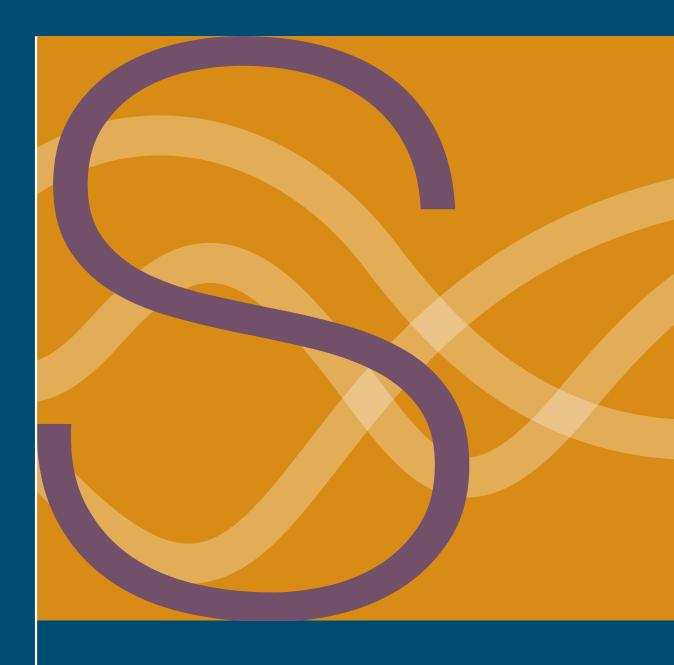


# Social and Sustainability Report 2023





# Social and Sustainability Report 2023



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### Introduction

In its social and sustainability report, the University of Florence presents the social and environmental policies that characterize its institutional activities (education, research, and third mission) and the impacts generated on these levels.

The social and sustainability report is integrated with the Annual Performance Report and the Gender Budget, aiming to offer a comprehensive view of the University's achievements. This document is aligned with international standards for social reporting and the guidelines of the Network of Universities for Sustainable Development (RUS) for "University Sustainability Reporting," adapting the model to the University's own policies and to the relevance of topics for the main stakeholders.

The 2023 Social and Sustainability Report consolidates the academic community's participatory approach to reporting: coordinated by the Delegate for the Budget and the Delegate for Inclusion and Diversity, the document followed a coordinated and shared process, involving various stakeholders directly engaged in reporting themes. This effort benefited significantly from input from key individuals, including Pro-Rectors, the Committee for Equal Opportunities (CUG), RUS working groups, and all administrative offices, who responded promptly and comprehensively to calls for participation. Notably, contributions from the Green Office, the Energy Manager, and the Energy Commission played an important role in the "Environment and Resources" section.

Aiming to engage stakeholders more actively in this edition, a brief survey was distributed among students, technical-administrative staff, and teaching and research staff to assess the importance of sustainability aspects. Findings revealed a broadly shared high interest in the University's environmental impact, with specific attention to energy consumption sustainability and waste reduction. Regarding social and economic impact, stakeholders identified the most significant issues as access to higher education, graduate employability, staff training and development, and economic benefits for personnel. Additionally, students emphasized the importance of workplace safety, equity, and inclusivity in accessing services and career paths (which was also a key concern for teaching and research staff).

The unmarked use of masculine grammatical gender, solely for simplification, should be interpreted as inclusive of all individuals within the academic community.

# 1 | Identity, Organization, and Strategies

The University of Florence, renowned for its <u>origins</u> and <u>history</u>, is today one of the largest research and higher education institutions in Italy.

Its actions are guided by **secular, pluralistic principles, free from any influence**; it works to disseminate knowledge, promote research, and develop culture, ensuring the right to study for all those driven by a desire for knowledge in a context of equal opportunities. The <u>Code of Ethics</u> commits members of the university community to behaviours that promote and disseminate fundamental values of legality, solidarity, and rejection of any form of discrimination, ensuring respect for and adherence to the general principles outlined in the <u>Statute</u>. These principles particularly emphasize **fairness, impartiality, and the protection of individual freedom and dignity, along with freedom in teaching, research, and study**.

The University has a **strong territorial presence**, with <u>campuses</u> throughout the city and beyond the urban area (see Fig. 2). Across Florence and neighbouring municipalities (Sesto Fiorentino, Calenzano, Empoli, Prato, Pistoia), the University encompasses over 100 buildings either owned or in use and land spanning more than 140 hectares.

The University also collaborates within the **regional healthcare system** through affiliations with the Careggi and Meyer University Hospitals (the latter being a pediatric hospital) and works with organizations and companies in the metropolitan area to support applied research activities and knowledge development.



Figure 2 - Map of the University of Florence locations in the metropolitan area.

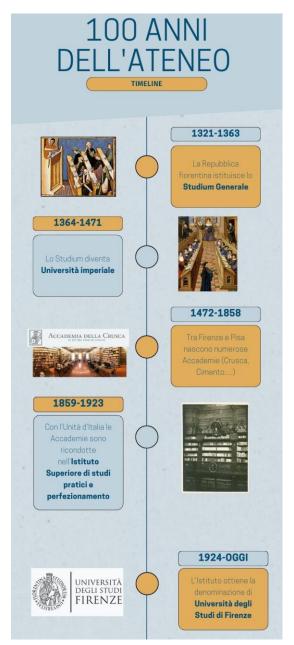


Figure 1 – University of Florence's history.

The international relations maintained by the University with the major training and research institutions in the world are also substantial (see fig. 3): there are over four thousand foreign students enrolled in study courses, over a thousand European and non-Europeans who move every academic year as part of the Erasmus program for a period of study in Florence and numerous visiting professors who are guests of the University for teaching and research activities.

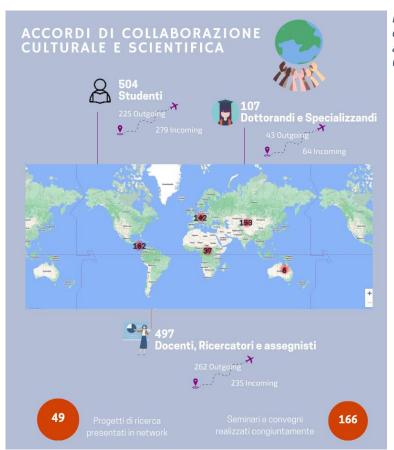


Figure 3 - Activities within the framework of cultural and scientific collaboration agreements. Source: Atlas (data as of 06/19/2023).

### 1.1 Values, Mission, Vision

### **Values**

Pluralism and respect for contributions from diverse disciplines

Expertise and excellence

Public university, acting in synergy with and for the territory

Lifelong learning

Sustainability and responsibility

Transparency and legality

Protection of the right to study

Internationalization and cooperation

Technological and digital innovation

Inclusivity: accessibility and equal opportunities

Health protection

Autonomy and full community participation of the University

Mission: To promote and develop research and advanced education

To foster inclusive and innovative teaching

To contribute to technological advancement, address societal challenges, and support the social, cultural, and economic growth of the region, the country, and the international community

Vision: To strengthen its excellence across areas of intervention

To enhance the value of teaching in response to new societal, workforce, and technological challenges

To foster high-quality international research through dialogue with institutions, businesses, and civil society

To promote well-being and democracy by transferring research findings, promoting scientific dissemination and cultural initiatives, enhancing inclusion policies, and encouraging sustainable growth.

Figure 4 - Unifi's values, mission and vision. Source: 2022-2024 Strategic Plan.

### 1.2 Stakeholders

The University interacts with a **broad range of stakeholders, both within and outside the academic community. Stakeholders** are those who influence or are influenced by the actions and management decisions of the University of Florence.

Stakeholder involvement in decision-making occurs through representation in governance and control bodies, satisfaction surveys, and other needs-assessment tools, as well as through the University's extensive network of relationships with public bodies



Figure 5 - Unifi's main stakeholders.

and institutions. The input from all social partners serves as a basis for planning and evaluating results.

The academic community (students, faculty, and technical-administrative staff) has been instrumental in identifying key issues for the environmental and social sustainability reporting presented in this document.

### 1.3 Institutional and Organizational Structure

The University of Florence's organizational model (see Fig. 6), as defined by the <u>Statute</u> and other regulatory and organizational acts, ensures governance over its institutional missions and services, also through a system of delegations reflecting the University's vision. All members of the academic community, including students, are entitled to elected representation in both central and decentralized academic bodies. For coordinating Quality Assurance processes, the University relies on the University Quality Assurance Office. The appendix (A.1) provides details on the composition of bodies for the year 2023. Historical data on teaching, research, and technical-administrative staff are included in Appendix (A.2); more detailed gender-specific information is available in the <u>2022 Gender Budget</u>. All data on the remuneration of executive roles and personnel costs are published in the <u>Transparency Administration</u> section on the University's website.

Governing Bodies			
Governing Bodies	Control Bodies	Advisory, Safeguarding, and Protection Bodies	
Rector, Pro-Rectors and Dele- gates Board of Directors	Evaluation Unit Board of Auditors	Board of Department Directors <u>Disciplinary Board</u> Equal Opportunity Committee (CUG)	

Academic Senate General Director

Rights Ombudsman Ethics Code Violations Oversight Committee **Technical and Administrative Committee** 

Engineering

Psychology

Political Science

### **Educational and Research Structures**

**21 Departments** 10 Schools

Biomedical Area: Agriculture

Experimental and Clinical Medicine Neurosciences, Psychology, Pharmaceuticals, and Child Health Architecture

(NEUROFARBA)

Biomedical, Experimental, and Clinical Sciences "Mario Serio" **Economics and Management** 

Health Sciences (DSS)

Scientific Area: Law

Biology (BIO) Chemistry "Ugo Schiff" Physics and Astronomy

Mathematics and Informatics "Ulisse Dini" (DIMAI)

Earth Sciences (DST)

Statistics, Informatics, and Applications "G. Parenti" (DISIA) **Human Health Sciences** 

Social Science Area:

Economics and Business Studies (DISEI) Mathematical, Physical, and Natural Sci-

> Legal Sciences (DSG) ences

Political and Social Sciences (DSPS)

Technological Area:

Architecture (DIDA) Agricultural, Food, Environmental, and Forestry Sciences **Humanities and Education** 

(DAGRI)

research structures

Civil and Environmental Engineering (DICEA)

Information Engineering (DINFO)

Industrial Engineering (DIEF)

**Humanities and Education Area:** Arts and Humanities (DILEF)

Education, Languages, Intercultural Studies, Literatures, and

Psychology (FORLILPSI)

History, Archaeology, Geography, Arts, and Performance

(SAGAS)

### **Administrative Organization**

**Central Administration: Service Centers:** 

11 Directorates **University Museum System (SMA)** 

**University Library System (SBA)** 

Administrative support for educational and Florence University IT System (SIAF)

**Additional 23 service centers** 

Figure 6 - Institutional and organizational structure of Unifi as of 12/31/2023. For composition and functions of the bodies indicated, please refer to the links included.

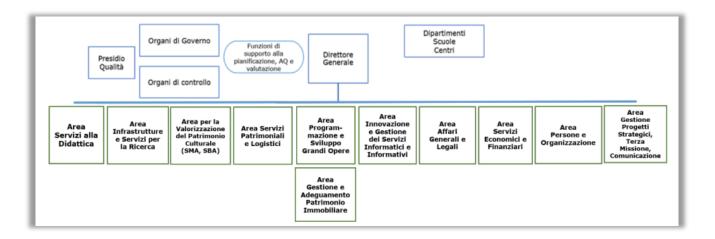


Figure 7 - Functional chart of the University Administrative Structure as of 12/31/2023.

The **University's faculty and researchers** are key figures in the scientific community, as evidenced by achievements in the research sector (see §3). Among the **initiatives implemented by the University to promote scientific development and improve teaching skills for faculty** are mobility programs, study leaves, training activities, particularly those offered by the Digital Learning and IT Training Unit, and the University Teaching and Learning Center. Satisfaction surveys indicate a high level of approval from faculty for University services, with higher-than-national average ratings for educational, research, and library services, although lower scores for communication and IT services. Approval is also very high for training events focused on digital learning and innovative teaching tools.

The **technical and administrative staff** numbers show slight growth; the annual **organizational well-being** survey indicates a generally positive internal climate. However, lower scores relate to perceptions of administrative fairness and career and professional development opportunities. Conversely, **satisfaction with services received by staff** is notably high (see Fig. 10).

Among the University's support measures for technical and administrative staff are **financial assistance** for special family and health-related expenses; **installment payment options** for employee tuition fees and public transportation subscriptions; **discounted agreements** with commercial establishments; telecommuting, remote work, and flexible hours to **facilitate work-life balance**; and **training activities** to align individual professional development with the University's strategic priorities. The <u>Staff Club</u> promotes a variety of cultural, recreational, and sports initiatives.

# TOTAL FACULTY AND RESEARCH STAFF: 1864

Source: CSA, data as of 31 december 2023

21% Professors ("Professori Ordinari")

46% Associate Professors ("Professori Associati")

27% Temporary Researchers (Fixed-term researchers, types A and B)

### Female Faculty Members 42%

### Scientific Qualification Indicators:

- Departments of Excellence: 7 departments have received this recognition.
- IRAS2 Recruitment Policies VQR 2015-2019: University of Florence ranks 8th nationally.
- Research Quality Indicator for Faculty iA9 ANVUR: 100% of Master's degree programs (LM) exceed the benchmark value of 0.8 (data from 2021).

## Satisfaction among faculty and research staff:

(2023 customer satisfaction survey on departmental services, Unifi average 2023 (comparison with 2022))

- Availability of administrative staff (PTA): 9 =
- External Recruitment: 8,9  $\downarrow$
- Doctoral Programs, Agreements & Trials, Research Projects, Extra-employment Assignments, Missions: 8,9 =
- Clarity of Functions and Services: 8,1 =
- Organization of Conferences and Seminars: 8,3  $\downarrow$
- Evaluation of Resolution Times: 8,4  $\downarrow$

Figure 9 - Size, qualification and satisfaction of the University's teaching and research staff.

# TECHNICAL AND ADMINISTRATIVE STAFF 1521

Source: CSA, data as of 31 december 2023

### Staff by category:

58% Category C

12 Executives

32% Category D

5% Category EP

2% Category Technologists

2% Category B

### Female technical-administrative staff 66%

- Ratio of contracted staff to teaching staff: 0.8
- Average age: 50

### Organizational well-being:

(organizational well-being survey, Unifi average 2023 (comparison with 2022))

- Discrimination: 5,0 <sup>↓</sup>
- My colleagues: 4,7 =
- Work environment: 4,5 =
- Career and development: 3,3 1
- Fairness in my administration: 3,3 ↑
  Organizational performance: 3,6 =
- Figure 8 Consistencies and satisfaction of technical-administrative staff.

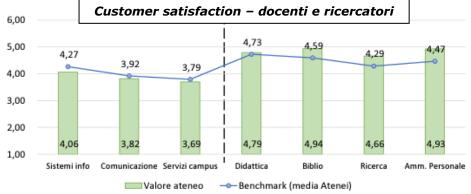


Figure 10 - Good Practice survey for teachers and technical-administrative staff: overall satisfaction with the services indicated, scale 1-6. Source: MIP final report.



The University of Florence integrates **research**, **education**, **and healthcare** through partner-ships with two **reference university hospitals** (AOU Careggi and AOU Meyer). This collaboration involves clinical support from faculty, researchers, residents, and university technical staff, joint training of medical and healthcare personnel, clinical trials, and shared medical research infrastructure.

The University participates in around **60 private entities** to varying degrees, through either <u>shareholding</u> or by appointing members to management or governing bodies. The entities consolidated into the University of Florence's financial statements under Italian law (D.I. n. 248/2016) include:

- > Azienda Agricola Montepaldi S.r.l.: Fully owned by the University, this company focuses on training, research, and technical support in agriculture, forestry, and environmental fields. Following years of challenging management, a recent development plan was approved to create a cultural and entrepreneurial ecosystem promoting ecological regeneration across cultural, economic, social, and artistic dimensions in partnership with a private investor.
- ➤ **Foundation for Research and Innovation** (FRI): Here, the University holds a majority voting position among stakeholders. The Foundation, supported by the Metropolitan City of Florence and the Cassa di Risparmio di Firenze Foundation, fosters synergy between the University and local institutions, particularly within the Florence, Prato, and Pistoia areas, supporting research, advanced education, sustainability, entrepreneurship, and cultural and environmental heritage. Over approximately 14 years, FRI has developed and consistently achieved positive financial results, with equally positive impacts on local research and innovation.

### 1.4 Policies and strategies

The University's values and vision drive its **policies and objectives for educational quality, research sustainability, and knowledge transfer with social impact**. The <u>Strategic Plan 2022-24</u> sets development goals for these institutional missions through **responsible, inclusive, and sustainable management**. More detailed information is provided in the <u>Integrated Performance and Organizational Plan</u> (PIAO, see §2) and other referenced strategic planning documents.

### **University Policies for Social and Environmental Quality and Sustainability**

### **Education**

The University is committed to offering a broad, varied, and constantly updated curriculum, adapting to scientific innovation and emerging economic, social, and professional needs to facilitate graduate employability and contribute to national growth. The educational process centers on student needs, removing obstacles to fully exercising the right to study.

### Research, Knowledge Transfer, and Public Engagement

The University fosters knowledge creation and application within society, offering an inclusive environment for researchers, stimulating productivity and competitiveness, providing state-of-the-art research infrastructure, enhancing research education, promoting research integrity, and expanding collaborations with business, public sector, and civil society, both through technological transfer and public engagement initiatives.

### **Social Sustainability and Inclusion**

The University promotes equality, inclusivity, and opposition to discrimination (gender, sexual orientation, age, disability, religion, ethnic and social origin, language, political and ideological beliefs). An integrated organizational approach addresses inclusion issues, supported by the recently established Inclusion and Diversity Support Center (<u>Unifi Include</u>). The University also incorporates feedback from the Equal Opportunity Committee (<u>CUG</u>). Key areas include the

right to education, accessibility, gender equality, development cooperation, and international protection. These policies are outlined in the <u>Strategic Plan</u>, <u>Positive Action Plan</u>, and <u>Gender Equality Plan</u>.

### Legality

The University of Florence is committed to creating a culture of shared legality, based on social responsibility. Strategic objectives in this area are set in the <u>Triennial Anti-Corruption and Transparency Plan</u>, which is part of the <u>PIAO</u>, detailing general and specific risk management measures to ensure all processes reflect fairness, equity, and efficiency.

### **Health and Safety in Study and Work Environments**

The University of Florence adopts the World Health Organization's definition of health as a state of **physical**, **mental**, **and social well-being**. The University promotes health within the academic and local communities by ensuring safe study and work environments, providing healthcare monitoring, facilitating work-life balance, offering healthy lifestyle support, and <u>basic healthcare services for off-campus students</u>, and <u>psychological counseling</u>. The University also contributes its expertise to the Regional Health System through partnerships with Careggi and Meyer University Hospitals. The University is the leading proponent of the sole health innovation ecosystem funded under the PNRR, named <u>THE - Tuscany Health Ecosystem</u>.

### **Technological Innovation and Digital Transition**

The University actively contributes to the Italian and European digital agendas, promoting the use of ICT to simplify access to public services, enhance administrative efficiency, foster innovation, and support economic growth. The University's action plan is outlined in the Triennial IT Plan, aiming to increase the number and quality of digital services, with a focus on accessibility, enhanced connectivity, and interoperable services.

### **Environmental Sustainability**

The University's environmental commitment includes reducing the environmental impact of its activities, with **procurement policies** that emphasize environmental and social criteria throughout







the purchasing process, waste reduction and management, support for sustainable mobility, and energy efficiency initiatives. The University also seeks innovative solutions and promotes a sustainability culture among the academic community and the public.

### **University Contribution to Sustainable Development Goals (SDGs)**



The University's contribution to the United Nations 2030 Agenda's <u>Sustainable Development Goals</u>, promoting global development, hu-

man well-being, and environmental protection, is realized **through educational** (see §2) and **research activities and the third mission** (see §3), encompassing virtually all the SDGs, as well as **conscious management choices**. These values are also recognized in **key international sustainability rankings**: for the fourth consecutive year, the University of Florence has shown a **positive trend**, ranking 225th in the global <u>UI Green Metric ranking</u> (up ninety-seven positions), moving from the 201-300 range to the 101-200 range in <u>The Impact Rankings</u>, and securing 144 points in the 2023 <u>QS World University Sustainability Rankings</u>, placing 147th internationally.



Figure 11 – Goals of the 2022-2024 Strategic Plan.

# 2 | Education and Students

The University's academic offerings (see Fig. 12) include <u>Bachelor's</u>, <u>single-cycle</u>, and Master's Degrees, Ph.D. Programs, and Specialization Schools, along with an extensive range of post-graduate courses aimed at continuous skill development: First and Second Level Master's Programs, Advanced Training <u>Professional Development</u> Courses, Courses, and Teacher Training Courses. Course content and teaching methodologies are regularly updated and innovated to align with educational demand, student learning needs, and the University's areas of research excellence.

The curriculum spans nearly all disciplines and **increasingly incorporates** 

### **EDUCATIONAL OFFERINGS**

A.A. 2023/24

Bachelor's Degrees: 62 Master's Degrees: 75 Single-cycle Degrees: 9

PhD Programs: 31 (administrative headquarters/part-

ners), of which 18 are of national interest

**Specialization Schools: 57** 

Master's Programs (Levels I and II): 79 Professional Development Courses: 12

**Advanced Courses: 46** 

Teacher Training Courses: 14 qualifying pathways of 30, 36, and 60 ECTS credits + specialization pathway for

supporting students with disabilities

Figure 12 - UNIFI's 2023/24 educational offerings

**interdisciplinary sustainability topics at all levels**. Approximately one-third of the courses offered in the 2023/24 academic year align with sustainable development goals (SDGs), with 1,806 out of a total of 5,281 analyzed courses showing direct relevance, based on cross-referencing the course title and description (see Figs. 13-14).

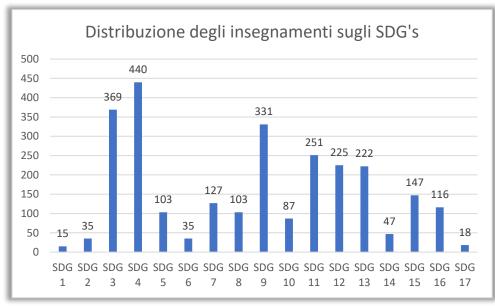


Figure 13 – Affinity of Unifi CdSs with SDGs: distribution on 2022/23 subjects for which SDGs fields on Syllabus were filled in. Aggregation by School. Source: Green Office



Agriculture,
Development and Poverty,
Energy Poverty and International
Policies,
Ingegneria delle Macchine per
l'Agricoltura,
Measurement and Causes of Poverty



Diritto degli Stranieri e dell'Immigrazione, Linguaggi della Diversità nelle Società Complesse, Psicologia Sociale, Tolleranza e Alterità nell'Europa Moderna



Alimentazione e Nutrizione Umana, Colture Arboree per Matrici Alimentari, Patologia Vegetale Molecolare e Controllo Ecosostenibile, Scienze Tecniche Dietetiche Applicate



Analisi del Territorio e degli Insediamenti, Analisi, Recupero e Valorizzazione del Giardino Storico, Architettura del Paesaggio, Costruzioni in Zona Sismica



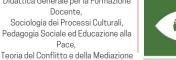
Counseling Psicologico Clinico, Health and Education Economics, Igiene e Promozione della Salute, Psicologia Sociale della Salute e Promozione del Benessere



Biotecnologie per le Produzioni Animali Ecosostenibili, Chimica e Analisi degli Alimenti, Food Quality and Culture for Tourism, Ottimizzazione e Innovazione dei Processi Produttivi



Abilità informatiche per gli Studi Umanistici, Didattica Generale per la Formazione Docente,





Ecosystem Services and Climate Change, Politica dell'Ambiente, Psicologia Ambientale, Valutazione di Impatto Ambientale



Gender and Citizenship, Labour Economics and Gender, Pedagogia di Genere, Storia di Genere



Biologia Generale e Zoologia I, Gestione e Riqualificazione dei Sistemi Fluviali, Microbiologia Ambientale, Sostenibilità e Crisi Biologiche



Acqua ed Energia, Gestione Sostenibile delle Acque e dei Rifiuti in Ambiente Urbano, Impianti di Trattamento delle Acque, Watershed Hydrology



Diversità Vegetale Regionale, Interazioni Funghi, Piante, Ambiente, Protezione delle Colture Ornamentali dai Fitofagi, Suoli Forestali



Energia Sostenibile per l'Ambiente, Gestione Industriale dell'Energia, Sistemi Energetici Avanzati, Systems and Solutions for energy Transition



Diritto dell'Unione Europea, Human Rights: the Catholic Perspective, Difesa dei Diritti Attraverso il Diritto: Introduzione allo Studio Clinico del Diritto, Sociologia dei Processi Culturali, Teoria del Conflitto e della Mediazione



Bank Management and Sustainable Finance, Diritto del Lavoro, Psicologia del Lavoro, Sicurezza Industriale



Diritto Internazionale (Lingua Inglese), Economics and Management of Complex Humanitarian Emergencies, Geoeconomia e Geopolitica dello Sviluppo Sostenibile, Pedagogia Sociale e Educazione alla Pace



Disegno Tecnico Industriale, Droni per il Rilievo Georeferenziato Urbano e Territoriale e Analisi di Dati Spaziali, Gestione degli Impianti Industriali,

Gestione degli Impianti Industrial Ingegneria Sismica Figure 14 – Some of the subjects provided in the SDGs-relevant degree programs. Source: Green Office

Course Types	Enrolled	Enrolled	Enrolled
	A.A. 2020/21	A.A. 2021/22	A.A. 2022/23
Bachelor's Degree/Single-cycle Master's Degree	42.963	43.595	44.874
Master's Degree	10.316	9.825	9.654
Professional Development Courses	174	171	135
Advanced Courses	433	1.058	1.109
I level Master's	663	541	570
II level Master's	459	436	579
Specialization Schools (Medical Area)	1.980	2.092	2.006
Specialization Schools (Non-medical Area)	182	154	239

Figure 15 - Enrolled in study courses. Source: ESSE 3 (Data as of March 31st of each year).

Commitment to a varied and high-quality curriculum, inclusive tuition policies, and extensive orientation initiatives have led to **significant increases in enrolment** in Bachelor's and Master's Degree programs from 2020 to 2022 (see Fig. 15), a trend sustained in preliminary data for 2023/24. Most students are **from the region** (about 70%), with around 53% coming from middle-class families and approximately 70% being **first-generation university students**. International students constitute around 1% of new enrolments.

To guide students toward study paths that align with their abilities and aspirations, balance gender representation across degree programs, reduce drop-out rates, and support their university experience, the University conducts diversified guidance and tutoring initiatives, designed with methodological rigor and student-centered approaches. The objective is to support high school students' informed and motivated access to higher education and to facilitate their continued academic careers. A wide range of initiatives is promoted, coordinated, and monitored through an internally integrated system that spans the University and the local area (schools, entities, and companies), and benefits from resources from various public funding sources. Particularly notable is the PNRR Active Orientation Project, launched in November 2022 following the approval of Ministerial Decree 934/2022. These courses targeted high school students in years 3, 4, and 5 during the 2022/23 school year. The University and its partners engaged 1,737 students from 51 secondary schools across Tuscany in these orientation activities, of whom 1,404 completed more than 70% of the required 15 hours across the 392 courses offered, thereby earning a participation certificate. The same project continues for 2023-24, titled "Orienta-Menti: An Active Path for Informed Choice." Programs aimed at fostering transversal skills and career orientation (PCTO) have also had a significant impact, including projects such as "I Will Be a Freshman", "Campus Lab", Orientation and Tutoring Plans (POT), Scientific Degree Plans (PLS), the "Spark Campus" project, as well as numerous informational initiatives and university life immersion programs. Collectively, these initiatives reached around 30,000 high school students in 2023.

Figure 16 – Average amount of fees paid by non-exempt students in Italian universities, A.Y. 2021/22. Source: elaboration on ustat.miur.it data.

### **AVERAGE FEE FOR PAYING STUDENTS**

A.A. 2021/22

Florence: 1213 €

Italy (all public universities): 1463 €

**Approximately 50%** of students have an ISEE (Equivalent Economic Situation Indicator) value €34,000. In line with its policies for inclusion, supporting the right to education, and promoting access to higher education, the University has established a balanced and progressive fee system. This system protects low-income students, takes potential disadvantages into account, and rewards academic merit. The full exemption threshold has been set at €24,000 in ISEE value for students who are on track and active in their studies, with additional financial aid provided for students with disabilities between 5% and 34% (a 25% partial exemption), extending the benefit to a broader range of students than in previous years, which was limited to those with over 34% disability. University fees are divided into 72 income-based brackets, ranging from €156 to €2,900, calculated based on students' financial capacity, academic progress, and productivity. Fee waivers and reductions apply in specific cases as outlined in the University's Study Manifesto (see Fig. 17). The

### **RIGHT TO STUDY – UNIVERSITY FEES**

Source: Study Manifesto A.Y. 2023/24

FEE TIERS: 72 ISEE brackets, from €13,000 to ≥€90,000 Contributions range from €156 to €2,900

FULL EXEMPTIONS FOR STUDENTS: ISEE up to €24,000, regular and active students who are recipients or eligible for ARDSU scholarships, children of disability pension holders, disability >66%, residents of areas affected by the 2016 earthquake, those in detention, students from developing countries, foreign students with scholarships in Italy, intergovernmental programs and agreements, athletic achievements, high school diploma grade of 100 with honors.

### PARTIAL EXEMPTIONS AND REDUCTIONS FOR STU-DENTS: multiple siblings enrolled, career reunification, political refugees, subsidiary protection and stateless individuals, disability

<66%, enrollment in specific disciplines.

Figure 17 - Unifi student fee system A.A. 2022/23 and cases of exemption (total or partial) and reduction of contributions. Source: Study Manifesto.

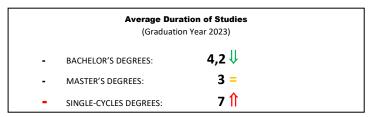


Figure 18 – Average duration of studies, Unifi graduates in 2023. Source: Almalaurea survey 2024.

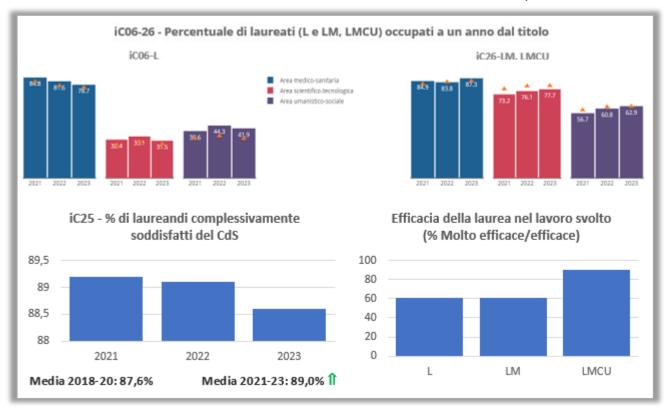


Figure 19 – ANVUR indicators (via Almalaurea) of employment status and Satisfaction with training received. Source: SMA – data as of July 2023; Almalaurea Survey 2024.

University of Florence's tuition costs are among the lowest compared to other comparable Italian universities (see Fig. 16).

Although the **proportion of on-schedule graduates is increasing**, **delays in academic progression still exist** for students enrolled in Degree Programs, indicating a need for targeted re-orientation and support measures to ensure timely program completion (see Fig. 18).

The employment rate for Bachelor's graduates exceeds the national average across all disciplinary areas, and it aligns with the national average for Master's and single-cycle degrees. Graduates generally rate their educational experience and the effectiveness of their degrees highly, noting that the skills acquired during their studies align well with their current job responsibilities and professional training needs. The <u>University's Career Services and Placement Office</u> support job matching by integrating services for both students and employers (see Fig. 19).

Thanks to the University's efforts and PNRR funding, the proportion of Ph.D. students with scholarships has increased: while the number of unfunded positions remained stable at 31, the number of funded positions rose from 204 in the 36th cycle to 329 in the 37th cycle (including 105 PONfunded scholarships), with total positions increasing from 235 to 437 (see Fig. 20).

In 2023, the University accredited 14 teacher qualification pathways as stipulated by Law 79/2022 and DPCM of August 4, 2023 (with **30, 36, and 60** 

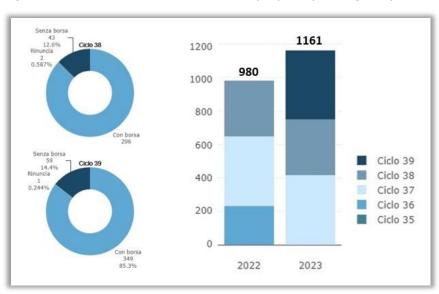


Figure 20 – No. of enrolments in Unifi administratively based doctoral programs in 2022 and 2023 and percentage of doctoral students with scholarships. Source: ESSE3.

**ECTS options**). The University set a registration fee for these programs below the maximum amount specified by the DPCM.

Enrolment in the **Specialization Program for Supporting Students with Disabilities** in early childhood and primary school and lower and upper secondary school has also seen continuous growth, with an increasing number of participants and partner schools (see Fig. 21).

Figure 21 – Enrolled in the Specialization Pathway for Supporting Pupils with Disabilities - Cycle VI, VII and VIII.

School	Enrolled a.a. 2021/2022 (VI cycle)	Enrolled a.a. 2022/2023 (VII cycle)	Enrolled a.a. 2023/2024 (VIII cycle)
Childhood	55	37	37
Primary	100	90	91
Secondary	106	124	193
First degree			
Secondary	124	155	318
Second degree			
Totale	385	406	639

### **TEACHING AND SERVICES EVALUATION**

### STUDENTS FEEDBACK:

### **Course and Teaching Organization**

- the course load is acceptable: 7,9 ⇒

- the class schedule allows adequate time for individual study: 7,9 ⇒

preliminary knowledge for understanding topics: 7,7 ⇒

### Instructor:

available for clarifications: 8,3 ↓
adherence to class schedule: 8,4 ⇒

### **GRADUATING STUDENTS FEEDBACK:**

- study abroad experience: 9,6 ↑

- internship/stage experience: 9,0 ⇒

equipment for teaching activities: 7,2 ⇒

- support for study abroad experience: 7,9 ↑

- evaluation of computer station: 7,3  $\downarrow$ 

evaluation of classrooms: 7,4 ⇒

### **SERVICES EVALUATION:**

classrooms and labs: 7,1 ↓

- libraries: 7,1 ↑

information services and communication: 6,6 ⇒

tutoring: 6,6 ⇒orientation: 6,4 ↑

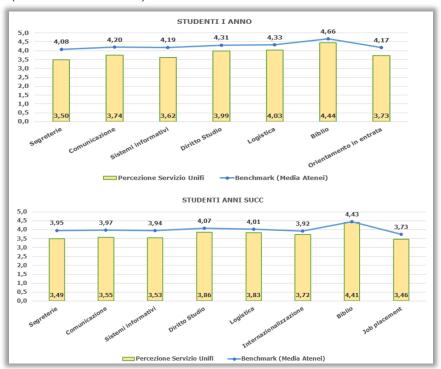
- international relations: 6,4 ↑

- student services and contact center: 6,4 ↑

- internships: 6,4 ↑

Figure 22 – Evaluation of teaching and services A.A. 2022/23 (attending and non-attending students): University averages per application (source: SIS-Valdidat).

Figure 23 – Good Practice survey 2022/23 (CS students 1st year and subsequent years): overall satisfaction with the services indicated, scale 1-6. Source: MIP final report.



The University upholds students' right to engage in self-managed educational and cultural activities within its facilities, promoting and funding **cultural**, **social**, **sports**, **and recreational initiatives proposed by students**. For the 2022/23 academic year, the University maintained its annual budget allocation of €140,000.

The University collects **student and doctoral student feedback on the educational path and support services** through various structured surveys (course and internship evaluations, Almalaurea surveys on graduate profiles, Ph.D. studies, and employment conditions, support service evaluations, Good Practice Survey). As highlighted in the <u>Annual Report</u> by the University Evaluation Unit, **the feedback shows high satisfaction levels for educational and internship activities, with some room for improvement regarding infrastructure and support services** (see Figs. 22-23).

# 3 | Research Impact

Scientific research drives societal progress and development by enhancing productivity and long-term competitiveness among companies, which fosters new employment opportunities and growth in knowledge-intensive business services (KIBS), now comprising nearly 50% of total employment in the EU.

The University promotes and supports ethical, inclusive, innovative, and internationally high-quality research by providing **resources and services to support researchers' projects** (about €3.8 million allocated in 2023 through Unifi4Future, RTD 2024-2025, and 30-month research projects) and **investing in cutting-edge research infrastructure with interdisciplinary applications** (approximately €2.6 million in funding allocated in 2023, also co-financed by the Cassa di Risparmio di Firenze Foundation).

**To attract and develop top talent**, the University gives special attention to early-career researchers, funding research fellowships and offering services like the **ERC Task Force** and the support office for **Marie Skłodowska-Curie Actions** (MSCA).

Since 2018, the University has held the European "<u>HRS4R – Human Resources Strategy for Researchers" certification</u>, an accreditation from the European Commission for institutions that follow the European Charter for Researchers and the Code of Conduct for their recruitment.

The **Research Ethics Committee** and the **Animal Research Committee** oversee ethics and research integrity matters. The University is also implementing a policy dedicated to research integrity.

The University encourages **Open Science** through "<u>transformative agreements</u>", which increased from 9 to 13 subscriptions in 2023. These agreements allow University researchers not only to access informational resources but also to publish their research open access at no cost. A total of 68,000 journal titles are accessible, with open-access publication available for 19,000. These agreements are funded by the University Library System, allowing researchers to publish open-access without using their research funds. During the year, 618 articles were published in this format (up from 377 in 2022).

In University-funded research calls in 2023, attention was given to **gender balance**, ensuring appropriate representation of both genders in proposals and review committees. Gender was also considered a ranking criterion in research content, following the guidelines of the Gender Equality Plan 2022-2024 (GEP). Evaluation committees were also formed with attention to gender balance.

Every five years, the National Agency for the Evaluation of Universities and Research (ANVUR) evaluates the research results and third-mission activities of public and private universities and research institutions.

In July 2022, ANVUR published the final report for the Research Quality Evaluation (VQR 2015-2019). Among state universities, Florence ranked seventh in terms of both quality and quantity of research output from all staff members and sixth when considering quality alone. Additionally, the University placed sixth in Italy for the quality and



Figure 24 – – Unifi outcomes in VQR 2015-2019. Source: ANVUR final report.

quantity of research output from Ph.D. graduates who have become researchers and **eighth for third-mission activities**, which include interactions with regional and societal contexts.

In 2023, University faculty and researchers submitted a total of 1,664 research projects, 925 of which were in response to competitive national, regional, European, and international calls. These projects collectively garnered nearly  $\in$ 85 million in research funding, with over  $\in$ 62 million awarded through competitive calls (including  $\in$ 17 million from European and international funding sources).

### 3.1 Collaborations with businesses, institutions, and the third sector

The University actively promotes knowledge transfer and cooperation with the business sector, public entities, the third sector, and civil society through various methods and objectives. Exchanges and interactions between University departments and production sectors are strengthened and realized through **extensive networking**, within a structured system that includes University departments, the <u>Technology Transfer Observatory</u>, the <u>University Service Center for Research Outcomes and Innovation</u> (CsaVRI), the <u>University of Florence Incubator</u> (IUF), <u>FI-RenzeSmarTworking Lab</u>, and the <u>Foundation for Research and Innovation</u>.

Numerous collaboration agreements aim to facilitate the matching of innovation demand and supply, the development of joint, often interdisciplinary projects, and the creation of training and professional development opportunities. Special focus is given to enterprise creation and support for entrepreneurship within the metropolitan area, with outreach at national and international levels. Innovative manufacturing, social innovation, and tourism are also priorities. Through this network of collaborations, the University is contributing to a true innovation ecosystem for the Florence Metropolitan Area (see Fig. 25).

Forms of partnership with public and private entities, intended to share expertise, human, financial, and instrumental resources, and to transfer research results into society, include:

- ➤ Commissioned Research by Public and Private Entities: In 2023, 423 active agreements for third-party research activities generated approximately €13.2 million in revenue.
- Competence Centers and Industry Development Associations:
  These public-private organizations bridge the gap between demand and supply for innovation services in businesses. The University of Florence is currently involved in six competence centers and the Association for Industrial Culture and Development (ACSI), formed with eight major international companies operating in Tuscany.

# Accordi di collaborazione per l'innovazione sul territorio



# Accordo quadro ecosistema dell'innovazione metropolitano fiorentino

Csavri, Fondazione per la Ricerca e l'Innovazione, Murate Idea Park, Nana Bianca, Impact HUB, Camera di Commercio, The Student Hotel Collab, Città Metropolitana di Firenze, Italian Angels for Growth, Italian Business Network, Manifattura Tabacchi, Zoworking



## Associazione per la cultura e lo sviluppo industriale (ACSI)

Baker Hughes, El.En Group, KME, Leonardo, Thales, Enegan, Sime, Sirio Solutions Engineering



CsaVRI, Fondazione CR Firenze, Fondazione per la Ricerca e l'Innovazione, HPE, Computer Gross, Nana Bianca, TT Tecnosistemi, Var Group, Webkorner



Accordo quadro con Confindustria Accordo quadro con Pratoinvest Accordo con Federmanager Toscana Accordo con Manager Italia Toscana

Figure 25 – Key framework agreements between the University of Florence and entities within the metropolitan innovation ecosystem.

> <u>University-Business Joint Laboratories</u>: The University has 97 <u>active laboratories</u>, mostly in technology (57%), followed by biomedicine (19%) and science (11%). Four new

laboratories are under development, with 25% of active labs established through University spin-offs.

- ➤ National Technology Transfer Center Extend Early Drug Discovery: This initiative, led by the National Innovation Fund, CDP Venture Capital, and in partnership with Evotec and Angelini Ventures, includes the University of Florence, San Raffaele Hospital in Milan, and other Italian research institutions. The center will invest over €30 million in creating a platform for biotech research, industrial, and financial collaborations to support innovation in the biopharmaceutical sector.
- ➤ THE Tuscany Health Ecosystem: Activities for the Tuscany Health Ecosystem (THE), one of 11 nationally funded innovation ecosystems under the National Recovery and Resilience Plan (PNRR), began in 2023 with a focus on life sciences. With €110 million in regional funding, this hub-and-spoke structured project is coordinated by the University of Florence, which leads Spoke 5, responsible for managing technology transfer (TT) across the ecosystem. A total of 53 sub-projects have been launched.
- ➤ National Agri-food Hub Farming Future: The Agri-food Tech hub, partnered with To Seed Partners, targets investments in projects and start-ups with innovative technologies applicable across the agri-food supply chain. Scientific sponsors include the University Federico II of Naples and other key institutions, with initial funding of €20 million. UNIFI is currently a non-structured partner in the hub.
- ➤ **National Robotics Hub RoboIt**: Established in collaboration with the Italian Institute of Technology in Genoa, the hub involves the University of Naples Federico II, the University of Verona, and the Scuola Superiore Sant'Anna, with contributions from Leonardo for technological and market expertise. RoboIt aims to support the first European Robot Valley in Valpocevera, with €40 million in funding. UNIFI, though not a formal partner, has received funding for two projects totaling €133,000.
- ➤ **Problem-driven Research Partnerships**: With a budget of €500,000, the University launched a call for co-financed 30-month research projects that align with the National Research Program (NRP) 2021-2027 and the 17 SDGs of the 2030 Agenda. These projects require partnerships between University departments and at least one entity outside Tuscany. Five projects began in November 2022, and partnerships have been established with the involved external entities (see Fig. 26).

Titolo proposta progettuale	Dip.to	Ente/i esterno/i	Finanzia- mento
Asse microbiota immunità: cibo Funzionale per la mOdulazioNe dell'infiammaZIonE in patoLogie gastrointestinaLi	DMSC	Synbiotec Srl	€ 85.000
BIM-to-Digital Twin. Gestione in- formativa a supporto dei processi decisionali nel ciclo di vita degli edifici	DIDA	Descor Srl	€ 125.000
Heritage - Ground Penetrating Radar	DST	Boviar Srl  IDS Georadar  Srl  Opificio delle  Pietre Dure	€ 98.500
tArgetiNg SchWann cells for chronic gEndeR pain	DSS	Diatech	€ 100.000

		Pharmacoge- netics Srl	
Fluorinated pharmacological chaperones for parkinson disease in drug-delivery studies	DICUS	Nanomia Srl AOU Meyer	€ 75.000
		INO-CNR UNIVR	

Fig. 26 – Partnerships on PNR research lines 2021-2027 co-financed by Unifi.

In line with previous years, relationships with the innovation ecosystem of the Florence Metropolitan Area have been strengthened and expanded. Numerous projects reflect activities in scouting, auditing, matching, and tutoring/coaching/mentoring, aimed at bridging the gap between innovation supply and demand, supporting local businesses and public stakeholders, and promoting innovative manufacturing, social innovation, tourism, and the digital and ecological transitions. European projects have also been developed on these topics.

Some exemplary projects from the innovation ecosystem's activities include:

- ➤ **Hubble:** This acceleration program, promoted by the Cassa di Risparmio di Firenze Foundation, the Foundation for Research and Innovation, and Nana Bianca, aims to foster the creation of new businesses and accelerate existing start-ups specifically operating in the digital market. In 2022, its seventh edition received over 2,000 applications, awarded 44 start-ups, provided more than 300 hours of training, tutoring, coaching, and mentoring annually, as well as seminars and workshops, resulting in over 200 jobs created and over €2 million raised in the market. The eighth cohort was launched in 2023, with a substantial revision of the program's financial structure and services offered.
- > **Faber:** A three-year project supported by the Cassa di Risparmio di Firenze Foundation, Confindustria Firenze, and the Foundation for Research and Innovation, Faber aims to connect the research sector with local micro, small, and medium-sized enterprises by introducing highly specialized researchers into companies seeking to innovate their processes, products, and/or organizational structures. Through financial support provided by the program, researchers are hired by participating companies with the option to pursue a Ph.D. during their employment. The third edition (2020-2023) is conclud-

Agreements and Projects created by the innovation ecosystem Unifi-Metropolitan City

Framework agreement for the Florentine metropolitan innovation ecosystem, Confindustria-Unifi framework agreement, Agreement with Federmanager Toscana and ManagerItalia Toscana, Association for culture and industrial development - ACSI, Framework agreement with Pratoinvest

Hubble, Faber (third, fourth and fifth edition), Rinascimento Firenze, Italian Lifestyle

Projects hosted at FirstLab: Impresa Campus Unifi, Ge.Co, iCare (CESVOT), Sarò matricola, Giotto, Clinica Legale, CResDET (CRISIS-RE-SISTANT DIGITAL EDUCATION AND TRAINING), ETour.Net (Employment in Tourism Using the New Technologies), SME Green Skill Hub (Supporting the implementation of the Sustainable Development Goals in small and medium sized enterprises through VET), Impact (Building values-based innovation cultures for sustainable business impact), Green Games, International Staff Training Week (EuniWell), StudentWell (Mindfullness e Well-being nello studio e nel lavoro), BIGin (ACSI)

Fig. 27 – Some agreements and projects created by the Unifi-Metropolitan City of Florence innovation ecosystem.

ing, with eight companies awarded and six doctoral programs launched. The fourth edition (2022-2025) recently started, awarding eight companies, including three UNIFI spin-offs, with corresponding doctoral placements. The year 2023 marked the core phase of the first year of work, during which part of the documentation required for implementing the fifth edition (2024-2027) was updated

➤ **Rinascimento Firenze:** This project aims to allocate financial resources to revitalize Florence's micro-economic fabric by combining traditional Florentine vocations with new or renewed functions. The initiative provides funding to companies through a mixed model of grants

(from the Cassa di Risparmio di Firenze Foundation) and concessional loans (from Intesa Sanpaolo), focusing on sectors such as tourism, artistic craftsmanship, fashion, startups/Industry 4.0, and agritech/agroindustry. The funding will support companies holistically, with an emphasis on social project objectives. The Foundation for Research and Innovation (FRI) is involved as the implementing body for the areas of startups, Industry 4.0, and agroindustry. FRI has awarded a total of 40 companies with approximately €10 million in funding across these two areas. Activities continued throughout 2023, and the project will conclude in 2024.

- ➤ **Valore Digitale:** In collaboration with the Cassa di Risparmio di Firenze Foundation, Nana Bianca, and the Foundation for Research and Innovation, this project aims to support and empower micro and small enterprises in Florence by providing pathways to digital skills acquisition and the implementation of new technologies.
- ➤ Italian Life Style: An acceleration program financed by the Intesa Sanpaolo Innovation Center, Cassa di Risparmio di Firenze Foundation, Nana Bianca, and the Foundation for Research and Innovation, this initiative fosters collaboration between local businesses and new entities offering digital solutions in tourism, fashion, and food—areas of excellence for which Italy is globally renowned. Italian Lifestyle provides each startup with a €20,000 grant, as well as training and mentoring services at the CR Foundation Innovation Center in Florence. In 2023, activities related to the second Italian Life Style batch were completed, with six companies successfully finishing the acceleration program. Preparations for the third batch began in 2023, including territory engagement and a targeted call that closed in early 2024, set to support another six companies in 2024.
- FIRenzeSmarTworking Lab (FIRST Lab): Launched by the University of Florence in 2020, FIRST Lab is dedicated to projects that generate added value and social impact for citizens, public administrations, and businesses. In 2023, FIRST Lab hosted numerous projects promoted by research groups from the University of Florence, CsaVRI, and FRI, such as Unifi Extra 2023 (a Public Engagement project), Etour-Net (3D transformation of cultural assets), Green Games and Impact (focused on sustainability), International Staff Training Week (EUni-Well alliance), StudentWell (mindfulness and well-being in study and work), and Valore Coaching (in-progress orientation). FIRST Lab also hosted externally coordinated projects, such as GIOTTO (Young Tuscan Talent, connecting students with businesses), "I Care: Studying Together" (to combat school drop-out), and BIGin (Business Familiarization Program).

### 3.2 Protection and Enhancement of Industrial and Intellectual Property

The University of Florence safeguards its inventive assets as a strategic element for knowledge transfer and for advancing innovation and societal progress. The <u>University's Intellectual Property Portfolio</u> includes <u>industrial inventions and utility models—patents</u>, new <u>plant varieties</u>, <u>models</u>, <u>designs</u>, <u>trademarks</u>, <u>software and databases</u> (see Fig. 28).



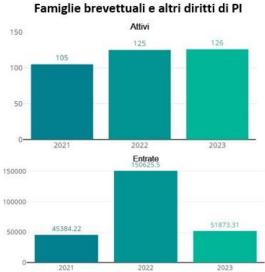


Figure 28 – Unifi industrial property rights portfolio, number of patent families and revenue from active licenses 2021-2023. Source: Report Pro-Rector for Technology Transfer, Cultural Activities and Social Impact and DAF (Version n.2 January 2024)

The number of active patents (mainly in "Health" at 42%, "Climate, Energy, and Mobility" at 22%, and "Food, Bioeconomy, Natural Resources, Agriculture, and Environment" at 20%) is above the national average, with many granted both in Italy and abroad. **About 39% of published intellectual property rights have been utilized** (via licensing or sale); **revenue from active licenses** in 2023 saw stabilization after the substantial increase in 2022, remaining within the 2015-2021 average.

In May 2023, the University registered its first two proprietary designs: the "Taskbar" furniture system and the "APLU" air purifier.

### 3.3 Innovative Startups, Spin-offs, and Youth Entrepreneurship

The University of Florence promotes knowledge transfer from research activities by establishing innovative companies (start-ups), which may be recognized as University spin-offs, aimed at the economic and entrepreneurial use of research results and the development of new products and services tied to innovation.

To **foster an entrepreneurial culture**, the University supports research teams in **transition-ing from idea generation to business formation** (through University start-ups and spin-offs) via pre-incubation and acceleration programs. To enhance youth entrepreneurship, the University Incubator runs the **"Impresa Campus Unifi" project**: in 2023, the 15th and 16th editions were held, bringing the total since 2013 to 627 applications, 377 developed projects, and 1,046 young participants.

From 2010 to 2023, 70 University of Florence spin-offs emerged from 198 teams supported in pre-incubation; 41 were still recognized as of 2023, with 49% listed as innovative startups and 8% as innovative SMEs. Regarding **spin-off performance**, trends for full-time employees and

cumulative production value from 2021 to 2022 are reported (latest available data – see Fig. 29). **In 2022, 2 new academic spin-offs were recognized** (Clepio Biotech and Florence Robotics).

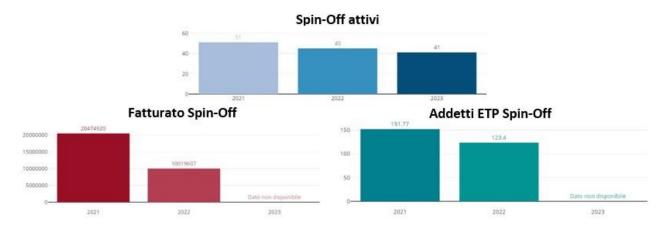


Figure 29 – No. active Unifi spin-offs, turnover and no. ETP employees 2021-2023. Source: DAF (Version n.2 January 2024)

### **3.4 PNRR**

Under the National Recovery and Resilience Plan (PNRR), Mission 4 Component 2, the University of Florence is **involved in five National Centers**, **one Innovation Ecosystem**, **and eight Extended Partnerships**. The total funding allocated to the University across these investments is **approximately €98.5 million**. A total of **440 project-dedicated personnel** have been recruited, and University staff have been involved in the projects for a combined 3,548 personmonths.

Additionally, the University of Florence participates in **four PNRR-funded Research Infra-structures**. Actively engaged structures include the CERM - Center for Magnetic Resonance of the Department of Chemistry "Ugo Schiff," the Civil Protection Center of the Department of Earth Sciences, the Department of Agricultural, Food, Environmental, and Forestry Sciences (DAGRI), the European Laboratory for Non-linear Spectroscopy (LENS), and the University Museum System.

The M4C2 component of the PNRR also funds projects led by **young researchers**, consistent with the Operational Arrangements agreed upon by the European Commission and the Ministry of Economy and Finance on December 22, 2021. Specifically, the University of Florence has hosted 11 researchers on fixed-term contracts (RTDa), including eight awarded three-year **Marie Skłodowska-Curie** (MSC) fellowships and three awarded two-year **Seal of Excellence** (SOE) grants.

In September 2023, five projects aimed at patent **enhancement programs**, funded by the Ministry of Enterprises and Made in Italy under the PNRR NextGenerationEU Investment 6 "Industrial Property System," were launched.

The restoration of the historic garden of Villa La Quiete and the Museum of Geology and Paleontology, aimed at eliminating physical, sensory, and cognitive barriers to ensure safe accessibility for all, received approximately €2.3 million in funding under Mission 1, Digitalization, Innovation, Competitiveness, and Culture, Component 3, Culture 4.0.

### 3.5 Public engagement

The University carries out numerous educational and cultural outreach activities of significant value, aimed at transferring knowledge to a non-academic audience and promoting inclusive societal growth. In 2023, in preparation for the celebrations of the first centennial of the University of Florence, efforts were made to highlight the University's historical connection to the City and its territory, enhancing its enduring relationship with the historical, cultural, economic, and social context in which it is rooted. To this end, a call for expressions of interest was issued to over 80 local entities, professional associations, museums, and foundations to contribute to a rich calendar of centennial events. The response was highly positive, with more than 30 initiatives proposed in addition to an equal number of proposals from University departments and structures, along with around ten centrally planned events.

Among the main events for engagement with citizens, associations, institutions, and businesses promoted in 2023 were:

- ➤ **Events organized by UNIFI**: A total of 1,329 initiatives were recorded across 27 University departments. Two of the University's longstanding events, which collectively attracted nearly 6,000 participants, were given particular attention: Bright Night The European Researchers' Night (the University is the lead institution for the project, funded by the European Commission under Horizon Europe/MSCA Actions, and coordinates all universities and higher education schools in Tuscany) and ScienzEstate (a public outreach event organized by UNIFI's OpenLab Service Center, with the 2023 edition expanding the number of locations and activities offered).
- ➤ Participation in public events: The University's Museum System participated in the popular "L'eredità delle donne" event, directed by Serena Dandini, which is now in its sixth edition. With an 80-square-meter stand at the Fortezza da Basso, UNIFI organized school workshops and other events at the "Earth Technology Expo," an annual exhibition on technologies for a sustainable present and future, which drew about 15,000 attendees. The University has also strengthened its collaboration with the city's major film event, Firenze Archeo Film, adding a jury of 50 student volunteers alongside the main jury of three faculty members.
- Framework agreements with local entities: To enhance collaboration and co-design initiatives in research, qualified training, and public engagement across the region, the University established partnerships with Fondazione Sistema Toscana for Cinema La Compagnia, the Institute and Museum of the Innocents, Fondazione Strozzi, Ximeniano Observatory, Galileo Museum, Fondazione Scienza e Tecnica, and Civic Museums for specific events. In 2023, a memorandum of understanding with the Tuscany Region launched a major collaboration to support programming at the "Memoriale delle Deportazioni," positioning it as an incubator for ideas and projects on the historical, political, and cultural heritage of democracy, freedom, peace, and intercultural collaboration.
- > Scientific coordination for the first "Gender Budget of the Metropolitan City of Florence and the Municipalities that Signed the Territorial Gender Agreement": With funding from the Tuscany Region through the European Social Fund, the University conducted a synergistic study involving the Metropolitan City and 39 municipalities, developing a methodology and format later adopted by all project municipalities. The result is a tool that enables the identification of gender inequalities within the region, thereby guiding the creation of more equitable policy actions.

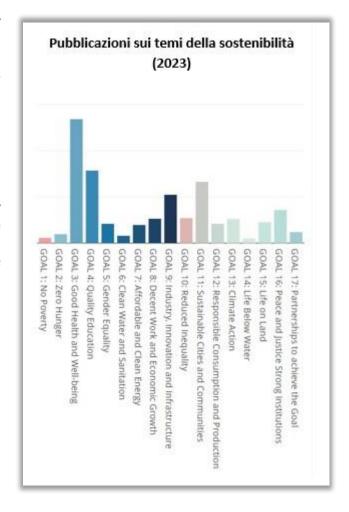
In a testament to the University's strong collaboration with the city's administration and other regional entities, **major academic ceremonies were held in public venues**, such as Palazzo Vecchio and the Teatro dell'Opera. Additionally, **several framework agreements were signed with prominent Florentine cultural institutions** (including superintendencies,

museums, theaters, conservatories, and academies), underscoring the University's deep integration into the city's cultural fabric.

### 3.6 Research and the Third Mission on Sustainability Themes

The University of Florence is **actively engaged in sustainability research**, participating in numerous local, national, European, and international projects on topics such as land use, geological and environmental safety, sustainable agriculture and food supply chains, human health, pollutant tracking and removal, renewable energy generation, climate, ethics and bioethics, educational models, economic models, transportation, and many others. The classification of **publications and research projects** submitted in 2023 according to the SDGs reflects the vibrancy of the University's research in these areas (see Figs. 30-31).

Figure 30 – 2023 publications on the SDGs. Source: CRUI-UNIBAS System and Research Observatory (data extracted on 17 January 2024).



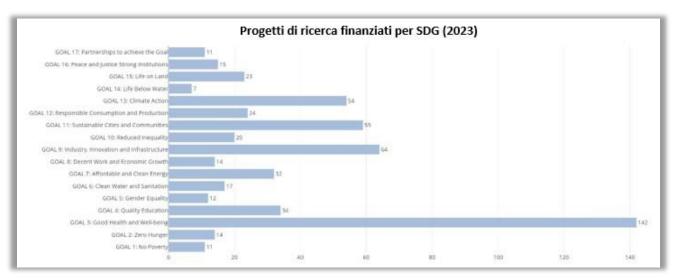


Figure 31 – 2023 research projects on the SDGs. Source: Research Registry (data extracted on 24 January 2024).

Among the **technology transfer** activities aligned with sustainability objectives, the following are noteworthy:

- ▶ Patents and Plant Varieties: The University holds numerous intellectual property rights related to environmental sustainability, with resulting valorization efforts aimed at creating positive impacts on territories, communities, and the environment. In the medical field, some patents—also granted internationally—support green healthcare policies, such as using agricultural or forestry by-products to create next-generation pharmaceutical compounds. Technological patents enable and foster circular economies that add value to agricultural areas, such as in bioplastic production or construction materials with certified sustainability. Other patents aim to improve industrial efficiency, with significant positive outcomes, including emission reduction, raw material waste reduction, and water usage optimization. These technologies and patents contribute to enhancing natural and heavily developed environments, making locations more sustainable, reducing noise, and addressing potential safety issues from both natural and artificial conditions. Additionally, the University holds rights to certain plant varieties that facilitate local production of items typically imported, reducing transportation needs.
- Spin off: Numerous University spin-offs contribute to sustainability in various sectors: Fotosintetica & Microbiologica s.r.l. (participated) produces functional foods, animal feed, natural medicines, cosmetics, and biofuels; Probiomedica Photonics & Robotics s.r.l. (participated) develops innovative health technologies; AgriZapp s.r.l. uses advanced technology to manage livestock and pastoral resources; CoAlmed s.r.l. provides inclusive healthcare services; Csp Alas cooperative focuses on clinical psychology; Ebico cooperative Onlus works on school wellness; Ecodrone s.r.l. offers products and services for monitoring marine, lake, and freshwater bodies; Feel Solutions s.r.l. reduces environmental impacts for businesses; FloNext s.r.l. repurposes existing drugs for new applications in degenerative diseases; Georisk Engineering s.r.l. specializes in analyzing natural risks linked to climate change; Horizons s.r.l. focuses on landscape restoration, particularly rural; Item s.r.l. works on avalanche risk prevention; Mck Therapeutics s.r.l. operates in biotechnology; Moca Future Designers cooperative provides consulting to socioeducational and cultural organizations; Morfo Design s.r.l. conducts research and experimental development in natural sciences and engineering; Pnat s.r.l. develops new agricultural technologies; Promopsi cooperative enhances psychological well-being and school life quality; Urban Life s.r.l. studies urban complexity; Bluebiloba s.r.l. addresses issues related to fragmented forest ownership, promoting sustainable management of Tuscany's and Italy's forest resources; Insect Pharma Entomotherapy s.r.l. explores the use of insects and other arthropods as medicines; FoodMicroTeam s.r.l. manages and controls fermentation processes.
- ➤ **National Technological Clusters**: The University is involved in several national clusters focused on sustainability, including: Agrifood CL.A.N: A partnership of companies, research centers, regional representatives, and key stakeholders in the agri-food chain; CTN Blue Italian Growth BI: Focused on the marine economy; Energia: Coordination in the energy sector; Sustainable Processes and Resources for Innovation and National Growth SPRING: Green chemistry; Transport Italy 2020: Mobility across road, rail, water, and intermodal systems.

The University also plays a significant role in the **preservation of cultural heritage, both tangible and intangible** (including oral traditions, languages, and knowledge), **as well as in providing public access to green spaces** (such as the botanical garden), largely thanks to contributions from the Museum System and various departments.

# 4| Well-being and Inclusion

The University of Florence is **strongly committed to promoting values of equality, inclusion, and opposition to all forms of discrimination** (including gender, sexual orientation, age, disability, religious belief, ethnic and social origin, language, political and ideological beliefs). This commitment is carried out through an integrated organizational approach to inclusion issues. In line with this vision, a **Technical-Scientific Committee** was established to **support actions on inclusion and diversity topics**, and the **"Unifi Include" service desk** was recently launched.

The **Unifi Include** service (inaugurated in July 2022 at the Novoli campus) implements policies for the social integration of students to ensure equity, gender equality, and equal opportunities. It provides resources and services tailored to specific groups of students who may experience vulnerability (students with disabilities, those facing gender-related issues, those in detention, and students from third countries). This support includes identifying and arranging necessary compensatory measures and aids (including technological ones) to help students achieve academic goals, personalized tutoring, assistance in classes, mediation with faculty, learning materials in accessible formats, interpretation services, and communication support.

Center for Psychological Counseling, Psychotherapy, and Clinical Psychology (CeCoPs): This center offers counseling and psychological intervention programs focused on managing personal and relational challenges. Demand for its services has surged, with requests increasing sevenfold compared to the previous service, from around 100 annual interventions to 749 in 2022 and approximately 619 in 2023 (preliminary data).

The University also takes guidance from the University's Equal Opportunities, Non-Discrimination, and Workplace Well-being Committee (CUG), which has advisory, consultative, and monitoring roles on policies

Summary of inclusion services promoted by the University	N.
Unifi Include Desk (support for students with BES and DSA)	406
Students in detention	73
PER-University Desk (Residence Permit)	80
Student-Athletes	30
Alias Careers	26
Total	615

Figure 32 - Report on the University's inclusion services. Source: News di Ateneo

### Piano triennale delle Azioni Positive



### Formazione, sensibilizzazione, comunicazione

Diffondere in maniera capillare all'interno della comunità accademica una cultura del rispetto, dell'equità di genere e della valorizzazione delle differenze.



# Pari opportunità, contrasto alle discriminazioni e inclusività

Creare una diffusa consapevolezza sulle condizioni che possono ostacolare una partecipazione alla vita universitaria basata su uguali opportunità e riconoscimento del valore degli individui. Proporre figure, misure e strumenti in grado di indirizzare l'Ateneo nel superamento di tali ostacoli.



# Benessere organizzativo, welfare aziendale, conciliazione di tempi di vita e lavoro

Promuovere le condizioni più favorevoli alla creazione del benessere fisico, psicologico e sociale del lavoratore, a cui concorrono una serie di fattori legati ai tempi, alle modalità di lavoro, alla cultura organizzativa, nonché al clima generale che si respira nel luogo di lavoro.

Figure 33 – Scope of action of the 2022-2024 PAP.

for workplace well-being, equal opportunities, and non-discrimination. The CUG prepares the **Triennial Positive Action Plan (PAP)**, the latest edition of which (for further details, please refer to the document) outlines three primary areas of intervention (see Fig. 33).

Below is a brief overview of the University's policies in some of the key dimensions defining the concept of inclusion.

### 4.1 Right to Education

In addition to the services provided by the <u>Regional Agency for the Right to Education</u> (mainly through scholarships, housing, and dining facilities), the University has established an <u>equitable</u> <u>and progressive tuition system</u>. This system protects low-income students, considers potential disadvantages, and rewards academic merit.

The **Tuscan University Penitentiary Program** (PUP) is aimed at upholding the constitutional principles of the right to university education and the rehabilitative purpose of sentences. This initiative is unique in Italy, as it allows incarcerated individuals to enroll in any degree program offered by Tuscan universities, supported by extensive orientation, in-progress, and post-completion assistance. Since 2003, the University of Florence has enrolled and supported over 270 incarcerated students in their studies. In the past three years alone, over 400 new students have joined the PUP in Tuscany, with students collectively completing almost 850 exams and 15 individuals earning their degrees. Currently, 75 students are enrolled in the Florence unit of the Tuscan University Penitentiary Program, including 20 first-year students. Most of these students are from the Dogaia prison in Prato (41 enrolled, including 13 new students). The degree programs with the highest enrollment among these students are within the School of Humanities and Education, the School of Economics and Management, and the School of Law.

### 4.2 Gender Equality

Measures aimed at promoting gender equality are outlined in the <u>Gender Equality Plan (GEP) 2021-2024</u>, as well as in the <u>2024-2026 Triennial Positive Action Plan</u> developed by the Equal Opportunities, Non-Discrimination, and Workplace Well-being Committee (CUG). The GEP's objectives are focused on creating equitable and inclusive study and work environments where all talents can thrive. These objectives are organized into four priority areas, each accompanied by specific actions, indicators, targets, and allocated resources (see Fig. 34).

The University recently established a **Gender Budget Observatory**, responsible for conducting extensive evaluations of the outcomes and impacts of promoted actions, as well as monitoring future policy planning and resource allocation aimed at removing barriers to gender

### Piano di uguaglianza di genere



### Conciliazione vita-lavoro

Consolidare degli strumenti conciliativi destinati al personale tecnico-amministrativo (telelavoro, lavoro agile, flessibilità oraria), progettare nuovi servizi dedicati a tutta la comunità accademica (es. ludoteca, babysitting).



# Equilibrio di genere nelle posizioni di vertice e negli organi decisionali

Iniziative formative e di revisione regolamentare per favorire una rappresentanza più equilibrata a tutti i livelli organizzativi.



# Integrazione della dimensione di genere nella ricerca e nei programmi degli insegnamenti

Sensibilizzare la comunità accademica sul tema, promuovere atteggiamenti inclusivi, rilevare gli aspetti legati al genere nei gruppi di ricerca e nei contenuti delle ricerche.



### Contrasto delle violenze di genere

Aggiornare il codice di comportamento, aprire sportelli per l'accoglienza e la segnalazione di molestie.

Figure 34 – Scope of action of the 2021-2024 GEP.

equality. This initiative seeks to foster increasing integration with other University planning, management, and reporting documents. For further details, please refer to the <u>Gender Budget</u> and the <u>documents produced by the CUG</u>.

### 4.3 Accessibility

To improve accessibility in environments and services, particularly for users with functional limitations, the University's commitments include:

- ➤ The **progressive removal of architectural and sensory-perceptual barriers** still present in some University buildings, as part of the interventions outlined in the Building Plan, along with the installation of signage within facilities to aid orientation, wayfinding, and the identification of hazard sources;
- > The creation of **accessible documents and websites**, promoting awareness among staff through guidelines, training, and regular monitoring;
- ➤ Expanding access to documents and educational content, also through the use of new technologies (for example, e-learning systems and specific aids for students who are blind, visually impaired, or have learning disabilities: text-to-speech software, reading devices, large keyboards, video magnifiers, etc.);
  - Simplification and digitalization of procedures.

#### 4.4 Development Cooperation and International Protection

The University of Florence contributes to the **processes of stabilization and democratization in developing countries** through coordinated actions with other major organizations, such as the Ministry of Foreign Affairs and International Cooperation, the University Cooperation for Development Network (CUCS), the Italian Agency for Development Cooperation (AICS), the Italian Interuniversity Consortium for Argentina (CUIA), and the Italian Higher Education with Africa Foundation (IHEA). In collaboration with these institutions, various initiatives are carried out, including scholarships for students from countries involved in these agreements, mobility programs, and joint research projects.

In January 2020, the University of Florence joined the <u>Inclusive University Manifesto</u> promoted by UNHCR, the United Nations Refugee Agency, along with 52 other Italian universities. The University is also part of the <u>Scholars at Risk</u> network, which includes over 650 universities in 43 countries. This network provides temporary refuge for professors and researchers from countries where academic freedom is not guaranteed, and where their personal safety is at risk.

Initiatives to promote access to university education and research for refugees, social integration, and active participation in academic life include:

- ➤ Humanitarian corridors for refugee students (Project Unicore 5.0, University Corridors for Refugees): This project aims to support young refugees who wish to complete their studies by pursuing a Master's degree taught in English at our University. Partners in this project include the Ministry of Foreign Affairs and International Cooperation, Caritas Italiana, Diaconia Valdese, Centro Astalli, and Gandhi Charity.
- > Qualification evaluation for holders of international protection: The University offers a service to certify the qualifications of refugees wishing to resume their studies, even if official documentation from their home countries is unavailable (National Coordination for Refugee Qualification Evaluation, CNVQR).
- > Support for students awaiting international protection: In collaboration with the Giorgio La Pira International Student Center, scholarships are available for students awaiting recognition of international protection and who intend to start a university degree.

- ➤ **Multicultural tutors:** These tutors assist refugee students with orientation and facilitate their integration into the academic system and society.
- > Agreements with universities in developing countries: Collaborative agreements with institutions in developing countries have been established (see the interactive map).

Following the start of the conflict between Ukraine and Russia, the University introduced **support measures in March 2022 for Ukrainian, Russian, and Moldovan students and researchers** (see Fig. 35). As part of its solidarity initiatives for students from high-risk areas, the University of Florence has also awarded four scholarships to **students** from **Myanmar** and five scholarships to **Afghan** students.

Additionally, the University of Florence coordinates the project "Being an inclusive university for refugee students: concepts, methods, and tools", funded by the European university consortium EUniWell.

## MISURE A SOSTEGNO DEGLI STUDENTI E RICERCATORI COINVOLTI NEL CONFLITTO RUSSIA-UCRAINA



Figure 35 – Measures to support Ukrainian, Russian and Moldovan students and researchers.

## 4.5 EUniWell: The European University for Well-being

The University of Florence is one of the founding universities of the European university alliance **EUniWell** (European University for Well-being). EUniWell, funded by the European Commission under the Erasmus+ and Horizon 2020 programs, has a primary mission to understand, enhance, measure, and rebalance the well-being of individuals, communities, and society as a whole. The University of Florence leads the working groups on Teaching, Environment and Urbanity, and Teacher Education and Training, and serves as a co-leader on the group focused on building a unified EUniWell identity.



# **5| Cultural Heritage**

The University possesses a significant cultural heritage, consisting of assets with artistic, historical, bibliographic, ethno-anthropological, or archival value, which also hold economic significance. The primary mission of the University Library System and University Museum System is to conserve, expand, and promote this heritage.

The University of Florence also fosters the dissemination and promotion of performing arts within the academic community and for the general public. It offers access to the <u>theater company</u> "Binario di Scambio," the <u>University Choir</u>, and the <u>University Orchestra</u>. Participation in these activities is free and open to students, faculty, and administrative staff. In addition to participating in official University ceremonies and initiatives, the choir, orchestra, and theater group offer various performances to the community.

#### 5.1 Libraries

The <u>University Library System</u> offers a wide range of informational services to support teaching and research; it ensures the growth, preservation, and accessibility of the University's book and document collections, both in print and digital formats, and manages and disseminates bibliographic information. Resources and services are also accessible to the public through interlibrary loans, the "<u>Ask in the Library</u>" online service, open-access electronic collections, and cultural events organized in partnership with local entities. The Library System includes **five thematic libraries and a Digital Library**, which promotes and develops services related to electronic and digital resources and technological innovation. **The Prato University Library** (PIN) also coordinates with the University Library System.

- 13 SERVICES POINTS → FIRENZE CENTER, CAREGGI, CASCINE, NOVOLI, SANTA MARTA, SAN SALVI, SESTO FIORENTINO
- 20.133 SQM ACCESSIBLE TO USERS  $\rightarrow$  STUDY AND CONSULTATION ROOMS, MEETING SPACES, CLASSROOMS, ETC.
- 2.437 STUDY STATIONS  $\rightarrow$  ACCESSIBLE FOR A TOTAL OF 672 HOURS PER WEEK
- 3.968.975 documents (as of 31/12/2023)  $\rightarrow$  mostly books and journals, but also maps, photographs, microforms, audiovisuals, etc.

Figure 36 - SBA offer: structures and book heritage. Source: SBA.

The thematic libraries operate through **14 service points across Florence**, housing a **collection of over 3,950,000 items**, primarily books and journals but also maps, photographs, microforms, audiovisual materials, and more. The **Digital Library** resources are extensive as well, with ongoing digitalization work feeding into the <u>Digital Imprints</u> portal, which provides online access to selected valuable items to ensure accessibility while preserving the originals. The <u>Chartae</u> portal, created from the reorganization, cataloging, description, and digitization of the Library System's archives, has, since 2020, hosted archival materials from across the University, including documents from the Historical Archive and Villa La Quiete. Both Digital Imprints and Chartae allow researchers, scholars, and enthusiasts worldwide to access these materials online.

```
97.611 ELECTRONIC JOURNALS
292 DATABASES
325.088 E-BOOKS
37.321 FULL TEXT RESEARCH OUTPUTS (FLORE)
236.948 IMAGES OF DIGITALIZED COLLECTIONS IN IMPRONTE DIGITALI (AS OF 31/12/2023)
81 ARCHIVAL COLLECTIONS DESCRIBED IN CHARTAE
20 VIRTUAL EXHIBITIONS
```

Figure 37 - SBA offering: electronic and digital collection. Source: SBA.

The Library System actively engages with the Florentine, national, and international community. Collaborations include the <u>SBART</u> project with other Tuscan universities and partnerships with prestigious Florentine institutions, such as the Accademia della Crusca, Fondazione Franceschini, the International Society for the Study of Medieval Latin, and the Biblioteca del Museo Galileo. The Humanities Library collaborates with the Tuscany Region to host and manage the <u>Crocetti Library</u>, specializing in bibliography, library science, and archival studies, and houses <u>CEDAF</u>, the Florence Flood Documentation Center, with a scientific committee comprised of numerous prestigious local institutions. The <u>European Documentation Center</u>, housed in the Social Sciences Library, is open to all EU citizens.

```
82.053 PHYSICAL BOOK AND DOCUMENT LOANS (+15% COMPARED TO 2022)
38.294 DIGITAL LOANS (+33%)
70.930 E-BOOKS AND E-BOOK CHAPTER DOWNLOADS (+5%)
1.722.469 DOWNLOADS FROM ELECTRONIC JOURNALS (+13%)
575.391 DATABASE RESEARCHES
4.836 ARTICLE OR MONOGRAPH DIGITIZATIONS FOR UNIFI USERS
111.693 ON-SITE SCANS VIA BIBLIOSCAN (BY 978 DIFFERENT USERS)
5.377 DOCUMENTS (ARTICLES E VOLUMES) RECEIVED FROM EXTERNAL LIBRARIES FOR UNIFI USERS
8.265 DOCUMENTS (ARTICLES AND VOLUMES) SUPPLIED TO EXTERNAL LIBRARIES FOR THEIR USERS
291 INFORMATION REQUESTS PROCESSED ONLINE VIA CHIEDI IN BIBLIOTECA (ASYNCHRONOUS REFERENCE)
1.227 BIBLIOGRAPHIC INFORMATION TRANSACTIONS VIA VIDEOCONFERENCE OR IN-PERSON (SYNCHRONOUS REFERENCE,
+25%)
557 FLORE ASSISTANCE TRANSACTIONS, RESEARCH QUALITY EVALUATION, TRANSFORMATIVE CONTRACTS (+42%)
91 courses held in-person and/or via videoconference \rightarrow 3.060 partecipants (+47%), 170 credits issued
(+51\%)
25 MOODLE COURSES \rightarrow 3.147 PARTECIPANTS, 3.986 CREDITS ISSUED (+20%)
71 LOANS TO DETAINEES AT THE UNIVERSITY PENITENTIARY HUB; 9 HOME LOANS FOR DISABLED USERS
```

Figure 38 - SBA: services provided in 2023 and comparison with 2022. Source: SBA.

The University libraries offer **extended hours** across various locations and a total of 1,165 study spaces. Projects to **repurpose spaces** are ongoing, aimed at not only expanding and properly preserving collections but also meeting the diverse study and research needs of students and scholars. Some locations have dedicated group study rooms; others feature multifunctional rooms for meetings, laboratory activities, and public engagement events, equipped with suitable furnishings such as comfortable seating, large tables, and boards. The Architecture library includes an electrified table for working on project plans. Customer surveys conducted in 2023 confirmed high satisfaction with services, facilities, and staff assistance.

In addition to traditional services like consultation, loan services, interlibrary loan, and document delivery, the Library System offers advanced services such as research assistance, bibliographic research training courses (some of which award academic credits), and support in the promotion and evaluation of research outputs. All services experienced growth in 2023, especially those available in-person (see Fig. 38).

Noteworthy are **services specifically for disadvantaged users**, such as lending to students at the <u>Penitentiary University Campus</u> and resources for <u>persons with disabilities</u>, <u>including visually impaired and blind users</u>. In 2023, collaboration with Unifi Include led to the creation of the <u>Accessible Books service</u>, which allows students with severe disabilities to access necessary texts in alternative, accessible formats. Libraries assist these students in locating texts and collaborate with Unifi Include on digitization efforts.

The libraries independently, or in collaboration with other University structures, organize free events for the general public and participate in events organized by external entities. In 2023, they contributed to <u>A Day at the University</u>, <u>Bright Night – The European Researchers' Night</u>, and <u>ScienzEstate</u>. They also organized exhibitions, meetings, and book presentations. Among notable exhibitions, in addition to the established <u>Archistorie</u> and <u>Agristorie</u> series, <u>The City Reflects: Where the Arno Meets Florence</u> included a variety of talks, exhibitions, film screenings, guided walks, and readings. A new virtual exhibition, <u>20th-Century Art in the Library of Aldo Palazzeschi</u>, was launched, enhancing the earlier in-person exhibition held at the Humanities Library in early 2023.

#### **5.2 Museums**

The <u>University Museum System</u> (SMA) draws its identity from the University's Natural History Museum, continuing a legacy over four centuries old. SMA is responsible for preserving, promoting, and making accessible the scientific, historical-scientific, and historical-artistic collections for public and research purposes. It coordinates efforts to promote these collections in collaboration with national and international institutions and engages in educational and outreach ac-

tivities, establishing ongoing partnerships with schools of all levels for joint cultural projects, and agreements with volunteer organizations dedicated to cultural heritage protection. It also conducts research and publishes scientific and popular works.

The Natural History Museum, with its multiple locations (see Fig. 37), houses **over eight million specimens in its collections**. The Museum System also includes the **historic Villa La Quiete and Villa Galileo**, located north and south of Florence, respectively.

Through its various activities, the University Museum System plays a valued cultural, educational, and social role locally, nationally, and internationally.

The Museums of Anthropology and Ethnology and Geology and Paleontology are open six days a week, morning and afternoon. In 2023, for the first time, the Botanical Garden remained open year-round, avoiding winter closure. Villa La Quiete and Villa Galileo offered visits during specific events or by appointment with guided tours. Visitor numbers, which increased in 2022, continued to grow in 2023, reaching a total of 73,373 visitors (see Fig. 39).

Visitor demographics vary by museum: the Anthropology and Ethnology Museum and the Botanical Garden are mainly visited by adults, while the Geology and Paleontology Museum sees a significant



Struttura	Visita- tori 2022	Visita- tori 2023
Villa Galileo	631	902
Villa La Quiete	797	874
Geologia e Paleontologia	24.284	25.860
Antropologia e Etnologia	14.405	13.166
Orto Botanico	30.304	32.571
Totale SMA	70.421	73.373

Figure 39 – Visitors to the University Museum System in 2023. Source: SMA.

proportion of young visitors, often schoolchildren, with peak attendance from October to May. Approximately 90% of visitors report satisfaction with their experience, frequently returning to view the collections. **Exhibits, informational materials, and staff courtesy receive particularly high ratings**.

**School visits** to museum locations, especially at Paleontology and the Botanical Garden, have surpassed pre-pandemic levels. **Educational workshops** for schools and families were also activated, along with Easter, Christmas, and summer camps at the three public-access Natural History Museum sites.

From March 25 to July 17, 2023, the exhibition Anatomical Waxes: The Specola of Florence was held in Milan. This project, led by the Fondazione Prada, highlighted Florence's Specola Museum's unique identity, presenting its human anatomy collection in a contemporary setting. The models, created by the Museum's Ceroplastics Workshop between the 18th and 19th centuries, were creatively interpreted by director David Cronenberg in the short film Four Unloved Women, Adrift on a Purposeless Sea, Experience the Ecstasy of Dissection. Botanical specimens were selected for the exhibition Botanical Wonders: Traveling with Cook to Discover Botanical Treasures of the Southern Lands (September 14 - October 29 at the University of Ferrara's Museum System) and for the "Giovanni Stradano in Florence" exhibition at Palazzo Vecchio. Numerous other talks and seminars were organized, including the "Dialogues around Nature" book series.

2023 marked a year of substantial restoration efforts in anticipation of the reopening of the **La Specola Museum**, with significant investments made. Botanical collections (waxes, paintings, and items in other materials) and Mineralogy and Lithology collections were transferred from La Pira to the new La Specola exhibit spaces in preparation for the reopening on February 21, 2024. Nearly all Botanical works and all plaster works (busts and roundels of notable figures) were restored, along with La Specola's wooden anatomical models, including the fresco in Room 2 of the historical route and the Musacci painting. The zoological route was completely renewed, with maintenance of approximately 5,000 animals, and all display cases restored and illuminated. **Restoration work began on the historic garden of Villa La Quiete**, originally designed by the Electress Palatine, Anna Maria Luisa de' Medici, a significant project under the PNRR funding call, which **will allow public access for the first time**, showcasing its restored green areas, including the "ragnaia" and flower garden, with collections carefully chosen by the princess.

In collaboration with both public institutions and private foundations or associations, **20 projects were continued and 8 new ones launched**, ranging from public education to cultural heritage preservation and conservation. SMA curators are involved in **two European projects**: DiSSCo Transition—to build a unified European e-science infrastructure for sharing, accessing, interpreting, and analyzing complex data from natural history museum collections across Europe—and TETTRIs—focused on the taxonomy, ecology, citizen science, and educational taxonomy of specific animal and plant groups.

The Natural History Museum collections are the **focus of study and research** by curators and scholars worldwide, with entomological collections having the highest number of loan requests, followed by malacological collections, herbaria, and even Bartolomeo Bimbi's still-life paintings.

# **6 | Environment and Resources**

The concept of sustainable development is rooted in the definition introduced in 1987 by <u>Gro Harlem Brundtland</u>, chair of the World Commission on Environment and Development, in the Brundtland Report: **sustainable development** is defined as development that meets the needs of the present without compromising the ability of future generations to meet their own needs.



The needs of a community such as the University of Florence, with approximately 60,000 people (including students, administrative staff, and

faculty), lead to activities that generate a significant environmental impact, which can only be mitigated through an **integrated and progressive strategy**. The University's commitment to greater environmental sustainability is therefore realized across multiple dimensions, discussed below.

The University of Florence is part of a broad <a href="network">network</a> that includes universities, research institutes, and companies from Italy and abroad, all engaged in environmental sustainability and social responsibility. This network includes the Italian University Network for Sustainable Development (RUS), the Italian Alliance for Sustainable Development (ASVIS), the European University for Well-being (EUniWell – see § 4.5), the European University Alliance, the New European Bauhaus (NEB), and the European School of Sustainability Science and Research (ESSSR). Another important goal for the University is to encourage student participation in internal working groups and committees, as well as in organizing initiatives and activities.

The **Green Office** is responsible for raising awareness and informing the academic community, as well as strengthening national and international networks and partnerships aimed at building and consolidating productive relationships with other universities, research institutes, and companies committed to environmental sustainability. The Green Office also coordinates the network of <u>RUS</u> representatives who work within teams focused on topics such as food, waste management, mobility, energy, climate change, education, inclusion and social justice, and university-industry collaboration.

**Florence** is one of the 100 European cities selected to participate in the EU Mission for **100 climate-neutral and smart cities by 2030**—20 years ahead of the target for the 27 EU member countries. Given the significant impact that an academic community like Florence's can have on emissions within the region, the University of Florence has been included as a key stakeholder in this ambitious goal. UNIFI actively supports the "Florence for Climate" initiative by contributing to the program with activities and participating in related meetings.

Campus	Ground Floor Net Area	Refectory/Seat- ing Area/ cLois- ter/Portico Area	Parking Area	Garden Area	Green Area with Trees
Centro storico	35.664	12.056	7.030	7.916	30.057
Polo Novoli	21.427	2.055	9.461	-	-
Polo biomedico e Tecnologico	25.553	19.708	17.305	30.316	6.953
Polo scientifico	34.099	13.830	77.950	571.141	30.069
Agraria	10.587	1.080	2.085	9.529	4.120

Figure 40: Net surface area occupied by buildings and outdoor areas accessible to staff and students. Source: Green Office.

#### **6.1 Procurement Policies**

The University of Florence selects suppliers of goods and services by applying the principles of Green Public Procurement (GPP) as outlined in European directives and current national legislation (Legislative Decree 36/2023). This involves using environmental and social criteria to identify the best solutions, products, or services in terms of energy consumption, reusability, and attention to social and labor rights of individuals involved in production processes. This approach is further reinforced for procurements linked to European funds from the National Recovery and Resilience Plan (PNRR), adhering to the "do no significant harm" (DNSH) principle for environmental objectives, as established in Article 18 of the EU Recovery and Resilience Facility (Regulation EU 241/2021). Specific areas of focus include procuring interior and urban furnishings, paper, multifunction office equipment, and cleaning and sanitization services to optimize resource use.

### **6.2 Energy Consumption and CO2 Emissions**

The University's building assets consist of structures built across different historical periods, each reflecting varying levels of technological advancement and attention to sustainability. Added to this diversity is the variety of functions performed in these buildings, which often differ significantly in energy intensity (for example, laboratories compared to lecture halls or offices).

The University monitors energy resources to identify actions and interventions that could improve energy efficiency (such as building insulation, lighting, heating and cooling systems, and equipment) and increase the use of electricity and thermal energy generated from renewable sources to reduce its CO2 emissions.

For energy supply, the University mainly relies on agreements through the Regional Procurement Center, which uses CET Scrl to conduct procurement procedures for electricity, natural gas, heating fuel, and in-house planning for energy efficiency projects. Companies such as ENGIE and Estra Clima Srl also service certain University complexes (Careggi, Calenzano).

Below are the main impacts related to CO2 emissions, electricity consumption, gas consumption, and initial results of reduction efforts through efficiency improvements and new technologies, such as biomass district heating.

➤ CO₂ Emissions: Despite systemic fluctuations due to climate conditions, the University has reduced its total energy consumption (from all sources) over the past decade, resulting in a reduction of overall CO₂ emissions from 2010 to 2023 by energy source and total emissions. Electricity and natural gas account for 83% and 15% of annual energy consumption, respectively, while diesel fuel, which is more polluting, now represents less than 1% and is limited to just three heating plants.

The metric for **CO2** emissions per person (including structured personnel and grant-supported doctoral students regularly using University facilities) stands at 3.17 tons of CO2 equivalent per person, well below the national average.

The 2023 consumption data by area/building complex (see Figs. 41-42-43) confirm the **predominant weight of electricity consumption compared to gas and diesel**, especially due to summer air conditioning needs. The **most energy-intensive complexes are the Sesto Fiorentino Campus and the Morgagni Complex**, which account for 39.3% and 22.7% of total consumption, respectively. For any action aimed at reducing energy consumption to be effective, a comprehensive review and careful analysis of the management of these complexes, particularly the Sesto Fiorentino Campus, is essential.

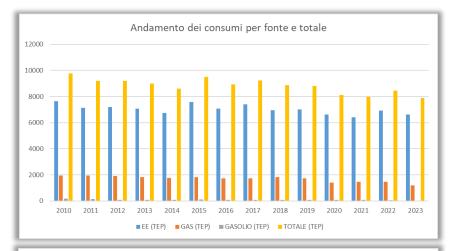


Figure 41 – Energy consumption 2010-2023 Unifi by source (transportation is included in diesel consumption). Source: Energy Manager.

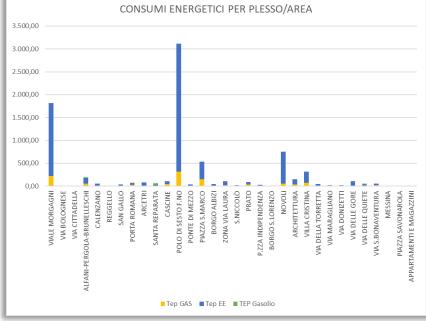


Figure 42 – 2023 energy consumption (gas, electricity, diesel) in TOE per complex/block of Unifibuildings. Source: Energy Manager.

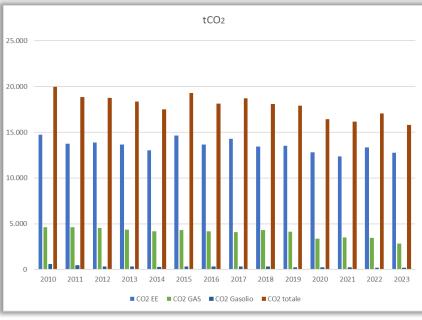


Figure 43 – 2010-2023 trend of  $tCO_2$  emissions by source and global. Source: Energy Manager.

- $\triangleright$  **Electricity:** In 2023, total electricity consumption was approximately 35.7 million kWh, down from peaks of around 40 million kWh in previous years. Monthly consumption trends highlight the impact of summer air conditioning. While electricity costs nearly halved in 2023 compared to the previous year (€7.7 million in 2023 vs. €14 million in 2022, when post-COVID recovery and the Ukraine-Russia conflict triggered an energy crisis), costs remain significantly higher than pre-pandemic levels (averaging €5.5 million from 2015-2019).
- ➤ **Gas**: Around 1.7 million cubic meters of natural gas were used, primarily to meet heating demands in winter. In energy terms (TOE Tons of Oil Equivalent), consumption dropped from 1,941 TOE in 2010 to 1,739 in 2019, down to 1,421 in 2020, and further to 1,159 in 2023 (aided by a mild season). Gas consumption from May to October is zero; however, thermal energy needs for air conditioning are met by electricity (heat pumps, electric terminals, heaters, minisplit systems) and, to a lesser extent, the trigeneration system at the University Hospital in Careggi.
- ➤ **Biomass District Heating:** In Calenzano, Estra Clima manages the Biogenera plant, a cogeneration system powered by wood biomass that produces electricity, thermal energy, and localized cooling. The district heating network, extending over 5 km, serves public facilities, schools, sports facilities, and more than 1,300 residential units, achieving over 20% savings compared to traditional heating systems. This network also supplies energy to the University's Design Campus at Via Pertini 93, Calenzano.

The ongoing update and development of measurement systems to obtain increasingly precise consumption data is essential for proposing appropriate **energy efficiency interventions** for the facilities and for optimizing system management. Analyses, supported by the digitalization of plant inventories, have highlighted opportunities for energy-saving interventions, such as advanced **lighting management systems** in various facilities, and enabled quantification of potential energy and cost savings.

Key energy efficiency projects currently underway include:

- ➤ **New Agricultural Campus**: The project involves relocating the Department of Agricultural, Food, Environmental, and Forestry Sciences (DAGRI) and the School of Agriculture to the Scientific Campus in Sesto Fiorentino (Florence). Designed to achieve nZEB (nearly Zero Energy Building) status according to Directive 2010/31/EU, the project employs components to minimize energy consumption, reduce reliance on non-renewable energy sources, and optimize water use and low-impact materials aimed at recycling and reuse. It also aims to meet the LEED® BD+C v.4 Platinum certification standard under the Campus Program Group Approach.
- > Photovoltaic Carport at the Sesto Fiorentino Scientific Campus: A 1.3 MWp installation designed to produce approximately 1,564,037 kWh annually, equivalent to 292 TOE and 565 tons of CO2 (4.2% of the University's total electricity demand).
- > Photovoltaic Installation in the Med EcoSuRe Pilot Project: Located at the Santa Verdiana university complex.
- > Photovoltaic System Design for the "CERM" Building: A planned solar installation on the flat roof of the building, producing power for 30 kWp.

Additionally, four new construction projects and two renovation projects co-financed by the Ministry of University and Research (MUR) under call 1274/2021-Line B and E will further enhance energy efficiency. These include: a new educational building at the Careggi Campus, a new lecture hall at the Sesto Fiorentino Scientific Campus, a modular building for CETECS and CRIST at the Sesto Fiorentino Campus to address research space shortages, an extension of the "Rise B" building at Sesto Fiorentino, renovations of the Santa Marta Engineering building and the former Geography building.

Further actions under consideration by the University include acquiring a Guarantee of Origin (GO) Certification for renewable energy sourced from the grid and participating in the initiative to establish a renewable energy community in Florence.

#### **6.3 Waste Management**

To combat pollution in water sources and natural habitats, careful waste management (sorting, recovery, disposal) is essential. However, it must begin with responsible and sustainable practices during the procurement phase, by streamlining purchases and prioritizing equipment that, at the end of its life cycle, can be reused, sorted, disassembled, and recycled as much as possible. In pursuit of a sustainable circular economy model, the University follows the "3 Rs" rule: reduce, reuse, and recycle.

Waste Reduction: To reduce single-use plastic and minimize the processes related to bottled water consumption, the University has installed 53 potable water **dispensers** ("Good to Drink Water") across its facilities—18 more than in 2022. An additional six dispensers will soon be installed. The quality of the water is monitored through laboratory testing. In 2023, 2,257 liters of water were dispensed (double the previous year's amount), which students, faculty, and administrative staff consume using refillable bottles (over 20,000 distributed for free by the University between 2016 and 2022), mugs, or cups, thereby avoiding plastic bottles. This has resulted in an estimated saving of about 2,257,894 single-use plastic bottles of 500 ml, equivalent to roughly 1,600 cubic meters of plastic.

The University is also working to reduce the use of single-use plastic cutlery and dishes in university cafeterias (replacing some with metal cutlery in one



Figure 44 – Total incremental consumption of water supplied by fountains and estimate of plastic avoided. Source: Green Office.

cafeteria) and encourages **sustainable catering** options that use reusable or at least compostable containers, dishes, cutlery, and cups.

Furthermore, the University is committed to proactively reducing the volume of waste and bulky items that require processing by **promoting the reuse** of surplus items, particularly in the case of **furniture**.

➤ Waste Sorting and Eco-points: special bins for plastic, paper, and glass are available across University facilities. At Ecopoints (map available), individuals can dispose of items like spray cans, expired medications, small electrical and electronic devices, used batteries, toner and cartridges, and household waste containing materials unsuitable for standard waste collection. In 2023, approximately 20% of waste generated in University buildings was nonsorted. As part of a project with high ethical, social, and environmental value—entrusted to the social cooperative II Cerro, an organization committed to reintegrating dis-

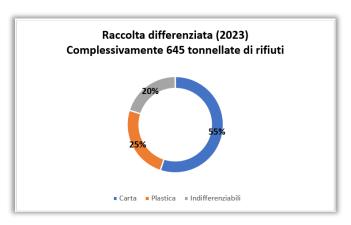


Figure 45 – Quantity in tonnes and percentage by type of waste separated by UNIFI. Source: Green Office.

advantaged individuals-23,750 kg of metal materials were sent for recovery.

➤ **Special Waste:** of the **549,576 kg** of special waste produced in 2023, **74.61%** was sent for recovery, showing a continuous increase (from 55% in 2021 to 68.59% in 2022; see Fig. 44). Waste designated for "destruction" mainly included laboratory waste, such as chemical, biological, and other types, for which recovery was not feasible. Appendix A.4 provides details on recovery potential in column D for both waste categories.

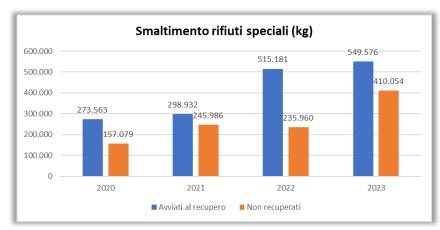


Figure 46 – Quantity in kg, type and destination of special waste produced by UNIFI. Source: Green Office.

#### **6.4 Sustainable Mobility**

At the end of 2023, the University drafted its fourth "<a href="Home-Work Travel Plan">Home-Work Travel Plan</a>" (PSCL), marking the first time this plan also included students, creating a "Home-University Travel Plan."

Travel habits for the University community (surveyed specifically for this purpose) reveal a continuing preference for private vehicles among faculty and administrative staff, while students primarily use public transportation or walk (see Fig. 47). Travel preferences are influenced by factors such as the location of University facilities (distance from home, accessibility) and the availability of "campus" parking spaces.

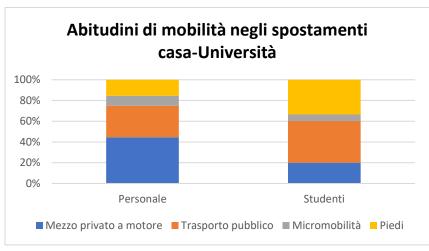


Figure 47 - Home-university travel modal split. Source: PSCL 2024.

To encourage public transportation use, the University of Florence, through an agreement with the public transportation operator, the Tuscany Region, the Municipality of Florence, and the Regional Agency for the Right to Education, offers students annual subscriptions to all city public transportation at reduced rates (approximately ¼ of the full cost), adjusted based on income. This subscription covers the entire ur-

ban bus network, including the neighboring municipalities and the Sesto Fiorentino and Calenzano Campuses. It also includes tram lines and regional trains operating within Florence. The University contributed €500,000 to support this initiative, with around 20,000 students participating.

Since April 2023, an agreement with AT allows **University staff to pay for annual subscriptions in installments via payroll**, with a 10% discount on urban passes and a 5% discount on extra-urban passes. Additionally, as of 2023, the University has signed **agreements with vehicle-sharing services** (cars and scooters), providing rental discounts.

To improve connections from Florence to the Design Campus in Calenzano, which is underserved by public transportation, the University has provided a **free shuttle service** for students, faculty, and staff. Plans are underway to build a **bicycle path** within the Sesto Fiorentino Scientific Campus, linking it to existing paths in **Sesto Fiorentino toward Florence and Campi Bisenzio**, promoting sustainable mobility.

Systematic data collection on the travel habits of the University community and the services and infrastructure at University sites (parking, pedestrian paths, etc.) has helped measure **the University's performance in sustainable mobility**. In 2023, the University received 1,250 points in the "Transportation" section of the **GreenMetric international ranking**, contributing positively to its overall score of 7,985 points.

#### 6.5 Water, Food, and Biodiversity

The campus of the Sesto Fiorentino Science and Technology Center includes a forested area, the "Park of Ideas," where trees have been replanted thanks to a donation from Salvatore Ferragamo. Near the campus lies a WWF-protected area, extending an additional 160,892 square meters. Until the new Sesto campus is completed, the Agricultural Department occupies part of the Cascine park-estate, established by Alessandro de' Medici.

One of the most pressing challenges presented by the climate crisis is the rational use, recovery, and conservation of water resources, requiring intervention choices even for existing systems. The University has adopted sustainable management practices for **irrigation in green areas**, such as a 10-cubic-meter underground cistern to **collect rainwater** from the Cold Greenhouse of the Botanical Garden. This system enables irrigation for valuable collections like tropical orchids, bromeliads, and carnivorous plants. Additionally, new departmental buildings have been designed to include rainwater collection systems.

The Botanical Garden implements various sustainability practices, particularly in the agronomic management of collections:

- ➤ **Pest and Pathogen Control**: Utilizing integrated methods for physical, chemical, and biological control, with the use of predatory and parasitic insects and microbiological treatments containing bacteria and nematodes.
- > **Weed Control**: Applying physical methods (mechanical scraping) and natural, entomologically safe chemicals (such as pelargonic acid) to manage weeds along gravel paths.
- > Reduced Mowing Frequency: Maintaining areas with flowering plants to support pollinators and beneficial insects, with **selective mowing** to protect and spread wild orchids and other flora of high conservation value.
- > **Mulching**: Finely chopped lawn clippings are redistributed on-site to enhance soil organic matter content.
- > **Soil Mulching**: Using straw, coconut fiber, and bark mulch to protect the soil, increase fertility, and reduce water loss through evaporation.

In 2023, the educational area of the **Botanical Garden's home garden** was expanded and revamped, creating five "no-dig" beds. This method eliminates soil tilling, enhancing fertility and organic matter content. The Botanical Garden also won the **INNOVA.BIO.ORT project**, funded by the Tuscany RDP. This project, involving the DAGRI and DMSC departments, the Botanical Garden, and two horticultural companies, aims to develop a simple, cost-effective, and replicable system to produce high-quality compost independently, which benefits soil fertility and the nutritional value of crops. The Botanical Garden is responsible for the project's outreach activities, with a robust calendar of educational events starting in early 2024, targeting both farmers and the general public.

The Department of Economics and Business Sciences (DISEI) is involved in a project initiated by the Regional Agency for the Right to University Study (DSU), which adds **more plant-based options** to the university cafeteria menus. The goal is to provide choices that support both health and environmental sustainability and to **calculate emissions reductions** by comparing menu supply chain emissions from 2019 onward with future trends. Preliminary results are encouraging, responding to numerous student requests for more vegetarian options. Meat consumption at the University of Florence has decreased from 83 tons in 2019 to 55 tons in 2023. Fish and seafood consumption has also declined from 24 tons in 2019 to 19 tons in 2023. The reductions in meat and fish consumption at university cafeterias have saved over 300 tons of CO<sub>2</sub>, reducing emissions from 1,715 tons in 2019 to 1,377 tons in 2023. These achievements have been recognized by the European Vegetarian Union (EVU), which, in its 2023 report on best practices in European public procurement, titled "Plant-Based Sustainable Public Procurement (SPP) – Best Practices", placed the University of Florence at the top in Italy and among the leaders in Europe.

#### 6.6 Communicating Sustainibility

To promote the reasons, methods, and objectives of sustainable action, the University carries out various **communication and engagement initiatives**. Information on these topics is shared through the Ateneo Sostenibile portal, the <u>Ateneo Sostenibile Facebook page</u>, other connected social channels (such as Unifi's <u>Instagram</u> and <u>Facebook</u>), <u>UnifiMagazine</u> (the University's online publication), and the University's newsletter.

From April 17 to 22, 2023, the University held the first edition of Unifi Green Week, an event aimed at raising awareness of issues that directly impact the future of younger generations.

During Unifi Green Week, a variety of activities-conferences, seminars, guided tours, workshops, hikes, screenings, and more—were organized to educate and engage the university community and the general public.

#### Other notable activities include:

- the hike titled "Let's Climb Together to Lake Scaffaiolo," part of the national event "Climbing for Climate 5";
- > "In the Cafeteria? Sort It Out!" conducted in collaboration with Firenze Città Circolare, featured visits to university cafeterias to explain to students, faculty, and administrative staff the importance of waste sorting and reducing food waste;
- "Greenhouse in a Greenhouse" Exhibit showcasing artworks created from beach-collected waste;
- A guided tour of the Revet recycling plant in Pontedera, where plastic packaging is processed;
- Numerous training courses on sustainability topics for both teaching and administrative staff.

**Engagement with the public** on environmental and social sustainability is encouraged during events such as the European Researchers' Night and ScienzEstate, aimed at primary, middle, and high school students. Other initiatives were organized in collaboration with student or cultural associations, notably <u>Caffè-Scienza</u>. Additionally, the <u>Green</u> **Book**, a brief online guide with tips for reducing environmental impact, is available on the website and periodically shared.

To make its commitment to environmental sustainability more visible, the University of Florence has adopted a distinctive visual identity. In the Novoli Campus (building C9), an entire wall features a mosaic of panels that provide the University community with a comprehensive view of the 2030 Agenda and the University's best practices. This in-

stallation was made using 60% recycled cardboard and printed film. Stickers have been placed in University spaces to encourage responsible use of resources, reminding users to turn off lights, close faucets, conserve water, use waste sorting stations correctly, print only when necessary, and turn off air conditioners.



17-22 aprile 2023

Figure 48 - Graphic visual identity project for the University's commitment to sustainability.

#### 7| Reclassification of the Income Statement

The Added Value (AV) represents the difference between the value of the production of goods and services and the costs incurred by individual production units for purchasing inputs from other companies. This value represents the contribution of the productive factors—capital and labor—used by the organization in "adding" value to externally sourced inputs to achieve a certain level of production. For the University of Florence's financial statements, Added Value is the wealth produced by the University, net of intermediate production costs. This is an economic-social measure as it accounts for the remuneration of the various stakeholders who contribute to the University's achievements.

The determination of AV (see Fig. 49) was performed by reclassifying values from the income statement, with two tables presented to show, respectively, its determination and distribution. The determination table shows the global added value generated by the system, with a breakdown of operational and extraordinary components. It also indicates the contribution of each component to the production value and the proportion of intermediate costs.

In the distribution table (Fig. 50), financial remuneration is shown for various stakeholder categories (students, staff, public administration, creditors, etc.). Specifically, in the case of human resources—which typically represent the largest expense for universities—the table separately shows costs associated with research and teaching personnel and those related to managerial and administrative staff.

I. Own Revenues	133.409.599,69	
II. Contributions	350.898.628,40	
V. Other Revenues and Incomes	18.758.844,20	
A) Production Value	503.067.072,29	100%
Consumed Goods	9.727.539,78	1,9%
Services	60.884.861,23	12,1%
Use of Third-Party Assets	2.232.829,80	0,4%
Provision for Risks and Charges	12.677.121,34	2,5%
Other Operating Expenses	855.130,78	0,2%
B) Intermediate Production Costs	86.377.482,94	17,2%
C) Operating Added Value (A-B)	416.689.589,35	82,8%
D) Extraordinary Income and Charges	210.165,31	0,0%
E) Total Global Added Value Created (C+D)	416.899.754,66	82,9%

Figure 49 – Statement for determining the Added Value for the year 2023.

A) Staff Remuneration	248.908.013,31	59,70%
1) Research and Teaching Personnel	188.753.397,77	45,28%
2) Managerial and Administrative Personnel	60.154.615,54	14,43%
B) Student Support	73.201.289,91	17,56%
C) Research and Publishing Costs	248.803,47	0,06%
D) Turnefere to Duciosto Doubres	22 624 224 24	
D) Transfers to Projects Partners	22.624.224,34	5,43%
E) Contributions to Organizations and Association Fees	11.138.982,13	2,67%
·		_,07 70
F) Public Administration Remuneration	16.513.447,67	3,96%
1) Direct Taxes	14.347.669,60	3,44%
2) Indirect Taxes	2.165.748,07	0,52%
G) Capital Remuneration (Net Financial Income)	842.652,78	0,20%
II) Characterial Barrers and in (Barrers intimated American)	10 676 241 06	
H) Structural Remuneration (Depreciation and Amortization)	18.676.241,86	4,48%
I) Equity Increase	24.746.099,19	5,94%
, , , , , , , , , , , , , , , , , , , ,		3,3770
J) Total Distributed Global Added Value (A+B+C+D+E)	416.899.754,66	100,00%

Figure 50 – Distribution statement of Added Value for the year 2023.

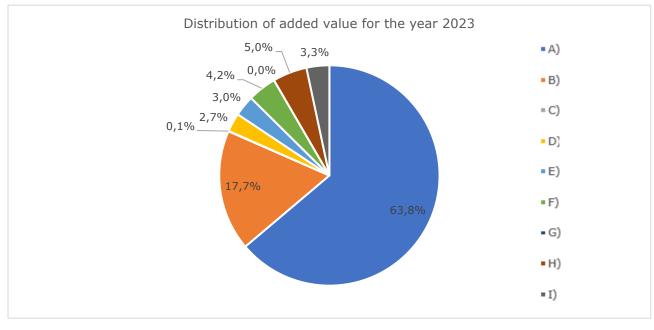


Figure 51 – Distribution of Added Value for the year 2023.

# **Appendix**

# A.1 Composition of the University Bodies as of 31/12/2023

## **Rector, Vice Rectors, and Delegates**

Rector	Alessandra Petrucci
Deputy Vice Rector with responsibility for coordinating regulatory activities	Giovanni Tarli Barbieri
Vice Rector of Research	Debora Berti
Vice Rector of Teaching, Orientation and Student Services	Ersilia Menesini
Vice Rector of Technology Transfer, Cultural Activities and Social Impact	Marco Pierini
Delegate of the valorization of the University's real estate assets and building development planning	Frida Bazzocchi
Delegate of labor relations and teaching staff planning	Luigi Burroni
Delegate of Doctorates and activities of the University Institute for Advanced Studies of the University of Florence	Stefano Cannicci
Delegate of International relations and multilateral agreements	Giorgia Giovannetti
Delegate of Legality and transparency	Erik Longo
Delegate of Budget	Enrico Marone
Delegate of Inclusion and diversity	Maria Paola Monaco
Delegate of organization of sustainable mobility initiatives (Mobility Manager)	Francesco Alberti
Delegate of Teacher Training	Francesco Ademollo
Delegate of Support to the Organization of Educational Offerings and Course Logistics	Gianni Cardini
Delegate of Job Placement	Francesco Grasso
Delegate of coordination of external relations	Donatella Lippi
Delegate of Performing arts	Teresa Megale
Delegate of educational innovation	Maria Ranieri

## **Board of Administrators**

#### **General Manager**

President	prof.ssa Alessandra Petrucci	General Manager	dott. Marco De- gli Esposti
Internal Members	prof. Marco Biffi, dott.ssa Marta Billo, prof.ssa Elisabetta Cerbai, prof. Giovanni Ferrara, prof. An- drea Lippi		
External Members	prof.ssa Roberto Ferrari, dott.ssa Gloria Manghetti, prof. Marco Mo- retti		
Student representatives	sig. Simone Zetti, sig. Giacomo Boschi		

#### **Academic Senate**

President	prof.ssa Alessandra Petrucci
Biomedical Area Representatives	prof. Francesco Annunziato, prof. Paolo Bonanni, prof. Luca Massacesi, prof.ssa Linda Vignozzi

Social Sciences Area F	Representatives			ncino, prof.ssa Irene Stolzi, rof. Roberto Bartoli
Science Area Represe	ntatives		David Caramelli, pı Fanti, prof. Grazia	rof. Duccio Fanelli, prof. Ric- no Gentili
Technology Area Repr	esentatives		Giuseppe De Luca, le Basso, prof. Fra	prof. Claudio Lubello, prof. ncesco Ferrini
Humanities and Educa	ation Area Representatives	•	Simone Magherini, Cervini, prof.ssa \	prof. Paolo Liverani, prof. Vanna Boffo
Representatives of fix	ed-term researchers	dott.s	sa Alessandra Ade	ssi, dott.ssa Daniela Marcello
Representatives of tec	chnical and administrative staff		ssa Francesca Di Co ssa Lucia Picariello	osmo, dott. Francesco Oriolo,
Student representativ	es	_		Niccolò Castellini, sig. Ric- ndro Garaffi, sig. Carlo Spa-
Assessment Unit		Boar	d of Auditors	
President	prof. Francesco Giunta		President	dott. Giovanni Natali
Internal members	prof.ssa Adelina Adinolfi, prof.ssa Giovanna Del Gobbo		MUR represen- tatives	dott. Gianluigi Cicolani (membro effettivo)
				dott. Fabio Ciampo (mem- bro supplente)
External members	prof.ssa Antonella Paolini, prof.ssa Matilde Bini, prof. Vin- cenzo Zara, prof. Marco Coccimi- glio		MEF representa- tives	dott.ssa Anita Frateschi (membro effettivo), dott. Paolo Novaselich (membro supplente)
Student representa- tives	sig. Tommaso Neri, sig. Alessio Ciarri			
			0	mbudsman
				avv. Alessandra Dapas

## **College of Department Directors**

President, Director of the Department of Agriculture, Food, Environment and Forestry DAGRI)	Simone Orlandini
Director of the Department of Experimental and Clinical Medicine (DMSC)	Francesco Annunziato
Director of the Department of Earth Sciences (DST)	Luca Bindi
Director of the Department of Education, Languages, Interculture, Literatures, and Psychology (FORLILPSI)	Vanna Boffo
Director of the Department of Health Sciences (DSS)	Paolo Bonanni
Director of the Department of Political and Social Sciences (DSPS)	Marco Bontempi
Director of the Department of Biology	David Caramelli
Department of Neuroscience, Psychology, Drug Research and Child Health (NEU-ROFARBA)	Carlo Dani
Director of the Department of Architecture (DIDA)	Giuseppe De Luca
Director of the Department of Industrial Engineering (DIEF)	Bruno Facchini
Director of the Department of Physics and Astronomy	Duccio Fanelli
Director of the Department of Biomedical, Experimental and Clinical Sciences	Andrea Galli

Director of the Department of History, Archaeology, Geography, Performing and Fine Arts (SAGAS)	Paolo Liverani
Director of the Department of Civil and Environmental Engineering (DICEA)	Claudio Lubello
Director of the Department of Economics and Management (DISEI)	Maria Elvira Mancino
Director of the Department of Humanities (DILEF)	Simone Magherini
Director of the Department of Statistics, Computer Science, Applications "G. Parenti" (DISIA)	Carla Rampichini
Director of the Department of Mathematics and Computer Science "Ulisse Dini" (DIMAI)	Luigi Barletti
Director of the Department of Legal Sciences (DSG)	Irene Stolzi
Director of the Department of Chemistry "Ugo Schiff" (DICUS)	Stefano Menichetti
Director of the Department of Information Engineering (DINFO)	Enrico Vicario

## **Technical Administrative Committee**

President	prof.ssa Paola Lucarelli
Full members	prof. Federigo Bambi, prof.ssa Chiara Rapallini, prof.ssa Marta Picchi, prof.ssa Laura Bini
Adjunt members	prof. Claudio Piferi, prof. Leonardo Casini

## **Rights Commission**

President	Alessandra Dapas
Membrers	Gabriella Caminati, Caterina Contini, Silvia Ferrini, Micaela Frulli

# **Guarantee Act Committee (CUG)**

President	Chiara Adembri
Full members admin representatives	Francesca Bucci, Irene Biemmi, Silvia D'Addario, Gia- como Massiach
Full members trade union repre- sentatives	Alessandra Pantani, Brunella Bandinelli
Alternate mem- bers admin repre- sentatives	Claudia Conti, Floriana Fabbri, Paolo Marcotti, Elena Pirani, Marta Tiezzi
Alternate mem- bers trade union representatives	Adriana Ardy

# A.2 Personnel numbers as of 31/12/2023

#### Teaching and research staff time series

Tenure	2017	2018	2019	2020	2021	2022	2023
Full Professors	389	387	371	372	384	393	384
of which full-time	365	361	346	347	358	366	359
of which fixed-term	24	26	25	25	26	27	25
Associate Professors	697	754	780	800	841	843	854
of which full-time	667	721	743	<i>759</i>	805	804	816
of which fixed-term	30	33	37	41	36	39	38
Permanent Researchers	343	261	239	184	165	126	117
of which full-time	320	244	224	173	153	116	107
of which fixed-term	23	17	15	11	12	10	10
Fixed-term Researchers	219	282	277	309	332	434	509
of which full-time	215	277	273	305	328	429	503
of which fixed-term	4	5	4	4	4	5	6
Total	1.648	1.684	1.667	1.665	1.722	1.796	1.864

Source: CSA, data as 31/12 of each year

#### Technical and administrative staff time series

Function	2017	2018	2019	2020	2021	2022	2023
Executives	10	10	10	10	10	11	12
of which fixed-term	3	3	2	2	2	3	3
Personale tecnico e amministrativo	1.526	1.477	1.463	1.448	1.465	1.436	1.521
of which fixed-term	73	69	68	38	56	<i>75</i>	93
of which permanent	1.453	1.408	1.395	1.410	1.409	1.361	1.428
of which permanent and full-time	1.195	1.171	1.183	1.207	1.225	1.208	1.281
of which permanent and part-time	258	237	212	203	184	153	147
Readers and Language Collaborators	79	79	79	77	74	70	70
of which fixed-term	-	-	-	-	-	-	-
Total	1.615	1.566	1.552	1.535	1.549	1.506	1.591

Source: CSA, data as 31/12 of each year

## Technical and administrative staff and managers by facility of affiliation and functional area

	Administrative Area			Technical Area		braries Social-He thcare Ar			Total	
	N.	%	N.	%	N.	%	N.	%	N.	%
General Administration	450	53,6	260	31,0	129	15,4	-	-	839	100,0
Departments	276	48,6	272	47,9	-	-	20	3.5	568	100,0
Schools	76	90,5	8	9,5	-	-	-	-	84	100,0

Other autonomous facilities (CLA, LENS)	15	50,0	14	46,7	1	3,3	-	-	30	100,0
Total	817	53,7	554	36,4	130	8,5	20	1,3	1.521	100,0

Source: CSA, data as 31/12 of each year

#### Technical and administrative staff and managers by contract type and age group

Type of Contract		Age Group					
	Up to 39	40 - 49	50 - 59	60 and over			
Permanent Contract	251	357	494	326	1.428		
Fixed-term	50	29		14	93		
Total	301	386	508	326	1.521		

Source: CSA, data as 31/12 of each year

## A.3 Number of students enrolled as of 31/12/2023

#### Student time series

Enrollees by study programs		F	М	Overall Total
	2020/2021	17.068	13.982	31.050
Bachelor's Degree	2021/2022	17.492	13.917	31.409
	2022/2023	18.154	14.160	32.314
	2020/2021	5.845	4.173	10.018
Master's Degree	2021/2022	5.804	4.092	9.896
	2022/2023	5.435	4.002	9.437
	2020/2021	6.626	2.971	9.597
Single-cycle Master's Degree	2021/2022	6.683	2.893	9.576
	2022/2023	6.819	2.847	9.666
	2020/2021	352	223	575
Former system (4 or 5-year degree)	2021/2022	314	200	514
	2022/2023	272	178	450

Source: University Statistics Bulletin, n. 11 of 2023

## A.4 Energy consumption and waste disposal

#### Energy consumption by complex/block for 2023

	Gas	En. El.	Diesel				
Complex/Block	(sm³)	(kWh)	(liters)	GAS TOE <sup>1</sup>	TOE EE <sup>2</sup>	Diesel fuel TOE <sup>3</sup>	Total TOEs
VIALE MORGAGNI	265.840	8.523.277	0	217,99	1.593,85	0,00	1.811,84

VIA CITTADELLA	0	35.978	0	0,00	6,73	0,00	6,73
ALFANI-PERGOLA- BRUNELLESCHI	62.380	675.639	14.570	51,15	126,34	15,74	193,23
CALENZANO	0	303.229	0	0,00	56,70	0,00	56,70
REGGELLO	0	1.705	0	0,00	0,32	0,00	0,32
SAN GALLO	15.542	118.609	0	12,74	22,18	0,00	34,92
PORTA ROMANA	36.790	219.934	0	30,17	41,13	0,00	71,30
ARCETRI	14.739	366.424	0	12,09	68,52	0,00	80,61
SANTA REPARATA	3.413	143.020	27.392	2,80	26,74	29,58	59,13
CASCINE	59.254	296.691	0	48,59	55,48	0,00	104,07
POLO DI SESTO F.NO	389.011	14.933.047	0	318,99	2.792,48	0,00	3.111,47
PONTE DI MEZZO	43	205.017	0	0,04	38,34	0,00	38,37
PIAZZA S.MARCO	187.830	2.029.750	0	154,02	379,56	0,00	533,58
BORGO ALBIZI	17.130	159.221	0	14,05	29,77	0,00	43,82
ZONA VIA LAURA	21.042	462.454	0	17,25	86,48	0,00	103,73
S.NICCOLÒ	14.187	32.832	0	11,63	6,14	0,00	17,77
PRATO	46.773	291.851	0	38,35	54,58	0,00	92,93
P.ZZA INDIPENDENZA	11.858	88.267	0	9,72	16,51	0,00	26,23
NOVOLI	68.343	3.706.898	0	56,04	693,19	0,00	749,23
ARCHITETTURA	40.654	622.424	0	33,34	116,39	0,00	149,73
VILLA CRISTINA	88.809	1.295.270	0	72,82	242,22	0,00	315,04
VIA DELLA TORRETTA	15.825	158.940	0	12,98	29,72	0,00	42,70
VIA MARAGLIANO	6.572	96.547	0	5,39	18,05	0,00	23,44
VIA DONIZETTI	4.623	66.595	0	3,79	12,45	0,00	16,24
VIA DELLE GORE	0	560.851	0	0,00	104,88	0,00	104,88
VIA DELLE QUIETE	12.056	153.950	16.211	9,89	28,79	17,51	56,18
VIA S.BONAVENTURA	26.937	191.291	0	22,09	35,77	0,00	57,86
MESSINA	0	1.430	0	0,00	0,27	0,00	0,27
APPARTAMENTI E MA- GAZZINI	3.626	4.807	0	2,97	0,90	0,00	3,87
TOTALS	1.413.278	35.745.948	58.172	1.159	6.684	63	7.906
1 3 1 705	factor 0 0000	•					

<sup>&</sup>lt;sup>1</sup> sm<sup>3</sup> to TOE conversion factor 0,00082

<sup>&</sup>lt;sup>2</sup> kWh to TOE conversion factor 0,000187

<sup>&</sup>lt;sup>3</sup> liters to TOE conversion factors 0,00108

## University energy consumption by source and related CO2 emissions (2010-2023)

Year	EE (TOE)	Gas (TOE)	Diesel (TOE)	Year Total (TOE)	CO <sub>2</sub> EE	CO <sub>2</sub> GAS	CO₂ Diesel	CO₂ total
2010	7.626	1.941	191	9.758	14.722	4.627	611	19.960
2011	7.120	1.940	145	9.205	13.745	4.625	464	18.834
2012	7.199	1.912	98	9.209	13.898	4.558	313	18.769
2013	7.077	1.829	98	9.004	13.662	4.360	313	18.336
2014	6.753	1.763	89	8.605	13.037	4.203	285	17.524
2015	7.583	1.818	103	9.504	14.638	4.334	330	19.303
2016	7.082	1.745	101	8.928	13.672	4.161	322	18.155
2017	7.405	1.725	103	9.233	14.295	4.113	329	18.736
2018	6.965	1.816	101	8.883	13.445	4.331	324	18.100
2019	7.007	1.739	76	8.822	13.528	4.145	244	17.917
2020	6.636	1.421	74	8.132	12.811	3.388	237	16.437
2021	6.415	1.477	80	7.972	12.384	3.521	257	16.162
2022	6.910	1.461	69	8.440	13.340	3.482	222	17.044
2023	6.684	1.159	63	7.906	12.904	2.763	201	15.868

## Summary of special waste sent for destruction or recovery for the year 2023

А	В	С	D	E	F	G	н
EWC code	Materials	Dange- rous/ Not Dange- rous	Class	Total materials collected in kg	Eligibility of even partial recovery	Mass of ma- terials sent for recovery kg	Percentage in- cidence to Re- covery %
010408	waste gravel and crushed rocks other than those mentioned in 01 04 07	ND	2	300	NO	0	0,00
020103	plant tissue waste	ND	2	5	NO	0	0,00
020304	waste unsuitable for consumption or processing	ND	2	50	NO	0	0,00
020304	waste unsuitable for consumption or processing	ND	4	110	NO	0	0,00
040109	waste from packaging and finishing operations	ND	2	2740	SI	2740	100,00
040222	waste from processed textile fibers	ND	2	640	SI	640	100,00
060404	waste containing mercury	D	2	20	NO	0	0,00
070513	solid waste containing dangerous substances	D	2	261	NO	0	0,00
080111	waste paint and varnish containing organic solvents or other dangerous substances	D	2	318	NO	0	0,00

080121	residual waste paints or varnish removers	D	4	15	NO	0	0,00
080317	waste printing toner containing dangerous substances	D	2	2386	SI	1154	48,37
080409	waste adhesives and sealants containing organic solvents or other dangerous substances	D	2	1053	NO	0	0,00
090101	water based developer and activator solutions	D	4	42	NO	0	0,00
090104	Fixer solutions	D	4	31	NO	0	0,00
090108	photographic paper and film, not containing silver or silver compounds	ND	2	5	NO	0	0,00
110107	Pickling bases	D	4	130	NO	0	0,00
110116	saturated or spent ion exchange resins	D	4	48	NO	0	0,00
120101	ferrous metal filings and shavings	ND	2	90	NO	0	0,00
120109	halogen-free emulsions and solutions for machinery	D	4	220	SI	220	100,00
120116	residues of sandblasting material, containing dangerous substances	D	1	120	NO	0	0,00
130205	mineral-based non-chlorinated engine, gear and lubricating discarded oils	D	4	410	NO	0	0,00
130206	synthetic engine, gear and lubricating discarded oils	D	4	195	NO	0	0,00
130208	other engine, gear, and lubrication oils	D	4	38	NO	0	0,00
140602	Other halogenated solvents and solvent mixtures	D	2	10	NO	0	0,00
140602	Other halogenated solvents and solvent mixtures	D	4	5778	NO	0	0,00
140603	other solvents and solvent mixes	D	4	5262	NO	0	0,00
150101	paper and cardboard packaging	ND	2	4163	SI	4163	100,00
150102	plastic packaging	ND	2	629	NO	0	0,00
150103	wooden packaging	ND	2	285	SI	285	100,00
150104	metallic packaging	ND	2	220	SI	170	77,27
150106	mixed material packaging	ND	2	41814	SI	41814	100,00
150107	glass packaging	ND	2	9	NO	0	0,00
150110	packaging containing residues of or contam- inated by dangerous substances	D	2	12070	SI	807	6,69
150111	Metallic packaging containing a hazardous solid porous matrix (e.g. asbestos), including empty pressure containers	D	2	33	SI	33	100,00

150202	absorbents, filter materials (including oil filters not otherwise specified), wiping cloths, protective clothing contaminated by dangerous substances	D	2	5592	SI	378	6,76
160103	end-of-life tyres	ND	2	480	SI	480	100,00
160107	oil filters	D	2	11	SI	11	100,00
160211	end-of-life equipment, containing chloro- fluorocarbons, HCFCs, HFCs	D	2	7320	SI	7320	100,00
160212	discarded equipment containing free asbestos	D	2	382	SI	382	100,00
160213	Discarded equipment containing hazardous components (1) other than those mentioned in 16 02 09 and 16 02 12	D	2	13885	SI	13885	100,00
160214	discarded equipment other than those mentioned in 16 02 09 to 16 02 13	ND	2	42417	SI	42417	100,00
160216	components removed from discarded equipment other than those mentioned in 16 02 15	ND	2	120	SI	120	100,00
160304	inorganic wastes other than those mentioned in 16 03 03	ND	2	60	NO	0	0,00
160305	organic waste containing dangerous substances	D	2	505	NO	0	0,00
160504	gases in pressure containers (including halons) containing hazardous substances	D	2	20	SI	20	100,00
160505	gases in pressure vessels other than those mentioned in 16 05 04	ND	2	34	SI	34	100,00
160506	laboratory chemicals containing or consist- ing of hazardous substances, including mix- tures of laboratory chemicals	D	2	1825	NO	0	0,00
160506	laboratory chemicals containing or consist- ing of hazardous substances, including mix- tures of laboratory chemicals	D	4	9079	NO	0	0,00
160601	lead batteries	D	2	547	SI	547	100,00
160602	nickel cadmium batteries	D	2	60	SI	60	100,00
160604	alkaline batteries (except 16 06 03)	ND	2	149	SI	149	100,00
160605	other batteries and accumulators	ND	2	404	SI	404	100,00
161001	aqueous liquid waste, containing dangerous substances	D	2	250	NO	0	0,00
161002	aqueous liquid wastes other than those mentioned in 16 10 01	ND	4	220	NO	0	0,00
170107	mixtures of cement, bricks, tiles and ceramics, other than those mentioned in 17 01 06	ND	4	14	SI	14	100,00
170201	wood	ND	2	73507	SI	73507	100,00

170202	glass	ND	2	3818	NO	0	0,00
170203	plastic	ND	2	3817	NO	0	0,00
170301	bituminous mixtures containing coal tar	D	2	560	SI	560	100,00
170402	aluminum	ND	2	23	SI	23	100,00
170405	iron and steel	ND	2	40410	SI	40410	100,00
170407	mixed metals	ND	2	60	SI	60	100,00
170411	cables other than those mentioned in 17 04 10	ND	2	110	SI	110	100,00
170503	soil and stones containing dangerous substances	D	2	1043	NO	0	0,00
170504	soil and stones other than those mentioned in 17 05 03	ND	2	2338	SI	2325	99,44
170603	other insulation materials consisting of or containing hazardous substances	D	2	847	NO	0	0,00
170604	insulation materials other than those mentioned in 17 06 01 and 17 06 03	ND	2	130	SI	130	100,00
170605	building materials containing asbestos	D	2	107	NO	0	0,00
170802	gypsum-based construction materials other than those mentioned in 17 08 01	ND	2	3227	SI	3227	100,00
170904	mixed construction and demolition waste other than that mentioned in 17 09 01, 17 09 02 and 17 09 03	ND	2	27560	SI	25880	93,90
180103	waste whose collection and disposal is subject to special requirements in order to prevent infection	D	2	41814	SI	1458	3,49
180103	waste whose collection and disposal is subject to special requirements in order to prevent infection	D	4	5889	SI	80	1,36
180106	chemical substances that are dangerous or contain dangerous substances	D	4	22	NO	0	0,00
180202	waste whose collection and disposal is sub- ject to special requirements in order to pre- vent infection	D	2	1263	SI	51	4,04
200101	paper and cardboard	ND	2	111494	SI	111494	100,00
200102	glass	ND	2	148	NO	0	0,00
200121	fluorescent tubes and other mercury-containing waste	D	2	312	SI	312	100,00
200125	edible oils and fats	ND	4	51	SI	51	100,00
200131	cytotoxic and cytostatic medicines	D	2	356	SI	356	100,00
200201	biodegradable waste	ND	2	31543	SI	31543	100,00
200307	bulky waste	ND	2	36253	SI	230	0,63
Amount of disposals carried out for hazardous and non-hazardous waste in 2023						Kg 549.576	

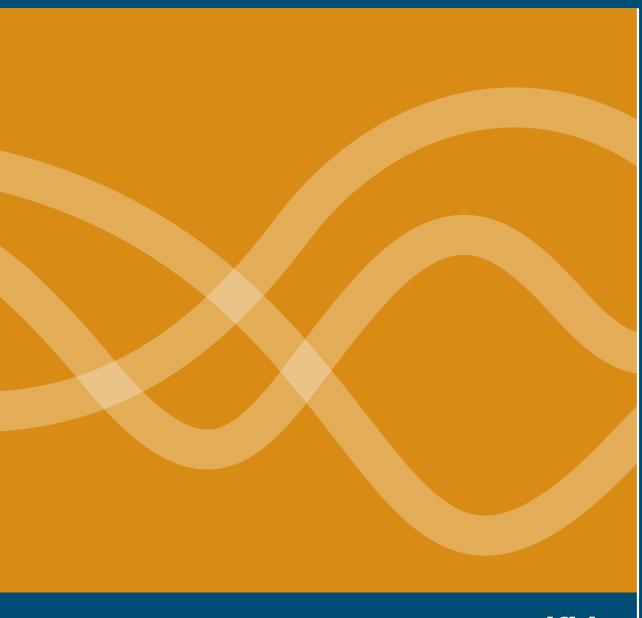
Quantity of waste sent for recovery for the year 2023	
Percentage of waste sent for reco	overy 74,61%

## Consumption of drinking water dispenser

Plant Number	Location	Consumption recorded from 01/01/2023 to 12/31/2023 (in litres)
1	Via Sansone, 6 - Sesto Fiorentino	38.569
2	Via della Pergola, 58	10.329
3	Piazza Ghiberti, 27	39.634
4	Piazza Brunelleschi, 4	65.625
5	Viale Morgagni, 67/a	30.241
6	Viale Morgagni, 59	10.352
7	Viale Morgagni, 40 P.T.	59.456
8	Viale Morgagni, 40 1°P.	93.264
9	Via Santa Marta, 3	65.160
10	Via delle Pandette, 35 – Novoli D4	44.821
11	Via delle Pandette, 21 1°P Novoli D5	19.316
12	Via delle Pandette, 9 P.T Novoli D6	50.926
13	Via delle Pandette, 2 P.T – Novoli D10	102.981
14	Via Santa Reparata, 93-95	4.555
15	Via San Gallo, 10 P.T.	10.750

16	Via Di San Bonaventura, 13	14.193
17	Piazzale delle Cascine, 18	21.184
18	Via della Torretta, 16	31.875
19	Viale Morgagni, 57	3.549
20	Largo Brambilla, 3 (viale Morgagni)	32.481
21	Via La Pira, 4	37.294
22	Piazza di San Marco, 4	26.463
23	Via Gino Capponi, 9	22.441
24	Via Laura, 48	38.061
25	Design Campus - Via Sandro Pertini, 93 Calenzano	21.488
26	Promo Design – Via Vittorio Emanuele, 32 Calenzano	6.588
27	Via Pieraccini, 6 (Careggi) - CUBO	35.072
28	DIDA – Via della Mattonaia, 8	27.174
29	SIEF - Via delle Gore, 2	5.488
30	Via della Lastruccia, 3-13 Sesto Fiorentino	27.580
31	Via Sandro Pertini, 16 – Novoli C9	20.526
32	Via P. A. Micheli, 1	7.916
33	Piazza Indipendenza, 8	9.116
34	Via P. A. Micheli, 2	15.314
35	CERM - Via Luigi Sacconi, 6 - Sesto Fiorentino	12.499

36	CTF - Via della Lastruccia, 3, via Ugo Sciff Sesto Fiorentino	12.446
37	INCUBATORE - Via Madonna del Piano, 6 Sesto Fiorentino	14.236
38	ORTOFLOROFRUTTICULTURA Via delle Idee, 30	6.030
39	CLA Via degli Alfani, 58	3.806
40	G1 FISICA NUCLEARE V. Sansone, 1	8.766
41	PALAZZO GAMBASSO Largo E. Fermi, 2	4.462
42	Via Maragliano, 71	2.920
43	LENS Via Nello Carrara, 1 – Sesto Fiorentino	7.876
44	E1 Viale Morgagni, 65	1.240
45	E2 Viale Morgagni, 63	581
46	Via San Salvi, 12	552
47	R1 AULE CITTA' METROPOLITANA	1.098
48	Viale Morgagni, 50	1.811
49	P2 CHIMICA Via della Lastruccia, 13	708
50	N.I.C. Largo Brambilla, 14 (febb. 2024)	0
51	ODONTOIATRIA Via Ponte di Mezzo, 13 (marzo 2024)	0
52	Museo della Specola (8 aprile 2024)	0
	TOTAL LITERS DISPENSED 2023	1.128.947



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