation of silver species in highly luminescent sulfur-zeolites.

Target: 7.3
By 2030, double the global rate of improvement in energy efficiency.

OTHER HIGHLIGHTS

EVENT

Livros dos Sintomas - Conversas

The event aims to map and think about artistic research and its manifestations in the national context.
The mission of MARE is to seek excellence in the study of aquatic ecosystems and disseminate knowledge to support policies for sustainable development, also contributing to a participative Blue Society. MARE-NOVA develops research activities of recognized quality in the following areas: environmental toxicology and risk analysis, water resources management, hydraulics and hydrology, management of living marine resources, marine biology and ecology, marine litter and microplastics, water pollution bioremediation, waste prevention and management, life cycle analysis and circular economy, coastal zone planning, urban sustainability and adaptations to climate change, ocean governance and literacy, socio-cultural studies of coastal communities and blue sustainability.

**HIGHLIGHTS**

The LocalSDG - Municipal Sustainable Development Goals monitoring platform aims to trigger a broad and open local sustainability movement, with strong multiplier effects, not only to bring the local actors and their initiatives to the spotlight, but also to promote the creation of an extensive and committed community of agents of change. The LocalSDG Platform embodies a dynamic technology-based online portal, which allows the visualization and monitoring of the progress and contributions of each municipality in relation to the various SDGs.

**IMPACT STORY**

**PROJECT**

**CAPonLITTER - Capitalising good coastal practices and improving policies to prevent marine litter**

CAPonLITTER aims at improving policies and practices that can help in preventing marine litter that results from coastal tourism and recreational activities. The project will focus on plastic food and drink containers originating from beach facilities and recreational events, due to improper behaviour of consumers but also to lack of incentives and structures for prevention, collection and recycling of waste.

**Funding Source:** Interreg Europe  
**Partner Entities:** 7

**Principal Investigators:** José Carlos Ferreira

**Target:** 14.1

By 2025, prevent and significantly reduce marine pollution of all kinds, in particular from land-based activities, including marine debris and nutrient pollution.
Distribution Patterns of Microplastics in Seawater Surface at a Portuguese Estuary and Marine Park

This study sets a baseline evaluation of microplastic (MP) accumulation at the sea surface at the Arrábida coastal area, in Portugal, which encompasses a marine protected area and an estuary, both under strong anthropogenic pressures. A short-term investigation on local spatiotemporal distribution, concentration and composition of MP was performed for the first time. Altogether, the information provided in this study aims to raise awareness among the identified sectors and consequently to act toward the prevention of MP inputs in the region.

**Target:** 14.1

By 2025, prevent and significantly reduce marine pollution of all kinds, in particular from land-based activities, including marine debris and nutrient pollution.

**OTHER HIGHLIGHTS**

Marta Martins’ participation in the episode “Toxic Formulas” of Biosfera, a TV show about the environment, exploring sustainable ways for Portugal.

**EVENT**

**Coastwatch Seminar 2020, “30 Anos a Olhar pelo Litoral”**

The Coastwatch Seminar 2020 - “30 Anos a Olhar pelo Litoral” was co-organized by GEOTA, FCT NOVA and MARE. During 4 days, the program had many communications and workshops across 3 different panels: Climate Change and Coastal Risk, Marine Litter and Microplastics and Communities and Ocean Literacy.
Laboratory for Instrumentation, Biomedical Engineering and Radiation Physics (LIBPhys) actively contributes to tackle the Sustainable Development Goals 3 and 4. Regarding the SDG 3, LIBPhys follow a multidisciplinary approach to obtain innovative solutions and knowledge dissemination aiming the creation of value healthcare. In what concerns the SDG4, the LIBPhys, as a public research unit, has the mission to serve the society, not only by producing scientific knowledge, but also to contribute to the graduate and post-graduate education.

**HIGHLIGHTS**

**HomeSafe**, heart rate, oxygen saturation and temperature monitoring system, developed for elderly and info-excluded people. Born in confinement, the project was developed by students from the NOVA School of Science and Technology under scope of the BeyondCOVID platform and involves partnerships with LIBPhys, Unidemi, Comprehensive Health Research Center, Curry Cabral Hospital, PLUX and FCT FABLAB.

**IMPACT STORY**

**PrevOcupAI**

The project aims to promote better occupational health by searching for historical information about occupational epidemiology, as well as bringing information about the occupational day of workers. It expects to (1) estimate the occupational risk, (2) improve training and information of workers with automation tools and (3) reduce medical leave as well as costs with occupational diseases.

**Funding Source:** FCT

**Partner Entities:** 4

**Principal Investigators:** Hugo Gamboa

**Target:** 3.8

Achieve universal health coverage, including financial risk protection, access to quality essential health-care services and access to safe, effective, quality and affordable essential medicines and vaccines for all.
PUBLICATION

ECG Biometrics Using Deep Learning and Relative Score Threshold Classification

This work contributes to the improvement of the coverage of essential health services (SDG 3.8), since it the methods developed mitigate the intra-variability challenges displayed by the ECG of each individual.

Target: 3.8

Achieve universal health coverage, including financial risk protection, access to quality essential health-care services and access to safe, effective, quality and affordable essential medicines and vaccines for all.

OTHER HIGHLIGHTS

Projeto Com@Rehab é um dos vencedores do Prémio Investigação Colaborativa Santander/NOVA

23.09.2020

Com@Rehab’s main objective is the development of the Digital Communication Module (MCD Rehab) of an interactive rehabilitation solution in Virtual Reality.

“We intend to focus on the expansion of the communicative skills of the various agents involved, while strengthening technological literacy and interactivity with technology, thus helping to improve the interaction between Man-Man and Man-Machine, we also aim to support the management of therapeutic activities aimed at post-COVID patients, therefore making the program more effective and efficient.”

Micaela Fonseca
Mechanical Engineering and Resource Sustainability Center – MEtRICs
NOVA School of Science and Technology

The MEtRICs mission is to create scientific knowledge and provide technical solutions for a cleaner, safer and sustainable world. The research activities are organized along 4 research topics: Energy Conversion; Advanced Engineering Systems; Structures and Vehicle Engineering; Food Technology and Wellbeing. All the activities have as a goal a contribution to the sustainability, focusing not only on the technological processes improvement but also on the economical, the environmental and the social aspects of the Research Unit’s contribution.

IMPACT STORY

PROJECT

MAGIC - Marginal lands for Growing Industrial Crops: Turning a burden into an opportunity

MAGIC builds on the idea of sustainable exploitation of marginal lands for the cultivation of industrial crops offering resource-efficient varieties for industrial applications. It aims to improve the livelihoods in marginal areas by placing abandoned marginal land in use again and by improving farm income on such marginal areas.

Funding Source: H2020
Partner Entities: 25
Principal Investigators: Ana Luisa Fernando

Target: 15.3

By 2030, combat desertification, restore degraded land and soil, including land affected by desertification, drought and floods, and strive to achieve a land degradation-neutral world.
Eco-Friendly ZnO/Chitosan Bionanocomposites Films for Packaging of Fresh Poultry Meat

Bionanocomposites based on chitosan and incorporated with nanoparticles were developed and enhanced the shelf-life of fresh poultry meat, contributing to reduce the food waste problem and to replace non-biodegradable plastics.

**Target: 12.3**

By 2030, halve per capita global food waste at the retail and consumer levels and reduce food losses along production and supply chains, including post-harvest losses.

**OTHER HIGHLIGHTS**

Studying the use of marginal lands to produce biomass.

**EVENT**

**EUBCE 2020 28th European Biomass Conference & Exhibition**

EUBCE is the world’s largest biomass event, bringing the latest advancements in this field to accelerate the biobased economy and contributing to achieve energy/climate and other SDG targets.
The Center of Technology and Systems (CTS) addresses engineering systems with a cyber-physical dimension, including modeling and design, development of support technologies and methods, proposition of adequate governance models, application, and assessment. Research activities focus on systems with growing levels of intelligence, autonomy, and hyper-connectivity. This entails data-rich environments, distributed intelligence, mobility, and autonomy, where sensing, micro-electronics, embedded systems, machine learning, computational intelligence and qualitative reasoning, robotics and automation, interoperability, collaborative networks and collaborative systems, security, and balanced human-systems collaboration play a major role. Global concerns of sustainability, including energy efficiency and systems optimization, encompass the developments.

**PROJECT**

foRESTER - Data fusion of sensor networks and fire spread modelling for decision support in forest fire suppression

It is urgent that the scientific community provides efficient tools for improving decision making during wildfires crisis. In project foRESTER it is proposed a fast, reliable, and informative decision support system based on advanced computational intelligence and visualization techniques (multi-sensor nodes, satellite image processing, and near real-time fire spread predictions).

**Funding Source:** FCT  
**Partner Entities:** 6  
**Principal Investigators:** Luís Oliveira  

**Target:** 13.1  
Strengthen resilience and adaptive capacity to climate-related hazards and natural disasters in all countries.
This work contributes to the improvement of the coverage of essential health services (SDG 3.8), since it the methods developed mitigate the intra-variability challenges displayed by the ECG of each individual.

**Target: 3.8**

Achieve universal health coverage, including financial risk protection, access to quality essential health-care services and access to safe, effective, quality and affordable essential medicines and vaccines for all.

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**EVENT**

**ReDiscover Europe Workshop**

Under the auspices of the Portuguese and Slovenian Government, H2020 IMPACTOUR Project organized the "ReDiscover Europe Workshop", discussing the role of sustainable Cultural Tourism within SDG 8.9 and 12.b.
CIUHCT aims at asserting the relevance of History of STM in building inclusive citizenship, focusing specifically, but not exclusively, on STM historical case studies on Portugal from an international perspective.

CIUHCT actively participates in international debates on the sustainability agenda, using the STM’s History as well as STM’s memory and heritage, to promote critical knowledge and innovative explanations in the context of the SDGs.

**PROJECT**

**Hi-BicLab: History Lab for Sustainable Urban Mobilities: Lisbon's cycling policies**

Hi-BicLab aims at contributing with insights from Lisbon’s mobility history to current policies based on sustainability and inclusivity, namely by understanding the “path-dependency” generated by the current car-centred socio-cultural-technical arrangement, and to collectively envision (and design) safer, more inclusive, cleaner, quieter, and more fulfilling cities.

**Funding Source:** FCT  
**Partner Entities:** 7  
**Principal Investigators:** M. Luísa Sousa

**Target:** 11.2

By 2030, provide access to safe, affordable, accessible and sustainable transport systems for all, improving road safety, notably by expanding public transport, with special attention to the needs of those in vulnerable situations, women, children, persons with disabilities and older people.
Designing (Un)Sustainable Urban Mobility from Transnational Settings, 1850–Present

We explore the terms by which urban planners, policymakers, and social reformers understood what we now call social, economic, and ecological sustainability while envisioning future urban mobility solutions.

**Target: 11.2**

By 2030, provide access to safe, affordable, accessible and sustainable transport systems for all, improving road safety, notably by expanding public transport, with special attention to the needs of those in vulnerable situations, women, children, persons with disabilities and older persons.

**OTHER HIGHLIGHTS**

**Anthropocene Campus: Parallax**

The Anthropocene Campus engaged with issues of environmental and social transformation highlighted by the Anthropocene, particularly by tackling systems of social and technological organization and forms of perception and narrative.

**Donors**

CIUHCT (FCT.IP) | Culturgest | HKW | MPIWG
The Associate Laboratory for Green Chemistry is the Portuguese Research Center for Sustainable Chemistry. Its mission is to initiate, advance, and promote the principles of Sustainable Chemistry: waste minimization, use of safer chemicals, energy efficiency, and use of renewable materials and energy sources. The thematic Lines of LAQV are aligned with the goals of the UN Sustainable Development Agenda, namely Goal 3 that promotes health and well-being, Goal 6 for sustainable management of water, Goal 12 for responsible production patterns and Goal 14 for sustainable use of marine resources.

PROJECT

KET4F Gas

Southwestern regions of Europe (SUDOE area), are experiencing more fire events due to drought and high winds. The main objective of KET4F-Gas is to contribute to the reduction of the Environmental Impact of Fluorinated Gases, which are powerful greenhouse gases, in the Sudoe space using Key Enabling Technologies (KETs).

Funding Source: EU (Interreg Sudoe Programme)
Partner Entities: 9

Principal Investigators:
Ana Belén Pereiro
João Araújo

Target: 13.2

Integrate climate change measures into national policies, strategies and planning.
Towards a new, green and dynamic scoring tool, G2, to evaluate products and processes

The article proposes G2, a new quantitative grid to assess the greenness and sustainability of chemical products and processes. The results show that, compared with other methodologies, G2 was able to integrate more green chemistry dimensions.

**Target: 12.6**

Encourage companies, especially large and transnational companies, to adopt sustainable practices and to integrate sustainability information into their reporting cycle.

**OTHER HIGHLIGHTS**

Miguel Santos is leading an investigation to a new medicine to treat and prevent Covid-19. It reuses medicines already used for the disease.
CENSE develops interdisciplinary research in environmental sciences and engineering, focusing on the interaction between human and ecological systems, to promote sustainable development. Improving knowledge about the functioning of environmental and human systems to inspire technological and social innovations for sustainability is core to our mission. CENSE develops its activities through research projects, outreach initiatives, training programs, collaboration with private and public organizations, dissemination of results and science-policy dialogues. CENSE’s research unfolds along five thematic areas: Ecological Economics and Environmental Management, Energy and Climate, Computation for Sustainability, Bioresources and Green Technologies, and Sustainable Water Sanitation, Wastes and Resources Recovery.

“Carbon neutrality cannot create inequalities”, Júlia Seixas

PROJECT

CRESTING – Circular Economy: Sustainability Implications and Guiding Progress

CRESTING recruited 15 Early-Stage Researchers (ESRs) to train in cutting edge systematic analysis of Circular Economy-related activity and initiatives in a range of geographical and economic settings. The purpose is to translate critical assessment to lessons for managing the transformation to a Circular Economy.

Funding Source: H2020
Partner Entities: 8
Principal Investigators: Tomás Ramos

Target: 12.5

By 2030, substantially reduce waste generation through prevention, reduction, recycling and reuse.
Electrodialytic removal of tungsten and arsenic from secondary mine resources — Deep eutectic solvents enhancement

Coupling DES with the electrodialytic process enhances the removal of arsenic and tungsten from Panasqueira mine residues, potentiating circular economy. The final treated residue could be incorporated in construction materials, mitigating current environmental problems in mining and construction sectors.

**Target:** 9.4

By 2030, upgrade infrastructure and retrofit industries to make them sustainable, with increased resource-use efficiency and greater adoption of clean and environmentally sound technologies and industrial processes, with all countries taking action in accordance with their respective capabilities.

**OTHER HIGHLIGHTS**

**Payments for ecosystem services to promote resilience and sustainable development of rural areas in Portugal**

A new policy proposal of Payments for Ecosystem Services to promote resilience and the provision of ecosystem services in rural areas in Portugal was developed for the Ministry for Environment and Energy Transition. The concept is being applied in the development of Landscape Plans (PRGPs) in priority areas in Portugal.

**Upcycling water treatment sludges and resources recovery in the urban water sector**

Valorization of Water Treatment Sludge as coagulant in primary settling operation. Lime insolubles potential for nutrient recovery in centrifuge runoff and in the thickening of sludge from wastewater treatment plants.
GeoBioTec develops interdisciplinary studies in the framework of sustainable development, aiming to preserve resources and therefore minimize the impact of human activity on the environment. To mitigate this effect, a paradigmatic shift represented by sustainable development, the research center is implicated in a joined effort to develop laboratory and field activities, which conducts theoretical and experimental research in a diversity of scientific fields, including geophysics, geochemistry, soil, biology, paleontology, petrology, mineralogy, industrial minerals, geomaterials, geotechnics, isotopic geology, hydrogeology, structural geology, volcanology and remote sensing.

PROJECT

MIREU – Mining and Metallurgy Regions of EU

Establishment of a European network of mining and metallurgical regions to identify ways to ensure a sustainable and sustainable supply of mineral raw materials to the European Union and promote investment, innovation and growth in the sector.

Funding Source: EU – H2020
Partner Entities: 20

Principal Investigators:
J. C. Kullberg
José A. Almeida
The Reuse of Waste Heaps from Extraction Sites: An Architectural Methodology

Nowadays, the rehabilitation of quarries is a widespread practice. It stems from most significant environmental concern to management of non-renewable resources. The aims, recover landscape and reuse abandoned quarries and piles.

ReviRIS. Revitalising Post-Mining Regions: Problems and Potential in RIS Europe
Event on defining the economic, environmental, geoethical, technical and potential criteria, to help decision making of a post-mining revitalization strategy. The prototype compiling now covers 16 different landscape profiles.
NOVA LINCS is a leading research lab in Computer Science and Informatics with many successful engineering solutions oriented towards sustainable development challenges. Main research outputs include contributions in the areas of healthcare and ageing, education, and skilling, emergency management, sustainable agriculture, cultural heritage, technology and innovation capacity-building for industry.

NOVA LINCS results are continuously leveraged within various collaborative partnerships in many societal areas at national and international level.

HIGHLIGHTS

AWARD

The authors of the awarded paper "A model-driven traceability framework for software product lines" propose the AMPLE Traceability Framework to support the creation and evolution of software product lines.

NOVA’s Researchers

Ana Maria Moreira

PROJECT

Clean Forest - Automatic and Participatory Surveillance of Forest Fire Protection Zones

"Clean Forest", led by NOVA LINCS, will apply innovative artificial intelligence and augmented reality techniques to minimize the risk and impact of forest fires. The main goal is to continuously monitor the cleaning and maintenance of fire fuel management bands, as legally required, to protect human lives, forests, environment, and material goods.

Target: 15.2

Funding Source: FCT
Partner Entities: 5
Principal Investigators: Carlos Viegas Damásio

By 2020, promote the implementation of sustainable management of all types of forests, halt deforestation, restore degraded forests and substantially increase afforestation and reforestation globally.
User Experience of Interactive Technologies for People With Dementia: Comparative Observational Study

The article proposes a set of guidelines that aim to help health professionals and engineers maximize user experience when using Interactive technologies for people with dementia.

FrailCare.AI is a project in the field of health and care for seniors aiming at improving the response of the SNS 24 line in supporting seniors.

NOVA’s Researchers
Sofia Cavaco

NOVA’s Researchers
Nuno Correia
CETAPS' research area TEALS (Teacher Education and Applied Language Studies) deals with teacher education, covering primary/basic, secondary and tertiary education in Portugal (SDG4). Its strands also work on the intercultural dimension in language teaching, curricular development policies and translation as a linguistic, cultural and semiotic process. CETAPS' Digital Laboratory contains several open access databases and, from 2020 on, CETAPS is leading a CIPSH chair on Digital Humanities in Education. In respect to the Earth and environment sustainability, in 2020, CETAPS' research area Anglophone Cultures and History, strand American Intersections, discussed representations of Nature and Climate Change in Art and Literature.

**PROJECT**

ICEPELL - Intercultural Citizenship Education Through Picturebooks In Early English Language Learning

This Erasmus+ Strategic Partnership project aims to support practitioners to confidently integrate intercultural citizenship education into English as a foreign language (EFL) lessons and library sessions with children aged 5 to 12 years using picturebooks.

**Funding Source:** EU  
**Partner Entities:** 6  
**Principal Investigators:** Sandie Mourão  

**Target:** 4.1  
By 2030, ensure that all girls and boys complete free, equitable and quality primary and secondary education leading to relevant and effective learning outcomes.
Art matters in languages and intercultural citizenship education

This paper discusses the pressing need for intercultural citizenship education in a human world made small, currently shut down due to a pandemic.

OTHER HIGHLIGHTS

CHAIR in Digital Humanities in Education – DHEDU

Carlos Ceia

By widening the access of the digital content and technologies in education, it proposes a renewed civic expression of the Humanities aiming at improving the social and global well-being of our communities and teacher education programmes.

TARGET: N/A

IMPACT STORY

Sponsor

International Council for Philosophy and Human Sciences UNESCO

EVENT

International Symposium “(Re)thinking Earth: From Representations of Nature to Climate Change Fiction”

This event presented plural representations of the tropes of threatened nature and climate crisis, spread over time, place, formats and aesthetic models, under the interdisciplinary model of the environmental humanities.

40 Participants
Instituto de História da Arte – IHA
NOVA School of Social Sciences and Humanities

IHA is a research unit hosted by NOVA FCSH and an integrated member of the RIHA network—The International Association of Research Institutes in the History of Art. It publishes Revista de História da Arte and Revista de História da Arte—série W (both indexed in ERIH PLUS). IHA was assessed as Excellent by FCT. It has a flexible and democratic structure that brings together researchers from various universities and cultural institutions. IHA is a unit of high level education and peer dialogue that promotes the integration of its members in international scientific networks. IHA's research is project-oriented. It is committed to Portuguese art history, while approaching the field in its global dimension.

PROJECT ARE

The research project “Artists and Radical Education in Latin America (1960s-1970s)” aims at exploring the relations between art and experimental pedagogy in the Latin-American region in the 1960s and 1970s. More specifically, it is set to examine projects led by women artists in this particular frame, thus critically contributing to the investigation of women’s engagement in the field of contemporary art education.

Conceived as a radical site of individual and collective emancipation at a time of political oppression in many countries of this area, the creation of pedagogic projects by artists, often founded in a symbolic break with the institutional space of the classroom or the museum, developed in multiple and heterogeneous directions. Based on archival research and interviews, this project seeks to investigate a number of collective experiences that blurred the boundaries between artistic practices and teaching, between individual and collective work, while often claiming a wider, more democratic definition of creativity and the capacity of art to intervene in social and psychological processes.

Funding Source: FCT

Principal Investigators:
Giulia Lamoni
This paper reflects upon artistic practices within conflict scenarios as a starting point for an analysis on the intersection between art and human rights. Centered on artistic practices whose intervention is focused on conflict resolution / conflict transformation in different geographical and cultural contexts, this paper follows two goals of a PhD research project: namely, to reflect upon the different concepts related with arts and activism and to compile different artistic practices that establish a connection with human rights since 2011. Within the scope of this article, institutional reports and collectives’ discourses and practices are analyzed and presented.

**Target: 16.a**

Strengthen relevant national institutions, including through international cooperation, for building capacity at all levels, in particular in developing countries, to prevent violence and combat terrorism and crime.

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**OTHER HIGHLIGHTS**

**The Oblique Think Tank #2 (Porto, 13-15 Feb. 2020)**

The Oblique Think Tank is a cultural, civic and research meeting within the IHA/NOVA FCSH Cluster “Curating the Contemporary: on Architectures, Territories and Networks”. The 2nd edition, in February 2020, in Porto, was dedicated to the theme "Heritage, Rubbish, Fetish? Curating Territorial Conundrums”.

**Website**

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**EVENT**

**The city is the house is the city is the house**

The collective exhibition “The city is the house is the city is the house” is the result of the final project developed by students of the Post-Graduate Course in Art Curatorship at NOVA FCSH (2019/2020 edition), coordinated by Emília Tavares and Sandra Vieira Jürgens. Through it and in curatorial terms, it intended to explore the relationship between the transformations of contemporary cities and the ways in which we inhabit their spaces.
CHAM’s projects, research, networks, training actions and participation in high-impact events aim to promote discussions and outputs that can engage different types of publics. As an interuniversity research unit focused on the Humanities, our specific actions are prone to answer particularly the sustainable development goals 4, 10, 11, 14 and 17.

On a daily basis, CHAM is committed to decrease the ecological footprint by implementing more green actions within the Unit, such as promoting the reuse of resources and the increase of the utilization of digital tools.

PROJECT

IRONIC: Iron Gall Ink Challenges - History and Conservation of a disappearing Cultural Heritage

IRONIC, a multi and interdisciplinary project, combines a diversity of fields such as history, written culture, archiving and conservation science, restoration, chemistry and nanotechnology. The scope of this project is to develop an innovative nanotechnology-based kit for the treatment at point-of-care of the iron gall ink corrosion process.

Funding Source: FCT
Partner Entities: 4
Principal Investigators: Ana Claro

Target: 11.4

Strengthen efforts to protect and safeguard the world’s cultural and natural heritage.
This paper presents new data on the urbanism and habitat areas of the Cidade Velha, when it was abandoned in the 18th century, as well as on the configuration of that religious structure.

**Target: 11.4**

Strengthen efforts to protect and safeguard the world’s cultural and natural heritage.

**OTHER HIGHLIGHTS**

**CHAIR in The Ocean’s Cultural Heritage**

João Paulo Oliveira e Costa

The Chair promotes and integrates different activities within the scope of the cultural heritage of the oceans, underwater cultural heritage and archaeology, the environment and history and the establishment of good practices and cooperation.

*This CHAIR is shared with other Research Units and Researchers from NOVA University Lisbon.*

**IMPACT STORY**

Sponsor

UNESCO

**EVENT**

Workshop from transcription to analysis

Open practical workshop on tools and methodologies for exploratory analysis / qualitative analysis of historical data. It was included in a main activity called “9000 on Tuesdays”.

17 Participants
IELT contributes to sustainability through the award of research grants, fostering skills and qualifications (SDG4); for gender equality by studying the contribution of women in literature and politics (SDG5); for the reduction of inequalities by studying and disseminating the Arab material and immaterial heritage in Portugal (SDG10); for the development of more sustainable cities by studying the cultural heritage of these places in projects and research that unite geography and literature (SDG11); producing sustainable knowledge with e-book editions (SDG12); increasing scientific knowledge and maritime literacy through participation in the UNESCO Chair Ocean’s Cultural Heritage (SDG14).

PROJECT
Estranhar Pessoa

The purpose of Estranhar Pessoa project is an exhaustive review of the discussion surrounding Fernando Pessoa’s work. Its team includes both young researchers and renowned specialists, from various academic institutions, national and foreign, enabling interaction between all these researchers and the reciprocal monitoring of individual and team work.

Funding Source: UI/FCT
Partner Entities: 1
Principal Investigators: Pedro Sepúlveda

Targets: 4.4

By 2030, substantially increase the number of youth and adults who have relevant skills, including technical and vocational skills, for employment, decent jobs and entrepreneurship.
PUBLICATION

Romances Tradicionais do Distrito de Bragança

Romances Tradicionais do Distrito de Bragança brings together the unpublished poems collected by J. J. Dias Marques in his fieldwork carried out in the 80s of the last century. The e-book edition allows the RU to reduce material footprint, material footprint per capita, and material footprint per GDP.

Target: 12.2
By 2030, achieve the sustainable management and efficient use of natural resources.

More information about the book

OTHER HIGHLIGHTS

CHAIR in The Ocean’s Cultural Heritage

Luís Sousa Martins

This chair brings to the spotlight the importance of obtaining knowledge on and of the management of tangible and intangible cultural and natural heritage of the open oceans, underwater realm and coastlines. Has a team of researchers that organize scientific and educational activities to promote literacy about the oceans.

This CHAIR is shared with other Research Units and Researchers from NOVA University Lisbon.

Website

Sponsor

UNESCO

EVENT

See/Review Women’s Writing (1926-1974)

This meeting focused on women’s literary production during Portuguese Military Dictatorship and discussed the socio-political context, the publication strategies, the receptivity of the works of female authorship and her marginalization/empowerment.

30 Participants
NOVA Communication Institute – ICNOVA
NOVA School of Social Sciences and Humanities

Crossing Social Sciences, Arts and Humanities, ICNOVA (NOVA Communication Institute) presents a strategic agenda for 2020-2023 focused on Media Practices and their cultural, societal and technological challenges. ICNOVA aims the achievement of promoting inclusion and diversity in a world of social inequalities, acceleration and change in which the digitalization impacts on socio-economic, political and cultural practices. ICNOVA achievements imply attention namely to SDG 4 (quality education), 5 (gender equality), 10 (reduced inequalities), and 17 (partnerships for the goals). These achievements are pursued through the following major themes: 1) Diversity, Pluralism, Inclusion; 2) Cognitive, Mediation and Decision-Making Processes; 3) Culture, Criticism and Digital Practices.

**PROJECT**

**ySKILLS, YOUTH SKILLS**

ICTs strongly impact children’s and adolescents’ wellbeing. In order to benefit from these, new skills are required, which most children and adolescents not fully master. The main aim is to enhance and maximize long-term positive impact of the ICT environment s by stimulating resilience through the enhancement of digital skills.

**Funding Source:** CE – HORIZON 2020
**Partner Entities:** 15

**Principal Investigators:**
Cristina Ponte (NOVA FCSH)
Leen d’Haenens, KU Leuven (Belgium)
Trafficking and Prostitution of Brazilian Women in Portugal: The journalistic discourse between stereotyping and the victimization

Analysing the representation of Brazilian women in the Portuguese quality press, the article identifies an erratic route which sometimes privileges a sensational tone, and sometimes pay attention to the exploitation and trafficking issues, reflecting the inconsistency in the law about this theme.


The book Political Communication and Democracy received an award from Coimbra University due to its critical analysis on the ways the media has becoming a risk factor for liberal democracy.

II International Conference – The history of Journalism in Portugal

The conference contributed to build a chronological and a narrative history of the Portuguese journalism and journalists, considering legal, political, economic and cultural dimensions and including an international comparative dimension.
Concerned with sustainable solutions for major societal challenges, CRIA contributes to the knowledge of contemporary cultural and social dynamics through research in various geographical contexts. CRIA promotes comparative and transversal analyses on different spatial and historical scales, supported and complemented by interdisciplinarity and sub-disciplinary articulations; it develops criss-crossing research projects, methodological experimentation, citizen science and communication with non-academic audiences. To address and understand the disruptions, to study and raise awareness on issues ranging from human impact on the biosphere to heritage; inclusive societies; social policies; gender; environmental urgency; grassroots economics; health and care, CRIA along with academia, policy-makers and stakeholders is strongly engaged with a sustainable world.

PROJECT

And after the reintroduction? Attitudes and experiences in the presence of the Iberian Lynx

The main goal of the project is to understand the attitudes and experiences resulting from the reintroduction of the Iberian Lynx (Lynx pardinus), in Portugal. The results of this study are relevant to guide conservation decision-making and to contribute to the conditions of coexistence humans-Lynx and to sustainability.

Funding Source: N/A
Partner Entities: 1
Principal Investigators:
Amélia Frazão Moreira

Targets: 15.5
Take urgent and significant action to reduce the degradation of natural habitats, halt the loss of biodiversity and, by 2020, protect and prevent the extinction of threatened species.
Solar photovoltaic energy infrastructures, land use and sociocultural context in Portugal

The paper contributes to the environmental governance in support of sustainability transitions, by shedding light on the intersection between utility-scale solar power plants, land use and sociocultural contexts in Portugal.

CAPSAHARA - Critical Approaches to Politics, Social Activism and Islamic Militancy in the Western Saharan Region

CAPSAHARA employs methods from anthropology, history and political science to involve local actors in the creation of knowledge related with the populations of the western regions of the Sahara. It aims to contribute to a constructive North-South dialog and to a better understanding between social and political agents of heterogeneous backgrounds.

Training Course: Intangible Cultural Heritage

Training course on the main debates and instruments involved in the conception, inventory and safeguarding of the Intangible Cultural Heritage, addressed to cultural agents, civil servants, among other stakeholders.
CICS.NOVA’s mission is to conduct interdisciplinary research and to promote critical thinking. Sociology and geography are our main research areas, alongside other social sciences and humanities, life sciences, environmental sciences and engineering.

CICS.NOVA’s approach is developed both from theoretical and/or epistemological questions and from social problems. We often work together with public institutions, policy makers and stakeholders, contributing with innovative responses that generate positive social impact and promote sustainability.

CICS.NOVA investigates numerous issues related to UN’s SDGs, including poverty (SDG1), hunger and sustainable agriculture (SDG2), health and aging (SDG3), education (SDG4), gender in/equality (SDG5), energy (SDG7), work and employment (SDG8), science and technology (SDG9), urban sustainability (SDG11), climate change (SDG13), marine sustainability (SDG14), desertification (SDG15), justice and citizenship (SDG16) and the transversal issue of social inequalities (SDG10).

**HIGHLIGHTS**

**The OCEANID Jean Monnet CHAIR**

EU Jean Monnet

Regina Salvador

**OCEANID** - EU Integrated Maritime Policy and Blue Growth (2017-2020).

Disseminating marine knowledge in line with EU’s “Blue Growth, Opportunities for Marine and Maritime Sustainable Growth” and work towards healthy and productive oceans, through traditional academic education and professional training.

**PROJECT**

**SMOOTH** - Educational Common Spaces. Passing through enclosures and reversing inequalities

SMOOTH addresses social inclusion by questioning the role of ‘educational commons’ in reversing inequalities. It proposes an innovative action-research with/by children to: reverse inequalities faced by children from vulnerable social groups; strengthen inter-cultural and inter-generational dialogue and social integration; develop skills; and create smooth spaces of democratic citizenship and experimentation.

Funding Source: EU – HORIZON 2020

Partner Entities: 12

Principal Investigators: Catarina Tomás
Local Food Policies – their constraints and drivers: Insights from Portuguese Urban Agriculture Initiatives

The article questions why resilient urban agriculture initiatives don’t scale up from practice to policy, finding constraints related to limited democratic governance, poor policies, insufficient funding and weak participatory processes.

OTHER HIGHLIGHTS

The National Observatory of Violence and Gender (Observatório Nacional de Violência de Género, ONVG) integrates researchers from NOVA, as well as distinguished international experts. Founded in 2008, it is the first national observatory covering the fields of Gender and Violence, and its independent structure is in line with that suggested by the Council of Europe, following scientific and academic guidelines such as those pertaining to its parent university. In this video, Professor Dalila Cerejo, discusses the effects of the pandemic in cases of domestic violence.

EVENT

5th National Meeting for Climate Justice

Gathering of collectives and individuals engaged in many areas of Climate Action, aiming at raising awareness and sharing experiences and knowledge in order to build strategies towards climate justice.
IEM aims to promote high quality research in the medieval field by networking with other researchers, both in Portugal and elsewhere so as to foster international collaboration that will contribute to new, multidisciplinary and comparative approaches to the Middle Ages. We also pay particular attention to the articulations between research and teaching as well as research and science communication. Our specific contributions to sustainability can thus be synthetized as such: to provide better education and to build more complex and time-embedded perspectives, are strong contributions for the resolution of today’s societal problems and for the future’s sustainable development.

**HIGHLIGHTS**

TV program “Visita Guiada” (RTP 2), on the city of Tavira, with Luís Filipe Oliveira and Carla Varela Fernandes, IEM integrated members.

**PROJECT VINCULUM**

Research project with European funding, focusing on Medieval and modern History, highlights the validity of knowledge creation on “not immediately useful” areas, allows for the creation of synergies with other countries, and previews different actions of science communication, engaging, namely, paid participation of students from less affluent areas.

**Funding Source:** EU - ERC

**Principal Investigators:** Mª de Lurdes Rosa

**Targets:** 4.7

By 2030, ensure that all learners acquire the knowledge and skills needed to promote sustainable development, including, among others, through education for sustainable development and sustainable lifestyles, human rights, gender equality, promotion of a culture of peace and non-violence, global citizenship and appreciation of cultural diversity and of culture’s contribution to sustainable development.
Abastecer a Cidade na Europa Medieval

While providing historical depth to a contemporary societal problem – sustainable cities - the book is also a testimony of a successful partnership with civil society, specifically the municipality of Castelo de Vide.

OTHER HIGHLIGHTS

CHAIR in The Ocean’s Cultural Heritage

Amélia Aguiar Andrade
Ana Cláudia Silveira
Carla Varela Fernandes
Gonçalo Melo da Silva

The Chair promotes and integrates different actions in the context of the cultural heritage of the oceans, underwater cultural heritage and archaeology, the environment and history, in the establishment of good practices and cooperation.

*This CHAIR is shared with other Research Units and Researchers from NOVA University Lisbon.

EVENT

Internacional Congress “Using the Past: The Middle Ages in the Spotlight”

Counting with speakers from all continents, the meeting questioned the wrong or dubious political appropriations of History, and highlighted the importance of citizen science.
Instituto de História Contemporânea - IHC
NOVA School of Social Sciences and Humanities

Sustainability acquired a technical meaning in the last decades of the 20th century and is currently a buzzword, especially in reference to economic and environmental policies. In this context, historians are called upon to develop interdisciplinary perspectives that account for reflexivity and historicity and that are able to challenge dominant narratives. By means of one of its Thematic Lines («Precarious Worlds and Sustainability»), the IHC develops research that shows how nature, health, and work are crucial for quality of life, and how each of these factors were responsible for the creation of precariousness, uncertainty, and inequality in living conditions.

PROJECT

Portuguese and Spanish Forced Labourers under National Socialism: History, Memory and Citizenship

Through the study of the situation of Portuguese and Spanish Forced Labourers under National Socialism, this research project aims to ensure public access to relevant historical information and to protect fundamental freedoms, by analysing a past event where they were severely jeopardized.

**Funding Source:** European Commission, Europa para os Cidadãos — Memória Europeia

**Partner Entities:** 3

**Principal Investigators:** Cláudia Ninhos

**Target:** 16.10

Ensure public access to information and protect fundamental freedoms, in accordance with national legislation and international agreements.
The spectre of historical crop losses: Challenging questions and methodological issues

This article aims to show how the historical study of calamities in agricultural production is essential in the current context of adaptation to climate change.

**Target:** 13.1

Strengthen resilience and adaptive capacity to climate-related hazards and natural disasters in all countries.

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**OTHER HIGHLIGHTS**

**League of Nations (1920-1946): Promises and Legacies**

By celebrating the 100th anniversary of the League of Nations, this temporary exhibition (held at the Portuguese National Library) has called attention to the necessity of promoting the rule of law at the national and international levels.
Linguistics Research Centre of NOVA University Lisbon - CLUNL
NOVA School of Social Sciences and Humanities

The Linguistics Research Centre of NOVA University Lisbon is a research unit that aims at promoting research in theoretical and applied Linguistics, to develop the advanced training of researchers, and to disseminate scientific data on the nature of language and the functioning of languages and texts.

The work developed at CLUNL has made a relevant and distinctive contribution in areas such as language acquisition, discourse analysis, lexicology and lexicography, text theory, terminology, historical linguistics, morphology, syntax, and semantics.

This research unit is funded by the Portuguese Foundation for Science and Technology (FCT), having obtained the qualification of Very Good in the latest evaluation carried out by this governmental institution.

HIGHLIGHTS

In the context of the project “Intervenção Preventiva para a Aprendizagem da Leitura e da Escrita (PIPALE)”, financed by Sesimbra Municipality, the PIPALE KIT was created.

It integrates several learning games aiming at developing the Portuguese language, spoken and written, complementing distance learning methodologies.

Website

PROJECT
EXPRIMI

Preliminary research on the teaching-learning of Portuguese as host language, targeting migrants. This research envisages the development of: methods for identification, extraction and description of vocabulary fundamental to host language learning; semiautomatic analysis of texts and their respective contexts to monitor trends/bias; building of task-based teaching materials for Portuguese, promoting the specific learning context and communication needs of migrant integration.

Target: 10.4

Partner Entities: 1

Principal Investigators:
Raquel Amaro
Susana Correia
Matilde Gonçalves

Adopt policies, especially fiscal, wage and social protection policies, and progressively achieve greater equality.
PUBLICATION

Terminologie vulgarisée des énergies renouvelables

Paper which describes the lexicographic definition of the vulgarized terms related to Renewable Energies included in the nomenclature designed for the bilingual dictionary “Dicionário Português Europeu - Árabe Padrão”.

OTHER HIGHLIGHTS

Com@Rehab project – Santander/NOVA Collaborative Research Award 2019-2020

The purpose of this project is to contribute to the rehabilitation of post-COVID patients in hospitals or home environments. CLUNL is participating by applying its competencies in Health Literacy, thus, improving communication between technology and patients. The Santander/NOVA Collaborative Research Award 2019-2020 had two winners in its 13th Edition:

EVENT

Training: Terminologia e organização do conhecimento: sistemas, normas e ferramentas

This training aims to demonstrate the importance of terminology for the organization of knowledge, to contextualize the development of a thesaurus for ROSSIO, and to involve both consortium members and community at large in this process.
NOVA Institute of Philosophy - IFILNOVA
NOVA School of Social Sciences and Humanities

IFILNOVA’s main goal is to develop research programs focused on the philosophical investigation of values, particularly by investigating the nature of value, the role of values in human action, as well as their normativity as constituted through public argumentation and reasoning in the ethical, political and aesthetic fields. The programs aim also to apply philosophical theories to social practices and problems.

This goal is pursued through four distinct strategies:

1. Fundamental research on philosophical problems.
2. Development of classic theories.
3. Development and application of new theories to empirical fields.
4. Direct intervention into social practices.

PROJECT

Integration of Refugees in Portugal: assessing moral duties and integration policies in the context of European values and policies

Currently, the scope of the duties of reception and assistance to refugees is lively debated all over Europe. Portugal has recently developed and implemented an ambitious policy of integration of third country nationals, not refraining from giving assistance and reception to refugees in the context of the European relocation initiative. The proposal aims to contribute to the national and European debate by means of an empirically informed analysis of normative claims.

Funding Source: FCT

Target: 16.6

Principal Investigators:
Gabriele De Angelis

Develop effective, accountable and transparent institutions at all levels.
The sluggish pace of progress on long awaited governance reforms, especially as the Economic and Monetary Union (EMU) and the Common European Asylum System (CEAS) are concerned (De Angelis 2017), has prompted scholars and institutional actors (European Commission 2017a) to set forth a number of proposals to reform the Union’s institutional structure. A number of remarkable recent publications help to assess the state of the art on some related key issues. In particular, two diagnoses stand out in the three texts here considered. The first diagnosis concerns the need to reconcile widening with deepening. The second diagnosis concerns how the Member States’ social and institutional diversity has been dealt with in the course of the integration process.

**Target: 16.6**

Develop effective, accountable and transparent institutions at all levels.

**EVENT**

Liberalism & the philosophy of migration - Roundtable discussion for the twentieth anniversary of the publication of Phil Cole’s “Philosophies of Exclusion”

Elizabeth Challinor (NOVA University of Lisbon & CRIA) (Chair), Opening remarks

Daniel Sharp (New York University), Relational Equality and Immigration

Daniel Weltman (Ashoka University), Exclusion’s Centrality to Liberalism and the Politics of Territory

Dario Mazzola (University of Bergen) Salus Rei Publicae Suprema Lex? Realism in Migration Ethics from Philosophies of Exclusion to the Migrant Crisis

Discussants: Rebecca Buxton ((University of Oxford) & Rufaida Al Hashmi (University of Oxford)

Philip Cole (UWE Bristol), Closing remarks
IPRI-NOVA, an institute dedicated to advanced studies in Political Science and International Relations, assumes its social responsibility and its public mission in the contemporary society, developing applied research, strengthening its relation with the public policy making world and increasing its presence in the public sphere in areas of research areas such as Democracy, Climate Change, Migration and Gender Equality, among others. The Institute also aims to promote dialogue and inter- and trans-disciplinary projects involving other areas of knowledge, as it is already doing in its research projects as well as in the Globalization Studies doctoral programme (Health, Energy, Economics and Law).

**HIGHLIGHTS**

**Mapa Mundo**
Regular analysis to the main international events. A partnership between TSF and IPRI-NOVA.

**PROJECT**

**PPEACE – Public Policies and Migrants Asylum**

In the current and challenging global context, where climate change and armed conflict continue to provoke a large number of forced migrants, the PPEACE Project aims to contribute to scientific progress in the area of Public Policies on the reception of NPT, asylum seekers and refugees in Europe and Portugal.

Principal Investigators:
Teresa Rodrigues
PUBLICATION

Non-Human Nature in World Politics: Theory and Practice

This book explores the interconnections between world politics and non-human nature and proposes a reorientation of political practice to better address the challenges posed by climate change and the deterioration of the Earth’s ecosystems.

Target: 13.3

Improve education, awareness-raising and human and institutional capacity on climate change mitigation, adaptation, impact reduction and early warning

OTHER HIGHLIGHTS

IPRI-NOVA won the 1.º place in the research’s individual ranking (Marco Lisi) and 2.º place in the RU ranking, regarding the commitment in internationalization of the research outputs in all axis of research, such as Democracy and Climate Change.

NOVA’s Researchers

Marco Lisi

EVENT

Óbidos Summer School 2020

Óbidos Summer School 2020 dedicated to the “Pandemic: Global Impacts” allowed reflection and analysis on how to address political health crises management in coordination with freedom and citizen’s rights.
The Comprehensive Health Research Centre’s (CHRC) vision is to improve population’s health, wellbeing and quality of life by changing behaviours, lifestyles, literacy, healthcare systems and policies, through impactful research on preventive measures, diseases management, promotion of active life, rehabilitation, education and health innovation. CHRC provides researchers with robust structure, resources, skills, tools, cross-disciplinary and networking, so they can be able to develop high quality and impactful research.

**PROJECT**

**COTIDIANA: mobile patient-centred system to improve drug trials and care of older adults with rheumatic diseases**

COTIDIANA will develop a mobile solution to efficiently acquire PROMS as well as sensor data to support clinical care and drug trials of older adults with rheumatic diseases1, collecting data about the state of the patient, their treatment, or the added value of the drug under test. Patients will use the smartphone in ambulatory conditions to report their experiences, symptoms/signs, and quality of life. Drawing on the smartphone’s built-in sensors and logs, we will be able to objectively track digital endpoints focused on hand dexterity (as an indicator for function or disease activity), gait and physical activity (as an indicator for mobility, fatigue and pain), and sociability patterns (as an indicator of mental health and wellbeing). The developed solution will be integrated with Pryv.io, a privacy-preserving middleware from Pryv, Studymate Pro, an advanced electronic Case Report Form from RAFFEINER, and Trial Monitor, a platform for monitoring user or patient data from AICOS; all of which will streamline development and increase commercialization potential.

**Funding Source:** AAL - EU  
**Partner Entities:** 6  
**Principal Investigators:** Francisco Nunes, Helena Canhão

**Target:** 3.4

By 2030, reduce by one third premature mortality from non-communicable diseases through prevention and treatment and promote mental health and well-being.
Comorbidity within mental disorders: a comprehensive analysis based on 145 990 survey respondents from 27 countries

Characterizing comorbidities within mental disorders is crucial for the adequate management of these vulnerable patients.

**Target: 3.4**

By 2030, reduce by one third premature mortality from non-communicable diseases through prevention and treatment and promote mental health and well-being.

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**OTHER HIGHLIGHTS**

**BOOTCAMP PATIENT INNOVATION**

Programa de aceleração ajuda doentes e cuidadores a desenvolver soluções

Plataforma Patient Innovation, criada por dois investigadores portugueses e onde todos podem encontrar resposta para inúmeros problemas de saúde, já tem mais de 2.400 soluções partilhadas. A maior parte delas simples, mas que podem mudar vidas. Várias já receberam prémios.

Website

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**EVENT**

Participation in the SRSul initiative of the Ordem dos Enfermeiros to raise awareness for vaccination

The impact of immunization / vaccination on the population’s health is undeniable. It has an important effect on reducing mortality and population growth worldwide.
ToxOmics Research Unit’s mission is to carry out innovative research and advanced education and training towards a better assessment of genetics as a determinant of health (interaction between genes, environmental stress and disease causation) allowing more accurate disease prediction and prevention as well as more effective therapeutic interventions.

Nanotechnology has offered various direct and indirect solutions to combat viral diseases such as HIV, herpes simplex, respiratory viruses, and human papillomavirus. Nanotechnology is being used to combat the current COVID-19 pandemic thus ensuring healthy lives and promoting well-being for all.

**PROJECT**

**GelGeneCircuit:** Cancer heterogeneity and therapy profiling using bioresponsive nanohydrogels for the delivery of multicolor logic genetic circuits.

Cancer is among the major causes of mortality in the developed world, and the worldwide incidence continues to increase. It is here that NanoMedicine can make a difference. In fact, the outstanding advancements made in Medicine and Biomedical Engineering over the last decade is somewhat due to the fundamental improvements made in Nanotechnology. The National Cancer Institute envisions that over the next years, Nanomedicine will result in significant advances in early detection, molecular imaging, targeted and multifunctional therapeutics, prevention and control of cancer. This ERC project develops an innovative and versatile methodology for the advance of a platform able to profile therapy outcome and heterogeneity in cancer using bioresponsive nanomedicines. Our goal is to create new and improved cancer therapies, by creating positive change in nanomedicine and oncology fields and bring hope to cancer patients and their families to come.

**Funding Source:** ERC

Support the research and development of vaccines and medicines for the communicable and non-communicable diseases that primarily affect developing countries, provide access to affordable essential medicines and vaccines, in accordance with the Doha Declaration on the TRIPS Agreement and Public Health, which affirms the right of developing countries to use to the full the provisions in the Agreement on Trade-Related Aspects of Intellectual Property Rights regarding flexibilities to protect public health, and, in particular, provide access to medicines for all.

**Target:** 3.b
Nanotechnology-based disinfectants and sensors for SARS-CoV-2

Nanotechnology-based antimicrobial and antiviral formulations can prevent SARS-CoV-2 viral dissemination, and highly sensitive biosensors and detection platforms may contribute to the detection and diagnosis of COVID-19.

**Target:** 3.b

Support the research and development of vaccines and medicines for the communicable and non-communicable diseases that primarily affect developing countries, provide access to affordable essential medicines and vaccines, in accordance with the Doha Declaration on the TRIPS Agreement and Public Health, which affirms the right of developing countries to use to the full the provisions in the Agreement on Trade-Related Aspects of Intellectual Property Rights regarding flexibilities to protect public health, and, in particular, provide access to medicines for all.

**OTHER HIGHLIGHTS**

“10-15 years ago, almost no one believed in Nanomedicine and the benefits of using nanomaterials to tackle real biomedical problems. (...) That’s why winning this award is so special and even more in 2020 where we are facing so many health problems, we now know that we can count on nanomaterials to solve real medical issues.”

Website
The CINTESIS Research Unit, in Nova Medical School, coordinated by Professor Conceição Calhau, focuses its scientific work and community activity in Nutrition and Food Sciences. In this context, this Research Unit promotes the well-being of the individual or a community by promoting the choice of sustainable eating habits, with an emphasis on local and seasonal food products (Mediterranean Diet). Furthermore, this unit promotes quality education offering internships and employment opportunities to young researchers of both genders and establishes valuable partnerships between different health / teaching institutions. Eating habits are only healthy if they are equally sustainable.

The IoMum project aims to promote a healthy life and well-being for all ages, since the monitoring of iodine status in pregnant women will allow national health entities to adapt public health policies to the Portuguese reality, namely with regard to iodine supplementation to prevent lower IQ.

**Funding Source:** BIAL

**Partner Entities:** 5

**Principal Investigators:** Conceição Calhau

**Target:** 3.d

Strengthen the capacity of all countries, in particular developing countries, for early warning, risk reduction and management of national and global health risks.
Extremely preterm neonates have more Lactobacillus in meconium than very preterm neonates – the in utero microbial colonization hypothesis (FEEDMI Study)

This publication reflects the work of young researchers and teamwork on a topic that is still poorly defined in the field of microbiota - this promotes quality education in our institution and community.

**Target: 4.4**

By 2030, substantially increase the number of youth and adults who have relevant skills, including technical and vocational skills, for employment, decent jobs and entrepreneurship.

**OTHER HIGHLIGHTS**

Emergency Study – Science and the pandemic

In the third episode of this program in SIC Notícias, Professor Conceição Calhau discusses the role of intestinal bacteria and vitamin D in immunity response to Covid-19.
Nowadays, sustainable technologies have faced an increased interest by researchers and consumers. Due to the environmental problems, technologies that are sustainable or help to promote sustainable behaviors are the basis of many strategies towards the mitigation of climate change. The prominence of this type of technologies in the context of meeting the sustainability goals reinforces even more the relevance in studying its adoption. Our research unit provides a deep and more contextualized perspective of the phenomenon and enhances understanding on the determinants of sustainable technologies adoption, use and value.

**PROJECT**

**HARP - Heating Appliances Retrofit Planning**

This Erasmus+ Strategic Partnership project aims to support practitioners to confidently integrate intercultural citizenship education into English as a foreign language (EFL) lessons and library sessions with children aged 5 to 12 years using picturebooks.

**Funding Source:** EU  
**Partner Entities:** 17  
**Principal Investigators:** Tiago Oliveira

**Target:** 7.b

By 2030, expand infrastructure and upgrade technology for supplying modern and sustainable energy services for all in developing countries, in particular least developed countries, small island developing States, and land-locked developing countries, in accordance with their respective programmes of support.
**PUBLICATION**

Drivers of consumers’ change to an energy-efficient heating appliance (EEHA) in households: Evidence from five European countries

This paper provides holistic investigation into the drivers of consumer behavior intention. For practitioners and policy-makers, highlights important findings for a more effective formulation of campaigns and policies based on the results.

**Target:** 7.b

By 2030, expand infrastructure and upgrade technology for supplying modern and sustainable energy services for all in developing countries, in particular least developed countries, small island developing States, and land-locked developing countries, in accordance with their respective programmes of support.

**OTHER HIGHLIGHTS**

**EVENT**

Data Science and Over-Indebtedness: Use of Artificial Intelligence Algorithms in Credit Consumption and Indebtedness Conciliation in Portugal (AICE)

This project aims at characterizing and describing over-indebtedness of Portuguese consumers using unsupervised Machine Learning and creating reliable supervised ML models to help to predict the factors that influence over-indebtedness.

**Target:** 1.3

Implement nationally appropriate social protection systems and measures for all, including floors, and by 2030 achieve substantial coverage of the poor and the vulnerable.
Nova School of Law contributes to sustainability generally through its teaching activities which strives to ensure inclusive and equitable quality education (SDG 4), and more specifically in areas concerning human rights, fundamental rights - which have been recognized as essential to achieve sustainable developments labour rights (SDG 8) - and environmental protection (SDG 13). Nova School of Law also contributes to sustainability through its research. Several Knowledge Centres have been created within Nova School of Law which carry out impactful research on two of the key dimensions of sustainability: the social and the environmental dimensions: the Refugee Clinic, the Nova Centre on Business, Human Rights and the Environment (SDG s 5, 8, 12 and 13), and the Consumer Lab (SDG 12) the Green Lab (SDG 13, 15 and the Nova Ocean (SDG 6 and 14).
Migrations and its connection to citizenship in today's world is all too evident. To know them is fundamental to achieve SDG 10 and reduce inequality within and between countries.

**Target:** 10.3

Ensure equal opportunity and reduce inequalities of outcome, including by eliminating discriminatory laws, policies and practices and promoting appropriate legislation, policies and action in this regard.

**OTHER HIGHLIGHTS**

**NOVA Knowledge Centre for Business, Human Rights and the Environment**

The NOVA Knowledge Centre for Business, Human Rights and the Environment (NOVA BHRE) is an innovative and multidisciplinary academic centre within the Nova School of Law. It was founded by its current director Claire Bright, and is supported by a team composed of experts both from NOVA School of Law and NOVA School of Business & Economics (NOVA SBE) as well as external experts from all around the world. The main goal of the NOVA BHRE is to foster responsible business conduct that upholds respect for human rights, decent work and environmental standards throughout their entire global value chains, thereby also advancing the UN Sustainable Development Goals. The centre is focused on applied academic work, which puts the latest academic research directly into practice, and clarifies the role of law in corporate sustainability.

Website 🌐
The Molecular, Structural and Cellular Microbiology Unit (MOSTMICRO-ITQB) aims to advance the fundamental knowledge of living organisms, with emphasis on microbes important for human health, biotechnology and the environment.

MOSTMICRO-ITQB contributes to the 3rd, 4th, 7th and 12th UN Sustainable Development goals (SDGs) by seeking to uncover the molecular bases of processes that sustain microbial life, studying the structural and organizational dynamics of microbial cells, investigating the dynamics of microbial populations, contributing to the development of novel therapeutic strategies and microbial factories for clean biotechnology, and through its overarching commitment to post-graduate training at the MSc, PhD and Postdoctoral levels.

**HIGHLIGHTS**

**Consolidator ERC Grant**

Mariana Gomes Pinho

EUR 2.533.500 to conduct a team from 2018 to 2023 to research on antibiotic resistance.

**PROJECT**

**SHIKIFACTORY100 - Modular cell factories for the production of 100 compounds from the shikimate pathway**

The ShikiFactory100 project aims to exploit the microbial production of more than 100 high value compounds derived from the shikimate pathway, a hub in cell metabolism. This pathway links the metabolism of carbohydrates to the biosynthesis of aromatic compounds, being commercially very significant with applications in food, pharma and cosmetics.

**Funding Source:** EU  
**Partner Entities:** 11  
**Principal Investigators:**  
Coordinator: Simão Soares (SilicoLife)  
Scientific and Technology Manager: Isabel Rocha (ITQB NOVA)
Toward the mechanistic understanding of enzymatic CO2 reduction

The CO2 in the Earth’s atmosphere is at the highest level, and countries around the globe are committed to achieving carbon neutrality by 2050. For that, global greenhouse gas emissions must be balanced with carbon dioxide capture by soil, forests, and oceans. However, this will not be enough – strategies involving improving the metabolism of some microorganisms to reduce CO2 into valuable compounds are crucial. This is the aim of this study.

**Target:** 7.2

By 2030, increase substantially the share of renewable energy in the global energy mix.

**OTHER HIGHLIGHTS**

**COVID-19:** ITQB NOVA test shows results to the naked eye - Saliva based testing is low cost and gives results in half an hour

A team of researchers from ITQB NOVA, led by Catarina Pimentel, implemented a test for COVID-19 using saliva, in collaboration with the Laboratório de Bromatologia e Defesa Biológica (Unidade Militar Laboratorial de Defesa Biológica e Química) and the Hospital das Forças Armadas. The test uses LAMP (Loop-mediated isothermal amplification method) technology with colorimetric detection, yielding results within 30 to 60 minutes. The test is now being applied directly to saliva samples, eliminating the need to extract genetic material from the virus, with very promising results.
GREEN-IT Bioresources for Sustainability
ITQB NOVA - Instituto de Tecnologia Química e Biológica António Xavier

The “GREEN-IT Bioresources for Sustainability” Unit addresses the challenge of ensuring food security and adequate resources for a growing human population, by deciphering the basic mechanisms of plant-environment interactions, translating knowledge into innovation for plant breeding and agricultural applications, and caring for environmental sustainability.

GREEN-IT researchers include agronomists, biologists, biochemists and chemical engineers contributing, in a field-to-bench-to-field approach, to achieve the 2nd, 15th, 13th, 12th, 4th and 17th UN Sustainable Development Goals. GREEN-IT is organized in four Scientific groups covering plant development, soil microbiome, stress response and plant breeding, and four Infrastructural groups ensuring technological/bioinformatics platforms, education and science dissemination.

Published in the scientific journal “Nature Plants”, this article was led by Elena Baena-González, principal investigator of Instituto Gulbenkian de Ciência and member of GREEN-IT.

Website

PROJECT
TRACE-RICE - Tracing rice and valorizing side streams along Mediterranean blockchain

TRACE-RICE is developing cost-efficient and environmentally-safe tools for traceability, authenticity, contaminant mitigation and conversion of by-products to innovative rice base food produced in the Mediterranean. It brings together public and private stakeholders across the Mediterranean, to deliver innovative solutions for fraud/safety challenges in the rice sector in a ‘farm-to-fork’ approach.

Funding Source: PRIMA
Partner Entities: 10
Principal Investigators: Carla Brites

Target: All targets
Natural variation in Portuguese common bean germplasm reveals new sources of resistance against Fusarium oxysporum f. sp. phaseoli and resistance-associated candidate genes

Exploring underused Portuguese common bean germplasm is revealing molecular markers associated to fusarium wilt genetic resistance. This can improve resistance breeding efficiency, reduce pesticide application and promote sustainable agriculture.

**Target: 2.4**

By 2030, ensure sustainable food production systems and implement resilient agricultural practices that increase productivity and production, that help maintain ecosystems, that strengthen capacity for adaptation to climate change, extreme weather, drought, flooding and other disasters and that progressively improve land and soil quality.

### OTHER HIGHLIGHTS

Sónia Negrão, ITQB NOVA alumna and GREEN-IT Bioresources for Sustainability member, received 1.5 million euros to develop strategies to ensure a more sustainable barley production, using imaging platforms, drones and artificial intelligence.
NOVA4Health
ITQB NOVA - Instituto de Tecnologia Química e Biológica António Xavier
NOVA Medical School

NOVA4Health, managed by iBET (www.ibet.pt), is a joint effort with CEDOC/NMS (http://cedoc.unl.pt/), ITQB-NOVA (www.itqb.unl.pt) and IPO (www.ipolisboa.min-saude.pt) that was created with the aim to promote the translation of knowledge on molecular biosciences and technologies to the discovery and development of new therapeutical entities, and to streamline the collaboration between Academic, Clinical and Technological institutions creating new career opportunities and fostering regional and national scientific development. United Nations’ SDGs #3 Ensure healthy lives and promote wellbeing for all at all ages is thus well embedded in iNOVA4Health core mission. In its strategic plan, iNOVA4Health is targeting three main areas of research Neurovision, Cardiometabolic diseases and Cancer, together accounting for two thirds of deaths worldwide every year.

IMPACT STORY

PROJECT

BRAVƎ

BRAV3 aims to provide a lifelong functional support to ischemic heart disease (IHD) patients. The project combines computational analysis, 3D printing and regenerative medicine to develop a biological ventricular assist device (BioVAD) to improve the patient’s quality of life. This project contributes directly to SDG#3 target 3.8 and 3b: access to safe, effective, quality and affordable essential medicines.

Funding Source: EU, H2020
Partner Entities: 14

Principal Investigators:
Felipe Prosper, University of Navarra (UNAV)

Target: 3.8

Achieve universal health coverage, including financial risk protection, access to quality essential health-care services and access to safe, effective, quality and affordable essential medicines and vaccines for all.
**PUBLICATION**

Patient-derived ovarian cancer explants: preserved viability and histopathological features in long-term agitation-based cultures

This study establishes an Ovarian carcinoma patient-derived explant culture which replicates features of the original tumour thus, contributing for the development of long-term drug efficacy and resistance studies.

**Target:** 3.b

Support the research and development of vaccines and medicines for the communicable and non-communicable diseases that primarily affect developing countries, provide access to affordable essential medicines and vaccines, in accordance with the Doha Declaration on the TRIPS Agreement and Public Health, which affirms the right of developing countries to use to the full the provisions in the Agreement on Trade-Related Aspects of Intellectual Property Rights regarding flexibilities to protect public health, and, in particular, provide access to medicines for all.

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**OTHER HIGHLIGHTS**

Moderna acknowledges GenIbet for its support in the development of mRNA-based vaccines.

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**EVENT**

Serology4COVID consortia

In 2020, iNOVA4Health researchers were actively involved in the Serology4COVID consortia, a consortium devoted to create a serological test for the detection of anti-SARS-CoV-2 antibodies.

**Donors**

Fundação Francisco Manuel dos Santos,
Câmara Municipal de Oeiras
Fundação Calouste Gulbenkian
GHTM mission is to promote and develop research, training and implementation in tropical medicine towards improving global health. We have an interdisciplinary research activity spanning from basic biomedicine to public health policy, under a one-health context. Most of our research focus on poverty-related (SDG1) and neglected tropical diseases, which pose a high socio-economic burden (SDG8), directly affecting health (SGD3) and malnutrition (SDG2) in endemic regions. Many of these diseases are re-emerging infections in a context of environmental change (SDG13). Our research outcomes are translational and product-driven, aimed at developing innovative solutions for surveillance and control, thus fostering collaboration with the industry and private sector (SDG9). We actively promote fair research partnerships (SDG10), specifically north-south, and international networking (SDG17).

**PROJECT**

INTEGRIV - Characterization of HIV-1 Drug Resistance to Integrase Inhibitors in Portugal: clinical and economic impact for treatment and drug resistance testing guidelines

The outcomes of this project will contribute to improved HIV-1 treatment and prevention of the emergence drug resistance. Furthermore, HIV-1 infection remains a poverty-related disease (SDG 1), contributing to inequalities within and among nations (SDG 10). Management of HIV/AIDS is challenging, bearing a considerable economic impact particularly for LMICs (SDG8).

**Funding Source:** FCT  
**Partner Entities:** 1  
**Principal Investigators:** Ana Abecasis

**Target:** 3.3

By 2030, end the epidemics of AIDS, tuberculosis, malaria and neglected tropical diseases and combat hepatitis, water-borne diseases and other communicable diseases.
The risk of tuberculosis in children after close exposure: a systematic review and individual-participant meta-analysis.

This partnership-based multicentric study (SDG17) demonstrated the high risk of infants and young children in developing TB, highlighting the need for more effective alternative strategies for TB prevention. Tuberculosis is a major poverty-related disease (SDG1) posing a high socio-economic burden directly affecting economic growth (SDG8), malnutrition (SDG2) and inequalities among nations and regions (SDG10).

**Target: 3.3**

By 2030, end the epidemics of AIDS, tuberculosis, malaria and neglected tropical diseases and combat hepatitis, water-borne diseases and other communicable diseases.

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**OTHER HIGHLIGHTS**

**Casa da América Latina CHAIR**
Millennium BCP Foundation

**Marcelo Urbano Ferreira**

Malaria persists as a major cause of acute morbidity and death across the tropical world – mostly in sub-Saharan Africa, but also in South and Southeast Asia, the Southwest Pacific and the Amazon. The research proposal combines multiple analytical approaches to deal with the challenge of malaria control and elimination in epidemiologically diverse settings of South America.

**Golden Medal - Human Rights Awards**
Portuguese Parliament

**Maria do Rosário Martins**

Coordination work in the first comparative study in Portugal on the consequences of Covid-19 on immigrant and Portuguese families in the municipality of Amadora.

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**EVENT**

Symbolic act to mark the start of a project

Symbolic act to mark the start of a project that aims to strengthen the laboratory capacity of the city of Lubango (Angola). The director of the IHMT-UNL, Filomeno Fortes, delivered to the Angolan ambassador in Lisbon, Carlos Alberto Fonseca, a PCT-RT device, as well as laboratory accessory equipment to carry out 1000 tests and individual protection equipment.
Nova School of Business and Economics – Nova SBE
NOVA School of Business and Economics

Nova SBE’s mission is to be a global school dedicated to the development of talent and knowledge that impacts the world. The Research Unit is closely aligned with the School’s mission and adopts a cross-disciplinary orientation. Researchers are together in a single unit, recognizing the variety of research topics studied by faculty.

Research is essential for an efficient transition to sustainable development and Nova SBE is aware of this fact. In 2015, we joined the Principles for Responsible Management Education initiative, a fundamental milestone for the integration of the United Nations Principles for Education in our activity. The school is dedicated to promote sustainability and impact in research. Our school has eight knowledge centers, four labs and two hubs. This infrastructure provides the means to link academic and applied research in order to offer to public and private organizations solutions and cutting-edge ideas to answer the sustainable development goals.

This work was funded by Fundação para a Ciência e a Tecnologia (UID/ECO/00124/2019, UIDB/00124/2020, UIDP/00124/2020 and Social Sciences DataLab, PINFRA/22209/2016), POR Lisboa and POR Norte (Social Sciences DataLab, PINFRA/22209/2016)

HIGHLIGHTS

CHAIR in Entrepreneurship & Technology
Novo Banco
Melissa Prado

Promote and develop knowledge intersecting the areas of finance, entrepreneurship, and technology.

CHAIR in Responsible Finance
BPI | Fundação "la Caixa"
Social Equity Initiative
Miguel Ferreira

Develop research and education on the important role that finance plays in societal progress and how a competitive and inclusive financial system can contribute to economic development.

PROJECT

GPS4Success: Early Identification of Students at Risk of School Success/Failure in the 1st Cycle of Basic Education

The educational institutions aim to define specific plans and interventions promoting success and preventing failure. This research contributes to a better comprehension of the success/failure phenomenons and factors in the primary schooling and to create a support system to teachers and school managers to identify (un)successful profiles and support them in their decisions.

Funding Source: Fundação Belmiro de Azevedo
Partner Entities: 0
Principal Investigators: Ana Balcão Reis

Target: 4.2

By 2030, ensure that all girls and boys have access to quality early childhood development, care and pre-primary education so that they are ready for primary education.
Does information break the political resource curse? Experimental Evidence from Mozambique

Natural resources can have a negative impact on the economy through corruption and civil conflict. The study tests whether inclusion and access to information by local communities can prevent this political resource curse. Our analysis revealed that information targeting citizens and their involvement in public deliberations increases local mobilization and decreases violence.

Target: 16.5

Substantially reduce corruption and bribery in all their forms.

OTHER HIGHLIGHTS

CHAIR in Health Economics
BPI | Fundação "la Caixa"
Social Equity Initiative

Pedro Pita Barros

Develop research to analyze new trends and challenges in the health sector through impact measurement, studies, and analyses on subjects such as Access to Healthcare Services, Human Resources, and Ageing Population.

CHAIR in Leadership
Fundação Amélia de Melo

Miguel Pina e Cunha

The Chair supports the emergent study of a new social and organizational model as a consequence of confluent forces in Entrepreneurial Learning and System Change.

CHAIR in Impact Economy
Fundação Calouste Gulbenkian

Pedro Oliveira

Prospect the field of Impact Economy in Portugal through research in areas such as User Innovation, Leadership for Impact, and Ageing Population.

EVENT

FinTech Conference – part of the Social Equity Initiative
The conference introduced research that further our understanding of how FinTech impacts the economy. It also hosted the presentation of the FinTech Report - which examines the size and characteristics of the FinTech in the ecosystem in Portugal and Spain.

Target: 9.5

Enhance scientific research, upgrade the technological capabilities of industrial sectors in all countries, in particular developing countries, including, by 2030, encouraging innovation and substantially increasing the number of research and development workers per 1 million people and public and private research and development spending.
EDUCATION

The Sustainable Development Goal number 4, Quality Education, sets the tone for the importance of an inclusive and equitable education, which promotes lifelong learning opportunities for all. NOVA, through its nine schools across three main areas of knowledge offers a wide range of academic and non-academic degrees. This chapter navigates through our offer in the different schools and programs.
NOVA Sustainability Map

EDUCATION

NOVA through its inclusive policies, academic curricula and sustainable-driven research priorities provides agency, empowers, amplifies and mobilizes the talent generated by NOVA to tackle the developmental challenges of societies. NOVA applies innovative models and strategies that have proven to be efficient to cultivate in students an SDGs-oriented and cross-cultural mindset.

The Sustainability MAP organizes information by areas of knowledge and school, exploring in greater detail one example of each Academic Degree (Bachelor, Master, and Doctoral). The final sub-chapter explores other non-degree programs.

Programs

With a strong degree of independence, each schools offers academic degrees and lifelong learning programs, among which executive education plays a significant role.

Volunteering

Volunteering at NOVA follows students in their academic journey, promoting an active citizenship. The University recognizes volunteering as an educational experience and certifies students with an honorable mention in the diploma.

Schools

NOVA University Lisbon, a comprehensive University, has nine schools, spread across three main areas of knowledge.

Science, Technology, Engineering and Mathematics
- School of Science and Technology
- Instituto de Tecnologia Química e Biológica António Xavier
- Information Management School

Society
- School of Social Sciences and Humanities
- School of Business and Economics
- School of Law

Health
- Medical School
- Institute of Hygiene and Tropical Medicine
- National School of Public Health
<table>
<thead>
<tr>
<th>Programs</th>
<th>Courses</th>
<th>Courses related to sustainability</th>
<th>Courses taught in English</th>
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<tr>
<td>3.690</td>
<td>699</td>
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SCIENCE

TECHNOLOGY
Education in Science, Technology, Engineering and Mathematics (STEM) is a strong asset to address global challenges as it develops the capabilities for individuals to function effectively within a science and technology-based society.
NOVA School of Science and Technology

NOVA School of Science and Technology (FCT NOVA) is one of the three largest and most prestigious schools of Sciences and Engineering in Portugal, due to its excellence in research, quality of education programs and large employability of its graduates. FCT NOVA extends over an open campus and is distinguished by a culture of excellent, a close teacher-student relationship and an intense academic life among its 8000 students.

In 2018, a vision for a Sustainable School was co-created with professors, researchers, students and collaborators aiming at a collaborative community of knowledge creation and sharing, committed to a sustainable and inclusive future: innovation, solidarity and nature protection foster an integrated and fair living, which motivates the FCT NOVA community to assume sustainability – environmental, social and economic – as a pillar to all activities. Education programs and research groups fully dedicated to sustainable development and environment and sustainability issues are corner stones, while awareness across all disciplines and research groups is increasing, as visible in outstanding projects. FCT NOVA got the green flag from eco-school national program and is an active member of the Portuguese Sustainable Campus Network.

**Number of courses related to sustainability offered:** 352

### Bachelor’s Degrees

**Highlight | Bachelor’s in Geological Engineering**

Geological Engineering constitutes a fundamental basis for the development of society and Human welfare. Raw-materials, groundwater, geothermal energy are examples of essential resources for a sustainable society. The search and exploitation of natural resources, and the mitigation of environmental problems resulting therefrom, are core activities of the Geological Engineer.

**Course Highlight | Hydrogeology**

Hydrogeology provides a balanced course between theory and practical application of principles of groundwater hydrology and hydraulics to complex environmental and groundwater resource problems. The course is designed to prepare students to enter in a professional level in the field of groundwater resources and environmental protection. Students develop detailed knowledge of principles and practices of groundwater science and obtain competences in critical thinking regarding strategies and responses to changing environmental conditions that may result from groundwater exploration, exploitation, contamination, and protection.

**Degree: Bachelor Degree in Geological Engineering**

“Freshwater is a crucial natural resource for the development of society in the 21st century, most of which comes from underground aquifers, corresponding to 30.1% of freshwater. This resource is under threat from climate change, soil and water contamination, over-exploitation, and many other hazards. One way to prevent this issue is through the complex analysis of the characteristics of aquifer systems, which is associated with Hydrogeology. Hydrogeology provided me with information about the behaviour and evolution of these systems over time, allowing to make decisions on how to act, manage and prevent the loss of this valuable water body.”

Mariana Ferreira Branco
Master's Degrees

Highlight | Integrated Master on Environmental Engineering
The program prepares professionals to lead the way to a clean environment and economy, considering ecological, social, economic and technological aspects, based on a systemic approach. It covers a wide range of sustainable issues, from natural resources to human settlements, contributing mostly for the SGD 6, 11, 12, 13, 14, 15.

Course Highlight | Sustainable Urbanism and Spatial Planning Project
Project work provides students with strong practical skills. Students are challenged to integrate all the knowledge acquired throughout the course, in the environmental, cultural and socio-economic domains, in order to adapt the planning and design practices to the environmental conditions and social needs of the future, in line with the SDGs. The project will develop sustainability strategies and action proposals for sustainability at different scales, from the neighbourhood to the city. Students will be able to follow a particular line of interest of their choice, thus allowing space for specialization in different areas of urban sustainability.

Degree: Master's in Sustainable Urbanism and Spatial Planning and Management

"My time during this Master's was truly unforgettable due to the interdisciplinary and international character of this course. Through a combination of urban planning, environment, economy, law, sociology and history, combined with classes about specific software (GIS/CAD), the Master's truly prepares the next generation of city planners that our world needs. Over the course of these 2 years, I had the chance to work together with a variety of local and international actors on themes related to urban sustainability, such as climate change, urban mobility, circular economy, green infrastructures, energy, water, and biodiversity"

Cornelis van Varik

Doctoral Degrees

Highlight | Doctoral Program in Environment and Sustainability
Advanced training in environment and sustainability, integrating the technical, ecological, social, economic and institutional dimensions necessary to meet current sustainability challenges. Students develop a solid scientific culture, with a broad and integrative perspective on sustainability, with the capacity to understand challenges, propose policy responses and implement innovative solutions.

Thesis Highlight | Climate change and emerging chemical contaminants in marine organisms: Bioaccumulation, ecotoxicology and public health impacts
This research assessed the combined effects of seawater warming, acidification and bioaccumulation of emerging chemical contaminants (ECCs) and ecotoxicological responses of fish and bivalves. Warming promotes the bioaccumulation of lipophilic and persistent contaminants, suggesting increased risks to future generations through the consumption of contaminated seafood. The simultaneous exposure to ECCs, warming and acidification promoted more severe responses than when each stressor acted in isolation. Such results reveal that exposure to ECCs in a climate change context will likely defy the resilience of marine systems, particularly in coastal areas.

"This program was a unique and enriching experience. It matched all my expectations, allowing me to strengthen my knowledge and consolidate my research skills. The program is very well designed, with a strong focus on networking and constant guidance, allowing students and professors to get to know each other and their work. During the program annual seminars, I had the opportunity to present the advances of my research plan and get feedback from other students/teachers with completely different backgrounds. This was extremely helpful and a great exercise, allowing me to improve my work and practice for the final PhD thesis presentation."

Ana Luisa Maulvaut
ITQB NOVA - Instituto de Tecnologia Química e Biológica António Xavier

ITQB NOVA is a research and postgraduate training institute in life sciences, chemistry and associated technologies. In a stimulating environment, 500 researchers work on cutting-edge experiments, in collaboration with international institutions and industry. Students contact with top-notch research and develop a critical mind, good communication skills and an entrepreneurial attitude.

ITQB NOVA understands sustainable development as the need to create the conditions under which humans and nature can exist in a healthy and thriving environment that supports present and future generations. ITQB NOVA aims at contributing to a sustainable development by training and educating people at all levels and by promoting research projects targeting different United Nations' Sustainable Development Goals or the European Commission's Green Deal, leading by example and promoting activities so that others also to contribute to these agendas on their daily lives and beyond.

Number of courses related to sustainability offered: 47

Master's Degrees

Highlight | Master's in Biotechnology for Sustainability

This Master Course endows students with a transversal and interdisciplinary perspective of green and white biotechnologies, preparing them to face the main societal challenges in Bioeconomy and Sustainability. Students acquire skills to understand the new challenges and contribute to the necessary paradigm shift, to protect the planet and the future generations.

Course Highlight | Global changes and sustainability

This introductory course explores agro-forestry in the context of sustainability. Starting from an historical perspective of agriculture, the course looks at current and future needs and threats of plant production. Triggered by insights from different experts, students have a chance to reflect about the direct and indirect impacts of climate change in crop yield and quality, and discuss strategies for tackling such issues. The course includes topics such as valorization of biodiversity and conservation of plant resources; monitoring/predicting climate change for crop management; plant improvement and biotechnology in environmental protection; and new technologies in sustainability (stress remote sensing, plant phenotyping, clean technologies and bioprocesses in bioremediation, resource recovery).

Degree: MSc Biotechnology for Sustainability

"A passionately taught introduction course with a great diversity of themes explored, allowing us to comprehend the real issues at stake while providing a starting point of thinking for new solutions and future prospects. The wide panel of multidisciplinary experts encountered during this curricular truly helped us figure out our scientific field of predilection. It was also a great opportunity to face our pre-conceived ideas about climate change and its real world implication. This CU truly highlighted biotechnology as an essential tool to help mitigate our impact on nature and ease the transition to a truly resilient system."

Clement Roumegoux
Highlight | Doctoral Program in Plant Biology – Plants for Life

This PhD program provides students with a state-of-the-art knowledge in Plant Biology, with particular emphasis on plant environmental interactions, and Plant Biotechnology. This training is fundamental to produce plants better adapted to an ever-changing environment, with improved water and nitrogen use efficiency and higher yield, thus contributing to different SDGs.

Thesis Highlight | Unravelling the genetic control of combined biotic / abiotic stress resistance in Phaseolus vulgaris L.

Susana Leitão’s Ph.D. thesis is an important contribution to the valorisation of the underused Portuguese common bean germplasm. It allowed the identification of new sources of multiple stress resistance and provides new genomic targets for the development of functional markers to support selection in disease resistance and drought tolerance breeding programs. It mainly addresses Goal 2 of the 2030 Agenda for Sustainable Development, which highlights the need to improve plant productivity and the income of small-scale farmers in a sustainable way. It promotes the cultivation of a food legume crop, through the development of tools for more efficient breeding of resilient varieties to changing environments.

“The Ph.D. Program Plants for Life provided me a complete scientific training addressing key biological questions related to plant growth and development, and more applied subjects such as plant breeding, plant responses to environmental stress, and sustainable agriculture. Within this PhD program, I had the opportunity of having classes and seminars and discuss ideas not only with very good researchers from Portugal but also with scientists from well-known plant sciences laboratories abroad. It is focused on Plant Sciences, but students are also encouraged to meet and discuss ideas with people from different research areas. I would strongly recommend the program.”

Susana Leitão
NOVA IMS is a school dedicated to the area of data science as the ability to transform data into knowledge. Its mission is to "train leaders capable of working in a global and competitive context, combining innovative research in information management with a stimulating and creative teaching environment, in order to generate and disseminate knowledge in global society", thus helping organizations to transform data into value.

Being an information management school, NOVA IMS contributes to Sustainability by transforming data to knowledge and value, that are essential tools in the construction of a better and sustainable world. NOVA IMS also comprises in its values the ethical and social responsibility behavior, with respect for human dignity, freedom, democracy, equality, the rule of law and, in general, human rights, including the rights of persons belonging to any minorities.

**Number of courses related to sustainability offered:** 24

**Bachelor’s Degrees**

**Highlight | Bachelor’s in Information Management**

This degree provides students with strong analytical skills to collect, organize and analyse data from organizations, translating it into a strategic resource that prompts innovation and competitive advantage. Those analytical skills can be implemented in several areas, including health and education, to reduce inequality and spur economic growth.

| 240 | 14 |

**Language**

**Course Highlight | Information and Informatics Law**

The course allows the student to understand the basic legal concepts and the difference between legal system and other normative systems. This course aims to identify the major institutions of the State, to understand the essential role of these institutions, besides their functioning and to identify the main regulation in the technology systems domain. Enabling students with knowledge regarding State institutions and its normative system contributes to the strengthening of those institutions.

**Degree: Bachelor Degree in Information**

“When considering a futuristic, more sustainable world, security and privacy are at the forefront of it. Ensuring this makes our students more conscious of what surrounds us, what people value in their privacy and how we can better protect it. Having knowledge of what institutions ensure our rights and duties, how they do it and how can we resort to them provides a way to build a better, more sustainable world, based on the protected individuality of each one of us. ”

Gonçalo Abreu Maximiano

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1 The data collected refers to courses of the undergraduate programs only. 24 out of 58 courses have contribution to the SDG.
### Master's Degrees

**Highlight | Master's in Geospatial Technologies**

Being an Erasmus Mundus Program, the master’s degree in Geospatial Technologies aims to support the educational, professional, and personal development in education and training thereby contributing to sustainable growth, quality jobs and social cohesion, to driving innovation, and to strengthening European identity and active citizenship.

**Course Highlight | Innovation Management and Design Thinking**

Design Thinking is a human-centered approach to innovation and problem solving and a process of immersing yourself in a problem space, thinking creatively around pain points and opportunity areas, then iteratively prototyping totally new solutions, contributing to a more inclusive and equitable society. Design Thinking has become a powerful approach to address complex challenges at a business, social and cultural level and also to innovate the corporate culture in startups, SMEs or big corporations.

**Degree: Transversal to all Master’s Degrees**

“I really enjoyed the course. The classes were very practical and challenging. One of the projects was about developing a product for an international colleague, according to his/her characteristics and needs, in an innovative fashion. Many of the contents I learned in this course I am using in my current job, as a web content designer, every time I create a new website.”

Joana Araújo

### Doctoral Degrees

**Highlight | Doctoral Program in Information Management**

The Doctoral Program aims to promote knowledge and innovation in Information Management, particularly in the research of its impact on wealth creation, improving the performance of organizations and the development of new methodologies and decision making tools.

**Thesis Highlight | Smart Sustainable Cities Assessment**

This project provided a holistic view of the relationship between a “smart city” and a “sustainable city” by conceptualizing and operationalizing a framework to measure the connection between technology and environmental sustainability. It goes further to categorize and rank European cities based on how smart and sustainable they are using a composite index based on publicly available data while highlighting indicators that city councils and urban planners can use to either maintain or improve the overall sustainability of their city. Lastly, it provided interesting insights for city councils pushing for citizen adoption of sustainable practices within their administrative boundaries.

“...The Doctoral Program in Information at NOVA IMS provided me with an excellent research environment and equipped me with the right tools to push the bounds of science. The mobility program during my study not only enabled me to acquire new knowledge, skills, and competencies but also helped me collaborate and cooperate with international colleagues leading to a more rounded research. Furthermore, I had effective supervision, adequate mentoring, and career guidance during the course. Overall, I enjoyed my experience during the course.”

Adeoluwa Akande
SOCIETY
Within a science and technology-based society, education in social sciences and humanities accounts for the people. It brings, equity, judgement, and justice. Social Sciences focus on human relationships and society, analysing the world outside the limits of the individual experience. It relates to the past, the present, and the future.
NOVA School of Social Sciences and Humanities

NOVA School of Social Sciences and Humanities (NOVA FCSH) is located at the heart of Lisbon, in two campi: Avenida de Berna and Campolide. NOVA FCSH offers 15 degrees, some of them pioneers in the country and with the highest entry averages; more than 40 master’s degrees, all of them competitive and differentiating; more than 20 doctorates, with links to 16 research units; and several postgraduate courses, most of them unique in the country. In addition, throughout the year, there are short courses, from 15 to 25 hours, on various topics that usually take place during school breaks.

NOVA FCSH participates in the Education for Sustainable Development Program -Eco School / Eco Universities with the objective to manage and organize the various initiatives during the school year in the scope of sustainable development and mitigating environmental impacts arising from the School’s activity.

Number of courses related to sustainability offered: 17

Bachelor’s Degrees

Highlight | Bachelor’s in Geography and Regional Planning

The Bachelor in Geography and Regional Planning contributes to a wider comprehension of sustainability goals and targets by enhancing the student’s capacity to understand socio-ecological dynamics in space and time and to develop solid knowledge where ethical principles and environmental values are concerned.
Course Highlight | Sustainable Development

Sustainable Development Curricular Unit helps geography students where SDG issues are concerned, by promoting an analysis of sustainable projects, by developing critical thinking about different social behaviors and by ensuring a correct and deep assessment of Sustainable Development Goals (2015-2030) both in their application at different spatial scales and monitorization. On the other hand, the program covers several themes about human relations with the environment envisioning sustainability which constitute, from the local to the global scale, pressing issues in management and policy. In the professional future of students, these are challenges they will have to deal with.

Degree: Bachelor Degree in Geography and Regional Planning

“One of the best decisions I’ve made throughout my career was to choose the subject of Sustainable Development with the teacher Ana Firmino. In this course, I acquired soft skills such as critical thinking, consciousness of the impact of my decisions, and proactivity that inspired me to innovate and be a change agent for a better world holistically and transversally. Today, I’m part of a multinational consulting firm on innovation and sustainability, where I’ve been applying what I learned here and understanding the importance of sustainable development in our society to pursue a dynamic balance between nature, people, and businesses.”

Sofía Botero Nieto
NOVA School of Business and Economics

Nova School of Business and Economics (Nova SBE) is the leading Portuguese school in the areas of Economics, Finance and Management, through its Bachelors, Masters, Doctorate, MBA and Executive Training courses. It is on the list of the 30 best management schools in Europe, with around 6000 students from more than 70 different countries, and its programs are recognized by the Financial Times.

With over 40 years of existence, Nova SBE continues to strive for its role to play towards a better future. One that aims to provide a blueprint for all individuals and organizations to attain economic development that is socially inclusive and environmentally sustainable in a human-ecosystem equilibrium by leveraging on its academic programs, research projects and wide community engagement.

Nova SBE embeds the principles and values of sustainable development, officially aligned with the 17 Sustainable Development Goals (SDGs), as outlined in the School’s Road to Impact Report 2019/2020.

Number of courses related to sustainability offered: 99

Bachelor’s Degrees

Highlight | Bachelor’s in Economics

The Bachelor’s in Economics Degree is a three-year course where students acquire a balanced mix of technical and scientific knowledge, besides receiving a general education in related areas, such as law and social sciences. This technical approach allows students to develop the analytical skills needed to face the complex future and the pressing challenges of today such as poverty, education and health and climate action.

Course Highlight | Managing Impactful Projects

The Managing Impactful Projects course challenges students to engage with an external and local organization to co-create sustainable solutions that tackle existing problems and foster organizational contribution to the 2030 Agenda. It should be highlighted that this course has recently become mandatory for students completing both management and economic academic programs as to guarantee the integration of the SDGs in the curriculum of undergraduates.

Degree: Transversal to all Bachelor’s Degrees

“The MIP course introduced me to the language of the SDGs, giving me a broader understanding of the concept of impact and how it can be applied to the context of different organizations. The opportunity to co-create with a real organization during such unprecedented times made me aware of the challenges organizations are currently facing in implementing and measuring their impactful initiatives.”

Sofia Geraldo
Master's Degrees

Highlight | Master's in Management

The Master’s in Management is designed for students from any graduate background wishing to gain a management education. Besides providing general management education, this program offers electives and modules that focus on contemporary issues such as Product Innovation, Entrepreneurship, Globalization, Sustainable Development, and Digital Business. Sustainable Development is becoming an integral part of this program which already counts with 13 sustainability-related electives from Business Models for Sustainability, Sustainable International Business to Leading Social Enterprises in International Development and Performance & Progress.

Course Highlight | Sustainable International Business

The Sustainable International Business Course provides future managers, expecting to work in or with developing countries, an understanding of these nations’ current economic reality and prospects, covering topics such as global development, governance, poverty, child labor, and education. Throughout the teaching period, students are challenged to reflect, discuss and deepen their understanding on several Global Goals across the SDG Agenda - namely SDGs 1, 4, 8, 10, 16 and 17, on topics such as the drivers of child labor and the role of education, the role of governance and institutions in development or entrepreneurship and the fight against poverty through business approaches.

Degree: Master's in Management

“The Sustainable International Business course made clear that each company is embedded in a unique and complex system. Without an understanding of the given political, economic and socioenvironmental dynamics, a company would be unable to adopt and adapt knowledge to its specific context. Identifying resulting key barriers and opportunities for businesses in case studies, flash essays and discussions, questioned my believes as well as my perspective on international business strategy and its viability.”

Charlotte Marie Both

Doctoral Degrees

Highlight | Phd in Economics and Finance

Nova SBE doctoral programs provide a solid theoretical and methodological basis, preparing PhD candidates to develop independent research in several areas of expertise. The Phd in Economics and Finance integrates two different but complementary fields to support and train students in conduction state-of-the-art research in theoretical and empirical areas such as Asset Pricing, Health Economics, Environmental, Fiscal Policy, Monetary Policy, and many others. By the end of the 4-year program, students are systematically suited for positions in academia and research institutions, or positions in business companies, financial institutions and governmental organizations.

Thesis Highlight | Essays in Behavioral Development Economics

“Essays in Behavioral Development Economics” explores how social networks influence political participation, and the decisions of firm owners through information, social norms, and reference points. In her dissertation, Julia Seither analyzes the effects of a different social network and environment through international migration, and the impact of being exposed to information about one’s peers in two field experiments. These questions are studied in the context of a low-income country that has experienced decades of social conflict and war - Mozambique. The empirical results show that the number of migrants an individual is in close contact through regular chatting within a village significantly increases political participation of residents in that village – more so than family links to migrants. Whereas family links are equally effective in changing political attitudes, they have little effect on political participation.
NOVA School of Law

The School of Law of NOVA University of Lisbon was founded in 1996. Its first undergraduate program was launched in 1997 as an ‘innovative hub’ with the objective of developing and innovating legal science.

Nova School of Law contributes to sustainability generally through its teaching activities which strive to ensure inclusive and equitable quality education (SDG 4). More specifically, it contributes to the SDGs through teaching in areas concerning human rights and fundamental rights - which have been recognized as essential to achieve sustainable developments, labour rights (SDG 8) - and environmental protection (SDG 13). Nova School of Law also contributes to sustainability through its research activities.

Number of courses related to sustainability offered: 25

Bachelor’s Degrees

Highlight | Bachelor’s in Law

The Bachelor of Law programme offered by Nova School of Law contributes to SDG 16 on Peace, Justice and Strong Institutions. In addition, many of the subjects offered contribute to specific SDGs.

Course Highlight | Public International Law

Public international law addresses a variety of issues related to social justice and sustainability. It looks at the role of public international law in colonial relations, the legal foundations of global economic relations, international human rights law and the way in which international law approaches the use of force and violence.

Degree: Bachelor Degree in Law

“It is undeniable that we face global issues which require global solutions. In that sense, it is urgent that we start looking at our society from a new and wider scope. Public International Law is crucial to every Law student in order to understand the mechanisms that are at our disposal to act and make a difference; to build a more equal, just and sustainable world. Throughout the semester we had the opportunity to discuss global sustainability from a legal point of view, which strengthened our argumentative abilities and allowed us to perceive this area with greater depth.”

Tiago Salem
### Master's Degrees

**Highlight | Master's in Law and Economics of the Sea**

Sea governance is an interdisciplinary, unique and innovative program dedicated to the study of all issues related to ocean governance. Internationally distinguished as one of the best master's programs at the global level, it aims to meet the main challenges and opportunities for sustainable global development.

**Course Highlight | Business, Human Rights and Sustainability**

This Business, Human Rights and Sustainability course is aimed at giving students an understanding of the main issues arising in the field of business, human rights and sustainability. The course explores the various human rights and environmental issues that can result from business activities worldwide and the legal debates surrounding the effective regulation of companies in this respect. Students learn to differentiate the various responsibilities of the different actors in relations to business-related human rights harms, and critically analyse the content and the implementation of the UN Guiding Principles on Business and Human Rights.

**Degree:** Master's in Law & Management

"Nowadays, we cannot talk about law without talking about sustainability. The connection between these areas is indisputable when we observe the attempts to ensure the survival of future generations, and to mitigate and remediate what have been ongoing situations that damage the environment and harm human rights. To educate students on these matters it means to prepare future professionals for the challenges ahead. The course Business, Human Rights and Sustainability not only does that, but also allows us to have a critical understanding of what has been done and what remains to be done in terms of sustainability, especially in the business world."

Ana Duarte

### Doctoral Degrees

**Highlight | Doctoral Program in Gender Studies**

The PhD in Gender Studies is the result of a partnership between University of Lisbon, through the Instituto Superior de Ciências Sociais e Políticas (ISCSP), and NOVA University Lisbon, through the School of Social Sciences and Humanities (NOVA FCSH) and the School of Law. The program's mission is to contribute to the affirmation of Gender Studies as an autonomous scientific area of research and advanced training.

**Thesis Highlight | From Environmental Rights to Resilience Justice: How Public Law Can Face Social-ecological Uncertainty in Cities**

Climate change is one of the biggest challenges for today's Environmental Law. Environmental rights enshrined in most constitutions do not demonstrate to be sufficient for an effective protection of socio-ecological systems and for the promotion of their resilience. Thus, departing from the complex reality of the cities and intending to address existing vulnerabilities, this study aims to suggest the implementation of new legal frameworks that, through more adaptive mechanisms of law, allow the realisation of justice for socio-ecological resilience.

"The PhD in Law at NOVA gave me the opportunity to research cutting edge and innovative topics in Environmental Law, such as those related to sustainability, social-ecological resilience, and climate change. Moreover, NOVA has given me the chance to spend some periods of time researching abroad in other international knowledge centres, which represented an important added value to my final research results."

Tiago de Melo Cartaxo
HEALTH
The Sustainable Development Goal number 3, Good Health and Well-being, sets the tone for the importance of healthy lives and well-being for all at all ages. By educating future professionals in this field, the University is actively contributing for a universal health coverage.
NOVA Medical School

NOVA Medical School (NMS) has celebrated 43 years in 2020. Provides public service preparing excellent professionals in the areas of health and medical sciences with internationally competitive research in multidisciplinary areas. Holds the 1st position in the admissions ranking for Medicine, in the Lisbon Area, for the last 5 years.

NMS’s contributes to the global health and well-being of mankind. The School’s mission is accomplished with advancements in health sciences and by training a new generation of excellent professionals, committed with sustainability. It aims to bring together clinicians, researchers and entrepreneurs with the ultimate purpose of generating ground-breaking solutions and accelerating translation of new discoveries, solutions or devices that impact on healthcare and well-being of patients and society at large. NMS promotes the collaboration of students, teachers, researchers and staff in activities that contribute to sustainability, related to the promotion of healthy lives, saving resources and social responsibility.

Number of courses related to sustainability offered: 64

Bachelor’s Degrees

Highlight | Bachelor’s in Nutrition Science

The program is designed so that the future nutritionist be able to: use concepts in the analysis of a particular case or situation (simulated or real); evaluate, analyse and make a decision based on scientific evidence (Code of Ethics for Nutritionist, Article 4, paragraph d); express personal opinion with arguments; take positions revealing critical and/or humanistic and/or ethical attitudes; expressing ability to design appropriate strategies to different situations and in different settings; show a critical and/or humanistic and/or ethical and/or warm and/or respectful performance in the development of various professional activities; respect diversity and; be an active part, participated in the health policy debate. This course allows students to acquire skills to diagnosis, intervention and monitoring, process and people management, communication, and technology.

Course Highlight | Public Health

In this course, students acquire basic knowledge of Public Health. In addition they identify and characterize important problems in public health and public health and nutrition, in Portugal and the World. They recognize and prioritize the health needs of individuals, groups and communities. Understand the dynamics of the disease and its natural history, data sources and main types of epidemiological study and measurement of data. They also set appropriate and relevant strategies that contribute to Health Promotion and control of major health problems.

Degree: Bachelor Degree in Nutrition Science

“The Public Health Curricular Unit was extremely enriching, allowing us to know how to identify the most relevant health problems nationwide. At the same time, it provided the acquisition of appropriate strategies for intervention in different populations, enhancing the impact of our action as future nutritionists.”

Carolina Pereira
Master's Degrees

Highlight | Integrated Master in Medicine

Students acquire the skills needed for the exercise of his profession such as: data collection in various clinical situations, development of clinical reasoning in order to proceed to the formulation of provisional and definitive diagnoses, clinical decision making. They develop and deepen skills of autonomy, to allow a careful selection of life-long learning pathways. They also develop skills in clinical research, particularly in formulating and conducting studies and reporting the results to the scientific and general community.

Course Highlight | Gynecology and Obstetrics

The main purposes of the course are the achievement of knowledge, skills and attitudes for women's health promotion, considering the specific needs and socio-cultural characteristics of each woman.

Degree: Integrated Master in Medicine

“The Obstetrics and Gynecology discipline taught me how to look at women with an holistic perspective. It was very enriching, not only as a future doctor but also as a human being, to be able to learn more about all the aspects of the women body, the unique struggles of women and the way they bring new life to our world.”

Filipe Quintas

Doctoral Degrees

Highlight | Doctoral Program in Health Sciences

The New Doctoral Program aims to be a national and international reference of high quality in Health Sciences, stimulating the development of high quality research projects at international level, promoting interdisciplinarity in this vast and important area of study, taking advanteg of the existing sskills and resources of excellence for its research guidelines: Chronic Diseases and Aging; Population Health and Nutrition; New Cellular and Molecular Therapies.

Thesis Highlight | Carcinogénese do Carcinoma da Mama Masculina

Male breast carcinoma is an uncommon neoplasm with rising incidence, emerging in the last years as a multifactorial and distinct subtype of BC. It is frequently diagnosed in anatomic advanced stage disease and has no individualized strategies for diagnosis, therapeutics and follow-up. The existent ones are based in female BC. Our main objective was to identify biological factors with potential to innovate the clinical management of male BC.

The biomarkers identified in my thesis are eligible for investigation as with potential to innovate the clinical management of male BC and, eventually, of Luminal subtypes female BC

“My experience with the support of NOVA Medical Scholl to construct a concept of my doctoral thesis, to its writing and in providing a good thesis final discussion was excellent. I consider the undertaking of curricular units aimed at research training, very useful by promoting interdisciplinarity. I also emphasize the excellence of the thesis advisors, indispensable for the success of my thesis.”

Maria Saudade André
The NOVA Institute of Hygiene and Tropical Medicine (IHMT) offered seven doctoral programs, three of which were in collaboration with other NOVA Schools (FCM, FCT and ENSP) and international institutions (Fiocruz), and six master programs, two of which were in collaboration with other NOVA Schools (FCM, ITQB and FCT).

Almost half of the students enrolled in the doctoral and master's programs at IHMT are from Portuguese-speaking countries. The depth knowledge and field experience of the teachers, provide the students with the understanding and skills that mobilise them to address the challenges of the SDGs in their origin countries. Furthermore, every student is empowered to implement SDG solutions during their thesis development, through achievement of essential tools offered during their academic education at IHMT. Higher education at IHMT helps to shape future leaders and professionals that will actively support national and local implementation of SGD.

Number of courses related to sustainability offered: 71

**Master's Degrees**

**Highlight | Master's in Public Health and Development**

The Master's degree in Public Health and Development approaches health problems, health systems and social contexts in low and middle income countries. We focus on the problems in the initial phase of the "transition in health", and the implications arising from resource limitations and institutional weaknesses of health systems in a Development and Global Health framework. We approach SDGs (e.g. 3, 10 and 17) through the analysis of issues related to governance, partnerships, the consolidation of civil society, as well as their interaction with social inequalities in health.

"This master's enabled me to develop skills and grasp the complexities of public health. Whilst the COVID-19 pandemic pushed us away to an online academic setting, it also brought us together with colleagues from diverse parts of the globe, including the least developed countries. I found this inclusive educational policy very appealing, as aside from being aligned with the SDGs, allows the sharing of different context experiences. I've been given the invaluable opportunity to work with refugees for my master's thesis and hopefully will be able to translate into action the lessons learned."

Vanessa Portela

**Course Highlight | Health Assessment**

Health Assessment promotes the training of researchers/health professionals in research evaluation of health interventions and/or programs contributing to the strengthening of sustainable health systems, and the adoption of more active, critical, and reflective work practices.

Degree: Master's in Public Health and Development
**Doctoral Degrees**

**Highlight | Doctoral Program in Biomedical Sciences (IHMT-NOVA) – DCB**

DCB-students have equitable access to science, technology, and research for health in sustainable environments that drives inclusion and diversity. This programme is based on digital platforms and encourages fair collaborations between European and non-European students, promotes institutions interplay and lifelong learning, contributing to the advance of sustainable economic and social conditions.

**Thesis Highlight | Impact of migration in the health profile of children in Amadora Municipality**

Migration is a social determinant of health influencing many of the dimensions of sustainable development. Migrant children can be at risk of poor health but there is a knowledge gap on this subject in Portugal. This project studies the health profile and access to health services by immigrant children in the Lisbon area. By comparing the outcomes of immigrant children with those born in Portugal to Portuguese parents, it will identify health inequalities, inform multisectoral interventions and contribute to policies aimed at reducing disparities and promoting the health of migrants within the perspective of “leaving no one behind”.

"The global and multidisciplinary mindset of the course has given me the opportunity to interact with academics and other students with diverse backgrounds enriching my own experience as a PhD student, paving the way for a whole set of new skills and increasing independence as researcher. The most rewarding aspect has been the fieldwork carried out for my thesis involving direct and interactive contact with migrant families and their healthcare providers. The COVID-19 pandemic brought challenges, but hopefully the work undertaken during the course and results achieved will be translated into positive action."

Zélia Muggli
For more than 50 years, the NOVA National School of Public Health (NSPH) has actively and innovatively contributed to the improvement of the health of populations, health systems and society. It is a reference institution in post-graduate teaching, research and creation of value for the society in the area of public health, the three pillars of its mission.

NSPH offers an excellent teaching centered on the student and on an integrated and dynamic vision of Public Health sciences, promoting the interdisciplinarity and sustainability of its study cycles (SGD 4) and also on life learning activities (SGD 8). NSPH's faculty and student’s community is dedicated to the production of knowledge and innovation in public health practices (SGD 3), contributing to the improvement of the population’s health levels and reducing inequalities (SGD 3, 10) and to the development and evaluation of the Portuguese health system (SGD 9) with national and international partnerships (SGD 17).

**Master's Degrees**

**Highlight | Master's in Health Management**

The Master's Degree in Health Management aims at acquiring scientific knowledge and advanced skills for the study and research in the field of health management. At the end of the degree, participants must have knowledge and skills that enable them to contribute to the improvement of health and the health system, both in Portugal and in a broader context, in scientific, professional and citizenship contexts.

**Course Highlight | Iniquities**

This unit aims to: 1) develop the required theoretical and technical skills to prepare, analyse and evaluate health policies, programs and strategies according to an economic perspective; 2) present economic concepts used in the health care field such as: opportunity cost; scarcity and priority; demand, supply and price; funding, payment and provision; efficiency and equity; economic evaluation. Understand the management of health services at all levels (primary care, hospitals, integrated care, among others) is fundamental to improve the health of populations in all perspectives (including health promotion, disease management, treatment).

**Degree: Master Degree in Health Management**

"In addition to the valuable diversity of students, I found a challenging and dialoguing faculty with the willingness to jointly define personalized learning paths, inviting each student to overcome themselves; and requiring each student to contribute to the development of the institution. Regarding this programme, I can say that the curricular construction covers the main challenges in health organizations management, articulating the visions of the different players involved in the sector and of different levels of care providing."

Óscar Brito Fernandes
Highlight | Doctoral Program in Public health – Epidemiology

Epidemiology is a core area of public health, important to understand all the public health events, therefore fundamental do achieve SDG 3.
As examples, at the end of this unit the students should be able to: Describe the purposes and uses of the main epidemiological methods and types of epidemiological studies, the conditions for its application and weaknesses; Define the core concepts, namely risk, bias and confounding, their main variants, and be able to interpret their meanings.

Thesis Highlight | Emotional and behavioural pathways to early adolescent substance use

Treat and prevent emotional and behavioural symptoms to prevent adolescent substance use is an important public health wide-world challenge. The extent to which gender modifies the effect of family, school and peer factors on early adolescent substance use remains elusive. Research is needed on the co-occurrence of antisocial behaviours and substance use in early adolescence, and its emotional and behavioural antecedents.

"The Doctoral Program in Public Health allowed me to develop crucial research skills while giving me a global and broad perspective on health, that only a Public Health approach can. I combined the doctoral program with my clinical training in Child Psychiatry, thus enriching my approach to the challenges I face daily. Through its faculty and students, ENSP-UNL creates an inspiring community and network that fosters critical thinking and excellence."

João Picoito
“Taking the Pre-University Semester was an exciting experience! I had the fantastic opportunity to interact with colleagues from all around the world, their diverse backgrounds and worldviews. On the other hand, the Mathematics and Microeconomics courses felt like a gentle transition to the world of Business School. In addition, I got to know more about the Portuguese Higher Education system and get used to how it flows. As a result, I feel confident to start my journey as a freshman at Nova SBE!”

Lara Côrrea, Brasil, Spring’21 Edition

OTHER PROGRAMS

Besides Academic Degrees, NOVA University Lisbon offers complementary education to its students, executive training, and other lifelong learning programs.
NOVA Foundation Program - SUPERNova

NOVA Foundation Program was designed for students who have recently finished high school and plan to apply to Higher Education in Portugal. It assists students from different countries in adapting to the European education system, developing language and academic skills at an appropriate level for successful progression to an undergraduate course at one of the best and most reputable young universities in the world. Students are guaranteed progression to the first year of a relevant degree at Nova University Lisbon, provided the progression criteria are met.

This multidisciplinary program offers students the opportunity to choose different disciplines offered by NOVA's Schools taught in Portuguese and/or English, depending on the student's preference. It also includes English or Portuguese classes for foreigners to initiate skills in that language. Students with levels above B2 are exempt from taking this module.

NOVA Schools that integrate the program are FCSH, FCT, IMS, NSL, NMS and SBE.

Valid applications: 199
Effective enrolled Students: 64
Valid Applications since 1st Edition: 432

Target: 4.7

By 2030, ensure that all learners acquire the knowledge and skills needed to promote sustainable development, including, among others, through education for sustainable development and sustainable lifestyles, human rights, gender equality, promotion of a culture of peace and non-violence, global citizenship and appreciation of cultural diversity and of culture's contribution to sustainable development.

Mentoring Program

The Foundation Program is working on a Mentoring Program in association with NOVA SAS Wellbeing team and aims to provide valuable support from NOVA Students to Foundation Program's students at critical points in their student life. This Program offers a host of other benefits for both mentor and mentee. Peer mentoring is a mutual way of learning and allowing both participants to develop transferable skills that will help them during their time at university and beyond.

Club of Ideas

The course integrates students who, coming from outside Europe, must be acknowledged about the European values, through the ability to know, discuss and accept different points of view from their own, without jeopardizing the principles of the social coexistence. It is developed as a mutual debate.

The Ideas Club has been a way of researching and reflecting on important issues - such as gender equality - where the different cultures are increasingly interconnected. It is structured to be as comprehensive as possible, with most of the students belonging to different areas of interest, and going to a wide variety of degree courses.

“It has been a surprising discovery welcoming international students in this journey where we walk through together. The new generation are humble aware of the power of information. I am grateful for witnessing their growth, curiosity and commitment for being the best adult they might be in tomorrow's society.”

Carlotta Pisano, Ideas Club lecturer.
NOVA Doctoral School

NOVA’s Doctoral School (NDS) was created in 2013. Without interfering with the structured PhD programmes of each Academic Unit (AU), NDS offers to PhD candidates, supervisors, researchers, and top university professionals (ex: research managers) a range of complementary, transversal activities and short (2/3 days) courses.

NOVA Doctoral School’s goals can be organized in two domains. Internally it aims to reinforce personal and professional development through transversal skills training; to enhance an open space for discussion within NOVA and to share best PhD practices and resources, promoting cross-fertilization among different scientific areas. Externally NDS aims to create mechanisms of interaction and collaboration with enterprises and the society in general.

From 2013 until the end of 2020 NDS offered a total of 211 editions of its 14 courses, with a total of 3,553 participations. Nova Pedagogical Innovation together with NDS, delivered pedagogical development, supervisory and transferable skills training, with 956 participations from NOVA Faculty members and 316 International Professors from Capacity Building projects.

<table>
<thead>
<tr>
<th>Students in 2020</th>
<th>Students since 1st edition</th>
<th>NOVA Faculty in 2020</th>
<th>NOVA Faculty since 1st edition</th>
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<tr>
<td>363</td>
<td>3,553</td>
<td>67</td>
<td>956</td>
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Lifelong Learning

Lifelong Learning at NOVA accounts for development opportunities after formal education. The continuing development of knowledge and skills that people experience throughout their lives in NOVA University Lisbon’s areas of expertise. Most of NOVA’s 9 Schools offer such opportunities addressing the needs of individuals and organizations. Executive Education plays a significant role in financing Schools.

The following pages explore NOVA’s offer across the different Schools, starting by highlighting specific post graduate programs or courses.

Supply Chain & Operations

This program provides leaders from today the knowledge and skills needed to deepen their knowledge of the supply chain, introducing new trends and promoting digital literacy in business strategy. Topics such as sustainability and the circular economy are explored, eco-efficiency, decarbonizations upply chain, IoT (Internet of Things) and machine learning in the supply chain.

| Students | 13 |

Information Management and Business Intelligence in Healthcare

The Postgraduate Program in Information Management and Business Intelligence (BI) in Healthcare is aimed at professionals who wish to acquire skills in information management, knowledge management and BI in healthcare, and as well as professionals who need to develop studies and projects in Business Intelligence in healthcare.

| Students | 46 |
### Sustainable Construction and Rehabilitation

The course aims to provide students (engineers and architects) with technical and scientific knowledge to enable them to apply the concepts of sustainability and circular economy to the construction sector.

### StartUp Research

The StartUp Research Mission is two-fold: to endow Life Science researchers with an innovation mindset, tailoring their profile to become effectual actors in intertwined relationships between academia and industry; and to build upon the translational value of the research performed in R&D clusters to promote their social impact and sustainability.

### International Course in Quality in Health and Patient Safety

University extension course that results from the partnership with the National School of Public Health - Sérgio Arouca of Oswaldo Cruz Foundation (Fiocruz) in Brazil. It is intended for health professionals who exercise, or intend to perform, functions in health institutions at different levels of health care: Primary (Primary Care), Secondary (Hospital) or Tertiary (Continuing Care), public, private or social sector, in Portugal, Brazil, Portuguese-speaking African Countries (PALOPs) and East-Timor.

### Globalization, Diplomacy and Security

The main goal of this postgraduate course is to assess the great current risks and the possible balance in a global world, providing a high degree of theoretical and applied preparation, contributing to the qualification of candidates in the exercise of leadership, diplomacy or technical advisory functions in public structures of the State, companies, private bodies and within the framework of civil society in the current international system.

### E-course on Women’s Rights and Gender Equality

This online short course aimed at studying the legal mechanisms to protect women’s rights and to promote gender equality at regional and international levels.

### Mental Health Policy and Services (3rd edition)

The program provides an updated and solid understanding of the main topics of these areas and to provide training in:
- Formulation, implementation, and evaluation of mental health policies, plans and programs
- Organization and evaluation of mental health care and related services
- Mental health in complex emergencies
- Mental health law and human rights

### The Lisbon MBA CatólicaNova

The Lisbon MBA CatólicaNova is a joint-venture between two top European business schools based in Lisbon, Nova SBE and Católica-Lisbon, in collaboration with MIT Sloan. The Lisbon MBA is committed to develop students’ full potential to become global principled leaders, capable of having a meaningful impact on business and society and contributing to a better world, by providing them with a unique life changing experience in an entrepreneurial and international environment. Focused on core values of Integrity; Collaboration; Excellence; Innovation; Diversity and Sustainability. The Lisbon MBA is recognized by the most prestigious international rankings in the world (Financial Times and The Economist) among the best MBA’s in the world, with the triple crown accreditation AACSB, Equis and AMBA.
Lifelong Learning management structures

NOVA University Lisbon’s schools are developing management structures to better serve individuals and organizations looking for post graduate training. These structures study the market and structure each school’s offer in each area of expertise. To ensure scientific quality of the service provided, programs involve academics and are subject to academic supervision.

NOVA Information Management School | Executive Education

NOVA IMS Executive Education designs and develops courses and training programs in the area of information management and data science for executives and companies. In a world in constant change, we are at the forefront of the latest methodologies and knowledge that allows us to train professionals who seek continuous updating of their skills.

NOVA School of Business and Economics | Executive Education

At the forefront of training in Portugal, Nova SBE Executive Education brings the best of Nova SBE’s diverse specializations and worldviews, as well as experts in various fields. The Executive Education programs are characterized by a customer service that designs and develops exceptional learning experiences that equip today’s leaders with the most demanded knowledge and skills. Related to sustainable development, we highlight programs such as Social Leadership for Managers, Sustainable Finance and Paradigm Shift.

In the academic year 2019/2020, beyond the traditional executive training portfolio, Nova SBE Executive Education prepared the development of a new innovative platform. One that allowed each individual, team or organization to explore an integrated and diverse offer of learning in a simple and customized way.

“The prestige and competence were essential. And Nova SBE guaranteed us that. Nevertheless, engaging the top executives in training for the transformation of our industry and our bank required more than that, it required proximity. And that was the most important thing that Nova SBE was also able to achieve.”

António Ramalho, President and CEO @ Novo Banco
Lifelong Learning aims to contribute to the qualification in the fields of Social Sciences, Arts and Humanities. The offer is anchored in the work developed by the Departments and Research Units of NOVA FCSH, according to the different typologies.

Postgraduate courses, within 2nd cycle framework and level requirements, provide advanced training in specific fields of social sciences, arts and humanities. Intensive courses target different audiences (students with a different background - university and non-university levels).

Luís Krus Centre also offers free courses, with different lengths. Some examples include Foreign Language courses (Korean Language and Culture). Portuguese Language courses are offered for free to foreigners.

All programs are proposed by professors and researchers and address topics in the areas of Social Sciences and Humanities. To ensure scientific quality all proposals are evaluated by a peer review committee and approved by the NOVA FCSH Scientific Council.
VOLUNTEERING AT NOVA

NOVA University of Lisbon, aware of its social responsibility in raising awareness and promoting the common good and greater social justice, has been promoting and supporting various voluntary activities, in partnership with other entities, civil society organizations, involved directly in the exercise of solidarity and citizenship. The volunteer program sensitizes the entire community to the importance of volunteering, enhancing opportunities for learning and development of technical, scientific, and social skills. It promotes volunteering activities in the social, educational, health, scientific, sports, cultural, environmental and leisure areas to all students.

Students, through Students’ Unions and other formal or informal organizations (such as musical groups or clubs), also develop activities with local organizations and communities. This involvement is very much incentivized by the University as it contributes to their personal and professional development.

This report explores three out of several examples of activities developed in 2020.

![IMPACT STORY](image)

**Project:** Support to homeless people  
**Promoter:** Comunidade Vida e Paz

Comunidade Vida e Paz aims to create and conduct several activities to meet the needs of people in homelessness situations. They aim at recovering these people’s dignity through rehabilitation and reintegration in society. Students engage as volunteers integrating a team that prepares and delivers food to the homeless, in Lisbon.

“In this experience, I came across homeless people, thrown away by society, who were forced to live on the streets. Comunidade Vida e Paz gave me the opportunity to hear their incredible stories and taught me the importance of reaching out and giving a chance to those who every day struggle for a place in this cruel world. I will never forget the love and kindness in their hearts and I will carry all these moments with me forever.”

Afonso Oliveira, IMS
**Project: Navio-Hospital**

Nova Junior Consulting was presented with a challenge from Fundação Alma Lusa - to materialize the project “Navio Hospital”. The main goal of the project is to help children grow under good physical and medical conditions, as well as provide vaccination and accommodation in São Tomé and Príncipe and, when necessary, in other PALOP countries. To support this effort, Nova Junior Consulting developed a pro-bono consulting project whose outputs were a Financial Plan and Cost Structure for the Project's Implementation. By analysing the initial costs and investment needs of the projects and giving recommendations on different types of financing pathways (European funds and corporate partnerships) that will later help the organization bring this project to life.

**Partners: Fundação Alma Lusa**

“Having the opportunity to lead Fundação Alma Lusa’s “Hospital ship” project was an extremely rewarding experience. I am especially happy with having been a part of this project due to its nature - to provide health services to African people who otherwise would not have access to it. Not only did the project allow me to apply financial and managerial concepts in a real-world scenario and to steer a small time of engaged consultants, but it also gave me the opportunity to be involved with an impactful organization in a project that will have a concrete positive impact in many lives.”

Francisco Sousa, SBE

---

**Project: Saúde Porta a Porta**

In a country populated by mostly elderly people, a lot of them with social and economic problems, healthcare access difficulties, it’s essential to develop projects and activities to overcome these challenges. This project focuses mainly on fighting the lack of access to basic healthcare as well as the social isolation in the elderly population by going to their houses, do a clinical check-up and if needed referral to a medical appointment. It allows to complement students curriculum and education, not only with clinical skills but also interpersonal relations and communication, all of them necessary for any future medical doctor or nutritionist.

**Partners**

CUF Infante Santo | Parish Councils: Alcântara, Misericórdia, Estrela e Alvalade | Lisbon City Council

**Donors**

IPDJ | Santander Universidades

“What led me to join SPAP was my search for new experiences and my interest in volunteering and the opportunity to help others. Through this initiative, I was able to learn more about medicine beyond what we learn in college.”

Pedro Rocha, NMS
VALUE CREATION & INNOVATION at NOVA

Value creation and innovation at NOVA is an output of NOVA’s commitment to quality education and innovative research. It bridges the gap between knowledge, industries, and local communities, aspiring for long lasting outcomes and impact. This chapter describes NOVA IMPACT’s activities to promote entrepreneurship and innovation with social and environmental impact.
NOVA Impact’s main mission is to support and foster the development of the University's innovation and entrepreneurship ecosystem, promoting a knowledge-based and high-impact value creation activity through collaborations with industry and society at large. NOVA Impact contributes to the University’s societal benefit by working with academics, researchers and students to apply and maximize the impact of their expertise and research, to foster knowledge transfer and transform innovative results into social and economic value. Its activity is developed in close articulation with NOVA’s Organic Units and Centers for the Valorization and Technology Transfer. With a strong digital presence, NOVA Impact is also part of national and international networks and platforms.

**Activities**

- Support in the management of NOVA’s Intellectual Property rights, from protection to exploitation and value creation from the knowledge produced at the University.
- Fostering an entrepreneurial culture in the NOVA community of students and researchers, through the offer of interdisciplinary training in entrepreneurship and soft skills development.
- Support for the development of scientific, technological or social innovation based startups, including incubation and acceleration programs.
- Establishing bridges between the University and industry or social organizations, through the promotion of collaborative and interdisciplinary activities.

NOVA IMPACT’s activity is aligned with the SDG, namely by ensuring quality education for future entrepreneurs (#4); promoting sustainable economic growth and the creation of highly qualified jobs through new spin-off companies (#8); and fostering knowledge-based and high-impact innovation through the valorization of NOVA’s technologies and specialized knowledge, and collaboration with industry at society (#9).
<table>
<thead>
<tr>
<th>Organization</th>
<th>AWARD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mater Dynamics</td>
<td>Santander X – Global Challenges</td>
</tr>
<tr>
<td>Ophiomics</td>
<td>&quot;People’s Choice Award&quot;, in the Scale Up Portugal Gala</td>
</tr>
<tr>
<td>Modatta</td>
<td>World Summit Award, in the category Business &amp; Commerce</td>
</tr>
<tr>
<td>Sea4Us</td>
<td>Seal of Excellence by the European Commission (SME Instrument / EIC Accelerator call)</td>
</tr>
<tr>
<td>INVISIBLE project</td>
<td>Horizon Impact Award 2020</td>
</tr>
</tbody>
</table>
Entrepreneurship Training at NOVA

Innovation and Entrepreneurship are part of NOVA's culture, being widely promoted within the University’s ecosystem as a way of fostering knowledge transfer and promoting the creation of social and economic value.

NOVA maintains a considerable focus on promoting an entrepreneurial culture among its students, teachers and researchers, through their training and provision of tools for them to innovate and be proactive in the organizations they will create or integrate. The academic community is exposed to the area of entrepreneurship either by the Organic Units, through mandatory or optional curricular units, or by the Rectory, through interdisciplinary programs and initiatives that encourage the creation of multidisciplinary teams and innovative projects.

Between 2016 and 2020, more than 10,000 students were involved in training actions and entrepreneurship competitions at NOVA University. In 2020, the number of students trained in Entrepreneurship surpassed the 2500 barrier, with particular emphasis to FCT NOVA and Nova SBE which, together, have trained more than 2300 students in this area. Also noteworthy are the initiatives promoted by NOVA Impact at the Rectory which, due to their interdisciplinary nature, constitute a unique opportunity to bring together students from different Organic Units and create teams with multidisciplinary and complementary skills, with technological, but also social and business development skills, hence better prepared to respond to social and market challenges.

2,551 Students with Entrepreneurship Training

“Starters Academy is a huge opportunity for you to know more about other entrepreneurs and to know about their experiences. If I had to call it by just one word, it would be challenging because every week you have a new challenge that makes you improve and I would definitely recommend it to a friend”

Nuno Amparo, ENSP-NOVA

Starters Academy

Starters Academy is a very successful entrepreneurship program that runs once a year at NOVA on the second semester of the academic year. Over the past 11 years, hundreds of NOVA students have benefited from this course. Starters Academy aims to stimulate the entrepreneurial spirit of NOVA’s Students and to equip them with the fundamental tools for creating a start-up through a practical approach and the development of a business plan and a go-to-market strategy, supported by a panel of experts and recognized trainers in the field.

This multidisciplinary course is made up of students from all the NOVA Organic Units, who pass the selection process. The skills acquired in this course are valuable not only to those who want to create their own startup but also to develop innovation skills that can a be a competitive advantage in the recruitment processes of startups or established companies.

More info

28 Participants

Partners
Academic Units

Donors
Sanntader Universidades
(Tickets to the European Innovation Academy)
BLUES: Blended-Learning International Entrepreneurship Skills

The BLUES program started in 2017 as an Erasmus+ project, with the goal to promote an innovative approach to teaching Entrepreneurial skills using Blended Learning methodology, combining a MOOC (Massive Open Online Course) with Face-to-Face sessions.

This program occurs once a year and is open to everyone within and outside NOVA (limited to a number of available spots). It allows participants to develop their business idea, or join a multidisciplinary team and create an innovative solution for day-to-day problems, supported by a panel of experts and recognized teachers in the field.

By participating in the Sciencepreneur Hands-on program we were able to mature and outline in more detail the value of our solution and what are the next steps to be taken both in terms of technology and business development, which would not be possible without the valuable help of our dedicated mentors. The sharing of experiences with everyone involved in the program was undoubtedly positive and very enriching.

The ‘Easy Breathie’ Team

Sciencepreneur – Science and Entrepreneurship Course

Launched in 2020 as a joint venture of NOVA Impact and NOVA Doctoral School, the Sciencepreneur program is aimed at NOVA scientists who are seeking to create value from their research activities. It aims to provide PhD students, young scientists and even more senior researchers with proper tools needed to put their research and ideas into a wider context, namely on the valorization of research results and their benefits to the economy and society at large.

Comprising theoretical lectures, case studies and discussion sessions with successful science-based entrepreneurs, investors and corporate CEOs, this course provides insights into the process of knowledge-driven innovation and idea generation, besides creating awareness of the impact that scientists can have from an economical and societal perspective, as well as of protecting intellectual property rights.

After the theoretical part of the program (in which participants do not need to have any business idea to apply for it), the scientists with a knowledge-based business idea or with a technological or scientific can apply to the Sciencepreneur Hands-on, aimed at accelerating knowledge transfer at NOVA, by supporting scientists to identify the best path for knowledge valorization, through a one-on-one guidance on how to build a go-to-market strategy, from research results to impact, either through the creation of the next NOVA Spin-off company or licensing the technology to established companies.
Intellectual Property

NOVA has revised its Intellectual Property (IP) regulation in 2020, clearly defining IP ownership, fees distribution and procedures, and also expanding the scope to cover for example trade secrets, software, contracts or research materials, beyond patents. As a result of the strong focus on innovation, NOVA holds active patents in various fields of knowledge, from Health & Life Sciences to Materials, Engineering and ICT. Some of the patented technologies from NOVA are now available in the website, aiming at fostering cooperation with industry and society.

Also in 2020, NOVA filed 40 patent applications including 7 new national patent applications, 12 PCT applications and 21 applications in 16 international territories, corresponding to the entry in the national phase of the PCT system.

BLOOD-FREE DIET FOR REARING MALARI A MOSQUITO VECTORS

A mosquito diet similar to blood that frees research and control of vector-borne diseases like malaria of financial and ethical constraints. In 2020, the patent was filed in the US (US20210030025) and European (EP3802584) territories.

TREATMENT OF SPINAL CORD INJURY


SUSTAINABLE PHA POLYMER PRODUCTION THROUGH MICROBIAL FERMENTATION

Using the typical 3-stage process for Polyhydroxyalkanoates (PHA) production, sterilization is not necessary, thereby decreasing the overall costs of production of PHA in comparison to pure culture systems. Using this technology, a mixture of two monomers is often produced as a result: 3-hydroxybutyrate and 3-hydroxyvalerate, which are both short-chain length PHA (scl-PHA). Herein described is a medium-chain length PHA, a polymer containing 3-hydroxyhexanoate and its method of production and uses thereof. Due to the existence of medium-chain length monomer, this technology is cheaper in comparison to pure culture systems, it is a sustainable alternative to oil-based plastics; and it has improved properties in comparison to scl-PHA, making it suitable for a wide range of applications. Provisional Patent Application Nº 116619 filed at INPI on July 31, 2020.

DID YOU KNOW?

A patent is a time-limited and territorial Intellectual Property Right which provides the patent owner exclusive rights on the patented technical invention. The number of patents is among the most prevalent metrics to assess innovation performance, which appear in the indicators of several University rankings.
**Entrepreneurship**

NOVA is committed to encouraging the creation of new spin-off companies born from the knowledge generated at the University. Companies formally recognized with the NOVA Spin-off seal have access to a set of benefits, ranging from exclusive and royalty-free licensing to the technology commercialization phase, duly authorized time allocation for professors or researchers who are also promoters of NOVA spin-offs to support the commercial development of the project, as well as easy access to space or advanced equipment available at the University.

Other support and activities include the creation of new businesses and companies, through partnerships that provide easy access to a wide range of services and support necessary for the development of projects and business ideas.

### Plugged In NOVA

In 2020, several start-ups born from the knowledge produced at NOVA presented innovative solutions to respond to the COVID-19 pandemic, from diagnostics and therapeutics to innovation platforms. Below, we highlight the start-ups from NOVA ecosystem that have actively contributed with solutions to tackle several issues raised by the pandemic.

#### CellmAbs

CellmAbs is a NOVA spin-off founded in 2019 and a success case of translational research. CellmAbs technology is the outcome of years of research conducted at NOVA (FCT NOVA and NMS) in collaboration with Porto Institute of Oncology (IPO Porto) and HZDR in Germany. NOVA led the licensing of this proprietary technology that is being protected worldwide.

CellmAbs raised EUR 1.5M to fund the preclinical development of its drugs, in the largest Portuguese immuno-oncology seed round ever seen and is already raising its series A round of financing.

During the current pandemic, the spin-off company has also been exploring ways of leveraging its innovative cancer therapies in the fight against COVID-19, with very promising results on using its antibodies for neutralizing SARS-CoV-2.

#### YourBiome

YourBiome is a NOVA spin-off linked to the NOVA Medical School with the mission to ensure safe and effective access to treatments based on fecal microbiota transplantation and to develop new microbiome-based therapies for diseases in which dysbiosis may play a role.

During the pandemic, the spin-off put efforts on transferring the knowledge acquired with the characterization of the intestinal microbiota of patients with COVID-19 with a view to developing a therapy based on microbiota, aimed at reducing individual susceptibility to SARS-CoV-2 and improve the clinical results of COVID-19.

#### STAB VIDA

STAB VIDA is a company based in Madan Parque, strongly connected to the FCT NOVA campus in Caparica. Since the 1st of March 2020, STAB VIDA redirected its R&D team to COVID-19 testing. The company filed a patent application for a small pocket test that detects the presence of coronavirus in less than 30 minutes. Doctor Vida is a portable, handheld device for isothermal nucleic acid amplification of viral genetic biomarkers. It is operated from any smartphone in a clinical or research setting, but also at home or any other place. This device runs single samples, with low risk of contamination and 98% accuracy. More info available [here](#).
Social Innovation

To preserve social equality and foster the harmonious and sustainable development of societies, it is necessary to seek innovative solutions to social problems. NOVA is committed to put its knowledge to the service of society at large, as well as to promote social entrepreneurship among its academic community.

The NOVA impact! Challenges competition was launched in 2020, during the Covid-19 pandemic, by the NOVA Impact Office, reinforcing the importance of innovation and social entrepreneurship to obtain innovative responses, due to its potential for impact and sustainability. Moreover, several Academic Units from NOVA have in place different initiatives addressing social innovation and entrepreneurship such as the ones promoted by the Leadership for Impact Nova SBE’s Knowledge Center or by NOVA FCSH’s Innovation Hub.

The INNO - NOVA Center for Social Innovation was designed as an innovative and unique center in Portugal, whose objectives are to develop, create and improve social structures and processes, and with the mission of contributing to the development and social harmony of the population, through the establishment of a differentiated and dynamic relationship, between the NOVA University Lisbon - institution producing social knowledge - and multiple entities from social sectors.

The INNO - Nova Center for Social Innovation will foster the interconnection of the various schools of NOVA, leveraging the development of new lines of action and innovation, transmission of knowledge and different interdisciplinary approaches in order to respond to multiple social problems.

NOVA impACT! Challenges

In 2020, the NOVA Impact office invited the students and researchers from NOVA to join the NOVA impACT! Challenges program. This pioneer initiative aimed to find 10 groundbreaking, easy to implement and impactful solutions to address challenges posed by the new normal expected to arise during and after the coronavirus pandemic, putting knowledge, creativity and innovation at the service of society.

During 3 full weeks (13-31 July), selected candidates got access to workshops, specialized mentoring and other University resources to develop a proof of concept/prototype. Solutions should be aligned with at least 1 Sustainable Development Goal (SDG) from the United Nations and ranged from the promotion of social inclusion and physical and mental wellbeing, to reducing social inequalities and promoting sustainable economic recovery.

Smart Inhaler - Easy Breathie is the winner in 2020.

Social Leapfrog Program

3-year pioneer capacitation program for hybrid social organizations using the school’s services and community, with the main goal of reaching higher impact and financial sustainability. Promoted by the Leadership for Impact Nova SBE’s Knowledge Center, the program develops several activities, from master’s thesis to executive education programs.

The 2nd edition started in September 2020, adding 10 new organizations to the program.
**CoLABs**

CoLABs are associations of research units, higher education institutions, companies, intermediate and interface institutions, technology centres, business associations and partners in the productive, social and cultural sectors. In addition to coordinating InnovPlantProtect and Value for Health CoLABs, NOVA also participates in 7 more collaborative laboratories and foresees the creation of additional CoLABs. ALMASCIENCE is headquartered at the Campus of Caparica in order to allow a future expansion in the emerging areas of flexible electronics and biomedical applications.

These CoLABs are actively working to find practical, innovative and sustainable solutions in areas as diverse as agriculture, cybersecurity, food, health, sustainability, environment, circular economy and biorefineries.

**InnovPlantProtect**

The InnovPlantProtect CoLAB (InPP) promoted by NOVA University Lisbon, is a joint effort of four Organic Units of NOVA (ITQB NOVA, FCT NOVA, NOVA IMS and Nova SBE), INIAV, the Municipality of Elvas, two major multinational companies (Bayer CropScience and Syngenta Crop Protection), an SME (Fertiprado), an agro-biotech research Centre in Beja (CEBAL), four farmer/industrial Associations covering a wide variety of plants and Évora University.

InPP was created in 2019 to develop innovative bio-based solutions to protect crops from pests and diseases and provide diagnostic and monitoring services, thus contributing to the sustainability of agricultural systems. Its priority focus is Mediterranean crops, in particular their protection against emerging pests and diseases associated with climate change, whose harmful effects are already visible in many countries, including Portugal.

By the end of 2020, InPP was already employing 20 highly qualified professionals, a number that is predicted to double in 2021.

**Value for Health CoLab**

Value for Health CoLAB (VOH.CoLAB) is a non-profit private organization whose mission is to help people and organizations, worldwide, to measure value in Health, empowering everyone to take the right decisions.

The founding partners, including NOVA University Lisbon, José de Mello Saúde, Vodafone Portugal and Fraunhofer Portugal, have centralized competencies and resources to accelerate the fundamental restructuring of healthcare delivery towards a paradigm shift to Value-Based Healthcare and Patient Empowerment.

During 2020 VOH.CoLAB developed a pilot project at Hospital de Santa Marta (Lisboa) for outcomes’ measurement through IoT devices. The project entitled “Show me my Heart” merges data from inpatient and outpatient, and uses Artificial Intelligence tools to predict complications and IoT devices to support the clinical team in the decision-making process.

Patients are empowered to measure outcomes and engaged for a faster post-surgical recovery.

**ALMASCIENCE**

ALMASCIENCE is an applied research organization focused on innovation, development and deployment of cellulose based smart and sustainable applications.

Through the exploitation of nanotechnology and advanced functional materials and their use to create ecological game-changing paper-based, fully printable, multifunctional devices and systems, ALMASCIENCE aims to deliver ecologically sustainable and universally accessible solutions by effectively enabling IoT in areas like: security, environment, health, brand protection, electronics, logistics, food or marketing.

Paper electronics holds a unique potential to bring intelligence into everyday objects and areas of our daily life such as radio-frequency identification (RFID), health, tags in shipping and inventory management, self-updating plane tickets or food labels.

In 2020, this CoLAB created 13 highly qualified jobs, a number that is expected to increase to 30 in 2021.
ORGANIZATIONAL SUSTAINABILITY
ORGANIZATIONAL SUSTAINABILITY

This section reflects upon NOVA University Lisbon’s organizational performance towards sustainability. Structured around environmental and social impacts, and governance, it highlights major indicators from different activities. NOVA’s infrastructure is also considered, analysing areas and consumptions.
Organizational Sustainability

NOVA University Lisbon’s three missions drive NOVA’s contribution to the Global Challenges. While research develops knowledge and promotes innovation, its transfer to society scales new solutions and creates value. NOVA also accelerates change by educating future generations of informed citizens and leaders. These results could only be possible with a strong organizational commitment towards sustainability, defining strategy and giving NOVA’s different stakeholders the right conditions to excel.

Following management best practices NOVA also accounts for its organizational transformation towards sustainability, complying with the Green Deal, the Paris Agreement, and the Sustainable Development Goals. NOVA 4 The Globe illustrates this commitment, from research to organizational performance.

In 2020, the University strengthened its sustainability strategy by consolidating NOVA 4 The Globe’s activity. The Operational Council 4 Sustainability started its regular meetings, aligning all 9 Schools around sustainability. Its activity addresses the sustainability strategy, by defining new policies, monitors and evaluates results, and accounts for the university performance expressed by the sustainability rankings.

Sustainability Policies

Sustainability Policies are a first step in NOVA’s sustainability journey. While defining its strategy and goals across different dimensions, they regulate and give context to already existing activities.

Policies pave the way towards a more informed and conscious action.

Sustainability Reporting

NOVA’s Sustainability Policy will be monitored and evaluated every year, starting in 2020. Sustainability Reporting is part of NOVA’s sustainability management strategy establishing a baseline for future decision-making.

Sustainability Rankings

Rankings are an opportunity to assess organizational performance across different sustainability dimensions, including research. Although they do not drive internal decision-making, they are an excellent support to reassure NOVA is on the right track considering its peers.

Rankings challenge Universities to move forward and to excel.

Latest Results

## NOVA Sustainability Map

<table>
<thead>
<tr>
<th>Description</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Total area:</strong></td>
<td>821.066 m²</td>
</tr>
<tr>
<td><strong>Green area:</strong></td>
<td>494.167 m²</td>
</tr>
<tr>
<td>60% of the total area</td>
<td></td>
</tr>
<tr>
<td><strong>Ground floor area:</strong></td>
<td>98.549 m²</td>
</tr>
<tr>
<td><strong>Gross floor area:</strong></td>
<td>287.832 m²</td>
</tr>
<tr>
<td><strong>Energy Consumption:</strong></td>
<td></td>
</tr>
<tr>
<td>13.8% of the energy consumed</td>
<td></td>
</tr>
<tr>
<td><strong>Electricity:</strong></td>
<td>18,352,136 kWh (Service provider)</td>
</tr>
<tr>
<td>2.940,139 kWh (Renewable sources)</td>
<td></td>
</tr>
<tr>
<td><strong>Water Consumption:</strong></td>
<td>441,944 m³ (Service provider)</td>
</tr>
<tr>
<td>21,227 m³ (Renewable sources)</td>
<td></td>
</tr>
<tr>
<td><strong>Campus population:</strong></td>
<td>25,737</td>
</tr>
</tbody>
</table>

### Environmental Impact

NOVA’s infrastructure as well as the different activities held on campuses are a key aspect of the University's environmental impact. This chapter establishes a baseline across different indicators that will enable NOVA’s active sustainability management moving forward.
Eco-Schools

Eco-Schools is the largest global sustainable schools programme – it starts in the classroom and expands to the community by engaging the next generation in action-based learning. The programme’s greatest achievement, according to their global website, is arguably the fact that it produces generation after generation of sustainably minded, environmentally conscious people.

Eco-Schools actively support students by fostering critical problem-solving skills, systems thinking and preparing them to become future decision-makers and tackle sustainability challenges in life and in the workforce. 4 Academic Units participate in the program, and 3 were awarded a green flag, distinguishing their efforts and commitments to become more sustainable (Medical School, School of Social Sciences and Humanities and School of Science and Technology).

See more

Tap Water

All Campi provide free access to clean tap water and some of NOVA’s Academic Units signed-up to the exclusive consumption of tap water in their facilities. By encouraging the consumption of tap water, NOVA promotes environmentally sustainable solutions and universal access, while incentivizing the reduction in plastic packaging.

Covid-19

The pandemic reaches its first peak in March 2020. NOVA’s Campi experienced a lockdown as face-to-face classes were suspended. Although the situation evolved during the year, with ups and downs, all the activities experienced a severe slowdown, with remote work prevailing. Not only commuting was affected, but consumptions in general, namely energy, water, or waste.

NOVA’s Infrastructure

NOVA University Lisbon is the university of the Lisbon metropolitan area with its teaching and research schools, and institutes, in the centre of Lisbon, Almada, Oeiras, and Cascais. All campi are served by public transports which promotes sustainable commuting. Within the campi, pedestrian access is facilitated and prioritised.

The University has three residence halls with a total of 460 beds for students, with priority given to Portuguese scholarship students and foreign students in exchange programs.

NOVA has several libraries specialized in a wide variety of thematic fields, covering all areas of knowledge. Together they offer a collection of over 307,000 printed books, 6,388 printed journal titles, over 18,000 e-journal titles, theses and dissertations, 26,300 ebooks, and access to bibliographical, statistical and financial databases.
Campolide Campus

The Campolide Campus is home to the Rectorate, the Social Welfare Services, and three Schools of NOVA University Lisbon:

- NOVA Information Management School
- NOVA School of Social Sciences and Humanities
- NOVA School of Law

Located in central Lisbon, this campus is served by several public transports. The Campolide Campus has one Hall of Residence – the Alfredo de Sousa Hall of Residence. The Rectorate occupies an original building distinguished with the Prémio Valmor de Arquitectura, an award that recognizes the architectural quality of new buildings in the city of Lisbon. The Rectorate hosts several offices that support the Rector and the University.

The campus is open to the community and pedestrian paths are available.

---

Campus population

- Total area: 58,207 m²
- Green area: 16,907 m²
- Ground floor area: 11,795 m²
- Gross floor area: 36,642 m²
- Parking area: 13,838 m²
- Parking spaces: 631
- Electric charging stations: 0

Sustainability indicators (aggregate)

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Amount</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Energy (Service provider)</td>
<td>1,772,958 kWh</td>
<td>0 kWh (Renewable sources)</td>
</tr>
<tr>
<td>Energy (Renewable sources)</td>
<td>0 kWh</td>
<td></td>
</tr>
<tr>
<td>Water (Service provider)</td>
<td>18,771 m³</td>
<td>4,046 m³ (Renewable sources)</td>
</tr>
<tr>
<td>Water (Renewable sources)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Waste (Total production)</td>
<td>14,32 t</td>
<td>N/A t (Recycled)</td>
</tr>
<tr>
<td>Commuting (Annual entrances)</td>
<td>552,280 cars</td>
<td>N/A (Use of other transports)</td>
</tr>
</tbody>
</table>

1. Electricity and Gas.
2. Not discriminated.
3. There are parking spots for bicycles.
4. The number is an estimate based on annual parking permits (1,187 were issued for students (646), faculty and staff (541)) x 2 trips per day x 20 days x 11 months.
### Almada Negreiros College

- **Gross floor area:** 13,990 m²
- **69,514 m³** (Service provider)
- **0 m³** (Renewable sources)
- **507,114 KWh** (Service provider)
- **0 kWh** (Renewable sources)

### Rectorate

- **Gross floor area:** 11,624 m²
- **435,591 KWh** (Service provider)
- **0 KWh** (Renewable sources)
- **1,171 m³** (Service provider)
- **0 m³** (Renewable sources)
- **N/A t** (Total production)
- **N/A t** (Recycled)
- **152** (Car Permits)

### Alfredo de Sousa Hall of Residence

The residence as 180 beds, with different room typologies, kitchens and common rooms. The places are in priority for scholarship holders (112) and exchange program students. In the residence building there is a canteen with 200 seats and a snack-bar.

- **Gross floor area:** 5,431 m²
- **428,588 KWh** (Service provider)
- **0 kWh** (Renewable sources)
- **5,288 m³** (Service provider)
- **0 m³** (Renewable sources)
- **N/A t** (Total production)
- **N/A t** (Recycled)
NOVA Information Management School

NOVA IMS is located at Campolide Campus. The classes are taking place at the NOVA IMS Building and Almada Negreiros College. Being located in the Campolide Campus, NOVA IMS enjoys its beautiful garden, and the easy access to public transports and bicycle trails.

<table>
<thead>
<tr>
<th>Energy Source</th>
<th>Amount</th>
<th>Type</th>
</tr>
</thead>
<tbody>
<tr>
<td>Service provider</td>
<td>219,050 kWh</td>
<td>219,050 kWh (Service provider)</td>
</tr>
<tr>
<td>Renewable sources</td>
<td>0 kWh</td>
<td>0 kWh (Renewable sources)</td>
</tr>
<tr>
<td>Service provider</td>
<td>833 m³</td>
<td>833 m³ (Service provider)</td>
</tr>
<tr>
<td>Renewable sources</td>
<td>0 m³</td>
<td>0 m³ (Renewable sources)</td>
</tr>
<tr>
<td>Total production</td>
<td>14.32 t¹</td>
<td>14.32 t¹ (Total production)</td>
</tr>
<tr>
<td>Recycled</td>
<td>0 t</td>
<td>0 t (Recycled)</td>
</tr>
<tr>
<td>School car permits</td>
<td>517</td>
<td>517 (School car permits)</td>
</tr>
<tr>
<td>Use of other transports</td>
<td>N/A</td>
<td>N/A (Use of other transports)</td>
</tr>
</tbody>
</table>

¹ Estimate, not discriminated.

Gross floor area: 1,748 m²
NOVA School of Law

Gross floor area: 2,882 m²

160,711 kWh
(Service provider)

0 kWh
(Renewable sources)

374 m³
(Service provider)

0 m³
(Renewable sources)

N/A t
(Total production)

N/A t
(Recycled)

236
(School car permits)

N/A
(Use of other transports)
Caparica Campus

Located in Caparica, Almada, it is formed by a set of 27 buildings. It’s well integrated in the urban tissue, being very close to Almada city centre, Lisbon, and Costa da Caparica beaches, by private or public transportation. It includes the Fraústo da Silva Hall of Residence, a library, minimarkets, a day-care centre and a FabLab. Two charging stations are available for electric vehicles, as well as free drinking fountains and several recycling bins (indoor and outdoor). FCT NOVA has an area of over 50% dedicated to outdoor spaces, where one can find a pond for wildlife and sports grounds.

Campus population

| Total area: | 592,728 m² |
| Green area: | 419,464 m² |
| Ground floor area: | 33,766 m² |
| Gross floor area: | 91,708 m² |
| Parking area: | 34,040 m² |
| Parking spaces: | 1,702 |
| Electric charging stations: | 4 |

Parking spaces: 1,702
Electric charging stations: 4

Sustainability indicators

<table>
<thead>
<tr>
<th>Sustainability indicators</th>
<th>Energy</th>
<th>Water</th>
<th>Waste²</th>
<th>Commuting³</th>
</tr>
</thead>
<tbody>
<tr>
<td>Energy</td>
<td>5,280,915 kWh (Service provider)</td>
<td>29,051 kWh (Renewable sources)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Water</td>
<td>65,642 m³ (Service provider)</td>
<td>3,285 m³¹ (Renewable sources)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Waste²</td>
<td>123,64 t (Total production)</td>
<td>47,64 t (Recycled)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Commuting³</td>
<td>102,520 cars⁴ (Annual entrances)</td>
<td>N/A (Use of other transports)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Good practices | Via Verde Boleias

The partnership between FCT NOVA and Via Verde under the program Via Verde Boleias allows students to share their rides to school. Through this program, students have access to a platform where they can request and offer shared rides to simplify the process of car sharing and reduce the cost of travel, while moving towards a more sustainable world.

¹ Estimated (last valid reading is from 2014).
² Production is estimated. Recycling includes paper, plastic, glass, construction materials, electronic materials/devices, and toxic waste.
³ There are parking spots for bicycles.
⁴ The number of annual car entrances is estimated.
Carcavelos Campus

The new campus project combines academic quality with the lifestyle that Portugal - especially the Lisbon and Cascais region – offer: safe, cozy, near the sea, and accessible, in a country with history and culture. Facing the sea next to the Carcavelos beach, with an area of more than 66,000 m², it has low buildings and large open green spaces open to the community.

In April 2019 the Carcavelos Campus won the award for Best Real Estate Project of the Year and Best Collective Equipment at the 21st edition of the Real Estate National Awards.

Campus population

- Total area: 78,347 m²
- Green area: 30,945 m²
- Ground floor area: 29,976 m²
- Gross floor area: 64,556 m²
- Parking area: 16,508 m²
- Parking spaces: 550
- Electric charging stations: 8

Sustainability indicators

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Service provider</th>
<th>Renewable sources</th>
</tr>
</thead>
<tbody>
<tr>
<td>Energy</td>
<td>3,634,676 KWh</td>
<td>2,911,088 KWh</td>
</tr>
<tr>
<td>Water</td>
<td>28,926 m³</td>
<td>13,896 m³</td>
</tr>
<tr>
<td>Waste</td>
<td>N/A t</td>
<td>N/A t</td>
</tr>
<tr>
<td>Commuting*</td>
<td>N/A cars</td>
<td>N/A</td>
</tr>
</tbody>
</table>

Good practices | NOVA SBE x TOMRA Container Deposit Scheme

Following the European Plastics Strategy, Nova SBE and Cascais Municipality joined TOMRA, a well-known Norwegian multinational, to carry out the first pilot project for a beverage packaging deposit system in Portugal. The equipment installed on campus allows the consumer to deposit the packaging waste and receive a value for the deposit left there, thus reducing its environmental impact and promoting recycling.

*There are parking spots for bicycles.
IHMT-NOVA carries out its activity in a building dating back to 1958. It is a robust, large building with wide walls lined with marble panels. Due to its privileged location, it has excellent sun exposure and a large area of gardens and forest, which allows students to enjoy outdoor walks. It has its own cafeteria and is well served by public transport.

Junqueira Campus

- Total area: 28,816 m²
- Green area: 14,589 m²
- Ground floor area: 3,715 m²
- Gross floor area: 14,959 m²
- Parking area: 2,940 m²
- Parking spaces: 147
- Electric charging stations: 0

Sustainability indicators

<table>
<thead>
<tr>
<th></th>
<th>Energy</th>
<th>483,506 kWh (Service provider)</th>
<th>0 kWh (Renewable sources)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Water</td>
<td>9,203.69 m³ (Service provider)</td>
<td>0 m³ (Renewable sources)</td>
</tr>
<tr>
<td></td>
<td>Waste</td>
<td>N/A t (Total production)</td>
<td>N/A t (Recycled)</td>
</tr>
<tr>
<td>Commuting¹</td>
<td>37,400 cars² (Annual entrances)</td>
<td>N/A (Use of other transports)</td>
<td></td>
</tr>
</tbody>
</table>

¹ There are parking spots for bicycles.
² The number is an estimate based on annual parking permits (85 were issued for students (15), faculty and staff (70)): 85 Permits x 2 trips per day x 20 days x 11 months.
Oeiras Campus

ITQB NOVA is located within Estação Agronomica Nacional, an agricultural research station with beautiful surroundings, including the vineyards of Carcavelos wine. The ITQB NOVA community benefits from all this space, and you can find students and faculty strolling (or jogging) throughout the whole campus. The main building is set on a space with 1,25 km\(^2\). Oeiras Municipality is currently recovering the space.

Campus population

<table>
<thead>
<tr>
<th>Total area: 17.760 m(^2)</th>
<th>Green area: 1293 m(^2)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ground floor area: 3.828 m(^2)</td>
<td>Gross floor area: 17.235 m(^2)</td>
</tr>
<tr>
<td>Parking area: 5.000 m(^2)</td>
<td>Parking spaces: 250</td>
</tr>
<tr>
<td>Electric charging stations: 3</td>
<td></td>
</tr>
</tbody>
</table>

Sustainability indicators

<table>
<thead>
<tr>
<th>Energy(^1)</th>
<th>5.027.141 kWh (Service provider)</th>
<th>0 kWh (Renewable sources)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Water</td>
<td>18.964 m(^3) (Service provider)</td>
<td>0 m(^3) (Renewable sources)</td>
</tr>
<tr>
<td>Waste(^2)</td>
<td>1970 t (Total production)</td>
<td>515 t (Recycled)</td>
</tr>
<tr>
<td>Commuting(^3)</td>
<td>53.763 cars(^4) (Annual entrances)</td>
<td>N/A (Use of other transports)</td>
</tr>
</tbody>
</table>

Good practices | Think Blue and Be Green

ITQB NOVA has been running for over a decade a comprehensive environmental initiative: the Think Blue/Be Green initiative. Within this scope, the ITQB NOVA community has been called upon to reduce water and electricity consumption, making environmental friendly choices and reducing ITQB NOVA carbon’s footprint. It has also taken measures to reduce consumption, such as installing automatic faucets and reducing water flow.

---

\(^1\) Electricity and natural gas.


\(^3\) There are parking spots for bicycles.

\(^4\) Estimate based on past data (pre-Pandemic).
Avenida de Berna Campus

NOVA University of Lisbon – School of Social Sciences and Humanities (NOVA FCSH) opened its doors in January 1978 as an educational institution that bet on social and human sciences, challenging the leading role that was then given to letters. Since that year, the future begins here, in the institution that was a pioneer in many areas of knowledge that it hosts, but, above all, in the vision it develops for teaching and research, which today culminates in a permanent commitment: interdisciplinarity, internationalization and transfer of knowledge for the society.

Campus population

Total area: 10,987 m²
Green area: 1,207 m²
Ground floor area: 5,165 m²
Gross floor area: 24,892 m²
Parking area: 8,346 m²
Parking spaces: 242
Electric charging stations: 0

Sustainability indicators

<table>
<thead>
<tr>
<th>Sustainability category</th>
<th>Value (2019)</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Energy</td>
<td>711,662 kWh</td>
<td>(Service provider)</td>
</tr>
<tr>
<td></td>
<td>0 kWh</td>
<td>(Renewable sources)</td>
</tr>
<tr>
<td>Water</td>
<td>214,296 m²</td>
<td>(Service provider)</td>
</tr>
<tr>
<td></td>
<td>0 m²</td>
<td>(Renewable sources)</td>
</tr>
<tr>
<td>Waste¹</td>
<td>N/A t</td>
<td>(Total production)</td>
</tr>
<tr>
<td></td>
<td>11.71 t</td>
<td>(Recycled)</td>
</tr>
<tr>
<td>Commuting²</td>
<td>96,800 cars²</td>
<td>(Annual entrances)</td>
</tr>
<tr>
<td></td>
<td>N/A</td>
<td>(Use of other transports)</td>
</tr>
</tbody>
</table>

Good practices | Installation of 10 water dispensers

The fountains have a filtration system connected to the mains, with hot, cold or natural water, encouraging the community to use their own reusable bottle. The appliances, equipped with a stainless steel reservoir and hot tank, are located in Avenida de Berna Campus and Colégio Almada Negreiros, in Campolide Campus.

¹ Includes paper, electronic materials/devices, and toxic waste.
² There are parking spots for bicycles.
³ The number is an estimate based on annual parking permits (220 were issued for students (20), faculty and staff (200)): 220 Permits x 2 trips per day x 20 days x 11 months.
Santana Campus

NMS main Campus at the top of the Santana Hill, includes the charming historical qualified headquarters building, two modern research buildings and the library. NMS was the first faculty in Portugal recognized as an Eco-School and is awarded with the Green Flag since 2015.

Campus population

- Total area: 19,345 m²
- Green area: 1,569 m²
- Ground floor area: 10,169 m²
- Gross floor area: 28,089 m²
- Parking area: 5,582 m²
- Parking spaces: 166
- Electric charging stations: 2

Sustainability indicators

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Service provider</th>
<th>Renewable sources</th>
</tr>
</thead>
<tbody>
<tr>
<td>Energy</td>
<td>1,595,701 kWh</td>
<td>0 kWh</td>
</tr>
<tr>
<td></td>
<td>(Service provider)</td>
<td>(Renewable sources)</td>
</tr>
<tr>
<td>Water</td>
<td>6,193.16 m³</td>
<td>0 m³</td>
</tr>
<tr>
<td></td>
<td>(Service provider)</td>
<td>(Renewable sources)</td>
</tr>
<tr>
<td>Waste¹</td>
<td>39.79 t</td>
<td>0 t</td>
</tr>
<tr>
<td></td>
<td>(Total production)</td>
<td>(Recycled)</td>
</tr>
<tr>
<td>Commuting²</td>
<td>83,600 cars³</td>
<td>N/A</td>
</tr>
<tr>
<td></td>
<td>(Annual entrances)</td>
<td>(Use of other transports)</td>
</tr>
</tbody>
</table>

Good practices | Fill forever bottle distribution

Reusable water bottles distribution to 1st year students from the Integrated Master’s Degree in Medicine and the Bachelor’s Degree in Nutrition Sciences to encourage the consumption of tap water and to reduce the purchase of disposable plastic bottles.

¹Includes toxic waste.
²There are parking spots for bicycles.
³The number is an estimate based on annual parking permits (190 were issued for students (0), faculty and staff (190)): 220 Permits x 2 trips per day x 20 days x 11 months.
Lumiar Campus

The National School of Public Health building, with a construction area of 3870 m², is a part of the National Health Institute Doutor Ricardo Jorge facilities. The initial building project was developed by the architect António Pardal Monteiro and was completed in 1972.

The project to expand the facilities was commissioned, in 1983, including the creation of another floor as had already been foreseen in its initial design, a work that was completed two years later.

Campus population

Total area: 14.693 m²
Green area: 8.193 m²
Ground floor area: 1.100 m²
Gross floor area: 3.480 m²
Parking area: 2.305 m²
Parking spaces: 70

Sustainability indicators

<table>
<thead>
<tr>
<th>Sustainability indicator</th>
<th>Value 1</th>
<th>Value 2</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Energy</strong></td>
<td>60.305 kWh &lt;br&gt;(Service provider)</td>
<td>0 kWh &lt;br&gt;(Renewable sources)</td>
</tr>
<tr>
<td><strong>Water</strong></td>
<td>2.427 m³ &lt;br&gt;(Service provider)</td>
<td>0 m³ &lt;br&gt;(Renewable sources)</td>
</tr>
<tr>
<td><strong>Waste</strong></td>
<td>N/A t &lt;br&gt;(Total production)</td>
<td>N/A t &lt;br&gt;(Recycled)</td>
</tr>
<tr>
<td><strong>Commuting</strong></td>
<td>N/A cars &lt;br&gt;(Annual entrances)</td>
<td>N/A &lt;br&gt;(Use of other transports)</td>
</tr>
</tbody>
</table>
Halls of Residence

Fraústo da Silva Hall of Residence

Integrated in the boundaries of the Caparica Campus, next to a big green area, the residence has 210 beds, with different room typologies, kitchens, common rooms and a big garden. The places are in priority for scholarship holders (112) and exchange program students.

Ground floor area: 1,852 m²
Gross floor area: 4,834 m²
Parking area: 600 m²
Parking spaces: 30
Electric charging stations: 0

606,944 kWh (Service provider)
5,528 m³ (Service provider)
N/A t (Total production)

(Transmission)

0 kWh (Renewable sources)
0 m³ (Renewable sources)
N/A t (Total production)

Lumiar Hall of Residence

The residence as 70 beds, with different room typologies, kitchen and a common room. The places are in priority for scholarship holders (20) and exchange program students.

Ground floor area: 183 m²
Gross floor area: 1,437 m²
Parking area: 0 m²
Parking spaces: 0
Electric charging stations: 0

137,789 kWh (Service provider)
1,646 m³ (Service provider)
N/A t (Total production)

(Transmission)

0 kWh (Renewable sources)
0 m³ (Renewable sources)
N/A t (Total production)
### Employment

| Employees (faculty and staff) | 2,564,37 |

### Gender Equality

| Number of female employees (faculty and staff) | 364,6 (43,9%) |
| Number of female senior academic staff | 364,6 (43,9%) |
| Proportion of publications by female authors | 50,6% |

<table>
<thead>
<tr>
<th>By subject area:</th>
<th>Aggregate</th>
<th>STEM</th>
<th>Medicine</th>
<th>Arts &amp; Humanities / Social Sciences</th>
</tr>
</thead>
<tbody>
<tr>
<td>Female students</td>
<td>1,533 (52,4%)&lt;sup&gt;1&lt;/sup&gt;</td>
<td>436 (42%)&lt;sup&gt;3&lt;/sup&gt;</td>
<td>541 (73,1%)&lt;sup&gt;3&lt;/sup&gt;</td>
<td>1,465 (66,9%)&lt;sup&gt;3&lt;/sup&gt;</td>
</tr>
<tr>
<td>Women starting first degrees</td>
<td>545 (52,1%)&lt;sup&gt;2&lt;/sup&gt;</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>First generation women starting first degrees</td>
<td>2,442 (56,1%)&lt;sup&gt;3&lt;/sup&gt;</td>
<td>436 (42%)&lt;sup&gt;3&lt;/sup&gt;</td>
<td>541 (73,1%)&lt;sup&gt;3&lt;/sup&gt;</td>
<td>1,465 (66,9%)&lt;sup&gt;3&lt;/sup&gt;</td>
</tr>
<tr>
<td>Female graduates</td>
<td>1,067 (43,7%)&lt;sup&gt;4&lt;/sup&gt;</td>
<td>142 (32,6%)&lt;sup&gt;4&lt;/sup&gt;</td>
<td>224 (41,4%)&lt;sup&gt;4&lt;/sup&gt;</td>
<td>701 (47,8%)&lt;sup&gt;4&lt;/sup&gt;</td>
</tr>
<tr>
<td>Female first degree graduates</td>
<td>1,465 (56,9%)&lt;sup&gt;3&lt;/sup&gt;</td>
<td>224 (41,4%)&lt;sup&gt;4&lt;/sup&gt;</td>
<td>701 (47,8%)&lt;sup&gt;4&lt;/sup&gt;</td>
<td></td>
</tr>
</tbody>
</table>

<sup>1</sup> % of students starting first degree.<br>
<sup>2</sup> % of first generation students starting first degree.<br>
<sup>3</sup> % of total graduates.<br>
<sup>4</sup> % of total female graduates.

### Social Impact

Social Impact is a natural consequence of an organizational structure with employees and other stakeholders, who directly benefit from its activity. Besides this natural engagement with its internal stakeholders, universities actively address social issues.

NOVA takes care of its Talent, from researchers to professors, from staff to students, promoting inclusiveness and opportunities for all. This chapter describes some of NOVA’s indicators that address these dimensions, namely inclusiveness, gender equality, occupational health, and financial support. It also describes other activities developed that extend these benefits to the community in general, namely Health, Culture, or Sports. It also describes some initiatives developed by the different Academic Units.
Diversity and Inclusion

Open to the globe, NOVA is particularly open to diversity. While welcoming students and faculty from all over the world, it recognizes the importance of the language as an inclusion factor, offering degrees and courses both in Portuguese and English.

Among other targets, NOVA has been particularly active in addressing the inclusion of people with disabilities and immigrant minorities, working together with local communities and civil society organizations. Reducing inequalities among NOVA Community, particularly among students and staff, is also a distinguishing factor of its intervention.

The Inclusive Community Forum addresses the lives of people with disabilities that seeks to promote a more inclusive community. It intends to build a network composed of all those who intervene in the lives of these people, challenging them to play an active role in co-creating solutions.

Gender Equality

NOVA’s commitment to gender equality is reflected in a written policy approved in 2020. It is non-discriminatory across different dimensions and aims at promoting equal opportunities in recruitment and promotion, leadership, and financial conditions. In addition, NOVA develops several initiatives in this area:

SPEAR European project to support the implementation of Gender Equality Plans in Academia and Research.

National Observatory for Violence and Gender

Founded in 2008, and supported by strong research in this field, it actively contributes to understand the different social dimensions of violence, in particular against women, and to influence national and international policies.

Support funds

Scholarships exist with the aim of meeting the needs of students whose family’s economic situation hinders or prevents them from continuing their higher education.

NOVA University Lisbon facilitates access to various financial supports in collaboration with the General Directorate of Higher Education (DGES), companies, institutions and individuals, promoting the participation of society for an inclusive higher education.

NOVA’s Academic Units also have their own support funds for students.

- FCSH | Patrons – ESTUDAR+ scholarships
- SBE | beNOVA Scholarship

Number of students receiving significant financial aid: 1,856 (8.9%)

Annual budget

Average yearly support
NOVA Health

NOVAhealth was born with the mission of creating value in the health area through scientific production, innovative solutions and knowledge dissemination and promoting research collaborations between the academic units of NOVA, as well as with external partners from science, industry and society. From the molecule to global health, the Platform focuses on several strategic areas, including aging, nutrition, chronic disease and infection, value improvement of health and care, the impact of climate change on public health, integrated care, migration and health, quality and patient safety and health policies and systems.
9 Schools involved

NOVA has a strong commitment to health sciences that encompasses all its nine organic units - ranging from molecular biology to the health of populations. Three of NOVA's schools are directly committed to health: NOVA Medical School, the Institute of Hygiene and Tropical Medicine and the National School of Public Health, while two others are dedicated to molecular biology and life materials, by so contributing to life sciences: the school of biotechnology (School of Science and Technology) and the school of molecular biology (Institute of Chemical and Biological Technology António Xavier). School of Social and Human Sciences, the school of management (Nova School of Business and Economics), the school of data (NOVA Information Management School) and the Law School, do collaborate to research in health sciences, namely covering social dimensions and interactions of health.

We may rightly state that NOVA covers the entire health spectrum - from molecule to patient's bedside - linking fundamental biology, technology and health care to ultimately improve the health of populations.

Other health services to NOVA’s community

The Bridge

The Bridge is NOVA's students well-being platform. It emerged as a need felt by the students, built and developed by NOVA’s Social Welfare Services.

Occupational Health

The Social Welfare Services provide health & wellbeing to NOVA’s students and staff: mental health (psychology and psychiatry), nutrition support, and sexual and reproductive healthcare.

Research Groups

Aligned with schools missions, ten strategic areas are organized with groups composed by researchers from different NOVA’s organic units and from external partners. The groups develop research and annually organize an international conference.

NOVAhealth Ageing
NOVAhealth Nutrition
NOVAhealth Chronic Disease and Infection
NOVAhealth Value Improvement in Health and Care
NOVAhealth Healthcare Dynamics

Integrated Care
Migration and Health
Quality Improvement and Patient Safety
Health Systems and Policies
NOVA University Lisbon, through Social Welfare Services (SAS NOVA), supports and promotes cultural activities for the students. Considering the pandemic situation, the year 2020 was atypical, with the strong limitation of events to be reflected in NOVA's cultural activities. Thus, there were projects cancelled, others that were not started (concerts), and all the others were adapted. Each School also develops cultural activities, in particular their libraries.

Activities

XII NOVA Photography Contest

Photo Contest open to all NOVA students, under the theme “Countryside and the city”, with prizes and an exhibition with the best works.

60 participants

More info

VI NOVA Music Band Contest

Competition open to bands with students or alumni of NOVA, with the winner to be decided in a final played live.

70 participants

More info

NOVA Writing Contest

Writing Contest open to all NOVA students, under the theme “The Tomorrow”. The winners were chosen by a jury and a book will be published with the works presented to the contest.

85 participants

More info

Memories | NOVA MUSIC FESTIVAL

Between 2012 and 2018, NOVA celebrated the beginning of the school year in a music festival, while promoting Portuguese music. Profits reverted to NOVA Social Support Fund.

2500 participants

More info
NOVA University Lisbon, through Social Welfare Services (SAS NOVA), supports and promotes sports activities for NOVA’s students. Given the pandemic, the year 2020 was atypical, with the strong limitation of events to be reflected in NOVA’s sports’ activities. Thus, there were some cancelled events, and all the others were adapted. Yoga, Pilates and Functional Training classes were given online, as well as the Be Active program. Each School also develops sports activities and sometimes have their own School teams.

**Competition**

**National University Championships of Surf and Bodyboard**

The championships were organized by NOVA University Lisbon, through SASNOVA, and were held on the same weekend. Although organized in 2021, due to the pandemic, they awarded the 2020 national titles. Carolina Santos won the women’s competition and was second in teams.

**Main numbers**

- 60 participants
- 15 disciplines
- 48 Students involved

**Be active!**

**BE Active – Ginástica laboral**

The Be Active Program is available to the entire staff of the University with brief sessions of Occupational Gymnastics, aiming to correct the posture caused by excessive stay in front of the computer, relieve the tension caused by the stress of work, combat inactivity, and improve flexibility.

**Main numbers**

- 13 participants
- 26 teams
- 78 athletes

**Memories | Organization of the National University Championship of Tennis (teams) - 2017**

Organization of the National University Championship of Tennis (teams), which gave access to the qualification for the European University Tennis Championships, leaving NOVA with three qualified teams.
Other initiatives

NOVA University Lisbon develops other initiatives targeting society, namely the most vulnerable. Among other targets, NOVA has been particularly active in addressing the inclusion of people with disabilities and immigrant minorities, working together with local communities and civil society organizations.

Other initiatives such as events are an excellent vehicle of awareness to NOVA’s community, fostering its engagement around Sustainability main topics. At an University level, or at a School level, they show what NOVA and its community do best.
NOVA Refugee Clinic (NRC)

A combination of NOVA Law students and professors provide information to refugees on their rights within the Portuguese Legal Framework. With a special emphasis on access to health, welfare, migration and asylum rights and first hand contact, NRC develops a hands-on approach on international legal matters and promotes equality access to legal information to these populations.

Partners/ Donors
Câmara Municipal de Lisboa
NOVA Medical School

Inclusive Community Forum

The Inclusive Community Forum (ICF) is a Nova SBE initiative, under the umbrella of Leadership for Impact Knowledge Center, aiming to promote the resolution of the main obstacles to the inclusion of people with disabilities through the development of structured projects that encourage the active participation of the community.

Given that the promotion of an inclusive community for people with disabilities can happen at different levels, ICF chose to act in two different themes: the Employability and the Education of people disabilities. For each, the operational team started by identifying the main barriers to inclusion and, together with the community, is finding ways to contribute to their resolution.

Partners
Argo Partners; Michael Page; Randstad; Your People

Donors
Pedro de Mello; Associação São Bartolomeu dos Alemães; Sofia e Claude Marion; Carmo e Rui Diniz; Rita e João Bento; Doador anónimo

MarcaMundos

MarcaMundos is a non-profit project to promote health education and training at a national and international level. In each edition, the previously selected team of volunteers is responsible for developing fundraising actions, participating and conducting training on a wide range of topics within the scope of health and volunteering.

Partners
AEFCM and others (please check the website).

Donors
IPDJ; Santander Universidades
GreenFest 2020

Greenfest is the largest sustainability festival in the country and celebrates the best economic, social, and environmental practices. It is a platform where ideas and experiences can be shared and citizens alike who care about the future have the stage. In 2019, the event was organized by Greenfest in partnership with Nova SBE and was held on the Carcavelos Campus. The agenda for the 4 days of event comprised a range of activities from talks, panel discussions and workshops to showcookings, interactive games and concerts. The event counted with the participation of 2,000 visitors on campus.

Promotor
Greenfest

Ciência + Cidadã Program - Carbon tree project

The project from the active citizenship program Ciência + Cidadã aims to raise awareness and enact change in topics related to air quality. In its first year of implementation, the project brought together young people from a local Oeiras highschool to critically think about air pollution and the impacts it has on their “glocal” (global + local) communities and lives. Participants built low-cost air quality monitoring stations that they used to investigate environmental and public health issues of their interest. This project promotes discussions on environmental and social justice and exposure to all steps of the scientific process.

Partners
IGC; InnovLabs; Sebastião e Silva School

Sponsor
Oeiras Municipality

Ciência aberta a Oeiras

ITQB NOVA is a key partner in Ciência Aberta a Oeiras, which includes Citizen Science and Science in school programmes, within the Oeiras Science and technology Strategy. The initiative brings science closer to society, creating an environment in which citizens feel science is close to them, breaking barriers for youngsters for whom science might otherwise seem like a distant reality. Science clubs, visits to schools, job shadowing initiatives, teacher training, events with researchers are complemented by initiatives with “senior universities” and citizen science. The broad scope allows us to reach young girls, the immigrant community, and other groups.

Partners
IGC

Donors
Oeiras Municipality
**Conference | The importance of the Digitalization for the Energy Transition**

During this conference it was presented opportunities of creating value through real time energy data and algorithms and some of the challenges and concrete problems that need to be solved in order to simplify, amplify & accelerate the energy transition to a new paradigm of more renewables and efficiency. The event was livestreamed on Facebook, on December 2nd, at 6 pm.

**Environment Week - May 11 - 15**

Online event organized by AEFCSH with various activities:
- Debate «The impact of the pandemic on the environment and current societies» with Heloísa Apolónia (PEV), Luísa Schmidt (ICS - UL) and Iva Pires (NOVA FCSH) and moderation by Joana Freitas (AEFCSH)
- Documentary «This changes everything» (Lewis 2015)

Music creation by the Environment playlist – Spotify

**Publication | Change**

Change is a weekly Publication with useful information about the most diverse subjects ecology related. In 2020 there were 10 articles published.

**European Public Health Week | Healthy Environments**

Facebook post and video about the importance of the green environments of NOVA National School of Public Health campus, surrounded by trees and lawns that provide relaxation, socializing and opportunities to be in nature, while contributing to the climate mitigation and noise absorption in Lisbon, the largest city in the Portugal.

**Initiative | Days on Mental Health**

The Mental Health Days are an initiative of the AEFCSH, jointly organized by the AEFCSH and the Psychology, Inclusion and Equality Services (PsII+) of NOVA FCSH. The sessions are open to the entire community and are intended to address topics that reflect concerns and daily experiences of higher education students, contributing to their inclusion and well-being.

**Smart Fishing Project / 2nd Summit Smart Fishing**

On October 12, 2020, the 2nd Summit of the Smart Fishing Project took place in the Ágora Space of FCT/NOVA Library. Entitled Perspectives for Local Fishing, as the entire bottom-up process developed by the project, local artisanal fishermen from the coastal area of Almada, legislators and authorities with maritime competence were present. Together, they participated in interactive exercises related to Governance, Technology and Legislation, with a view to co-building our Integrated Technology Solution for the safety and sustainability of local fisheries!
Governance

Grounded in NOVA University Lisbon’s statutes, its governance is an instrument to facilitate change, by establishing the rules under which the different stakeholders may interact. In light of Sustainability, the University governance establishes policies and regulations, promoting best practices that would otherwise undermine NOVA’s image and performance. It is NOVA’s opportunity to lead by example. This small chapter highlights good examples of governance in 2020.
Strong baseline

NOVA’s Governance is grounded in its statutes, approved in 2017 after NOVA University Lisbon, a public institution, became a public Foundation regulated by private law. Its statutes reflect its ambition and openness to society, integrating external members in its decision-making processes, as well as its different stakeholders. The General Council is the body of strategic decision and supervision and consists of 27 members including teaching staff and researchers, students, non-academic and non-research staff member, and external members of recognised merit with no connection to NOVA.

Considering the organizational transformation towards sustainability best practices, NOVA has been developing several policies and guidelines for their implementation across its different schools. In 2020, a Smoking-free Policy and a Gender Equality Policy were developed and approved. In addition, the University launched the first draft of a Sustainability Policy to be discussed and approved in the upcoming year.

Smoking-free Policy

Established in 2020, the Smoking-free Policy complies with Portuguese legislation and prohibits smoking in all of its buildings. Meant to promote health and environment in all campi, it also limits smoking in open areas in a 5 meter range from any building.

Gender Equality Policy

Also established in 2020, the Gender Equality policy is non-discriminatory, aiming at promoting equal opportunities in recruitment and promotion, leadership, and financial conditions.

Strategic Plan 2020-2030

In the end of 2019, NOVA approved its Strategic Plan for the next 10 years. It is a reference for the main initiatives and programs to be developed, underpinning strategic decision-making.

The Strategic Plan is the result of an extensive process of discussions, contributions and suggestions from all those who have responsibility for guiding and implementing the strategy to be adopted: the Rector, the Rectorate team, Deans, and members of representative bodies of NOVA schools. Therefore, the Strategic Plan is very much revealing of the environment of diversity and inclusion, interdisciplinarity and free thinking that is in place at NOVA.

It is a work in progress, not complete upon its approval. It must continue to be developed and improved with the contribution and involvement of the entire NOVA community.
Future

This Sustainability MAP establishes a baseline for the future, supporting strategic decision-making across the University. It aligns what NOVA does with what the world is doing, reflected in the Sustainable Development Goals. It is a statement, a compromise that NOVA has just started a new journey.

This journey requires permanent monitoring and evaluation, but it will also require goals. Moving forward, these are NOVA’s grand challenges, to define where it is heading to. NOVA’s Sustainability Policy will be a first step towards this goal, others will follow. This section sets the tone for the year to come.
The Sustainability MAP

NOVA’s 2020 Sustainability MAP defines a baseline for the future, grounding the basis for strategic decision-making in light of the University’s Sustainability Journey. It results from a collective effort to describe all the activities, anchored in NOVA’s three missions, also accounting for NOVA’s organizational dimension.

Aiming at following NOVA’s ambition to strengthen its accountability process, aligning this document with sustainability reporting best practices, it is important to recognize its limitations and room for growth. First, it is not an exhaustive description of all the activities developed by the University. In Education, for example, the document does not reflect all the offer across the different academic degrees. Second, this map was not able to cover in detail the valuable contribution of organizations to co-create impact with NOVA, including its suppliers. Finally, this document is only covering outputs of NOVA’s activity, and future editions could benefit from medium to long-term analysis, including outcomes and long-lasting impacts.

The last section of the document is also expected to grow and assume compromises, quantitative and qualitative goals for the year to come, strengthening monitoring and evaluation processes.

Students

Students are a key driver of sustainability as not only their present actions influence NOVA’s sustainability performance, but also their future journeys as citizens. NOVA is designing the best forum for them to speak out and actively participate in the decision-making process in this area.

Sustainability Rankings

In 2020 NOVA participated in the Times Higher Education Impact Rankings for the second time, significantly improving its global position. It presented data for 5 SDGs.

In 2021, NOVA plans to meet the requirements for other SDGs in this ranking, and to apply to other relevant universities’ rankings in this area.

Policies

Policies play a strategic role in the Sustainability Journey as they give strategic context and meaning to the activities developed. In particular, a Sustainability Policy, planned to offer guidance to the University as a whole and its nine Schools. This Policy started to be written in 2020 and it is planned to be approved next year, after receiving contribution from NOVA’s Community.

Other Policies are also meant to give context to NOVA’s action in specific areas related to sustainability, namely Energy and Climate, or Water Management.

Communication

NOVA 4 The Globe’s website, organized by the University’ contribution to the Sustainable Development Goals is a critical tool to communicate and engage its different stakeholders.
Thank you

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