Mission Statement

for European Universities Linking

Society and Technology (EULiST)

OUR VISION

From the heart of Europe's metropolitan areas to peripheral rural regions, **our diversity and complementarity drives our ambition**. Each of our campuses is deeply embedded in its local ecosystem, connected to the regional and national society and deeply integrated in the European Community. By linking our campuses, EULiST connects territories and communities and their rich social, cultural, technological and economic knowledge and experience. By **integrating perspectives from the social and technical sciences** and **boosting challenge-based learning**, EULiST fosters innovation to build a more sustainable and globally engaged Europe and trains future generations of students, researchers, scholars and life-long learners to develop solutions to the grand challenges of today and tomorrow, notably **climate change, digital transition and social cohesion**.

OUR MISSION – OUR AMBITION

As universities, we have the responsibility to address the challenges that humanity is facing in everything we do, from education to research, innovation and societal outreach. This requires a major transformation: ensuring that our campuses become carbon-neutral, enabling true inter- and transdisciplinarity and integrating new perspectives by cooperating among our universities; while connecting with our stakeholders and partners from civil society, economy, culture and politics, for instance in cooperation clusters and joint innovation centres in EULiST Regions.

To achieve this, we have defined a guiding principle and chosen a clear focus based on sustainability: **interlinking knowledge in Science, Technology, Engineering and Mathematics (STEM) together with Social Sciences and Humanities (SSH)** to develop solutions to the major societal challenges of today and tomorrow, in particular climate change and the risks to social cohesion. This includes the major technological challenges like Artificial Intelligence (AI), machine learning and (big) data science.

Climate action is for us more than a unifying ambition, but demonstrates how EULiST will transform and prepare our universities for a sustainable future in terms of campus life, education, research, innovation, outreach and internationalisation. At the same time, **securing social cohesion** is both a prerequisite for and a consequence of climate mitigation as well as adaptation. True sustainable development therefore needs to consider ecological, economical and societal goals (SDGs).

EULiST will thus serve as an intermediary and generator of knowledge and innovation, empowering responsible change agents by laying out career paths for students, scholars and researchers contributing to societal and technological developments. The Alliance will thus have a direct impact on SMEs and start-ups and represent an opportunity for the development of communities. To this end, EULiST strives to build a unique, creative and inclusive academic ecosystem inspired by the reciprocities and synergies between all disciplines and recognizing the importance of **trust between society and technology**.
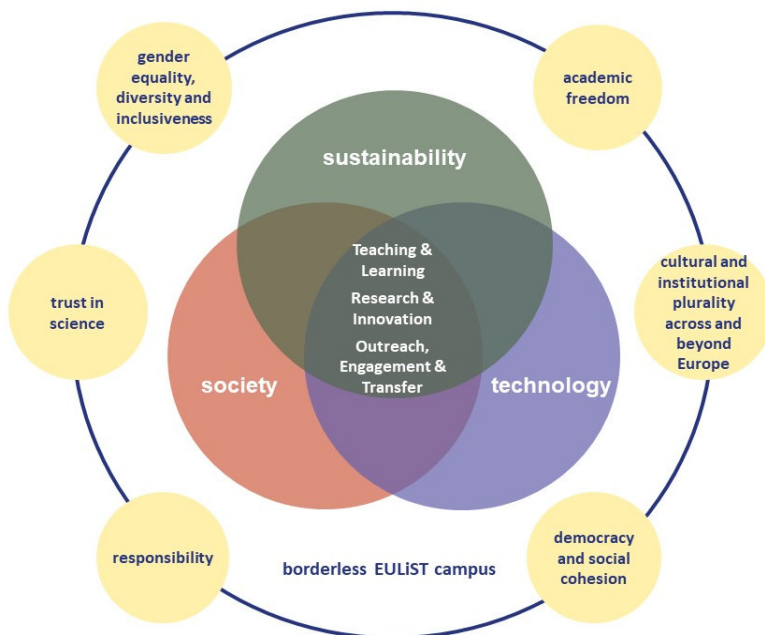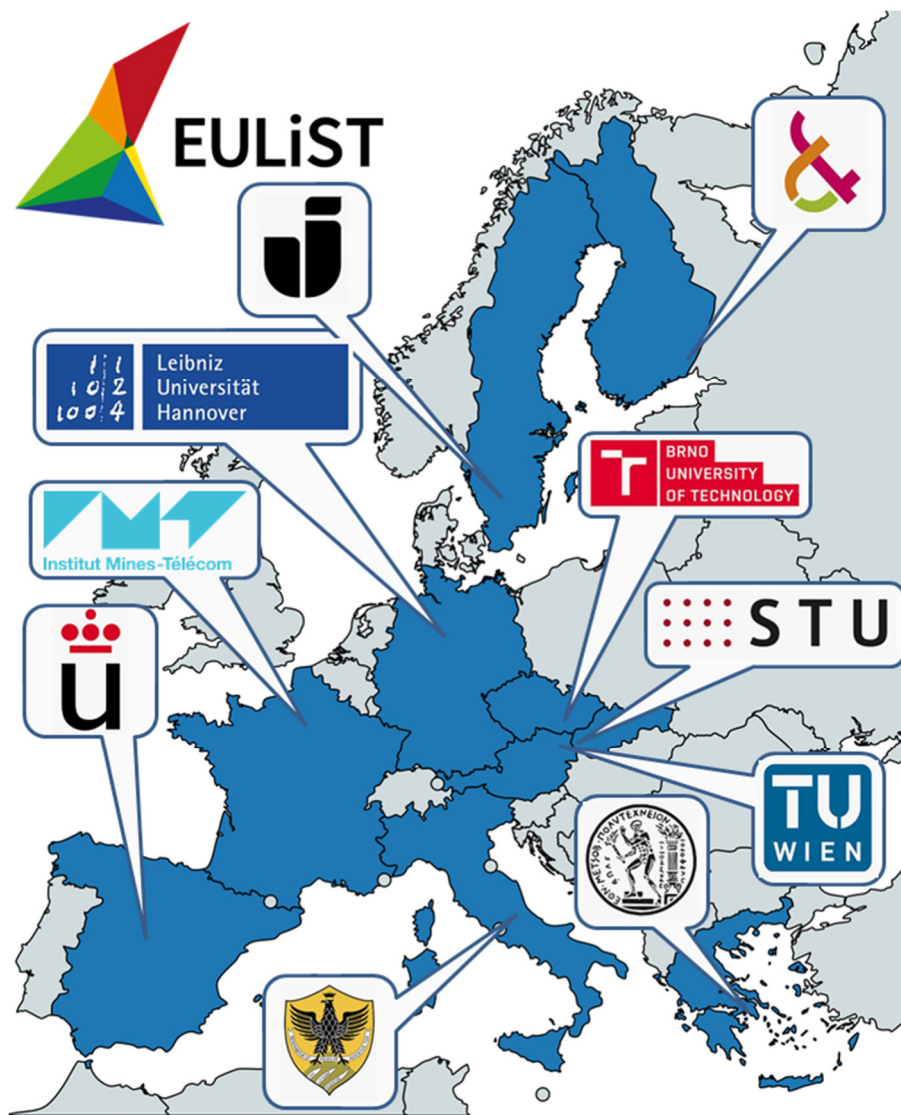

Figure 1: EULiST's unique and creative academic ecosystem at the intersection of society, technology and responsibility, grounded in European core values.

OUR CONSORTIUM – EMBODYING EUROPE'S DIVERSITY

EULiST integrates **over 200,000 students and 20,000 staff at 10 universities in 10 countries and even more European regions** motivated by the joint mission to educate new generations

of graduates and early-career researchers as well as equip life-long learners with the necessary competencies to address the societal and global challenges of today and tomorrow.

We base our proposal on a comprehensive and inclusive approach. From the outset, EULiST has engaged all groups and institutions in our member universities with a special focus on students, as well as civil society representatives and other stakeholders at all levels, from the local, regional and national to Europe and the world, in a **dynamic bottom-up approach**. Our vision reflects this approach.

Figure 1: EULiST in Europe

Together we represent the **diversity of the European university landscape** with universities from Sweden and Finland in the North, Greece, Italy and Spain in the South, the Czech and Slovak Republics in the East and Austria, France and Germany in the West and the Centre:

Lappeenranta-Lahti University of Technology LUT, Finland (LUT)

Jönköping University, Jönköping County, Sweden (JU)

Leibniz University Hannover, Lower Saxony, Germany (LUH)

Institut Mines-Télécom, France (IMT)

Brno University of Technology, South Moravia, Czech Republic (BUT)

Slovak University of Technology Bratislava, Slovakia (STU)

Technical University of Vienna, Austria (TUW)

University Rey Juan Carlos, Community of Madrid, Spain (URJC)

University L'Aquila, Abruzzo, Italy (UNIVAQ)

National Technical University of Athens, Attica, Greece (NTUA)

We are located in large metropolitan areas such as Athens, Madrid, Paris or Vienna, in major cities like Bratislava, Brest, Brno or Hannover and smaller rural towns such as Albi, Jönköping, Lappeenranta or Lahti. However, our diversity is not only geographic. Our members vary in size from 6,000 students at Lappeenranta-Lahti to 45,000 at Rey Juan Carlos. There are many public Members and privately funded ones, long-standing and newly created. Seven of our universities specialise in technology and business; three are comprehensive, offering a full range of disciplines including both STEM and SSH degrees. Some are based on a single campus; others are spread across a wide metropolitan area (URJC, NTUA), in different cities (LUT) or throughout the whole country (IMT).

This diversity is fundamental not only because it enables us to address the challenges of tomorrow, but because we can do so from different perspectives that take into account the different regions and also help us be aware of the complex consequences of our actions on individuals, society and the planet; enabling us to respond accordingly and appropriately. This diversity also provides the basis for future collaboration, beyond the four-year funding period, in hubs with other

European University alliances, and allows us to act as a model of good practice for other universities, in order to form synergies across a broad disciplinary range within and beyond Europe.

DRIVEN BY EUROPEAN VALUES

Despite our differences, our collective motivation is based on a set of shared values and principles. Among these are **equality, inclusion, diversity, democracy** and **peaceful international cooperation**. In line with **the objectives of the European Education Area and the European Research Area, in synergy with the European Higher Education Area**, we believe in the active role of universities and borderless mobility and innovation in the **digital age**. We believe in sustainable development, in life-long learning and in providing future-proof skills for sustainable, long-term employment that match the **twin green and digital transition**. We strive for interdisciplinary, high-impact research while **ensuring academic freedom, open data and open science** for the general public in order to serve society.

All EULiST Members are strongly committed to these core values and objectives and will stick to them in the future. Working together as **one university with shared institutional structures of a common academic ecosystem and across academic disciplines** will enable us all to accomplish more than we could on our own: educating students and scholars to think, create and act in ways that benefit a diverse and inclusive society. Our combined capacities will help propel cooperation between the EULiST regions and thus foster sustainable **European cohesion**. Transdisciplinary European projects will support the regions to act as motors for implementing the **Europe 2020 strategy for smart, sustainable and inclusive growth**. In line with the UN Agenda 2030, particularly SDG 17, our **interregional cooperation** will be complemented by **global multi-stakeholder partnerships** to mobilise and share knowledge, expertise, technology and financial resources for globally sustainable development.

PERFECTLY PLACED TO ADDRESS OUR AMBITION AND ACCOMPLISH OUR MISSION

Our shared European values enable us to develop a **unique approach within our institutional and individual diversity**. This methodology provides an added value for the community of all European University Alliances to develop joint approaches to societal challenges, in particular to the climate crisis and social disruption.

Many research-intensive alliances aim to address sustainability and climate change as probably the most challenging threat to our societies. At EULiST, we combine our strengths in technology and impactful research to propose an approach that focuses on innovative, yet practical and quickly implementable solutions by integrating both universities of technology and comprehensive universities. This enables us to act as a model for and form hubs with other European Universities for synergies. By **embedding social sciences and humanities at the heart of the technological solutions and innovations that we develop and create**, we aim to ensure that they are not only socially acceptable but also truly driven by a social vision to address various societal and global challenges. EULiST thereby uses the **STEAM approach** of blending the knowledge generated by STEM with that of other fields of study, in particular SSH programmes, to address particularly environmental and social challenges with the use of transversal skills, such as creative problem-solving, critical thinking and a dialogue with societal actors.

Finally, our institutional diversity, allied to that of our local and national environments, ecosystems and student bodies, gives us the necessary diversity of perspectives to develop **solutions relevant to both metropolitan and regional areas**. Solutions that aim to counter increasing inequalities and polarisation and contribute to social cohesion. Solutions that aim not only to help solve challenges facing our planet but also those affecting different forms of human agglomerations.

Figure 3: Sustainable Development Goals (SDGs)

This perspective and ambition are reinforced and anchored in our profile and notably by the alignment of our publications and European funded research projects with the **Sustainable Development Goals**.

The two Specialisation Indexes below identify the SDGs that EULiST Members most specialise in compared to the rest of Europe. More than the numeric results, what is relevant are the relative results, i.e. which SDGs 'stand out' from the others. For both publications and projects, EULiST's research is highly specialised (in comparison to the EU-27 baseline) in SDGs 6, 7, 9, 11, 12 and 13.
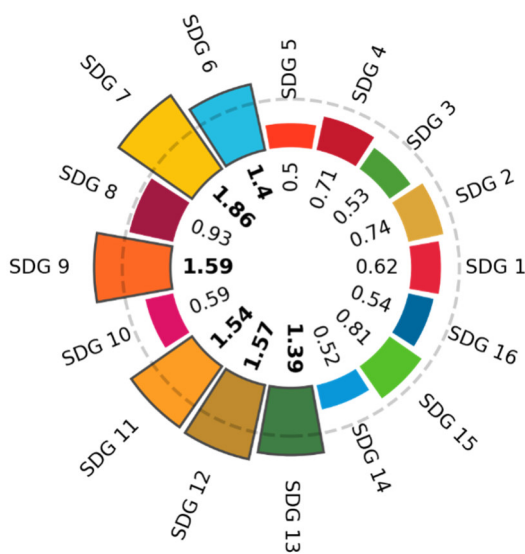

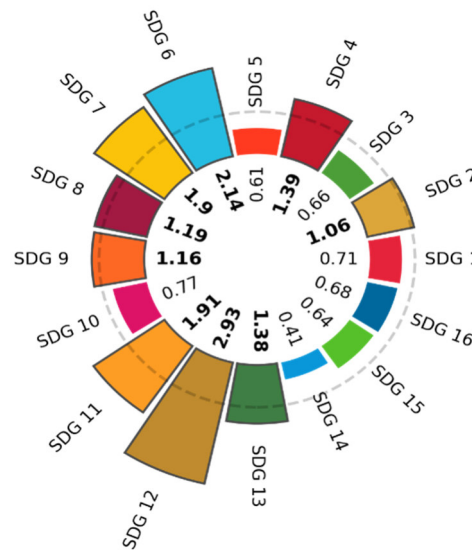Figure 4: Specialisation Index (SI) of the EULiST Members' publications, by SDG.

Figure 5: Specialisation Index (SI) of EULiST Members' H2020 projects, by SDG.

EULiST's focus on climate change mitigation and social cohesion is therefore backed by our combined research strengths: **climate action (SDG 13)** and **clean energy solutions (SDG 7)**, linked to **industry, innovation and infrastructure (SDG 9)** and to society through **sustainable cities and communities (SDG 11)** and finally to citizens' behaviour regarding **clean water (SDG 6)** and **responsible production and consumption (SDG 12)**. These strengths and focus areas demonstrate that questions affecting social cohesion are at the core of the EULiST Members' recent, extensive research work.

In addition to our strengths in these SDGs, the research and education activities of the EULiST Members are addressing all other SDGs as well. In line with the 2022 Agreement on Reforming Research Assessment, EULiST Members agree to "ensure gender equality, equal opportunities and inclusiveness" and to "take into account diversity in the broader sense (e.g. racial or ethnic origin, sexual orientation, socio-economic, disability" (4) in all EULiST action, particularly in research and innovation. **Gender equality (SDG 5)** is central to our approach of reconciling society and technology in agreement with the recently published European Strategy for Universities (COM(2022) 16), stating: "Diversity, inclusiveness and gender equality in the higher education sector have become more important than ever" (2). The EULiST Members, with our many faculties of engineering and technology, are ideally placed to take concrete action to improve the gender balance amongst our academic staff and students, particularly in STEM subjects. Finally, EULiST demonstrates the true potential of **partnerships for the goals (SDG 17)**, while our joint goal of **quality education (SDG 4)** represents the most crucial of SDGs for our group of universities.

This profile underlies our guiding principles of integrating societal demands and needs into the creation of innovative technologies, the dissemination of technological wisdom and of educating young and life-long learners to this end. Social innovations and changes in nature – not only climate change – are also bringing about changes in the job market, necessitating support and adaptability through skills development and resilience in **life-long education**. Our scholars will work together across disciplines and borders to identify and address needs for innovation in design and technology against a background of social, political and legal developments and consequences. Exposing EULiST students to this transdisciplinary thinking in **international challenge-based learning formats, impactful research and outreach projects** with various stakeholders will improve creativity and help shape a new generation, better equipped to meet upcoming challenges.

The **EULiST Campus**, physical and digital, will offer an academic ecosystem which will support inter- and transdisciplinary learning, research and outreach in facilities which support student participation and interaction with society. The campus will function as an **academic ecosystem of sustainable development,** exhibiting innovative techniques and providing access to hands-on experience and experiments, notably by digital and on-site EULiST demonstrators – all open to the public.

READY TO ADDRESS THE INSTITUTIONAL CHALLENGES OF EUROPEAN UNIVERSITIES

Following in-depth exchanges with both existing European University alliances and the huge Pan-European initiatives like the EOSC (European Open Science Cloud) or the emerging common European data spaces, as well as recommendations and reports on the European University Initiative (such as the October 2022 EUA briefing), we acknowledge that a successful European University alliance must do two things. On the one hand, alliances must find a way to define a **common strategy and governance** for campuses distributed across Europe. On the other hand, alliances must learn to create a **common digital infrastructure** to enhance the excellence of each member university and improve the complementarity of research activities, focusing on the high level of performance of early-career researchers in particular.

These two challenges appear to be relevant to all European Universities but they are particularly crucial to EULiST because of our **institutional diversity**. This diversity is fundamental to find innovative ways to address societal developments in different contexts and, in particular, climate change and social cohesion, but complementarities also increase complexity and risks of divergence between campuses.

We believe that EULiST can propose particularly important and relevant approaches to resolve these challenges and risks thanks to the **experience of our Members.** Notably, EULiST partners with the **German National Library of Science and Technology (TIB Hannover)**, affiliated to and part of the EULiST Member LUH, and uses TIB's expertise and initiatives as a model for developing EULiST's common digital infrastructure and digital knowledge services with data- and AI-based tools.

One of the biggest structural challenges for European Universities is to break down barriers to **inclusive and 'green' mobility**. EULiST seeks to diversify and simplify inclusive and green mobility of students and staff (online, hybrid or on-site), in particular with its digital course catalogue, online mobility, Blended Learning and Virtual Exchange, which will allow students from underrepresented groups to benefit from international experience. Overall, EULiST respects and values its student body of 200,000 for its large diversity. Within EULiST, students will act as the bonding individuals, treated not only as insiders within the new governance schemes, but their unique characteristics and invaluable feedback are required for organisational success. Regular feedback loops and surveys will help design EULiST and its digital and physical campus infrastructures to students' true needs and requirements. In workshops and confirmed in a joint Service Agreement, EULiST Members are benchmarking their **support services**, aiming to provide international students and staff with the same quality services and welcome culture across the entire Alliance.

BUILDING ON OUR STRENGTHS AND EXPERIENCE

The EULiST Members are especially well suited to fulfil the vision of developing European Universities by combining the distinctive features of **local embeddedness, Europe-wide scope, joint digital and physical campuses and seamless physical, virtual or hybrid mobility** – all to be governed by a common institution. Managing multi-campus institutions is a reality for four of the EULiST Members. Their campuses vary in size and scope from serving one municipality (the metropolitan regions of Madrid and Athens in the cases of URJC and NTUA) or two regions (Lappeenranta and Lahti in the

case of LUT), to eight campuses recently successfully merged within a single institute (in the case of IMT). This unparalleled experience will be shared within EULiST and is complemented by the experiences of other Members that have seen substantial growth over the past decades, have added new fields to their existing offer or have successfully reached out to partners locally, regionally and world-wide.

Other areas where EULiST Members will learn from each other include, for example, sustainability on campus, an area where **LUT** has won the **International Sustainable Campus Network (ISCN) award** and is ranked **9th in the world in climate action by THE –** an excellent example for other Members with campuses still in need of further action. **Local embeddedness, resilience and recovery** are today a hallmark of **L'Aquila University** after it experienced the devastating 2009 earthquake and suffered the loss of almost all physical infrastructure, including archival records. This will serve as an example of how to recover and use a tragedy as a catalyst to build something new, highly digitalised. **Brno University of Technology** and the **Slovak Technical University in Bratislava** have also experienced their own version of **upheaval** after the **major transformations** they have undergone with the fall of communism, transition to democracy and the Velvet Revolution, including the division of the state. Presenting yet another area for mutual learning and development among EULiST Members, the upcoming **European Open Science Cloud (EOSC)** was developed with substantial input from **TU Vienna,** launched there in 2018 and active internationally ever since**.** Last but not least, **NTUA**, with its long history of educating engineers who have driven the development of modern Greece, is part of the urban matrix of Athens' city centre.

CREATING A NOVEL DIGITAL INFRASTRUCTURE

In light of these defining characteristics of EULiST, we believe that a shared digital infrastructure is crucial for instilling a common identity, enabling economies of scale and thus creating true added value for all towards the twin digital and green transition.

This is why we have placed the **EULiST Knowledge Hub** at the heart of EULiST– a hub of knowledge, data and AI-based tools for information, education, open data sharing and cybersecurity. Using the **German National Library of Science and Technology (TIB Hannover) as the biggest technological library in the world as a model and nucleus**, EULiST Members will align, pool, share, upgrade and upscale their information systems. These include data facilities, IT and computing infrastructures, open access collections and other data resources in Members' libraries, in order to connect technology, data and minds for the best ideas and outcomes. The user-friendly EULiST Digital Knowledge Hub will be a vast and unique knowledge and information resource. **AI-based tools** will support orientation and interpretation in the enormous educational and research data universe for learners, educators, researchers and the public; pooling research data will stimulate and facilitate collaborative research among EULiST Members and increase visibility in joint publications.

Embedded in a single borderless campus, the EULiST Knowledge Hub will facilitate transdisciplinary learning and teaching, cooperative research and innovation and community outreach that will serve to **make the knowledge square a reality** while contributing to advancement of open science principles in Europe and beyond.

Already now, EULiST lives its mission to form a European University, based on European values, a common identity and responding to key global challenges in order to rebuild societal trust in technology, boost climate action and reinforce social cohesion – based on our present, for your future.