

# Fondazione Bruno Kessler's Sustainability Plan.





## Introduction

In the current context, marked by profound environmental, technological, and social changes, the climate crisis and the digital transition stand out as transformative challenges destined to rapidly and incisively redefine our future. Addressing them with responsibility and vision means recognizing not only the urgency, but also the concrete possibility of contributing to the construction of a fairer, more resilient and sustainable development model, capable of generating growth, widespread well-being and new opportunities.

In this scenario, Fondazione Bruno Kessler (FBK) - internationally recognized excellence for applied research - is called upon to play a key role: creating knowledge, experimenting with innovative solutions and stimulating change, to produce positive, lasting and tangible impacts on the social, environmental and economic levels.

Building on this awareness, we have chosen to define a clear and cross-cutting path of commitment that runs through our daily processes, strengthens the Foundation's distinctive assets, is reflected in our governance models, and is integrated into our internal welfare policies. Thus, the Foundation's first Sustainability Plan was created - the result of a shared process that brought together people, skills, and ideas, and that organically brings together the actions we intend to implement in the coming years, defined by quantifiable yet ambitious objectives.

We present it as a structured and dynamic path, aimed at continuous improvement, built on a solid foundation that is already attentive to sustainability issues. We are guided by the belief that sustainability is not a limitation but a key driver of research, innovation, and value creation for the benefit of the whole community.

*Ferruccio Resta*  
*Fondazione Bruno Kessler's President*

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# Introduction and direction to the 2025-2027 Sustainability Plan

Sustainability plays a key role in addressing the climate crisis and wisely guiding the technological revolution towards a more equitable and environmentally friendly future.

Human activity, mainly through greenhouse gas emissions, has unequivocally caused global warming, leading to an increase in global surface temperature of 1.1°C in the period 2011-2020 compared to the pre-industrial period (1850-1900) [1], consequently having significant impacts on ecosystems, societies and economies. These events require urgent action and synergy in mitigating CO2 emissions and supporting adaptation measures to ensure the transition to a responsible society.

In parallel with the challenges posed by climate change, the technological revolution – particularly through the many applications of artificial intelligence – represents a powerful means of advancing most of the targets set by the SDGs. The current pace of technological evolution could, in fact, help overcome many of the limitations that still hinder the achievement of various sustainability goals. [2]. To foster growth in this direction, Fondazione Bruno Kessler has made it its mission to tackle the challenges of the AI era with rigor, insight, and scientific depth, supporting society in managing its impact on research, business, and education. At the same time, when dealing with this issue we cannot fail to mention the impact that the diffusion of these new technologies is having, and will continue

to have, in the use of water and energy resources, with a growing carbon footprint and a “voracious appetite” for energy [3]. Therefore, an approach is needed that addresses the development and opportunities arising from scientific research and technology innovation, reducing dependence on fossil fuels and carefully considering the profound impacts on economic, environmental and social systems.

In this context, **environmental, social, and governance sustainability – commonly referred to as ESG** – represents the necessary response to today’s challenges, aligning with Europe’s strategy and commitment to future generations. In its fullest sense, sustainability goes beyond environmental protection, encompassing a concrete commitment to meet the needs of the present without compromising the ability of future generations to meet their own, while addressing environmental, social, and economic dimensions. This holistic approach acknowledges the connections between individual well-being, social equity, and ecosystem health, fostering a growth model that is inclusive, responsible, and enduring. With this in mind, the adoption of sustainable practices is essential to mitigate the negative effects of climate change and promote responsible technological development.

63

years of research and innovation projects

2 hubs

at Povo (Trento hillside) and in the heart of the city

12

research centers

7

laboratories

40.000 sqm

Campus

750+

researchers and research support staff

160+

PhD students

250+

interns

60+

Staff members’ countries of origin from EU and non-EU countries

To facilitate the rapid and effective dissemination of these practices, new reporting requirements have been introduced for companies, such as the recent European CSRD (Corporate Sustainability Reporting Directive), which imposes stricter sustainability obligations on private firms. As of 2025, sustainability becomes a central element in the agenda of the Boards of Directors, consolidating the role of the “ESG Agenda”, which in recent years has acquired increasing importance in the private sector.

Fondazione Bruno Kessler heeds this call to consider its impact on the environment and society, aiming to plan its actions toward sustainability in alignment with its mission and vision. The strategic sustainability plan is a key element to ensure the resilience and competitiveness of the organization in a constantly evolving scientific, ethical and technological context. In this context, integrating sustainable practices into organizational processes not only reduces environmental impact but also improves the efficiency of individual operations, enhances reputation, and creates long-term value for stakeholders.

**FBK embraces this commitment to sustainability principles and expresses it along two complementary trajectories.**

▶▶ **An outward trajectory**, the most relevant, is linked to the impact that the Foundation, through the results of its research and technology innovation, brings to sustainability. In this context, FBK’s true strength in addressing today’s challenges lies in developing technical solutions, knowledge, and skills that are not only applied internally but also generate positive impacts for society. In this context, the Foundation’s Sustainability Plan is part of the initiatives set out in the FBK 2024-2027 Strategic Plan. It serves as the tool that translates the Foundation’s mission into concrete objectives and focused strategic directives, integrated within the broader landscape of national and global policies. The Strategic Plan, therefore, lays out an execution framework closely tied to sustainability and structured **around the ESG goals, which serve as concrete strategic directions guiding research, innovation, and problem-solving efforts in service of people and communities.**

▶▶ **An internal course of action** focused on refining processes and initiatives that ensure sustainability in the use of large infrastructures and in the organization of the Foundation’s activities.

With the goal of aligning objectives and improvement actions across both trajectories, the Foundation has developed its first Sustainability Plan for the 2025–2027 period.

2025-2027 Strategic Plan Actions

Environmental
Research and innovation for natural resources
Expertise on environmental crises and disasters
Industrial systems for circular economy
Advanced systems for applied research in space

Social
A digital and sustainable health care
A green transition that puts the citizen at the center
The impact of the introduction of innovative technologies on the quality of life of workers
A more resilient, inclusive, and secure society
Ethical, philosophical and historical reflections on AI

Governance
Leveraging artificial intelligence as a tool for financial sustainability
The quantum revolution
A plan to recruit and attract talent
Responsibility towards the local communities

# Vision and objectives of the Sustainability Plan

A Sustainability Plan is a structured framework of objectives and actions designed to ensure a sustainable future for key activities and infrastructures, in line with the mission of Fondazione Bruno Kessler.

The Sustainability Plan is a strategic document that defines the objectives, actions and measures that FBK intends to adopt to integrate environmental, social and economic sustainability into its activities. It is therefore a strategic tool to align institutional governance with the principles of ESG.

The following Plan has been developed within the implementation period of the FBK Strategic Plan and therefore follows its timeline, defining objectives and actions to be carried out from 2025 to 2027.

The structure of the Sustainability Plan is built around five key pillars aligned with ESG – environmental, social, and governance – principles and extends its scope to two additional areas that are essential to the Foundation and ensure comprehensive sustainability: research and innovation, and data security and digital infrastructures.

## Research and Innovation (R)

The **Research and Innovation Pillar** lies at the heart of the Foundation's activities. It centers on research as a cornerstone for developing sustainable solutions, creating new value and well-being for future generations, and addressing pressing challenges and emergencies by delivering solutions that do not yet exist or are not yet available. This pillar encompasses four themes focused primarily on monitoring the impact and enhancing the value of research, each developed around key stakeholder groups: universities and research centers, the corporate sector, public administrations providing services to local communities, the broader ecosystem of public bodies and local organizations, as well as policymakers and the local, national, and European platforms in which they participate.

## Resources and the Environment (E)

The **Resources and Environment Pillar** forms the cornerstone of the Sustainability Plan, characterizing this document through actions targeting waste management, resource optimisation, the promotion of sustainable mobility, and the awareness-raising of the community of employees and researchers who drive the Foundation.

## People (S)

The **People Pillar** is based on the centrality of the individual and on the promotion of an inclusive, equitable and stimulating environment. Among its key points, it includes the transmission of the values of the Sustainability Plan to strengthen the awareness and alignment of the Foundation's entire community of employees and scholars with the institutional mission. It promotes the adoption of additional services and infrastructures to improve the quality of life, work-life balance, and organizational efficiency, further supporting the work organization model implemented that underlines the importance of physical and mental well-being, the work environment and the green transition. The pillar contains objectives and concrete actions to enhance all people, promote equal opportunities, reduce gender inequalities and counteract all forms of discrimination. Finally, it strengthens the links between school, university and research through innovative training programs and opportunities for growth in research and innovation contexts.



## ■ Governance (G)

The **Governance** Pillar reports on all objectives and actions aimed at strengthening a transparent, responsible and participatory organizational culture – one that effectively guides sustainability initiatives. It brings together meaningful actions to ensure strategic alignment between sustainability objectives and institutional decisions, integrating environmental, social and governance (ESG) criteria into internal planning and management processes – including the code of ethics, procurement policies, partnership development guidelines, research monitoring and evaluation procedures, and communication strategies.

## ■ Data and digital infrastructure security (D)

Usually, when addressing sustainability issues, we think of waste management, decarbonization and environmental legislation, while cybersecurity and the management of digital infrastructures are often overlooked. In reality, the security of an organization's data and infrastructure is a vital ally for sustainability, which often takes a back seat, while remaining central to the technological revolution. For this reason, the following Plan structures topics, objectives and actions within a Pillar dedicated to **Data Security and Digital Infrastructures** in order to consider an integrated strategy for sustainable digital innovation, aimed at enhancing infrastructures and technological systems while ensuring maximum IT security, resilience, flexibility and energy efficiency.

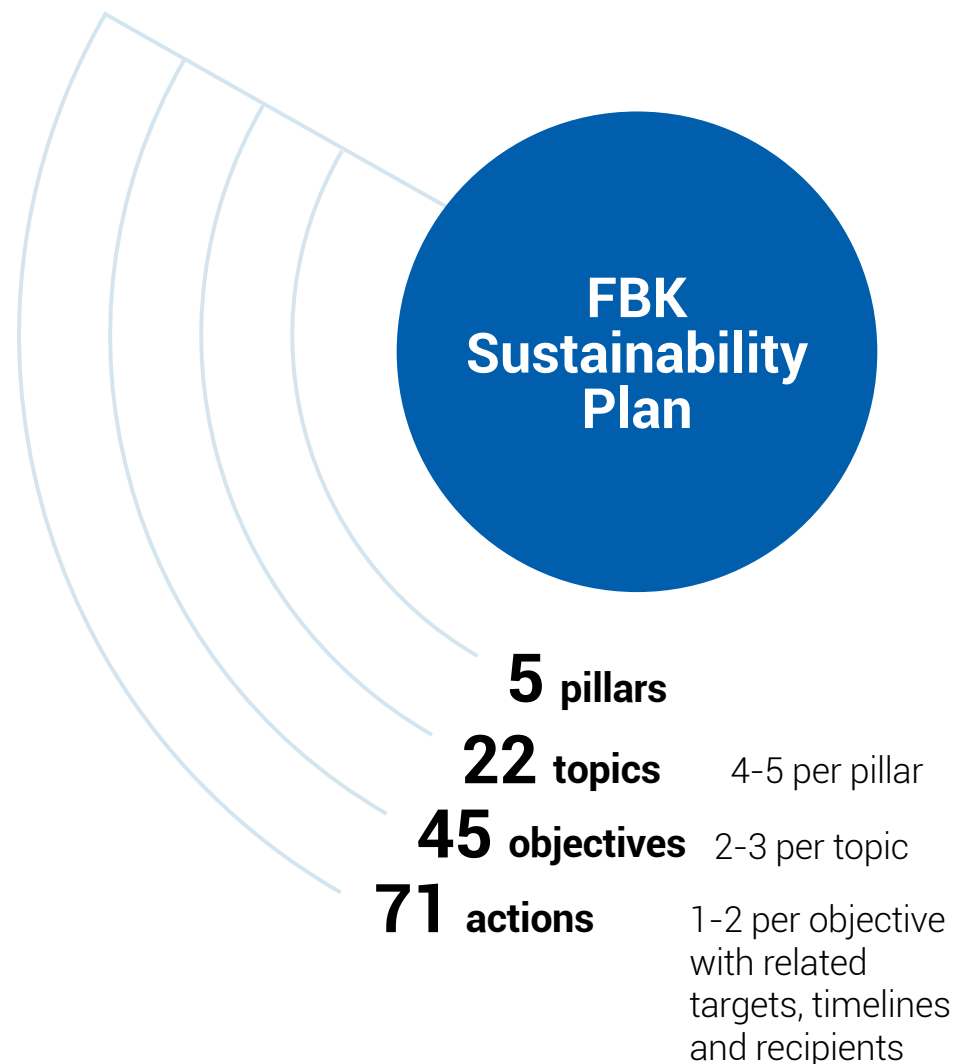


## How the Plan dashboard is developed and read

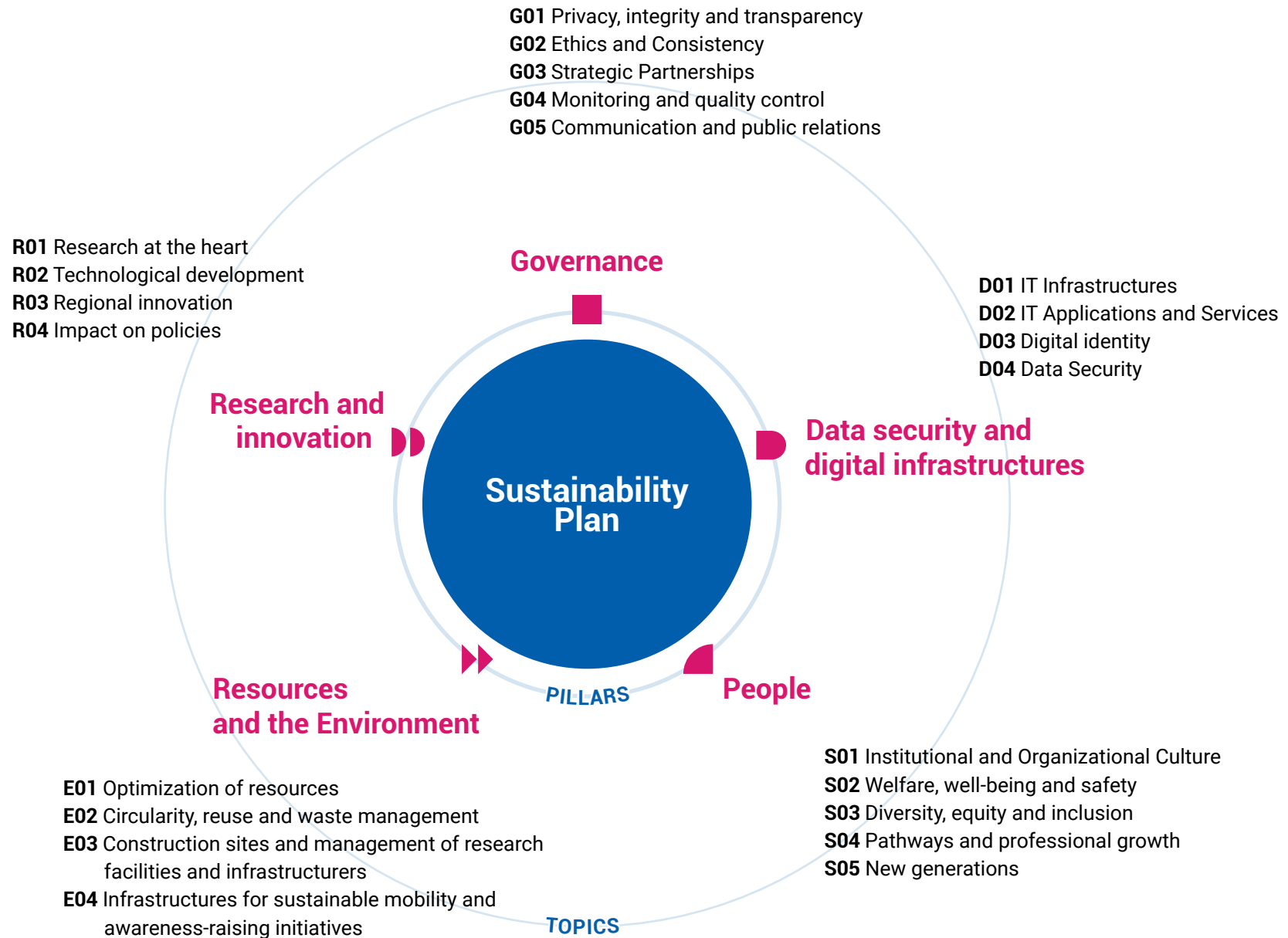
As structuring elements of the Plan as a whole, each pillar is divided into 4 or 5 topics, which are then developed into objectives to be achieved and concrete actions to be implemented over the three-year period 2025–2027.

Each specific action is then paired with clear indicators for monitoring success, defined targets to achieve, timelines and recipients – ensuring transparent tracking of progress. Within the Foundation’s internal processes, each action is assigned a responsibility matrix that specifies who is entrusted with its implementation. The following pages present Pillars and topics, while each table of objectives and actions is preceded by a brief summary of what was implemented in FBK until the beginning of 2025 to give a picture of the state of the art on the individual theme.

In addition, the Plan aligns with an international framework by mapping each topic to the United Nations Sustainable Development Goals (SDGs), thus ensuring reference to global targets and a holistic view of sustainability.







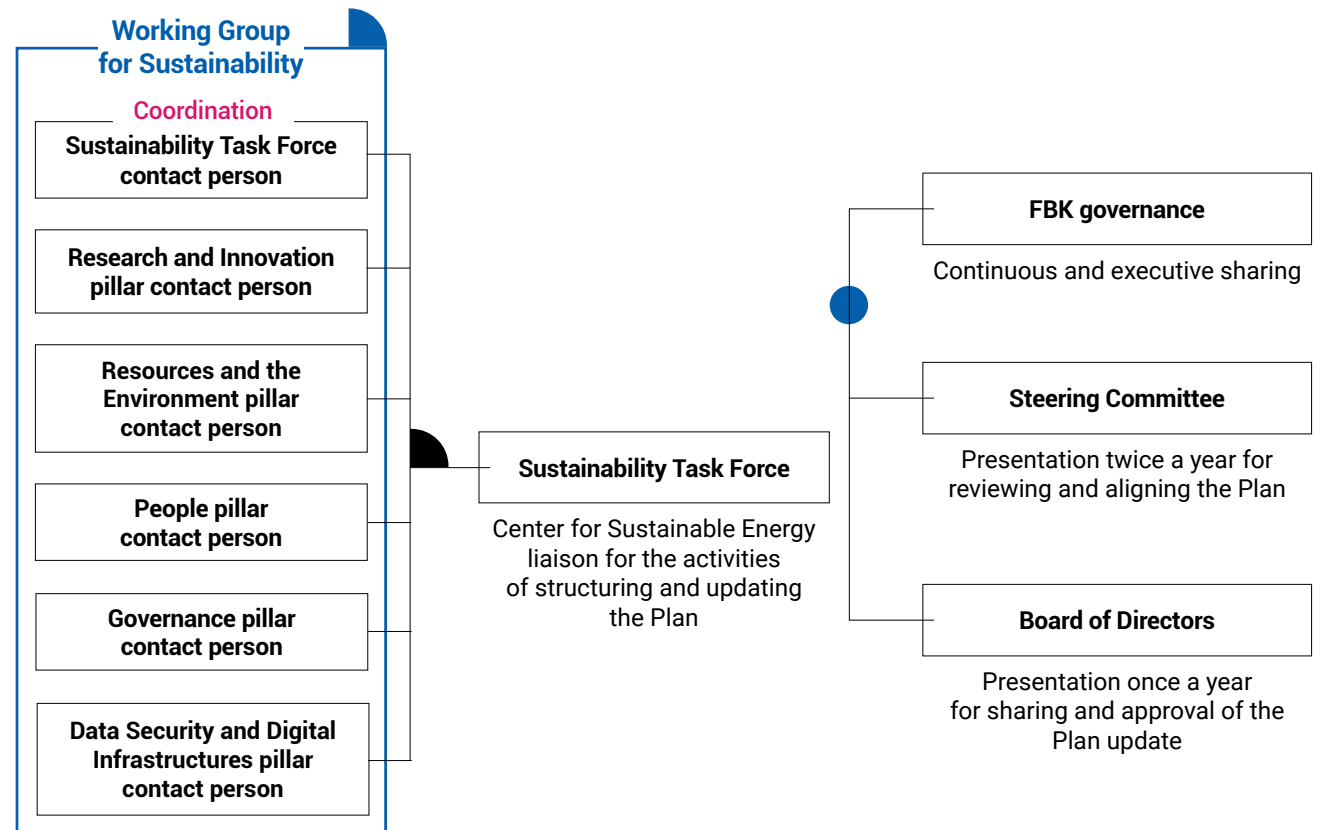
# Sustainability Roadmap

Identifying priorities and directing resources toward key sustainability issues requires a steering group that oversees the definition of a comprehensive, synergistic program capable of ensuring coherence across all actions.

The development of this first Plan is a step in this direction – where actions with the aim of improving sustainability, well-being, safety and the value of research have often been key for FBK but not synergistically developed. The development of the Plan revealed that a structure for coordination and discussion on sustainability was missing – even though actions had been carried out across all the areas addressed. Defining the Plan has therefore initiated an internal reflection on structuring an organizational framework to oversee and monitor sustainability actions.

One of the first strategic actions launched alongside this Plan was the establishment of a sustainability governance for the Foundation, proposing a “Working Group for Sustainability” – a connecting forum between the pillar leads – and a Sustainability Task Force, an operational team that links both with the leadership board and with the broader governance. A working group that supports the strategic direction of the Foundation by developing more forward-looking, effective and cohesive sustainability policies.

## Sustainability governance framework



# RDD

Research  
and Innovation







## Research and Innovation Pillar (R)

### R01 Research at the heart

Research is at the heart of Fondazione Bruno Kessler's mission and activity and represents the most influential tool to face the great transformative challenges of our time, identified in the 2024-2027 Strategic Plan in: climate change, demographic dynamics and digitalization. Climate change is redefining priorities and scenarios daily and urgently, requiring timely, innovative and multidisciplinary solutions to develop mitigation and adaptation strategies. At the same time, the continuous expansion of artificial intelligence requires FBK to commit to governing its impacts with quality, wisdom and scientific rigor. In this context, research cannot be limited to understanding phenomena and trends, but must generate knowledge, develop predictive models, and translate into applicable, accessible, and scalable technologies.

Fondazione Bruno Kessler (FBK) is actively engaged in these domains, with a sphere of action that intersects sustainability from multiple angles—environmental, social and governance—and spans the expertise of all its research groups. Numerous centres work on advanced solutions to address decarbonization and climate-related challenges, integrating knowledge and technology to build a more resilient and sustainable future. Fondazione Bruno Kessler's contribution can be viewed in two directions: a vertical one, through the development of specific sustainable technologies aimed at achieving adaptation and/or mitigation objectives effectively, rapidly, with lower resource use and via innovative processes, and in a second direc-

tion, it acts horizontally by providing enabling tools — such as AI, digital platforms and bespoke innovations — that bring sustainability into the common domain, creating business and economic development opportunities. This last direction is addressed in the next section, *"Technological development"*.

The contribution of research therefore becomes a cornerstone for the development of solutions that look at sustainability, create new value and well-being for future generations, solve priority problems of various kinds, and bring solutions that do not exist or are not yet available.

Among the various application areas of research, FBK contributes to the energy transition, developing and promoting low-carbon and zero-emission solutions for the production, distribution and storage of energy, minimizing environmental impacts and contributing to the decarbonization of society. In the coming years, the commitment to the development of the entire hydrogen and battery supply chain will be intensified, addressing key aspects such as innovative materials, production, integration with energy networks, storage, safety, distribution and end use.

At the same time, FBK also focuses its efforts on the development and application of AI and digital technologies in different areas. Among these, research dedicated to agriculture is constantly evolving through the development of decision support systems for preci-





sion agriculture and the implementation of resource optimization processes capable of improving the yield and sustainability of agricultural practices. Research advancement also encompasses the development of digital tools, computational and sensor models applicable to mobility and urban traffic studies, environmental monitoring, nowcasting for weather forecasting and activation of warning systems, radiation mapping for estimating electrical manufacturability, and numerous other applications dedicated to environmental sustainability.

At the same time, research also focuses on environmental history and the relationship between humans and nature, examining how societal changes have affected the environment and climate.

In addition to research on environmental protection, monitoring, and the transition to a zero-carbon society, FBK also aims to strengthen the other two ESG dimensions — social impact and governance. This is done through studies dedicated to the health and well-being of people, the transmission and control of infectious diseases and through research focused on the evaluation of public policies, which, in a dynamic context such as the current one, where numerous measures concerning sustainability are implemented, is key in the field whether the policies designed to achieve a given goal actually succeed in doing so.

Alongside research with applications aimed at promoting the different areas of sustainability, FBK is also committed to researching cutting-edge issues that will impact the entire society. The imminent quantum revolution will transform computing, sensing, communication, and digital security, while artificial intelligence will play a crucial role in advancing many key application areas related to sustainability, thereby opening new discussions on the role of ethics.

The research conducted by FBK aims to contribute to the development of a resilient and caring society both to mitigate its impact on the environment and to improve citizens' quality of life. By aligning its activities with these objectives, FBK is committed to further expanding applied research in the field of sustainability over the coming years, with particular attention to ESG issues and climate change. For the effective achievement of these objectives, however, it is necessary to start from the monitoring of the state of the art and it is in this area that objectives and actions to be completed have been developed.

## R01 Objectives and Actions covered in the 2025-2027 Plan

Objective	Action	Implementation details
Increase the number of scientific publications on sustainability issues	<b>R01A1</b> Monitoring of the rate of publications on sustainability	<b>INDICATORS:</b> No. of publications on sustainability <b>TARGET:</b> a) Implementation of monitoring b) Subsequent increase in the share of publications (% of total) following monitoring <b>TIMELINE:</b> 2025 (definition of indicators) 2026 (implementation of monitoring) 2027 (target implementation) <b>RECIPIENTS:</b> All research staff (>>internal) Universities and Research Centers (>>external)
	<b>R01A2</b> Raise awareness among researchers through guidelines	<b>TARGET:</b> a) Identification of awareness degree of FBK's research community b) Publication of internal guidelines <b>TIMELINE:</b> 2025 (degree of awareness) 2026 (publication of guidelines) 2027 (implementation of targets) <b>RECIPIENTS:</b> All research staff (>>internal) Universities and Research Centers (>>external)
Increase the rate of research funding on sustainability issues	<b>R01B1</b> Monitoring of the rate of funding earmarked for sustainability research in total	<b>TARGET:</b> a) Implementation of monitoring b) Subsequent increase in project funding rate (% of total, defined following monitoring) <b>TIMELINE:</b> 2025 (definition of indicators) 2026 (implementation of monitoring) 2027 (target implementation) <b>RECIPIENTS:</b> Center Directors (>>internal) Universities and Research Centers (>>external)
	<b>R01B2</b> Development of a research and technology development strategy on sustainability issues (governance guidance document)	<b>TARGET:</b> Inclusion of 1 strategic direction per Research Center <b>TIMELINE:</b> 2026-2027 <b>RECIPIENTS:</b> Center Directors (>>internal) Universities and Research Centers (>>external)





## Research and Innovation Pillar (R)

### R02 Technological development

The Foundation's commitment to promoting technological development translates into the creation of innovative solutions capable of generating a concrete impact on society and responding with excellence in research and innovation to current challenges. Indeed, technological advancement has become a central driver of change in this century, influencing and re-shaping economies, governments, and the fabric of communities [4]. To achieve society's decarbonization, it has been estimated that technologies not yet on the market will account for about half of the reductions in global emissions [5].

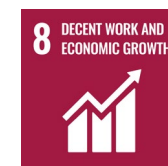
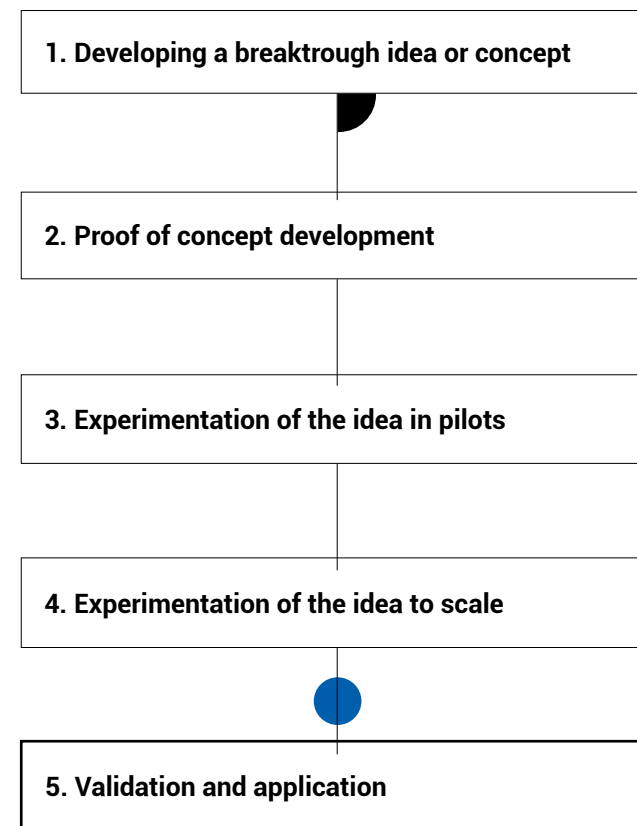
Research conducted at FBK is not limited to expanding scientific knowledge, but aims to transform results into practical, accessible, and scalable applications. In fact, the Foundation's approach is based on interdependence and a strong connection with the industrial system. This convergence is crucial to positioning FBK as a "one-stop shop" for innovation – a hub where ideas can be developed from initial conception and design through to experimentation and real-world implementation. This ability to create concrete solutions promotes sustainable, responsible and socially impact-oriented innovation. Continuing along this path, the Foundation combines two complementary research approaches: a pull approach, focused on improving existing technologies to meet practical needs in collaboration with industry, and a push approach, aimed at generating exploratory knowledge.

Through both approaches, FBK develops innovative technologies, making them available for both scientific and commercial purposes to external actors. By the end of 2024, the Foundation held 61 patents, essential for protecting intellectual property and enhancing the economic value of its research results.

Over the years, it has promoted the creation of joint laboratories in collaboration with companies, consolidating an open and collaborative innovation model. There are 17 co-located companies and 3 companies housed on a loan-for-use basis in the FBK research-business ecosystem as of 2025. This synergy allows companies to access frontier competencies and develop solutions to address current challenges. FBK is therefore a strategic partner for companies, contributing to the identification of new development opportunities and the enhancement of research results through shared innovation paths. In parallel, to foster technological innovation in the market, researchers are supported in creating spin-off companies that help transfer the results generated by FBK's research and the know-how acquired in the field of technological innovation.

A recent initiative in this direction is the Proof of Concept (PoC) program, which, through an internal call, aims to support innovative ideas and solutions in the research and development process, financing targeted activities to support them along the path from

### One-Stop-Shop



scientific research to innovative implementation, expressed through patents, spin-offs, and other forms of intellectual property (IP) valorization.

To promote technological development and its applications for society, this Plan defines the objectives and actions to be achieved by 2027. These are mainly focused on monitoring the technologies produced with the contribution of FBK in support of the ecological transition. This first step will be critical to define improvement targets in the coming years that can direct future progress.



## R02 Objectives and Actions covered in the 2025-2027

Objective	Action	Implementation details
Provide a contribution to the development of sustainable technologies and/or tools for the market	<b>R02A1</b> Identification of the number of technologies and/or tools related to sustainability (developed with the contribution of FBK)	<b>INDICATORS:</b> TRL/MRL/other of the technologies and/or tools related to sustainability <b>TARGET:</b> Implementation of the monitoring/study on the available technologies <b>TIMELINE:</b> 2025 (definition of monitoring tools) 2026 (monitoring and changes) <b>RECIPIENTS:</b> Center Directors, all research staff (>>internal) Corporate, PA and local services (>>external)
	<b>R02A2</b> Quantify the impact of improvement on the above projects, based on indicators of technological maturity such as TRL, MRL, etc.	<b>INDICATORS:</b> Total sum of the changes in progress on TRL/MRL/other of the technologies and/or tools related to sustainability <b>TARGET:</b> Implementation of monitoring <b>TIMELINE:</b> 2026-2027 (monitoring and changes) <b>RECIPIENTS:</b> Center Directors, all research staff (>>internal) Corporate, PA and local services (>>external)
Increase FBK's impact in technology and service development	<b>R02B1</b> Increase in number of projects related to technology development and tools in the field of sustainability	<b>INDICATORS:</b> No. of projects for technological tools in the field of sustainability <b>TARGET:</b> rate increase (% of total projects) <b>TIMELINE:</b> 2026-2027 <b>RECIPIENTS:</b> Center Directors (>>internal) Corporate, PA and local services (>>external)
	<b>R02B2</b> Development of a research and technology development strategy on sustainability issues (governance guidance document)	<b>TARGET:</b> Inclusion of 1 strategic direction per Research Center <b>TIMELINE:</b> 2026-2027 <b>RECIPIENTS:</b> Center Directors (>>internal) Universities and Research Centers (>>external)





## Research and Innovation Pillar (R)

### R03 Regional innovation

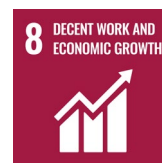
Fondazione Bruno Kessler plays a key role in strengthening the ecosystem of innovation in our regional territory, standing out for its ability to experiment and promote change. The development of solutions that address local challenges also takes place through exchange with universities, research centers, scientific organizations, public administrations, and regional companies, with which FBK collaborates on strategic topics such as service digitalization, security, environmental sustainability, and emergency management. The sharing of knowledge and skills is therefore aimed at supporting and promoting the specific features of the local area. This collaborative approach with stakeholders ensures that research is in line with the needs and challenges of the local communities, which facilitates the application of research results.

FBK promotes local innovation through participation in living labs and joint laboratories with local companies, experimentation spaces where new technologies and innovative models are tested and adapted to meet local needs. In relation to ESG issues, the TESS Lab strategic project is scheduled to begin in 2025. This joint center of excellence — established by the Autonomous Province of Trento, Trentino Sviluppo, the University of Trento, and Fondazione Bruno Kessler — will provide a cutting-edge technological platform and laboratories for industrial research in the areas of future energy, sustainable development, and quality of life.

FBK is also a strategic partner for public administrations, contributing to the implementation of large projects that can improve the quality of life of citizens. These concern aspects related to health and access to health services, the application of artificial intelligence to the public administration to digitize and streamline its work and collaboration on various areas related to sustainability, including decarbonization and agriculture.

In addition to applied research, the Foundation promotes a culture of innovation in the region through scientific outreach, fostering open exchange between research and society. This commitment translates into initiatives that introduce citizens, students, and professionals to the topics of digital transformation and sustainable development, with the goal of making innovation a key driver of the community's economic and social growth, as well as of the local business ecosystem.

To continue to bring innovation to the local area, maintaining a leading role, FBK has developed in this Plan objectives and actions to be completed by 2027.



## R03 Objectives and Actions covered in the 2025-2027

Objective	Action	Implementation details
<b>To support the Trentino area ecosystem (universities, research centers, scientific organizations, industries and local communities) in exploring synergies and promoting joint collaboration initiatives on strategic issues related to sustainable development</b>	<b>R03A1</b> Development of joint territorial laboratories with companies	<b>TARGET:</b> 3 new joint labs with companies <b>TIMELINE:</b> 2025-2026-2027 <b>RECIPIENTS:</b> Center Directors (>>internal) Local ecosystem of PA entities, organizations and stakeholders of the Trentino area and/or other areas (>>external)
	<b>R03A2</b> Participation in large projects with the Public Administration	<b>TARGET:</b> 4 new digital platforms <b>TIMELINE:</b> 2025-2026-2027 <b>RECIPIENTS:</b> Center Directors (>>internal) Local ecosystem of PA entities, organizations and stakeholders of the Trentino area and/or other areas (>>external)



## Research and Innovation Pillar (R)

### R04 Impact on policies

FBK recognizes the importance of constant exchange with institutions and policy makers to actively contribute to support the development of policies based on scientific evidence. All the Foundation's Research Centers are committed to promoting this approach, through institutional support for development and innovation, with different focuses, from local to international, and verticality, in accordance with the four main areas of research: AI for Society, AI for Health, AI for Industry and Sensors for AI. Nevertheless, FBK has a Center entirely dedicated to the analysis and evaluation of public policies and programs.

Following this direction, the Foundation is committed to strengthening the participation of its governance, scientific management and spokespersons in important national and international events, as well as strategic regional events, even outside the Trentino context. This commitment translates into a constant activity of participation in strategic panels, aimed at strengthening the visibility of research and increasing the impact of its skills in the political and economic context, for the benefit of society as a whole.

Researchers, directors and the governance of FBK have over the years taken part in several local roundtables such as, by way of example but certainly not limited to: participation in the tables of the scientific committee of the Trentino 2030 Strategy towards the

development of the Strategy for adaptation and mitigation of climate change of the Autonomous Province of Trento; the working group dedicated to the development of the Environmental Energy Plan of the Provinces of Trento; the thematic tables of the Intelligent Specialization Strategy (S3) of Trentino; as well as the inter-institutional table for the prevention and contrast of the phenomenon of gender violence in the Province of Trento. At the same time, FBK contributes to major national and international bodies, such as the Italian Alliance for Sustainable Development (ASviS), of which it has been a member since 2017; it also takes part in the governance of the Italian Hydrogen Association (H2IT) and Hydrogen Europe Research, and collaborates with other partnerships such as the Batteries European Partnership Association (BEPA). In addition, FBK supports the definition of Italian policies for the hydrogen sector through contributions to the relevant ministries (primarily MASE, MIMIT, and MIT), including input to the Italian Hydrogen Strategy and participation in working groups focused on developing key research areas for future European projects.

By participating in research projects of European and national relevance and developing specific skills and knowledge in those areas, FBK contributes to providing policy recommendations, thus supporting decision-makers in the implementation of new strategies dedicated to innovation and sustainable development.







The Foundation's mission is to transfer knowledge and tangible solutions to institutions, supporting the definition of effective strategies in crucial areas such as digital transformation, security, environmental sustainability and emergency management. Therefore, maintaining coordinated oversight of participation in these bodies and the commitment to developing policy recommendations plays a crucial role in assessing the impact already achieved and identifying opportunities to further strengthen engagement in local, national, and European policies. To achieve this goal, specific objectives and actions have been defined in the Plan to be completed by 2027.

## R04 Objectives and Actions covered in the 2025-2027

Objective	Action	Implementation details
Provide a contribution to local/national green transition policies	<b>R04A1</b> Participation in policy-making through involvement in strategic panels and related networks to support the development of local and national policies	<b>INDICATORS:</b> No. of panels attended <b>TARGET:</b> Monitoring participation in policy-making panels and networks <b>TIMELINE:</b> 2025 (definition of indicators) 2026 (baseline monitoring) 2027 (monitoring) <b>RECIPIENTS:</b> Center Directors, all research staff (>>internal) Local and national panels (>>external)
	<b>R04A2</b> Drafting of local and national policy recommendations on sustainability issues	<b>INDICATORS:</b> No. of local/national policies supported, No. of recommendations provided through projects <b>TIMELINE:</b> 2025 (definition of indicators) 2026 (baseline monitoring) 2027 (monitoring) <b>RECIPIENTS:</b> Center Directors, all research staff (>>internal) Local and national panels (>>external)
	<b>R04A3</b> Inform and contribute to local and national policies leveraging research results	<b>INDICATORS:</b> No. of local/national policies supported, No. of recommendations provided through projects <b>TIMELINE:</b> 2025 (definition of indicators) 2026 (baseline monitoring) 2027 (monitoring) <b>RECIPIENTS:</b> Center Directors, all research staff (>>internal) Local and national panels (>>external)

## R04 Objectives and Actions covered in the 2025-2027 Plan

Objective	Action	Implementation details
Provide a contribution to European/ International green transition policies	<b>R04B1</b> Participation in policy-making through involvement in strategic panels and related networks to support the development of European and international policies	<b>INDICATORS:</b> No. of panels attended <b>TARGET:</b> Monitoring participation in policy-making panels and networks <b>TIMELINE:</b> 2025 (definition of indicators) 2026 (baseline monitoring) 2027 (monitoring) <b>RECIPIENTS:</b> Center Directors, all research staff (>>internal) Local and national panels (>>external)
	<b>R04B2</b> Drafting of European and international policy recommendations on sustainability issues	<b>INDICATORS:</b> No. of European and international policies contributed to No. of recommendations provided through projects <b>TIMELINE:</b> 2025 (definition of indicators) 2026 (baseline monitoring) 2027 (monitoring) <b>RECIPIENTS:</b> Center Directors, all research staff (>>internal) Local and national panels (>>external)
	<b>R04B3</b> Inform and contribute to European and international policies using research results	<b>INDICATORS:</b> No. of European and international policies contributed to No. of recommendations provided through projects <b>TIMELINE:</b> 2025 (definition of indicators) 2026 (baseline monitoring) 2027 (monitoring) <b>RECIPIENTS:</b> Center Directors, all research staff (>>internal) Local and national panels (>>external)





## Resources and the Environment





## Resources and the Environment Pillar (E)

### E01 Optimization of resources:

#### energy and reduction in consumption, emissions and water

For over a decade, Fondazione Bruno Kessler has pursued a structured strategy to optimize resources and reduce consumption, which began in 2010 with the resolution “Reduction of Energy Consumption.” Thanks to the implementation of more than 80 energy efficiency measures, FBK has established itself as a leading model in energy management, reaffirming its commitment to the ecological transition. Some examples are the recent works to replace the thermal and cooling power plant in the Villa Tambosi building and the thermal power plant in Via della Cascata, together with a further expansion of the photovoltaic system in the latter complex.

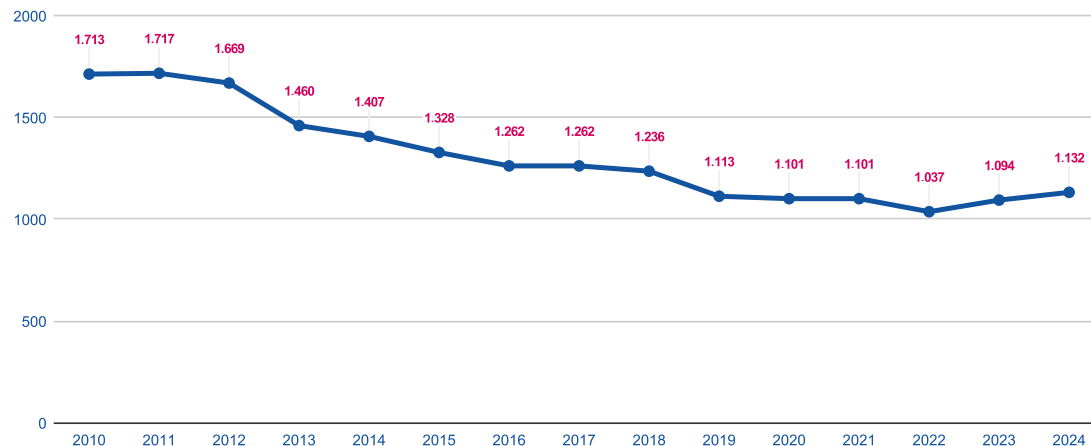
To ensure increasingly efficient use of resources, the Foundation has adopted an advanced Energy Management System for the overall monitoring of its buildings, along with Building Energy Management Systems (BEMS) to optimize the real-time consumption of key technological systems. These integrate control sensors and dedicated software to monitor energy consumption in real time, allowing immediate action in the event of a technical failure and minimizing the impact of system malfunctions. Through the analysis of the data collected, it is possible to identify areas for improvement and adopt targeted strategies to optimize energy use, reducing waste and CO<sub>2</sub> emissions. In addition, this monitoring also makes it possible to optimize the internal environmental parameters of the Foundation’s spaces.

Thanks to the measures implemented over the years to improve energy efficiency and monitor consumption, the Foundation has achieved a significant reduction in overall energy use, as shown in Graph 1, which takes into account both methane gas and electricity consumption. This decrease is even more significant if we consider that, since 2015, employees, calculated in FTE (Full Time Equivalent), have grown by 43%, in conjunction with an increase in research activities.

From the analysis of the energy consumption obtained from monitoring, it can be seen that more than 83% of the needs is due to electricity consumption, equivalent

to 5,928,596.00 kWh in 2024, while the remaining 17% from gas consumption. The data obtained also show that the most energy-intensive buildings are those located in Povo, where there are important research laboratories. In fact, the Clean Room laboratories represent the main electrical load across FBK, accounting for 41.9% of total electricity demand in 2024. Among these, refrigeration plants represent the most energy-intensive technology at FBK. With the planned expansion of these laboratories, energy demand is expected to increase further. It is therefore necessary for FBK to keep planning energy efficiency works and, in order to minimize indirect emissions, meet the current

**Graph 1**  
FBK Total Energy Consumption (Tep)





demand for electricity from renewable sources, as is already provided by current suppliers.

In addition to its energy efficiency measures and the use of renewable energy sources, FBK has invested in the self-production of renewable energy since 2011, installing photovoltaic systems on all the Foundation's buildings not subject to heritage or preservation restrictions. Thanks to this initiative, the share of self-produced solar energy increased from 0.7% of total demand in 2011, with a production of 62.879 kWh, to 5.9% in 2024, when production reached 325.451 kWh. The trend in the production of photovoltaic systems is illustrated in graph 2.

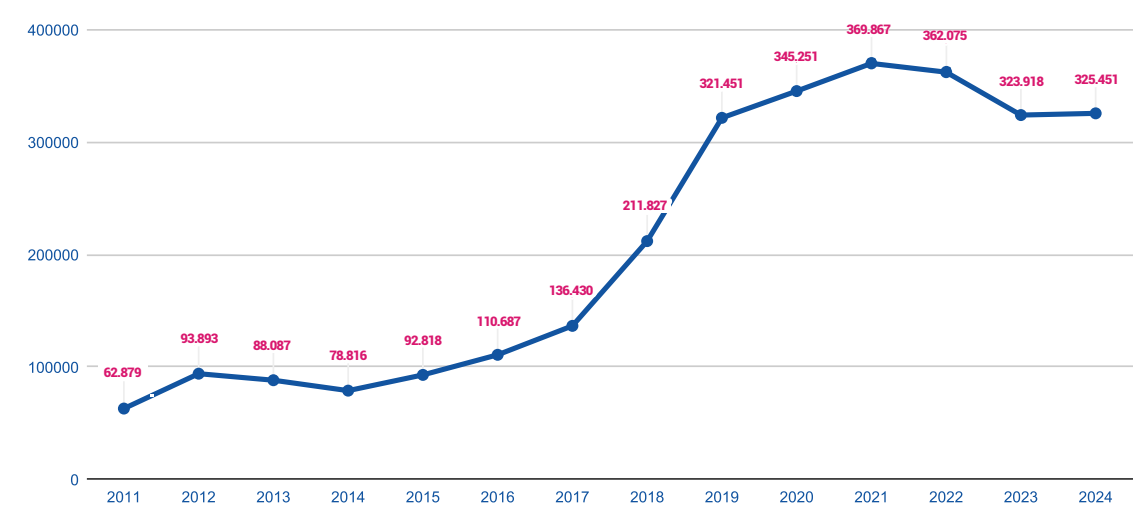
The focus on sustainability also includes water resource management. Through two wells operated under concession, FBK meets its non-potable water needs. Once used, the water is returned to the natural cycle, thus ensuring a responsible use of the resource.

As part of the use of water for research activities, an important step forward in water saving was taken with the introduction of an innovative water purification system in 2024. This instrument produces distilled water for laboratory use based on an electrodeionization system of water (EDI), which made it possible to improve production efficiency, compared to traditional resin methods, going from 60% to 92% and reducing water waste by 2.200 Sm<sup>3</sup> only in 2024.

The actions implemented have a big impact on water consumption, but a further increase in water used both for laboratory purposes is planned in the future, in view of the expansion of the new Clean Room, which will be implemented in 2027, and due to the increase in FBK staff.

With an integrated, innovation-oriented approach, FBK continues its commitment to developing concrete, measurable solutions that optimize the resources essential to the Foundation's work and ensure their continuous management and monitoring.

**Graph 2**  
Production Performance of Photovoltaic Systems (kWh)





## Objectives and Actions covered in the 2025-2027 Plan

Objective	Action	Implementation details
Energy efficiency of systems and reduction of heat losses in structures and buildings	<b>E01A1</b> Upgrading the East Building's cooling plant and monitoring its energy consumption	<b>INDICATORS:</b> Amount of energy dedicated to the systems (kWh) <b>TARGET:</b> a) Final design phase b) Construction works <b>TIMELINE:</b> 2025 (design) 2026 (implementation) <b>RECIPIENTS:</b> No specific recipient, aimed at improving the environmental footprint of the organization
	<b>E01A2</b> Installing a solar thermal system and heat pump boiler to supply hot water to the cafeteria service	<b>INDICATORS:</b> Amount of energy produced by the solar thermal system annually (kWh) <b>TARGET:</b> Completion of the works <b>TIMELINE:</b> 2025-2026 <b>RECIPIENTS:</b> No specific recipient, aimed at improving the environmental footprint of the organization
Increase in self-produced renewable energy	<b>E01B1</b> Installation of additional photovoltaic panels on some of the recently built roofs	<b>INDICATORS:</b> Photovoltaic surface coverage rate (%) <b>TARGET:</b> Completion of PV installation <b>TIMELINE:</b> 2027 <b>RECIPIENTS:</b> No specific recipient, aimed at improving the environmental footprint of the organization
Increasing staff awareness of energy savings and resource use	<b>E01C1</b> Publishing energy consumption data for resources such as energy, water, emissions, intended to inform staff	<b>TARGET:</b> At least 1 initiative for staff per year on resource use [min. 3] <b>TIMELINE:</b> 2025-2026-2027 <b>RECIPIENTS:</b> All staff, co-located company staff



## Resources and the Environment Pillar (E)

### E02 Circularity, reuse and waste management

Over the years, Fondazione Bruno Kessler has undertaken a structured program to reduce waste generation, promote the reuse and circularity of its assets, and enhance waste separation. Particular attention has also been given to encouraging external suppliers to minimize food waste and to adhere to the same waste management policies.

To improve waste management and identify the most effective actions, the Foundation monitors waste disposal data. From these inspections, it emerged that the vast majority of special waste similar to urban waste produced in the premises comes from the use of paper towels in the bathrooms. Given the incidence of this type of waste, specific measures have been introduced in the Plan in order to significantly reduce consumption. At the same time, the digitization of administrative processes—such as producing appointment documents in electronic format and converting forms to digital versions in accordance with RENTRI regulations—also contributes to waste reduction. Within the Foundation's buildings, five waste-sorting stations for separate collection have been installed. In addition, specific areas have been designated for sorting and detailed separation of technical materials.

As part of asset and office management, a policy promoting the reuse and recycling of materials and furniture has also been implemented. To this end, several measures have been implemented to reduce the use of plastic, including the introduction of reusable badg-

es for the staff of external companies and visitors.

In managing special waste, FBK follows a hierarchical approach that prioritizes prevention, then reuse, recycling, and recovery, with landfill disposal as the last resort. Although the generation of this waste is closely tied to research activities and offers limited potential for reduction, the Foundation is taking steps to optimize its logistics and disposal management.

For cafeteria services and catering activities managed by external contractors, the Foundation works with suppliers to minimize waste throughout the entire supply chain. In the cafeteria service, meal-related waste has been reduced by limiting unnecessary packaging and introducing a zero-mile supply chain for certain fresh products, helping to minimize waste even during the supply stage. When requesting specific catering services, often held alongside events, suppliers are required to eliminate single-use products and plastic bottles, replacing them with sustainable alternatives in line with provincial policy measures. At the same time, efforts have focused on reducing food waste by offering discounts on unsold products from the internal café and minimizing food surpluses through careful monitoring of the number of meals prepared and by standardizing cafeteria meals at the Via Sommarive location at the end of each shift to prevent surpluses. In organizing conferences and events, FBK has recently adopted a sustainability-focused approach, limiting printed and paper materials and reducing the

distribution of disposable promotional items in favor of useful, reusable ones.

Despite the measures already in place to minimize waste generation, it should be noted that waste production may increase in the coming years. This is due to the increase in staff in recent years, which naturally corresponds to a rise in waste generation.

Between 2025 and 2027, FBK is committed to continuing its efforts to reduce waste, promote circularity, improve separate collection, and minimize food waste in order to further reduce its overall environmental impact.



## E02 Objectives and Actions covered in the 2025-2027 Plan

Objective	Action	Implementation details
<b>Reduce the generation of non-hazardous waste similar to municipal waste, while continuously improving the management of special waste</b>	<b>E02A1</b> Through these same efforts, FBK aims for a continuous reduction in the rate of non-recyclable waste – particularly single-use products – by replacing paper towels with air hand dryers	<b>INDICATORS:</b> Rate of non-recyclable waste deriving from paper (%), Quantity of paper disposed as non-recyclable waste (kg) <b>TARGET:</b> a) Installation of air hand dryers in [30%] of FBK bathrooms b) Monitoring the paper towel dispensers that remain in use through 2027 <b>TIMELINE:</b> 2025-2026-2027 <b>RECIPIENTS:</b> All staff, co-located company staff
	<b>E02A2</b> Position change of the special waste storage, to allow collection to larger vehicles, saving on the total number of trips undertaken for disposal and therefore reducing transport-related emissions	<b>TARGET:</b> Completion of work <b>TIMELINE:</b> 2027 <b>RECIPIENTS:</b> No specific recipient, aimed at improving the environmental footprint of the organization
<b>Improvement and awareness of waste reduction, support reuse and strengthen separate collection</b>	<b>E02B1</b> Implementation of initiatives awareness-raising of employees and visiting scholars through various dedicated initiatives	<b>INDICATORS:</b> Number of awareness-raising initiatives <b>TARGET:</b> Implementation of awareness-raising initiatives [+3 in total] <b>TIMELINE:</b> 2025-2026-2027 <b>RECIPIENTS:</b> All staff, visiting researchers and PhD students





## Resources and the Environment Pillar (E)

### E03 Construction sites and management of research facilities and infrastructures

The buildings in which FBK's research activity takes place are divided into 4 facilities, divided into 11 buildings located in the municipality of Trento. The Via Sommarive complex houses the Foundation's scientific research activities and includes numerous electronics, computer, and biology laboratories in addition to staff offices. The S. Croce complex, located in the center of Trento, is home to the Italian-German Historical Institute, the Center for Religious Studies, the Institute for the Evaluation of Public Policies, and the Foundation's Library. The Via della Cascata complex houses companies that collaborate on the Foundation's research, strategic to bring the investigation produced to the market. In addition to the co-located companies, there are National Research Center offices and a part of the Foundation's staff seconded there. Finally, the Villa Tambosi complex is home to the Center for Theoretical Studies in Nuclear Physics and Related Areas.

To ensure innovative and forward-looking research, FBK plans to expand its spaces and laboratories in the coming years, providing the expertise and infrastructure needed to design and develop new technologies. The largest investment will support the expansion of the Foundation's Clean Room—part of the Micro Nano Facility, which specializes in the production of advanced sensors—increasing its area from the current 1.400 square meters to 2.000 sqm by 2027. Currently one of the leading facilities in Italy, FBK's Clean Room is set to become one of the best in Europe.

Further investments will support the expansion of the Center for Sustainable Energy's facilities, including the development of a new research complex in the former Arcese area in Rovereto. The site will feature an outdoor testing area, a laboratory building, and an office building. While awaiting the availability of the former Arcese area in Rovereto, the Center for Sustainable Energy will open new laboratories and offices in 2025 within the Rovereto Progetto Manifattura facilities. In particular, 2025 will see the inauguration of the TESS Lab, established in collaboration with the University of Trento and the Autonomous Province of Trento, focusing on next-generation energy, sustainable development, and quality of life.

In designing new construction projects and managing research facilities and infrastructure, FBK places strong emphasis on sustainability. This commitment stems from a process that began in 2010 with the "Reduction of Energy Consumption" resolution, which introduced measures aimed at gradually reducing CO<sub>2</sub> emissions through improvements to building envelopes and technological systems. With this goal in mind, and in accordance with the European Directive, all new buildings owned by the Foundation are designed following the Nearly Zero-Energy Building (nZEB) criteria, as outlined in the Design Guidance Documents (DIPs).

In addition, to ensure the efficiency of the maintenance management processes and reduction of plant down-

time due to failures, predictive maintenance processes have also been standardized through the use of certified software, which as of 2024, allows the management of deadlines, the recording of interventions and all the documentation relating to compliance with current regulations.

For the 2025–2027 period, this Plan defines objectives and actions to ensure that future plants and research buildings are designed in line with sustainability requirements, promoting thermal waste recovery where possible and reducing both energy consumption and CO<sub>2</sub> emissions.



## Objectives and Actions covered in the 2025-2027 Plan

Objective	Action	Implementation details
Design of new research infrastructures and redevelopment of existing ones in accordance with sustainability criteria, integrating environmental considerations such as reduced impact and energy efficiency improvements.	<b>E03A1</b> Recovery of thermal waste from laboratories for reuse in new buildings, along with the development of all Design Guidance Documents (DIPs) for new infrastructures in accordance with the Nearly Zero-Energy Building (nZEB) criteria established by European legislation.	<b>INDICATORS:</b> No. of new infrastructures designed using nZEB criteria; Recovered thermal waste (kWh) <b>TARGET:</b> 100% of new infrastructures designed using nZEB criteria <b>TIMELINE:</b> 2025-2026-2027 <b>RECIPIENTS:</b> Center Directors, dedicated FBK Services
Efficiency improvement of plant and service management and maintenance processes	<b>E03B1</b> Configuration of the certified software for the standardization of maintenance processes of systems and related monitoring, in order to make improvements and make maintenance processes more efficient	<b>INDICATORS:</b> No. of systems added to the software, No. of maintenance processes managed <b>TARGET:</b> Quality of the documentation produced as proof of the interventions <b>TIMELINE:</b> 2025 (implementation) -2026-2027 (implementation monitoring) <b>RECIPIENTS:</b> Co-located companies



## Resources and the Environment Pillar (E)

### E04 Infrastructures for sustainable mobility and awareness-raising initiatives

FBK is committed to promoting low-impact, active, and healthy lifestyles, with the goal of improving the well-being of its community of employees and scholars, while also helping reduce emissions from private vehicle use.

Like all organizations mandated by Decree-Law No. 34 of May 19, 2020 (Decreto Rilancio), the Foundation designates its Mobility Manager and also develops the Home-Work Commute Plan. The goal is to achieve a structural and lasting reduction in the environmental impact of private car traffic by supporting actions that organize and manage mobility demand for daily commuting between home and work. These measures aim to ease traffic congestion and, above all, reduce emissions generated by commuting.

To this end, some initiatives have been implemented to encourage sustainable mobility. In particular, to encourage the use of shared mobility, agreements have been established with local public transport providers, offering favourable conditions for the purchase of annual city passes by employees and scholars. At the same time, light mobility is promoted as a tool to further reduce environmental impact and encourage healthier habits. To support this transition, bicycle racks have been installed at all locations, and showers are now accessible from every FBK site while two initial Mobility Days-Al lavoro in bicicletta events were organized in 2023 and 2024, as part of the European Week of Sustainable Mobility.

Sustainable mobility and awareness are also key themes in FBK's research, which over the years has led to the creation and development of a dedicated platform called Play&Go. This is a tool that allows users to monitor sustainable travel and encourage participation in active mobility initiatives through personalized challenges, concrete incentives and dynamic content.

The initiatives implemented by the Foundation play an important role in reducing emissions generated by travel and must continue to be promoted in an integrated and synergistic manner. However, the analysis conducted for the 2024 Home-Work Commute Plan showed that one action, in particular, had a notably strong impact: the consolidation of remote work, which on its own contributed significantly to reducing mobility-related emissions. To further strengthen this strategy and offer staff the opportunity to work in locations closer to their residence, the Foundation will participate in the activation of Local co-working hubs arranged by the Trento Province government dedicated to remote work. [\[See People pillar\]](#).

As a research organization involved in numerous national, European and international projects and working groups, the Foundation manages a substantial amount of institutional business travel. With this awareness, we intend to implement measures to optimize travel and encourage the use of lower-impact travel options.

To address the issues described and achieve the goals set, the Foundation cannot succeed without the involvement of the entire FBK community. Organizing awareness-raising activities that align the proposed actions—promoting sustainable mobility, healthy lifestyles, and low-impact behaviors—with the values of FBK employees will be essential to achieving meaningful results.

In line with the initiatives the Foundation has already undertaken in recent years, and as briefly described in this section, the Plan outlines objectives and actions designed to promote sustainable mobility, support remote working, reduce the impact of institutional travel, and foster awareness of active, low-impact lifestyles.





## Objectives and Actions covered in the 2025-2027 Plan

Objective	Action	Implementation details
<b>Development of facilities for the incentive to commute to work by electric and conventional bicycle</b>	<b>E04A1</b> Use of infrastructures to support mobility for electric and conventional bikes such as racks and maintenance/pump stations	<b>INDICATORS:</b> No. of bikes (no. of electric bikes and no. of conventional bikes) Absolute value + rate increase (%) <b>TARGET:</b> a) Monitoring of the number of electric and conventional bikes b) Increased commuting by electric and conventional bikes [5%] <b>TIMELINE:</b> 2025 (implementation)-2026-2027 (implementation of monitoring) <b>RECIPIENTS:</b> All staff, visiting researchers and PhD students
<b>Sensitization of the Foundation community to healthy lifestyles and/or with less environmental impact</b>	<b>E04B1</b> Considering the introduction of a software system for the incentive of sustainable mobility in the home-work route through incentives and gaming	<b>INDICATORS:</b> No. of people who download the app and use it, No. of people who participate in the challenges, No. of rewards/incentives provided <b>TARGET:</b> Implementation and monitoring <b>TIMELINE:</b> 2026-2027 <b>RECIPIENTS:</b> All staff, visiting researchers and PhD students
<b>Reduction of the private vehicle portion of commute</b>	<b>E04C1</b> Consultation with the competent local authorities to assess the possibility and need for extension of bike trails and increase in frequency and stop locations of public transit  <b>E04C2</b> Continuation of the subsidy activities already promoted by FBK to encourage the use of public transport	<b>INDICATORS:</b> % of people who commute to work by sustainable means <b>TARGET:</b> Continuation of monitoring of the criteria formalized by the Mobility Plan <b>TIMELINE:</b> 2025-2026-2027 (continuous work in progress) <b>RECIPIENTS:</b> Area Mobility Manager of the Municipality of Trento (>>external)  <b>INDICATORS:</b> No. of subsidies promoted by FBK <b>TARGET:</b> Maintenance of all subsidies promoted by FBK <b>TIMELINE:</b> 2025-2026-2027 <b>RECIPIENTS:</b> All staff, visiting researchers and PhD students

## E04 Objectives and Actions covered in the 2025-2027 Plan

Objective	Action	Implementation details
Reduce emissions associated with employees' business travel	<b>E04D1</b> Development of internal guidelines within the Foundation that discourage the use of air transport for business travel	<b>INDICATORS:</b> Number of trips taken without flying out of the total number of planned trips (short distance) <b>TARGET:</b> a) Publication of guidelines b) Start collecting data on the different types of trips <b>TIMELINE:</b> 2026 <b>RECIPIENTS:</b> All staff, specific FBK Services
	<b>E04D2</b> All cars to be acquired in the future will be at least mild hybrids, with a preference for purchasing electric vehicles for short-distance use.	<b>INDICATORS:</b> % of at least hybrid cars purchased out of the total Foundation's car fleet <b>TARGET:</b> a) 30% of the car fleet to be at least mild hybrid by 2025 b) 40% of the car fleet to be at least mild hybrid by 2026 c) 50% of the car fleet to be at least mild hybrid by 2027 <b>TIMELINE:</b> 2025-2026-2027 <b>RECIPIENTS:</b> Specific FBK Services





## People Pillar (S)

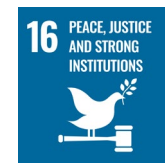
### S01 Institutional and Organizational Culture

Since its inception, Fondazione Bruno Kessler has pursued excellence in research and innovation, generating the greatest possible economic and social impact. In a context where science and technology innovation is recognized as a decisive driver of development and environmental protection, the Foundation reaffirms its commitment to producing multidisciplinary knowledge and solutions that promote and support a strong ecological and digital transition.

In line with the United Nations Sustainable Development Goals (SDGs), FBK aims to combine scientific excellence with knowledge transfer, ensuring that research results translate into concrete benefits for the economy and society. From this perspective, environmental sustainability represents a key pillar of the Foundation's vision, integrated across all operational dimensions.

Achieving these overall objectives—further detailed in the Strategic Plan and, consequently, in the current Sustainability Plan—requires extraordinary effort and shared commitment. For this reason, fostering a common culture of sustainability within the FBK community is essential, aligning the institutional mission with everyday values and practices. Spreading and internalizing the principles and actions of this Plan across the entire organization is crucial to strengthening the Foundation's identity and consolidating a system-wide approach to sustainability, so that it becomes an integral part of FBK's organizational way of operating.

With this alignment in mind, and to ensure the effectiveness of the actions designed to promote and achieve sustainability, this Plan sets out specific objectives and initiatives to support the development and dissemination of a shared institutional and organizational culture.





## Objectives and Actions covered in the 2025-2027 Plan

Objective	Action	Implementation details
Convey the values of the Sustainability Plan to align the entire FBK community with the institutional and organizational mission and increase awareness	<b>S01A1</b> Provide information on the strategic aspects of the Sustainability Plan at the time of staff onboarding, be them employees, visiting researchers or Scholars	<b>INDICATOR:</b> % of personnel involved in relation to the total number of new hires <b>TARGET:</b> 100% of new hires <b>TIMELINE:</b> 2025-2026-2027 <b>RECIPIENTS:</b> All staff members
	<b>S01A2</b> Provide information on the strategic aspects of the Sustainability Plan at the Foundation's Talent Development Program training sessions and at the time of Manager onboarding	<b>INDICATORS:</b> % of personnel involved, in relation to the total number of new hires and rehires, in training <b>TARGET:</b> 100% of new hires and rehires <b>TIMELINE:</b> 2025-2026-2027 <b>RECIPIENTS:</b> Center Directors and Service Heads, Unit Heads/Coordinators, staff involved in the Talent Development Program
Promote the participation of the Foundation's community of staff, visiting researchers and PhD students in the further development of the Sustainability Plan, aligning everyone's values with the institutional and organizational mission	<b>S01B1</b> Engage the FBK community in a collection of ideas that can be assessed and implemented directly or included in new editions of the Sustainability Plan	<b>INDICATORS:</b> Idea-gathering campaign, No. of ideas received/ No. of ideas implemented <b>TARGET:</b> 1 idea-gathering campaign <b>TIMELINE:</b> 2026-2027 <b>RECIPIENTS:</b> All staff members



## People Pillar (S)

### S02 Welfare, well-being and safety

The Foundation has always been committed to ensuring the well-being of its community; in particular, FBK has focused on and promoted an effective balance between the professional and private lives of its staff.

In this regard, and in full collaboration with all trade unions, the Foundation has developed a results-oriented work organization model based on the principles of responsibility and personal autonomy.

Within a framework of reciprocity—where the institutional mission and the professional contribution of all staff are aligned—FBK has translated the concept of work–life balance into operational objectives that are system-wide, traceable, and accountable. This approach allows for wide flexibility in alternating between on-site and remote work and has eliminated mandatory working hours. In line with this commitment to flexibility and sustainability, the Foundation has also signed a collective agreement supporting the development of co-working hubs across the province. Once fully operational, these hubs will be available to all staff, enabling remote work from locations closer to their homes.

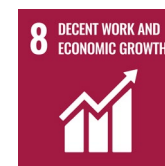
Flexibility is also reflected in the Foundation’s welfare and well-being services, which address both universal needs and the specific needs that may emerge over time – whether related to age, gender, or, within an international research context, cultural background.

The “customization” of solutions to support flexibility, inclusion, and personal and professional development draws on a comprehensive contractual framework of opportunities and measures. These are adapted when needed through specific individual “reciprocity pacts” and supported by a system for recognizing professional roles based on technical skills and soft skills, which are continuously evaluated, updated, and strengthened through substantial investment in training.

In a spirit of sustainability and collaboration, the corporate welfare and well-being system is also integrated within a broader territorial district agreement, which brings together multiple public and private organizations committed to sharing services and initiatives for the benefit of citizens.

To ensure the effectiveness of the welfare and welcoming model – and to prevent any form of discrimination or imbalance – the Foundation has established two independent systems of active listening and support, available to all staff: the Mental Health helpdesk and the Confidential Counselor, both freely accessible and offering a fully confidential environment.

To continue promoting the well-being of its community and supporting work–life balance, FBK has identified specific objectives and actions, included in this Plan, to be implemented during between 2025 and 2027.



## S02 Objectives and Actions covered in the 2025-2027 Plan

Objective	Action	Implementation details
Offer services that improve the quality of life, the balance between private and working life, promoting the optimization of services and infrastructures among companies	<b>S02A1</b> Build the Collina Intercompany Network through the approval and operation of the Intercompany Plan for Local area Welfare Services	<b>TARGET:</b> a) Publication of the Plan b) Carrying out the mapping of the needs and existing services provided by the network's member organizations <b>TIMELINE:</b> 2025 <b>RECIPIENTS:</b> All staff, Autonomous Province of Trento staff seconded to FBK, leased staff (>>internal). The services will be extended to the Entities participating in the network (>>external)
Promote an organizational model of sustainable work that responds to the needs of workers' well-being, physical health and mental health, work-life balance and environmental sustainability	<b>S02B1</b> Publication of the Regulations for the sustainable management of remote work and future coworking centers and local hubs	<b>TARGET:</b> a) Writing and adoption of the Regulation b) Implementation of monitoring and sample checks of compliance with the provisions contained therein <b>TIMELINE:</b> 2025 <b>RECIPIENTS:</b> All staff, Autonomous Province of Trento staff seconded to FBK, leased staff
Promote the spread of agile working to facilitate sustainable mobility, the reduction of emissions and the work-life balance of staff and the positive and indirect impacts on the local area	<b>S02C1</b> Consolidation of the Agile Working Reciprocity Pact intended as an individual and dynamic action plan for the increase of remote work days for reasons of work-life balance, sustainability, study/research or in particular situations of fragility or physical or mental impairment.	<b>INDICATORS:</b> No. of customized and signed reciprocity pacts – related documents <b>TIMELINE:</b> 2025-2026-2027 <b>RECIPIENTS:</b> All staff members



## People Pillar (S)

### S03 Diversity, equity and inclusion

Diversity, equity and inclusion are fundamental principles for the enhancement of the social component of the principles of sustainability. Fondazione Bruno Kessler has always paid close attention to these values, adopting organizational and management models based on respect and on the well-being of the people who work and study within it.

Through the Diversity & Inclusion working group of the People Innovation for Research Service, the Foundation has strengthened its commitment to the removal of persistent obstacles to full gender equality and the enhancement of diversity. This commitment was materialized through the adoption of the Gender Equality Plan (GEP), which defines objectives and actions over the 2022-2024 period and which will be renewed for the following three years (2025-2027). The Plan aims to ensure and support the full participation of all people working and studying at FBK, promoting equal opportunities within the organization, reducing gender asymmetries and fostering a culture of respect and non-discrimination.

The Guidelines for the 2025-2027 POE (Staff points equivalent) Plan, which guide calls for tenure tracks, the granting of permanent employment contracts and career progressions, also integrate the principles of equity. In developing the most recent POE plan, particular attention was given to gender mainstreaming, supported by data analysis and by the identification of measures aimed at reducing asymmetries and wage

gaps.

At the same time as developing measures aimed at reducing gender gaps, the Foundation is intensifying its actions to promote the employment of people with disabilities, in line with Law no. 68 of March 12, 1999. To this end, an agreement was signed with the Labor Agency to fulfil mandatory hiring quotas for people with disabilities. Nonetheless, ensuring the work inclusion of these workers—especially in highly qualified and technical-scientific roles—remains a significant challenge. To address this, FBK and the Employment Agency are offering targeted work and training programs designed to create concrete opportunities for professional development. To support these goals, FBK will implement tailored training for the personnel involved, including tutor support and individual development paths to enhance skills and promote balanced professional growth. In addition, every year the Foundation sets the objective of improving the accessibility of both its physical and digital workspaces, adopting reasonable special arrangements. This includes enhancing the accessibility of content on its institutional website to reach an increasingly broad audience, and adapting workstations for employees with disabilities to ensure safe, flexible, and inclusive working conditions—regardless of place, time, or device used.

Policies on equal opportunities—both in terms of gender equality and the inclusion of people with disabilities—are already an integral part of the culture of

the Foundation. However, the path to full inclusion requires ongoing commitment. For this reason, the new Plan identifies additional areas of intervention, with objectives and actions to be achieved by 2027, further strengthening the Foundation's mission to promote diversity, equity, and inclusion in an increasingly impactful way.





## S03 Objectives and Actions covered in the 2025-2027 Plan

Objective	Action	Implementation details
Encourage the creation of an inclusive environment that enhances the full participation of all people working and studying at FBK and promote equal opportunities within the organization, reduce gender asymmetries and counter discrimination	<b>S03A1</b> Maintain gender focus in the 2024-2027 POE Plan - performing accurate analysis and monitoring data relating to gender distribution, to verify alignment with the guidelines in the planning	<b>INDICATORS:</b> No. of M/F vertical and horizontal advances, No. of M/F temp-to-permanent contract conversions (TT) <b>TARGET:</b> a) Implementation of monitoring of data relative to gender distribution in the 2024-2027 POE plan b) Compliance with 2024-2027 POE guidelines <b>TIMELINE:</b> 2025-2026-2027 <b>RECIPIENTS:</b> All staff members
Increase the opportunities for the professional inclusion and integration of people with disabilities offered by the Foundation	<b>S03B1</b> Job placement of people with disabilities through the activation of the experimental project agreed with the Employment Agency and monitoring of work paths in compliance with targeted inclusion	<b>INDICATORS:</b> No. of job placements/internships as per L.68/99, No. of temp-to-perm. contract conversions <b>TARGET:</b> a) Concurrent presence of 8 people with disabilities employed in different areas b) Implementation of the Strategy for the empowerment and recruitment of people with disabilities c) Monitoring the effectiveness of pathways <b>TIMELINE:</b> 2025 <b>RECIPIENTS:</b> All staff members (L.68/99)
	<b>S03B2</b> Development of a strategy to enhance the attractiveness and recruitment of people with disabilities into research groups	<b>INDICATORS:</b> No. of initiatives activated for Research positions <b>TARGET:</b> a) Strategy Implementation b) Release of a communication and operational strategy <b>TIMELINE:</b> 2025-2026 <b>RECIPIENTS:</b> All staff members (L.68/99)



## People Pillar (S)

### S04 Career paths and professional growth

The extraordinary human capital available to the Foundation is the basis of FBK's vision and the successes achieved across its research areas. For this reason, supporting the development of skills that align both with the strengths of the people who work and study at FBK and with organisational needs is essential.

To this end, the Foundation has invested in projects that foster the professional growth of its staff, designing a system of professional roles defined by distinctive competencies and dynamically aligned with the institutional mission. These development paths are supported by training opportunities and learning content delivered through the FBK Academy. The Academy promotes continuous learning: staff are not only recipients of training initiatives but also active contributors to the development, updating and sharing of knowledge and skills. Through the FBK Academy platform, all employees and doctoral candidates participating in the Foundation's PhD Program can access an innovative training offer tailored to different competency areas, delivered through courses, workshops and seminars. In addition, the Foundation supports the continuous growth of Service Offices staff as part of the ongoing digital transformation, helping them adapt their skills to evolving roles and organizational processes and preparing them for future challenges.

To further strengthen the system of roles, competencies and training pathways, in 2024 the Foundation

launched the Talent Development Program, involving doctoral students, early-career researchers and technologists in advanced education, research and innovation projects aimed at enhancing and sharing their potential. Through the program, participants follow personalized career-development pathways designed to cultivate individual strengths and support the growth of the skills that make each person's talent distinctive, providing experiential learning opportunities aligned with their professional aspirations.

The framework of roles, skills and professional pathways applies to all Foundation staff and presents particular challenges for those seeking to engage in strategic areas – such as innovation, scientific communication and artificial intelligence – or for those aiming to obtain a permanent position through the tenure-track system. These are high-performance pathways built around strategic objectives aligned with the Foundation's mission. Across all development paths, special attention is given to integrity and sustainability, both pillars of the Foundation's Code of Conduct. Thanks to the long-standing commitment of the People Innovation for Research Service to creating a work environment attentive to staff needs, the Foundation obtained the Human Resources Strategy for Researchers (HRS4R) award in 2018. This certification recognizes the excellence of FBK's HR services and its commitment to policies that support staff, providing researchers with a positive and enabling environment for development and professional growth.

Continuing to promote a supportive working environment, ensuring continuous learning, and enhancing individual talent remain strategic priorities for the Foundation, which has identified specific objectives and actions to be achieved.



## S04 Objectives and Actions covered in the 2025-2027 Plan

Objective	Action	Implementation details
Enhancing and supporting the growth of research staff by integrating it into the Foundation's organizational system	<b>S04A1</b> Identify, through the Talent Development Program (TDP), the professional dimensions and distinctive organizational characteristics of the research staff. Mapping career paths, connecting professional growth paths and skills development	<b>INDICATORS:</b> No. of employees involved in career path mapping <b>TARGET:</b> a) Release of the “career path” model for researchers and subsequent release of related growth programs b) 170 researchers involved in TDP in 2025 c) 90 researchers involved in TDP in 2026 <b>TIMELINE:</b> 2025-2026 <b>RECIPIENTS:</b> Research staff involved in the TDP
Support FBK services staff to make them increasingly aligned and prepared for the innovative research context and, at the same time, to guide them in the ongoing digital transition	<b>S04B1</b> Initiate the mapping of the needs and digital skills of service personnel and then activate dedicated training courses for the sustainable digital transition	<b>INDICATORS:</b> No. of employees involved in digital maturity mapping, No. of employees in training <b>TARGET:</b> a) Obtaining mapping on digital skills b) Training of 100% of service personnel with deficiencies that emerged as a result of the mapping <b>TIMELINE:</b> 2025-2026 <b>RECIPIENTS:</b> All staff members (especially FBK Service staff)



## People Pillar (S)

### S05 New Generations

With more than 170 doctoral students, over 300 university interns, and a comparable number of high school students involved each year, the Foundation has long invested in guiding and developing young talent by offering meaningful growth and learning opportunities. Supporting young people as they enter the worlds of research and work is also one of the ways FBK gives back to the local community, returning value and expertise to the local area. By fostering collaboration between companies and schools, FBK helps ensure that local needs and productive vocations are clearly communicated. Maintaining an ongoing dialogue with the education system, the Foundation works with schools and universities to co-design programs that fully reflect the skills required by the regional labor market. The goal is to provide a well-rounded and personalized learning experience that not only enhances students' academic records but also offers hands-on exposure to research and innovation. Over the years, the Foundation has launched multiple initiatives to contribute to the education of new generations and the development of emerging talent, actively involving students in its activities. Through the Research and Innovation Unit for Schools – renamed the Scholars and PhD Program in 2024 – FBK has promoted scientific culture and research among students by creating programs such as FBKJunior, which has included school-to-work projects, teacher training, summer schools, and laboratory activities.

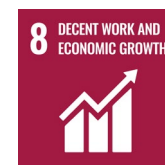
FBK also coordinates annual research and innovation projects with numerous schools through the Domo-

Sens model. With more than 20 projects carried out, this model engages high school students as active participants in school-work projects, closely connected to state-of-the-art research and developed in collaboration with local organizations and companies. Many of these projects have addressed sustainability and climate-related issues, including water resources, air quality, and food waste.

Every summer, since 2001, FBK has organized WebValley, an international Data Science summer school led by FBK researchers and aimed at students aged 17 to 19. Designed to promote a culture of data and interdisciplinary research, the three-week program has welcomed nearly 500 students from around the world and has often focused on topics with strong ethical relevance, such as climate change.

In addition to student-oriented initiatives, the Foundation also provides support to teachers on topics related to artificial intelligence and educational innovation.

FBK researchers remain actively involved in the training and mentorship of students and graduates offering a wide range of opportunities across new technologies, innovation, the humanities and the social sciences. Recognizing the diverse aspirations and educational backgrounds of students, the Foundation has developed a varied set of options, including curricular and extra-curricular internships, thesis projects, 150-hour student collaborations, and more.





Since 2016, FBK has offered an international doctoral program of excellence, in collaboration with leading Italian and international doctoral schools. Doctoral candidates, enrolled at partner institutions, conduct their research at FBK under the supervision of highly qualified researchers in a stimulating, multicultural environment. The Foundation is committed to providing access to state-of-the-art facilities and laboratories equipped with cutting-edge technologies. In addition, strong partnerships with industry and universities at the local, national and international levels – together with the co-location of FBK research units with departments of the University of Trento and with the European Institute of Innovation & Technology (EIT) Digital – create a unique environment for innovation and for the development of advanced skills. The FBK doctoral program enriches the research experience by offering opportunities to develop soft skills through courses, workshops and seminars delivered by the FBK Academy. These initiatives represent an important stage in students' professional and personal growth, extending beyond specialized research and fostering a dynamic learning environment.

In its training activities, the Foundation has also identified the need to foster stronger entrepreneurial skills among doctoral candidates.

To this end, beginning in 2025, FBK will extend the Research to Business (R2B) program to PhD students, providing them with the skills needed to transform innovative ideas into successful commercial initiatives and to generate impact starting from their research.

In the coming years, the Foundation also aims to promote doctoral projects that place particular emphasis on sustainability, further amplifying the impact of research in this area.

To continue and expand activities aimed at training new generations and nurturing emerging talent—while ensuring high-quality learning opportunities for doctoral candidates and strengthening research pathways focused on ESG-related topics—the Foundation has identified objectives and actions to be implemented between 2025 and 2027.



## S05 Objectives and Actions covered in the 2025-2027 Plan

Objective	Action	Implementation details
<b>Strengthen and institutionalize outreach programs for schools and universities, offering young people opportunities for hands-on laboratory learning, curriculum innovation, and open exchange with the research community</b>	<b>S05A1</b> Promote active and project-oriented teaching programs such as DomoSens Projects	<b>INDICATORS:</b> No. of students involved in the projects, No. of internships activated, No. of teachers trained <b>TARGET:</b> Implementation of at least 1 project per year <b>TIMELINE:</b> 2025-2026-2027 <b>RECIPIENTS:</b> Scholars, teachers, high school and college students, Trento Province Departments
	<b>S05A2</b> Support training programs for young emerging profiles as already carried out in the WebValley initiatives for Schools and AcademyFBK for university students	<b>INDICATORS:</b> No. of students involved in the projects, No. of internships activated, No. of teachers trained <b>TARGET:</b> Implementation of the first FBK Academy <b>TIMELINE:</b> 2025-2026-2027 <b>RECIPIENTS:</b> Scholars, teachers, high school and college students, Trento Province Departments
	<b>S05A3</b> Provide guidance and strategic advice for the school/university system, such as advice on artificial intelligence	<b>INDICATORS:</b> No. of teachers involved in the training <b>TARGET:</b> Responding to the needs of schools <b>TIMELINE:</b> 2025-2026 <b>RECIPIENTS:</b> Scholars, teachers, high school and college students, Trento Province Departments

## Objectives and Actions covered in the 2025-2027 Plan

Objective	Action	Implementation details
Offer doctoral students the opportunity to access cutting-edge research and innovation, collaborating with prestigious Doctoral Schools in Italy and abroad and conducting their research at the Foundation	<b>S05B1</b> Promote doctoral scholarships with special attention to sustainability, offered with a stronger investment on the communication of their availability through the website, branding and European systems such as Euraxess	<b>INDICATORS:</b> No. of doctoral and postdoctoral students, No. of agreements with universities <b>TARGET:</b> Increase in PhD students included in Foundation projects in line with the Strategic Plan's objectives/KPIs <b>TIMELINE:</b> 2025-2026 <b>RECIPIENTS:</b> Scholars
Offer doctoral students the opportunity for professional and personal growth, creating a dynamic and innovative ecosystem where researchers can excel and contribute to projects of international relevance	<b>S05C1</b> Development of training programs that promote the creation of research communities and that will also support them with entrepreneurship courses, through thematic summer schools (Summer school, Research2Business and other training activities)	<b>INDICATORS:</b> No. of doctoral students who participated in a training program <b>TARGET:</b> Implementation of at least 1 training project - Research2Business <b>TIMELINE:</b> 2025-2026-2027 <b>RECIPIENTS:</b> Scholars







## Governance Pillar (G)

### G01 Privacy, integrity and transparency

Privacy, integrity, and transparency—although their connection may not be immediately obvious—are core components of sustainability and ESG, as they are essential to generating a positive impact on society. As a research institution, FBK contributes value to the economic and social system through the knowledge and innovation it produces and the real-world applications of its research results. Ensuring the quality and integrity of this research requires strict adherence to the highest ethical principles and regulatory standards. In particular, compliance with European data protection requirements is key to maintaining the credibility of research activities. Working in the fields of computer science and artificial intelligence, FBK manages substantial volumes of data, including personal data, and regularly faces complex challenges related not only to privacy but also to data quality and security.

In this context, FBK has obtained the ISO/IEC 27001:2022 certification in 2024, recognizing the maturity of its Information Security Management System [\[see the Data and Infrastructure Pillar\]](#).

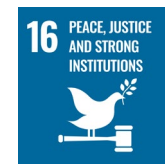
At the beginning of 2025, the Foundation defined its strategic directions for raising awareness and strengthening competence in personal data protection and regulatory compliance within the broader framework of technological transformation and artificial intelligence. More specifically, to reinforce understanding of the risks associated with data management and to ensure a structured approach to data

protection, the Foundation—while maintaining full compliance with the GDPR and providing related staff training—launched a program called “Enriching Privacy Awareness Effectively in Our Daily Activities”. The goal of this program is to systematically integrate a culture of privacy into research activities. It foresees the creation of privacy-focused labs within Research Centers that regularly process personal data, the definition of clear operational governance to ensure that data protection remains a constant priority, and the promotion of awareness initiatives that offer practical guidance for researchers. This project will strengthen exchange between researchers and the Privacy Unit, fostering an informed and responsible approach to personal data management.

While integrity and privacy are essential in a research environment centered on information technologies and artificial intelligence, sustainability—both formal and practical—also requires strong regulatory, operational and cultural safeguards. In this perspective, over time FBK has built and consolidated a comprehensive system of protections to ensure the integrity of all its activities. In the area of corruption prevention and mismanagement, two key bodies are involved: the Supervisory Body, responsible for oversight of the Organizational Management and Control

Model, and the Head of Corruption Prevention and Transparency, responsible for updating and supervising the Foundation’s Three-Year Plan. Although they

maintain independent judgment, the Head of Corruption Prevention and Transparency and the Supervisory Body work together in a “dual-model” approach designed to strengthen the effectiveness of corruption-risk management measures.



## G01 Objectives and Actions covered in the 2025-2027 Plan

Objective	Action	Implementation details
Increased awareness about the risks related to the protection of personal data to which people and assets of the Foundation are exposed	<b>G01A1</b> Establishment of a personal data management and protection model "AI Act and GDPR compliance" based on responsible and shared procedures and good practices, through the development of internal context analysis, the activation of good laboratory practices and the implementation of the management model developed within a specific Project Plan	<b>TARGET:</b> Periodic reporting to the Secretary General and the Management Committee of the Research Centers on the progress of the "Enriching Privacy Awareness Effectively in Our Daily Activities" Project Plan <b>TIMELINE:</b> 2025-2026-2027 <b>RECIPIENTS:</b> Center Directors, Unit managers/coordinators

## Governance Pillar (G)

### G02 Ethics and Consistency

The Foundation's commitment to research integrity and sound operational management is demonstrated through the consistent and ongoing application of ethical principles, professional standards, and responsible-conduct guidelines. These principles guide everyone involved in designing, conducting, funding, or evaluating scientific work, as well as those providing administrative and functional support. Integrity, sustainability, and ethics are cross-cutting values that shape not only the quality of our research, but also the management of all the Foundation's resources.

In response to the rapid pace of technological development—and to further strengthen oversight of research integrity—the Foundation operates with a strong sense of social responsibility and transparency. To ensure alignment with the ethical and professional standards of the international scientific community, the Foundation has adopted a Code of Conduct whose foundations are dedicated to safeguarding research integrity. This Code explicitly sets the goal of establishing an FBK Ethics Committee in a timely manner. It defines the principles of diligence, loyalty, impartiality, and good conduct that guide the behavior of everyone working at the Foundation. To maintain its relevance and consistency with the highest ethical and professional standards, the Code is reviewed and updated on a regular basis.

In addition, the Foundation aligns its work with the principles of the European Charter for Researchers,

as well as with all applicable internal and external regulation on activities. Compliance with regulations, combined with strict adherence to ethical standards, ensures high-quality research and the transparent, well-informed dissemination of scientific results.

The focus on integrity also extends to procurement processes. In addition to meeting the minimum legal requirements (CAM, DNSH, personnel reporting, etc.), the Foundation will begin a process to elevate sustainability standards in its procurement procedures by adopting criteria that favor suppliers who demonstrate stronger social and environmental responsibility. The high sustainability standards expected of FBK by the entities and companies it works with require the Foundation to ensure compliance with sustainability principles throughout its entire “production” chain. In this regard, the Contracts and Tenders Service has already begun mapping and periodically evaluating suppliers, in line with UNI ISO 9001:2015 certification. This is carried out through regular questionnaires, with the goal of progressively integrating—through this Plan—more advanced criteria, including those related to sustainability.

To ensure the integrity of research and operational management, and paying particular attention to the issue of sustainability in tenders and contracts, FBK has developed objectives and actions included in this Plan that will be implemented in the next three years (2025-2027).



## G02 Objectives and Actions covered in the 2025-2027 Plan

Objective	Action	Implementation details
<b>Provide the Foundation with a body of expertise in the field of research integrity</b>	<b>G02A1</b> Establishment of an internal Ethics Committee for related disciplinary areas, developed through a shared design process, followed by pilot testing and formal implementation	<b>INDICATORS:</b> Scientific-technological hub that have formed a Committee internal ethics (%) <b>TARGET:</b> 100% of centres with an internal ethics committee <b>TEMPISTICHE:</b> 2025-2026 <b>RECIPIENTS:</b> Center Directors, research boards
<b>Apply the Foundation's Code of Conduct based on the nature and purpose of the latter, the internal organizational context, the variety of the profiles of its recipients, sustainability</b>	<b>G02B1</b> Semantic analysis and adaptation of the text based on the application context, target audiences, and the various dissemination channels.	<b>INDICATORS:</b> Code of Conduct articles analyzed, revised, and enhanced for target audiences (%) <b>TARGET:</b> Code of Conduct dissemination actions <b>TIMELINE:</b> 2025 <b>RECIPIENTS:</b> All staff members
	<b>G02B2</b> Strengthening of provisions related to sustainability through an amendment to the Foundation's Code of Conduct	<b>INDICATORS:</b> Code of Conduct articles analyzed, revised, and enhanced for target audiences (%) <b>TARGET:</b> Updating of dedicated articles <b>TIMELINE:</b> 2025 <b>RECIPIENTS:</b> All staff members



## G02 Objectives and Actions covered in the 2025-2027 Plan

Objective	Action	Implementation details
<b>Promote the inclusion of environmental and social certifications and/or company policies in the Foundation's procurement and tender processes</b>	<b>G02C1</b> Development of new reward criteria to be proposed to internal clients (those requesting the tender), for subsequent integration and use in bid evaluation processes by competitors in the procedures	<b>INDICATORS:</b> No. of tender procedures in which the criteria are included <b>TARGET:</b> Definition of reward criteria <b>TIMELINE:</b> 2025-2026-2027 <b>RECIPIENTS:</b> Center Directors, Unit managers/coordinators (>>internal); Economic operators (>>external)
	<b>G02C2</b> Standardize the practice through the development of forms to be used in all tender procedures	<b>INDICATORS:</b> No. of completed forms <b>TARGET:</b> a) Drafting of an internal guidance document b) Publication of the form on the internal website for researchers' use c) Preparation of the form to be included in the tenders <b>TIMELINE:</b> 2025-2026-2027 <b>RECIPIENTS:</b> Center Directors, Unit managers/coordinators (>>internal); Economic operators (>>external)
	<b>G02C3</b> Monitor and map suppliers with environmental and social certifications and/or company policies, in order to determine the minimum percentage of suppliers that meet the aforementioned requirements.  <small>*In 2025, monitor the number of suppliers that meet appropriate environmental and/or social standards, based on the evaluations conducted to maintain the ISO certifications held by the Foundation. In the following years (2026 and 2027), after completing the initial evaluation, establish the minimum percentage and/or improvement target for suppliers that meet the required standards.</small>	<b>INDICATORS:</b> No. of questionnaires completed, No. of competitors in tenders with certification/policy, No. of successful tenderers with certification/policy, No. of suppliers with certifications/policies <b>TARGET:</b> a) Mapping Implementation b) Minimum established percentage of suppliers with certifications/policies (2026-2027) c) Implementation percentage of improvement set for progress of FBK's sustainability policies (2026-2027) d) Completion of questionnaires by 50% of suppliers <b>TIMELINE:</b> 2025 (monitoring) 2026-2027 (monitoring + improvement) <b>RECIPIENTS:</b> Center Directors, Unit managers/coordinators (>>internal); Economic operators (>>external)

## Governance Pillar (G)

### G03 Strategic Partnerships

FBK actively collaborates with universities, research centers, scientific organizations, companies, and local stakeholders to develop synergies and promote joint initiatives on strategic issues. A key element of this vision is the strengthening of relationships with national and international companies to develop research and innovation projects using technologies created at FBK, with particular attention to artificial intelligence.

These collaborations aim not only to support companies as they navigate an increasingly complex and global market, but also to develop solutions to the major transformative challenges identified in the 2024–2027 Strategic Plan: climate change, demographic transition, and digitalization.

Over the next three years, in line with the Strategic Plan's objectives, the Foundation will reinforce its commitment to building long-term partnerships with leading companies, with the goal of increasing strategic agreements with Italian firms by 50%. The Corporate Relationship Office (CRO), established in 2024, will play a central role in consolidating these relations. It will work to understand market needs and facilitate synergies between the research and industrial sectors, with the aim of fostering stable and enduring partnerships, elevating the impact of FBK's research, and promoting the application of technological innovation across the industrial landscape. These collaborations will not only create new funding opportunities for research, but will also support a model of respon-

sible and sustainable innovation. Strengthening these strategic alliances offers an opportunity to combine research excellence with a concrete commitment to sustainability. In this perspective, the CRO will help foster partnerships with companies aligned with sustainable development strategies, thereby contributing to a responsible innovation model geared toward future challenges. The objectives and actions outlined in this Plan have been developed to make this possible.



## G03 Objectives and Actions covered in the 2025-2027 Plan

Objective	Action	Implementation details
Promote broad and lasting partnerships involving different actors and expertise to offer a range of integrated services focusing on the trust and long-term stability thereof, with a focus on relationships with partners that contribute to the sustainable development goals	<b>G03A1</b> Development of a document for the description of processes, which formally defines the management of strategic partnerships. Within this document, guidelines will be developed for the selection of partners that will possibly also consider a sustainability scoring	<b>INDICATOR:</b> Average duration of partnerships, No. of Centers involved, No. of researchers involved, Services offered <b>TARGET:</b> a) Formalization of the strategic partnership management process and publication of the process description document b) Development of guidelines with sustainability scoring <b>TIMELINE:</b> 2025 <b>RECIPIENTS:</b> Center Directors, Unit managers/coordinators
Support the sustainability principles of the Foundation also in the development of partnerships	<b>G03B1</b> Experiment with the integration of an article related to sustainability within some collaboration agreements developed at FBK. Implement its use if the feedback is positive	<b>TARGET:</b> Development of a proposal for an article dedicated to the principles of sustainability <b>TIMELINE:</b> 2026 <b>RECIPIENTS:</b> Specific FBK Services

## Governance Pillar (G)

### G04 Monitoring and quality control

Research and innovation are at the core of Fondazione Bruno Kessler's mission. Ensuring the highest levels of quality is essential to FBK's competitiveness and growth at both the national and international levels, as well as to delivering value to society and reinforcing the Foundation's organizational reputation.

With regard to research quality, two main dimensions are considered: the management of research processes and the quality of research outputs. For the first dimension, the Foundation has committed to enhancing process quality, ensuring efficiency and continuous improvement through the adoption of a Quality Management System (QMS) compliant with the international UNI EN ISO 9001:2015 standard. In 2024, this certification was extended to nearly the entire scientific and technological hub of the Foundation (with the exception, for now, of the ECT\* Center and the centers within the humanities and social sciences hub).

At the same time, and with a view toward ongoing improvement, FBK remains strongly committed to monitoring the quality of its research and managing the data and processes related to scientific production. In recent years, this commitment has included the development of indicators and reporting tools that guide and support the work of Center Directors and governance bodies. Growing awareness of the importance of data – bibliometric, scientific, and related outputs – has enabled technical innovations and prompted organizational adjustments, including the complete

reorganization of the Research Assessment function.

To ensure the quality of both processes and scientific results produced at FBK, the Plan defines specific objectives and actions that address current gaps and support further improvement.





## Objectives and Actions covered in the 2025-2027 Plan

Objective	Action	Implementation details
<b>Provide governance and research managers with new data and reporting on scientific production useful for making informed decisions</b>	<b>G04A1</b> The creation of a working group to provide methodological support for setting up reports on scientific production and particular personal achievements	<b>INDICATORS:</b> No. of report views (compared to the number of users with whom the reports were shared) <b>TIMELINE:</b> 2025-2026 <b>RECIPIENTS:</b> Center Directors and research boards, Unit Heads/ Coordinators, Stakeholders
	<b>G04A2</b> Development of the reports and their review based on the feedback of the dedicated working group, the Research Center Directors, the Foundation's governance and all the users that it will be considered useful to involve	<b>TARGET:</b> Use of indicators on scientific production in structured internal processes (automatic or semi-automatic production of standard reports) <b>TIMELINE:</b> 2025-2026 <b>RECIPIENTS:</b> Center Directors and research boards, Unit Heads/ Coordinators, Stakeholders
<b>Make sure the Quality Management System certification (UNI EN ISO 9001:2015) obtained in 2024 is extended</b>	<b>G04B1</b> Design and adopt a shared and validated model for surveillance certification and recertification of ISO certifications obtained in 2024	<b>TARGET:</b> Validation of the maintenance model (in its entirety) and conclusion of the third-party maintenance audit (RINA) in the established/necessary terms <b>TIMELINE:</b> 2025-2026 (annual maintenance) 2027 (recertification) <b>RECIPIENTS:</b> All staff members

## Governance Pillar (G)

### Communication and public relations

The promotion of Fondazione Bruno Kessler's mission is essential to strengthening its position within the research and innovation landscape, with particular emphasis on the national level. In addressing contemporary challenges through the knowledge generated at FBK, scientific dissemination plays a strategic role, ensuring that research outcomes and applications are shared with the wider public. In line with the Strategic Plan, FBK's Communication Plan for 2024–2027 establishes a structured plan for scientific and public communication designed to increase the Foundation's brand awareness and institutional presence at major sector events. The Plan aims to consolidate FBK's national visibility on key topics such as human-centred artificial intelligence, environmental sustainability, health and digital industry, and next-generation devices and sensors. It seeks to highlight people, research achievements, and their societal impact, while engaging institutions, businesses, the media, public administrations, and the local community in transparent and constructive exchange. A particular focus is placed on strengthening FBK's media presence through a targeted strategy of relationship-building, aimed at enhancing the visibility of the Foundation and more effectively communicating the value of FBK's researchers, cross-cutting projects and programs, and innovation activities, especially those linked to the Strategic Plan's KPIs.

Within this framework, sustainability is positioned as a central narrative element for communicating re-

search results. Another key pillar of the communication strategy is the development of internal skills, with particular attention to nurturing young talents who are central to FBK's research activities. In 2024, the Foundation launched the FBK Science Ambassador project – an advanced training program for young researchers from across FBK's scientific areas – to strengthen and promote their dissemination and science communication capacities. Targeted at 25 young talents as an initial cohort, the program is intended to become a recurring and structural component of FBK's communication activities, fostering a community of disseminators capable of narrating research “from within,” both internally and in the public debate.

The overarching goal is to transform communication into a strategic tool that amplifies the impact of research, promotes scientific culture, and supports innovation as a key driver of sustainable development and socially oriented growth in the local area. To this end, the Plan sets forth objectives and actions to be completed by 2027.



## Objectives and Actions covered in the 2025-2027 Plan

Objective	Action	Implementation details
Promote FBK's institutional presence at major events, including on the strategic theme of environmental sustainability	<b>G05A1</b> Actively participate in relevant local and national events, delivering high-quality contributions that showcase the Foundation's research results and expertise	<b>INDICATORS:</b> Event participation number, qualitative/quantitative report on event impact <b>TIMELINE:</b> 2025-2026-2027* <i>*Four-year communication plan based on the Strategic Plan</i> <b>RECIPIENTS:</b> Center Directors, governance, internal communities concerned (e.g. Ambassadors), stakeholders
Support the Foundation's increased brand awareness at a local and national level to enhance FBK's mission, promoting research and innovation as key levers for sustainable development and growth of the local area	<b>G05B1</b> Strengthening institutional relations with the Trentino system and at the national level to explore synergies and promote joint collaboration initiatives on environmental sustainability issues	<b>INDICATORS:</b> Report on actions and results achieved - qualitative report of evaluation of activities and materials <b>TIMELINE:</b> 2025-2026-2027* <i>*Four-year communication plan based on the Strategic Plan</i> <b>RECIPIENTS:</b> Center Directors, governance, internal communities concerned (e.g. Ambassadors), stakeholders
	<b>G05B2</b> Intensify relations with the media at the local and national level, to position FBK in a distinctive and visible way in the media, increasing recognizability of the brand and its impact on the scientific, social and business community on the strategic theme of sustainability.	<b>INDICATORS:</b> Report on actions and results achieved <b>TIMELINE:</b> 2025-2026-2027* <i>*Four-year communication plan based on the Strategic Plan</i> <b>RECIPIENTS:</b> Center Directors, governance, internal communities concerned (e.g. Ambassadors), stakeholders



## Data and digital infrastructure security







## Data and digital infrastructure security Pillar (D)

### D01 IT infrastructure

In recent years, the landscape of digital infrastructures has changed profoundly, both in terms of complexity and scope. Although digitization is already widespread, the 2024–2027 Strategic Plan identifies it as one of the major transformative challenges of the coming years. The increasing need to invest in artificial intelligence technologies—expanding their areas of application and addressing contemporary challenges—has made it essential to strengthen and optimize the infrastructures that support the development of AI algorithms. At the same time, the rise of remote work has reshaped digital collaboration tools, creating demand for more flexible and efficient solutions. These resources must be safeguarded against disruptions, attacks, and breaches, and treated with the same level of protection as physical, environmental, and social infrastructure [6].

To remain at the forefront of these developments, the Foundation has pursued a long-term program to optimize its digital infrastructures, aiming for greater efficiency, security, and sustainability.

One of the key initiatives has been the consolidation of computing systems, which has enabled more rational use of resources and improved operational performance. In addition, a significant portion of IT systems previously hosted in the Foundation's local data centers has been progressively migrated to the public cloud. This transition has produced tangible benefits in terms of environmental impact, increasing

energy efficiency and reducing CO<sub>2</sub> emissions. While on-premises data centers typically operate at 2–3% utilization, cloud infrastructures reach utilization levels above 70%, reducing waste and optimizing resource use through shared capacity [7].

These actions not only improve energy efficiency but also support the Foundation's ongoing digital evolution by ensuring more accessible and effective work tools.

Some IT infrastructure services necessarily remain on site, as they support the operation of buildings and laboratories and must be designed to remain resilient in the event of disasters. To minimize data loss, service recovery time, and downtime during emergencies, the Digital Solutions & IT Infrastructure Service is working to eliminate single points of failure by replicating systems, services, and data across two distinct data centers and migrating all non-building services to the cloud. The Service is also committed to increasing automation in production processes and application updates, reducing manual intervention to make operations more repeatable and less prone to human error.

The virtualization and optimization of IT resources enable agile responses to new operational needs, reduce dependence on physical infrastructures, and enhance computational efficiency. In the coming years, it will be essential to continue supporting this infrastructural evolution while further improving the efficiency

and security of access to data and to the outcomes of research and innovation activities. To achieve this, objectives and actions have been defined for completion by 2027.



## D01 Objectives and Actions covered in the 2025-2027 Plan

Objective	Action	Implementation details
Support the logistics and upgrading of the infrastructures and tools needed for the development of artificial intelligence algorithms, ensuring ever greater computational and energy efficiency	<b>D01A1</b> Implement remote self-management capabilities for the power systems of FBK servers hosted in the Trentino Digitale data center, enabling energy-consumption monitoring through access to the powering PDUs. This will support the development of research tools for energy saving, optimization of advanced computing resources, and timely reporting	<b>KPIs in line with the Foundation's Information Security Objective Plan</b> <b>TARGET:</b> IT collaboration and integration (100% of planned actions implemented) <b>TIMELINE:</b> 2025 <b>RECIPIENTS:</b> All staff, specific FBK Services
Streamline system energy management and the work of personnel responsible for assets and security by completing the transition to the cloud and updating of the last non-avant-garde instruments	<b>D01B1</b> Carry out monitoring and prevention with device health control, with real-time warnings of ongoing attacks	<b>KPIs in line with the Foundation's Information Security Objective Plan</b> <b>INDICATORS:</b> Average feedback score above 4 out of 5 <b>TARGET:</b> Monitoring and service satisfaction <b>TIMELINE:</b> 2025-2026-2027 (ongoing work in progress) <b>RECIPIENTS:</b> Specific FBK Services



## Data and digital infrastructure security pillar (D)

### D02 IT applications and services

For many years, the Foundation has distinguished itself through its commitment to promoting agile work, guided by the principle: “work safely, easily, from anywhere, at any time, with any device, in the same way.”

This organizational model delivers concrete benefits both for personnel well-being and for reducing emissions from commuting, thereby contributing to environmental sustainability. However, ensuring efficient and secure access to remote work has required a significant shift in approach. Systems must now be configured to provide the highest levels of accessibility and flexibility, enabling staff to use spaces autonomously, move easily between buildings, and reduce dependence on cables and physical archives. Whereas IT services were once designed primarily for use within the Foundation’s buildings, their scope has now expanded, requiring numerous actions to align with new operational needs. Many of these measures have already been successfully implemented, yet the evolution toward an increasingly flexible and pervasive digital ecosystem is ongoing. A proactive and adaptive approach is essential to address emerging needs and ensure a modern, secure, and accessible work environment.

Key actions enabling effective remote work include the adoption of cloud infrastructures and applications, the widespread use of browser-based tools, the implementation of Single Sign-On (SSO) to simplify and secure access, and the adoption of the Zero Trust

Network Security (ZTNS) model to strengthen data protection.

In parallel with initiatives supporting high-quality remote work, efforts are also underway to meet requests for hot-desking solutions in selected Foundation spaces, introducing shared and unassigned workstations to increase flexibility in the use of physical spaces. To support this shift, the Digital Solutions & IT Infrastructure Service is virtualizing fixed telephony, enabling business communications to be managed independently of any physical workstation.

The Foundation’s digital innovation path is continually evolving to address new challenges and enhance operational efficiency, cybersecurity, and sustainability. This proactive approach allows the Foundation to respond effectively to staff needs while ensuring a modern, inclusive, and secure working environment. At the same time, this rapidly evolving context requires continuous adaptation. For this reason, the actions outlined in the Plan do not include fixed performance targets; instead, they provide a strategic framework to guide the Digital Solutions & IT Infrastructure Service in responding to future challenges.



## D02 Objectives and Actions covered in the 2025-2027 Plan

Objective	Action	Implementation details
Configure systems to provide maximum accessibility and flexibility in the autonomous use of workspaces, facilitating mobility between buildings and reducing reliance on cables and physical archives, while also supporting the adoption of modern, sustainable work practices for remote working	<b>D02A1</b> Continue to develop the path and configure the systems to ensure accessible remote work by carrying out the actions already taken over the years such as single sign-on, web applications, moving to the cloud and applying a Zero Trust Network Access strategy	<b>KPIs in line with the Foundation's Information Security Objective Plan</b> <b>INDICATORS:</b> Average feedback score above 4 out of 5 <b>TARGET:</b> Customer satisfaction <b>TIMELINE:</b> 2025-2026-2027 <b>RECIPIENTS:</b> All staff, visiting researchers and PhD students
	<b>D02A2</b> Virtualize the use of landline telephony through PC web applications and smartphone apps	<b>KPIs in line with the Foundation's Information Security Objective Plan</b> <b>INDICATORS:</b> Average feedback score above 4 out of 5 <b>RECIPIENTS:</b> All staff, visiting researchers and PhD students <b>TIMELINE:</b> 2025-2026-2027 <b>RECIPIENTS:</b> All staff, visiting researchers and PhD students
Support the development of state-of-the-art strategies and solutions in co-innovation laboratories with companies and public organizations to validate scientific ideas and identify emerging challenges, creating a virtuous cycle between research and real-world applications in the field of cybersecurity	<b>D02B1</b> Implementation of a Joint Lab between the Foundation's Center for Cybersecurity and the Digital Solutions & IT Infrastructure Service to establish a first-response task force in the event of a compromise, as well as a dedicated training, consulting, and support service	<b>KPIs in line with the Foundation's Information Security Objective Plan</b> <b>TARGET:</b> a) Operation of the Joint Lab between the Center for Cybersecurity and the Digital Solutions and IT Infrastructure Service b) User satisfaction <b>TIMELINE:</b> 2025 (start and subsequent continuous operations) <b>RECIPIENTS:</b> Unit Heads/Coordinators, Cybersecurity Department





## Data and digital infrastructure security Pillar (D)

### D03 Digital identity

FBK is strongly committed to developing secure and reliable solutions for digital identity management, a key enabler of data protection and technological transformation. The widespread digitization of systems and the increasing use of management applications—accelerated in part by the growth of remote work—have made it essential to adapt IT systems to ensure secure and flexible access to corporate resources from anywhere. Digital identity is therefore key to enabling continuous access to cloud-based services and information, ensuring operational continuity and process agility.

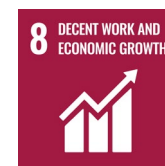
To simplify access, Single Sign-On (SSO) has been introduced, allowing users to authenticate once to access the multiple services and applications they rely on daily. In addition, the implementation of multifactor authentication (MFA) has strengthened security and enabled the extension of remote access to nearly all Foundation services, contributing to the dematerialization of processes.

Digital identity not only supports effective remote work by ensuring accessibility and data protection; it is also a strategic driver for the innovation of digital services, including solutions that support ecological transition. In this direction, FBK's research in the coming years will focus on the development and analysis of the digital identity wallet, an essential tool for ensuring controlled data sharing by citizens and organizations while preserving authenticity and integrity.

These digital identity tools provide the backbone for secure, resilient digital ecosystems that can support large-scale data sharing without sacrificing privacy or security. When integrated with advanced technologies such as machine learning, digital wallets will enable full use of artificial intelligence, offering effective solutions to future social and industrial challenges. This technology is critical not only for cybersecurity but also for ensuring the authenticity and integrity of data in strategic sectors such as health and agriculture, where high-quality information is essential for advanced decision-making and AI applications.

Although digital identity is already embedded in most internal systems and constitutes a central component of ongoing research, it remains essential to maintain a proactive approach to technology updates and new integration opportunities in order to uphold increasingly high and continuously evolving security standards.

For 2025–2027, the Plan sets out objectives and actions to ensure continued progress in the development of digital identity solutions.



## D03 Objectives and Actions covered in the 2025-2027 Plan

Objective	Action	Implementation details
Promote the integration of digital identity through multiple services, promoting the dematerialization of processes, agile work, sustainable mobility and cloud computing	<b>D03A1</b> Carry out a gap analysis to identify possible further actions to be taken to promote the integration of digital identity	<b>KPIs in line with the Foundation's Information Security Objective Plan</b> <b>TARGET:</b> Publication of the analysis and validation by the Head in 2026 <b>TIMELINE:</b> 2026 <b>RECIPIENTS:</b> All staff, visiting researchers and PhD students



## Data and digital infrastructure security Pillar (D)

### D04 Data security

The new challenges associated with digitization, the development of infrastructures supporting artificial intelligence research, and the growing consolidation of remote work have accelerated the migration of user-facing systems — traditionally hosted in data centers — toward cloud-based solutions. This shift has led to an exponential increase in security risks and digital threats, particularly concerning data availability and privacy, as well as the protection of IT systems.

Recognizing these challenges, the Foundation's Digital Solutions and IT Infrastructure Service, in close collaboration with researchers from the Center for Cybersecurity, has launched a series of security-enhancement initiatives since 2022. Among these is the FBK 2022–2024 Security Project, which established a comprehensive program to strengthen and review existing security measures in line with emerging digital risks. Over the years, the Foundation has also adopted a Zero Trust Network Security model, which requires continuous verification of access and multi-factor authentication (MFA), adding layers of protection to prevent unauthorized access.

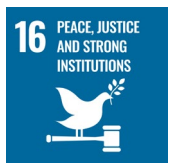
At the beginning of 2025, the Cybersecurity Joint Lab was formally established as a shared infrastructure between the Digital Solutions and IT Infrastructure Service and the Center for Cybersecurity. The Lab is dedicated to experimentation and the development of innovative IT security solutions. This collaborative environment enables the testing of advanced technol-

ogies and the assessment of prevention, monitoring, and active protection measures, ensuring a proactive approach to cybersecurity.

These efforts made it possible to validate and demonstrate compliance with the international ISO/IEC 27001:2022 standard, resulting in the certification of 8 of the Foundation's 12 Centers within the Information Security Management System in 2024—further reinforcing the Foundation's commitment to data protection and secure information management.

The growing prevalence of cybersecurity risks has also underscored the need to close skills gaps among cybersecurity staff and researchers, promoting stronger digital literacy and ensuring continuous professional development. To support this objective, the Foundation has introduced “Digital Cafés,” a series of meetings focused on various cybersecurity topics, accompanied by phishing simulations designed to assess and improve staff capabilities. With the establishment of the Joint Lab, these initiatives will not only continue but will be expanded, contributing to the further strengthening of the organization's security culture and a more informed approach to managing cyber risks.

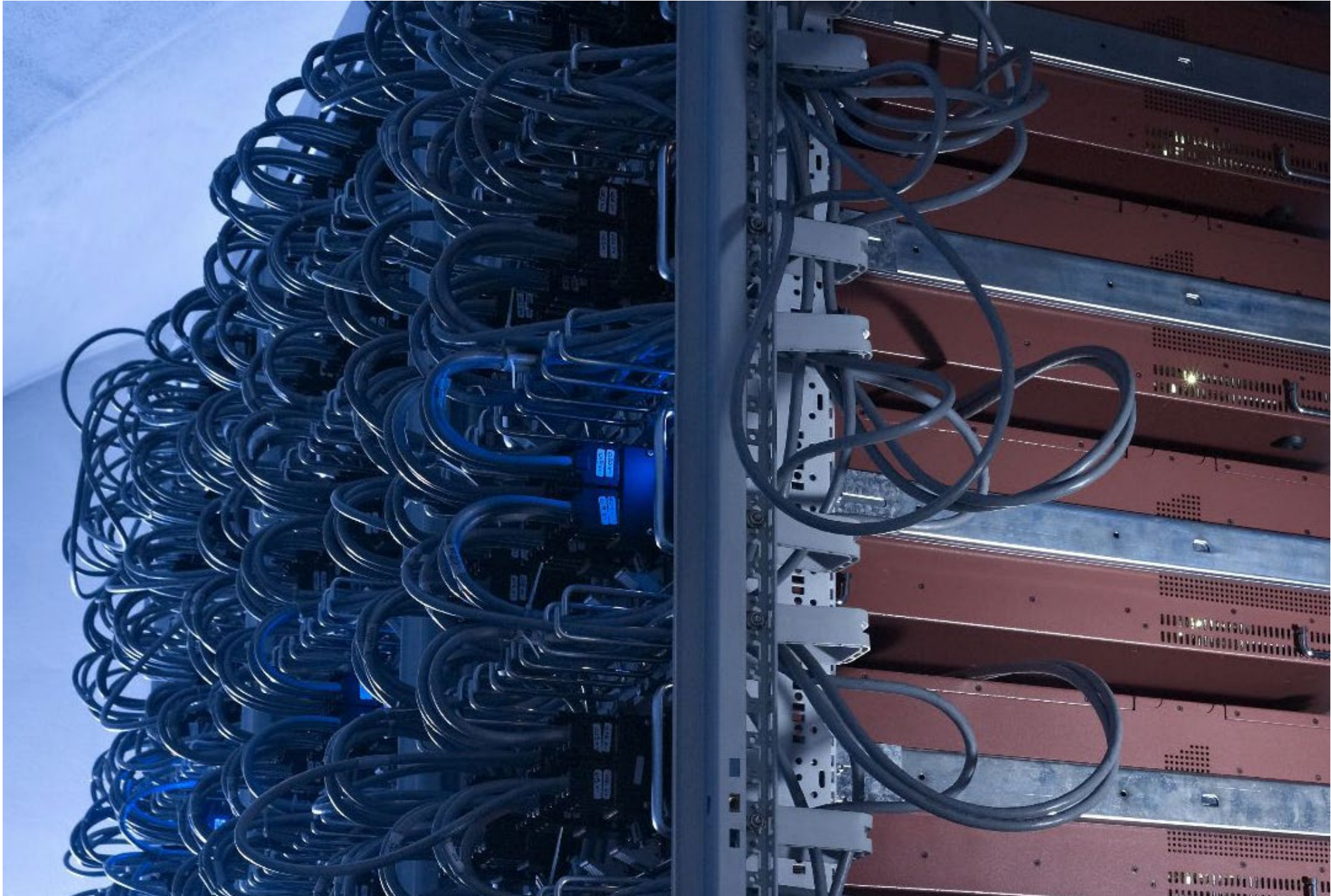
In line with recent progress, the Plan defines new objectives and actions to further advance data security.



## D04 Objectives and Actions covered in the 2025-2027 Plan

Objective	Action	Implementation details
Increase and maintain data and information security, according to a research thinking that is proactive and cybersecurity-oriented, always up-to-date	<b>D04A1</b> Development of annual plans, by the Joint Lab, outlining actions to be introduced to improve the preventive defense capacity, reducing the risks related to remote access to the Foundation's systems. 2025 sees the transition from traditional VPNs to Zero Trust Network Access (ZTNA)	<b>KPIs in line with the Foundation's Information Security Objective Plan</b> <b>TARGET:</b> Development of annual action plans approved by the governance <b>TIMELINE:</b> 2025-2026-2027 <b>RECIPIENTS:</b> Specific FBK Services
Invest in user training with the aim of increasing awareness and, consequently, improving the digital security of the entire Foundation	<b>D04B1</b> Continue to provide training programs to improve and keep staff security skills up to date through the activities of the Joint Lab. Specifically, continue and improve existing activities such as awareness raising events, "Digital Cafés" on cybersecurity issues, interviews and fake phishing experiments to increase the awareness of the FBK community	<b>KPIs in line with the Foundation's Information Security Objective Plan</b> <b>INDICATORS:</b> Percentage of staff who react correctly to a test <b>TARGET:</b> Preparation for social engineering <b>TIMELINE:</b> 2025-2026-2027 <b>RECIPIENTS:</b> All staff members
Make sure the certifications for the recognition of the Information Security Management System (ISO/IEC 27001:2022) obtained in 2024 are maintained	<b>D04C1</b> Design and adopt a shared and validated model for routine and special maintenance of ISO certifications obtained in 2024	<b>TARGET:</b> Validation of the maintenance model (in its entirety) and conclusion of the third-party maintenance audit (RINA) in the established/required terms <b>TIMELINE:</b> 2025-2026-2027 <b>RECIPIENTS:</b> All staff members



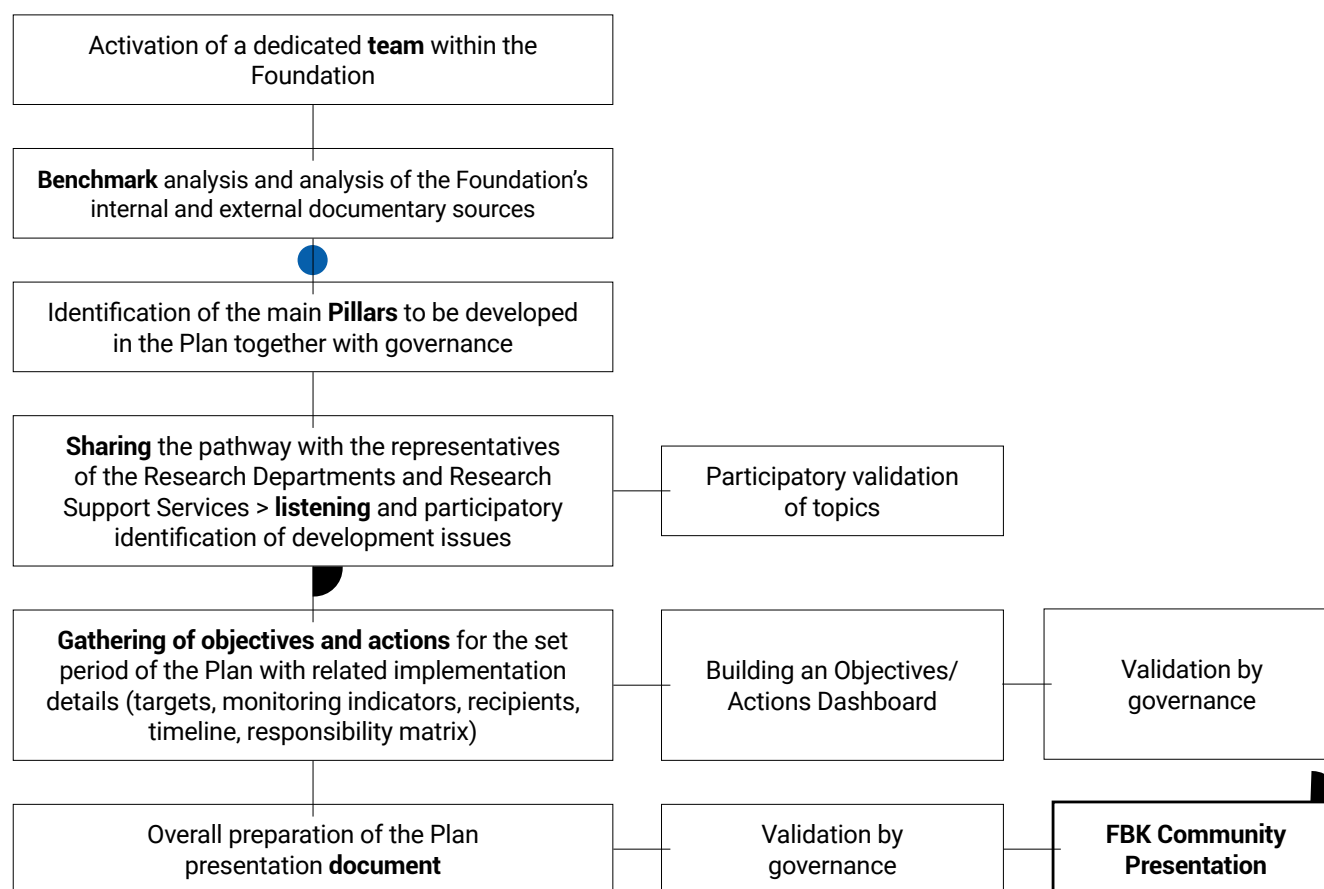


## Methodological note

To develop Fondazione Bruno Kessler's first Sustainability Plan, an in-depth review of existing documentation and internal processes already in place at the Foundation was carried out. At the same time, a benchmarking analysis was conducted on sustainability plans implemented by other foundations, universities, and companies that have recently adopted similar tools. Dialogue with the Secretary General, the Management Committee of the Research Centers, the Service Managers, and other stakeholders involved in the Plan was essential. These discussions made it possible to define the 22 themes addressed in the Plan. Using a structured methodology for gathering objectives and actions, the 45 objectives and 71 actions presented in this document were identified and subsequently validated.

Engagement with the Services also supported the assessment of the current state of implementation and the refinement of the actions to be adopted. This broad, participatory process involved all those responsible for the proposed actions, enabling the definition of targets to be achieved by the end of the Plan's implementation period in 2027.

### Development stages of the FBK Sustainability Plan





## Working group

The collection of information, coordination of the Plan's development phases, and drafting of the document were led by the Center for Sustainable Energy through the team composed of Luigi Crema (Center Director), Sara Stemberger, and Petra Centis.

The process was overseen by the Foundation's Secretary General, Andrea Simoni, and the representatives of the following themes and pillars contributed to the development of the Plan's content:

- **Research and Innovation Pillar**  
the Directors of the FBK Research Centers
- **Resources and the Environment Pillar**  
Amos Collini, Corrado Segata, Melani Emiliyan Ilichova, Chiara Morstabilini, Manuel Rezza and Veronica Giordani;
- **People Pillar**  
Alessandro Dalla Torre, Manuela Bacca, Claudia Dolci, Luisa Rigoni and Paolo Lubrano;
- **Governance Pillar**  
Alessandro Dalla Torre, Anna Benedetti, Giuliano Muzio, Daniela Anesi, Chiara Fronza, Silvia Malesardi, Paola Angeli, Alessandra Frongia, Andrea Asnicar, Massimiliano Filippi and Federico Pomarolli;

- **Data security and digital infrastructure Pillar**

Marco De Rosa and Silvio Ranise.

Silvia Malesardi, Moira Osti, Giovanna Rauzi and Giancarlo Sciascia contributed to the development of the overall communication project.

Finally, we thank Elvin Garibov, Annalisa Armani, Nicola Frizzera, Giulia Mezzanotte and Dominique Cappelletti for their contribution.



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