

TUM Sustainability Statement

Preamble

Purpose of this Document

This document provides an outline for sustainable development at the Technical University of Munich (TUM). It seeks to create a common understanding of our responsibility and our sustainability ambition as a purpose-driven, entrepreneurial University. It outlines our sustainability vision and mission, and our approach of how to get there. What follows is a call for reflection, action and transformation that is directed at all members of the TUM family: students, staff, faculty, alumni and partners.

Scope of Application

This document applies to the entire university. With respect to the organizational structure, this includes the TUM Board of Management, Functional Units, Central Service Institutions, Central Administration, Schools and Departments, Integrative Research Institutes, TUM Graduate School, TUM Institute for LifeLong Learning, TUM Institute for Advanced Study, Central Scientific Institutions, and Technology Core Facilities¹.

Sustainability and Sustainable Development

Sustainability is a powerful concept that guides TUM's responses to the many urgent challenges we face in the context of intergenerational and global justice. The discrepancy between the status quo and a sustainable future demands decisive action and significant changes in economic and social systems. TUM adheres to the established idea that sustainable development must integrate nature and environment, society and economy as interconnected and inseparable elements.

- Sustainable *ecological* development ensures the long-term availability of abundant natural resources for future generations, as well as the preservation and restoration of ecosystems – as a prerequisite for human existence.
- Sustainable *social* development fosters long-term well-being and prosperity for societies and individuals.
- Sustainable *economic* development promotes and creates stable and resilient economic systems serving the needs of society within the limits of finite environmental systems.

Inter- and transdisciplinary approaches are essential to connect these three elements as well as incorporate a multitude of context-dependent and individual understandings of sustainability. Evidence-based decision making, continual reflection and re-evaluation are crucial for sustainable development. As a knowledge center and innovation driver, TUM is in an excellent position to motivate, initiate and implement transformations toward sustainability through the breadth of its activities.

TUM's understanding of sustainability is aligned with the Sustainable Development Goals (SDGs) of the United Nations and draws on the political and legal environment, as well as frameworks specific to higher education institutions, e.g., as set out by the Bavarian Network for Sustainability in Higher Education.

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TUM's Sustainability Ambition as an Entrepreneurial University

TUM's sustainability vision and mission derive from the first guiding principle of the TUM mission statement that emphasizes our responsibility to

bring about "innovation for people, nature and society"².

Our Sustainability Vision

Through responsibility, talent, scientific and technological excellence, we take a leading role in the sustainable transformation of society to promote prosperity in accordance with nature and the environment.

Our Sustainability Mission

We are a globally connected, living laboratory for transformative action and make sustainable development central to our identity and activities. We do this by:

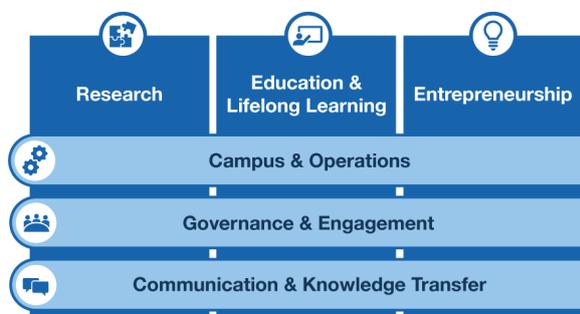
- enabling and connecting students, staff and faculty to develop transformative solutions for a sustainable future;
- facilitating research that advances the understanding of conditions and processes which impact sustainability, and that reduces ecological footprints through responsible innovation;
- fostering sustainable entrepreneurship;
- contributing to the development of a sustainable knowledge society;
- driving the transformation of our own physical, social, economic and governance systems.

TUM's Approach to Sustainability

The diversity and the scientific excellence of disciplines and persons are TUM's greatest assets. They provide a wide array of learning and research contexts, perspectives and approaches to sustainable development. This diversity is our key for becoming a leading contributor to regional, national and global sustainability transformations, and it forms the centerpiece of TUM's approach to sustainability.

Action Fields

Six interrelated fields of action create the foundation of TUM's sustainability strategy.



TUM encourages and specifically supports *research* that contributes to sustainability transformation across disciplines. TUM upholds sustainable principles for its research programs

and fosters inter- and trans-disciplinarity to generate impact.

TUM integrates sustainability into its *educational* mission. It fosters the transfer of knowledge and skills on sustainability-related issues to motivate and empower students to take responsibility and create sustainability impact – during their studies and beyond. This applies to our regular programs of study, as well as to our *lifelong learning* programs for internal and external learners.

TUM's *entrepreneurship* activities establish sustainability as a central stimulus for start-ups to develop long-term viable and profitable structures and business models. TUM's entrepreneurs strive to have a positive impact on society, nature, and the environment.

Scientific solutions to sustainability challenges are put into practice on TUM *campuses & in its operations*. These challenges include ecological, social and economic themes such as greenhouse gas emissions, energy consumption, mobility, resource management, biodiversity, gender equality, diversity, inclusion, security, and work and study conditions. TUM raises awareness for these issues through leading by example and making our campuses "living labs" for sustainability.

Participatory *governance* structures with clear responsibilities provide strategic orientation and motivate *engagement* to drive sustainability in all action fields. Transparency, high-quality evaluation and reporting are essential components of TUM's transformation.

Communication & knowledge transfer generate awareness and accelerate sustainability transformations by exchanging insights and experiences among people and institutions. TUM seeks to cooperatively advance progress through collaborative initiatives with other universities, research institutions, industry, civil society groups, and policy makers.

TUM Sustainability Strategy

The need for sustainability transformation demands a two-fold strategy: immediate and decisive measures and projects with clear benefits combined with an overarching strategy that is continually adapted and regularly updated. This approach empowers bottom-up activities, generates short-term impacts and ensures our long-term focus.

Call for Action

Sustainability is both an urgent challenge and a great opportunity to substantiate TUM's status as a responsible university of excellence. To accomplish the necessary deep changes, the entire university community needs to contribute their individual strengths, skills and expertise towards a sustainable purpose. TUM's *leadership* actively encourages campus-wide involvement and provides the support (financial, structural and political) needed to address our sustainability challenges. *Researchers* develop new ideas and drive sustainable research projects. As the largest body at the university, *students* are an integral part of the sustainability transformation – both within the university by stimulating change processes and beyond in their crucial role as

In order to take a leading role in sustainable development, we have defined a TUM-specific approach to develop our sustainability strategy:

- We set the scene for strategic activities and develop a common understanding of our sustainability framework.
- We identify key sustainability topics where we can have the greatest impact and contribute by utilizing our strengths.
- We define our ambition level, set concrete goals based on key performance indicators (KPIs), and develop measures and projects for each topic.
- We communicate progress on a regular basis in the form of public and transparent sustainability reports, we hold ourselves accountable, and we measure the success of our strategy.

This approach and the underlying processes are coordinated by the TUM Sustainability Office which reports directly to the TUM Board of Management.

multipliers before, during and after completing their studies. *Administrative and operational staff* have the knowledge and experience to identify potential areas for improvement and to implement changes to the physical infrastructure and administrative practices of the university. Our *partners* actively support our endeavors and collaborate with us to jointly accelerate sustainable development.

We are all called to take up responsibility and join forces to create meaningful transformation towards sustainability. We are committed to fostering a culture of sustainability at TUM and to evolving and implementing our sustainability strategy in order to steadily advance towards a leading role in sustainable development.

¹ This document is not binding for legally independent entities, such as TUM Campus Heilbronn, TUM Asia, Bavarian School of Public Policy, University Hospital Klinikum rechts der Isar.

² <https://www.tum.de/en/about-tum/our-university/mission-statement/> [15.03.2022]