Sustainability Reporting in Universities

Manual for implementation of the RUS-GBS Standard

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INTRODUCTION

INTRODUCTION

A Standard for Sustainability Reporting in Italian Universities has been drafted, thanks to collaboration between the Italian University Network for Sustainable Development (RUS) and the Reporting and Sustainability Group (GBS).

RUS – promoted by the Conference of Italian University Rectors (CRUI) in 2015 – is the first experience of coordination and sharing carried out by all Italian Universities (currently 82), committed to environmental sustainability and social responsibility.

The main goals of RUS are:

- to spread the culture and good practices of sustainability, both inside and outside universities, sharing competences and experience, so as to increase the positive effects of the initiatives carried out by the single universities;
- to promote *Sustainable Development Goals* (SDGs) and contribute to their achievement;
- to enhance the reputation and importance of the Italian experience at international level.

RUS, moreover, proposes itself as a model of good practice, to be extended also to other sectors of the Public Administration (PA), Education and the territory in general, encouraging collaboration between universities and cities, spreading social innovation throughout the territory, and promoting cultural initiatives for the entire country.

GBS was officially founded in Milan in 1998, as a research group entrusted with the drafting of Social Reporting and, in 2001, this no-profit research group was formally ratified and named *Gruppo di Studio per il Bilancio Sociale* (Social Reporting Research Group), which in 2022 was renamed *Gruppo Bilanci e Sostenibilità* (Reporting and Sustainability Group) (GBS). Since 2001, the association has gathered many more members including scholars, universities and institutions. Its 28 founding members have been joined by 38 ordinary members and 44 universities, with the added support of CNDCEC – Consiglio Nazionale dei Dottori Commercialisti ed Esperti Contabili (National Board of Accountants and Auditors) and ASSIREVI (Italian Auditors' Association), amongst others.

The main goals of GBS are:

- to promote and develop scientific research on social reporting and on topics inherent to its representation and diffusion.
- to analyse, study and develop a people-centred, enterprise culture.
- to study models of social reporting suitable for companies operating in specific sectors, also in the sphere of public cooperation, as well as to study and diffuse codes of ethics, as tools for preventing irresponsible behaviour.

RUS and GBS agree on the following:

- The importance of the role that universities can play as agents of change to promote, support and achieve SDGs;
- That teaching, research and the third mission are key elements in spreading knowledge and promoting innovation and change aimed at achieving SDGs;
- That sustainability and the achievement of SDGs are fundamental for the construction of models of responsible universities;
- That reporting on the sustainability of universities is a primary element in stakeholders' communication policies, and of the commitment aimed at achieving a more sustainable future.

Based on this premise, RUS and GBS have formed a Working Group. Relying on the experience and commitment of RUS in spreading the culture of sustainability in Italian universities, and on the technical and scientific competence of GBS on social reporting, the Group has drafted a standard and a manual of implementation for drawing up a Sustainability Report for Universities.

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PURPOSES OF THE IMPLEMENTATION MANUAL

PURPOSES OF THE IMPLEMENTATION MANUAL

WHY A STANDARD ON SUSTAINABILITY REPORTING IN ITALIAN UNIVERSITIES IS NEEDED

The last thirty years have been characterized by a growing interest in themes inherent to sustainable development. This has led organizations to behave and act following a logic of socio-environmental responsibility and accountability, reporting to stakeholders on their commitment to sustainability. Universities are no exception. However, compared to other organizations and taking into account their functions and role in the economic-social context they work in, a distinct approach to sustainability needs to be adopted which differs from other organizations.

The prime functions of universities are, above all, **teaching** and **education**, **research** and the **Third Mission** (**collaboration with the external community**). These functions render them the most eligible institutions for spreading the concept of sustainability. The Talloires Declaration, signed in France in 1990, is the first official statement on sustainability made by universities, and well describes the potential role of universities in this area. *"Universities educate most of the people who develop and manage society's institutions. For this reason, universities bear profound responsibilities to increase the awareness, knowledge, technologies, and tools to create an environmentally sustainable future. Universities have all the expertise necessary to develop the intellectual and conceptual framework to achieve this goal. Universities must play a strong role in the education, research, policy development, information exchange, and community outreach to help create an equitable and sustainable future"* (Report and Declaration of The Presidents Conference, 1990).

The essential role of universities in the transition towards sustainable development has been shared over time and has been further strengthened after the approval of the 2030 Agenda. The 2030 Agenda, adopted by the General Assembly of the United Nations in 2015, lists 17 Sustainable Development Goals (SDGs), framed within an action plan with 169 relevant targets or goals regarding the environment, economics, social and institutions to be achieved by 2030. Through these 17 goals, the 2030 Agenda intends to face our planet's most urgent challenges, such as ending poverty and achieving economic prosperity, social inclusion and environmental sustainability in a coordinated, shared manner. Universities are called on to lead the construction of the "transformative resilience" (RUS 2020) necessary for the concrete achievement of the SDGs.

On this matter, RUS has developed a plan to implement their Manifesto, "Da 'Le Università per la sostenibilità' a 'La sostenibilità nelle Università'" *("From 'Universities towards Sustainability' to 'Sustainability in Universities'")*, signed by CRUI in Udine in May 2019, identifying concrete activities to carry out, following different lines of action. The Manifesto is a true 'agreement' drawn up by the Italian Rectors, committing Italian Universities to becoming promoters of the 2030 Agenda, and strengthening their role in Italy's socio-economic transformation, supporting sustainable development in local communities and territories.

Universities, therefore, are called on to help achieve awareness, acting both as "agents" and "subjects" of change.

UNIVERSITIES AS AGENTS OF CHANGE

With regard to **teaching and education**, it is up to Universities to help society evolve, by teaching how to deal with crucial socio-economic problems in specific contexts, encouraging social debate and adopting socio-economic and environmental policies. It is important, therefore, to review the teaching activities offered with the aim of fostering socio-economic development, inclusion, environmental sustainability and the development of critical thinking. Furthermore, it is vital to teach all students by spreading the necessary knowledge, competence, and values for a sustainable future and an awareness of the importance of the work contributed by each single person, aimed at improving quality of work life (QWL) for present and future generations.

To this end, it is certainly essential to promote the development of curricula, conferences, seminars and subjects proposing sustainability-related topics. Universities, however, have to foresee much more. It is not simply a question of modifying the "contents"; it is also a question of modifying the culture and educational practices. In order to educate students responsibly, universities have to provide them with the necessary tools to acquire *critical thinking*, supporting a more sustainable lifestyle. Moreover, it is necessary to spread principles, values and ethical, behavioural norms in helping to choose between what is good and what is not good to do. Providing individual or isolated courses on socio-environmental ethics or responsibility is therefore, not enough. Instead, it is necessary for these topics to become the core of the various subjects. In this process of transformation, the educational method itself needs to be reconsidered and integrated with more active participation on the part of the students, and with *solution-oriented* approaches. This would allow to educate individuals who are able to transfer the knowledge and competence acquired to outside the university system, thus spreading *sustainability-oriented* rules and behaviours in a thorough manner.

With regard to the **research** carried out by universities, focusing on topics in connection with sustainable development contributes to spreading to basic principles and values within the scientific community, but also to promoting the development of tools and actions able to support sustainable actions carried out by organizations and universities themselves.

The principles and values of sustainability should not be limited only to teaching and research but should also be at the basis of **relationships with stakeholders and local communities**, in a joint effort to find solutions for new models of life and sustainable activities. Knowledge deriving from scientific research and the competences acquired should be made available for the territory, creating partnerships and spreading a logic of creation and sharing of values.

UNIVERSITIES AS SUBJECTS OF CHANGE

The objective of the latter role is the commitment of universities to the sustainability of their own programmes, rethinking strategies and actions to carry out. The various social and environmental impacts caused by their activities and the use/consumption of resources (water, energy, paper, and so on) need to be taken into consideration. This new behaviour, however, must be shared with all the stakeholders involved in the organization (particularly students, teaching staff, and technical and administrative personnel): each person who studies, works or collaborates with a university

has to be part of it and acquire awareness of the benefits which can derive from sustainable behaviour and actions. The approach towards sustainability, therefore, needs to be included in the university *mission*, making it one of its fundamental values, and also included in its strategic plan and models of governance. This approach must be adopted in routine operations, and in interactions with the various stakeholders. Similarly, it needs to be considered in *accounting* and *reporting* systems to assess and report on the activities carried out and the results obtained.

THE ROLE OF SUSTAINABILITY REPORTING FOR UNIVERSITIES

The tool which universities can adopt to report on their operability with regard to the above-mentioned aspects is Sustainability Reporting. A Sustainability Report is a useful tool to support the duty of transparency and *accountability*, as well as a way of measuring each university's level of performance and, by aggregation, that of all Italian universities.

Drawing up a sustainability report for universities cannot be separated from the culture of sustainability which needs to guide its principal functions (teaching and education, scientific research and third mission) as well as the structure of governance, its strategic and organizational approach, and operational practices.

At present, however, there are still no available standards for non-financial reporting that are widely accepted for universities. To date, reports published by universities have only referred to directives, guidelines, or general standards which can be adopted by both public and private companies.

Given the above, the Standard and the Manual for Implementation have been written with the aim of realizing a specific guide for Italian universities (public and private), providing guidelines for non-financial reports which they may be interested in publishing.

These documents, therefore, propose to:

- guide universities (public and private) in drafting their Sustainability Report;
- provide a well-reasoned, balanced synthesis on the economic and socio-environmental impact of university operability;
- show the present and prospective contribution of universities towards achieving their goals of sustainable development as foreseen by the UN 2030 Agenda;
- guide and strengthen the commitment of universities to domestic and international challenges which the institutional and social context will require from them;
- allow stakeholders to get acquainted with the university's institutional goals and, in particular, the range of activities and their results and impact on specific communities;
- provide clear, reliable information, which is easily understandable for anyone interested;
- devise a model to be used for spatial/temporal comparisons.

This Standard may be adopted both by those universities adopting sustainability reporting for the first time and by those that have been active in this area for a longer time. When reporting on the goals of sustainable development which they have been pursuing, as specified above, universities cannot but follow the goals which their activities have a direct impact on (Goals 4 and 5 above all,

in line with the guidelines of the *World Business Council for Sustainable Development)*. A sustainability report, in addition, must report on all those SDGs which are considered to have priority, based on the strategic plan drafted by the universities themselves.

METHODS

1. METHODS

1.1 MANUAL CONTENTS

This Manual has been conceived as a support tool for the RUS-GBS Standard – Sustainability Reporting in Universities and is intended to go further into the reporting activities listed and described in the Standard. The document has been elaborated to provide guidelines for universities when drafting a sustainability report, giving information and further details on various aspects of structure and contents illustrated in the Standard, specifying certain aspects of reporting, suggesting modalities of stakeholder engagement, and tips for the process of *assurance*. The Manual is explicitly connected to the Standard and should be considered as an ancillary tool for a university when drafting a Sustainability Report.

In drafting this Manual, the GBS-RUS Working Group took into consideration the contents of Research Document no. 7 on "Social Reporting for Universities", published by GBS in 2008 and already adopted by some Italian Universities in their initial approaches towards social reporting. Likewise, the goals expressed by RUS in their Manifesto were taken into consideration, "*From* 'Le Università per la sostenibilità' a 'La sostenibilità nelle Università'" *("From 'Universities towards Sustainability' to 'Sustainability in Universities'")* (2019), and in the "Lettera aperta della Rete delle Università per lo Sviluppo Sostenibile" ("An open letter from the University Network for Sustainable Development") (2020). Aiming at making the Manual as exhaustive as possible, the RUS Working Groups have been involved in the organization of the qualitative and quantitative indicators that will be presented in the following sections. In order to define these indicators, numerous national and international standards and rankings, already used by universities (for instance, *Global Reporting Initiative*, *STARS*, *GreenMetric*) have been taken into consideration. The Working Groups took into account both normative and institutional innovations, which occurred after the publication of Research Document no. 7 (the *mission* of universities, indicators, accounting, and so on) and routine practices and standards, developed at domestic and international levels, regarding the social-environmental commitment required from organizations (SDGs, emission reduction, gender equality, non-financial reporting, *Web reporting*, and so on).

This Manual proposes a series of quantitative and qualitative indicators to evaluate the areas already identified in the Standard, related to the activities of the reporting university. The indicators are presented considering both some generic examples pertaining to the area observed (for instance, the number of research products) and specific examples pertaining to sustainability (for instance, number of research products regarding sustainability). The specific indicators, therefore, consider the areas calculated by generic indicators but highlight aspects strictly related to sustainability. It is necessary, however, to specify that there will be some areas which will not need specific indicators, given their specific nature, as they already refer to measurable aspects of sustainability (for instance, rate of infrastructure coverage and use of devices to reduce water consumption). For some specific areas, there will be a natural, gradual enforcement of this aspect in the system of calculation, in order to allow a university to decide on the adequate monitoring tools (for instance, meters installed in specific, logistic locations to monitor consumption).

Quantitative indicators are represented through an absolute value, allowing to relativize data to a specific relative quantity (for instance, number of the student community, number of courses, number of staff) in some cases. For example, an indicator may represent the total number of courses dealing with topics related to sustainable development, foreseeing a temporal comparability on a yearly basis in a university, and can be relativized, comparing this information to the total number of courses offered by the same university. In order to render the Sustainability Report complete and easy to understand, it is important for quantitative indicators to be accompanied by qualitative descriptions, supporting quantitative data, also describing areas that are not easy to calculate. Single indicators, when apt, can also be applied to the question of gender (for instance, male/female students, women/men). In order to be synthetic, a generic plural will be used (for instance, talking about students or final-year students), giving the reporting university the freedom to modulate the above-mentioned indicator, considering possible connotations of gender.

Given that many activities are common to numerous spheres of application, some indicators have been inserted in specific areas rather than in others, purely for the sake of exemplification, but they can also be considered in other spheres, if they are coherent with the actions of the reporting university. For instance, the monitoring of continuing education has been categorized in the third mission, but it can, no doubt, also be included in the section on teaching.

As has already been explained in the Standard, it is also important for the indicators to be applied with the aim of achieving the SDGs, considering the role played by a university as an agent of change in pursuing the targets defined by the 2030 Agenda. In this respect, the Manual proposes some SDGs of reference for the area measured, leaving each university the task of illustrating how they are going to contribute to pursuing such objectives. To this end, based on the report drawn up, each university will have to verify the achievement of one or more targets for each SDG, attaching a table to their report showing the relationship between SDG targets and the reported areas.

References to the SDGs should have both a graphic illustration for each area and also be found in the single sections of “References and sources”.

A “References and sources” section has been included for every area, and it may be useful so as to understand where to collect specific information within a university’s reporting system, and which national and international sources to refer to, for a deeper knowledge of a specific area measured.

To facilitate the link between the Manual and the Standard, the same number of paragraphs and sub-paragraphs has been maintained for both documents. Some hyper-textual references are also present in both documents, allowing the reader to browse easily inside each document.

1.2 DESIGN OF THE MANUAL

The Manual for Implementation, together with the Standard, has been developed with the dual aim of guiding the process of implementation of socio-environmental responsibility management in universities, and of defining structure and contents of the sustainability report. The Manual also proposes some linking points with the planning and programming systems of universities, and with the already existing system of indicators, in order to promote functional reporting with regard

to a university's strategic planning and its three main missions (teaching and education, scientific research and the third mission). The drafting principles for sustainability reporting are those foreseen in the GBS Standard, "Bilancio sociale. Principi di redazione del bilancio sociale " ("Social reporting. Drafting principles for social reporting (2013)", which shall be referred to.

This Manual maintains the same methodological coherence and linear language adopted in the Standard, providing various examples of indicators for the areas mentioned in the Standard. In its structure, the Manual consists of an introductory section, followed by a section focused on indicators. The former foresees a Methodological Note with a description of the standard(s) used for drafting a report, the drafting principle used, and a synthetic description of the reporting process carried out. Goals are then defined, as well as the characteristics of single universities, such as the structure of their governance, their mission, and their areas of operation.

The latter section, the real core of sustainability reporting, presents a range of indicators (qualitative and quantitative) aimed at measuring the environmental, social and economic impact of the activity carried out by the university. In accordance with the parameters deriving from the work of other RUS boards, the areas to be measured and monitored will be presented, considering the characteristics of the item measured and connections with internal and external sources necessary for the construction of the indicator. It will then be up to each university to adapt the structure and parameters proposed by the Standard to their own characteristics. To limit the risk of self-reference of sustainability reporting and to enhance its credibility, the Manual provides indications on the activities to be carried out regarding stakeholder engagement in the various phases of reporting, giving advice regarding the adoption of *assurance* by a third, independent subject.

PROCESS OF DRAFTING A UNIVERSITY SUSTAINABILITY REPORT

2. PROCESS OF DRAFTING A UNIVERSITY SUSTAINABILITY REPORT

The drafting of a university's Sustainability Report should stem from the widespread awareness among the governance of a university on the necessity of a new commitment to responsibility, transparency and *accountability* in a wider ecosystem of actors and partners with whom the university interacts. In this section, a process of drafting a sustainability report is presented, to help those universities who intend to do so.

The initiative for the drafting should come from the Rector and the other governing bodies of a university.

Successively, the drafting should be activated by a series of actions:

Appointment of a delegate responsible for drafting the document

Taking into account the strategic value characterizing the process of *accountability* of a university, it is important to appoint a delegate who is responsible for drafting the university's sustainability report, or extend an already existing appointment (for instance, with regard to the programming, or monitoring, or measuring and reporting on the university's level of performance).

Setting up a Scientific Committee and a Working Group

The Scientific Committee: this is presided over by the Rector and consists of the delegate responsible for drafting the university's sustainability report, teaching staff with ascertained competence in *accountability* and sustainable development, or other delegates (focused on gender equality, environmental sustainability, economic and financial programming, and so on).

The Working Group: the Scientific Committee avails itself of the collaboration of technical and administrative staff, who will be involved in gathering and processing data and other information for drafting the Sustainability Report. It is useful to foresee the presence of a General Manager in the Scientific Committee or Working Group.

It is suggested to formally entrust this task to the technical and administrative staff already belonging to existing administrative structures within the university (for instance, a Unit of Technical Coordination of Strategic Planning, Management and *Reporting* Control, *Green Office*), and/or specifically dedicated structures (for instance, a Staff *Accountability* Unit) and, if necessary, fund such an initiative. Moreover, the accounting value of this tool and its link with university financial statements, indeed, make the Sustainability Report an important element within the wider system of programming and management of the university. This tool falls into the category of documents regarding a university's policies and administrative and accounting management, which a university is called to report on (with regard to, for instance, financial statements, strategic plans, *Gender Equality Plan*, gender equality). A university's Quality Assurance unit plays a significant role in the

effectiveness of this process and should also include the drafting of a Sustainability Report in its quality plan.

Alternatively, it is possible to set up working groups at various levels, considering a first, extended group involving the people entrusted with the task and the university's governance bodies, and a second, more limited group (within the extended group), assigned to selecting and processing data to help draft the Sustainability Report.

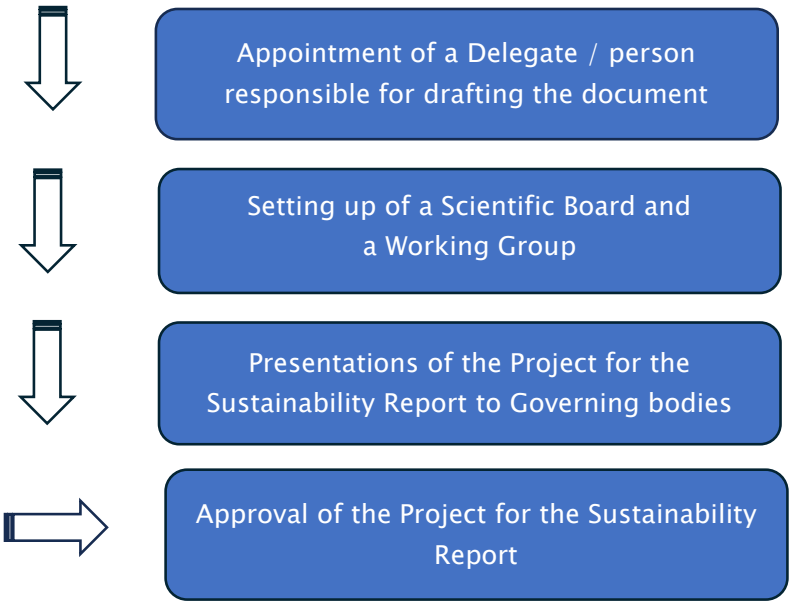
Presentation of the Sustainability Report to a university's governing bodies

The Scientific Committee prepares a project for the university's Sustainability Report, and then presents it to the university's governing bodies (Academic Senate and Board of Directors) for approval. The project must include the following: the composition of the Scientific Committee and of the Working Group; a description of the structure of the document and the principles to comply with, in preparing the report, with the aim of guaranteeing clarity, intelligibility, truthfulness, and spatial and temporal comparability of the information provided; the time frame being reported; internal and external sources to be used for the collection of data (for instance AlmaLaurea portal, programming documents, USTAT Portal, Cineca Databank, *Student Information System*); the chronological programme for the drafting of the Report.

Approval of the Project for the Sustainability Report

After the approval of the university's Project for the Sustainability Report by the governing bodies (Academic Senate and Board of Directors), the drafting of the document can start.

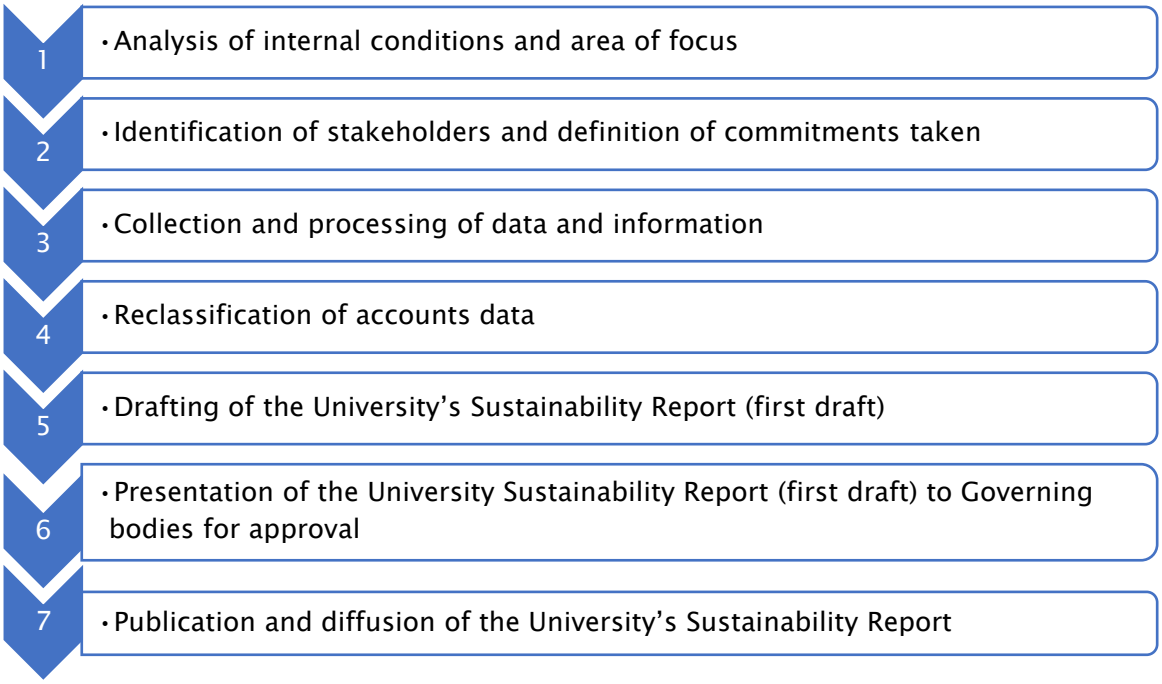
Figure 1 – Process of drafting Sustainability Report



The process of drafting the Sustainability Report implies the development of a series of successive phases which include:

- a **preliminary analysis of both the internal and contextual conditions** in which a university operates;
- **identification of stakeholders** and their needs and expectations, with **a clear description of the commitments taken** by the university to them. During this phase, it is necessary to identify those topics which are seen as material by the university and the stakeholders of reference, an aspect which is particularly relevant for the entire reporting process. To identify the aspects which are deemed most relevant, it would be advisable to define and realize contact initiatives between the members of the university and stakeholders. This can be done, for instance, with interviews, questionnaires, *focus groups*, or *workshops*. Activation of the stakeholder engagement process is fundamental for a successful approach towards a university's sustainability and achievement of the intended goals (see Appendix);
- **collection and processing of data and information.** The collection and analysis of data, related to the university and its area of reference, allows the identification of strong and weak points. Data and information collected will be processed through the production of graphs and tables, and the calculation of indicators and indexes. A comment of the results obtained will follow, to be integrated with other information, illustrated in a narrative form. Finally, it will be necessary to identify the initiatives and results obtained which most contribute to the achievement of the goals of sustainable development;
- **re-classification of accounts data**. The reclassification of accounts data is intended to calculate the added value generated and distributed to various stakeholders by the university;
- **preparation of the university's Sustainability Report (draft)**;
- **presentation of the university's Sustainability Report (draft) to governing bodies for approval.** A draft of the document should be submitted to academic bodies (Rector, Academic Senate and Board of Directors) and discussed. If modifications are required, it will be necessary to submit the rectified report again for approval/acknowledgment, in compliance with the norms/regulations of the university;
- **publication of the university's Sustainability Report and its diffusion**. Once the contents of the report have been shared with the academic bodies, it can be published. To ensure wide diffusion, it should be published on the university's website and on social media (YouTube, Instagram, Facebook, LinkedIn, and so on.), and e-mailed to the most relevant stakeholders. To ensure communication with stakeholders, meetings could be organized where the document is presented and then debated, possibly leading to feedback which would in turn be evaluated and considered when working to improve the document itself.

Figure 2 – Process phases in drafting the Sustainability Report



Following publication of the document, it will be necessary to analyse and evaluate the results and include them in the process of programming and planning.

As underlined in the Standard (Section 6.2), the above-mentioned activities are closely linked to the necessity of considering the drafting of the Sustainability Report not as a mere reporting activity, but as a process included in the university's programming and planning, thus leading to the creation of new strategies.

The collection and analysis of data regarding the university and its area of reference allow to identify strong and weak points which may support the programming of new initiatives, aimed at strengthening the university's economic, social and environmental sustainability. Strategic planning and allocation of resources will also be included in this process of analysis and evaluation of possible initiatives.

It is also essential, at least between one rendering of accounts and another, to monitor the results achieved, comparing them to what had been initially programmed. In this way, it will be possible to identify and analyse those activities and initiatives which can be ratified, and those which will need to be modified or integrated in the programming process.

UNIVERSITY IDENTITY

3. UNIVERSITY IDENTITY

The third section considers the university identity describing its distinctive elements.

3.1 MISSION AND VALUE ORIENTATION

To show the existing connection among values, analysis and orientation of the university's entire programming activity, reporting is focused on the mission, seen as the dominant goal through which a university can express its own raison d'être and its contribution towards the realization of sustainable development and SDGs. Specifically, the following points are essential:

- *a university's institutional goals*, with specific reference to three areas of intervention – teaching and education, scientific research and third mission;
- *a university's founding values*, also in the light of the social, environmental and economic context in which it operates, with reference to aspects connected with ethics and responsibility;
- *its relationship with stakeholders*, emphasizing activities of stakeholder engagement and the ensuing key elements:

    - stakeholders of reference, duly classified,
    - modalities of identification, approach and selection of stakeholders,
    - outcomes of the engagement, in terms of identifiable opportunities and critical points.

3.2. SETTING AND AREAS OF REFERENCE

This section of the document is focused on the following aspects:

- *Historical and evolution profile*, showing the main phases which have characterized the evolution, with a clear reference to aspects such as internationalization of human resources, approaches of cooperation and the building of relationship networks.
- *Regulatory and institutional framework*, showing internal regulations and codes, policies on legality, corruption and equal opportunities, especially in the light of regulatory impact on a university's identity profile.
- *Social and territorial context*, illustrating the demographic, geo-economic, social and cultural features of a university's area of reference, specifying impacts on the quality of the environment and the social development of the territorial context, also in connection with the SDGs.
- *The effects of potential implicit or explicit restrictions* which have affected the university's mission, strategies and policies, deriving from:

    - national programming,
    - extraordinary conditions of emergency or ascertained risks.

3.3. GOVERNANCE AND ORGANIZATIONAL STRUCTURE

The description of the governance of a university must include its governing and organizational structure, focusing particularly on figures regarding sustainability governance and management. Relevant aspects for reporting include composition, true amount of autonomy and responsibility, and role in decision-making processes.

This section specifically analyses:

- *a university's corporate governance*. To fully understand governance, central, supervising governing bodies become important (Rector, Provosts, Vice-Rectors and Delegates, Board of Administration, Academic Senate, Board of Auditors, Evaluation Unit, General Manager, Board of Department Heads), along with the other bodies tasked with consulting, programming and control, guaranteeing and safeguarding as foreseen by universities, (such as the Ethics Committee, the Students' Advocate, the Joint Committee for Equal Opportunity);
- *the governance of each didactic and research structure* (departments, research centres, post-graduate and PhD schools, Degree Course Boards).

Useful reporting elements include:

- Management areas;

- the technical, organizational and secretarial structure (didactic and administration services)

- integrated structures of sustainability (such as, the *Green Office*), and related managerial areas (*Sustainability, Energy, Mobility, Food, Resources & Waste, Inclusion, Career construction*);

- student representation on the various institutional bodies;

- the general organizational structure;

- entity and features of staff;

- gender profile, relating to governance structure;

- relationships between the university and external institutions, especially when they might influence specific bodies.

This description may be integrated with graphic representations, to make the topic easier to read and understand.

3.4 AREAS OF INTERVENTION

The areas of intervention section in the Standard focuses on a university's ability to develop networks of relationships with the main actors in its own context of reference. Consequently, the cruciality of this part of the Sustainability Report is, first of all, attributable to the various categories of potential stakeholders, whose needs have to be inevitably identified, analysed and above all, interpreted, so as to obtain suitable answers.

In the process of identification all stakeholders, given the particular nature of university organizations, the wide, complex system of existing, interactive relationships has to be taken into consideration, particularly between the university and the territory in which it operates. Listening to and involving stakeholders becomes particularly relevant. A suitable report on the goals, modalities, and degree of satisfaction of the expectations of the various interlocutors will need to be prepared (Section 5).

Given that the stakeholders' expectations are expressed in economic, social and environmental terms, communication on sustainability increases the probability of creating virtuous circles of resources-activities-results-consensus, along with improving the image of a university.

The term "areas of intervention" describes useful combinations of the activities carried out by a university, following one or more criteria of homogeneous classification compared to the results obtained, the main beneficiaries of the actions taken, the choices made, and so on. These, therefore, fall into the following, main macro-areas areas of activity:

- **teaching and education** (Section 4.1)
- **scientific research** (Section 4.2)
- **third mission** (Section 4.3)

3.5 STRATEGIES AND POLICIES

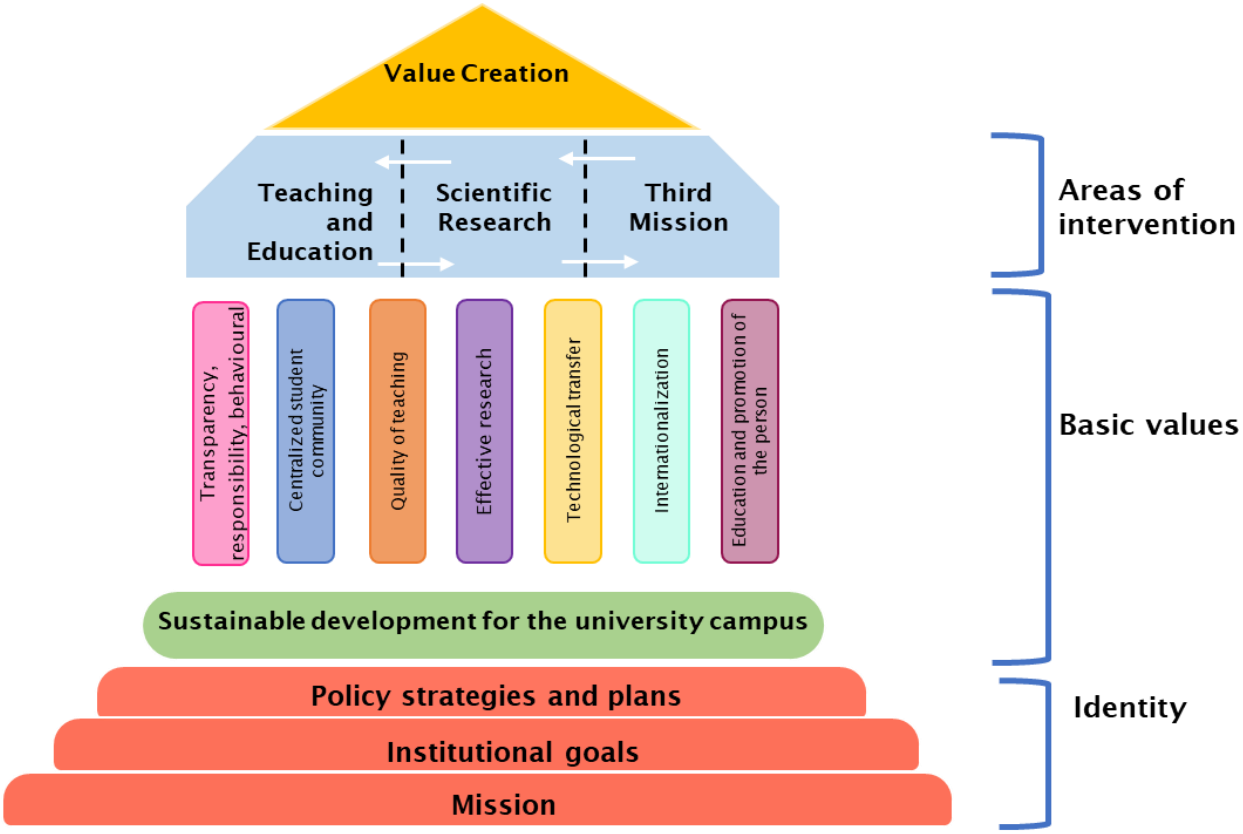
To provide useful points to illustrate the mission, it is important to explain the strategies, policies, projects, and operational programs defined by a university.

In particular, the reporting needs to be focused on coherence between the main strategies defined and actions taken in the various areas of intervention. Then, having described the operational programs and the results obtained, it will be possible to evaluate a university's ability to work on its predefined goals.

With this regard, it is important to compare the strategies specified in the programs with reports approved by the university. In a similar way, it is useful to illustrate short-term objectives and choices of focus and intervention, in order to properly manage the resources used.

The logic on which a university's entire sustainability report is founded is shown in *Figure 3*, where the **process of creating value for a university** is illustrated.

Figure 3 – Graph of theoretical-conceptual framework



The prerequisite for value creation for a university is the degree of a university's interrelationship with its own territory and the ability to perceive the expectations of multiple stakeholders, translated into effective actions that are coherent with its own identity. To this end, the assertion of the mission, of the university's goals, strategies, policies and projects define a university's **identity** as its own, distinctive feature.

Specifically, it is important to consider the main, inalienable features of the identity of the university, which is basically expressed through the **fundamental values** of the entire university system. The following values are the most relevant:

- transparency, responsibility, behavioural ethics,
- a centralized student community,
- quality of teaching,
- effective research,
- technological transfer,
- internationalization,
- education and promotion of the person.

The founding values, which are seen as the structural elements on which the areas of intervention are established, are fully agreed on in a strategic approach aimed at sustainable development and

are a prerequisite for the creation of a university's long-lasting value in its economic, social, and environmental sphere. The connotation of this approach involves all the values and principles cited in the formulation of coherent strategies, policies and projects. In this context, **sustainable development** may be intended as a common denominator of the value of the entire university system and is, therefore, at the basis of a correct definition of the three areas of intervention: teaching and education, scientific research and third mission.

In brief, the **areas of intervention** stem from the synergic interaction between a university's identity and its founding values. Therefore, notwithstanding the fact that they represent three distinct fields of activity in the modern concept of a university, they cannot be isolated from one another: the *interdependent relationship* among teaching, scientific research and current mission is unavoidable, and needs to be suitably highlighted in the reporting document.

In particular, the entire, complex set of a university's didactic and educational activities is linked to the third mission, due to a series of physiological, interdependent relationships, and particularly to scientific research. Third-cycle courses of studies, such as PhD courses and postgraduate schools can be organized in this perspective: they are, in fact, a physiological link between didactic processes and scientific production.

Likewise, it is of fundamental importance to emphasize the close relationship among third mission, research and scientific production. Hence, it will be particularly useful to specify if, and how, research activities may be affected by the result of third mission activities aimed at enhancing research. On the other hand, the output of research activities may be an effective starting point to carry out or strengthen the experience gained working on the third mission and on links with the territory and/or institutions.

SUSTAINABILITY REPORTING FRAMEWORK: INDICATORS

4. SUSTAINABILITY REPORTING FRAMEWORK: INDICATORS

To render a sustainability report more intelligible, indicators need to be illustrated in both quantitative and qualitative terms showing the innovative experiences gained and, in particular those which have been appreciated by stakeholders, both within and outside the university. It would also be advisable to consider at least the last three years of activity when comparing data reported.

The indicators proposed in the following sections are included in the guidelines given to universities drafting a Sustainability Report. The indicators to report on, however, are those which focus on aspects seen by a university as significant and relevant, taking into account the main stakeholders' interests (see Section 5).

This premise should induce universities, if necessary, to adapt the indicators to the area of reference and/or integrate them, trying to find a balance between itemization and significance of indicators, and their very intelligibility for those who the report is addressed to.

4.1 TEACHING AND EDUCATION

The implementation of university teaching and educational activities is certainly a priority when reporting on social and environmental aspects, looking at goals of primary importance, such as transmission of knowledge, cultural and professional education, and civil growth for students as citizens and people.

With regard to the reporting of didactic and educational activities through generic indicators, reference is made to:

- educational offer: main teaching outcomes,
- tutorial and supportive actions for studying,
- career guidance,
- transdisciplinary education.

4.1.1 Educational offer: main teaching outcomes

A thorough description of the vast, complex range of a university's teaching and educational activities is particularly important when reporting on social and environmental aspects. In the light of the various reforms compliant with current law (Ministerial Decree no. 270/2004), it is necessary to illustrate the organization of a university's educational offer, such as:

- first cycle and single cycle courses of studies (degree and single cycle master's degree),
- second cycle course of studies (master's degree),
- third cycle courses of studies (PhD courses and graduate schools).

In addition, there are further educational options, transversal to the above-mentioned classification, such as first level and second level master's degrees, advanced training courses, lifelong learning, intensive courses, and other analogous typologies.

A university's educational offer is a tool through which internal and external stakeholders may get information with regard to: the type of courses offered (first-, second- and third level, and *post-graduate* courses) and the types of profession they are aimed at; innovative, curricular, teaching and educational opportunities, and/or organized in agreement with enterprises/institutions/world of work (internships, apprenticeships, and so on); the opportunity to attend extracurricular activities. Moreover, a specific part of the analysis of teaching and educational activities needs to be focused on how to approach remote teaching tools which nowadays, more than ever, are no longer merely contingent teaching options, but transversal learning alternatives to the various courses of studies. In this sense, a description of e-learning services for remote education could be useful (for instance, platforms for synchronous or asynchronous teaching; applications for remote written exams), online services for teaching activities (for instance, software and available IT applications,

lecturers' *web pages*, information databases, electronic bibliographic resources available to students, resources and *Open Access*), that is to say, all those Web services intended to help students in their career (personal *web pages*, online reservations for exams, an institutional e-mail service, administrative information and records, certification of exams, digital exam transcripts, and so on).

Finally, in illustrating specific matters and aspects of a university's teaching and educational activity, it is necessary to keep mechanisms and evaluation tools in mind which, managed in compliance with current law, are a highly relevant feature of the *disclosure* processes of Italian universities. Students' evaluation of university teaching was introduced in Italy with Law no. 370/1999 and is a particularly relevant aspect as it is one of the parameters of reference contributing to the quantification of the funds attributed by the FFO (*Fondo di Finanziamento Ordinario* – Ordinary Financing Fund) to universities (Law no. 1/2009). As is known, this evaluation currently covers all the subjects of the Courses of Studies included in the educational offer of each University (related, therefore, both to Ministerial Decree no. 509/1999, and to Ministerial Decree no. 270/2004), and is usually carried out through specific online platforms, intended to make it easier for students to express their judgment. Although the data obtained and the ensuing results are the focus of specific sections and descriptions, dealt with in the third part of the document, "Social and Environmental Relationship", it would be useful to show the main aspects connected to the evaluation activity mentioned above, in the part regarding a university's identity, such as the chosen methodological approach(es), the tools used, and the typology of expected results, specifically focusing on indicators when reporting and analysing the results obtained as an outcome of the evaluation.

The following generic indicators, but the list is not exhaustive, illustrated in Table 1, can be used to monitor a university's educational offer and its ability to attract students effectively.

Table 1 – Generic indicators for educational offer

Name	Type	Description	Goals
Student population	Quantitative	Number of students enrolled in courses A further field of observation may be included, considering some specific factors (for instance, geographical origin, previous course of study)	Outline the main characteristics of students
Degree courses	Quantitative	Number of degree courses offered by a university, categorized as bachelor's degree, master's degree, and single cycle master's degree	Assess the quantitative consistency of first and second level educational offer
PhD courses	Quantitative	Number of research PhD courses	Assess the quantitative consistency of third level educational offer
Master's Degree courses	Quantitative	Number of master's degree courses and number of	Assess the quantitative consistency of post-graduate educational offer

		students enrolled in first and second level courses	
Internationalized courses of studies	Quantitative	Number of courses with co-tutorship (final degree recognized in two universities) (national and international)	Assess a university's ability to offer students international courses
Attractiveness from other universities	Quantitative	Ratio between students enrolled in the 1st year of 2nd cycle courses coming from other universities and total number of students enrolled in the 1st year of 2nd cycle courses	Assess the attractiveness of 2nd level educational offer
Regularity of courses	Quantitative	Number of university educational credits acquired in the academic year vs. the total number of credits foreseen by curriculum	Verify students' regularity during their course of study
Satisfaction of final year students	Quantitative	Degree of satisfaction of final year students regarding the course attended	Assess the degree of satisfaction of final year students regarding the course attended
Employment *after graduation*	Quantitative	Percentage of graduates who have found a job within a year after graduation	Assess the attractiveness of courses vs. the job market

A specific section should also be focused on sustainability, environment, heterogeneity and inclusion, gender, human rights and other social and environmental topics which become particularly significant in universities, given their close interdependence with teaching and education.

Considering the above, this part of the social and environmental reporting might be particularly suitable for listing and explaining specific courses offered, to stakeholders or, more generally, study options (such as master's degree courses, advanced training courses, PhDs). These are courses that are suitably structured following a multidisciplinary approach, transversal to departments or to various scientific sectors, which are specifically formative for the above-mentioned topics. Thus, a university that has already started initiatives on sustainable development, may illustrate its goals through specific indicators, exemplified as follows (Table 2).

Table 2 – Specific indicators for educational offer

Name	Type	Description	Goals
Degree courses on Sustainable Development	Quantitative	Number of degree courses specifically inherent to Sustainable Development	Assess a university's ability to offer an education coherent with sustainability and the Goals of the 2030 Agenda
Subjects on Sustainable Development	Quantitative	Number of subjects specifically inherent to Sustainable Development	Assess the focus on sustainability in degree courses
Enhancement of sustainable development in subjects	Quantitative	Number of subjects including topics on sustainable development	Identify subjects dealing with topics related to sustainable development in the various disciplines

		It is possible to specify the incidence of these subjects by type of course	
PhD courses on Sustainable Development	Quantitative	Number of interdisciplinary (and non-interdisciplinary) PhD courses on sustainable development	Identify PhD courses focused on sustainable development, distinguishing between interdisciplinary and non- interdisciplinary courses

4.1.2 Tutorial and supportive activities for studying

Tutorial and supportive activities for studying are becoming increasingly important for universities: activation, in fact, helps students to follow their course of studies, thus reducing the risk of *drop-out*.

Specifically, tutorial and supportive activities for studying may show how welcoming a university is for students, at the beginning of their course; how a university can guarantee support for studying during courses, also in the presence of specific needs (for instance, *counselling* needs). This section also includes activities aimed at granting economic benefits to safeguard and guarantee the right to education at university. Consequently, these activities are highly sensitive given their particular impact on the student community and on their families, and care must be taken when including them in a social and environmental report.

Other activities, part of a wider range, are also included, such as public competitions for grants, housing and catering services, along with contracts for part-time collaborations, and much more. Given that these activities are obviously for the benefit of the entire student population, irrespective of their economic and social conditions, this part of the report must adequately show the conditions and ways of managing these crucial tools, sorting them by each category of beneficiaries. Services for students also include counselling and psychological support, help for people with disabilities and with specific learning disorders (DSA - *Disturbi Specifici dell'Apprendimento*), sports facilities, libraries, IT services, and so on.

An exemplification of indicators is shown in Table 3.

Table 3 – Indicators for tutorial activities and support for students

Name	Type	Description	Goals
Tutorial activities	Quantitative	Number of first year students who have availed themselves of tutorials and mentorships during the academic year	Identify a university's ability to support first-year students in their approach to studying at university
Training courses	Quantitative	Number of training courses carried out for each course year	Identify a university's ability to carry out training courses for students of all degree courses
Tutorial activities among peers	Quantitative	Number of tutorial initiatives among peers carried out for each course year	Identify a university's ability to incentivise exchange and collaboration among peers

Definition of curricula	Quantitative	Number of support activities for the definition of curricula	Identify initiatives of student support during the phase of definition and drafting of one's own curriculum

4.1.3 Career guidance

Career guidance offered by universities is characterized by customary compliance with procedures and *best practices* in sectorial scientific research, and is aimed at allowing students to focus on their personal, professional and working goals, without being subjected to any prejudice and/or gender, professional or other kinds of stereotyping, trying to build a sustainable, inclusive future, based on social and environmental justice. The goal of this range of services is to support all students who enter the academic world, as well as those who are already engaged at university. To this end, these services must stem from the commitment of a pool of experts (Delegate for Career Guidance, Career Guidance Office, scholars and experts on career guidance at university, and so on) both in scientific research related to career guidance, and on the importance of career guidance as a tool in favour of sustainable innovation, and the university's role in favouring sustainable development.

Career guidance should help younger generations reflect on the importance of a university education, focus on valuable goals for themselves, society and our planet, and use complex decision-making strategies, elaborate information to be able to compare universities or the various courses offered by the same university, avoiding stereotypes and encouraging the understanding of the value of a well-organized, complex university education, listening to students and helping them follow their ambitions. It can be implemented in first- and second-level secondary schools, aimed at helping students face the sense of anxiety and uneasiness they feel about the future, leading them to not invest in it, and making them understand the value of active and responsible educational and professional planning. Furthermore, career guidance can assist students to reflect on how to face barriers, obstacles and discrimination, helping them to exercise their right to plan and carry out a dignified job, towards building an inclusive, sustainable society.

Career guidance may include activities of information and communication aimed at eliminating stereotypes and clichés, opposing *fake news* on education and the world of work; interdisciplinary *workshops*, courses and seminars, focused on the creation of innovative professions, dealing with the topics of dignified work, social justice in working contexts, and sustainable working contexts; teaching activities to help make an informed choice on one's professional future, encouraging students to see teaching activities as essential and incisive factors for sustainable, inclusive and equal growth. Other career guidance activities should also be included, carried out by experts specifically focused on post-graduate studies, aimed at helping students develop complex decision-making skills, while planning their future, promoting investment in education and leading students to focus on the most compelling social challenges, while supporting families in decision-making, also considering situations of disability and/or disadvantage. Career guidance, in accordance with scientific research, will need to elaborate indicators able to verify its own efficacy (for instance, increased decision-making ability, improved critical awareness, reduced indecision, increased knowledge, and an extended range of interests). Finally, universities are called on to include teaching activities on career guidance, collaborating with other universities and researchers

on career guidance, following an interdisciplinary perspective, for the benefit of all those who intend to offer high-quality career guidance.

Table 4 – Generic indicators for career guidance

Indicators	Type	Description	Goals
Actions carried out in collaboration with schools	Quantitative / Qualitative	Number of laboratory activities organized in collaboration with schools; description of these modalities of collaboration, including their efficacy (increased knowledge, range of interest, decision-making, and so on)	Identify a university's ability to involve young generations in the creation of projects for the future, mainly focusing on education, sustainability, inclusion and equality
Services for *career counselling*/ career guidance	Quantitative / Qualitative	Number of services provided for *career counselling/career guidance* carried out by professionals, specifically trained for working with students, their parents and their families; description of this service, including verification of its efficacy (increased decision-making, reduced uncertainty regarding the future, and so on)	Identify a university's ability to satisfy the need for professional planning and career guidance for students with different characteristics and *backgrounds* during the various phases of a university course, providing support for decision-making to students' parents and families, also considering situations of vulnerability and/or disadvantage
Training in guidance	Quantitative / Qualitative	Number of courses provided (master's degree courses, advanced courses, advanced training courses) on career guidance, in collaboration with researchers on guidance and with other universities (increasing the ability to carry out *evidence-based* actions and *best practices* regarding guidance, and so on)	Identify a university's ability to answer the teaching staff's training needs (in universities, schools, and around the territory) regarding guidance
Efficacy of career guidance activity	Quantitative	Number of students enrolled in a university compared to the total number of students involved in guidance activities	Identify a university's ability to provide career guidance support for students on their arrival, who still have to fine-tune their enrolment in university
Training in Career Guidance	Quantitative	Number of training programs carried out for each academic year	Assess a university's willingness to guarantee training courses for the different courses

4.1.4 Transdisciplinary educational programmes

As for all other institutions that are part of the 193 countries which have signed the 2030 Agenda, likewise for universities the *SDGs* represent a plan of action to change the world, working for the benefit of people, the planet, peace, future prosperity and partnerships. To make this happen, the fundamental values of sustainability must become a widespread culture among all members of the university community, helping the universities themselves to have an adequate, hopefully growing, impact on the sustainable development of their territory. For this reason, education, also at university level, takes on a central role when focusing on sustainability, as the necessary cultural transformation is inevitably anchored to behavioural interventions, before even educational and teaching activities.

Universities, in fact, entrusted with the education of future citizens, politicians, decision-makers and professionals, are called to fully commit themselves to sustainability, reviewing its educational impact, also being aware that the universities' educational offers need to better satisfy the needs of a rapidly, continuously changing society, and a world of work in need of new professionals. Not only do these professionals need to be competent in specific disciplines, but they should also work following a systemic perspective, based on the knowledge of transversal and transdisciplinary aspects. Universities, therefore, will have to both provide each student, irrespective of their specialization, with the possibility of following educational programs focused on sustainability, also considering the fact that the labour market is increasingly searching for more and more graduates with professional knowledge, ability and competence related to this topic, and to propose educational programs aimed at developing students' competence in citizenship (learning how to learn, planning, communicating, collaborating and participating, acting autonomously and responsibly, solving problems, identifying connections and relationships, acquiring and interpreting information) and in transversal competences (social and personal competence, the ability to learn how to learn, competence in citizenship, entrepreneurial competence, competence in cultural awareness and expression).

It is important, therefore, to emphasize the activities carried out in universities and in each department or service centre for the creation of training and educational programmes related to the Goals of the 2030 Agenda, sustainability, and transversal and citizenship competences. This can be done using innovative approaches and pedagogic methods, aimed, more than others, at achieving students' active participation.

Table 5 indicates some indicators, purely for the sake of exemplification, related to transdisciplinary education programmes.

Table 5 – Indicators for transdisciplinary education programs

Name	Type	Description	Goals
Courses for transversal skills	Quantitative	Number of courses for transversal skills started by the university during the academic year	Assess a university's ability to train citizens and professionals, able to master their uncertainties
Frequency of transversal teaching on sustainability	Quantitative	Number of students who have followed transversal teaching on sustainability; number of students who have successfully passed exams related to this topic	Assess the student's ability to think in a critical systemic manner

Each university, based on the immediate availability or attainability of data, will be able to further observe other aspects, especially related to their own characteristics.

References and sources

Information needed for the completion of this section may be found in some internal documents, such as the University's Strategic Plan, the Integrated Plan, Reports on Performance, or reports from the Group of Evaluation, and Three-year Plans from each Department. Some information has already been requested in the SUA_RD and SUA Third Mission and Social Impact forms.

With regard to the Transversal and Career Guidance Competence Programmes (PCTO – *Percorsi per le Competenze Trasversali e l'Orientamento*) see the guidelines adopted by Decree no. 774, September 4th, 2019.

Regarding evaluation of teaching, see Law no. 370/1999, as a reference for quantification of funds attributed by FFO (*Fondo di Finanziamento Ordinario* – Ordinary Financing Fund) to universities (Law no. 1/2009). For evaluation of all the subjects included in the Courses of Study as part of the educational offer of each university, also see Ministerial Decree no. 509/1999 and the current norm foreseen by Ministerial Decree no. 270/2004.

Finally, with regard to teaching and education on sustainable development, in addition to the aforementioned 2030 Agenda, see the manual produced by the *Sustainable Development Solution Network* (SDSN). In addition, for those universities which have included indications of the SDGs in their syllabus that the various subjects help to achieve, it is also possible to refer to the contents of these documents.

4.2 SCIENTIFIC RESEARCH

Reporting of the complex results obtained from academic research is certainly an important aspect, since it shows the commitment of a university's professors and researchers in terms of study, applied research, and experimentation. Various professional figures contribute to a university's scientific output, such as, research technicians, specializing students, grant and fellowship holders and PhD students. In this perspective, it is essential that the Sustainability Report show stakeholders an analysis, as thoroughly and exhaustively as possible, of the strategies and organizational and planning tools used to achieve the research output. For example, this can include research grants, specific institutional or applied research, competitions for national or international research programmes, and also research in partnership with companies and third parties.

Within the Standard, when reporting on research activities involving generic and specific indicators, reference should be made to:

- main results of the research,
- results obtained from the evaluation process of the research.

4.2.1 Main results

This section shows the results and the effects of the research carried out by a university. A few examples of results and effects may include: activities carried out in PhD courses and their supportive, organizational structure; human and financial resources used for basic and applied research; assessment of scientific production deriving from research; the networking capacity of researchers and their motivation; achievements in terms of awards obtained and all managerial and organizational information related to the infrastructures used for research.

Some of the data in this section may be shown using different scales and time frames. Some data may be observed or available in a fragmented form, like publications categorized per author. In other instances, data may be collected per discipline, department, schools/courses or cycles. When drafting these data, homogeneous representation is recommended, taking also other contexts within the Standard into consideration.

Further relevant considerations to be made relate to research projects. These projects may have been realized participating – or not – in a local, regional, national, European, or international competition. They may be totally or partially funded by public or private enterprises, such as foundations. It is usually advisable to also insert the total amount of funds allocated for these projects, without computing due transfers or possible co-financings, in addition to the total number of projects. This section also includes research projects launched internally, to be funded locally. The choice of specific criteria of inclusion or exclusion should be made as clear as possible, using explanatory notes. The explanation of the research activity should be described convincingly, in

order to show the efficacy of its approach and tools used compared to the goals specified in the social and environmental report being drawn up.

To monitor the results and effects obtained by the above-mentioned policies, a few generic indicators may be adopted, as exemplified in Table 6.

Table 6 – Generic indicators for research outcomes

Name	Type	Description	Goals
PhD students and doctoral scholarships	Quantitative	Number of PhD students or doctoral scholarships initiated	Assess the number of staff working on research
Grant holders, scholarship holders and research grant holders	Quantitative	Number of Research Fellows, research scholarship holders, and research grant holders	Assess the number of staff working on research and support to research, even those without a long-term contract
Research projects	Quantitative / Qualitative	Number of research projects won and relative monetary amount. Possibly, a short description may follow	Assess a university's competitive ability through participation in public competitions and winning of projects presented
Research products	Quantitative	Number of research products, categorized by type of contribution (scientific papers, monographies, curatorships, and so on)	Assess the amount of scientific production pertaining to the categories adopted in the Research Catalogue
Research centres	Quantitative	Number of interdepartmental and inter-university research centres of adhesion	Assess the ability to create stable research relationships with other institutions
Research awards	Qualitative	Illustration of the main or most significant research prizes and awards given to professors and researchers	Illustrate the achievement of quality results in scientific research in detail
Organizational structure to enable and support research activities	Quantitative	Number of staff working on research, including research technicians, laboratory technicians, project managers or taskforces for research	Quantify or illustrate examples of organizational structure to support research

Using specific indicators, universities may also show results and policies of sustainability in a broad sense – holistic, interdisciplinary, multidisciplinary and transdisciplinary. Projects, or other sustainability-related publications may be selected following sets of guidelines that are quite different from one another. One of these options, also described in the following chapter on the goals of sustainable development, foresees the use of the very goals being pursued as a selection criterion for a project or paper, which may be accepted or rejected in a specific analysis. Another alternative is to analyse the abstracts submitted by researchers, in relation to a specific research project, or an article, or another research item, in a broad sense. In working on this section, therefore, when illustrating a project, it is advisable to describe the criteria it is founded on.

Some specific indicators, purely for the sake of exemplification, are shown in Table 7.

Table 7 – Specific indicators for research outcomes

Name	Type	Description	Goals
Adhesion and/or setting up of national research centres, laboratories and national and international consortia on sustainability	Quantitative / Qualitative	Number of research centres, laboratories, national and international consortia on sustainability. Possibly, a short description may follow	Quantify or illustrate a university's ability to establish scientific cooperation relationships through adhesion to national and international networks
Institutional strategies aimed at incentivising research on sustainability	Quantitative / Qualitative	Illustration of the main or most significant strategies which the university intends to carry out to incentivise the study of sustainability in general (see description for more quantitative details)	Provide a detailed illustration of a university's strategy to incentivize research on sustainability
Funds and research contracts with an impact on sustainability	Quantitative / Qualitative	Absolute, relative, and/or financial value of ministerial research funds, which have been invested in the study of sustainability-related topics	Assess and describe a university's ability to carry on research on sustainability with the sole use of ministerial funds
Publications on the study of sustainability	Quantitative	Number of scientific publications on the study of sustainability Number of scientific publications on sustainability vs. total number of publications Average number of scientific publications on sustainability for each teaching staff member and researcher Number of scientific publications in *Open Access* on sustainability, vs. total scientific publications produced	Assess the number of scientific publications on sustainability
Research projects on the study of sustainability	Quantitative	Number of research projects won, and relative monetary amount appropriated for only research projects on sustainability	Assess a university's competitive ability through participation in public competitions and winning of projects presented
Research awards won by teaching staff and researchers for projects, publications, and papers regarding sustainability.	Qualitative	Illustration of the main or most significant research prizes and awards received by teaching staff and researchers for projects and	Illustrate in detail a university's achievement of quality results in scientific research and its organizational capacity

		papers, also by the technical and administrative staff, for their organizational effort aimed at sustainability	

This section includes both indicators covering various areas, and those intended to show different perspectives regarding the institutionalization of sustainability in a university. In the former case, for instance, it should be observed how Italian universities cooperate more and more frequently with local, national, and international research centres and laboratories, and also with a wider range of research associations. In this section of the document, the university drafting the report may emphasize its adhesion to RUS in its various branches and fields, and/or its connection to the various *networks* of the *European Institute of Innovation &Technology* (EIT).

In the latter case, a university should also deliver qualitative information, specifically for the various disciplines, with examples of strategies, mainly elaborated internally, to incentivize research on sustainability. Further examples include: manifestoes issued by researchers in a specific discipline; adoption of a policy to incentivize *Open Access*, also through the allocation of funds for *Article Processing Charge* (APC); the existence and number of PhD schools wholly focused on sustainability; number of PhD students whose educational and research project is in the area of sustainability; number of research grants for projects of study in the areas of sustainability. There is another specific detail, linked to the indicator, pertaining to the use of ministerial funds for further studies into sustainability, on the part of the university. This indicator specifically proves the adoption of the institutional strategies mentioned previously.

When drafting a document, a university should give a quantitative illustration of its wide range of scientific production on sustainability, together with an evaluation of the effectiveness of research strategies. To start with, the number of pertinent scientific publications should be given, followed by other considerations, as shown in the Table. The connection between publication strategies in *Open Access* and the topic of sustainability becomes particularly important, turning out to be the quickest vector for openly spreading research results. In addition, the university may show its ability in carrying out research on sustainability, quoting the monetary amount and the absolute value of the single research projects awarded in competitions. Other related values may be determined in relation to the total amount of research projects, or to the total amount of research funds, or illustrating the research agreements made with institutions funding sustainability-related projects. A university can also quote the most significant examples of prizes and awards won by professors and researchers, along with a university's organizational effort made in adopting sustainability practices, not necessarily involving professors and researchers.

Finally, a university can choose whether to include a list of *other sustainability-related research initiatives*, including a miscellaneous category of qualitative and quantitative indicators. These may include:

- conferences, congresses or meetings, hosted by a university, focused on research on sustainability, covering various disciplines, for a specific audience;
- founding and launching scientific journals focused on sustainability, involving professors and researchers as members of their boards, or editors;

- organizing training schools for professors and researchers, and also students (such as PhD students/ grant holders/specializing students), focused on sustainability.

4.2.2 Outcomes of research evaluation

The evaluation of activities aimed at scientific production is a particularly sensitive and, therefore, fundamental component to include in social and environmental reporting.

The illustration of the main results achieved by a university according to the parameters of Valutazione della Qualità della Ricerca (VQR) (*Evaluation and Research Quality*), linked to ANVUR – Agenzia Nazionale di Valutazione del Sistema Universitario e della Ricerca – *National Agency of Evaluation of University and Research Systems*) needs to be as explanatory as synthetic, and it need not be repeated yearly. On the other hand, other data regarding prizes and awards won, such as the status of "Department of Excellence" may be shown through qualitative indicators, able to convey how these resources (financial, or in terms of human resources) have been used. Further specifications on external informative sections, such as dedicated websites or news sites are advisable, when the section dedicated to results is particularly rich in content. Any scrutiny of a particular department is unadvisable in that the report has an institutional goal and is not intended to show competition between departments. Obviously, reporting on processes and tools used for evaluation of university research does not necessarily have to be limited to the VQR programme. In this regard, when the information is internally available, it is possible to add further details regarding evaluation methods in this specific part of the report. A few examples of generic indicators are proposed in Table 8.

Table 8 – Generic indicators for the method of research evaluation

Name	Type	Description	Goals
Departments of Excellence	Quantitative	Number of Departments of Excellence vs. the total number of departments	Show the ability to elaborate quality research strategies
Resources dedicated to Research	Quantitative	Amount of resources allocated to these departments in terms of: financial resources assigned to research projects presented by these departments, staff members assigned to these departments	Ability to plan and manage highly prestigious research projects
Research performance	Quantitative	Choice of the most significant VQR indicator (*Valutazione della qualità della ricerca* – Research Quality Assessment) with regard to a university's performance (for instance, level of performance of newly-employed or newly promoted staff, and performance of PhD graduates who have	Explain the complex system of evaluation to an inexperienced public, especially in public universities

		obtained a doctorate in the previous period)	

Other specific indicators may be included to show how departments of excellence have holistically implemented sustainability research in the programs and projects they have submitted, and which have been funded. For instance, through a more detailed description, and only when the information is actually available, the ranking/evaluation of research projects submitted by Departments of Excellence on the study of sustainability could be shown, comparing it to other projects submitted that are not related to the study of sustainability.

With specific regard to research funding, and the general ability to obtain research funds from external institutions, or from winning competitions, a university drafting a document may create a connection between this part of the document and the section related to the reclassification of financial data (see Section 4.6). In so doing, the reader will be able to connect a university's performance, in terms of scientific research, to information related to the financial management of projects and their social and environmental impact. In particular, the reader can be walked through the document, showing the tools used to evaluate the research, evaluation in terms of efficacy and, finally, the social and environmental impacts generated.

The tools used for research evaluation need to be adapted coherently to the social and environmental reporting: the research carried out needs to be clearly illustrated, so that its effective approach and the tools used can be observed also by a non-expert audience. When showing the efficacy of scientific research, the interdependence between research and third mission activity cannot be ignored (see Section 4.3). Therefore, whenever necessary, a university drafting a report may make important connections, within the document itself, if specific research projects have contributed to particularly significant Third Mission activities, in terms of social and environmental impact.

References and sources

The information needed for this section may be found in some internal documents, such as: a University's Strategic Plan, Integrated Plan, or Reports on Performance, or reports from the Group of Evaluation, and Three-year Plans from each Department. Other information is already requested in the SUA_RD and SUA (*Scheda Unica Annuale Docente* – Professors' Annual Files), Third Mission forms. Searching for and collecting data from the IRIS (Institutional Research Information System) Publications website may turn out to be necessary. IRIS is the *Repository* of Research Products which allows to file, consult and enhance products deriving from research carried out by public universities, and has been set up by CINECA (an Italian centre of excellence for supercomputing technologies). The use of other databases, such as Scopus, WoS or SciVal is allowed, but it is advisable to adequately justify the reasons for referring to them. The section of the IRIS portal called IRIS_AP (IRIS – Activities and Projects) is useful to collect data on planning quality. Other ad hoc information, usually useful for the *GreenMetric* questionnaire, or other ranking criteria, may be used as a source. Similarly, VQR results have also led to testing the so-called SUA Docente, the synthetic reports of which may be used to complete this section.

4.3 THIRD MISSION

As illustrated in the Standard, the third mission foresees the assessment of the following areas: technological transfer, academic entrepreneurship and research commercialization; *public engagement*; *job placement*, continuing professional education and *lifelong learning*, enhancement of *cultural heritage*, production of social and educational public goods, and policies for social inclusion, activities regarding organization, infrastructure and/or governance, *external leadership*, national and international cooperation, guidelines and public *advocacy* for the implementation of the Goals of the 2030 Agenda; clinical trial and health care initiatives.

4.3.1 Technological transfer, academic entrepreneurship and research commercialization

Technological transfer and research commercialization are the most traditional third mission features, among those identified in the definition of third mission. These activities are ascribable to the commercialization of research (*Academic Entrepreneurship*) and to the management of intellectual property.

The management of intellectual property includes patents, while academic entrepreneurship is focused on the creation of *spin-offs* or *start-ups*, together with incubators, scientific parks, consortia, and so on. This also includes specific prizes or awards related to sustainable development and activities carried out for third parties, externally requested consultancy, and initiatives and events aimed at strengthening technological transfer and research commercialization. Examples of commercialization can be *calls for ideas* and *start-up weeks*, events aimed at developing ideas and entrepreneurial solutions to reach the SDGs promoted by the UN, involving potential start-uppers, marketers, visionaries, designers and web developers, intent on coming up with a new idea for sustainable business. This context also includes, therefore, any form of relationship with the world of production and the entire local community, which may materialize through services and consultancy for the external society and, above all, for entrepreneurs and institutions. The production of public, social, and environmental goods is likewise included. This third mission context can be presented using the indicators synthesized in the Tables below. The indicators observe a phenomenon in terms of internal or external effectiveness, or impact, efficiency or economicity. The indicator can be shown in numbers (of initiatives, subjects engaged, products, structures used or built, processes, and so on), in percentage or monetary value, as a variation, if compared to the previous year, or even as an average for the last three years. Recently, third mission activities have been intensely observed by Italian universities, and ANVUR has elaborated specific guidelines on the third mission stemming from the calculation and evaluation of results, given the necessity of observing their social impact on the local economy and on society in general. Generic indicators may be used to monitor and report on third mission activities in this specific context, including specific indicators when they are referred to specific sustainability goals. A few examples are shown in Table 9 below.

Table 9 – Generic indicators for technological transfer, academic entrepreneurship and research commercialization

Name	Type	Description	Goals
Spin-off	Quantitative	Number of *spin-offs*	Contribute to academic entrepreneurship using *spin- offs*
Start-up	Quantitative	Number of *start-ups*	Contribute to academic entrepreneurship using *start-ups*
Patents and Licences	Quantitative	Number of patents and licenses	Increase the ability to patent products (licences and patents)
Call for ideas and/or *start-up week*	Quantitative / Qualitative	Number of initiatives, such as *call for ideas* or *start-up week*	Plan and organize initiatives to propose new ideas and develop entrepreneurial solutions
Call for ideas and/or *start-up week*	Quantitative / Qualitative	Number and type of subjects engaged in the initiative	Increase the ability to engage would-be start-uppers, marketers, visionaries, designers and web developers, aimed at concretizing a business idea
Call for ideas and/or start-up week	Quantitative / Qualitative	Number of participants for each initiative	Increase the ability to engage would-be start-uppers, marketers, visionaries, designers and web developers, aiming at concretizing a business idea
Call for ideas and/or start-up week	Quantitative / Qualitative	Number and type of participating/satisfied subjects	Increase the quality of the initiative and the participants' satisfaction (assessment to be made using the satisfaction questionnaire)
Prizes or awards given by companies	Quantitative	Number of prizes or awards given by companies	Increase the ability of a university, and of each of its members (both academics, and technical and administrative staff), to win prizes and awards
Financial resources from third parties for activities and consultancy --- Sharing of buildings/laboratories/machinery with non-university organizations	Quantitative --- Quantitative	Revenue from third parties --- Number and monetary value of structures/machines shared with other companies and institutions	Increase third party revenues received from consultancy or other activities --- Increase willingness to share structures and equipment with non-university subjects
Researchers working in companies and other institutions	Quantitative	Number of researchers working in companies and other institutions	Increase the number of researchers working in companies and other institutions
Testing, production and sale of prototypes	Quantitative	Amount of *testing* carried out and sale of prototypes; Revenues obtained for *testing* and sale of prototypes	Increase *testing* and sale of products

Centres/structures of intermediation (technological transfer offices, incubators, scientific parks, consortia and so on)	Quantitative	Number centres/structures of intermediation (technological transfer offices, incubators, scientific parks, consortia and so on)	Guarantee the presence of Centres/structures of intermediation

Table 10 shows an example of third mission specific indicators with reference to technological transfer, academic entrepreneurship and commercialization of research, given their direct reference to sustainability.

Table 10 – Specific indicators for technological transfer, academic entrepreneurship and research commercialization

Name	Type	Description	Goals
Spin-off	Quantitative	Number of *spin-offs* pursuing Sustainable Development Goals (SDGs) (Goals of the 2030 Agenda)	Contribute to sustainability through *spin-offs* pursuing Sustainable Development
Start-up	Quantitative	Number of *start-ups* pursuing SDGs (Goals of the 2030 Agenda)	Contribute to sustainability through *start-ups* pursuing Sustainable Development
Patents and licenses	Quantitative	Number of patents and licenses focused on SDG innovations	Increase the ability to patent new products (patents and licenses) promoting sustainability
Call for ideas and/or *start-up week*	Quantitative	Number of initiatives, such as *calls for ideas* or *start-up weeks*, aimed at SDGs	Program and organize initiatives to propose ideas and develop entrepreneurial solutions to reach SDGs
Call for ideas and/or *start-up week*	Quantitative	Number of subjects involved in sustainability initiatives	Increase the ability to involve would-be start-uppers, marketers, visionaries, designers and web developers whose goal is the realization of sustainable businesses
Call for ideas and/or *start-up week*	Quantitative	Number of participants in each initiative aimed at sustainability	Increase the ability to involve would-be start-uppers, marketers, visionaries, designers and web developers whose goal is the realization of sustainable businesses
Prizes or awards given by companies for sustainability	Quantitative	Number of prizes or awards given by companies for Sustainable Development	Increase the ability of a university, and of each of its members (both academics, and technical and administrative staff), to obtain prizes and awards for sustainability
Financial resources from third parties for activities and consultancy for Sustainable Development	Quantitative	Revenues from third parties obtained for activities related to Sustainable Development	Increase revenues from third parties from consultancy, or other activities specifically related to SDGs
Testing, realization and sale of prototypes aimed at improving quality of life and sustainability	Quantitative	Amount of *testing* carried out and sale of prototypes aimed at improving quality of life and sustainability;	Increase *testing* and sale of prototypes aimed at improving quality of life and sustainability

		revenues coming from *testing* and sale of prototypes	

4.3.2 Public engagement

Public engagement includes various activities aimed at involving universities in the public sphere and, in turn, engaging the public in the third mission, academic activities of research, didactics and divulgation.

The main activities are those proposed by external subjects, involving, for instance, professors in refresher courses for high school teachers/lawyers/accountants/architects and other specific targets, but also as expert evaluators, or members of political, or social or cultural bodies (*academic engagement*). Other activities include creation and management of relationship networks with public institutions, trade associations, entrepreneurs, *non-profit* institutions, and so on. Indeed, *networking* allows to share and exchange knowledge with others, increasing the social capital of the territorial ecosystem. A significant example in this context is the realization of *citizen science* initiatives, through which citizens, in a network or in organized groups, become an active part in the collection of data and the production of information, aiming to increase their own knowledge and contribute to scientific research. The ensuing relationship may also be found interesting by a generic public (single citizens or local communities) whom a university can consult for cultural and scientific events, research projects to be *crowdfunded* by the university, and also to legitimize its own activities which have a social, economic and cultural impact on the local community, through official communications in the press and on social media.

Generic indicators may be used to monitor third mission activities in this specific context, a few examples of which are shown in Table 11 below.

Table 11 – Generic indicators for public engagement

Name	Type	Description	Goals
Training and refresher courses	Quantitative	Number of teaching staff appointed by the university to offer training and/or refresher courses for professionals	Assess the involvement of the academic community in building social capital, and contributing to the quality of life of *social* communities
University *crowdfunding* campaigns	Qualitative	Number of *crowdfunded* research projects	Assess a university's ability to sensitize external stakeholders and fund research in the interest of the collective
Initiatives of engagement of citizens	Qualitative / Quantitative	Number and types of initiatives engaging citizens	Assess a university's ability to engage citizens in various initiatives
Communication and external relationships	Qualitative	Number of articles on traditional media, live events on *social media*, number of *followers*, number of reports or interviews on radio or TV channels	Assess a university's degree of connectivity with the community, in order to render dialogue with stakeholders stronger and steadier

Participation in institutions, networks, partnerships	Qualitative	Type and number of institutions, networks, partnerships (local, national, international)	Assess a university's capacity for networking and its strategic function in governing the territory
Involvement of academic and technical staff in collegial bodies, technical and scientific committees, and boards for the evaluation of projects	Quantitative	Number of tasks of *academic engagement* entrusted to academic and technical staff in every department	Assessment of the degree of involvement of the teaching staff in the process of planning and evaluation of co-created value projects for the benefit of the community

Public engagement plays a very important role in the third mission, above all in the perspective of the 2030 Agenda, as it allows the university to effectively contribute to the diffusion of sustainability culture at a local, national, and international level. To be able to report on this contribution, it is important to adopt indicators that are correlated to the university's specific *public engagement* activities. In this perspective, some indicators are proposed, distinct for their typology, contents and knowledge goals associated to SDGs listed in Table 12 below.

Table 12 – Specific indicators for public engagement

Name	Type	Description	Goals
Training and refresher courses on sustainability (2030 Agenda)	Quantitative	Number of university teaching staff appointed by the university to offer training and/or refresher courses for professionals on the goals of the 2030 Agenda	Assess contribution given in spreading the culture of sustainability, thanks to the acquisition of competence on sustainable development
University *crowdfunding* campaigns for projects on sustainability	Qualitative	Number of crowdfunded research projects on sustainable development	Assess a university's ability to involve the community in co-financing research applied to sustainability
Communication on sustainability	Qualitative	Web pages on education, research, and cultural initiatives, promotional video clips, webinars, articles published in the press, or campaigns of sensitization through social media	Assess the contribution given to spreading good practices of consumption and sustainable production
Participation in inter-institutional networks on sustainability	Qualitative	Type and number of inter-institutional networks at local, national and international level, focused on the Goals of the 2030 Agenda	Assess the contribution given to capacity building in bodies and other institutions belonging to the network of sustainability development
Number of university teaching staff belonging to collegial bodies, technical and scientific committees, boards for the evaluation of projects or prizes to be awarded for sustainability	Quantitative	Number of university teaching staff entrusted with *academic engagement* tasks and definition of the role of various commissions/collegial bodies	Assess the contribution given to the spread of the culture of sustainability and to *capacity building*

4.3.3 Job placement, continuing education and lifelong learning

The sphere of *job placement*, *continuing professional education and lifelong learning* includes a set of activities aimed at encouraging job placement through enhancing didactic activities, with first-hand experiences and visiting companies, as well as through post-grad activities to help students who have completed their studies to enter the world of work. These activities also include professional updating initiatives and continuing training, to obtain course credits, and training courses in penitentiaries. In general, all those activities which can offer students training courses that will increase their work prospects, also enhancing transversal skills, are included. The activities can also involve citizens and may be focused on matters related to sustainable development and the goals of the 2030 Agenda. Reports from teaching activities are an example, as are visits to companies, and other events organized in collaboration with companies and institutions; PhD grants funded by companies or other institutions; communications for job opportunities and job interviews organized with companies and other external subjects; job-finding initiatives; Massive Open Online Courses (MOOC); activities of sensitization/engagement of entrepreneurs/managers aimed at providing dignified jobs; the building of a future, job inclusion, to provide younger generations with an easier work life. Further activities include *external leadership*, cooperation, guiding and public *advocacy* (for instance, participation in institutional boards to create educational and training courses to implement the goals of the 2030 Agenda).

This context, therefore, embraces all aspects of continuing education, lifelong learning and open teaching, continuing training in medicine, certification of competences, school-to-work alternation and other training activities, activities of life-long training related to sustainable development and the goals of the 2030 Agenda, addressed to a wide public.

Activities and programs focused on the implementation of inclusion policies are particularly relevant in this section (for instance, participation in projects aimed at enhancing the territory, initiative of democracy, *consensus conferences*, *citizen panels*, and programs to help non-standard users such as elderly people, migrants, victims of organized crime, prisoners, or *early school leavers* to find a job).

In this context, the entity of the impact is measured by the ability to integrate university education and the world of work with one another, and also being able to present vulnerable people with the prospect of a job. The number of people involved, and the reduction of the unemployment rate are typical indicators. Some specific indicators are shown in the table below.

To give an example, the section including *job placement*, *continuing professional training and lifelong learning* may be shown through the generic and specific indicators synthesized in the following tables (Table 13 and Table 14, respectively).

Table 13 – Generic indicators for job placement, continuing professional training and lifelong learning

Specific indicators	Type of Indicator	Description of Indicator	Objective of Indicator
Agreements with enterprises and other subjects for the offer of corporate training classes	Quantitative / Qualitative	Number and type of agreements made Hours of training offered, and subjects involved	Increase the university's networking capacity, making agreements with bodies and companies in order to offer training activities Increase the hours of professional training in agreement with companies and institutions
Type of university training credits granted in continuing training	Quantitative	Number of institutions applying for university training credits Number and type of university training credits in continuing training	Assess a university's ability to involve various associations and trade categories for the obtainment of university training credits
Vulnerable subjects who have been employed after training courses or other initiatives	Quantitative	Number of vulnerable subjects who have been employed	Contribute to reducing the rate of unemployment
Postgraduate training initiatives	Quantitative	Number of initiatives	Increase activities connected with the organization of *postgraduate* training initiatives
Continuing training courses carried out during a specific year	Quantitative	Number of training programs involving disadvantaged people	Capacity to carry out training programs including disadvantaged people
Lifelong learning courses	Quantitative	Number of *lifelong learning* courses carried out by a university during a specific year and open to citizens	Assess a university's contribution to permanent learning, enhancing free courses
Initiatives aimed at job placement	Quantitative Qualitative / Qualitative	Number of job placement initiatives Number and type of subjects (internal and external) involved in job placement initiatives, % of satisfied/participating subjects	Carry out effective job placement initiatives
Initiatives carried out with companies aimed at inclusion in the workplace	Qualitative / Qualitative	Number and type of companies involved in initiatives of inclusion in the workplace	Assess a university's ability to carry out initiatives aimed at realizing inclusive work contexts

Table 14 – Specific indicators for job placement, continuing professional training and lifelong learning

Specific indicators	Type of Indicator	Description of Indicator	Goal of Indicator
Training and refresher courses for public administration workers, focused on sustainability-related topics	Quantitative	Number of training and refresher courses carried out, focused on sustainable development	Plan postgraduate training activities focused on sustainable development
		% of training courses on sustainable development/total number of courses	
Agreements with companies and other subjects to offer corporate training classes on specific sustainability-related topics	Quantitative	Number of agreements drawn up aimed at sustainability	Increase a university's capacity of networking, making agreements with companies and institutions to offer training activities focused on sustainability
		Offer of training hours focused on sustainability	Increase the number of hours of professional training, in agreement with companies and institutions working on sustainability
Subjects involved in educational programs focused on sustainable development	Quantitative	Number and type of total subjects involved in training activities focused on sustainability	
		Number of teaching staff involved in educational programs aimed at sensitizing on sustainable development compared to the total number of teaching staff	Increase the number of subjects involved in initiatives focused on sustainability
		Number of students involved in educational pro-	

		grams on sustainable development compared to the total number of students	
		Number of members of technical and administrative, and laboratory staff involved in educational activities on sustainability	
Postgraduate training initiatives which focus on sustainability-related topics	Quantitative	Number of extracurricular training activities on sustainability	Increase of activities connected with *postgraduate* training activities on sustainability

4.3.4 Enhancement of cultural heritage

To enhance *cultural heritage* in terms of sustainable development, it is important to take into account the specific assets identified as a university's cultural heritage. They are included in the concept of cultural heritage that is distinct from tangible or intangible aspects.

1. **Material cultural heritage**

Cultural heritage (Art. 10, paragraph 2, of the Code of cultural heritage and landscape):

- immovable and movable assets of particularly significant artistic, historical, archaeological or ethno-anthropological interest, belonging to subjects who are different from those specified in paragraph 1;
- archives and single documents, belonging to private individuals, of particularly important historical interest;
- libraries, belonging to private individuals, of exceptional cultural interest;
- immovable and movable assets, belonging to anybody, of particularly important interest, given their close connection with history, be it political, military, literary, artistic, scientific, technical, industrial, or cultural in general, as evidence of the identity and history of public, collective, or religious institutions.

Landscape assets (Art. 10, paragraph 3, of the Code of cultural heritage and landscape):

Immovable assets, or estates, and the areas listed in Article no. 134 are landscape assets, an expression of the historical, cultural, natural, morphological and aesthetic value of a territory, and other assets, as identified or recognized by the law.

2. **Intangible cultural heritage** (Art. 2, Convention for the Safeguarding of the Intangible Cultural Heritage, UNESCO, 2003)

The definition "Intangible cultural heritage" describes the procedures, representations, expressions, knowledge, know-how – as well as the tools, objects, artefacts and cultural spaces linked to them – which communities, groups and, in some cases, single individuals recognize as part of their

cultural heritage. This intangible cultural heritage, passed down from generation to generation, is constantly re-created by communities and groups in their relationship with their environment, their interaction with nature and their own history. This gives people a sense of identity and community, promoting the concept of respect of cultural diversity and human creativity.

Universities are called on to enhance those assets which testify their cultural heritage in compliance with the guidelines given by the European Council on the sustainable use of *cultural heritage* (Convention on the Value of Cultural Heritage for Society, CETS NO. 199, Faro, 2005). Activities included in this context are carried out by university museums, libraries, including sections dedicated to ancient manuscripts, botanical and planetary gardens. Table 15 shows some generic indicators used to assess the amount of activity carried out.

Table 15 – Generic indicators for the enhancement of cultural heritage

Name	Type	Description	Goals
Availability of a university's cultural heritage	Quantitative	Number of users Number of users per event Number of generic or targeted users compared to the number of opening hours or the number of events organized over the year	Assess the rate of use of a university's collections
Users' opinion	Quantitative / Qualitative	Questionnaires / Interviews / *Guest books* / number of "*likes*" on social media Information on the level of appreciation of a university's collections	Assess a university's capacity to spread and maintain the memory of its own *cultural heritage*
Display of scientific findings in Museums	Qualitative	Creation of new museums or other cultural sites	Assess the degree of care and conservation of a university's cultural heritage

To report the activities carried out for the enhancement of *cultural heritage*, useful guidelines can be found in the "UNESCO *Culture 2030 Indicators*", which show how culture is a strategic topic covering all SDGs. Referring to SDG target 11.4, which aims at "increasing the effort to protect and safeguard the world's cultural and natural heritage", UNESCO proposes a *framework* where sustainable development revolves around culture, in all its aspects. This can be adopted if a university's cultural heritage is a strategic priority, pursued by working on projects shared with the city and the main stakeholders.

A report on the activities carried out for the enhancement of *cultural heritage* should consider the characteristics of each university's cultural heritage, and how they are managed. To this end, specific indicators are suggested, offering information on the sustainable use of such heritage, as well as on the contribution which its management can give to spread the culture of sustainability (Table 16).

Table 16 – Specific indicators for the enhancement of cultural heritage

Name	Type	Description	Goals
Economic management of a university's cultural heritage	Quantitative	Revenue + contributions Management costs Ratio between revenues showing a university's capacity to cover management costs (conservation, maintenance, promotion and enhancement) of its cultural heritage and revenues from sale of tickets and other collateral activities, and internal and third-party contributions	Assess the economic sustainability of a university's cultural heritage
Temporary exhibitions on topics related to the 2030 Agenda	Quantitative	Number and specific type of exhibitions organized by Museums, botanical gardens, libraries and archives on topics related to sustainability	Assess contribution to the spread of sustainability culture
Use of temporary exhibitions focused on sustainability-related topics	Qualitative	Number of users Number of users per event focused on sustainability Number of generic or targeted users compared to the number of opening hours or the number of events organized over the year on sustainability-related topics	Assessment of the level of socio-cultural sustainability of a university's cultural heritage

4.3.5 Production of social and educational public goods and policies for social inclusion

The production of public goods aimed at spreading cultural sustainability in a specific territory is a particularly important part of a university's third mission, even if often undervalued. This activity stems from a university's strategic policies aimed at sensitizing people, promoting a mindset of inclusion and sustainability. This also includes the participation of academic and technical staff in creating standards or legislative/regulatory texts, or practices of participative democracy. Further actions include projects of urban development, sustainable mobility, and of *smart specialization strategy*.

The following generic indicators shown in Table 17 can be used to monitor this context.

Table 17 – Generic indicators for the production of social and educational public goods, and policies aimed at social inclusion

Name	Type	Description	Goals
Members of academic and technical staff involved in the creation of standards, legislative texts, development projects, and so on	Quantitative	Number of teaching and technical staff appointed by the university to participate in the creation of standards, legislative texts and sets of rules and regulations, or initiatives of participatory democracy	Assessment of a university's *capacity building*
Setting up and realization of public works	Quantitative	Budget of investments and funding (co-funding) for the construction of structures (such as, university colleges and residences, technological parks), specifying the parts which have been realized	Assessment of a university's contribution to the co-creation of public value for the benefit of stakeholders

This context includes activities which may help reach the different goals of sustainable development listed in the 2030 Agenda, with particular reference to SDG 9, "Enterprises, Innovation and Infrastructures", SDG 11 "Cities and Sustainable Communities", and SDG 17, "Partnerships towards goals".

The range of third mission activities within this context shows the necessity to use suitable indicators to measure a university's specific contribution to the sustainable development of its territory. Several of these indicators are proposed below (Table 18).

Table 18 – Specific indicators for the production of social and educations public goods, and policies aimed at social inclusion

Name	Type	Description	Goals
Realization of co-working spaces for sustainability	Quantitative	Number and types of hubs, laboratories or co-working spaces designated for sustainability	Ability of the university to create public spaces for co-planning
Design of university colleges and residences	Quantitative	Number of projects realized for the building of university colleges and residences, in compliance with eco-sustainable criteria	Ability to realize public works, following sustainability logic and principles

4.3.6 Organizational, infra-structural, and/or governance activities, external leadership, national and international cooperation, guidelines and public advocacy for the implementation of the SDGs

Third mission activities related to the 2030 Agenda include different categories of actions: i) organizational, infra-structural or governance activities, such as, the setting up of a dedicated *Green*

Office and/or finalizing systems and/or protocols for the management of toxic waste or the reduction of the use of fossil fuels, and/or the realization of new structures to ensure the health, well-being, QWL, and dignity of all; ii) awareness and participation to the Goals of the 2030 Agenda, on the part of the local community and/or the university's internal community; iii) *external leadership*, national and international cooperation, guidelines and public *advocacy* (such as participation in institutional boards for the development of actions to be taken at all levels for the implementation of the Goals of the 2030 Agenda), carried out by universities also in partnership with other institutions and stakeholders, related to the 17 SDGs.

This area being assessed is, by definition, transversal to a university's other activities. In particular, the definition of goals connected to the 2030 Agenda and implementation of the activities taken to achieve them, can be identified both in the initial part of the Sustainability Report, and in the numerous specific indicators inspired by the pursuit of the SDGs. One can consider, for example, how activities of *public engagement* within the third mission are ascribable to activities of sensitization and participation of the local community to the topics of the 2030 Agenda, or how the evaluation of a university's *carbon footprint* contributes to achieving the goal of climate change.

4.3.7 Clinical trial and healthcare initiatives

This section includes objectives and activities aimed at protecting and improving the public health through the discovery, development and experimentation of techniques, methods and drugs. The fundamental ideas are "conservation medicine and health", intent on finding useful, cheap old tools to replace new, expensive tools to cure patients, adopting reusable materials, preferring both clinics and rehabilitation in one's own house to mega-*technologic hospitals*, and alternative forms of energy instead of traditional systems of heating and air-conditioning.

The goals in the healthcare section can be associated to three macro-questions pertaining to sustainability: answering adequately to patients' various needs and, consequently, collective and individual health needs; reducing strictly economic problems; reducing negative impacts on the environment and on natural resources.

This area of action takes into consideration not only activities aimed at emphasising the importance of pre-clinical and clinical research, but also activities aimed at patient *empowerment*, also in the interest of subjects with various "frailties", The health issues here may be connected with age, gender, socio-economic status, the presence of disabilities, or having experienced poverty or migration: *screening* campaigns, information and/or prevention campaigns, spreading awareness on social media, or creating Internet websites on sensitive, health-related topics can be considered.

Clinical and *non-profit* trials are also included, as well as studies on medical devices, non-interventional studies, studies for the development of new drugs or the *repurposing* of some drugs, including generic drugs, and the creation of structures supporting these activities, such as clinical trial centres and biobanks, and all those activities aimed at guiding regional, and/or national healthcare policies and the development of Pharmacoeconomics. This area also involves activities carried out in veterinary hospitals and university departments in a *One Health* vision of safeguarding public health.

The indicators shown in Table 19 may include various areas of intervention for the goals to focus on, such as "sustainable management" of drugs, medical equipment and the supply of health goods and services; research and clinical and pre-clinical trial and enhancement; patient *empowerment*.

Table 19 – Indicators for clinical trial and healthcare initiatives.

Name	Type	Description	Goals
Sustainability in purchasing and using medical devices and development of pharmaco-economics	Qualitative	Systems for monitoring drug costs, medical devices and other items	Use a sustainable approach in managing drugs, medical devices and the supply of healthcare goods and services
Research and clinical and pre-clinical trial, and its enhancement in terms of sustainability	Qualitative / Quantitative	A university's policy aimed at supporting clinical research and the development of new drugs	Support studies on the development of new drugs and medical devices in the interest of public healthcare, patient well-being and life expectancy
Access to drugs and services	Quantitative	Number of information days/ *screening* days /prevention days/ sensitizing campaigns (also on social media) on important healthcare-related topics related to helping people with vulnerabilities, elderly people, immigrants or descendants of immigrants, and so on	Guarantee full access to drugs, information and healthcare services, and overcome social inequalities
Satisfaction of patients and family (objective and perceived)	Qualitative	Satisfaction with patients' quality of life (survey)	Improve objective and perceived quality of life for patients, families and people in general

In universities with veterinary clinics, the same indicators may be used, taking their clinic specificity into account.

Another aspect of this section that should not be neglected is gender medicine, focused on promoting suitable and customized therapies, obtaining positive effects in terms of effective cures and reduced costs for the National Health System. Following this approach, the health service generally offered focuses on "patient centrality" and "customized therapies" leading, in turn, to consider parameters such as sex, ethnicity, religion, sexual orientation, social, economic and cultural conditions.

As in other areas, the indicators proposed may partially overlap with other areas of assessment (for instance, special waste produced may be considered as part of Section 4.5.4).

References and Sources

In a university's planning and programming documents (Three-year planning, Integrated Plan of Activities and Organization (*Piano Integrato di Attività e Organizzazione* – PIAO), Strategic Planning, and so on), referring to the section on the third mission, the information required for the

calculation of general and specific indicators of sustainability may be reported as indicated, regarding the following spheres: technological transfer, academic entrepreneurship and commercialization of research (4.3.1); *public engagement* (4.3.2); *job placement*, continuing professional training and *lifelong learning* (4.3.3); production of social and educational public goods, and of policies of inclusion (4.3.5); organizational, infrastructural and/or governance activities, *external leadership*, national and international cooperation, guidance and public *advocacy* for the implementation of the goals of the 2030 Agenda (4.3.6); clinical trial and healthcare initiatives (4.3.7).

With regard to these, some information may be drawn from the University Financial Report, in a review phase, or when reporting on performances, or from other documents produced from the Evaluation Board or the Quality Assurance Board. More information may be inferred from a university's programme, or yearly list of public works and investments, or from energy efficiency plans, or enhancement of cultural heritage. It also needs to be pointed out that a lot of the data that is necessary to calculate the indicators related to this context are requested in the university's Yearly Spreadsheet – Third Mission and Social Impact (*Scheda Unica Annuale – Terza Missione e Impatto Sociale* – SUA-TM/IS, 2018), and in the more recent *ANVUR Guidelines on the Third Mission (*"Linee guida ANVUR sulla terza missione"), published in 2021, as well as the Gender Equality Plan and, for the universities which have adopted it, the HRS4R (Human Resources Strategy for Researchers) Action Plan.

With regard to the enhancement of *cultural heritage* (4.3.4), should such information not be present in the above-mentioned sources, the collection of data ought to be carried out as illustrated below. The parameters taken into consideration by the economicity indicators can be drawn from the U-GOV platform, under the COAN heading. In addition, the total amount of revenues from ticket sales, as well as costs for museum management, musical events and enhancement of cultural heritage, including libraries, archives, and sections where ancient manuscripts are kept, are also foreseen by the Yearly Spreadsheet – Third Mission and Social Impact (SUA- TM/IS, 2018) – section 1.5, Management of Heritage and Cultural Activities. Indeed, SUA-TM/IS requires this information, (for instance, number of users/visitors, number of events, opening days) with regard to museums, musical activities (orchestras, choirs, *ensembles*, and so on), historical archives, libraries, and theatres. With regard to *customer satisfaction* indicators, it will be useful to consult the data collected by those in charge of the various cultural assets and the Heritage Department of a university. Various sources also include: Legislative Decree no. 42/2004 "Codice dei beni culturali e del paesaggio" ("Codification of cultural heritage and landscape") revised by Law no. 132/2019); "Convenzione per la salvaguardia del patrimonio culturale immateriale" – "Convention for the Safeguarding of the Intangible Cultural Heritage", UNESCO, 2003, Paris; Convention on the Value of Cultural Heritage for Society (CETS NO. 199), FARO, October 27th, 2005; and UNESCO *Culture 2030 Indicators*. See also the reference to indicators and the Goals of the 2030 Agenda (see Section 4.3.6), also present in the ANVUR Guidelines for drafting the Yearly Spreadsheet – Third Mission and Social Impact (*Scheda Unica Annuale – Terza Missione e Impatto Sociale* – SUA-TM/IS, 2018) for Universities (version updated to November 7th, 2018).

4.4. HUMAN RESOURCES, INCLUSION AND SOCIAL JUSTICE

In the section on human resources, inclusion and social justice in this Manual, indicators that can enhance a university's ability to promote conditions of well-being for the whole academic community are proposed, opposing any form of inequality or discrimination, aiming to contribute to sustainable development and social justice.

The three areas to be included in the indicators refer to:

- human resources;
- inclusion and social justice;
- support for the right to study and a university QWL, also in the presence of disabilities, learning disorders or other vulnerabilities.

4.4.1 Human resources

This section shows the main quantitative and qualitative indicators related to a university's organizational structures, taking into consideration the existing infrastructures, in addition to human resources. The goal is to show a university's commitment to inclusion and social justice, as well as the activities carried out to create the conditions for a professional QWL for people with disabilities, or other vulnerabilities, and the results obtained in terms of organizational well-being, life-work balance, corporate *welfare*, and so on. This section could also include a reference to some indicators in the Gender Balance and/or in the *Gender Equality Plan* (GEP).

A few examples of generic indicators which may be adopted are shown in Table 20.

Table 20 – Generic indicators for human resources

Name	Type	Description	Goals
Employees per type of contract	Quantitative	Number of employees with fixed-term contracts or permanent contracts	Identify the university's contribution to the creation of an organizational and managerial structure committed to sustainability
Retention rate of human resources used	Quantitative	Number of fixed-term contracts transformed into permanent contracts	Define a university's ability to guarantee full productive employment, and employee retention, investing in human resources
Surveys on climate and organizational well-being	Quantitative / Qualitative	Report assessment of the level of satisfaction of those working in admin-	Identify the strong points of the organization, showing its potential for development and areas for improvement

		istration, based on an organizational survey on staff (for instance, number of answers given, and average score given to answers)	
Staff training	Quantitative / Qualitative	Number of yearly training hours for each employee, distinguishing, for instance, their function/operational sector; description of specific training initiatives carried out	Assess a university's commitment to the development of staff knowledge and competence
Absences and *turnover*	Quantitative	Rate of absenteeism, based on ratio between hours/days of absence and total number of hours/days of work; rate of turnover, based on ratio of employees who terminated their contract compared to number of employees at the beginning of a certain period	Provide an indirect assessment of staff dissatisfaction level
Work-life balance	Qualitative	Description of initiatives carried out and the structures created to support workers (for instance, amount of funds allocated; number of beneficiaries; contributions for nursery schools, summer camps, spaces for smart- working, flexible working hours, working from home (WFH))	Identify the university's commitment to workers' well-being

Among specific indicators, those shown in Table 21 may be considered as an example.

Table 21 – Specific indicators for human resources

Name	Type	Description	Goals
Employees working on sustainability	Quantitative	Number of employees per type of contact committed solely to sustainability-related topics; number of hours of work, according to type of contract, with workers partially engaged in sustainability-related topics	Assess level of determination in creating an organizational-managerial structure committed to sustainability-related topics
Retention rate of human resources engaged in sustainability-related topics	Quantitative	Number of fixed-term contracts transformed into permanent contracts	Assess a university's ability to guarantee full, productive employment and *employee retention*, investing in human resources committed to sustainability-related topics

Employee training on sustainability-related topics	Quantitative / Qualitative	Number of hours for each training activity carried out in order to sensitize the entire organizational structure on sustainability-related topics; description of training activities carried out on sustainability-related topics	Assess a university's commitment to achievement of knowledge and competence on sustainability

4.4.2 Inclusion and social justice

This sphere considers all those measures and tools which can be adopted to promote and spread critical awareness on matters such as inclusion and social justice, to oppose inequalities, value heterogeneity and uniqueness, eliminate barriers and discriminations, promote inclusive culture and teaching, working on building more equal social contexts, including university life.

The university should state whether a GEP has been drafted or not, if there is someone designated by the Rector, responsible for inclusion and disabilities or, more in general, if there are specific boards for defining and enforcing inclusion and social justice policies in the university.

To report on its commitment to the culture of inclusion and social justice among all students, as well as within its own community, a university should define some generic indicators, such as those shown in Table 22.

Table 22 – Indicators of inclusion and social justice

Name	Type	Description	Goals
Staff sensitization and training on inclusion and social justice	Quantitative / Qualitative	Number of participants in initiatives of sensitization, along with teaching and non-teaching staff training on topics related to inclusion and social justice; description of the activities carried out, and possibly an *assessment* of the level of competence acquired	Assess a university's commitment to sensitizing and training its staff to obtain inclusive working environments, and incentivize the adoption of inclusive didactic strategies
Student sensitization and training on topics relating to inclusion and social justice	Quantitative / Qualitative	Number of students participating in initiatives regarding sensitization and training on topics related to inclusion and social justice; description of the activities carried out, and possibly an assessment of	Assess a university's commitment and results obtained. Spread a culture of inclusion and social justice along with promoting the capacity to create inclusive contexts for all graduates

		the level of competence acquired	
Agreements for training activities or voluntary work in third sector institutions	Quantitative / Qualitative	Number of participants in agreements for training activities or voluntary work in third sector institutions	Assess a university's commitment to creating collaborations with associations within the territory, working on inclusion and social justice for foreign communities, or people in difficulty (economic, health problems, and so on)
Actions taken to involve and train the local community on inclusion and social justice	Quantitative / Qualitative	Number of participants in the involvement and training of local community on inclusion and social justice, also considering initiatives for the enhancement of specific territories managed by the university (in collaboration with companies, associations, profit and non-profit institutions, cultural institutions, and other institutions). Description of the activities carried out, and a possible assessment of the level of competence acquired	Assess a university's commitment and the results obtained, working to spread the values of inclusion and social justice, considering initiatives of collaboration with associations in the territory, working on the inclusion of foreign communities or people in difficulty (economic, health problems, and so on)
Anti-discrimination initiatives	Quantitative / Qualitative	Number and type of anti-discrimination activities, against, for example, race, colour, sex, religion, political opinions, nationality, or social origin, or other relevant forms of discrimination (age, disabilities, immigrant, HIV and AIDS, gender, sexual orientation, genetic predisposition and lifestyle)	Assess a university's ability to organize actions aimed at fighting discrimination

4.4.3 Supporting the right to education and quality of life at university, also for students with disabilities, such as learning disabilities or other forms of vulnerability

This section is focused on a university's ability to:

- promote the right to study, which is the main tool for one's personal realization and the diffusion of culture;

- predispose support for all students (also with disabilities) to this end, so they avoid suffering any sort of impediment to the continuity of their course of studies and their quality of life.

Disabilities are a question of human rights, as confirmed by the United Nations Convention on the Rights of Persons with Disabilities and, as specified in the 2030 Agenda, are strictly linked to the realization of a sustainable and inclusive society (SDGs 4,8,10,11,17). Universities, therefore, must carry out a series of initiatives to physically and psychologically support all the people who attend them. The right to study at university for all people, irrespective of their economic and social conditions, gender, nationality, religion, political opinions, or any form of disability or vulnerability is guaranteed by Article no. 34 of the Italian constitution, in compliance with Article 3, which promotes social justice to remove all obstacles for the "full development of a person".

With regard to *students*, a few examples of generic indicators are shown in Table 23.

Table 23 – Generic indicators for the support of vulnerable students

Name	Type	Description	Goals
Tutors supporting students with vulnerabilities	Quantitative	Number of didactic and/or peer tutors specifically trained also with regard to inclusion, compared to the number of students with disabilities, specific learning disabilities, specific temporary needs, health problems, immigration, ex-prisoners, and so on	Show a university's ability to respond to and support some specific needs of students with vulnerabilities, employing tutors supporting students in their right to education, training them to study, and helping them participate in university life, spreading an inclusive perspective
Services supporting students with vulnerabilities	Quantitative / Qualitative	Number and type of services aimed at people with disabilities, specific learning disabilities, specific temporary needs, immigration background, and so on, such as, looking for medical support for psychological counselling, equal access to accommodation, specific support for students with learning disabilities, equal access to degree courses (support in the preparation for entrance tests, and availability of places for students with disabilities, refugees, and so on)	Show a university's ability to answer the needs of people with disabilities, learning disabilities, or other vulnerabilities, creating an inclusive context
Initiatives of didactic innovation, supporting vulnerability	Quantitative / Qualitative	Number and type of activities taken to innovate teaching, with an inclusive perspective, adopting an inclusive language, and developing accessible structures to support inclusion	Assess a university's ability to take into account the heterogeneity of students' needs, eliminating social, administrative, and bureaucratic barriers; elaborating curricula, education, access to degree courses,

		and social justice, answering students' needs	systems of evaluation able to respond to various needs; planning and realizing environments that are accessible to everyone, from various points of view: physical, bureaucratic, technological, social, and so on
Tax breaks/exemptions, offer of scholarships for disadvantaged students	Quantitative	Number of beneficiaries in proportion to student population; amount of funding. Facilitations foreseen for students are taken into consideration not only in compliance with State legislation, but also with the allocation, for instance, of specific supportive funds for students who find themselves in difficulty (with, for instance, economic problems, or after the sudden occurrence of family problems)	Show a university's commitment in supporting students in difficulty, and in promoting learning opportunities for everyone

With regard to *workers*, (*employees or non-employees*), a few examples of generic indicators are shown in Table 24.

Table 24 – Generic indicators for the support of vulnerable workers

Name	Type	Description	Goals
Subsidies and *benefits* foreseen for disadvantaged workers	Quantitative / Qualitative	Amount of funds allocated for supporting employees with personal or family problems (for instance, with a disabled person in the family)	Enhance a university's ability to answer the needs of its employees, creating inclusive contexts
Initiatives to promote workers' health	Quantitative / Qualitative	Number and type of programs and initiatives to provide ease of access to healthcare and medical services, and to safeguard the health of its employees (for instance, nutrition counselling and periodic *screenings*)	Describe a university's ability to ensure the health and well-being of all workers
Initiatives promoted by the university to improve accessibility	Quantitative / Qualitative	Number and type of activities aimed at eliminating architectural barriers, of-	Show a university's ability to respond to the needs of people with disabilities, learning disabilities, or other forms of

		fering a "reasonable adaptation" of working places, and so on	vulnerability, creating inclusive contexts

References and sources

To collect useful information to identify and show the various indicators in this section, the following documents can be consulted: guidelines from the Italian Conference of University Delegates for Disabilities (*Linee guida della Conferenza Nazionale Universitaria Delegati per la Disabilità*) (CNUDD) 2014; strategic plans drawn by universities which, as a general premise, should call for commitment to the SDGs listed in the 2030 Agenda; the yearly report from the Joint Committee for Equal Opportunity (Comitato Unico di Garanzia – CUG) regarding staff; Positive Action Policies (*Piano di Azioni Positive* – PAP) elaborated by CUG; the three-year plan for technical and administrative staff training; the integrated plan/performance plan; the three-year programme for public works; a description of the services of inclusion and accessibility; guidelines for gender language at university; gender balance at university. Further information may be included in other documents, such as the Report on Performance and the Report from the Evaluation Board. A fundamentally important factor will be a university's compliance with the current national and international law.

4.5. ENVIRONMENTAL RESOURCES

The section focused on environmental resources is closely connected to the logistic and operative characteristics related to the reporting activity. The indicators proposed in this section are linked to safeguarding policies and protecting spaces for people who work and/or study in a university. Similar to previous sections, the assessment of aspects related to the environment will lead to the reporting of both quantitative aspects (for instance, water consumption), and qualitative aspects (for instance, projects on sustainable mobility). Obviously, these policies need to be in compliance with the current law, at local, regional, and national level. In view of a university's participation in international projects or initiatives, adherence to the principles proposed by such initiatives (for instance, *Global Compact*), will also be required. Among the areas of assessment of environmental resources, some generic aspects are included, such as: the current law of reference and a university's environmental policies; strategies and actions carried out for the development of the above-mentioned environmental policies; ecological, public purchases. We shall instead dedicate the rest of this section to exemplify specific areas of assessment which characterize a university's impact on the environment, such as: energy and sustainable buildings; sustainable use of water; fight against climate change; enhancement of resources and waste prevention; sustainable mobility; food.

4.5.1 Energy and sustainable buildings

In this area of assessment, the aim of the indicators is to incentivize universities to monitor parameters inherent to energy consumption (electric and thermic). The use of these parameters will allow the evaluation of activities carried out so as to gradually improve the energetic performance of buildings in university campuses, in the perspective of sustainable development, and, in particular, SDGs 7, 11, 12 and 13 (Table 25).

Table 25 – Indicators for energy and sustainable buildings

Name	Type	Description	Goals
Forms of energy (methane gas, electricity, and so on)	Quantitative	Electric and thermal consumption/form of energy used (with it being possible to separate the amount of self-produced energy). Describes a university's electric and thermal consumption for each form of energy. The indicator estimates the amount of electric and thermal energy coming from renewable sources and possibly from	Describe the forms of energy used, specifying possible self-production for each form of energy. This indicator will identify the presence of district heating and/or district cooling in the university buildings, and the amount of self-production for each form of energy

		energy saving solutions (systems of cogeneration or trigeneration)	
Self-production of energy	Quantitative	Self-production/total electric and thermal consumption. It indicates the percentage of self-produced energy compared to total consumption. % kWh_{auto}/kWh_{el_tot}	Show a university' capacity for self-production of energy
Thermal consumption normalized to degree day and net volume heated	Quantitative	Energy consumption/ (Volume · Degree Day) This indicator allows to assess the thermal consumption for various buildings over time, adjusting for the external component of temperature variation. $kWh_t/(m^3 \cdot DD)$	Assess the trend of energy consumption for each building
Emissions of CO_2 equivalent per person	Quantitative	This indicator identifies the emissions of CO_2eq per person within the university. tCO_2eq/person tCO_2eq/ˆ academic numerosity	Assess the carbon footprint of people participating in academic life
Electric consumption compared to the amount of supply from renewable sources	Quantitative	Supply of green energy/total electric consumption Indicates the % of electricity supplied by the energy provider and produced from renewable sources compared to the total amount of electric consumption	Assess a university's propensity to the use of renewable sources

An energetic vector is a form of secondary energy which lends itself to being transported through infrastructures, to its destination of use. It is a transportable substance which releases its own energy (solid, liquid or gas fuels, steam, hot water, and so on), or electricity (electric energy), the vector which best allows to exploit its energy content.

The various indicators of energetic vectors and the self-production of energy are ascribable to data which the Italian Federation for Energy Efficiency (*Federazione Italiana per l'uso Razionale dell'Energia* – FIRE) requires from universities.

The assessment of thermic consumption normalized to the degree day and by net volume heated allows to identify a university's thermic consumption, based on the heated and/or cooled volumetry and degree days. Degree days are defined in Presidential Decree no. 412/93 as "the total,

extended to each day of a conventional yearly period of heating, of the sole, positive, daily differences between the indoor temperature, conventionally fixed at 20°C, and the average outdoor temperature; the unit of measurement used is the degree day (DD)". Thermic consumption needs to be normalized, at least compared to the degree days corresponding to the climatic zone of the university under consideration. Thermic consumption should be normalized quantifying the degree days based on meteorological data collected locally, thanks, for instance, to continuous measurement carried out by the Regional Agency for Environmental Protection (*Agenzia Regionale per la Protezione Ambientale* – ARPA) stations. Moreover, it would be advisable to normalize thermic consumption also for the May to September period, so as to assess the percentage of consumption deriving from the use of air conditioners in summer. The characterization of degree days during the summer should also take another parameter into account, HUMIDEX, based on meteorological parameters (temperature and relative air humidity, in particular), based on the information collected at the sites of interest, which can be easily calculated thanks to the data obtained from ARPA's regional monitoring networks. In particular, the HUMIDEX (H) parameter can be calculated as follows:

$$H = Ta + 0.5555 \cdot (0.06 \cdot UR \cdot 10^{0.03\,Ta} - 10)$$

Where:

T_a = indoor air temperature;

UR = relative humidity of the air.

The normalization of both winter and summer thermic consumption allows to evaluate how air-conditioning systems have been used, how they have worked and whether there have been any anomalies, irrespective of a mild or harsh season.

In evaluating the CO_2eq per person, regarding the academic community observed, it should be pointed out that the definition of academic community not only means the total annual number of students, but must also include the number of members of the teaching staff, as well as members of the technical and administrative staff. With regard to the emissions of CO_2 equivalent, these can be assessed exclusively on the base of energy consumption, according to the various sources used, or calculation may be extended to emissions deriving from the mobility of students, teaching staff and technical and administrative staff between home and university. In this case, the parameter requires a more complex evaluation (related to logistics and *mobility planning* – already required, as is the case, from universities), also able to assess the universities' actual carbon footprint. On this matter, see Section 4.5.3.

In order to better show universities' critical points, when observing energy consumption (both thermic and electric), aiming at making Italian university campuses more energy-efficient, it is important to know the size of the areas occupied by buildings, according to their destination of use. Some macro-destinations of use may be identified (divided by teaching, research, offices for teachers and technical and administrative staff, and so on), and the surface assigned for each destination of use in proportion to the total surface assessed (for instance, laboratories, lecture halls, offices).

The assessment of electricity used, bought from renewable sources, may be made by observing various factors, both in terms of the surface area under observation (university/headquarters/building) and in terms of a temporary solution for energy consumption (hourly/monthly/annual timeframes). Based on the assessment made and level of detail chosen, a university may come up with a strategy in favour of renewable energy, as opposed to non-renewable energy.

Qualitative data in this section may be integrated with the description of adjustments and upgrades carried out on the university's buildings, considering how some indicators may be improved, thanks to such interventions.

References and sources

On this matter, see *Green Paper – Sustainable Energy Management*, which shows some particular aspects of management and monitoring, aimed at saving energy. With regard to the use of energy vectors and the self-production of energy, see the FIRE guidelines while, with regard to the law regulating *Energy Manager*, the main point of reference is Law no. 10, issued January 9th, 1991, with particular reference to Article no. 19.

4.5.2 Promoting sustainable use of water resources

Water is a fundamental resource, and safeguarding it is a priority for all mankind. It is no coincidence that it is seen by various SDGs as a preeminent factor, both as a resource (SDG 6 and SDG 12), and as a matrix (SDG 14 and SDG 13). With regard to climate emergency, the focus on water is crucial in the commitment to sustainability, also for universities. This focus must go further than a mere, contingent preoccupation (in terms of collection, consumption and disposal of this resource), acquiring all possible knowledge to plan, create and improve, now and for the future, i) the quality and availability of water as a vital factor, ii) resilience and adaptation of ecosystems (above all, urban) to extreme meteorological and climatic phenomena deriving from climate change, seeing water as a risk factor (drought on the one hand, and floods on the other). In universities, the importance of decisions made, and their consequences, has a long-term effect, deriving also from the weight of the message conveyed, which has an impact on vast communities and above all, on the education of a large number of young people.

Table 26 shows a selection of indicators which, on the one hand, show the "entity" of this topic in terms of consumption of drinking water, also indirectly involving the question of wastewater disposal and, on the other hand, show objectives, results and perspectives of improvement for a university in terms of increased efficiency in the use and management of water resources, also considering water as a risk factor.

Table 26 – Indicators for water

Name	Type	Description	Goals
Relative consumption of drinking water in a specific period	Quantitative	Total amount m^3 of drinking water supplied compared to relevant *drivers* Relative annual consumption of drinking water (in m^3, according to official data from "adjusted" meters/bills- balance management), compared to relevant *drivers*, such as: - number of users in the university (per capita consumption); - size of the area (total m^2, m^2 of green areas, m^2 of laboratories, and so on)	Provide a chart showing the consumption of drinking water. The indicator allows to see a university's positive or negative trend compared to the reduction of relative water consumption, and to monitor the effects of policies aimed at reducing water consumption (reduction at origin and re-use)
Percentage of infrastructure and devices aimed at the reduction of water consumption	Quantitative	Number of waterspouts equipped with devices to reduce or limit the flow of water Total number of waterspouts The indicator is based on the mapping of: waterspouts equipped with infrastructure/devices/systems aimed at an efficient use of water, leading to reduced consumption (for instance, automatic mechanisms to reduce water consumption in washbasins/fountains, such as photocells, water breakers, pedals, timers; double flushes, photocells or other in WCs; rain sensors in irrigation systems); - all waterspouts (washbasins, showers, fountains, flushes, irrigators, and so on)	Specify the amount of work done by university to improve infrastructure to reduce consumption "at source". The indicator allows to indirectly monitor the implementation of policies aimed at reducing water consumption at source
Presence of drinking water waterspouts	Quantitative	Number of waterspouts (including fountains, drinking fountains, toilet flushes) in university (also including waterspouts supplied with public water or	Monitor the extent of the public water supply network, thus obtaining an economic advantage in terms of lower, or zeroed costs with regard to the consumption of bottled

		taps in bars). This value can be compared to the entire university community Checking the consumption registered by water meters, it is possible to assess the amount of water consumed by the community, presuming that this amount has replaced the consumption of bottled water, thus contributing to the reduction of CO_2 produced by a university and by each individual	water, and the reduction of plastic consumption
Number of interventions carried out for the reduction of drinking water consumption through recycling and re-usage	Quantitative / Qualitative	Number and description of interventions carried out The indicator foresees a detailed count of the interventions carried out to reduce the use of drinking water, through systems of recirculation, recycling and re-usage (for instance, system of recirculation of cooling waters in laboratories, systems of collection of rainwater from roofs for irrigation, recycling systems of water from washbasins for toilet flushes)	Show a university's specific effort to make infrastructure more efficient for the reduction of water consumption "through recycling and re-usage" . The indicator is also useful for monitoring the outcome of policies for the reduction of water consumption considering policies of water recycling and re-usage
Quantity of rainwater collected in dry wells or water tanks	Quantitative	Total area in m^2 of roofs used to collect rainwater in dry wells/water tank vs. the total area of roofs in m^2 The indicator foresees the acquisition of data regarding a university's covered spaces, identifying the rate of rainwater collected. Likewise, in the presence of green roofs, the final amount collected must be assessed, not including recycled rainwater	Show the extent of "relief" for the sewage network where waste and sewage water flows (also specifically complying with regional laws), which is important, especially in the event of intense rainfalls. The indicator is also useful for monitoring the outcome of policies for higher resilience against the effects of climate change
Amount of permeable, floored external areas	Quantitative	Total area in m^2 of permeable ground, the total area in m^2 of university ground not covered by buildings	Show the extent of the "relief" for the sewage network (also specifically complying with regional laws), which is important, especially in the event of intense rainfalls. The indi-

		The indicator foresees the acquisition of data regarding the total extent of a university's external, permeable areas and the total extent of a university's external ground. Only the areas where rainwater is not collected in the sewage system are to be considered permeable (filtering floors, green areas, areas covered with pebbles, and so on) The indicator can be usefully contextualized with regard to specific university areas (offices, campus and others)	cator is also useful for monitoring the outcome of policies for higher resilience against the effects of climate change

During a census made to assess the number of specific infrastructures created to save water, and actions carried out to reduce water consumption, information should be gathered on the possibility of modernizing water networks, specifying any actions carried out to achieve reduced water consumption, defining, as clearly as possible, the timeline of reference, and specifying if the intervention carried out is part of routine or one-off maintenance. Finally, it would be advisable to contextualize data, also aiming at potential initiatives of sensitization, regarding the structures equipped with water-saving devices (for instance, Areas and Departments) and the users involved (for instance, the entire academic community, rather than users from a single Department/Area). This indicator may be normalized according to the number of users/structures/other.

On analysing access to drinking water, also some hygienic and sanitary aspects linked with water quality control need to be taken into consideration (from the public network point of access to the point of delivery).

On analysing the quantity of rainwater and the amount of paved, permeable external areas, the data obtained should be seen in the context of the existing buildings/offices, and note taken if there have been routine or one-off maintenance interventions.

References and sources

Useful references for *reporting*, and the definition of relevant indicators for water assessment include: Global Reporting Initiative (GRI), with particular reference to indicator GRI EN303, *Water and effluents*; UN *Sustainable Development Goals*, particularly referring to the goals defined in SDGs 6 (Clean water and hygienic and sanitary infrastructures), 11 (Cities and sustainable communities), 12 (Responsible consumption and production), 13 (Climate change), 14 (Life under water); the *GreenMetric*, in its sections: "*Setting and Infrastructure*" and "*Water*"; the STARS international standard of the Association for the *Advancement of Sustainability in Higher Education*, with particular reference to the *Water Use* and *Rainwater Management* sections.

With regard to internal sources, focus should not be limited to the examination of plans and programmes to obtain a general, contextual picture, but should also be extended to technical areas (management of cultural heritage/buildings/infrastructures/services).

4.5.3 Fight against climate change

Universities can provide a significant contribution to the fight against climate change. In addition to its traditional, "institutional" role of educating students on the various aspects of climate change, within the bigger picture of sustainable development, and of research and development of topics such as adaptation and mitigation, universities can create a model to follow in each territory to actively de-carbonize their activities and manage the impacts of climate change.

On this matter, SDG 13 foresees that institutions at all levels promote action to fight climate change, both reducing the impact of changes which have already occurred, together with the inevitable impact in decades to come (adaptation) and acting on causes such as greenhouse gases (GHG) and deforestation (mitigation).

Numerous universities in Italy and in the rest of the world have committed themselves to implementing measures against climate change in their strategies and policies, inventorying their emissions and/or coming up with a plan of mitigation, carrying out mitigating activities (for instance, reduction of energy consumption, be it electric, thermic, or deriving from mobility), and adaptation (for instance, green or shaded spaces for better comfort during heat waves). Many initiatives have been proposed, regarding the topic of climate change, particularly in recent years, directed both to students and professors and to the general community.

A university which has already started to take action on climate change may also provide a description of the activities carried out, highlighting them through specific indicators specified below (Table 27).

Table 27 – Indicators for the fight against climate change

Name	Type	Description	Goals
Number of surveys on CO_2 emissions	Quantitative	Number of academic years covered using methods that are compliant with the guidelines provided by the RUS-CC work group	Show a university's ability to act against climate change
Formal commitments for the reduction of CO_2 emissions	Qualitative	Commitment made by the university in public and/or private documents regarding the reduction of CO_2 emissions. No specific	Share a university's commitment for the reduction of CO_2 emissions

		clauses are foreseen regarding the extent of the commitment or deadlines.	
Creation of a plan to reduce CO_2 emissions	Qualitative	Definition of a plan to reduce CO_2 emissions compliant with the guidelines provided by the RUS-CC work group. No specific clauses regarding the extent of the commitment or deadlines are foreseen.	Show the planning of actions to be taken to reduce CO_2 emissions
Reduced emissions of CO_2 for a specific year	Quantitative / Qualitative	Reduction of absolute emissions (non-normalized) of CO_2	Monitor the efficacy of actions taken by a university to reduce CO_2 emissions
Reduced emissions of CO_2 from energy consumption	Quantitative	Amount (%) of a university's reduced CO_2 emissions deriving from energy consumption (generation of heat + generation of cold air + indirect emissions coming from electric consumption + indirect emissions coming from district heating/cooling) for a specific year observed by a university (indicate year)	Monitor the efficacy of actions taken by a university to reduce CO_2 emissions vs. its own energy consumption

References and sources

The necessary data to determine the indicators shown above are available at the university sustainability office, or with the *team*/working group/office specifically responsible for drawing up an inventory of emissions or coordinating activities of mitigation and/or adaptation. Reference can be found in the reports issued by the RUS working group on climate change to support universities, such as "Guidelines on CO_2 emission factors for emission inventories in Italian Universities" ("*Linee guida sui fattori di emissioni di CO_2 per gli inventari delle emissioni degli atenei italiani*") (2019) and "Guidelines for drafting Mitigation Plans" ("*Linee guida per la redazione dei Piani di Mitigazione*") (2020) (https://reterus.it/cambiamenti-climatici/). Other sources include: Recommendation no. 532, July 10th, 2003; Regulation (EC) no. 761/2001 of the European Parliament and voluntary participation by organizations in a Community Eco-Management and Audit Scheme (EMAS), regarding the choice and use of indicators of environmental performance ISO 14031:2021. Environmental management — Environmental performance evaluation — Guidelines.

4.5.4 Enhancement of resources and waste prevention

Conditions of sustainable production and consumption may also be achieved in the transition towards a model of circular economy, "closing the loop", guaranteeing economic growth that reduces environmental impact, in line with the principle of "*doing more and better with less*", intended to achieve, above all, SDG 12 on "*Responsible consumption and production*" of the UN 2030 Agenda, to promote models of Sustainable Production and Consumption (SPC).

Adequate planning of goods and services, sustainable management of natural resources during production and distribution, conscious consumption, the implementation of recycling systems, as well as effective waste management, are all tools to be used to safeguard the eco-system, reducing the use of natural resources and the introduction of anything harmful for the environment (above all, climate-changing gases).

Universities, both as temples of knowledge and because they may be seen as "small cities", are the ideal site to test new circular economy practices, hopefully involving all stakeholders within the territory.

In particular, a university's potential ability is very high in promoting, both internally and externally (in a third mission perspective), the awareness that resources and waste are two sides of the same coin, and that the management of the former (acquisition of goods, jobs and services) always has to take management of the latter into account (that is, of the waste – real, but also potential – generated by these processes), in a *continuum* of fundamental thought, to reach Goal 12 of the 2030 Agenda and, in particular, the following targets (including all fields of action of a university: research, teaching, institutional activities and third mission): 12.3 "by 2030, reduce by 50% the global, per capita food waste involving retailers and consumers, and reduce the food waste occurring during production and delivery..."; 12.4 "by 2020 achieve the compatible management of chemical substances and of any other kind of waste in their entire lifecycle..."; 12.5 "by 2030, substantially reduce the production of waste through prevention, reduction, recycling and re-using"; 12.7 "promote sustainable public procurements, in compliance with national policies and priorities"; 12.8 "by 2030, guarantee, all over the world, relevant information and awareness regarding sustainable development and lifestyles in harmony with nature".

In addition, universities may play an important role in achieving the goals of the Green Deal which, as we know, aims at making the EU a world leader in the circular economy and in clean technologies, also updating the action plan for the circular economy. Specifically, universities can contribute *i)* to the circular planning of products and services, *ii)* to the promotion of models of development with reduction and reuse as its main priorities, *iii)* to fight *greenwashing* practices, *iv)* to the introduction of minimum compulsory objectives and rewarding criteria with regard to green public procurements (GPP) in the legislation of this sector and to the gradual introduction of compulsory communication to monitor the use of these types of public procurements, *v)* to launching a system of certification and *reporting* to facilitate the use of sub-products in industrial symbiosis, *vi)* to the development of an EU coordinated level of separate waste collection, *vii)* to increased care, in the field of bio-economics, to the reduction of environmental impacts deriving from the collection and use of resources, aiming at safeguarding biodiversity and the natural capital, *viii*) to the introduction of a target for the reduction of food waste, or measures to improve sustainability of the distribution chain and consumption in the food sector, with relation, above all, to product packaging. The number of actions already carried out by universities to promote the circular economy are

uncountable, ranging from goals aimed at university structures (for instance, the presence of the "*circular economy*" item in a university's Statute, or in other documents, such as the Strategic Plan or the Ethics Code; the appointment of an expert as a *Resources & Waste Manager*; promotion of "green purchase" policies for suppliers in the sector of environmental hygiene and waste collection, transportation and waste treatment; promotion of specific activities and projects to avoid the production of waste, such as the presence of water dispensers and *vending machines* without disposable drinking cups), to initiatives starting at the level of the "university system", to be promoted at the national level (for instance, encouragement to recognize the figure of *Resources & Waste Manager* at national level), to those that can be started within the territory, in collaboration with other local figures (for instance, integrating university interventions in the local waste management plan; agreeing on common rules, at least at local level, for the management and prevention of urban waste; promotion of synergies with other competent institutions to promote the collection of specific types of waste from containers placed in privately owned areas through "routine" management).

Given all of the above, a university's progress in this dimension will have to be adequately measured, both with reference to the increasing level of awareness of the internal, waste-generating processes (from purchasing policies regarding goods and services intended to optimize the consumption of resources, to those aimed at both promoting reutilization internally, and delivering goods externally), and with regard to the necessity of quantifying (even an estimation, in some cases) the types of these waste flows, to be able to plan and carry out (and then monitor) strategies of prevention, reduction and management of the waste itself, also in agreement with external stakeholders. In Table 28, some indicators aimed at monitoring this context are proposed.

Table 28 – Indicators for the enhancement of resources and waste prevention

Name	Type	Description	Goals
Rate of digitization (paper-free) of administrative procedures	Quantitative	% of digitized administrative procedures per year, assessed as: Total number of digitized procedures/total number of administrative procedures officially assessed (for instance, matriculation documents). Data for the construction of the indicator are generally available in the relevant offices in the university (for instance, information services, Planning and Control Services, Special Plans Offices, and so on)	Show a university's commitment to efficient use of internal resources, particularly with regard to the reduction of paper consumption but also, indirectly, by external stakeholders. The indicator also indirectly provides evidence of a reduced consumption of toners, as well as the energy needed for printers
Level of reduction of the use of single-use packaging related to the *vending machine* division	Quantitative	% of reduction vs. the previous year in the number of single-use cups for beverages + number of bottles	Show a university's commitment to reducing the quantity

		of water bought from *vending machines* in universities, assessed as: Number of single-use cups used in the current year/ total number of *vending machines* in the current year Number of single-use cups used in the previous year/ total number of *vending machines* in the previous year Number of bottles used in the current year/ total number of *vending machines* used in the current year Number of bottles used in the previous year/ total number of *vending machines* used in the previous year	of single use packaging material (mainly plastic, but also other materials) The indicator allows to monitor the effects of the implementation of specific policies both of substitution and/or modernization of *vending machines*, and campaigns of sensitization aimed at encouraging students to use their own cup or bottle, to reduce the amount of waste and promote, at the same time, the use of drinking water from specific spouts (fountains, taps, and so on)
Level of incidence of initiatives aimed at re-using electric and electronic equipment (EEEs) and furnishings	Quantitative	Number of current initiatives aimed at re-using EEEs or furnishing internally and/or allocating them for external use on a yearly basis Number of initiatives carried out regarding waste management/circular economy in the university on a yearly basis	Show a university's commitment to efficient use of resources, specifically referring to the possibility of extending the life of EEEs and furnishings used in the university, preventing them from becoming waste EEE (WEEE) and bulking waste prematurely The indicator also indirectly shows the presence of policies for the prevention and reduction of waste (see types above)
Quantification of special waste produced	Quantitative	Total weight of special waste produced by a university (in kg) on a yearly basis, compared to relevant *drivers* (for instance, the area occupied by laboratories, the area occupied by the university, the university population)	Show a university's level of awareness and management with regard to its own production of special waste
A university's level of compliance with regard to separate waste collection	Quantitative	% of types of waste collected in all the university's premises compared to all possible types that are collectible in the communes	Show a university's ability to dispose of the various waste types in compliance with the

		where the university's premises are located, assessed as: Number of waste types collected in all the premises of a university Number of total waste types collectible in the communes where the university's premises are located The indicator is assessed considering the number of waste types collected by a university in each of its premises compared to the number of types collected by the company which manages waste in a specific commune (if not in the suburbs) where the university's premises are located, excluding those types which can be directly handed in to a waste collection centre by the producer. The indicator is, therefore, compound, and the final value is obtained from the average of the percentages from each single premise. Each university may decide whether to categorize each premise by its importance, using an average weight. *As an example, a university with 4 premises, one of which in a different commune, and one very large, may make the assessment as follows:* (*x* number of types at Premise 1 / *x* number of types in Commune 1) *coefficient (0.7) + (*x* number of types at Premise 2 / *x* number of	regulations of the commune where it is located

		types in Commune 1)* (coefficient 0.1) + (*x* number of types at Premise 3/ *x* number of types in Commune 1)* coefficient (0.1) + (*x* number of types at Premise 4/ *x* number of types in Commune 2) * coefficient (0.1) The total amount obtained divided by 4	

With regard to the rate of digitalization, when possible, the following actions are suggested: monitor the consumption of paper, both through data displayed by printers/multifunction devices (number of copies printed/photocopies) and the number of reams of paper bought, involving the relevant offices (for instance, the purchasing department); verify the number of digitally signed documents (a sort of cross check). When considering, instead, the rate of reduction in the adoption of single-use packaging in *vending machines*, data may be requested from the supplier, or acquired directly, in the presence of active telemetric systems. It should be pointed out that, in the absence of *vending machines* on the university premises, when dispensing beverages "excluding single use cups", the rate of reduction for this component of the indicator will be equal to zero, and only the rate of reduction regarding the adoption of single-use plastic bottles should be calculated.

Indictors monitoring the incidence rate of initiatives aimed at re-using Electric and Electronic Devices (EEDs) and furniture may be organized considering various classes of initiatives, such as projects engaging external stakeholders, internal experimentation, and agreements with external stakeholders. It is fundamental that such initiatives have led to the reuse or transfer of such goods. Moreover, it is advisable to, a) evaluate the introduction of specific weights/coefficients of impact for each initiative (for example, identifiable with regard to the number of subjects/structures involved); b) estimate the quantity of "waste avoided", thanks to the initiatives of internal reutilization and free of charge external transfer; c) keep trace of regeneration practices for EEDs, which are necessary for their reutilization.

With regard to special waste, the indicator considers the amount of hazardous and non-hazardous special waste produced by a university and not delivered to the local waste management company. The term "special waste" refers to waste not delivered to the local waste management company and accompanied by a FIR (*Formulario identificazione rifiuto* – Waste identification form). The necessary data can be obtained from this form. To improve reporting on this aspect, it would be advisable to elaborate a system of assessment to make reporting easier, in compliance with the European Waste Characterisation (in Italy, CER – Codice Rifiuti Europeo).

To monitor this parameter, it is also suggested to consider initiatives of separate waste collection, stemming from plans and agreements which the local administration is involved in (for instance,

collection of RAEE – *Rifiuti di apparecchiature elettriche ed elettroniche* – Electronic waste, trainers, exhausted oils), specifying coverage for each location.

References and sources

The following international references are useful for *reporting* and defining indicators concerning *resources and waste*: GRI and, especially, GRI no. 306 (2020), *Waste*; UN *Sustainable Development Goals*, especially SDG no. 11 (Sustainable Cities and communities), SDG 12 (Responsible consumption and production), SDG 13 (Climate change); *GreenMetric*, sections: "*Setting and Infrastructure*" and "*Waste*"; *STARS, from the Association for the Advancement of Sustainability in Higher Education* (especially OP 7: *Food and Beverage Purchasing*; OP 11, *Sustainable Procurement*; OP 12: *Electronics Purchasing*; OP 13: *Cleaning and Janitorial Purchasing*; OP 14: *Office Paper Purchasing*; OP 18: *Waste Minimization and Diversion*; OP 20: *Hazardous Waste Management*). Also see: Recommendation no. 532, July 10th, 2003, Guidance for the Implementation of Regulation (CE) no. 761/2001 of the European Parliament and European Council on the voluntary participation by organizations in a Community Eco-Management and Audit Scheme (EMAS), regarding the choice and use of indicators of environmental performance ISO 14031:2021. Environmental management — Environmental performance evaluation — Guidelines.

With regard to internal sources, not only plans and programmes should be looked up to have a contextual perspective, but also technical sectors should be involved (management of cultural heritage/buildings/infrastructures/services).

4.5.5 Sustainable mobility

Thousands of people go to their university every day, students and staff, who – coming from their places of origin, often quite different from one another – reach their departments using different means of transport. These constant, significant transport flows are an important element for those who commute between home and place of study, and home and workplace, and they show particular features in terms of frequency and travel modalities. Surveys on university students and staff mobility carried out by RUS in 2016 and 2020 have shown that, especially in certain geographical areas where public transport is not widespread, and the frequency of connections is low, privately owned cars are the form of transport preferred by technical, administrative and teaching staff, and used also by a significant number of students. Policies of modal re-balancing and, more in general, of sustainable mobility are, therefore, of the utmost importance. It is well known that transport produces a significant amount of negative externalities: it uses about a third of all energy in the European Union, mostly from fossil fuel, and is one of the main sources of gas emissions affecting climate change; it is also one of the main causes of atmospheric and acoustic pollution, affecting people's health and quality of life.

In this context, universities may play a significant role by managing the flows of transport which they produce, and with suitable and effective policies of *mobility management* they can significantly contribute to achieving various goals of sustainable development foreseen in the 2030 UN Agenda: more specifically, SDG 3 (Health and Well-being), SDG no. 11 (Sustainable Cities and Communities), SDG 13 (Fight against climate change) and also, thanks to the promotion, for instance, of electric mobility, SDG 7 (clean and accessible energy) or, through "hardware" investments, SDG 9 (Enterprises, innovation, and infrastructures) or even, thanks to its educational role which may be defined also in terms of choices of informed "mobility consumption", SDG 12 (Responsible consumption and production).

Universities, therefore, would need to be able to measure the degree of sustainable (or unsustainable) mobility in commuting to/from its premises on the one hand, also considering staff missions and, on the other hand, the efficacy of its *mobility management* policies. These policies may include both demand management, aimed at encouraging users to avail themselves of more efficient means of transport, from an economic, social and environmental point of view, and improvement of the offer, providing alternative ways of transport, with a wide range of choice for commuters. Further improvement could be had in communication, adopting strategies to sensitize the academic community on the topic of sustainable mobility.

To this end, a few indicators are proposed here which, if measured yearly, may allow each university to evaluate its progress over time, verifying if the policies chosen and the investments made have helped reach the pre-fixed goals, leading to a higher level of sustainable development. The indicators proposed are aimed at each university's ability to self-evaluate itself and, as their specific context of belonging is not taken into account, are not suitable to make comparisons with other universities.

The nature of the problems related to mobility for a university's community is, on the one hand, intrinsically connected with the range of transport alternatives available, especially in large urban areas while, on the other hand, may depend on certain prevailing, external factors in the decision-making processes on the part of members of the community, which cannot be controlled by universities.

A university's mobility policies, therefore, are affected by the necessity and the opportunity to take multiple directions. Promoting sustainability, in this sense, means incentivizing pedestrian and cycling mobility and, nowadays, also micro-mobility, use of urban, but also extra-urban, public transport (buses and trains), and forms of *sharing* and *pooling*. Obviously, it is also important to encourage any kind of inter-modality which may render journeys more efficient – and, therefore, cheaper for commuters – characterized by a high level of environmental sustainability.

Furthermore, universities need to promote strong partnerships with local institutions, transport providers and other potential stakeholders in the sector, that may contribute to analysing, addressing and planning the choices of those who can significantly influence the structural context of the mobility offer where the choices of a community are made.

In such a complex context, a thorough monitoring of environmental sustainability in this area would require a high level of detail, which a limited number of quantitative indicators would not

fully reach. The following table, therefore, proposes a selection of some macro-indicators aimed at devising the basic framework for a wider range of parameters, with the level of detail depending on each university, allowing them to derive more specific categories, elaborating the synthetic data provided by the macro-indicators. This would permit each university to focus its policies more suitably on the topic (see Table 29).

Table 29 – Indicators for sustainable mobility

Name	Type	Description	Goals
Number of sustainable vehicles compared to the total number of vehicles	Quantitative	Number of sustainable vehicles compared to the total number of vehicles owned by a university (or leased, and so on). Sustainable vehicles include electric cars/vans/motorcycles, hybrid vehicles, vehicles using GPL or fuels other than petrol/diesel, e-bikes Number of bicycles owned by a university/potential user (for instance, university staff if the bicycles are for staff use)	Monitor purchasing policies for vehicles internally managed by a university towards a 100% sustainable fleet
Amount of sustainable travelling when *commuting*	Quantitative	With reference to the main modality (covering the longest distance between home and university), % of the community who do not use a private petrol/diesel car/motorcycle, nor *car-pooling*. It is also possible to distinguish between active mobility, public transport and car *sharing/pooling*, and by type of user (for instance teaching staff, technical and administrative staff, and students)	Monitor commuting choices between home and university in the community
Amount of sustainable travelling on missions	Quantitative	% of trips on missions (with means of transport not belonging to the university's fleet), travelling by train or local public transport (LPT) or other sustainable means of transport (as defined by indicator 1) for a distance within 700 km	Monitor the sustainability of off-site missions where the use of public transport on land represents a feasible option
Economic incentives from sustainable mobility	Quantitative	Annual per capita expense (the entire community) for agreements on reduced fares and/or co-financed	Monitor a university's commitment to sustainable mobility through direct economic in-

		services, on LPT, sharing and pooling	centives (with funds for members of the community) or indirect (funding transport services), making public transport, and vehicle *sharing* and *pooling* more economic, efficient or functional
Investment in equipment for sustainable mobility	Quantitative	Total per capita expense for infrastructure supporting sustainable mobility (both internal and co-financing infrastructure external to university premises). Possible unbundling by type: costs for internal equipment (equipment for recharging electric vehicles or *plug-in* hybrids, infrastructure for parking/maintenance of bicycles, such as bicycle racks, canopies, anti-theft shelters), costs for co-funding infrastructure, external to university premises (cycling tracks for access to the university, parking spaces near premises)	Monitor a university's commitment to sustainable mobility through the creation of its own infrastructure, or co-financing external infrastructure
Space for 1000 bicycles on university grounds belonging to members of the community	Quantitative	Total number of spaces for bicycles on university grounds, including specific stalls for *bike-sharing* services	Monitor a university's commitment to cycling mobility
Number of initiatives of sensitization and information on sustainable mobility	Quantitative/ Qualitative	Number and description of non-profit seminars, *workshops*, training courses, scientific lectures and conventions/agreements on sustainable mobility carried out during the year	Monitor a university's communication activity to inform and sensitize the university community and the public

References and sources

The indicators on mobility proposed by *GreenMetric* and the *STARS* standard were the main points of reference in defining our indicators.

Most of the indicators are potentially derivable from information obtained from internal administrative sources which, in some cases, requires consolidating information managed in single departments. Information on *modal share* is obviously, instead, deductible only from specifically commissioned ad hoc surveys. On this matter, see the study on transfers and share mobility in Italian universities proposed by RUS.

4.5.6 Green spaces and biodiversity

Safeguarding biodiversity may involve universities not only from the point of view of research and teaching, but also with regard to the direct management of the environments in which they themselves operate. Biodiversity has been defined in the Convention on Biological Diversity, signed during the United Nations Conference on Environment and Development held in Rio de Janeiro in 1992, as "the variability among living organisms from all sources, including terrestrial, marine, and other aquatic ecosystems, and the ecological complexes of which they are part: this includes diversity within species, between species and ecosystems". Protecting, restoring and promoting sustainable use of land and marine ecosystems, stopping and reversing soil degradation and the exploitation of marine resources, and safeguarding biodiversity, are some of the goals synthesized in SDGs 14 and 15 and which universities need to make an effort to achieve. It should also be highlighted that safeguarding biodiversity is closely connected to safeguarding the climate (we think, for instance, of how the loss of habitat may affect GHG emissions) and water (for instance, the impact on biodiversity caused by drought) and, therefore, with SDGs 13 and 6.

With regard to a university's operative premises, whether owned or rented, identifying species at risk, and/or the presence of a vulnerable ecosystem, may become relevant for a university in planning and carrying out activities to safeguard biodiversity. A university's commitment to the protection of species and the prevention, management and restoration of biodiversity becomes even more significant for those areas neighbouring protected natural areas (national parks, for instance) and internationally recognized areas. Reference is made, for instance, to areas named in UNESCO's World Heritage List, in the Natural Sites section, Ramsar sites, sites and areas listed in the Natura 2000 network, or relevant sites for the presence of biodiversity (see, for example, those marked in the map of *Key Biodiversity Areas*, or sites that host species included in the International Union for Conservation of Nature (IUCN) Red List.

When reporting on how biodiversity is managed, the university can describe policies and strategies of biodiversity management and elaborate a system of indicators to synthesize the initiatives of prevention and management, as well as initiatives aimed at restoring potential damage caused to natural habitats by the university. Based on these premises, the table which follows proposes a series of indicators on biodiversity. Each university, based on its operative premises and environmental context of reference, should further study the information and integrate it with reports on other indicators. In Table 30 some examples of indicators to monitor these aspects are proposed.

Table 30 – Indicators for green spaces and biodiversity

Name	Type	Description	Goals
Ratio between green space and total area	Quantitative/ Qualitative	Total m^2 / Total m^2 for a university	Assess a university's attention regarding green spaces
Botanical Gardens	Quantitative/ Qualitative	Space allotted to botanical gardens and number of specimens and/or botanical species present	Show commitment to conservation and development of biodiversity
Operations in protected areas	Quantitative/ Qualitative	Site size; number of sites where activities take place; activities carried out in those areas. It indicates a university's number of working sites (property of the university or rented) inside protected areas or adjacent to protected areas	Monitor activities carried out in these areas, in order to assess and monitor their impact on the eco-system
Areas of high biodiversity and of landscape value	Qualitative	Monitoring and preservation activities of protected natural areas, local and supra-municipal parks, important green areas, and so on	Show the university's commitment to the conservation of highly prestigious areas
Protected or reclaimed habitats	Qualitative/ Quantitative	Number of habitats and description of initiatives carried out. Habitats for which protection has been enforced to reduce damage, or to carry out reclamation activities	Monitor initiatives and events for safeguarding biodiversity
Protected species	Qualitative/ Quantitative	Number and description of species on the Red List, specifying the safeguard initiatives carried out. State the presence, within a university's working grounds, of species belonging to the IUCN Red List, and initiatives carried out to protect them	Monitor initiatives and events promoted to protect these species

In this section, a university may present information on the climatic area of reference and describe the variables of the operating system. Along with the third mission, also initiatives aimed at improving the above-mentioned indicators (for instance, tree planting) can be presented.

References and sources

For further information, see the following references: UN *Sustainable Development Goals*, especially for SDG 14 (Safeguard and use of oceans, seas, and marine resources responsibly for sustainable development), SDG 15 (protect, restore, and favour sustainable use of the terrestrial ecosystem); *GreenMetric*; *STARS*, *Association for the Advancement of Sustainability in Higher Educa-*

tion (especially OP 10: Biodiversity); IUCN, *Guidelines for planning and monitoring corporate biodiversity performance-IUCN Global Business and Biodiversity Programme*, 2021. See also the following websites: UNESCO and *World Heritage Convention*, Rete Natura 2000; Ramsar; International Union for Conservation of Nature's Red List of Threatened Species - IUCN, European Strategy on Biodiversity.

4.5.7 Food

Assessment of the food context in a university takes various features into consideration, such as the individual, daily spheres of those who are part of the university community that, in turn, is formed by various social groups, which can be set up and activated, based on choices regarding food. Another sphere pertains to the university's bodies and governance, which can change significantly for each organization, ranging from very small universities in single structures, to relatively new campuses (buildings and open spaces), and to large universities with a multitude of properties, such as historical buildings in urban areas.

Moreover, although the food sphere involves each single member of the university community and so in the same way all universities, in addition to the differences mentioned above, a further difference is the high number of didactic and research structures of the various universities involved. While on the one hand there are small-sized universities specialized on the "food" topic, on the other hand there are large universities where the "food" sphere is included in almost every department that carries out research and teaching. If we consider how common this topic is to every department, we realize how all specialist areas are involved, involving a wide variety of disciplines, ranging from those more closely linked to food and agriculture production, to nutritional sciences, to sciences dealing with hygiene and sanitary matters, to the entire group of social and human sciences (in a broad sense, including anthropology, law, economics, geography, sociology, and so on). This entails a broad variety of mind-sets towards the topic, with various levels of sensitivity, different inclinations, approaches and competences revolving around the food sphere, which can all be made available to generally increase the level of sustainability of food supplied to a university (excluding all research and educational activities carried out regarding food or, better, to try to focus part of the activities in the university toward a *living lab* working for a higher level of sustainability).

Given the universality of this sphere, there are many overlaps with other areas of measurement, such as the enhancement of water resources (Section 4.5.2), the fight against climate change (Section 4.5.3), or waste prevention (Section 4.5.4). Table 31 shows some possible indicators related to some areas of measurement on the topic dealt with in this Section. Among these, the importance of promoting the transition to a Mediterranean diet in university canteens is highlighted.

Table 31 – Indicators for food

Name	Type	Description	Goals
Spaces allocated for consumption of food (for instance, canteens)	Quantitative	Total number of m^2 allocated for the consumption of food for students/staff % of m^2 assigned to students – it is possible to relate it to the total university community (students enrolled +staff) and compare it among various buildings	Understand whether over time investments have been made, or if more attention has been focused on this need, which is strongly felt by students and staff, especially with regard to new buildings Compliance with norms and health and hygiene matters related to the organization of spaces, such as equipment and common use of microwave ovens and refrigerators
Canteens	Quantitative/ Qualitative	Number of canteens Number of accesses to canteens Number of meals provided Specify agreements made with restaurants for student meals with controlled prices	Assess a university's capacity to guarantee meals with accessible prices for the entire university community
Mediterranean Diet	Qualitative	Selection and promotion of university catering providing healthy meals based on the Mediterranean diet. For university catering, select and promote a menu with a high Mediterranean adequacy index (MAI >10). Evaluate the nutritional properties of the types of foods offered. Set up points of sale; fruit & vegetable shops/corners	Promote the diffusion of a healthy daily menu in all canteens
Healthy, sustainable food in *vending machines*	Quantitative	Number of *vending machines* spread throughout the university, selling healthy, nutritional food, promoting sustainability (for instance, local products and organic and Fairtrade products), suitable for people with allergies and/or intolerances (gluten free, celiac, and so on) This value may be compared to the total number of vending machines	Quantify the availability and suitability of healthy and sustainable products in *vending machines*. The *vending* system was chosen as it is easier to monitor compared to bars, where the range of products offered is decidedly wider

		spread throughout a university % of healthy and sustainable products compared to the total amount of products, calculated on standard-sized *vending machines* selling these kinds of products % of fruit- and vegetable-based products compared to the total amount of products, calculated on standard-sized vending machines selling healthy and sustainable products	
Vegetable gardens in universities	Qualitative/ Quantitative	Areas assigned to the cultivation of vegetables vs. the total area of non-buildable surfaces that could be used for cultivation Description of the main initiatives for the development of vegetable gardens in universities	

Reaching an evaluation of social accounting, based on the data obtained from the proposed indicators, will be a gradual process. In addition to the above-mentioned items, further qualitative and quantitative indicators may be hypothesized. For instance, in addition to a university's market garden, some universities have set up their own agricultural companies which can focus on organic production and self-consumption, in terms of value created. Moreover, the necessity to monitor the activities of canteens and coffee shops in a university should not be neglected, considering the number of users, meals served and policies aiming at sustainable food consumption. The main agreements with private restaurants catering for students and university staff should also be reported.

Similar to other spheres, there is a strong overlap between the areas measured to monitor the food resource and other areas proposed in the Manual. For instance, there may be many initiatives to spread nutritional education for the community which also involve the third mission (Section 4.3), while a new understanding of these topics within a university's educational offer should be included in indicators of the teaching area (Section 4.1). A further item in a university's report is the waste produced by food consumption, and guidelines for reporting are given in Section 4.5.4. The meal vouchers issued and used, and the ensuing economic weight for a university, should be considered.

References and sources

Amid the SDGs referred to, attention should be focused particularly on Goals 3 and 4. Among the many sources available focused on correct nutrition, see the WHO Global Strategy on Diet and Physical Activity (Resolution WHA 55.23, May 22nd, 2004), the Green Book of the European Commission, "Promoting healthy diets and physical activity: a European dimension for the prevention of overweight, obesity and chronic diseases", December 8th, 2015, Commission Regulation (EC) no. 637/2005, and the Recommendations for sustainable nutrition promoted by the Barilla Food & Nutrition Centre. For the realization of university market gardens and agricultural companies see current law on this topic, the strategy of the European Green Deal, and the Farm to Fork Strategy, proposed by the European Commission. For further, specific information, please refer to the Food Handbook by the RUS Work Group.

4.6. ECONOMIC AND FINANCIAL RESOURCES

The aim of the "Economic and financial resources" section in the Sustainability Report is to inform stakeholders on the university's ability to attract resources autonomously, thus creating value for its stakeholders, and explain its policies of investment on sustainability.

To draft this section, the main source from which relevant data and information can be drawn is the University's Financial Report, consisting of the following documents:

- Management report,
- University Budget Plan,
- Balance sheet, Income Statement and Financial Statement,
- Supplementary note, containing parameters of evaluation and composition, analysis and detailed items of Balance Sheet and Income Statement,
- Other possible information.

In addition, other useful documents for information and data collection to insert in this section may include:

- University Three-year Strategic Plan,
- Annual University Financial Report,
- "Missions and Programmes" Statement,
- Analysis of Property Assets Statement,
- Analytical ledger related to credits and debts.

Analysis of accounting data should be carried out on a three-year basis, based on the classification of data foreseen in a University Financial Report.

In particular, an analysis of a university's structure of revenues and contributions is focused on data from its own income statement, intended to highlight its ability to attract new private and public resources. This analysis reflects the classification of operating proceeds according to their origin, as foreseen in the income statement (teaching and education, scientific research, commercial activities, transfers from ministries or the EU, and local public institutions).

The analysis of the structure of operating costs (as per income statement) needs to be focused on personnel costs and on costs incurred by the current administration. This perspective of classification by nature allows to show transfers to third parties, personnel costs and other costs incurred by the current administration. It is also possible to show how expenses are assigned, according to type of activity, particularly with regard to teaching and education, scientific research and third mission. With regard to the latter, and in a perspective of sustainability, an analysis of costs per mission and per programme should also be carried out.

A modality of reclassification of accounting data, both for private and public universities, refers to the construction of the statements of determination and shared added value following traditional methods.

Amongst others, universities should carry out an analysis of their assets, based on the assets chart included in a university's balance sheet. In particular, also by consulting other specific documents (pertaining, for instance, to their properties), referring to the last three-year period, this analysis should show the value of their most significant components, including discontinuation, reconversion or requalification of assets, enhancement, destination and state of use of the most valuable goods, or goods of high historical, cultural, artistic and environmental interest, the amount and destination of use of the patrimony (not owned) which a university has obtained for free use from public or private subjects.

4.6.1 Determination and distribution of added value

Information needed to determine and distribute added value.

4.6.1.1 Added value determination

	n Year	n-1 Year	n-2 Year
A) Attracted Value			
University's own profits			
Contributions (current and for investment)			
Revenues from healthcare assistance and S.S.N - *National Healthcare System*			
Revenues from direct management of implementation of the right to education			

Other revenues and income			
Variations in inventories			
Increased plant and equipment for internal work			
B) Non-structural costs			
Costs of current administration			
Provision for risks and other costs			
Various management costs			
GROSS CHARACTERISTIC ADDED VALUE			
C) Ancillary and extraordinary items			
	n Year	n-1 Year	n-2 Year
GROSS GLOBAL ADDED VALUE			
— depreciation			
NET GLOBAL ADDED VALUE			

Contents of each entry of the reclassified income statement related to entries of the university's income statement

A) Attracted value

The attracted value is obtained from the sum of revenues and income, described as follows:

OWN INCOME

- *Income from teaching (three-year degree courses, master's degrees, PhD courses)*

Income from teaching derives from a university's routine activities. This income is mainly composed of fees paid by students for courses included in the educational offer (degree courses, master's degrees, and so on), as well as sums specifically paid for other educational activities, and/or other various ancillary services

These include, for example: *fees and contributions for degree courses and master's degree courses, fees and contributions for other courses (advanced courses, master's, graduate schools, training courses), fees and contributions for state exams, various fees and contributions, late payment compensations, admission test fees, contributions and fees for doctorates, fees and contributions for Pe F24 training*.

- *Commissioned research and technological transfer.*

These are specific orders commissioned by external subjects from a university for scientific research. Activities of research, consultancy, planning and experimentation are carried out for third parties (these items are categorized as projects, and the income deriving from them covers all their operating costs).

All of the above include *research contracts, consultancy, research agreements with third parties, paid services at fixed prices, know-how exploitation rights, licences and brand names*.

- *Research with competitive financing*

These are funds acquired from the submission of projects funded by public or private institutions at national, European, or international level assigning financial contributions managed by the university, based on comparative evaluations.

These include: *research with competitive financing from the Ministry of Universities and Research (MUR), research with competitive financing form other ministries and other central administrations, research with competitive financing from Regions, research with competitive financing from Provinces and Communes, research with competitive financing from healthcare and hospital companies, research with competitive financing from other local administrations, research with competitive financing from the European Union, research with competitive financing from universities, research with competitive financing from other international bodies, research with competitive financing from controlled companies and bodies, research with competitive financing from other (public) clients, research with competitive financing from other (private) clients*.

CONTRIBUTIONS (current and investment contributions)

- *Contributions from MUR and other local Administrations*

These are funds obtained from FFO (*Fondo di Finanziamento Ordinario* – Ordinary Financing Fund) and other current financings and investments from Central Administrations and other Public Administrations.

These include, for example: *FFO – Basic fee, award and equalizing share, Assigned funds for assistance, social integration and the rights of people with disabilities, FFO – Assigned funds for extraordinary call procedures for professors, Assigned funds for university sports activities, Miscellaneous contributions, Assigned funds for co-financed scientific research of national interest, FFO – specified areas of national and EU interest, FFO – No Tax Area, FFO – extraordinary plans, Assigned funds to incentivize the mobility of Italian and foreign teachers working abroad, Assigned funds for Youth Support, Ministerial Decree no. 198/2003, FFO – Assigned revenue for three-year planning, Programme Agreements, FFO – doctorates and post-graduate courses, Miscellaneous contributions for research, Miscellaneous contributions from other Ministries, Assigned funds from PON (Programma Operativo Nazionale – National Operational Programme), MUR funds for university buildings, MUR funds for sport's facilities – FFO; MUR funds for students' international mobility, FFO – tutoring and teaching and integrative activities, Assigned funds for specialization grants, Assigned funds for Youth Support, Ministerial Decree no. 976/2014, Article 3.*

- *Contributions from Regions and autonomous Provinces*

These include, for example: *Assigned funds from Regions – autonomous Provinces for implementing teaching initiatives, other Assigned revenues from Regions – autonomous Provinces, Assigned revenues from Regions – autonomous Provinces – Miscellaneous contributions, Assigned revenues from Regions – autonomous Provinces – Programme agreements*.

- *Contributions from other local Administrations*

These include, for example: *Assigned funds from other local Administrations for the implementation of didactic initiatives, other Assigned funds from local Administrations as operating contribution, Assigned funds from other local Administrations – miscellaneous contributions, Assigned funds from other local Administrations – Programme agreements*.

- *Contributions from the European Union and other International Bodies*

These include, for example: *various assigned funds from the European Union, Contributions from other International Bodies.*

- *Contributions from universities*

These include, for example: *Contributions from universities, Current Assigned funds from university grants, Other Current Contributions from universities, Assigned funds from universities for investments, Assigned funds from universities for research, Contributions from inter-university structures, Current assigned funds from inter-university structures, Assigned funds from inter-university structures for investments, Assigned funds from inter-university structures for research*.

- *Contributions from other (public) clients*

These include, for example: *Miscellaneous funds from Public Institutions, CNR (Centro Nazionale Ricerche – National Research Centre) Contributions and contracts, revenues from ASL (Azienda Sanitaria Locale – Local healthcare Company)*.

- *Contributions from other (private) clients*

These include, for example: *Current assigned funds from private companies for grants, Assigned funds from private companies for investments, Assigned funds from private companies for research, Contributions from private social institutions, Current Assigned funds from private social institutions for grants, Assigned funds from private social institutions for investments, Miscellaneous Current Contributions from private companies*.

INCOME FROM WELFARE ACTIVITIES AND NATIONAL HEALTHCARE SERVICE

This category includes all forms of income related to welfare activities organized by a university.

INCOME FOR DIRECT MANAGEMENT OF THE PROMOTION OF THE RIGHT TO STUDY

OTHER INCOMES AND VARIOUS REVENUES

This category includes all incomes and revenues not included above. These include, for example: various incomes (related to: *Student's record books, student cards, Diplomas and degree parchments, incomes from patenting of research results, bequests, oblations and donations, discounts and reductions, incomes from in meeting and seminars participations, and so on, incomes from sales of goods, sale of mementoes, Sponsorships, rental of university spaces, and so on*), income from real estates (rents, and so on) income from debt collection and reimbursements (*debt collection and reimbursements with restricted use, debt collection and reimbursements from scholarship recipients with non-restricted use, debt collection from food vouchers, and so on)*, use of funds and monetary reserves (*use of funds for risks and obligations, use of TFR (Trattamento di fine rapporto – Severance pay) funds, use of surplus reserves, use of amortization fund of assets acquired in financial accounting, use of reserves of net patrimony deriving from financial accounting, and so on*).

CHANGES IN INVENTORY

INCREASE IN FIXED ASSETS FOR INTERNAL WORK

This category includes: *Increases in tangible fixed assets for internal work, Increases in intangible assets for internal work*.

B) Non-structural costs

This includes all operating costs related to the current administration, to provisions for risks and obligations and to various obligations deriving from the administration. *Please note* – categories of costs, regarding analysis of Added Value, (as described in the guidelines), which pertain to the area of created/attracted value are not inserted in this section. Other exclusions, in addition to staff costs, include:

- costs incurred for student interventions (costs for student support and costs for the enforcement of the right to study);
- transfers to partners of coordinated research projects and technology;
- costs related to the purchase of subsidiarity services and technical and managerial collaborations for institutional activity (for instance, external collaborations and professional consultancy directly supporting research activities), or services integrating institutional activity in the university's economic area (for instance, services provided by *in-house* companies supporting administrative activities, or ancillary services, such as cleaning, maintenance, security), and services provided by other companies collaborating with a university, or with a structured agreement. As the statement of distribution of added value shows, these costs for services, and technical and managerial collaborations will be integrated into staff costs, thus showing how the distribution of value to the human resources that have contributed to creating it is understood as being more than a juridical element of subordination to the university.

GENERAL ADMINISTRATION COSTS

This section lists all the costs related to a university's routine management, connected with institutional activities, except for costs showing the distribution of added value.

- *Costs for editorial activity*

This account shows all the expenses connected with university publications. These include costs incurred for editorial activities, related to services purchased on the market. Of course, if a university has its own publishing company, or uses companies from its own economic group, costs related to direct editorial activities will be included in the distribution of added value.

- *Purchase of consumables for laboratories*

This category includes costs incurred related to scientific and didactic consumables, healthcare consumables, and so on.

- *Changes in inventories of consumables for laboratories*

- *Purchase of books, journals and bibliographic material*

Costs related to, for instance, books, digital resources (bibliographic and data banks), paper journals and publications should be included here.

- *Purchase of services and technical and managerial collaborations*

These include costs for services, except for those related to occasional work, professional consultancy and support services which, as mentioned above (see "non-structural costs", letter C), will be found instead in the statement of distribution of added value.

- *Purchase of other materials*

This includes costs related to the purchase of consumables and stationery.

- *Changes in inventories of materials*

- *Costs for enjoyment of third-party goods*

This includes costs for goods rented or leased (referring to costs for passive rentals, rentals and accessory expenses, leasing fees, user's licenses for an indefinite period).

- *Other costs*

This includes all operating costs which have not been classified in the previous sections, and which do not have to be shown in the statement of distribution of added value. The following values may be included here: reimbursement of expenses for transfers, missions for teaching and career guidance.

PROVISION FOR RISKS AND EXPENSES

This item includes the amounts put aside to face existing or potential future costs and losses of a specific, certain or probable nature. These include, for example, provisions, dispute funds, university's common fund, fund for the young researchers' program, funds for incentivising staff projects as per Legislative Decree no. 163/2006, Article 93, funds for contract renewals, and risk funds on reported projects.

VARIOUS ADMINISTRATION COSTS

This is a residual item which shows costs of various nature. It will be necessary, therefore, to examine its exact composition, given that some of the costs may count in the prospect of distribution of the added value – added value distributed to the public administration. This is the case for registration taxes, government concession fees, revenue stamps, payments to the State, and so on. Other contributions to the Added Value are, for example, charges for legal and judiciary losses in lawsuits, mandatory advertising, credit losses.

GROSS CHARACTERISTIC ADDED VALUE

C) Accessorial and extraordinary components

INCOME AND FINANCIAL EXPENSES

This refers to financial incomes, interests and other financial charges, profits and losses on exchange rates, and so on.

Please note that the following items are *not to be included* in this Section:

- financial expenses (seen in the prospect of distribution of the added value – Added value distributed to External Financiers as credit capital, and relative expenses, such as financial expenses on short-term credit capital, financial expenses on long-term credit capital)

VALUE ADJUSTMENTS FROM FINANCIAL ACTIVITIES

INCOME AND EXTRAORDINARY EXPENSES

This category includes extraordinary income and expenses related, for instance, to contingent gains, capital gains, various extraordinary revenues, capital losses.

GROSS GLOBAL ADDED VALUE

AMORTIZATION

This category includes all amortizations of tangible fixed assets and intangible assets from the asset entries of the balance sheet.

NET GLOBAL ADDED VALUE

4.6.1.2 Added value distribution chart

A. Added Value distributed to Human resources

This includes costs related to employees and non-employees who carry out two institutional activities, at any level: teaching or research. The list includes costs for human resources, staff fixed and additional fees, contributions, INPS (*Istituto Nazionale della Previdenza Sociale* – National Social Insurance Institute), and INAIL (*Istituto Nazionale Assicurazione Infortuni sul Lavoro* – National Institute for Insurance on Accidents at Work) social security payroll taxes, and so on.

Income Statement items:

B) OPERATING COSTS

VIII. STAFF COSTS

1) Costs related to staff working on research and teaching

a) professors and researchers (internal staff working on research and *teaching*)

b) scientific collaborators (costs for research grants and for collaborations from staff working on research projects)

c*) contract lecturers* (this refers to teaching contracts for lecturers from outside a university: scholars or experts to whom an official teaching appointment is given, through a specific contract). Related costs are to be inserted, such as: Training Course Lecturer Contracts, Contract Lecturers for Degree Courses, Master's Degree Lecturer Contracts, Specialization Course Lecturer Contracts, Contract Lecturers for PeF24 Training Courses.

d) *language experts*

e) *other staff carrying out teaching and research* (including costs related to other types of contracts for *teaching* and research, not included in previous items, such as coordinated and continuous collaboration research contracts and external collaboration contracts).

2*) Costs for management staff and technical and administrative staff* (costs related to the General Manager and technical and administrative staff, including costs related to the university's Common Fund and to the administrative staff additional treatment payments, bonuses, overtime work, meal vouchers, and so on). Further costs are included, related to services from subjects not employed by the university, doing occasional work or professional consultancy (technical, legal, medical consultancies, and so on), services (security, maintenance, cleaning, and so on). Non-staff workers are people who do not have a direct working relationship with a university, in compliance with the national law, but whose work and/or place of work is supervised by or belongs to a university.

Costs related to non-staff workers are generally included in the income statement item IX. GENERAL ADMINISTRATION COSTS, 8) Purchase of services and technical and managerial collaborations.

This also includes some cost-related items often observed in the income statement item 12) *Other costs* related to charge allowance, attendance fees paid to university bodies (for instance, Attendance Fees for University Bodies, Indemnities to the Board of Auditors, Indemnities to the Members of the University's Evaluation Team, and so on). Reimbursements of expenses, instead, are not to be considered as remuneration (for instance, reimbursements for travelling costs).

B. Added value distributed to Students

This includes all costs related to support for students in the form of grants, international mobility, tutoring.

Income statement item:

IX. GENERAL ADMINISTRATION COSTS

1) *Costs for support to students* (reference is made, for example, to: Grants – gross cost of PhD courses, Grants – PhD courses with mandatory contributions, Grants – gross cost of Post-graduate courses, Grants – gross cost of Graduate schools, gross costs of Medical specialist training contracts in compliance with EU norms, Medical specialist training contracts in compliance with EU norms with mandatory contributions, Grants – further training abroad, Lifelong Learning Programme (LLP)/Erasmus Placement Grants – Part-time collaborations for Students, Grants for Students, gross cost of Student tutoring, Student tutoring with mandatory contributions, Post-graduate grants for research, Other interventions in favour of Students).

2) *Costs for the Right to Study* (this also includes other interventions in favour of students, even if most right to study interventions are managed by the Department for the right to university study).

C. Added value distributed to the Public Administration

This includes the economic benefit obtained by the Public Administration. Taxes paid by universities, such as registration taxes, wealth taxes, IRAP (*Imposta Regionale sulle Attività Produttive* – Regional Tax on Productive Activities) are elements included in this item.

Income statement item:

X. VARIOUS ADMINISTRATION EXPENSES

This is a residual item of the income statement which includes costs of various nature, which, in turn, comprise items representing Added Value distributed to the Public Administration, such as costs for: Registration taxes, Government concession fees, revenue stamps, Payments to the State.

D. Added value distributed to External Credit Capital Stakeholders

Income statement item:

C) FINANCIAL INCOME AND EXPENSES

Interests and other financial costs (amounts included in this category relate to financial charges on short-term credit capital; financial charges on long-term credit capital). These identify the value distributed to holders of loan capital, which in some way represent a structural resource for a university, contributing to building up added value.

E. Added value distributed to Other Subjects

This item includes shares from coordinated projects, led by a university, and re-transferred to each partner involved.

Income statement item:

IX. GENERAL ADMINISTRATION COSTS

Transfers to partners in coordinated projects

F. Added value retained by the Company-University System

Only reserve allocations should be taken into account in this context, when net Added Value is considered, or also amortizations, when Gross Added Value is considered.

4.6.2 Indicators obtained from accounting sources

Sustainability contexts for universities may be observed through measurement parameters obtained from accounting sources. These indexes or indicators may, anyway, derive from the ratio or combination of one or more accounting elements (incomes, revenues, expenses, costs, debts, reserve funds, and so on), with one or more "physical elements" (number of events, number of subjects involved, student population, courses of studies with teachings on sustainability, number of conventions, number of training courses, museum opening hours, number of lecturers, and so on). These indicators may measure, for example: the capacity of income or revenues obtained from an activity, a service or a sustainable project, to cover management costs for the initiative itself; the percentage of investments in projects or services centred on sustainability, against the total costs for the investment; investments in sustainability compared to the student population; income from enrolments in sustainability-related Advanced Training Courses (food, water resources, poverty, and so on); income from third parties related to sustainability compared to total income from third parties, ministerial transfers (FFO)/student population, to assess how much a university supports socially weaker families with its own income.

When drafting their sustainability reports, universities may elaborate indexes or indicators based on economic and financial data, listing them in the sections related to each of the sustainability areas reported on, for better clarity and intelligibility.

STAKEHOLDER ENGAGEMENT AND MATERIALITY ANALYSIS

5. STAKEHOLDER ENGAGEMENT AND MATERIALITY ANALYSIS

5.1 STAKEHOLDER ENGAGEMENT

Due to the three missions pursued, along with institutional activities, universities deal with a plurality of subjects who thus acquire the connotation of stakeholders, and with whom continuous or temporary relationships are held, in terms of professional and human exchanges, economic resources, values and mutual influences, changing in intensity over time.

In this perspective, stakeholder engagement becomes crucial, also while drafting a Sustainability Report, as it combines the need to keep the various stakeholders informed regarding the possibility of generating knowledge which would then become an integral part in defining the policy of a reporting university.

It becomes clear, therefore, that to start a process of stakeholder engagement while *reporting*, it is essential to have identified them carefully. In the following part of the Manual, this phase will be called "Mapping of stakeholders", intended as the identification of subjects who affect or are affected by a university, at various levels, or who, regarding their direct or indirect interests, expect something from them.

The Sustainability Report may include several quantitative and descriptive indicators related to stakeholder mapping and engagement. When this regard, it is also possible to consider the following elements shown in Table 32 merely as an example:

Table 32 – Indicators for mapping and engagement of stakeholders

Name	Type	Description	Goals
Mapping of stakeholders			
Stakeholders' profile	Qualitative	List and description of the qualitative and quantitative entity of stakeholders' categories	Identify and map groups of stakeholders in a university
Stakeholders' relevance	Qualitative	Description of the degree of relevance of each category of stakeholders	Categorize stakeholders identified based on: - expectations and level of influence - hierarchy among categories
Engagement of stakeholders			
Scale of engagement	Quantitative/ Qualitative	Number of stakeholders consulted Description of the categories of stakeholders engaged	Identify and select the stakeholders to engage

Level of engagement	Qualitative	Description of the level and methods of engagement for each category	Choose and explain the modality of engagement to use for each category
Rate of engagement	Quantitative	Number of times a group of stakeholders is consulted	Assess the time gap between consultations

Mapping stakeholders

Each university may map its own stakeholders, distinguishing them between internal and external, the former being strongly connected to a university due to a mutual influence (for instance, students, teaching and nonteaching staff), the latter only having secondary or indirect interests (for instance, local communities, enterprises, territory).

Stakeholder mapping may be carried out in various ways, such as tables, graphs or diagrams. Table 33 shows an example of this.

Table 33 – Exemplifying classification of stakeholders

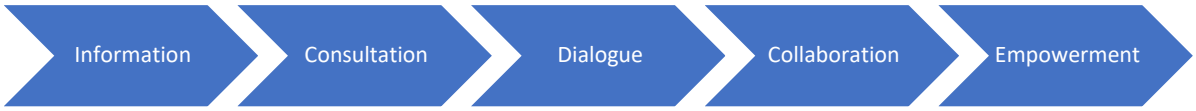
Internal Stakeholders	External Stakeholders
- Government bodies (Rector, Board of Directors, Academic Senate, General Manager) - Teaching Staff - Non-teaching staff - Students - PhD Students - and so on	- Enterprises and Institutions in the territory - MUR, Region, Province, Commune - Other Italian and foreign universities - Students' families - Schools - Local communities - Suppliers - Media and public opinion - and so on

Stakeholder engagement

When drafting a Sustainability Report, stakeholder engagement allows to understand some aspects of university activities which these groups or individuals consider most relevant.

When preparing to engage stakeholders, it is necessary to take stakeholder typology into account (who to involve), modalities of consultation (how to involve), and areas of interest (what to ask). Various levels of engagement, schematized in Figure 4, are proposed by the Manual.

Figure 4 – Level of stakeholder engagement



Information: in the phase of circulating information on a report, there is usually simple indirect engagement, in which stakeholders acquire information passively. There is not, therefore, any actual interaction with these subjects, only a unilateral communication reporting on activities carried out and results obtained in a specific period of reference.

Consultation: at this level of engagement, a university may open a communication channel submitting questionnaires and carrying out surveys, through which stakeholders' opinions and perceptions can be obtained. The feedback collected and then processed will allow to implement the information received, understand which priorities to include in the Sustainability Report, and adapt future planning of activities in a wider perspective, which would otherwise be difficult to determine, without having listened to the stakeholders. Consultation, however, is not limited to the phase of elaboration of the Sustainability Report. It may continue by taking advantage of the intrinsic potential of the report itself which, once published, may include another channel of communication (through a link or a QR code, leading to an evaluation questionnaire) that is useful to assess the effectiveness of the contents reported in the document, and the activities carried out during the year the report refers to, following a process of continuous improvement.

Moreover, at this level of involvement some sections may be included within the sustainability report dedicated to stakeholders, allowing various subjects to express their opinions and judgments on the institutional activities carried out by a university (for instance, "what they say of us").

Through interviews, universities may identify some material aspects while drafting the Sustainability Report. A list of potential questions for the various typologies of stakeholders is shown in the Appendix.

Dialogue: maintaining the perspective of direct engagement, a university may implement a relationship of continuous, stable participation, engaging stakeholders in the Working Group during the reporting process. With this in mind, a Focus Group technique could be adopted. This is a qualitative technique in which groups or individuals may be invited to debate and exchange ideas to gather opinions and become aware of the information needs of the various typologies of stakeholders. This technique will allow not only a bilateral exchange of information between university and stakeholders but will also guarantee the development of relationship networks aimed at encouraging various subjects to interact with one another.

Table 34 – Organization of a Focus Group

Before	During	After
Members of the Working Group: features – diversification of the Working Group – group size: limited (10–20 people)	– duration of a meeting: no longer than 2 hours – use of clear language, avoiding technicalities – guarantee equal treatment and freedom of speech – encourage interaction and mutual knowledge	– draw up a report (participants, first impressions) – evaluate the results obtained by the Focus group and interpret them – adapt the topics of the Sustainability Report to stakeholders' expectations

Collaboration: a level of engagement of this fashion allows a university to cooperate with stakeholders in defining every aspect of the structure and contents of the Sustainability Report. Indeed, in this context, a university approaches these subjects to find solutions and acquire advice to include in the drafting of the Sustainability Report.

Empowerment: finally, this modality of engagement aims to put final decisions into the hands of stakeholders, so that they may share responsibility in decision-making and in the results obtained from *reporting* processes. With this regard, among the tools available to a university to engage stakeholders at this level, there are citizen panels, polls and delegated decisions.

Stakeholders may be actively engaged, at various levels of intensity, also in the analysis of the contents of a sustainability report, to evaluate transparency, completeness and significance of the information given, and the way it is reported.

This verification may also be entrusted to a panel of independent experts representing key stakeholders, made up of stakeholders inside the university who have specific competences on this topic (for instance, one or more representatives of the teaching and non-teaching staff and of the students) and by external stakeholders (for instance, representatives of enterprises, local institutions, third-sector institutions, experts on this topic). On concluding any verification, the panel should express its final judgment and, if deemed necessary, make suggestions to improve the Report.

5.2 MATERIALITY ANALYSIS

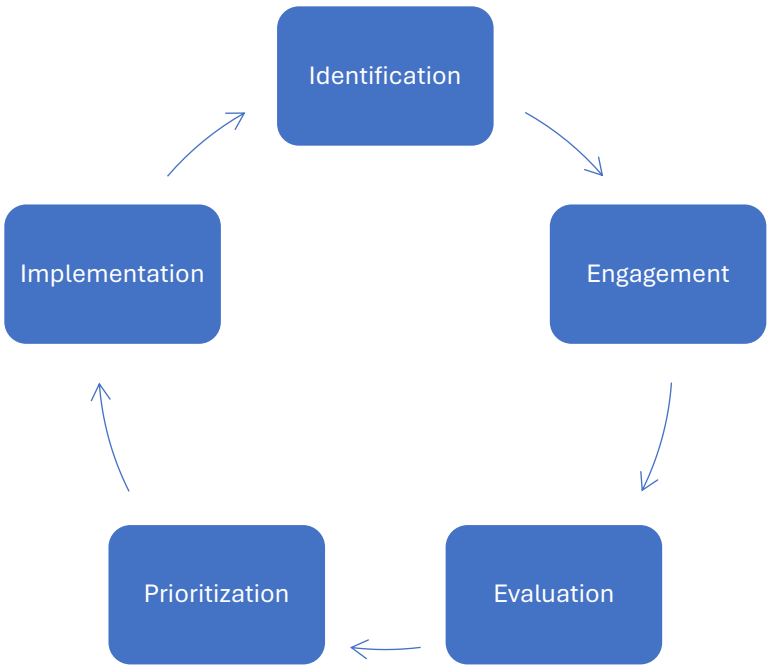
Continuous, direct engagement of stakeholders and collegial consultation of university bodies and of each organizational department allow the identification of material topics, that is to say, those university activities which may reasonably be considered as relevant, given that they reflect the most significant economic, environmental and social impact for a university, or substantially affect stakeholders' expectations, decisions and actions.

A joint evaluation of the respective positions of university and stakeholders regarding relevant topics is determined by materiality analysis, a method of planning and management which produces a series of reflections in a university, ranging from planning and management of activities to the reporting of them. The usefulness of a materiality assessment stems from the need to identify those topics which, given their relevance for the parties, deserve to be included and dealt with in the Sustainability Report. At the same time, a materiality analysis may be considered as a basic element for sustainability strategic planning as the topics may be organized and integrated into a university's planning systems and governance, once they have been identified.

Process of identification of material topics

The materiality analysis may be carried out following a procedure which is divided into various phases, helping the authors of the report to identify topics, in a first analysis, which are potentially relevant, and which can be included in the Sustainability Report. Given that the choice of the number and type of phases is at the discretion of each author, an initial formalization of this process may be based on the one shown in Figure 5. Moreover, it is important for a university to illustrate the logic followed in determining the level of priority for each topic in the Materials and Methods section of the Sustainability Report, to guarantee compliance with the principle of transparency. This can be used as a further tool for stakeholders who will be more certain that the report contains the information that they deem relevant, having been able to evaluate the suppositions at the basis of the materiality analysis.

Figure 5 – Process of identification of material topics



Identification

The process starts with the identification of the sustainability-related topics which are relevant for the university, taking into account the information coming from internal elements, such as docu-

ments on quality policies (the university's *mission* and *vision*, service charter, and so on), documents relating to university planning and programming (Strategic Plan, Integrated Plan of Performances, Sustainable Development Plan, and so on), internal regulations and monitoring tools (documents issued by the Evaluation Board, Performance Report, and so on), as well as the system of control and management.

In this phase, it is also useful to have a detailed exchange with the university management, so as to guarantee a vision of the full picture of the university's most relevant priorities regarding its social and environmental impact and governance.

Engagement

The aim of the second phase is to plan stakeholder engagement. This phase is necessary to confirm the results obtained from the previous phase, on the one hand, and, on the other hand, identify those topics which groups or individuals deemed worthy of attention on the part of the university. In this context, highly interactive dialogues, such as personal exchanges or group reunions, are considered highly effective (see paragraph 5.1).

Evaluation

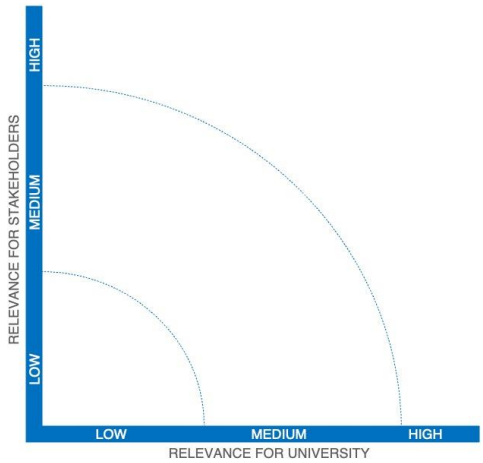
The combination of what has been obtained from the phases of identification and engagement is then validated by a working group in charge of drafting the Sustainability Report. This phase could be useful if some feedback obtained in previous phases of the analysis needs to be clarified. In this case, the parties involved can be consulted again to get further information.

Prioritization

The aim of this phase is to determine a list of the material topics directly related to the results obtained from the previous phases. The output of this may also be shown in a graph through a materiality matrix, a bi-dimensional graphic where the topics are positioned inside the matrix, based on their relevance, according to the results obtained from the analyses carried out in the previous phases, and according to the joint perspective of relevance for the university and the stakeholders.

The matrix may be built by positioning the two dimensions needed to evaluate the materiality of a topic on the axis of the graph, indicating relevance for stakeholders (y-axis) and relevance for the university (x-axis). As an example, Figure 6 shows a materiality matrix, which the author of the report may adapt according to specific needs.

Figure 6 – Materiality matrix



In this phase, connection between the material topics and the goals of sustainable development included in the UN 2030 Agenda can be identified to explain and emphasize the importance of a university's strategic orientation towards international programmes for sustainable development.

Implementation

Finally, the processed information will be the foundation which the Sustainability Report is based on, and which will allow the inclusion of connecting elements between relevant topics and performance indicators contained in this Manual, as well as taking the identified material topics into account.

References and sources

Additional information, useful to complete this section, can be found in some documents and guidelines drawn up by international bodies, such as the AA1000 Stakeholder Engagement Standard and the International Association for Public Participation guidelines, which contain recommendations aimed at improving the process of stakeholder engagement.

ASSURANCE

6. ASSURANCE

It is emphasized in the Standard that, in order to increase the credibility of a Sustainability Report, universities can foresee ways of revising this document, by resorting to assurance.

An internal employee or control body, or an independent and competent individual or external organization, may be charged with the *assurance* task. Requisites of independence and competence are essential when choosing the subject or organization checking the Sustainability Report.

Among the *internal subjects* in a university who may certify the Sustainability Report, there is the university's Evaluation Board, and government-appointed auditors.

Verification of a university's Sustainability Report may be entrusted to various *subjects outside* the university. This procedure may be carried out by a single auditor, an external auditing company, a certification body, or a proven expert on these matters.

A university may decide to entrust more than one subject with this verification task, for instance a stakeholder panel and an auditing company.

The assurance report, drawn up at the end of the verification procedure, must be attached to the Sustainability Report it refers to.

APPENDIX

STAKEHOLDER ENGAGEMENT: SOME POSSIBLE QUESTIONS

Internal Stakeholders	
Rector/Provost /Vice-Rector Rector/Vice-Rector for teaching / Coordinators for courses of studies Rector/Vice-Rector for Research / PhD course co-ordinators Rector/Vice-Rector for the Third Mission/ Management Offices/ Third Mission Offices and technological transfer, *Public Engagement* Office Office/Board for Sustainable development (where present), Resource & *Waste Manager*/ *Mobility Manager*/ Technical Offices/ technical and administrative staff / General Manager	Is sustainability integrated into the university's *mission*, *vision* and *strategies*? In what manner? What do you think are the university's strong/weak points? What opportunities and future challenges does it have? How is the university's educational offer laid out? What are its distinctive elements? What are its future perspectives? How is sustainability integrated in the educational offer and degree courses? How many students have been trained on topics related to sustainability? What are the main research branches developed by the university? How is sustainability integrated into research activities? What is the university's position regarding the internationalization of research? Could you describe the main third mission activities being carried out? Which bodies, institutions, companies within the territory does the university interact with? Which stakeholders within the territory support research activities and teaching? In what way? Which synergies are active with other universities and other research centres in the territory? How is knowledge acquired from university research transferred? How does the university integrate sustainability within its own activities? How does the university respect and protect the territory it is located in?

	How does the university enhance and engage its own human resources?
Teaching Staff	What are the main ideals and values in which the university recognizes itself? What do you expect from a sustainable university? How do you integrate sustainability in your teaching, research and Third Mission activities? What initiatives of *public engagement* have you participated in, and how do you value the university's presence within the territory? What initiatives of *public engagement* have you organized?
Researchers, Research Fellows, PhD Students	What are the main ideals and values in which the university recognizes itself? What do you expect from a sustainable university? How is sustainability integrated in your research activities? What initiatives of *public engagement* have you participated in, and how do you value the university's presence within the territory? What initiatives of *public engagement* have you organized?
Non-teaching staff	What are the main ideals and values in which the university recognizes itself? What do you expect from a sustainable university? What initiatives of *public engagement* have you participated in, and how do you value the university's presence within the territory? How does the university enhance and engage its own human resources? / Do you feel engaged in/valued by your university?

External Stakeholders	
Students (and their Families)	Why did you choose this course of studies and this university? What is the added value? How do you think that the study course allows deeper learning of themes related to sustainability and guarantees competence on environmental, economic and social sustainability?

	What is your opinion regarding the possibility of acquiring deeper learning on themes related to sustainable development? What initiatives of *public engagement* have you participated in, and how do you value the university's presence within the territory? How do you assess your experience at university? Would you recommend this course of study? Could you explain the reasons for your answer?
Future students	What do you expect from a sustainable university? Would you be interested in learning more on themes related to sustainable development in your course of studies?
Alumni	How do you assess your experience at university? Would you recommend this course of study? Could you explain the reasons for your answer? What initiatives of *public engagement* have you participated in, and how do you evaluate the university's presence within the territory?
Public and private bodies, *profit* and *non-profit* organizations active on the territory (Bodies, Institutions, Foundations, Companies, Associations)	What do you expect from a sustainable university? What are the benefits from collaboration with the university enjoyed by your institution? What initiatives of *public engagement* have you participated in? How do you evaluate the university's presence within the territory?

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This text was approved by the RUS Coordination Board and by the coordinators from the Working Groups of RUS (Rete delle Università per lo Sviluppo Sostenibile – *Italian University Network for Sustainable Development)* on 16 December 2022, and by the Scientific Committee and the Board of Directors of GBS (Gruppo Bilanci e Sostenibilità – *Reporting and Sustainability Group*) on 21 July 2022.

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