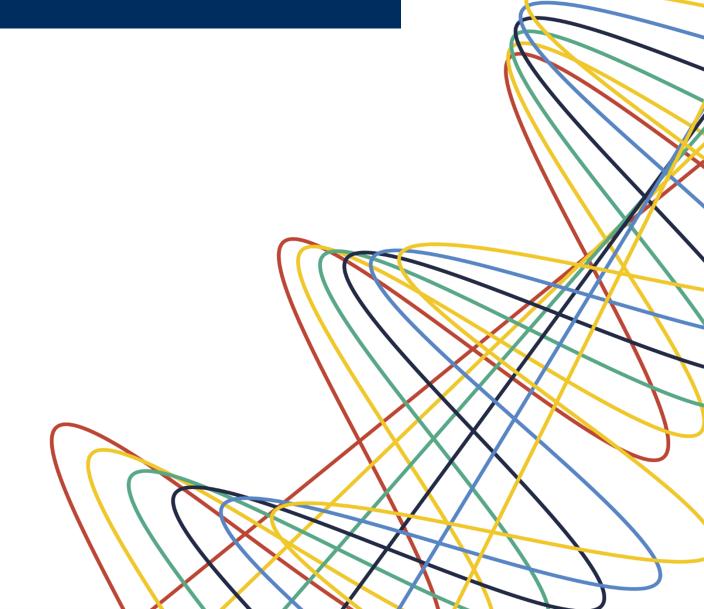# Sustainability strategy

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Status: (check only one)
    ☑ Public
    ☐ Available to Constructor Institute of Technology members only (on Intranet)
    ☐ Restricted availability, subject to approval

Related documents: see items [2] to [4] (Development Plan, Faculty Statute, Administration and Governance) in "References", section 6. Preamble

Date	Authors	Comments about this version
2023-03-08	Jesse Coleman	• Harmonised format based on the agreed template (headlines, titles, subtitles, font, size, etc.) • Fixed format issues • Justified the plain text • Approved by Board of Director 08.08.2023 • Approved by President 09.08.2023 • Approved by Academic Senate 09.08.2023
2023-10-07	Amandine Ambregni	• Initial version

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1 Introduction

Constructor Institute of Technology is a part of the Constructor ecosystem and shares its purpose to drive transformative advances in education, science, research, and technology.

The strategic goal for Constructor Institute is excellence in science, innovation, and teaching. Constructor Institute impacts science by creating new knowledge and developing human capital in research and innovation. Constructor Institute improves society by addressing key global challenges through research and innovation, and by strengthening the uptake of technologies throughout society. Constructor Institute generates innovation-based growth and leverages investment in computer science and quantum research.

Being a young and actively developing organisation, we cannot ignore sustainability. As a responsible institution, we align our sustainability goals with the sustainability goals of the United Nations. In making our strategy explicit, we take decisive steps towards making our organization future-oriented. This strategy summarises our understanding of sustainability on the one hand and our development strategy on the other. Based on our core competencies of teaching, fundamental and applied research, and innovation, we believe that we fulfil our social commitment in Switzerland and beyond – and will continue to do so for years to come.

2 Developing a sustainable organization

Constructor is an educational ecosystem founded in Schaffhausen, Switzerland, in 2019. The main goal of the Constructor ecosystem is to address, through knowledge, the world's most pressing challenges:

- Wars and violence
- Ageing and diseases
- Environment and sustainability
- Poverty and social injustice
- Universe and Earth challenges

Constructor Institute Schaffhausen aims to bridge the gap between education, science, research, and business to empower the younger generations and to address the problems of an ever-changing and complex world. Constructor Institute provides an innovative and business-oriented answer to the need for action regarding the growing global demand for Information and Communication Technologies (ICT) specialists in general, and more specifically in the areas of Artificial Intelligence (AI), software development, computer technology, cyber security, and quantum technologies.

The ethos of sustainability permeates every facet of Constructor Institute, as exemplified by the following activities:

2.1 Teaching and studies

Sustainability is transversal in our programs, such as the "MSc in Computer Science and Software Engineering, and Leadership" and the "MSc in Quantum Software Engineering and Computer Science."

- The intended outcome of these programs is to engage ethically with academic, professional, and wider communities, and to actively contribute to a sustainable future while reflecting and respecting different views.
- Instruction on sustainability is included in the module "Customer-Centric Mindset and Agile Delivery Management": "In this module, students touch upon the design of innovative R&D, operations, and marketing strategies that provide firms with a strategic and sustainable competitive advantage that is capable of utilizing global resources and capturing markets. These strategies will constantly be viewed in a competitive, resource constrained, and capital efficient marketplace."
- Information on sustainability is further disseminated in other management and leadership modules. Students also acquire professional competence in project studies.

Competence development plays a central role in human resources management. At Constructor Institute, we have outlined two layers of competence development – organizational and individual. The organizational layer aims to ensure corporate guidelines are in place to foster best practices and act as general rules when defining individual development. We ensure then that these guidelines and development options are effective at the individual level. We have identified various competence development options, such as coaching and mentoring, enrollment in courses, on-the-job training, etc. For all of those mentioned above and more, we have dedicated a separate HR Development Plan which can be referred to for additional details.

2.2 Research

Constructor Institute engages in a wide range of research. A significant part of this research contributes to sustainable development. Among these are research on smart cities, software engineering, and quantum technologies. These and other research programs have a significant impact on the following Sustainable Goals of the United Nations:

- Quality Education (Goal 4)
- Affordable and Clean Energy (Goal 7)
- Decent Work and Economic Growth (Goal 8)
- Sustainable Cities and Communities (Goal 11)

While expanding the research volume and opening new research projects and laboratories, Constructor Institute plans to increase the impact on the above-mentioned Sustainable Goals and cover other Goals in future research.

2.3 Sustainability in the organisation

- **Framework**: We have developed a series of framework documents for our Institute that define our conception of what a sustainable organization is. These documents include this sustainability strategy, related chapters in our development plan, as well as our research strategy and gender equality guidelines.
- **Internationalization**: Creating a multi-national environment is a key feature of our organisation, which we consider as a basis for sustainable development and competitive advantage. We enjoy a wide cooperation network through both academic and business partnerships around Europe and the world.
- **Local partnership**: Our partnership with canton Schaffhausen is designed to improve further development of the region as an education and innovative business centre and seeks to contribute to its sustainable growth.
- **Online-teaching**: We offer plentiful opportunities to study and teach online, which contributes to the digitization of society, which, in turn, saves natural resources by decreasing transportation and energy costs.

3 Our sustainability vision

Constructor Institute has firmly embedded sustainability in what it studies, how it teaches, how and what it researches, and the transfer of scientific knowledge, as well as in every aspect of its operation. The campus life shall be characterised by the responsible use of resources. Constructor Institute also supports a multi-language society based on democratic values, with an emphasis on diversity and inclusion.

We see opportunities in digitization and how it can positively impact the development of sustainability and equality throughout society. The multi-cultural ethos of the Constructor Institute allows us to present a uniquely global and multi-faceted understanding of sustainability.

Sustainability is a cross-sectional theme throughout our master's programs, as well as in our other courses. Sustainability also forms the framework of our educational and research activities. We promote further education for all members of the Constructor Institute in comprehensive sustainability practices that enable them to incorporate sustainability into their everyday professional and private lives.

We take the sustainability impact of all our activities into account, as it is at the heart of our vision of success – of our institution and of society as a whole.

4 Our governance

We believe that all status groups at the Constructor Institute can contribute to the process of shaping and promoting sustainability in the long term. To ensure freedom and equitable participation, this strategy declares that members of all status groups can set up initiatives, provide feedback, and influence decision-making and control processes in a dialogue-based framework.

The steering group "Sustainable Constructor Institute" consists of members from all status groups. The group members represent students, lecturers, teaching and research staff, as well as the administration. The steering group convenes at least once per semester at the invitation of the President.

The members of the steering group are:

- President
- Provost
- Administrative Director
- Equal opportunities officer
- Two representatives of the Students' Committee
- Representative of the Staff Council of the academic employees
- Representative of the Staff Council for administrative staff

The steering group is responsible for the further development of the Institute's sustainability goals as well as for the assessment of their implementation.

An appointed member of the quality control team performs the function of a Sustainability Manager. The Sustainability Manager organizes, on an annual basis, a "round table" on the topic of sustainability. In addition, the Sustainability Manager also ensures that the strategy and decisions of the steering group "Sustainable Constructor Institute" are implemented, collects suggestions and feedback from all status groups, and reports and communicates them out to the Institute community. The Sustainability Manager can also engage teams of experts from areas of the Constructor Institute that are particularly relevant to sustainability.

5 Our sustainability goals

In Constructor Institute of Technology, all aspects of sustainable development – environmental, economic, and social – are relevant in our research, teaching, and day-to-day operations. We use the UN Sustainable Development Goals 2015-2030 (SDGs) as our orientation framework. Among these 17 goals, we have identified as the most important for us: "Quality Education" (Goal 4), "Gender equality" (Goal 5), "Reduced inequality" (Goal 10), and "Industry, Innovation and Infrastructure" (Goal 9). We endeavour to implement the SDGs by taking them into account in the design of our teaching, research, scientific transfer, partnerships with academic and industrial partners, and organizational activities.

5.1 Teaching and studies (TaS)

The United Nations Sustainable Development Goal 4 "Quality Education": To ensure inclusive, equitable, quality education and lifelong learning opportunities for all.

To implement Goal 4 "Quality Education" we set up the following strategic objectives:

- TaS1: We embed sustainability in our courses and impart a basic understanding of sustainability to every graduate of the Constructor Institute.
- TaS2: We empower all members of the Constructor Institute to implement sustainability in their work- or study-place.

5.2 Research and Transfer (RaT)

The United Nations Sustainable Development Goal 9 "Industry, Innovation, and Infrastructure": Building a resilient infrastructure, promoting inclusive and sustainable industrialization and supporting innovation.

To implement the Goal 9 "Industry, Innovation, and Infrastructure" we set up the following strategic objectives:

- RaT1: We embed sustainability in our research and development activities by facilitating the research projects which influence ecological, social, and economic sustainability.
- RaT2: We assess our research activities to measure their influence on sustainability by supporting innovation in computer sciences and other related areas.

5.3 Institute operations (IOs)

The United Nations Sustainable Development Goals set several goals which we could use for improvement of our operation processes, contributing to sustainable economic growth (Goal 8), responsible consumption (Goal 12), and ecological and climate actions (Goal 13).

To implement these goals, we set up the following strategic objectives:

- IOs1: By the end of 2024 we assess our status to determine when we will achieve climate neutrality.
- IOs2: We will develop a climate protection plan for the Constructor Institute by the end of 2024, which will outline the possibilities for achieving climate neutrality (UOs1).
- IOs3: From 2024 onwards, we will set up sustainable procurement processes to ensure social and ecological criteria.
- IOs4: So far, Constructor Institute has signed the "Race to zero" pledge, along with corporate partner Acronis (https://www.educationracetozero.org/)
- IOs5: We will run a "Food for Thoughts" event on Sustainability on an annual basis, as well as hosting yearly or bi-yearly hackathons.

5.4 Less inequality (LI)

The United Nations Sustainable Development Goal 10 "Reduced inequality" and Goal 5 "Gender equality".

One of the key values of the Constructor Institute is equality of opportunity. Constructor Institute is committed to equal opportunity, regardless of someone's gender, age, religion, ethnicity, sexual orientation, social background, or disability. The issue of gender inequality is also addressed in our Gender Equality Guidelines.

Constructor Institute makes its contribution to eliminate existing disadvantages in society and to design learning and working environments in which diversity and variety play an empowering role. The specific design of measures to achieve these goals is assigned to a working group.

The appointed member of the quality control team performs the function of the Equal Opportunities Officer. The Equal Opportunities Officer organises on an annual basis a "round table" on the topic of "Less Inequality" at the end of each year, which includes members from all status groups. The Equal Opportunities Officer also ensures the implementation of the measures and reports to the President of the Constructor Institute on an annual basis. The Equal Opportunities Officer is also the contact person for all students and employees in order to cooperate with management on clearing and mediation of all issues related to this topic.

In order to implement these goals, we set up the following strategic objectives:

- LI1: We offer barrier-free educational opportunities for underrepresented groups in society by proposing scholarships and other forms of support.
- LI2: We develop special activities to attract more female students.

5.5 Transparency and reporting (TaR)

We believe that transparency and reporting are the main tools to embed democratic values and ensure sustainable development. Therefore, we are committed to ensuring a high quality of internal and external communication.

To implement this goal, we set up the following strategic objectives:

- TaR1: We will be making sustainability visible at our Institute and report on our sustainability activities and achievements on the Constructor Institute website.
- TaR2: We will present our sustainability report every two years. Our first sustainability report is to be published in 2025.

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