



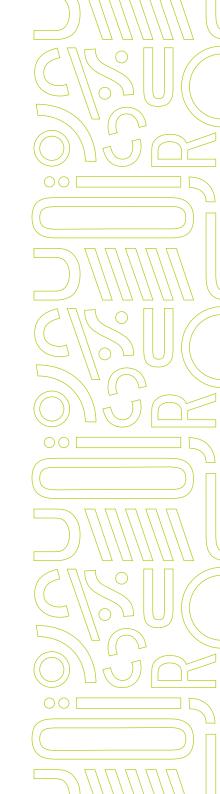
UNIVERSITIES FOR THE REGIONS IN THE YEAR OF CLIMATE AMBITION 2021 RUS REPORT



RETE DELLE UNIVERSITÀ
PER LO SVILUPPO SOSTENIBILE NETWORK OF UNIVERSITIES
FOR SUSTAINABLE DEVELOPMENT

Universities for the regions in the year of climate ambition

RUS Activities Report
June 2020 - December 2021





## PREFACE

In 2021, preceding the release of this report by a few months, Italy launched its National Recovery and Resilience Plan. It is a formidable commitment to getting the national economy back on track, strengthening EU policies, and moving forward with key transformations for the future of new generations. Within the two hundred and seventythree pages, across which the document unfurls, the term "sustainability" is a recurring theme. It is about environmental and social sustainability; energy sustainability and Italian businesses; the sustainability of production chains and of the repercussions for international markets...It's not a slogan, then, much less an ideology, to be adopted a priori or unconditionally. When we talk about sustainability, we refer to a complex challenge that forces us to bring factors, needs, and requirements to the table that are not always consistent with each other, that ask us to assess the nature and impact of forces that push us in opposite directions. Sustainability is, above all, an act of mediation. It is a compromise, more or

less advantageous, between ecological transition and industrial development; between the dynamics of globalisation and interests aimed at ensuring the capacity of local systems. It would, therefore, be reductive to interpret sustainability exclusively as an environmental issue. It implies a genuine social revolution that goes from the creation of new technologies, to the reorganisation of the employment world and of professions, to a change in culture and thought.

What can the university do in this context? The university can do a lot. Just think of the centrality of research in some key sectors of industrial innovation: from manufacturing to transport, from space to the production of alternative energies. Just consider the importance of training that class of leaders that will

be tasked with completing the change towards a radical modernisation of the country. Not least, a nod to the capacity of our universities and our education system to articulate an interdisciplinary and critical way of thinking that leads to an authentic change in paradigm is enough. The country will, in fact, be the leader of great transformations that will be based on three indispensable conditions: knowledge, technology, and human capital. These are essential elements that make the university the enabling factor of every significant and long-lasting reform.

### **Ferruccio Resta**

President of the CRUI Conferenza dei Rettori delle Università Italiane (Conference of the Rectors of Italian Universities)

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### INTRODUCTION

### PATRIZIA LOMBARDI RUS PRESIDENT

2021 was a particularly important year for our RUS community. It was the year of COP 26 on the climate, which ended on 13 November with the signing of the "Glasgow Climate Pact", by all 197 parties who participated in the negotiations. RUS had the organisation of the international conference: ClimateExp0, brought forward, anticipating this highly significant event; it was held in May 2021 in collaboration with the UK COP26 University network. It was also the year of the G20, chaired by Italy, with a specific focus on the climate crisis and the commitment to decarbonising the regions. On this issue, the RUS provided the operating guidelines for quantifying the emissions and decarbonising campuses, thanks to the commitment of the climate change working group. Again in 2021, the EXPO in Dubai was inaugurated, whose Italian pavilion involved the participation of many regions, communities of practice, businesses, and universities. This involved a specific collaboration with the RUS including in preparing for the international forum that was then held in January 2022, on the role of cooperation and universities in the effort to accelerate achieving the SDGs. At this event, as the RUS, we put forward specific, challenge-based activities addressed to hundreds of students on the issues of: Planet, People, Prosperity.

Again, 2021 was the year of the development of vaccines that made it possible to contain infections and drastically lower the mortality rate due to the pandemic, thanks to advanced research in the medical and health fields. Finally, 2021 is the year in which Italy's National Recovery and Resilience Plan was published. The plan gave the country's regions an unmissable chance for transformative development, for the future.

In this context, the RUS was and continues to be a reference for local communities and regions. The network has always had at its heart the will to assist the transition towards a more sustainable future, based on the transformative capacity that the universities display. Universities, in fact, are an irreplaceable driver for development in the regions, non-profit bodies that, with their Education, Research and Knowledge Transfer, Knowledge Sharing, and External Leadership missions, perform a priceless service for present and future generations. It is precisely as a result of this awareness of the strategic role that the universities take on in implementing the 2030 Agenda that, in 2016, the RUS was created, a network of universities that amplifies the strength and ability of universities to impact change.

Today, the network is composed of 81 universities, located in all regions of Italy, and is organised into working groups that comprise more than 700 faculty and staff members. In 2021, RUS grew further in terms of numbers, as shown by the graphs included in this report, the outcome of the mapping that is conducted every year. In particular, the network

expanded both with reference to geographical positioning, being more widely distributed in all the Italian regions and, in particular, in the south, and to the size of the universities, with good representation from medium-small universities. The mapping also reveals the growing commitment of universities not only in the field of cultural promotion and public engagement activities and external leadership, but also in that of governance, which is organised to implement the goals of the 2030 Agenda on their campuses. We note, with great satisfaction, the growth in Chancellor delegates on issues of sustainability and, in particular, the number of administrative offices and/ or of their own programming, as the need to make universities' social impact measurable (see the sustainability concept in the strategic plans) is also clear. Italian universities are also improving their positioning in international rankings, for example in the Green metric there are many more Italian universities present among the top 100 in the world compared to a few years ago.

To satisfy the needs of universities to grow their transformative capacity and make their own public outreach measurable, in 2021 we provided two other relevant publications. The first publication, in collaboration with the GBS (Social Budget Group), relates to accounting principles; the second, in collaboration with SDSN (Sustainable Development Solution Network Italy), provides a genuine guide for universities that invest in implementing the 2030 Agenda. Several reports were also published by the seven working groups. I note, in particular,

the work on university mobility that also involved a public presentation with the MUR (Italy's Ministry of Education, University and Research) and MIMS (Italy's Ministry of Infrastructure and Sustainable Mobility) ministers in attendance.

In the field of education, which we know to be central if we wish to change the current trajectory of current unsustainability, I note, in addition to defining the criteria for delivering the "Lezione" Zero" ["Lesson Zero"], the multiple initiatives for innovative teaching and continuing education. Such initiatives target schools of every kind and degree, the public administration and companies, and were carried out in collaboration with various partners and stakeholders, including: ASviS, Santa Chiara Lab, SDSN Italia, UNICEF Italia, WWF Italia, the Italian commission for Expo 2020 Dubai, etc. As was also highlighted in the ASviS report on the regions and the Sustainable Development Goals, municipal authorities and mayors must be able to consult the 2030 Agenda to confront, in a strategic and coordinated way, the crucial problems of our cities, from the fight against poverty to energy efficiency, from sustainable mobility to social inclusion. As a result, it is essential to regionalise the 2030 Agenda Goals, and to support administrations in measuring transformative action, to "make cities" and human settlements inclusive, safe, resilient, and sustainable", as set forth by goal no. 11 of the UN's 2030 Agenda. Planning the future requires taking on a conscious role within a strategic framework that has, as its context, the 2030 Agenda SDGs and, as its tools, partnerships with local actors (universities,

civil society, the private sector, etc.). As the Network of Universities for Sustainable Development, we are aware of the absolute impossibility of replicating this historical moment. It is a time, unfortunately, recently made worse by atrocious and incredibly dramatic international events that threaten the very implementation of the 2030 Agenda, striking right at the heart of the programme, SDG no. 16: Peace. We need, then, to strengthen and accelerate our commitment in all directions and with reference to all 5 Ps of the Agenda. The universities remain a key element of this transition but need to have, as their support, a collaborative, non-competitive platform that offers continuity in working on and implementing the 2030 Agenda Goals.

For this reason, the network is attempting an additional organisational effort, to aggregate the universities into RUS regional sub-networks, with the difficult task of assisting government and civil society committed to implementing and supporting the National Strategy for Sustainable Development (SnSS). At the same time, internationally, the network is strengthening its activities and collaboration with other active networks in terms of cooperation and sustainable development. An additional action that we already implemented in 2021 but that I hope becomes even more central in 2022 is that of foregrounding the commitment of young people through a close alliance between the RUS and student associations of various universities. In this historical, very delicate, and fragile moment, as far as regards the capacity to

achieve the 2030 Agenda targets, great common action is necessary, an intergenerational alliance that leads to that turning point in sustainability and the much hoped-for resilience. It is not an easy path – quite the opposite. It requires a complete cultural and organisational change, the only possible one and the fact that it is finally shared and understood at the government level too, makes us all much more hopeful than in the past, despite the terrible atrocities that surround us.

In conclusion, the 2021 RUS Report clearly reveals the commitment of our universities in supporting, through activities of sharing sustainability practices and co-producing knowledge, the country's ecological and social transition. This commitment is made possible thanks to the excellent coordination of the working groups, on the one hand, and the members of the coordination committee (which at the end of 2021 completed its mandate), on the other. My sincere appreciation and thanks go out to all of them for the great work they did. Finally, I would like to thank all of you, delegates, contact people, and members of the RUS, because it is also thanks to your daily commitment and your determination that our network continues to be a reference for the regions, government, and civil society.



### THE NETWORK'S **PURPOSES AND GOALS**

Promoted by the CRUI (Conference of Italian University Rectors, officially) since 2016, the RUS (Italian University Network for Sustainable Development) was the first experiment in coordinating and sharing between Italian universities engaged with issues of environmental sustainability and social responsibility. Created from the spontaneous initiative of a small and determined group of universities, in December 2021 the RUS numbers 81 universities that have formally committed to orienting their institutional activities towards the goals of integrated sustainability and actively participating in reaching the network's institutional goals.

All universities belonging to the CRUI participate, by right, in the RUS, but other universities, whose institutional purposes are in line with the network's goals, can also join. The RUS, a unique experiment of its kind by number of members and sphere of action, sets itself up as a model of good practice to extend to other sectors of the public administration, education, and the region in general as well, incentivising the development of collaborations between universities and cities, spreading social innovation across Italy and providing cultural stimuli for the whole national economy.

### INSTITUTIONAL PURPOSES AND GOALS

The network's main purpose is to disseminate the culture and good practices of sustainable development, both within and outside the universities (at the urban, regional, national, and international level), so as to increase positive impacts in environmental, ethical, social, and economic terms of actions network members implement. All this is done to help achieve the 2030 Agenda Goals and to strengthen the recognisability and value of the Italian experience internationally. The member universities are committed to

supporting the network's institutional goals:

- Harmonising institutional activities and improving the management of environmental and social aspects.
- Creating a community capable of developing best practices and representing the university nationally and internationally.
- Promoting and developing projects in the areas of knowledge and skills transfer, teaching, and university governance and management activities.
- Developing the cross-disciplinary educational dimension in university programmes, in order to contribute to growing the culture of sustainable development and impacting students' adoption of correct life styles.
- Promoting training and refresher courses on sustainable development issues for university staff and all teachers of every kind and degree.
- Developing awareness-raising and promotion initiatives with a view to stakeholder

- engagement.
- Increasing collaborations with public institutions and the world of businesses on projects linked to the network's purposes.
- Formulating opinions and proposals, on matters within its remit, when requested by institutional parties.

### **GOVERNANCE**

### **WORKING GROUPS**

Climate Change

Food

Education

Energy

Inclusion and Social Justice

Mobility

Resources and Waste

### ORGANISATIONAL SECRETARY

Politecnico di Torino

### **COORDINATION COMMITTEE**

#### Politecnico di Torino

President and Secretary Offices

Alma Mater Studiorum – Università di Bologna

Università Ca' Foscari Venezia

Università degli Studi di Bari Aldo Moro

Università degli Studi di Milano-Bicocca

Università degli Studi di Parma

Università degli Studi di Roma "Tor Vergata"

Università degli Studi di Siena

Università degli Studi di Udine

Politecnico di Bari

Politecnico di Milano

### **GENERAL ASSEMBLY**

Delegates of the 81 Universities

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The RUS coordination committee guides and monitors the network's activities and comprises 10 elected universities and one appointed by the CRUI. The universities remain in office for three years: 2021 concluded the 2019-2021 mandate.

In February 2022, the new coordination committee for the 2022-2024 three-year period took office and includes the following universities:

Politecnico di Bari, Politecnico di Torino\* (Chair),
Università Ca' Foscari Venezia, Università degli
Studi "G. D'annunzio" Chieti Pescara, Università degli Studi di Bari Aldo Moro, Università degli Studi di Brescia, Università degli Studi di Milano-Bicocca,
Università degli Studi di Roma "La Sapienza",
Università degli Studi di Roma "Tor Vergata",
Università degli Studi Mediterranea di Reggio
Calabria, and Università di Pisa.

\*the Politecnico di Torino was appointed by the Chair of the Conference of Italian University Rectors (CRUI), pursuant to art. 5 of the Network Agreement.

### **MEMBER UNIVERSITIES**

2017
51 participating universities
e of
versity
RUI),
o art.
etwork
t.

2018
+ 07 universities, a total of 58 participating universities
2019
+ 10 universities, a total of 68 participating universities
2020
+ 09 universities, a total of 77 participating universities
2021
+ 04 universities, a total of 81 participating universities

### **WORKING GROUPS**

The RUS is divided into seven Working Groups (WGs) dedicated to priority issues for achieving the network's institutional goals. Each member university of the RUS has the right to participate, via representatives of its communities, in the work of the WGs that, while maintaining their operational and internal organisational autonomy, periodically report to the coordination committee and develop their activities based on priorities chosen by the group itself. The WGs are, first of all, "places" for dialogue between the universities for a mutual and positive cross-fertilisation of effective actions aimed at sustainably transforming their communities and campuses. Thanks to the heterogeneous nature of their components, the WGs develop and promote useful tools (e.g. guidelines, white papers, sets of best practice, etc.) that are provided to and disseminated among the whole academic community to facilitate achieving the UN's 2030 Agenda goals. During the year, the WGs' activities are punctuated by plenary meetings, occasions for exchange regarding new projects and sharing work carried out by various sub-groups that compose them. Below, the main information that characterises each WG is included: the coordinator, the operational contacts (if present), a brief description of the WG goals, a significant activity developed between June 2020 and December

2021, and a good practice whose consolidation is proposed (the latter is understood, according to the WG, as a good practice of the group itself or as a good practice that the individual universities can replicate). The WGs have launched their activities at different times and are continuously transforming and being updated; today, these are: Climate Change, Food, Education, Energy, Inclusion and Social Justice, Mobility, Resources and Waste.

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# CLIMATE CHANGE

Year and month launched 2017, March

<u>Universities involved</u> 60

#### Coordinator

Prof. Stefano Caserini
— Politecnico di Milano

#### Operational contact

Ms. Paola Baglione (architect)— Politecnico di Milano

Website

The goal of the Climate Change WG is to guide the commitment of universities towards actions to combat climate change through the sharing of information, materials, and methods aimed at defining shared metrics, knowledge, skills, and good practices. The activities concern supporting the creation of CO2 emissions inventories for the universities, mitigation and adaptation plans, the organisation of information and training events, as well as the assumption of formal commitments to limit emissions, in the short and long term.

### **SUB-GROUPS**

- Updating the operational guidelines for drawing up greenhouse gas emission inventories for Italian universities (the sub-group is further divided according to the details of the guidelines chapters)
- Mapping universities' climate change activities and the Green Questionnaire
- Sustainability of the water cycle and climate change

emissions inventories mitigation adaptation



#### Activity name

Workshop entitled "Why so late? Why so slow?" and workshop entitled "Impct of COVID-19 on Italian university emissions towards Zero Emissions"

#### Period

17 June 2021 and 22 June 2021

In the workshop: "Why so late? Why so slow?" the psychosocial aspects in the delay in fighting climate change were discussed - from daily behaviours to collective actions. In the workshop, "Impact of COVID-19 on Italian university emissions towards Zero Emissions" the issue of the influence of the pandemic on energy consumption and CO2 emissions was confronted. Many attended the seminars and the registrations are available on the website for the RUS Climate change WG.

### **GOOD PRACTICE DEVELOPED AND TO BE CONSOLIDATED**

### **Conference call meetings**

In 2019, the WG started proposing as a good practice the holding of plenary meetings and working sub-groups in mixed mode, offering, that is, the chance to follow them either in person or remotely. Participation in the two ordinary plenary meetings of 2019 was, for the first time, 44% in person and 56% remote, while the second involved 54% in person and 46% remote. During 2020, due to the COVID-19 pandemic, all the meetings were held by conference call. Given the positive outcome of the activities, which were productive and enjoyed wide consent, and the availability of many easy-to-use platforms adopted by all the universities, in 2021 the meetings were organised exclusively by conference call. This led to an increase in participants, compared to 2019, of 59% in 2020 and 70% in 2021. In-person meetings will, then, be avoided in future, thus reducing the energy consumption and emissions linked to commuting.

During 2021, two, wholly online seminars were also organised that had a great response and some data of which are included below.

The seminar: "Why so late? Why so slow? Psychosocial aspects in the delay in fighting climate change. From daily behaviours to collective actions", on 17 June 2021, involved 19 speakers; average participants registered during the event were 51 out of 99 enrolled.

The seminar: "Impact of COVID-19 on Italian university emissions towards Zero Emissions", of 22 June 2021, involved 9 speakers; average participants recorded during the event were 47 out of 55 enrolled.

About us Working Groups 2021 RUS Report

### **FOOD**

### Year and month launched

2018, December

#### Universities involved

65

#### Coordinators

Prof. Egidio Dansero

- Università degli Studi di Torino Prof. Eleonora Sirsi
- Università degli Studi di Pisa Prof. Laura Di Renzo
- Università degli Studi di Roma "Tor Vergata" (since January 2022)

### Operational contacts

Dr Nadia Tecco

- Università degli Studi di Torino Dr Margherita Brunori
- Università degli Studi di Trento Ms Maria Luigia Fiorentino (arch.)
- Università degli Studi di Roma "Tor Vergata" (since January 2022)

#### Website

The Food WG works on the relationship between food and universities, understood as an organisation and community. To make the universities actors in more sustainable food policies, it invites people to reflect and act on: food production, procurement, and distribution in universities, spaces for consuming food, food waste, as well as food education and sustainability, in close relations with other regional actors. The WG aims to produce and transfer knowledge on the food phenomenon in universities, gathering and disseminating data, promoting the exchange of experiences and good

### **SUB-GROUPS**

- Production
- Distribution
- Consumption
- Post-Consumption (Rifiuti, contro Rifiuti)
- Indicators and monitoring
- Resources and Waste / Food inter-WG

food environment foodscape food procurement foodprint food literacy & education food citizenship



practices.

### **Activity name**

Handbook

#### Period

November 2020 - December 2021

The <u>Handbook</u> consists of summary tables designed to offer universities guidelines for promoting sustainability of food consumption in universities. The idea is to distil concrete practices, based on experiences had, to be implemented in any Italian university. The tables produced concern: production (university vegetable gardens and farms); distribution, competitions and tenders, food education, the Mediterranean diet, food safety and quality, and post-consumption.

The purposes and the ultimate meaning of the handbook are to be a guide for a university that wishes to undertake, in a systematic and integrated way, multiple initiatives on food, as it is produced, distributed, consumed, wasted by the university community, thus becoming conscious and reflecting actors in constructing local food policies.

### **GOOD PRACTICE DEVELOPED AND TO BE CONSOLIDATED**

### **University vegetable gardens**

The experience of the university vegetable gardens fits into the urban agriculture context that, today, has broad purposes concerning the production of healthy, 0-km food, contributing to reducing climate altering emissions and to protecting biodiversity, weaving social networks and achieving inclusion goals.

The "vegetable gardens" correspond, as the initiatives launched in various universities demonstrate, in Italy and in other countries, to multiple practices with different characteristics. The gardens located within the university and that enable direct experience of independent production through sustainable agriculture practices encourage the maintenance of a relationship with the region and the city and the acquisition of knowledge on the production-nutrition-health relationship. As do the initiatives promoted by universities with the involvement of external parties (in addition to the students and staff of the university, their families, or the local community) according to a "community agriculture" approach, like the so-called "School Gardens" promoted by Slow Food, as experiences launched in primary schools and kindergartens with voluntary associations, including in collaboration with universities.

In order to consolidate and maintain these practices, the following are considered useful: awareness-raising campaigns to induce students and employees to pay more attention to the possibility of independent production of food with university vegetable gardens (both inside and outside the university); action aimed at constructing local networks/partnerships; the creation of summer internships to support managing the vegetable garden; meetings and Open Days that may present the experience not just on the university campus, but also at schools and municipal administrations.

Among the most consolidated experiences at the Italian universities, we highlight those of Gastronomic Sciences of Pollenzo, of the universities of Florence, Rome "Tor Vergata", Udine, and Venezia Ca' Foscari, and Pisa.

### **EDUCATION**

### Year and month launched

2017, September

### Universities involved

57

#### Coordinator

Prof. Enrico Giovannini
— Università degli Studi di Roma "Tor Vergata"

### **Deputy-coordinator**

Prof. Gabriella Calvano — Università degli Studi di Bari Aldo Moro

#### Website

Aware of the importance of taking a lifelong and lifewide learning perspective, the Education WG focuses on various education methods for sustainable development, highlighting good practices and proposing teaching and educational approaches and methods that are effective for ensuring that all members of the university community (students, teachers, technical and administrative staff) know the 2030 Agenda and the sustainable development principles, including in relation to their area of study and

### **SUB-GROUPS**

- Education
- Cross-discipline skills
- Interdisciplinarity
- Cross-disciplinarity
- Lifelong learning

education cross-discipline skills interdisciplinarity crossdisciplinarity lifelong learning



work

### **Activity name**

Ethics sub-group

### Period

2021

Awareness of the essential role that the universities play as centres of education and knowledge regarding sustainability requires that universities rethink their ethics codes beginning from the founding principles of environmental ethics.

In the context of the Education WG, the Ethics sub-group was set up, for this reason, with the purpose of reflecting on the contribution that ethics can offer in practical and concrete terms for the organisation and governance of the universities, with particulate reference to education aspects.

The sub-group is developing a Sustainability Ethics Guidance Document for Universities, beginning with identifying non-negotiable ethical principles and the recognition of the profound link between environmental and civic ethics.

### GOOD PRACTICE DEVELOPED AND TO BE CONSOLIDATED

#### **Lezione Zero**

Lezione Zero is the network's first training initiative through which the universities belonging to the RUS have the chance to promote a training path on sustainability content and the 2030 Agenda. It consists of optional coursework, accessible online or in person, that enables students to gain genuine university teaching credits or credentials in a supplementary diploma (electronic badge). Teaching targets students of all university degree programmes with the purpose of introducing sustainability issues, with particular reference to the 17 Sustainable Development Goals proposed by the 2030 Agenda. An increasing number of universities in the network are promoting the institution of a cross-discipline course linked to issues of sustainable development, exploiting the focuses and skills of its university, including in terms of serving the region's sustainable development. This year too, the ASviS has provided its course online. Each university can decide to distribute it as it is or as a possible starting point for promoting explorations relating to the 2030 Agenda Goals. The Working Group is developing, through a specific, dedicated sub-group, a Lezione Zero proposal to offer to network universities, a proposal that will be presented in the first quarter of 2022, with the aim both of assisting those universities that have more difficulty in defining a cross-business course on issues of sustainability and of promoting a course with a "network" format that can, over time, become educational policy for the whole Italian university system.

About us Working Groups 2021 RUS Report

### **ENERGY**

Year and month launched

2016, November

Universities involved 59

Coordinator

Prof. Alberto Poggio
— Politecnico di Torino

**Operational contact** 

Mr. Claudio Turcotti (engineer)— Politecnico di Torino

Website

The Energy WG studies the energy requirements of university facilities, the actions for their reduction and meeting them with renewable sources, in compliance with the standards of comfort and services delivered. To this end, it gathers data and constructs information and methodological bases, defines metrics, supports the action of the university Energy Managers, gathers and disseminates good practices for managing energy in the public administration, and promotes the focus on energy sustainability among university communities and in the region.

### **SUB-GROUPS**

- Green Paper "Sustainable Energy Management"
- Metrics and indicators
- Air conditioning systems: health and well-being
- CRUI-RUS-GSE support agreement
- Contracts (sub-group being formed)

energy efficiency reducing consumpion renewable sources monitoring and management



### Activity name

Implementation of the CRUI – RUS – GSE collaboration agreement

### Period

from July 2020 to December 2021

RUS Energy fulfilled the role of promoting and coordinating the activities set forth by the collaboration agreement between the CRUI and GSE, with the implementation of operating assistance addressed to Italian university technical facilities, aimed at promoting energy efficiency works on university building assets and developing renewable sources.

### **GOOD PRACTICE DEVELOPED AND TO BE CONSOLIDATED**

### Independent production and self-consumption of energy from renewable sources at university facilities

With the adoption of European standards regarding renewable sources (Directive RED II), additional possibilities opened up for the development of the distributed generation of electricity among final users, in particular solar power. The self-consumption and energy community tools offer new opportunities for installing systems with greater capacity for generation, thanks to the possibility of exchange with other users within the network. The university facilities context constitutes a natural laboratory for experimenting with these applications, constituting a stimulus for initiatives spread throughout the region. Some pilot experiences are already underway and will be further expanded through the assistance of and collaboration with the GSE.

About us Working Groups 2021 RUS Report

### INCLUSION AND SOCIAL JUSTICE

Year and month launched

2019, dicembre

**Universities involved** 

59

Coordinator

Prof.ssa Laura Nota
— Università degli Studi di Padova

### **Deputy-coordinator**

Prof. Pasquale Lelio Iapadre
— Università degli Studi dell'Aquila

### **Operational contact**

Dott.ssa Gioia Grigolin — Università degli Studi di Padova

Website

The goal of the Inclusion and Social Justice WG is to promote innovative policies and initiatives for inclusion and social justice, such as opportunities for all people in environments of responsible growth. The WG is committed to disseminating the culture of inclusion and social justice in the academic community and regions, stimulating a critical consciousness on inequality, discrimination, and inequity, promoting the use of inclusive language that is careful of disparities, reducing barriers, and creating services focused on the right of everyone to

### **SUB-GROUPS**

- Indicators
- Good practices

inclusion social justice inequality social sustainability



study.

### **Activity name**

Consolidation of WG activity launch

#### Period

June 2020 - December 2021

The Inclusion and Social Justice WG started work in 2020, sharing founding values and purposes. In particular, it reflected on the importance of monitoring the relation between the pandemic and the increase in inequality and to assist the renewal process, launched by ANVUR (the Italian National Agency for the Evaluation of the University and Research Systems) as part of the VQR (Research Quality Assessment) 15-19, of the assessment criteria for universities' public outreach.

### GOOD PRACTICE DEVELOPED AND TO BE CONSOLIDATED

#### **Consolidation of universities' social impact**

To promote positive practices in terms of inclusion and social justice, the WG has collaborated with the Equality and Diversity Forum (FDD) and with a group of 26 universities that had launched a discussion on the social impact of universities, supporting the idea that the latter should not be limited to the economic aspect (patents, employment, etc.), but must set itself a series of different goals, such as the dissemination of knowledge on inclusion and social justice, constitutional rights and duties, and the dignity of work and equal opportunities. It was agreed, in compliance with university autonomy, to suggest that the selection of public outreach cases for the VQR 2015-19 be inspired by the criteria of inclusion, social justice, and sustainable development. We also decided to participate in the connection initiatives between FDD, the group of 26 universities for public outreach, ANVUR, and the MUR working group on the role of universities in fighting inequality and, in particular, in the "Social impact of the universities" public meetings (18 February 2021), aimed at outlining the trajectories that would be followed for the ANVUR assessment of the public outreach case studies, and the "Case studies for assessing 'public outreach' - A first map" (14 July 2021), aimed at debating the first, encouraging, results. Special attention will be paid to the next steps in the process of collaborating with all actors, in the effort to facilitate these innovation trajectories.

About us Working Groups 2021 RUS Report

### **MOBILITY**

### Year and month launched

2016, November

### Universities involved

70

#### Coordinator

Prof. Matteo Colleoni — Università degli Studi di Milano-Bicocca

### **Deputy-coordinator**

Prof. Giuseppe Inturri
— Università degli Studi di Catania

### **Operational contact**

Dr. Massimiliano Rossetti — Università degli Studi di Milano-Bicocca

#### Website

The Mobility WG discusses and implements policies and measures for academic mobility management and assistance in preparing the homeuniversity commuting plans, with the aim of incentivising sustainable mobility, encouraging the use of public transport or shared means, limiting access to university buildings for conventionally fuelled private vehicles and raising awareness on values and mobility behaviours for encouraging innovation and technological and organisational change. Special attention is given to promoting measures to encourage active mobility (by foot and/or by bike).

### **SUB-GROUPS**

- Mobility management measures and relationship with companies and institutions
- Data, investigations, and indicators
- Internationalisation
- Innovation and technologies

accessibility
sustainable
mobility policies
multi-modality
mobility
management
home-work/
university
commuting plan
(PSCL)



### **Activity name**

Survey on home-university commuting during COVID-19

### Period

July 2020

The survey, promoted by the RUS's Mobility WG with the support of the CRUI and launched in July 2020, involved the participation of the student community, teachers, and technical and administrative staff of 52 Italian universities. Information on commuting habits before the lockdown phase and any changes expected in a post-phase (according to two alternative scenarios of low or high health risk), with a special focus on the health safety and sustainability factors. The indications gathered were priceless for planning teaching and work at the university, but also for planning public transport and PSCLs (Home Work Commuting Plans).

### **GOOD PRACTICE DEVELOPED AND TO BE CONSOLIDATED**

## Preparation and publication of the white paper on sustainable mobility activities promoted at Italian universities on the RUS website

The white paper, the product of the work of 4 sub-groups (WP) operating in the areas described below, was presented at the national conference: "Mobility, accessibility, and the right to study at Italian Universities" that was held at the Università degli Studi di Milano-Bicocca on 7 June 2021. The conference involved, among others, the participation of Minister Cristina Messa, Minister Enrico Giovannini, the CRUI President Ferruccio Resta, and the RUS President Patrizia Lombardi.

The practice of working in sub-groups was re-proposed this academic year (the third of the three-year mandate of the WG's work) with the aim of sharing goals and actions for sustainable mobility, divided according to the issues of various WPs. The results of the work will be summarised in autumn 2022 in a new document that will be presented at the national conference at the end of the mandate.

About us Working Groups 2021 RUS Report

### RESOURCES AND WASTE

Year and month launched 2016, November

Universities involved 65

#### Coordinator

Dr. Eleonora Perotto

— Politecnico di Milan
Dr. Daria Prandstraller

— Alma Mater Studiorum
Università di Bologna
(until December 2020)

Website

The Resources and Waste WG works on methods for managing (collection, temporary deposit, transport and treatment) of all types of waste produced by universities, to implement legal and technical standards. At the same time, it gathers and disseminates practices, including in terms of the "circular economy", for raising awareness on the issue of correctly managing waste and steering people towards behaviours designed to prevent their production from the start (from the non-use or limited use/sharing of certain objects or substances to the ethical management of goods and materials in order to lengthen their working life as much as possible).

### **SUB-GROUPS**

- Guidelines on temporary deposit of waste
- Selling moveable assets
- Good circular economy practices
- Separate collection
- Waste and good practices in the COVID-19 crisis
- Indicators
- Resources and Waste / Food inter-WG

prevention management enhancement sharing circularity



### Activity name

Ministry of Ecological Transition minimum environmental criteria work group

#### Period

from November 2020

In the period in question, various activities were undertaken; to find out more, reference should be made to the WG page. Here, we should recall the joint participation, since 2020, with the Food WG in the work of the group set up by today's Ministry of Ecological Transition (MiTE). This work is aimed at defining the Minimum Environmental Criteria for entrusting catering services (including via the installation of food, drink, and water distributors) and for preparing and serving sandwiches (as well as for sandwich supplies) and also for the installation and management of water fountains.

### **GOOD PRACTICE DEVELOPED AND TO BE CONSOLIDATED**

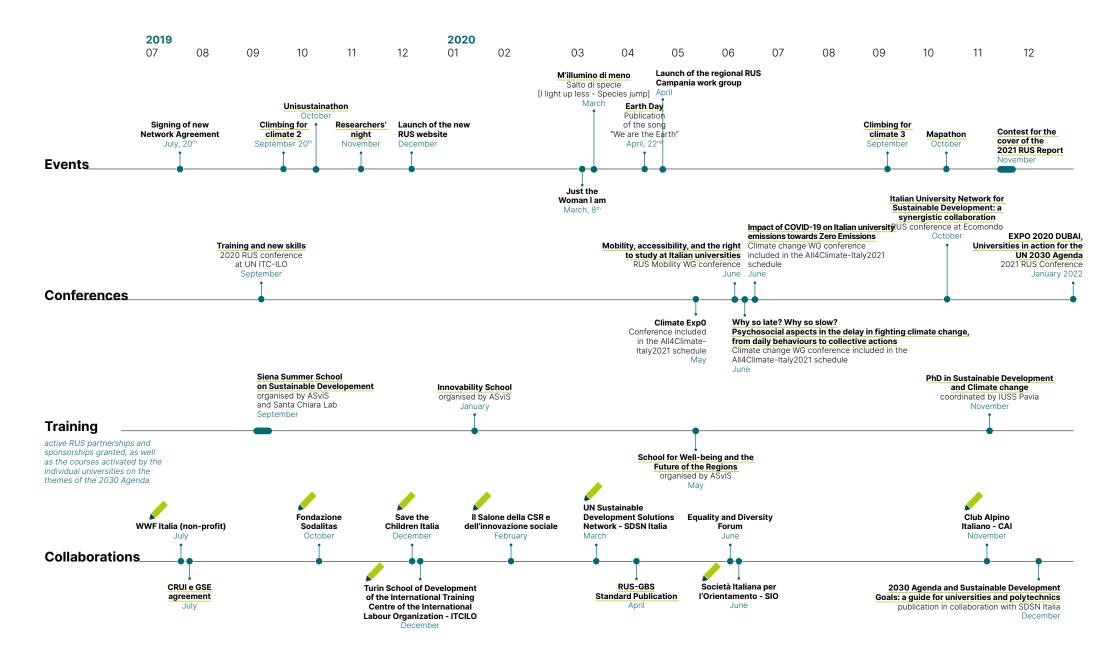
An exploration was recently conducted of the good practices implemented by the universities concerning the issue of reuse, presented at an event organised in June 2021 by the Università degli Studi di Verona. Following this, we include, grouped by categories, some good practices surveyed and considered "consolidated":

- Reuse of electric and electronic equipment: "Portale del Riuso" ["Reuse Portal"]
   of UniUD; "Stop ai RAEE" ["Stop electric and electronic equipment waste"]
   of UniPR; "Give them a chance" of PoliMI; "Trashware" of UniBO Cesena;
   "Allunghiamo la vita dei beni" ["Let's extend goods' lives'] of UniPD; and
   "GREENUNIMC per il Riuso" ["GREENUNIMC for reuse"] of UniMC.
- Furnishing reuse: "Mobiliamoci" ["Let's get furnished"] of UniSI; "Riutilizzare per ridurre i rifiuti" ["Reuse to reduce waste"] of UniFI; "RiusaMI" ["ReuseME"] of PoliMI; "Allunghiamo la vita dei beni" of UniPD; and "ReBIN" of UniSA.
- Reagents reuse: "Reagiamo" ["Let's react"] of UniSI; "Reagentario sostenibile Lia" ["LIA sustainable reagent supply"] of PoliMI; and "Allunghiamo la vita dei reagenti" ["Let's extend the life of reagents"] of UniPD.
- Reuse is sharing: "Policiclo la ciclofficina degli studenti" ["Policiclo the students' bike shop"] of PoliMI and "POLISharing per la mobilità" ["POLISharing for mobility"] of PoliMI.
- Raising awareness and training in reuse: "Greenopoli" of UniSA; "Sensibilizziamo"
  ["Let's raise awareness"] of UniFI; "GREENUNIMC" of UniMC; and "AvanziMania"
  ["Scrap Mania"] of PoliMI.

Finally, we note two initiatives for the regional promotion of the circular economy (to find out more, please refer to the WG page):

- "Circular South" of UniRoma3: university students and graduates of southern Italian universities experiment with entrepreneurial circular economy ideas and assess their potential on the market;
- "CEWMS Circular Economy of Waste Materials and Sustainability" of UniPD: creation of a synergistic network between the various stakeholders in the region, leveraging both the results that can be obtained with advanced research and the capacity to propose sustainable cultural models through education





### **EVENTS FOCUS**

### CLIMBING FOR CLIMATE 2 CLIMBING FOR CLIMATE 3

The RUS has been involved in Climbing for Climate (CFC) since 2019, the year when the Università degli Studi di Brescia launched the initiative proposing that Italian chancellors do the ascent to the Mount Adamello glacier. The 2020 and 2021 editions included the front-line involvement of the RUS that, in collaboration with the Club Alpino Italiano (CAI), disseminated the initiative throughout Italy to promote the 2030 Agenda issues through knowledge of the regions and active mobility, with a special focus on the issue of the climate crisis. While CFC2 was conducted via the initiative's only widespread method with the membership of 26 RUS universities and collaboration with the local CAI divisions, CFC3 was enriched by uniting the experience of 31 universities from 13 different regions in the spirit of the first edition, aimed at restoring national media coverage of universities' commitment to combating the climate crisis. On 14 September 2021, less than two months before the start of COP26 and at the peak of the CFC3 local excursions, l'Università degli Studi di Brescia together with the Atenei abruzzesi - Gran Sasso Science Institute, Università degli Studi dell'Aquila,

Università degli Studi di Teramo, Università degli

CAI proposed and organised an excursion with a

symbolic significance on the southernmost glacier

Studi "G. D'Annunzio" Chieti Pescara - and the

September 2020 September 2021 in Europe, the Calderone, a symbol of climate damage in the heart of Gran Sasso. The excursion had the aim of launching an appeal to fight the climate crisis, the ecological crisis, and biodiversity loss, with special reference to southern Europe's climate risks. Chancellors, delegates from RUS universities, and sponsoring bodies participated in the trek.

### UNISUSTAINATHON

October 2020

A three-day digital marathon organised by the RUS and by ASviS with the collaboration of Italy's General Commission for Expo 2020 Dubai with the aim of promoting the creation of projects and good practices for university environments on the issues of awareness, spaces, community, and inclusion. The Unisustainathon involved the participation of 36 groups consisting of 209 students (F: 137, M: 72) including 38 international students, belonging to 49 universities, including 12 international ones in 11 countries (Canada, United Arab Emirates, France, India, Nepal, the Netherlands, Pakistan, the UK, Senegal, Uganda, and the USA).

### LANCIO DEL SITO NUOVO DELLA RUS

December 2020

Thanks to the collaboration with the Data
Processing Service (S.E.D.) - IT and multimedia
service centre of the School of Economics of
the Università degli Studi di Roma "Tor Vergata",
which provided its Content Management System
to create the RUS website, the RUS website, the
new site was launched becoming the favoured tool
for sharing information and good practices for the
network's internal and external stakeholders.

2020-2021 activities Events focus 2021 RUS Report 61





Climbing for Climate 2 and 3, September 2020 and September 2021

### ALL4CLIMATE-ITALY2021 SCHEDULE

During 2021, the Ministry of Ecological Transition, in collaboration with the climate change communication programme Connect4Climate of the World Bank, together with the Lombardy Region and the Milan city council promoted All4Climate-ltaly2021: a shared, inclusive path aimed at exchange and dialogue on the challenges and good practices linked to the issue of climate change and the goals of the Paris Agreement.

With All4Climate-Italy2021, everyone was able to contribute ahead of two preparatory appointments for COP26 that Italy hosted in Milan from 28 September to 2 October 2021: the (Pre-COP) preparatory event and the international event dedicated to young people "Youth4Climate: Driving Ambition".

Aware of the significance of the role of universities in dealing with the climate crisis, during 2021, the RUS promoted and organised numerous events that were included in the 2021 All4climate Italy initiatives calendar. These included: Climate Exp0 and Climbing for Climate 3

### M'ILLUMINO DI MENO - SALTO DI SPECIE

The RUS joined "M'illumino di meno", a day for saving power and sustainable lifestyles launched by the Rai Radio2 Caterpillar programme, scheduled for Friday, 26 March 2021 and dedicated to the "Species jump", i.e. to the ecological evolution in our way of living that needs to be taken to emerge from the pandemic better.

January - September 2021

March 2021

From 19 to 26 March 2021, the universities belonging to the initiative launched an awareness-raising campaign on social networks, stimulating the university community to share photos and videos to describe their personal "species jump" and the desired ecological evolution and, thus, stimulating the university's greater sustainability in one or more of the areas proposed: Mobility, Home, Food, Circular economy, Energy, Nature, or Free Jump (a personalised species jump, if not found in the others).

18 universities joined and many ideas were proposed for the "species jump"!

### LAUNCH OF THE REGIONAL RUS CAMPANIA Work Group

April 2021

As already happened for the Piedmont and Lombardy universities, the regional RUS network for Campania universities was launched, encouraging the active coordination of 7 universities that are part of the national network. The RUS Campania regional work group also aims to act as a driver for developing ideas and projects collected on a wider scale, according to the best practices observed, adopting, at the same time, innovative methods for their more effective dissemination.



2020-2021 activities Events focus 2021 RUS Report 65

MAPATHON October 2021

In the context of the 2021 Sustainable Development Festival, responding to the slogan #stiamoagendo ["we're acting"], the RUS and the l'Alleanza Italiana per lo Sviluppo Sostenibile (ASviS), in collaboration with the Università degli Studi di Bari Aldo Moro, organised the MaPathon. This is a collaborative challenge with the aim of mapping a fragile area in the world for stimulating and increasing international collaboration in an educational and training context that is highly collaborative. The initiative was organised in collaboration with UN Mappers, a global community of volunteers supporting Unite Maps, a programme of the United Nations Global Service Center, the United Nations logistics base for creating geospatial services used by the UN peace missions in Africa. On 8 October 2021, approximately 100 students comprising 12 teams mapped 4,586 km of road in Madagascar!

### CONTEST FOR THE COVER OF THE 2021 RUS REPORT

In Autumn 2021, a call was held to create the cover for the 2021 RUS report, open to students of universities belonging to the RUS.

In response to the theme of the 2021 RUS Report: "Universities for the regions in the year of climate ambition", <u>37 proposte</u> were sent by as many students and, following the assessment made by the members of the RUS coordination committee and coordinators of the RUS WGs, the proposal created by Gaia Esposito and Barbara Maione of the Università degli Studi della Campania "Luigi

November 2021

Vanvitelli" was announced the winner. The proposal was used to create the cover of this RUS report.

### **FOCUS CONVEGNI**

### **CLIMATE EXPO**

May 2021

From 17 to 21 May 2021, the <u>Climate Exp0</u> took place, the conference organised by the RUS in collaboration with the <u>COP26 Universities</u>

<u>Network</u>, a group of more than 55 universities with headquarters in the UK that worked together with the ambition of bringing tangible results to the United Nations Conference on climate change - COP26 (Glasgow, November 2021). The conference was included in the "All4Climate – Italy 2021" schedule.

Ahead of COP26 - six months before the conference itself - Climate Exp0 presented the most recent reflections and most relevant research around five key themes: Adaptation and Resilience; Finance and Regulation; Green recovery; Mitigation solutions and nature-based solutions.

Dealing with a different issue every day, through three virtual stages, Climate Exp0 involved the participation of 760 speakers including leading personalities in British and Italian politics, involving more than 80 people in its organisation and reaching more than 5,200 people registered to follow the conference in 159 countries.

2020-2021 activities Conferences focus 2021 RUS Report 67

## RUS CONFERENCE AT ECOMONDO "ITALIAN UNIVERSITY NETWORK FOR SUSTAINABLE DEVELOPMENT: A SYNERGISTIC COLLABORATION"

As part of Ecomondo 2021, the RUS organised a meeting in order to illustrate the role of the Italian University Network for Sustainable Development to encourage collaborations among universities and the region, with a view to public outreach and community leadership. After a brief presentation from the network, space was given, first of all, to case studies presented by some coordinators of the RUS Working Groups and, following this, to stakeholders who have established partnerships for especially significant projects with the RUS and/or with the network's member universities.

### EXPO 2020 DUBAI UNIVERSITIES IN ACTION FOR THE UN 2030 AGENDA

On 18 January 2022, during the Global Goals of EXPO 2020 DUBAI week, the RUS organised, in collaboration with the Italian pavilion and the Italian Alliance for Sustainable Development (ASviS), the "Universities in action for the UN 2030 Agenda", forum. This event was sponsored by the Conference of Italian University Rectors (CRUI), by the Ministry of Infrastructure and of Sustainable Mobility, and by the Ministry for Universities and Research. The "Universities in action for the UN 2030 Agenda" forum was an occasion for international polytechnics to dialogue and imagine the role of the universities as part of the UN Decade of Action focused on the three Ps: People, Planet, and

October 2021

January 2022

#### Prosperity.

During the forum, videos selected as part of the "Call for students" and "Call for Higher education institutions", launched during 2021, were projected. 46 RUS people participated in person in Dubai: the CO₂ emissions caused by their air travel was wholly compensated for by purchasing carbon credits thanks to the Carbonsink sponsorship.





**Expo 2020 Dubai**, January 2022

**2020-2021 activities** Conferences focus 2021 RUS Report 69

# • • • • • • •

### GUIDELINES ON ITALIAN UNIVERSITIES' "NET ZERO EMISSIONS" COMMITMENTS

STEFANO CASERINI COORDINATOR OF THE RUS CLIMATE CHANGE WG

The interest in "net zero emissions" goals, relating to CO2 or total climate-altering gases, is constantly growing. An increasing number of parties has assumed commitments in this sense, mostly relating to 2050, but also for 2030, 2040, 2060, or intermediate years. The European Union has taken on the commitment of climate neutrality by 2050, first in the "2050 Long-term strategy" presented by the European Commission in November 2018 [1], then in the European Green Deal and in the Climate Law approved in December 2020. A similar goal is included in the climate platform of the President of the United States, Joe Biden, while the Chinese President Xi Jinping has announced China's commitment to carbon neutrality by 2060. Commitments to net zero emissions by mid-century have been declared or announced by more than another 100 nations, by more than 1,000 subnational authorities (cities, regions, etc.), and by more than 1,500 companies that have an overall turnover of more than 11 trillion dollars [2].

[1] CEC (2018) 2050 long-term strategy.

[2] Hsu A. et al. (2020) (2020).

Accelerating Net
Zero: Exploring
Cities, Regions, and Companies'
Pledges to
Decarbonise.
Data-Driven
EnviroLab &
NewClimate
Institute.

Numerous international universities that have joined the global campaign "Race To Zero" [3], supported by the UNFCCC, have announced their commitment to net zero greenhouse gas emissions, or to net CO2 emissions. In this area, the "Global Climate Letter for Universities and Colleges [4]" was, in fact, launched as part of the SDG Accord, with the goal: "Pledge to reach net-zero by 2030, or 2050 at the very latest". 615 universities have joined, which represent approximately 8 million students. Another 71 university networks or research bodies, which represent approximately 34,157 institutions, have joined.

In 2020, the Italian University Network for Sustainable Development (RUS) formally signed up to the Global Climate Letter for Universities and Colleges, and 8 Italian universities have declared a goal of net zero emissions: Università degli Studi del Sannio in Benevento, Università degli Studi di Genova, and Accademia Albertina delle Belle Arti di Torino by 2030; Università degli Studi di Pavia and Università di Roma "Tor Vergata" by 2040; Politecnico di Torino, Almo Collegio Borromeo, and Università degli Studi dell'Aquila by 2050 (this list refers to what was available on 31 March 2021 on the UNFCCC- SDG Accord website).

Despite the great interest in "net zero emissions" goals, the meaning of this commitment is often unclear, and there are numerous aspects that should be clarified when these commitments are adopted [5].

Carbon neutrality, or "net zero carbon emissions", means that any residual CO2 emissions must be

[3] UNFCCC, <u>2020</u>
Race To Zero
Campaign.

[4] The SDG
Agreement
exhorts universities
and institutes
throughout the
world to include
the Sustainable
Development
Goals in training,
research,
leadership,
management,
administration,
and engagement
activities.

[5] Rogelj e Geden (2021) Three ways to improve netzero emissions targets. Nature, 591, 365-367 compensated for with a corresponding amount of negative CO2 emissions.

Climate neutrality means, in contrast, a commitment to "net zero climate-altering gas emissions", i.e. any residual CO2, CH4, N2O and F-Gas emissions must be compensated for with a corresponding quantity of negative CO2 emissions; the non-CO2 gas emissions are generally converted into CO2 with a suitable global warming potential, which depends on their heating potential and their duration in the atmosphere compared to CO2.

At the moment, the "negative" emissions of other climate-altering gases are not considered. Negative CO2 emissions can be produced with technologies and processes that ensure the removal of CO2 from the atmosphere and its subsequent permanent sequestration. The main examples of these technologies, called CDR (Carbon Dioxide Removal) or GGR (greenhouse gas removal), considered in the IPCC Special Report on 1.5 degrees of global warming [6] are afforestation and reforestation, soil carbon sequestration via agricultural practices, biochar, bioenergy with carbon capture and storage (BECCS), direct air capture for carbon storage (DACCS), ocean alkalinization, and accelerated rock weathering. While the afforestation technologies, conservation agricultural practices are already implemented on a wide scale in various contexts, the others are currently used in a very limited way, or are in the research and development phase.

research and development phase.

While research and development in this sector is

rapidly growing, at the moment, these options - like

Global Warmi

1.5 °C, Chapte

Strengthening

implementing

global response

[6] IPCC (2018)
Special Report on
Global Warming of
1.5 °C, Chapter 4
Strengthening and implementing the global response.

other mitigation technologies such as CO2 capture and storage or nuclear fission - are not yet available on a commercial scale and their potential remains unknown. For this reason, when planning goals and actions in the medium-long term (2030-2050), it is preferable to rely on options currently already able to offer guarantees in terms of results. It should be noted that the main actions already practicable today, both globally and locally, concern the achievement of three main goals, in order of decreasing priority:

- significant reduction in absolute terms of total energy requirements (including through what is set forth by Goal 7, target 7.3 of the UN's 2030 Agenda);
- sustained growth of the share of renewable sources covering total energy requirements (including through what is set forth by Goal 7, target 7.22 of the UN's 2030 Agenda), until they are completely met;
- removal of CO2 from the atmosphere, in particular through afforestation actions and the implementation of conversation agricultural practices.

For a university, energy requirements may be reduced in various sectors: electricity consumption, thermal consumption (heating and cooling of buildings), and consumption linked to commuting. For example, as far as regards mobility for institutional and research missions, trips that can be substituted may be reduced by using webconference tools and trips with private motor vehicles (in particular conventionally fuelled ones)

and air travel (in particular, for distances of less than 500 kilometres and on tracts served by high speed trains) may be drastically reduced by using local, national, and international public transport. Another way for a public or private party to reach net zero emissions may involve compensating part of the residual emissions with "credits" deriving from the reduction in CO2 emissions or removals carried out in other projects. At this time, the "official" carbon credit market has, however, stalled - waiting for the implementation of the new credit system set forth by art. 6 of the Paris Agreement, defined in COP26 in Glasgow. There is a growing demand for and supply of CO2 emission credits in the voluntary market. In 2020, credits for 188 million tonnes of CO2 were generated, which has already become 239 Mt in the first 8 months of 2021 [7]. Microsoft is the company that has currently purchased the greatest quantity of CO2 removal credits, 1.4 million tonnes [8], in view of its goal of becoming "carbon negative" by 2030, compensating for all its emissions, both direct and indirect, since its foundation. For the most part (84.8%), forestation credits, from sequestration of carbon in the soil via agricultural practices (14.7%), have been purchased and, only to a small extent (0.5%), credits from BEECS, biochar, and DACCS.

[7] Ecosystem
Marketplace
(2021) State of the
Voluntary Carbon
Markets 2021
Markets in Motion

[8] Microsoft's F21
Carbon Removal
Portfolio

The RUS believes it is important that Italian universities adopt net zero emission commitments, but in a consistent way that is clear in its concrete details, which can significantly change the substance of the commitment.

Some suggestions are outlined below for adopting these goals and the related points to be clarified to make universities' commitment transparent and verifiable, in order to increase the credibility and possibility of enhancing these commitments.

### POLLUTANTS CONSIDERED BY THE GOAL

It must be clear whether the net zero emissions goal relates to CO2 or to other greenhouse gases as well (indicating, in this case, the GWP considered). We suggest only considering CO2 emissions, thus carbon neutrality goals.

# SECTORS CONSIDERED FOR ESTIMATING EMISSIONS CONCERNED BY THE GOAL

It must be clear which emissions the net zero emissions goal is defined for, i.e. if relating only to direct emissions (e.g. heating, vehicles belonging to the university) or indirect electric ones (from purchased electricity consumption), or other indirect ones (transport for accessing campus, staff missions).

We suggest considering at least the direct emissions, indirect ones from purchased electricity and heat consumption, and emissions deriving from staff missions...

# METHODS FOR REACHING THE GOAL (REDUCTION IN DIRECT EMISSIONS/CREDITS/REMOVALS)

In defining the net zero emissions goal, it should be defined to what degree the goal will be achieved via direct reduction in university emissions, by CO2 removal, by credits deriving from emissions reductions, or by CO2 removal credits. We believe that universities must not rely significantly on the purchase of credits, but commit to an ambitious CO2 emissions reduction strategy, which entails a very significant reduction goal (e.g. at least 90%) of emissions. Otherwise, the commitment in the medium-long term may be a way of "shifting the problem", or relying on a hypothesis (CO2 removal, use of credits) whose implementation does not just depend on the university, or even of distracting from a current absence of concrete actions. We suggest considering these minimum goals for reaching the carbon neutrality goals:

- by 2030: at least a 50% reduction in emissions due to direct initiatives (thus, no more than 50% via the purchase of credits)
- by 2030: at least a 75% reduction in emissions due to direct initiatives (thus, no more than 25% via the purchase of credits)
- by 2050: at least a 90% reduction in emissions due to direct initiatives (thus, no more than 10% via the purchase of credits)

# USE OF CREDITS FOR COMPENSATING RESIDUAL EMISSIONS

It must be clear what type of credits will be considered for compensating emissions, indicating

the type of credits, the guarantees on their additionality and permanence of their effects. The possibility of considering, in terms of CO2 emissions reduction, the purchase of guarantees of renewable source energy, whose additionality is strong doubtful, must also be clarified.

The use of "regulated market" credits is advisable, i.e. those recognised by the UNFCCC and not just by private parties ("voluntary market").

#### **DEFINITION OF A STRATEGY**

The assumption of a net zero emissions commitment should be accompanied by the definition of a strategy, defined by a working group of energy technology experts, that delineates the possible developments in the generation of electricity from renewable sources and storage, the increase in energy efficiency and in the reduction of energy consumption, as well as the method for integrating renewable sources into the current fossil fuel system during its gradual limitation. Alternatively, we suggest defining at least one working group tasked with identifying the strategy itself.

## **DEFINITION OF INTERMEDIATE GOALS**

The commitment to net zero emissions should be accompanied by the definition of intermediate goals, at least by 2030 and 2040, if not every five years.

We suggest the following minimum commitments, with reference to the year 2019:

• by 2030: -20% direct energy consumption

(electricity, fuel/heat) and 25% coverage of requirements with production from renewables (independent production, energy community, territorial area)

- by 2040: -35% direct energy consumption and 40% coverage of requirements with renewable production
- by 2050: -50% direct energy consumption and entire coverage of residual requirements (50%) with renewable production (zero emissions campus)

# DEFINITION OF A MONITORING SYSTEM (EMISSIONS INVENTORY)

To verify compliance with the reduction goal or goals, a commitment to equip the university with an emissions quantifying system is necessary, for example, an inventory of emissions and an energy budget.





# 2021 MAPPING

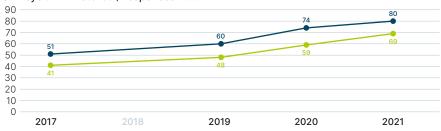
Every year, a survey is carried out with the twofold goal of having an up-to-date image of the network and mapping the activities and initiatives of universities in terms of sustainable development. For the 2021 survey, in October 2021, an online questionnaire was given to the 80 universities belonging to the RUS at that time. 69 responses were received, with a response rate of 86%. In addition to a classification by size and geographical position, the questionnaire is structured into sections that explore various areas: the principles of sustainable development, the 2030 Agenda and SDGs, delegates, organisational structure, sustainability activities, students, communication channels, reporting, networks, and, finally, a section dedicated to specific questions about Working Groups.

At the end of the three-year mandate 2019-2021 of the coordination committee, the most significant results are listed below, with a special focus on the trends that emerge via the comparison between data collected in the surveys conducted from 2017 to 2021.



# DATA COLLECTION 2017 / 2019 / 2020 / 2021

#### Surveys administered / responses received



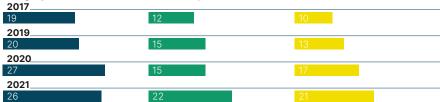
### **UNIVERSITY FEATURES**

#### Size of the University

<b></b>	0.0.1,		
2017			
10	11	10	10
2019			
9	10	13	16
2020			
11	14	15	19
2021			
10	19	16	24

\* Mega Universities: over 40.000 enrolled students Large Universities: 20.000 to 40.000 enrolled students Medium Universities: 10.000 to 20.000 enrolled students Small Universities: up to 10.000 enrolled students

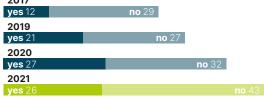
#### Geographical location of the University



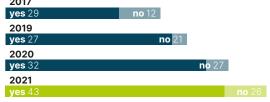
North: Emilia-Romagna, Friuli-Venezia Giulia, Liguria, Lombardia, Piemonte, Trentino-Alto Adige, Veneto, Valle d'Aosta Center: Lazio, Marche, Toscana, Umbria South/Island: Abruzzo, Basilicata, Calabria, Campania, Molise, Puglia, Sardegna, Sicilia

### SUSTAINABLE DEVELOPMENT PRINCIPLES

Are the principles of sustainable development mentioned in the **University Statute**?



Are the principles of sustainable development present in the **University's Strategic Plan?** 2017



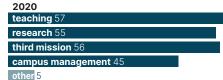
Does the **University Strategic Plan** include quantitative sustainability targets?



### **AREAS OF WORKS**

\* multiple answer

In which  $\mbox{areas}$  of  $\mbox{work}$  can you find references to the principles of sustainable development?





#### **MANDATES**





#### Is the **Delegate for Sustainability** also the Delegate for RUS?

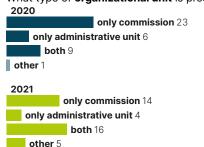


#### ORGANIZATIONAL STRUCTURE

Is there a dedicated sustainability **organizational structure** at the University? **2017** 

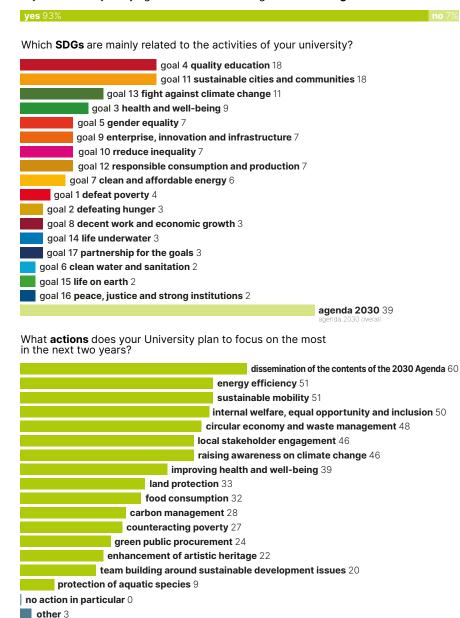


#### What type of **organizational unit** is present?



#### AGENDA 2030 AND SDGS

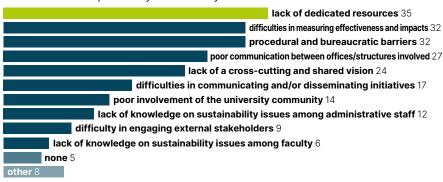
Is your university carrying out awareness-raising activities on Agenda 2030 issues?



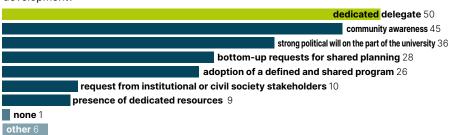
**2021 Mapping** 2021 RUS Report 87

#### SUSTAINABILITY ACTIVITIES

What **barriers / obstacles** have you encountered in implementing actions for sustainable development at your university?

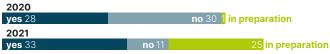


What **factors** have triggered the implementation of actions for sustainable development?



#### REPORTING

Is there regular **reporting on sustainability activities**?

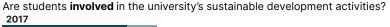


# **RANKING**

What sustainability rankings does your university take part in?



#### **STUDENTS**

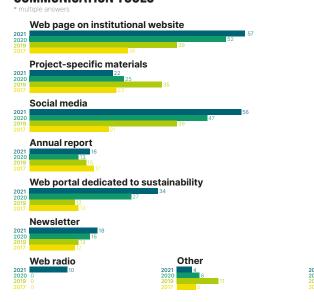




#### How are the students involved?



## **COMMUNICATION TOOLS**



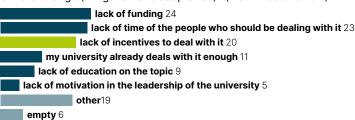
None

### **CLIMATE CHANGE**

In your opinion, what is your university's **level of commitment** to climate change (mitigation and adaptation)?



In your opinion, what is the **reason** why your University does not work harder on climate change (mitigation and adaptation)? (max three answers)



### **FOOD**

Regarding the presence of spaces in the university for the consumption of food brought from home (or purchased outside the university) (more than one answer possible)

dedicated spaces exist 53

dedicated spaces are mixed-use spaces (food consumption and study room or other) 31

dedicated spaces are open to everyone 21

sono in previsione o allestimento spazi dedicati 19

dedicated spaces are open only to part of the university community (students, faculty, t/a staff) 14

 $\underline{\text{dedicat}} \text{ed spaces are spaces for exclusive use for food consumption } 9$ 

dedicated spaces are equipped (microwave, sink, other...) 18

dedicated spaces are present within these spaces communications (panels, signage) dedicated to the theme of sustainable food  $\mbox{3}$ 

other 43

there are no dedicated spaces 19

# **EDUCATION**

Has the university activated a cross-curricular course on sustainable development (so-called **Zero Lesson**)?

yes 37 no 3

#### **ENERGY**

Has your university appointed an **energy manager** (responsible for the conservation and rational use of energy in accordance with Law 10/91 art.19)?

es 45 no 24 |

## **INCLUSION AND SOCIAL JUSTICE**

Are there **specific University policies** for inclusion and social justice?

yes 64 no 5

If yes, what are they about? (more than one answer possible):

specific attentions for students with disabilities 62

specific attention for students with learning disabilities 57

 $\underline{\text{specific attentions for students } \underline{w} \text{ith refugee status and migration stories } 40$ 

specific attentions for students in economically disadvantaged conditions 51

specific attention for staff with disabilities 45

specific attentions for staff with other vulnerabilities 27

involvement of male and female students in educational activities related to inclusion/social justice 38

initiatives against discrimination associated with gender 49

initiatives against discrimination associated with nationality 27

initiatives against discrimination associated with the presence of disabilities and learning disabilities 32

initiatives against discrimination associated with the presence of psychological/psychiatric problems 33

the involvement of and faculty members in training activities in the area of inclusion/social justice 31

the involvement of administrative technical staff in training activities in the area of inclusion/social justice 26

other 4



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#### MOBILITY

Has your University drafted and adopted a Home-Work Travel Plan? yes, it has been drafted and it is in force 14 yes, it has drafted it but it is not in force yet 9 no, but it is in the process of being drafted 8 no, but we plan to do so in the coming months 19 no, and there are no plans to draft it 19

# **WASTE AND RESOURCES**

What actions has your university taken to prevent the use of single-use plastic? (more than one answer possible)

water bottle distribution to all freshmen 30

water bottle distribution at events 37

installation of fountains/drinks 48

introduction of hot beverage dispensers (vending machines) with the possibility of dispensing without a glass 10

implementation of information and awareness campaigns on the reduction of single-use plastic and public water quality 23

specifications for the organization of events that limit or prohibit the use of single-use plastic 16

notices/chapters with requirements expressly aimed at preventing the production of packaging waste 22

distribution of water bottles to Technical-Administrative staff 26

distribution of water bottles to Teaching staff 20

water bottle distribution to more than 50% of students 10

valorization of public water by preparing maps of drinking bottles, signals, etc 11

studies on consumption of products in disposable containers on university premises 11

restrictions on the sale of single-use bottled water in vending machines 11

introduction of incentives for those who avoid purchasing or reuse containers 1

none 3

other 9

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# **COLLABORATIONS**

In the second half of 2020 and during 2021, the RUS confirmed previous agreements and formalised, through Partnership Letters, collaborations with bodies that share the same goals and recognise, in the 2030 Agenda, an essential guide for directing their own activities. Through the Partnership Letters, the RUS and the bodies involved demonstrate their interest in establishing a collaborative relationship on issues linked to the 2030 Agenda for sustainable development, consisting in the implementation of shared interest activities and participation in mutual initiatives, according to the forms defined on a case-by-case basis.

In particular, the RUS has formalised and confirmed its collaboration with the following bodies and associations:



















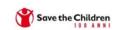






















#### **COLLABORATIONS FOCUS**

### **SAVE THE CHILDREN ITALIA**

November 2020

The RUS collaborates with Save the Children in disseminating the "Volunteers project for supporting studies" through which RUS universities can make a significant contribution to supporting the schools, children, and adolescents at greatest risk of learning loss and dropping out of school. The project aims to improve the learning and school participation of at least 1,500 children and kids in the current school year, strengthening their basic skills and motivation to learn, with the support of young volunteers engaged in university studies. Save the Children thought of involving the RUS in recruiting volunteers from among the university student population. This is an occasion to exert yourself for young people, giving a meaning to days that, during the lockdown, were impoverished of chances to take on a challenge. Every volunteer, before joining the team of people available and prepared to support online teaching, undertakes mandatory, basic training, in order to start the service, and specific training, so they can enrich their own set of skills.

**RUS-GBS STANDARD PUBLICATION** 

The preparation of the <u>Standard on the Italian</u> <u>universities' Sustainability Budget</u> is the result of the collaboration between the Italian University Network for Sustainable Development (RUS) and the group for studying the social budget (GBS). RUS and GBS are in agreement in believing that the

April 2021

role that universities carry out as agents of change, to promote and support achieving the Sustainable Development Goals, is significant and that universities' sustainability accounting is a primary element in stakeholder communication policies and in their dedication and proactive vision for achieving a more sustainable future.

RUS and GBS founded a Working Group that, leveraging the experience and commitment of the RUS in disseminating the culture of sustainability in Italian universities and the technical and scientific skills of the GBS on issues of sustainability reporting, worked on developing a standard for preparing universities' Sustainability Budgets.

# UN SUSTAINABLE DEVELOPMENT SOLUTIONS NETWORK - SDSN ITALIA

December 2021

Thanks to the collaboration with the Sustainable Development Solutions Network for Italy (SDSN Italia), in December 2021, the "2030 Agenda and Sustainable Development Goals: a guide for universities and polytechnics" was published. The quide, the first edition in Italian, is also the first internationally to include the annotated translation of the two guides: "Getting Started with the SDGs in Universities" (2017) and "Accelerating Education for the SDGs in Universities" (2020) – of the United Nations' Sustainable Development Solutions Network (UN SDSN). The two guides aim to encourage, support, and guide universities and polytechnics in developing expertise, knowledge, and useful skills for achieving the 2030 Agenda Sustainable Development Goals.

Collaborazioni Focus collaborazioni 2021 RUS Report 99

Making use of the collaboration with the RUS, SDSN Italia chose to create a single version in Italian with the goal of promoting and enhancing the content of both guides, as well as facilitating their understanding, dissemination, and use nationally by universities and any other tertiary institution.

#### MEMBER UNIVERSITIES

Alma Mater Studiorum - Università di Bologna Istituto Universitario di Studi Superiori - Iuss Pavia

Gran Sasso Science Institute

Libera Università di Bolzano

Libera Università di Lingue E Comunicazione - Iulm

Libera Università Internazionale degli Studi Sociali "Guido Carli" - Luiss

Libera Università Maria Ss. Assunta - Lumsa

Politecnico di Bari

Politecnico di Milano Politecnico di Torino

Scuola Superiore di Studi Universitari e di

Perfezionamento Sant'Anna

Università Ca' Foscari Venezia

Università Campus Bio-medico di Roma

Università Carlo Cattaneo - Liuc

Università Cattolica del Sacro Cuore

Università della Valle D'aosta - Université de la Vallée

D'aoste

Università degli Studi del Sannio

Università degli Studi della Basilicata

Università degli Studi della Campania - Luigi Vanvitelli

Università degli Studi della Tuscia

Università degli Studi dell'Aquila Università degli Studi dell'Insubria

Università degli Studi di Bari Aldo Moro

Università degli Studi di Bergamo

Università degli Studi di Brescia

Università degli Studi di Cagliari

Università degli Studi di Camerino

Università degli Studi di Cassino e del Lazio Meridionale

Università degli Studi di Catania

Università degli Studi di Catanzaro "Magna Graecia"

Università degli Studi di Ferrara

Università degli Studi di Firenze

Università degli Studi di Foggia

Università degli Studi "G. D'annunzio" Chieti Pescara

Università degli Studi di Genova

Università degli Studi di Macerata

Università degli Studi di Messina

Università degli Studi di Milano

Università degli Studi di Milano-Bicocca

Università degli Studi di Modena e Reggio Emilia

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Università degli Studi di Napoli Federico II

Università degli Studi di Napoli "L'Orientale"

Università degli Studi di Napoli Parthenope

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Università degli Studi di Pavia Università degli Studi di Perugia

Università degli Studi di Roma "La Sapienza"

Università degli Studi di Roma "Tor Vergata"

Università degli Studi di Roma Unitelma Sapienza

Università degli Studi di Salerno

Università degli Studi di Sassari

Università degli Studi di Scienze Gastronomiche

Università degli Studi di Siena

Università degli Studi di Teramo

Università degli Studi di Torino

Università degli Studi di Trento

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Università degli Studi di Verona

Università degli Studi Internazionali di Roma - Unint

Università degli Studi Link Campus University

Università degli Studi Mediterranea di Reggio Calabria

Università degli Studi Roma Tre

Università degli Studi Saint Camillus - International

University of Health And Medical Sciences

- Unicamillus

Università degli Studi Suor Orsola Benincasa

Università del Piemonte Orientale

Università del Salento

Università della Calabria

Università di Pisa

Università luav Di Venezia

Università Lum Jean Monnet

Università per Stranieri Di Perugia

Università per Stranieri Di Siena

Università Politecnica delle Marche

Università Pontificia Salesiana

Università Telematica "Leonardo Da Vinci"

Università Vita-Salute S. Raffaele

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# NETWORK OF UNIVERSITIES FOR SUSTAINABLE DEVELOPMENT

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