

Sustainable Development Goals Report

Technical University of Cluj-Napoca
2022

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The 2030 Agenda for Sustainable Development, adopted by all United Nations member states in 2015, provides a common plan for peace and prosperity for people and planet, now and in the future. At its heart are the 17 Sustainable Development Goals (SDGs), which represent an urgent call to action from all countries - developed and developing - in a global partnership. Thus, it was agreed that the elimination of poverty and other deprivations must be convergent with various strategies that improve health and education, reduce inequality and stimulate economic growth, while addressing climate change and contributing to environmental conservation.

Higher education did not play a significant role in the original Millennium Sustainable Development Goals (SDGs) for the period 2000 – 2015. But this changed profoundly with the definition of the SDGs for the period 2015 – 2030, so now universities everywhere are interested in achieving these ambitious goals. The university as an institution has a long history, starting as an educational institution, later assuming the function of knowledge creation (research) and more recently the so-called third mission of active engagement in society, thus having the role of contributing to the development of society.

„Sustainable Development represents, in the Romanian context, the desire to achieve a balance, a synthesis between the aspirations of the free-born citizen, the society on which it depends and through which it is defined, and the context that allows self-realization. This balance starts from man, the central actor who seeks an individual balance and favorable conditions to achieve it. The favorable conditions are influenced by the society that must support and motivate him and by the environment through which he finds himself and can find his balance. The role of the state in the context of sustainable development is to help achieve this balance, not only for citizens now, but also for future generations."

The national strategy for sustainable development of Romania 2030



In this context, the Technical University of Cluj-Napoca, like many other universities in the country, but as the main initiator in the field, is facing both major challenges and real opportunities for sustainable development, both of which, however, presuppose an approach pragmatic, realistic, focused on the real needs of the regional and national socio-economic environment, by orienting the entire educational, scientific research and innovation process towards this requirement.The Technical University of Cluj-Napoca is an active partner in the national and international academic community and has a continuously involved presence in the local and regional community. The purpose of this report is to highlight the involvement and impact in society of the Technical University of Cluj-Napoca in achieving the Sustainable Development Goals, including examples of initiatives, events and projects that provide impact from the perspective of the 17 sustainable development goals.

In the academic year 2021-2022, the first evaluation of the University was carried out in the UIGreenMetric international ranking - position 805, and the University's impact related to the Sustainable Development Goals specific to the prestigious Times Higher Education International Ranking THE IR2023 edition, was evaluated as follows:

- for *ODD4 - quality education,* position **200-300** at the international level (out of 1300 universities) and position 2 at the national level,
- for *ODD7-Clean Energy* - position **300-400** at the international level and the first position at the national level,
- for *ODD9-Industry, Innovation, Infrastructure*- position **400-600** at the international level and position 3 at the national level
- and for *ODD11-Sustainable cities and communities* position **400-600** at international level, position 2 at national level.



This Report for the academic year 2021-2022 regarding the Sustainable Development Objectives in the Technical University of Cluj-Napoca reflects how the University relates to these objectives, identifying and carrying out initiatives, events and impact projects on them.

Section I. Areas of intervention and progres

1.1.Education and Research (ER)

In the Technical University of Cluj-Napoca, educational and research-innovation activities are the basis for preparing the next generations of students, researchers and innovators, able to address the evolutionary challenges of society in the context of sustainable development. As a facilitator with a significant research activity at national and European levels, the University integrates and supports an important number of *Multidisciplinary* Research Centers aimed at sustainable development.The implementation of a culture of sustainability at the level of the entire community, through formal and non-formal education and by stimulating the multidisciplinary research activity that integrate various aspects regarding sustainability.

The Technical University of Cluj-Napoca is a multicultural university that offers 165 bachelor's and master's programs in Romanian, German, English and French, which address various aspects of sustainable development. Complementary to formal education, a series of post-graduate training courses or professional retraining offer specialized courses in fields such as energy management or energy audit. Fundamental research, but especially applied research, achieved remarkable results through the projects won at international and national level addressing topical issues, most of which are in conjunction with the objectives of sustainable development. At the institutional level, there has been continuous progress in terms of the educational context - various student scholarships, accommodation and meal facilities, didactic and individual study spaces, specialist counseling centers - the OCOC Center - career counseling and guidance, the CESTI Center - Studies and learning, the Alumni Office. Social and medical services are represented at the campus level by general medical and dental offices, and the maintenance of the state of health at the level of the entire academic community is ensured by the spaces intended for sports activities (Olympic pool, multifunctional sports fields, gyms per campus). Cultural services offer a wide framework for involvement and participation through various artistic activities.

Achievements

- Identification and documentation at the level of the current **Academic Programs,** of the curricular content that aims and promotes sustainability
- Providing opportunities for **non-formal Learning about sustainability** - General courses for a wide audience and for the Community, so as to become an active player in the process of transition to the green-sustainable Campus (Green Campus)
- Promoting and facilitating multidisciplinarity and the perspective generated by sustainable development in all Research Activities and **Projects** where possible
- 12 specialized study programs at master's level in the field of sustainable development
- 1 general level course, 10 specific courses at Bachelor level
- 2416 scientific articles identified by Scopus related to sustainable development objectives that accumulated 14067 citations
- 15.5 million Eur HorizonEurope research projects, H2020,FP7

1.2.Energy (E)

Addressing a major challenge such as climate change requires a truly collaborative, society-wide perspective. The Technical University of Cluj Napoca is an essential partner and actively involved in the education, creation and support of policies and their implementation on Campus and various communities, including in direct relationship with the Municipality of Cluj Napoca a community that has committed to decarbonize its current level by over 80% by 2030.

In the current context of an energy transition towards renewable sources, decarbonisation and environment with low greenhouse gas emissions, the University, through all its actions and policies, is in agreement with the objectives, financial allocations and actions of the decision-makers in Romania and at European levels, the most important being the improvement of energy efficiency by at least 45% by 2030, and the introduction of local renewable sources for self-consumption, respectively.

At the Technical University of Cluj-Napoca we have also committed to act as an example of the best practices at local and regional levels and to play our leader in the transition process towards the realization of a Green Campus. Building on the progress made at University level in recent years, we will continue to promote and use new technologies to increase the energy efficiency of heritage buildings according to the Action Plan for Climate and Sustainable Energy (PACED), supporting an ambitious investment transition plan to carbon neutrality.

Achievements

- Actively tracking the reduction of energy consumption - Internal monitoring at the level of the **ENTREC Energy Transitions Center**, through a dedicated energy consumption software system
- Making sustainable purchases - making and approving the **Sustainable Procurement Policy**
- **Community awareness** of the importance of the energy transition and the role that everyone has.
- Identifying and establishing realistic objectives in the field of sustainable energy and greenhouse gas emissions - equipment projects as a prosumer of suitable buildings in the Campus
- Diversifying energy supply by investing in renewable energy sources and reinvesting energy cost savings in new **Sustainability Projects** and Living labs.

1.3.Campus and Community (CC)

Sustainable development aspires to improve the health of the environment, society and the economy. The health of the community is determined by a wide range of social, environmental factors and various economic influences. The sustainability and vitality of our University depends on the health of the community and each other.

Increasing the availability of clean water, green energy, providing opportunities for active transport, identifying ways to reduce the waste generated and dispose of single-use plastics, aiming at easy access to safe and clean drinking water, providing healthy, safe and sustainable services, creating opportunities for physical activity, all of which have a positive effect and impact on health and well-being at individual and community level.

We fully agree that not only health education, but also healthy ecosystems - Campus and Community, are the essential foundation for good life. Globally, health is reflected in all sustainable development goals through direct or indirect correlation. We are fully aware that we depend on the environment and nature to support our educational and economic processes, but also food security, health and the quality of life of the Community.

The mission of the University is to create an environment favorable to the entire Community, by reorienting the services in accordance with the principles of sustainable development and strengthening community action.

Achievements

- Application of a unified approach at the level of the entire University from the perspective of information and involvement, with the aim of improving the well-being of the entire community -**Strategic Sustainability Plan** (developed and approved, implementation activities in the first year).
- Digitization of the University through the **EUT4ALL digital** project - the transformation of the university ecosystem through the digital transition towards a sustainable European future
- Fully functional **eCampus** for over 20,000 active users (Elearning and interaction)
- Student Digital Campus - **MEUtCluj** applications
- Institutional Cloud - **CloudIT** - support for multidisciplinary research activities
- Realization and approval of the **Gender Equality Strategy** reflecting the current and evolving perspective of the University on this issue
- Improvement of environmental management on Campus (renovation of the Observatory Restaurant, 2 new sports spaces - Baia-Mare multifunctional field, Mărăști Campus sports field equipment)
- Minimizing the impact on the University's own ecosystem and the environment through operational and infrastructure development activities (new Baritiu Buildings 4-6 undergoing certification according to standards)

1.4.Governance and Partnerships (GP)

At the Technical University of Cluj-Napoca we are aware that sustainable development cannot be adequately approached by a single group working in isolation. The complex problems that arise cover many areas of our work and require an integrated approach, bringing together our strengths as an education and research institution.

Social and environmental challenges are addressed by teachers and researchers in various fields, sustainability projects in Campus are implemented by technical and administrative staff, and students ensure that their priorities are achieved by getting involved in shaping our agenda.

As an ongoing basis, we aim to expand partnerships to increase opportunities for transdisciplinary research in the field of sustainability, to increase the visibility of University's activities in this field and to gain knowledge to valuable international practices. The University aims to optimize development opportunities in a sustainable manner and to integrate environmental and sustainability concerns into inter-university partnerships or with the socio-economic agents.

Achievements

- Creating a university based on **ECampus**, **CloudIT** technology that improves the student experience and supports the efficiency of information and operations
- Encouraging **Entrepreneurial Activities** for resource efficiency and increasing income diversity to finance future growth and development
- university communities in incorporating the objectives of sustainable development in education, research, services and the processes that take place in the University

- **Sustainable development strategy of Cluj Napoca Technical University 2022-2030**
- **Plan for climate and sustainable energy - PACED Plan**
- **Energy policy**
- **Sustainable procurement policy**
- **Action plan on climate change**
- **Strategic plan regarding gender equality**
- **Strategy for University digitalisation**
- Over 265 active partnerships, of which 23 are strategic partnerships
- Fully functional eCampus for over 20,000 active users (Elearning and interaction)
- Institutional Cloud operationalization - CloudIT, Electronic Registry (63,703 documents and approx. 24,000 users)
- 9 EUT+ meetings for governance and projects, the establishment of EUT+ Clusters for research and curriculum projects

Section II. Sustainable development of the University- PERMANENT ACTIVITIES

Considering the provisions of the Strategic Plan of the Technical University, the Sustainable Development Strategy adopted in 2022, the indicators collected for the international rankings UI Green Metric and THE Impact Ranking, there is a need to implement sustainable development policies and mechanisms at the institutional level, which aim at achieving the objectives set for the period 2022-2030.

This Sustainable Development Report for the year 2022 reflects the Status and Progress achieved in a point-by-point perspective, at the level of each of the 17 indicators.

GOAL 1. NO PVERTY



This objective aims at how universities address the problem through all their actions and initiatives, having a direct role in reducing the degree of poverty in their own community, both through quality education and through concrete material support, thus reducing the degree of intergenerational poverty.
UTCN considers it a priority to support the smooth running of the educational process and the formation of skills and competencies needed on the labor market, thus through its partnerships it has achieved the continuous provision of a set of scholarships that reward excellence and creativity.

Date	**Initiative/Event/Project**
permanent	Centrul CCOC- The Open University project offers career councelling and guidance (Career Kit brochure, Open Day, UTCN Caravan in high schools, 'Freshers' Week)
permanent	CESTI Center – Programe remediale / Remedial programmes for various diciplines
permanent	CESTI Center – Programe de dezvoltare personală /Personal deveopments programmes
permanent	SAS - Societatea antreprenorială studențească /The Entrepreneurial society from Technical University of Cluj Napoca (SAS) organizes events to support entrepreneurial initiatives and innovative technological development ideas (Demoday, Prototype Challenge)
permanent	Admision test simulation- testul de admitere
permanent	Faculties presentation in various events - Viitor inginer
permanent	Cursuri opționale de formare psihopedagocică/ Psihopedagogical Lectures
permanent	Cursuri facultative de limbi străine pentru studenți/ Foreign languages Lectures
permanent	Electrosummer – Summer School for pupils and students from disadvanged regions
permanent	Kick off your STEM career/ Mentoring programme Emerson Cluj

permanent	Grants DAAD
permanent	Roberto Roca Grants
permanent	Robert Bosch Grants
permanent	Premierea excelenței/ Excellency prize - Seismic Design Competition
permanent	ANIS Grants for education offered to teaching staff that offerts a curriculum adapted to new technologies
permanent	Grants Rada Mihalcea in partnership with Cluj Napoca City Hall
permanent	Grants Hidroelectrica for Electrical Engineering students
permanent	Grants NuclearElectrica
permanent	Grants Deep Mind for underrepresented communities, Artificial Intelligence Master TUCN
permanent	Grants competition --Proiecte antreprenoriale UTCN-- in partnership with JAR Romania

SDG1 in numbers

26% students participating in counseling and mentoring activities
Over 2000 scholarships and grants
80 students enrolled in personal development programs
120 students in admission preparation programs and 240 students in remedial programs/year
14% Relevant partnerships SDG1

GOAL 3. GOOD HEALTH AND WELL BEING



Ensuring a healthy life and promoting well-being, regardless of age, is an essential component of sustainable development, which can be addressed both through the correct identification of various diseases and through the implementation of intelligent solutions capable of increasing the degree of physical or mental comfort, respectively to monitor or maintain a certain level of health.
UTCN has remarkable results in this field through its presence in a series of international research projects, through the implementation of practical solutions adapted to certain needs in the CESTER Robotics Research Center and through continuous monitoring of the health status of community members.

Date	Initiative/Event/Project
permanent	Centrul de cercetare în Robotică CESTER /Robotic Research Center for health applications
permanent	Innovation Hackaton e-Mental Health Hackathon
permanent	Crosul UTCN with prizes and public recognition of the winners at the Cluj Youth Gala
permanent	***Campus smoke-free*** policy in all campuses

SDG3 in numbers

33% of research projects relevant to SDG3
53% ODD3 specific partnerships
6 sports terrains, Olympic nautical base

GOAL 4. QUALITY EDUCATION



Quality education is essential for sustainable development, being an area in which universities excel. Inclusive and equitable education supports the addressing of various challenges specific to sustainable development, is a mechanism for reducing inequities and improving the quality of life.
UTCN aims to support the increase of the quality of life and the level of well-being through support measures to ensure lifelong learning (LLL-lifelong learning), by providing access to various types of educational resources, courses and scientific events.

Date	**Initiative/Event/Project**
permanent	UTCN in EUT+ (European University of Technology)
permanent	Institutul de Inteligență Artificială al UTCN – IA-UTCN (evoluție)/Artificial Intelligence INSTITUTE
permanent	CESTI- Study and learning Center
permanent	Digital Innovation Hub-permanent activities
permanent	Platform DECIDFR for elearning curricula for postgrad and professional reconversion
permanent	Platform E-Campus for digitalisation of educational processes
permanent	ProINVENT -Research and innovation Conference
permanent	Robotica -UTCN/Robotics platform for learning and research
permanent	Continous update of bibliographic resources/Resurse bibliografice digitale din Biblioteca UTCN
permanent	ANELIS la baze de date internaționale for scientific resources
permanent	Google Hub Tech – Google Applied technologies hub
permanent	Zilele Carierei in Universitatea Tehnică Cluj- Napoc/ TUCN Career days
permanent	UTCN academic partnership with RAF and Fundația Transylvania Instiute of Technology in Innovation Lab Hackaton
permanent	Demo Day - entrepreneurial ideas supported by business plans through the Student Entrepreneurial Society - UTCN
permanent	Microsoft Learn – Microsoft technologiea training program for specialisation and certification
permanent	DIGILENT- design and programming competition
permanent	Programul FUTURE – build with passion, skills development program for the labor market
permanent	UTCN and DptIT- expozitie si jurizare proiecte informatice și de dezvoltare tehnologii/DptIT-Software projects competition
permanent	Polihack competition
permanent	BattleLab Robotica competition
permanent	Internet of Things Student Challenge competition

permanent	Mentoring programme Kick off your STEM career- Emerson Cluj
permanent	Seak-Peak webinarii tehnice SILCOTUB /technical webinars for TUCN students
permanent	Bosch Engineering bootcamp- internship with mentors
permanent	Like a Bosch experience- Bosch month
permanent	Luna companiei Tenaris – Tenaris month
permanent	Luna companiei Fortech - Fortech month
permanent	Luna companiei Emerson- Emerson month
Permanent	Luna companiei Endava în UTCN- Endava month
permanent	Program de mentorat Kick off your STEM career- Emerson Cluj
permanent	UTCN at Noaptea muzeelor
permanent	InnoEUT- Innovative University of Technology- EUT+ project for education innovation
permanent	Bosch Future Mobility competittion
permanent	Declarația de sustenabilitate - Sustainability statement present the new educational model through sustainable perspective

SDG4 in numbers

27% of research projects relevant to SDG4
62% of partnerships

GOAL 7. CLEAN AND AFFORDABLE ENERGY



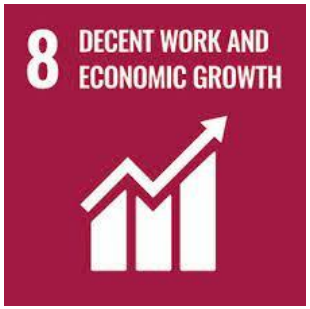
This objective proposes global, equitable access to safe, sustainable energy in an accessible manner, being essential because modern energy supports the other sustainable development objectives.
UTCN provides education and research conditions in modern spaces, in compliance with the latest energy efficiency standards.
The university organizes a series of support activities such as specialized master's courses, postgraduate specialization courses, workshops with a focus on energy, resources and the environment.

Date	Initiative/Event/Project
permanent	ENTREC -Research Center in energy transition
permanent	CRIMIGE - Centru regional de instruire și monitorizare /Monitoring and learning Center for electrical devices impact
permanent	Emobi-City- energy efficiency through city mobility
permanent	Net4Senergy- crossborder network for universities energetic sustainable
permanent	Curs postuniversitar Eficiență și sustenabilitate pentru manageri energetici /Postgraduate course in efficiency and sustainability for energy managers
permanent	Curs postuniversitar Tehnici de analiză energetică pentru cladiri cu consum nZeb/ Energy analysis techniques for NZeb consumption buildings
permanent	Curs postuniversitar de Audit energetic pentru clădiri/ Energy audit for buildings
permanent	Master Clădiri Verzi/Green buildings Master
permanent	Master Energii Regenerabile/Renewable energies Master
Permanent	Master Ingineria, dreptul si economia dezvoltarii durabile/Master for law economics and engineering of sustainable development
Permanent	Master Sisteme poligrafice sustenabile/ Master Sustainable poligraphic systems
permanent	Master Dezvoltare durabilă și protecția mediului/ Master Sustainable development and environment protection

SDG7 in numbers

35% of research projects
12% students enrolled in specific study programs

GOAL 8. DECENT WORK AND ECONOMIC GROWTH



Decent work in safe and stable conditions is a vital component in eradicating poverty and maintaining good health. Universities as employers must provide and educate in such a perspective, and as innovators they can identify advanced and fair ways of working.

UTCN is a promoter of the idea of economic growth through decent work in optimal conditions and ensuring a healthy and safe context.

Date	**Initiative/Event/Project**
permanent	Centrul OCOC- Career counceling Center
permanent	Centrul CESTI – Study and learning Center
permanent	Politici salariale publice/Public salaries policies

GOAL 9. INDUSTRY, INNOVATION, INFRASTRUCTURE



This objective focuses on providing an infrastructure capable of supporting sustainable development. Economic growth and the continued provision of health services, education and a decent standard of living are based on a quality infrastructure, and innovation, science and technology are crucial for the development of a sustainable infrastructure.

UTCN considers research essential in the analysis and solution of global problems, which is why it provides mechanisms to stimulate research and publish results with maximum impact and visibility.

Date	Initiative/Event/Project
permanent	Inno-EUT+ Innovative European University of Technology – growing the innovative and entrepreneurial capacity of the University
permanent	CloudUT- institutional project to support research activities using high-performance hardware/software support
permanent	COOLDC – data centers cooling- novel techniques for optimal thermal flexibility shifting and on demand waste heat reuse
permanent	Interreg Danube Transnational Programme: Transnational Cooperation to transform knowledge into marketable products and services for the Danubian sustainable society of tomorrow
permanent	BIECO- building trust in ecosystems and ecosystem components
permanent	AMATUC – DICOMI -Directional Composites through Manufacturing Innovation
permanent	Proiecte naționale /National projects with industry (130 projects) -Research page TUCN

SDG9 in numbers

More than 250 research projects annually
Over 250 patents

GOAL 10. REDUCED INEQUALITIES



The reduction of inequalities is reflected in every aspect of sustainability, through the way of meeting the objectives, offering a broader perspective than the objective of gender equality, which refers only to gender inequities.

UTCN reflects this objective in all its processes, constantly contributing through policies and actions in this regard

Date	Initiative/Event/Project
permanent	Centrul CCOC- Career counceling Center (broșura Kit de carieră, Ziua porților deschise, Caravana UTCN în licee, Saptamâna Bobocilor)
permanent	Centrul CCOC -Servicii și facilități pentru persoane cu dizabilități, metode alternative de evaluare, mentorat-/Services and facilities for persons with disabilities
permanent	Student associations and societies OSUT, BEST,ASFIC, ASCUT, AStA
permanent	EUT+- projects
permanent	Carta UTCN- Guaranteeing the rights of national minorities and prohibiting any form of discrimination
permanent	TUCN Grants
permanent	FutureProof- program TELEKOM pentru explorare oportunităților și de carieră/ Telekom programme for career oportunities
permanent	DAAD Grants
permanent	Roberto Roca Grants
permanent	Robert Bosch Grants
permanent	Premierea excelenței -Seismic Design Competition
permanent	ANIS Grants for education offered to teaches with updated curriculum
permanent	Rada Mihalcea Grants , in partnership with Cluj City Hall
permanent	Hidroelectrica Grants for electrical engineering students
permanent	NuclearElectrica Grants
permanent	Deep Mind Grants for underrepresented communities – Artificial Intelligence Master TUCN
permanent	Grants for Proiecte antreprenoriale in partnership with JAR Romania

GOAL 11. SUSTAINABLE CITIES AND COMMUNITIES



The objective promotes sustainable cities and communities, reducing the negative impact of cities on the environment, supporting an inclusive, safe, resilient and sustainable context for cities and their communities.
UTCN carries out the promotion and protection of the tangible cultural heritage in the spaces in which it operates, offering open access and ensuring their good conservation by identifying the necessary resources. Through the projects in which it is involved, the University aims to support the intangible cultural heritage by investing in projects and events that promotes this heritage, it also ensures the promotion and support of a sustainable development of the cities where the material heritage resides.

Date	**Initiative/Event/Project**
permanent	Events ALUMNI-UTCN
permanent	Clubul Cultural Studențesc—Românașul, BUM, Honoris, Nova, Pasărea IBIS, TrioTransilvan/Students Cultural Club
permanent	Acord EIB European Investition Bank pentru Investiţii Transformaţionale in TUCN
permanent	FAU- Diploma project exposition
permanent	SCIENCE4FUTURE European researchers night
permanent	Noaptea companiilor/ Companies night
permanent	Noaptea muzeelor/Museum night

SDG11 in numbers

EIB agreement EUR 21 million - Research, Education, Innovation Infrastructure
More than 30 artistic performances per year Românașul
Annual exhibition open to the public with over 100 FAU projects/year
PROINVENT Invention Salon
Annual scientific events as organizer or participant: Night of museums, companies, researchers

GOAL 13. CLIMATE ACTION



Climate change affects every part of society in every country. Universities must be the promoters of actions to reduce the impact generated by climate change, acting in such a way as to address these approaches through research, education and the permanent reduction of the carbon footprint.
UTCN recognizes the importance of a unified, effective and efficient approach to this issue, which is why it has designed policies and action plans in this regard.

Date	**Initiative/Event/Project**
permanent	Declarația – angajament de sustenabilitate recognizes the determining role of the University in the community and society in analyzing the challenges generated by climate change and sustainability. It is proposed to create a framework in which all university students will graduate with a good understanding of the issue but also with a minimum of expertise in identifying the souls for future generations
permanent	Plan de acțiune Climatică mentions effective investments to increase energy efficiency and reduce CO2 emissions
permanent	Politica Energetică proposes concrete actions that can be monitored and quantified resulting in the reduction of energy consumption and the realization and periodic updating of a PACED plan
permanent	ENTREC Research Center

GOAL 15. LIFE ON LAND



Maintaining biodiversity is a challenge in the face of climate change and the increasing degree of damage to nature through human intervention. Universities must contribute to the sustainability of biodiversity at the level of Campus and external ecosystems. UTCN has initiated various observation projects by collecting data and processing them to assess potential risks.

Date	**Initiative/Event/Project**
permanent	Eco2Pac - project to follow the process of collection and recycling of waste from TUCN
permanent	GreenTOP Agrobiodiversity - Structural Funds Project
permanent	International project GeoSES, space emergency system towards monitoring of dangerous natural processes

GOAL 17. PARTNERSHIPS FOR THE GOALS



This goal reflects the fact that partnerships are necessary to ensure sustainable development goals. Partnerships designed for common goals are stronger if they are made between governments, industries and civil society. This objective includes various elements such as: financial and development support, public policies, access and development of innovative technologies, development of various resources addressing a whole palette of systemic aspects.

Governamental and european partherships
Romanian digitalisation authority- Cadrul strategic național pe Inteligență Artificială/ National strategic framework for Artificial Intelligence
European University of Technology EUT+
Consiliul Național al transformării digitale
Autoritatea pentru digitalizarea României/ Romanian digitalisation authority/
Primăria Municipiului Cluj-Napoca. Cluj-Napoca City Hall

NGO's and companies partnerships
Cluster Cluj IT
Education Cluster - C-EDU
Innovation hub - DIH4S
Innovation hub - Digital Innivation HUB
Cluster Economic Regional Electrotehnic - ETREC
Cluster Materiale Avanced materials for Microandi Nanotehnologies - ADMATECH
Cluster Drifmat- Distributed Research Infrastructure for Materials, Applications and Future Technologies
Cluster Pro-nZEB
Cluster SpaceTech Transilvania
Cluster Ecoinovativ - CLEMS
Cluster Transnational for renewable energy - TREC
Bosch, Emerson, Siemens, Energobit, Banca Transilvania, BCR, ARKK, Nagarro, Indeco, Eaton, Intelactsoft, EVozon,UACE
JAR Romania
DpIT
Innovation Labs

SDG17 în numbers

More than 400 partnerships
More than 70 strategic partnersh

Section III. PROGRESS in Sustainable development goals

Complementary to the permanent activities, the 2021-2022 academic year contributed significantly to the implementation of the sustainable development objectives established by the University's Sustainable Development Strategy and ensuring the policies defined at the institutional level.

Significant results were noted at the level of the following Sustainable Development Objectives:

SDG1 - No poverty by increasing the number of Summer Schools, diversifying and multiplying the type and number of scholarships offered by the University, free postgraduate programs for SMEs

ODD3 - Health and well-being thanks to innovative projects won at international level

ODD4 - Quality education - new specialized master's programs in the field of sustainable development, -National center of competence and solutions for the development of climate-neutral and intelligent cities- NEtZeroCities (UTCN partner), Project ccu European funding-DIH4Society Digital Innovation Hub for a Smarter Safer and more sustainable Society, InnoEUT- Innovative University of Technology-, the EUT+ project for innovation in education, Digitalization Strategy of Cluj Napoca Technical University

ODD7 and ODD9 – International projects carried out in the field of Energy, Innovation in industry and infrastructure

ODD11 - Actions and projects specific to Sustainable Communities from a cultural perspective and institutional investments for urban regeneration

ODD13 - International projects in the field of climate actions (Entrainer, Olga, DOitSmarter)

ODD17 - New strategic partnerships initiated (ENIHEI, Lookheed Martin)

GOAL 1. NO POVERTY



This objective aims at how universities address the problem through all their actions and initiatives, having a direct role in reducing the degree of poverty in their own community, both through quality education and through concrete material support, thus reducing the degree of intergenerational poverty.
UTCN considers it a priority to support the smooth running of the educational process and the formation of skills and competencies needed on the labor market, thus through its partnerships it has achieved the continuous provision of a set of scholarships that reward excellence and creativity.

Date	Initiative/Event/Project	Link
2021-2022	PAVING: Advanced Practice for Engineering Career Success in partenship with industry for mentorship ppractical activities for last year students.	https://paving.utcluj.ro/
2021-2022	IMM free programme - efficiency and energetic sustainability for managers	https://www.utcluj.ro/media/notices/2021/Articol_presa_-_Lansare_curs_Editia_2_v2.pdf
2021-2022	Grants Accenture Industry X shape your future join student tech space	http://rocon.utcluj.ro/~levente/wp-content/uploads/2021/03/2021-04-06-Accenture-Research_program-UTCN35.pdf
2021-2022	Grants Guvernul Indiei for all study levels	https://www.utcluj.ro/media/notices/2022/Burse_Consiliul_Indian_pt._Rel._Culturale.pdf
2021-2022	Prizes from BT/ premii BT	https://crmse.utcluj.ro/index.php/anunturi/campanie-cu-premii-pentru-studenti-de-la-banca-transilvania.html
2021-2022	Summer school ENTREPBOOTCAMP- 30 students in practical workshops	https://www.utcluj.ro/media/documents/2022/International_Entrep-Bootcamp.pdf
2021-2022	European Summer University – Cluj- Napoca- ESU	https://www.utcluj.ro/media/documents/2021/ESU.pdf
2021-2022	Summer school Guhring NX-CAD inginerie mecanică	https://iirmp.utcluj.ro/practica/scoala-de-vara-2021-2022.html
2021-2022	Summerschool Bright-3D experimental platform	https://www.utcluj.ro/media/documents/2022/Bright_final.pdf

SDG1 progress in numbers

53% increase in the number of students participating in counseling activities

115 scholarships and 20 funding grants

80 students enrolled in personal development programs

120 students in admission preparation programs and 240 students in remedial programs

73 teams in Boboc UTCN

11 Relevant partnerships SDG1

GOAL 3. GOOD HEALTH AND WELL BEING



Ensuring a healthy life and promoting well-being, regardless of age, is an essential component of sustainable development, which can be addressed both through the correct identification of various diseases and through the implementation of intelligent solutions capable of increasing the degree of physical or mental comfort, respectively to monitor or maintain a certain level of health.
UTCN has remarkable results in this field through its presence in a series of international research projects, through the implementation of practical solutions adapted to certain needs in the CESTER Robotics Research Center and through continuous monitoring of the health status of community members.
(358 Scopus articles 2018-2022)

Date	Initiative/Event/Project	Link
2021-2022	ReMINDe –intelligent robot for chronic dementia patients	https://www.aalremind.eu/consortium
2021-2022	AAL H2H Care- international project- social robots for age elderly people care	https://www.utcluj.ro/media/notices/2020/H2HCare_PBJAwL5.pdf
2021-2022	AAL Remember Me- Digital assistant for preventing cognitive decline and social incusion	https://www.utcluj.ro/media/notices/2020/ReMember-Me_dkS91t2.pdf
2021-2022	Wisdom of Age – practical platform for knowledge transfer intergenerational.	https://wisdomofage.eu/wp-content/uploads/2022/07/Wisdom-of-Age-Project-Fact-Sheet.pdf
2022-2022	Online atelier for 3D printing with e-health applications	https://www.utcluj.ro/media/notices/2021/atelier_online.pdf
2021-2022	Concurs online de idei și proiecte HealthTech next generation	https://www.facebook.com/102630301485084/photos/a.104488931299221/251633293251450/
2021-2022	Study for students mental health	https://www.utcluj.ro/media/page_document/86/anunt_studiu.pdf
2021-2022	Multisport terrain -noului teren multisport UTCN-finalizat	https://www.utcluj.ro/media/notices/2020/teren_multisport.pdf

SDG3 progress in numbers

23% of research projects relevant to SDG3

2 new multi-sports facility

5 international conferences organized

95 new partnerships

GOAL 4. QUALITY EDUCATION



Quality education is essential for sustainable development, being an area in which universities excel. Inclusive and equitable education supports the addressing of various challenges specific to sustainable development, is a mechanism for reducing inequities and improving the quality of life.
UTCN aims to support the increase of the quality of life and the level of well-being through support measures to ensure lifelong learning (LLL-lifelong learning), by providing access to various types of educational resources, courses and scientific events.
(98 Scopus articles 2018-2022)

Date	Initiative/Event/Project	Link
2021-2022	AITECH- Centru de Excelență for artificial intelligence and big data	https://aitech.utcluj.ro/
2021-2022	High education from the equitiy, inclusion and sustainability perspective conference in Proiect RISE 2022—EUT+	https://www.utcluj.ro/media/notices/2022/EUt_CFP_RISE2022.pdf
2021-2022	ANTREDOC: Entrepreneurial skills and research excellence in doctoral and postdoctoral programmes (Proiect finanțat ESF)- activități de proiect	https://antredoc.utcluj.ro/
2021-2022	PAVING: Advanced Practice for Engineering Career Success, in partnership with industry- final year students mentorship practical activities	https://paving.utcluj.ro/
2021-2022	NEXTIng- future engineers in new digital revolution era.	https://www.utcluj.ro/media/page_document/471/D7_CNFIS-FDI-2022-0442_4SGVZBp.pdf
2021-2022	INSA double degree	https://www.utcluj.ro/media/documents/2022/acord_ARUT-INSA_dubla-diploma.pdf
2021-2022	Competition Blockathlon with Spherix accelerator and Cluj Startups for innovation and digital solutions for public sector.	https://crmse.utcluj.ro/index.php/anunturi/concurs-blockathon-editie-online-12-13-februarie-2021.html
2021-2022	Model Based Academy- Design academy based on models- Porsche Romania	https://crmse.utcluj.ro/index.php/anunturi/programul-model-based-academy-organizat-de-porsche-engineering-romania-inscriere-pana-la-data-de-15-februarie-2021.html

2021-2022	Erasmus+ Research and Industrial Week- Innovative Microwave Electronics and Optics- workshops and debates	https://www.utcluj.ro/media/notices/2022/Research_and_Industrial_Week.pdf
2021-2022	Romania's digital future – information, analysis and technology project proposal in partnership with Transilvania digital innovation hub	https://www.facebook.com/utcluj.ro/photos/a.200127156812497/1910873989071130/
2021-2022	Seak-Peak webinarii tehnice SILCOTUB for TUCN students	https://crmse.utcluj.ro/files/Anunturi/Invitatie%20webinarii%20tehnice%20TenarisSilcotub%20-%20UTCN.pdf
2021-2022	Bosch Engineering bootcamp- internship with mentors	https://www.facebook.com/utcluj.ro/photos/a.200127156812497/1916574575167738/
2021-2022	Program de internship STRATEC Buid your Robot	https://crmse.utcluj.ro/index.php/anunturi/build-your-robot-stratec-internship-2020-2210.html
2021-2022	Electrotehniada creativitate în știință și tehnologii/creativity in Science and Technology	https://www.utcluj.ro/media/documents/2022/ELECTROTEHNIADA_-_2022_Ing._El..pdf
2021-2022	InnoEUT- Innovative University of Technology- EUT+ project for innovation in education	https://crmse.utcluj.ro/index.php/anunturi/inno-eut-proiect-castigat-de-utcn-in-parteneriat-cu-eut.html
2021-2022	XP2P- mechatronic education	https://www.utcluj.ro/media/notices/2022/INVITATIE_XP2P_FIN.pdf
2021-2022	Laboratory Industry 4.0	https://www.utcluj.ro/media/documents/2021/inaugurare_Lab_Industry_4.0_n4muI1D.pdf
2021-2022	Laboratory for building automation technologies	https://www.utcluj.ro/media/documents/2021/laborator_AC_SxXrCdG.pdf
2021-2022	Laboratory for sanitary techniques	https://www.utcluj.ro/media/documents/2021/GROHE.pdf
2021-2022	Laboratory for process automation	https://www.utcluj.ro/media/documents/2022/International_Entrep-Bootcamp.pdf
2021-2022	Laboratory Signify- lighting solutions laboratory	https://foaiatransilvana.ro/utcn-va-inaugura-un-nou-laborator-de-ultima-generatie-in-cadrul-facultatii-de-inginerie-a-instalatiilor/
2021-2022	ENTREC energy days	https://entrec.utcluj.ro/entrec-energy-days-25-27may-2022/
2021-2022	Master your digital future- information and involvement actions	https://www.utcluj.ro/media/notices/2022/Master_your_Digital_F.pdf
2022	NEtZeroCities- National Competence Center for climatic neutral and intelligent cities.	https://www.utcluj.ro/media/documents/2023/NetZeroCities.pdf
2022	DIH4Society Digital Innovation Hub for a Smarter Safer and more sustainable Society	https://dih4society.ro/partners/

2022	Transilvania Digital Innovation Hub	https://transilvaniadih.ro/en/projects/
2022	EUT+ -Digital &sustenabil.the transformation of the University ecosystem through the digital transition towards a sustainable European future	https://eut4all.utcluj.digital/
2022	Master Ingineria instalațiilor– Servicii pentru orase regenerative/Regenerative cities Services	https://rb.gy/aygig
2022	Start-up an Engineer	https://www.utcluj.ro/universitatea/startup-an-engineer/
2021-2022	SALT- Entrepreneurial students in the digital world to develop entrepreneurial skills and abilities	https://www.utcluj.ro/media/page_document/452/Proiect_FDI_2021-0199.pdf
2022	Centru de Studii Coreene	https://www.utcluj.ro/media/notices/2022/Prof.David_Kim.pdf
2022	Strategia de digitalizare a Universității/University digitalisation strategy	https://www.utcluj.ro/media/documents/2022/Planul_Strategic_pentru_Digitalizare_al_UTCN_2022-2030.pdf
2022	Declarația de sustenabilitate present the new educational model through sustainable perspective	https://www.utcluj.ro/media/documents/2022/Declaratie_de_sustenabilitate_NX3Wt0g.pdf
2022	Strategia de sustenabilitate-2022-2030/Sustainability strategy	https://www.utcluj.ro/media/documents/2022/UTCN_SDD_final_31.10.2022_Engl.pdf

SDG4 progress in numbers

1 Center of Excellence in Artificial Intelligence

1 National Competence Center and solutions for the development of climate neutral and smart cities

5 new laboratories, 1 Master program for regenerative cities

GOAL 7. CLEAN AND AFFORDABLE ENERGY



This objective proposes global, equitable access to safe, sustainable energy in an accessible manner, being essential because modern energy supports the other sustainable development objectives.
UTCN provides education and research conditions in modern spaces, in compliance with the latest energy efficiency standards.
The university organizes a series of support activities such as specialized master's courses, postgraduate specialization courses, workshops with a focus on energy, resources and the environment.
(601 Scopus articles 2018-2022)

Date	Initiative/Event/Project	Link
2021-2022	Re-Cognition	https://entrec.utcluj.ro/renewable-cogeneration-and-storage-technologies-integration-for-energy-autonomous-buildings-815301-re-cognition/
2021-2022	SMEmPower- A holistic framework for Empowering SME's capacity to increase their energy efficiency	https://entrec.utcluj.ro/a-holistic-framework-for-empowering-smes-capacity-to-increase-their-energy-efficiency-847132-smempower-efficiency-2019-2022/
2021-2022	GEAR-AT-SME	https://entrec.utcluj.ro/generate-energy-efficient-acting-and-results-at-small-medium-enterprises-894356-gear-at-sme-2020-2023/
2021-2022	BRIGHT	https://www.brightproject.eu/consortium/
2021-2022	Olga – green holistic airport	https://entrec.utcluj.ro/holistic-green-airport-101036871-olga/
2021-2022	URBIVEL with Porsche Engineering Romania – advanced technologies for urban intelligent vechicles	http://www.epe.tuiasi.ro/2020/index_files/URBIVEL%20at%20EPE%202020.pdf
2021-2022	MicroInv with Technologistic Napoca Software-technologies for regenerable energy sources	https://www.utcluj.ro/raport-rector-2021/
2021-2022	GeoSES – Space Emergency System HU-SK-RO-UA cross border region for monitoring dangerous geo proceesses	www.geoses.ro

2021-2022	EnyMSW - energy recovery from municipal solid waste by thermal conversion technologies	https://www.utcluj.ro/raport-rector-2021/
2021-2022	Emobi-City- energetic efficiency through electric mobility	https://www.nord-vest.ro/emobicity-cresterea-eficientei-energetice-prin-promovarea-mobilitatii-electrice-in-orase-increase-of-energy-efficiency-by-electric-mobility-in-the-city/
2021-2022	PANDA – Powerfull advanced N-Level Digitalization Arhitecture for models of electrified vehicles and their components	https://project-panda.eu/carbon-care-action-of-a-european-research-project-on-electrified-vehicles/
2021-2022	HORESEC the holistic impact of renewable energy sources on the environment and climate	http://www.spms.energ.pub.ro/HORESEC/index.html
	Portal Gearsme for roumanian companies in their process of CO2 Gas emission reduction monitoring	https://www.utcluj.ro/media/notices/2022/Press_Release_Portal_GEARSME.pdf
2021-2022	ENTERC energy days	https://entrec.utcluj.ro/entrec-energy-days-25-27may-2022/
2022	Master – Servicii pentru orase regenerative/Regenerative cities services	https://rb.gy/aygig

SDG7 progress in numbers

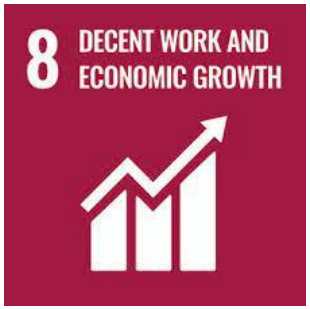
45% of research projects

1 new Master's program - services for regenerative cities

224 students enrolled in specific study programs

12% reduction in energy consumption

GOAL 8. DECENT WORK AND ECONOMIC GROWTH



Decent work in safe and stable conditions is a vital component in eradicating poverty and maintaining good health. Universities as employers must provide and educate in such a perspective, and as innovators they can identify advanced and fair ways of working.

UTCN is a promoter of the idea of economic growth through decent work in optimal conditions and ensuring a healthy and safe context.

Date	Initiative/Event/Project	Link
2021-2022	Strategia egalității de gen /Gender equality strategy mentions status and University policies for 2022-2025	https://www.utcluj.ro/media/decisions/2022/04/19/Planul_Strategic_al_UTCN_privind_egalitatea_de_gen.pdf
2021-2022	Carta Universității Tehnice mentions the aspects of non-discrimination, inclusion, equity and equality at the level of all processes in the University	https://www.utcluj.ro/media/documents/2021/carta_UTCN_2021.pdf

GOAL 9. INDUSTRY, INNOVATION, INFRASTRUCTURE



This objective focuses on providing an infrastructure capable of supporting sustainable development. Economic growth and the continued provision of health services, education and a decent standard of living are based on a quality infrastructure, and innovation, science and technology are crucial for the development of a sustainable infrastructure.

UTCN considers research essential in the analysis and solution of global problems, which is why it provides mechanisms to stimulate research and publish results with maximum impact and visibility.
(371 Scopus articles 2018-2022)

Date	Initiative/Event/Project	
2021-2022	COOLDC – Data centers cooling- novel techniques for optimal thermal flexibility shifting and on demand waste heat reuse	http://coned.utcluj.ro/cooldc/
2021-2022	Proiecte naționale /National projects with industry	https://research.utcluj.ro/tl_files/research/Active%20projects/2022/Proiecte_in%20derulare_tip_proiect_2022.pdf
2021-2022	eDREAM enabling new demand respose advanced, market oriented and secure technologies solutions and bussiness models	https://edream-h2020.eu/project-consortium/
2021-2022	S2RJU - Flexible medium voltage DC electric railway systems	https://entrec.utcluj.ro/flexible-medium-voltage-dc-electric-railway-systems/
2021-2022	INNO EUT+, Start-upuri Manuscrito, Shipdmed,Bway-education	https://innoeut.utcluj.ro/startups/
2021-2022	SAS Demo day	https://sas.utcluj.ro/index.php/category/evenimente/
2022	Global Startup cities ehealth – startup competition in e-health domain	https://crmse.utcluj.ro/index.php/anunturi/global-startup-cities-ehealth-program-2022.html

SDG9 progress in numbers

68 new projects with industry

9 new patents out of a total of 138 in the last 5 years

GOAL 10. REDUCED INEQUALITIES



The reduction of inequalities is reflected in every aspect of sustainability, through the way of meeting the objectives, offering a broader perspective than the objective of gender equality, which refers only to gender inequities.

UTCN reflects this objective in all its processes, constantly contributing through policies and actions in this regard

Date	**Initiative/Event/Project**	
2021-2022	FutureProof- TELEKOM programme for career opportunities exploration	https://www.utcluj.ro/media/page_document/86/Telekom_Romania_lanseaza_proiectul_Futureproof.pdf
2022	Rural-Urban Hub- proiect C-EDU for reduction of rural- urban gaps.	https://c-edu.ro/rural-urban-hub/

GOAL 11. SUSTAINABLE CITIES AND COMMUNITIES



The objective promotes sustainable cities and communities, reducing the negative impact of cities on the environment, supporting an inclusive, safe, resilient and sustainable context for cities and their communities.
UTCN carries out the promotion and protection of the tangible cultural heritage in the spaces in which it operates, offering open access and ensuring their good conservation by identifying the necessary resources. Through the projects in which it is involved, the University aims to support the intangible cultural heritage by investing in projects and events that promotes this heritage, it also ensures the promotion and support of a sustainable development of the cities where the material heritage resides.
(267 Scopus articles 2018-2022)

Date	**Initiative/Event/Project**	
2021-2022	IDArt- Development of complex methodologies regarding the attribution and authentication of medieval and pre-modern pictures from the national heritage	https://idart.utcluj.ro/
2021-2022	VART - Scientific investigation and exploitation of ornamental Dacian parade shields using virtual/augmented reality techniques	https://vart.utcluj.ro
2021-2022	RoCultura – Biserica lui Horea – Innovative techniques in the valorization of cultural heritage. Horea's Church - a heritage for the future. Valorization of an architectural monument from the 18th century through virtual reality	http://cizer.muzeul-etnografic.ro/index.php/ro/acasa/
2021-2022	RoCultura -Tehnici inovative în valorificarea patrimoniului cultural. The icons from the Sebeș Valley from the collection of the Ethnographic Museum of Transylvania	https://valeasebesului.muzeul-etnografic.ro/acasa/
2021-2022	Women in TEch	https://www.adr.gov.ro/adr-si-utcn-au-lansat-programul-national-women-in-tech-in-marja-innowave-summit-2022/
2022	National Conference *Sudura* (novative exhibition of artistic metal welds	https://www.utcluj.ro/media/documents/2022/Conferinta_nationala_SUDURA_2022_UTCN.pdf
2021-2022	Acord EIB European Investition Bank pentru Investiții Transformaționale in Technical University of Cluj Napoca	https://www.eib.org/en/press/all/2020-385-eur-21-million-european-investment-bank-backing-to-strengthen-research-education-and-innovation-infrastructure-at-the-technical-university-of-cluj-napoca

2021-2022	Urban regeneration imobilului de patrimoniu Bistrița 8 UTCN – Bistrița, Central Plaza 29	https://www.utcluj.ro/media/documents/2023/raport_rector.pdf

SDG11 progress in numbers

EIB agreement EUR 21 million - research, education, innovation Infrastructure

Urban regeneration Patrimoniu-Bistrita Building

GOAL 13. CLIMATE ACTION



Climate change affects every part of society in every country. Universities must be the promoters of actions to reduce the impact generated by climate change, acting in such a way as to address these approaches through research, education and the permanent reduction of the carbon footprint.
UTCN recognizes the importance of a unified, effective and efficient approach to this issue, which is why it has designed policies and action plans in this regard.

Date	**Initiative/Event/Project**	
2021-2022	OLGA- holistic green airport	https://entrec.utcluj.ro/holistic-green-airport-101036871-olga/
2022	ENTRAINER- energy audits and training for energy auditors	https://entrec.utcluj.ro/energy-transition-audits-towards-decarbonization-entrainer/
2022	DOITSMARTER- innovative control algorithms for smart buildings, cost effective technological heat solutions	https://entrec.utcluj.ro/doitsmarter/

GOAL 14. LIFE BELOW WATER



This objective reflects how universities are involved in various actions to protect and extend aquatic systems.
UTCN is aware of this objective, being a member of an innovative European project, which develops automatic intervention solutions in marine environments.

Date	Initiative/Event/Project
2021-2022	SEACLEAR - Search, identificaction and Collection of marine Litter with Autonomous Robots

GOAL 15. LIFE ON LAND



Maintaining biodiversity is a challenge in the face of climate change and the increasing degree of damage to nature through human intervention. Universities must contribute to the sustainability of biodiversity at the level of Campus and external ecosystems.

UTCN has initiated various observation projects by collecting data and processing them to assess potential risks.

Date	**Initiative/Event/Project**	
2021-2022	GOLDENEYE - Earth observation and Earth GNSS data acquisition and processing platform for safe, sustainable and cost-efficient mining operations	https://twitter.com/GoldenEye_H2020
2021-2022	GreenTOP Agrobiodiversity –Structural Funds project	https://ctfs.utcluj.ro/index.php/anunturi/anunt-incepere-proiect-poc-greentop-agrobiodiversity.html
2021-2022	GeoSES, - spatial system for natural and human ddisaster proceses	http://geoses.ro/?fbclid=IwAR1383KXjtLg2SpQR9034L4-pQf4KMjHmzJxS5vuzaQ7IC2r9xyEfubTuMQ
2021-2022	Environment project- *Hai la ecologizare- Ziua mondială a apei-Mondial Water Day*	https://www.utcluj.ro/media/notices/2022/Afis_Ziua_Mondiala_a_Apei_21_martie_2022.pdf

GOAL 17. PARTNERSHIPS FOR THE GOALS



This goal reflects the fact that partnerships are necessary to ensure sustainable developmentgoals. Partnerships designed for common goals are stronger if they are made between governments, industries and civil society. This objective includes various elements such as: financial and development support, public policies, access and development of innovative technologies, development of various resources addressing a whole palette of systemic aspects.

Governamental and european partherships	
ENIHEI- Innovative European Network for high education universities	https://www.utcluj.ro/media/documents/2022/UTCN_membra_a_retelei_ENIHEI.pdf

NGO's and companies partnerships	
Lookaheed Martin- partenership for inovative technologies development	https://www.utcluj.ro/media/documents/2022/lookheed_Martin.pdf
Cridsoft-partenership for technological models design for informatic systems	https://www.utcluj.ro/media/documents/2021/Proiect_IT_cu_CRISoft.pdf

SDG17 progress in numbers

19% of total SDG relevant partnerships

18% SDG relevant research projects

19% students enrolled in SDG-specific study programs

Appendix 1.Indicators and degree of achievements

No.	Measure	Indicators	Degree of achievements (0-4)	Term
ER1	Integration of concepts, mechanisms and approaches on sustainable development in the educational programs of the University	Number of courses that integrate aspects of sustainable development (min 30% of the courses in the Curriculum integrates notions of sustainable development) Number of dedicated courses (min. 1/year) Number of specific courses (min 5% of the total courses)	3	Ongoing
ER2	Encouragement and support offered to non-formal education initiatives for sustainability in the University	Number of courses, workshops, summer schools (min. 2/year) Number of students (internal/external) participants	4	Ongoing
ER3	Participation of the technical staff of the General Administrative Directorate in training sessions, and development of competences in the field of sustainable development and energy efficiency, through *in-house* courses	Number of courses (min. 2/year) Number of participants (approx. 20)	0	2024
ER4	Proposing and implementing research and development projects in areas related to sustainable development (according to the 17 SDGs - Sustainable Development Goals)	Number of research projects (min. 2/year) Number of publications (min. 200) Number of associated events (min. 2)	4	Ongoing
ER5	Supporting and promoting pilot demonstration projects such as *living labs,* regarding innovative solutions with applicability in the University's own buildings aimed at energy efficiency, renewable sources, smart buildings, etc.	Number of pilot projects (min. 2)	2	2025
E1	Increasing the awareness and involvement of the university and local community on the subject of energy efficiency and the transition to clean energy, through information campaigns and training in the field. Launch of materials to promote energy efficiency in buildings: guides, posters, stickers	Number of campaigns/year (min. 2)	1	Ongoing
E2	Development of a Community-wide network for monitoring energy consumption on campus. Installation of smart thermostats (temperature, humidity, Co2) Designation of an Energy Manager	Monitoring structure Energy Manager	1	2023
E3	Monitoring the level of energy consumption and emissions, as well as the measures to reduce the CO_2 emissions at the level of the University's buildings and infrastructure;	Annual Report	2	Ongoing

No.	Measure	Indicators	Degree of achievements (0-4)	Term
E4	Develop a *Sustainable Climate and Energy Action Plan (PACED)* for the major renovation of TUCN buildings and to significantly reduce energy consumption and greenhouse gas emissions, in line with the ER resolution	Plan PACED Increase energy efficiency min.45% -2030 vs 2012 Increase Decarbonization min 80% - 2030 vs 2005	4	2023
E5	Coordination of accessing and allocating financial resources, with priority non-reimbursable in order to significantly increase the comfort and energy efficiency of the patrimonial buildings	Number of projects (min.2/year)	4	Ongoing
E6	Implementation of energy-efficient lighting systems (motion sensors in corridors and toilets, the classrooms equipped with presence sensors, photovoltaic lighting devices for outdoor lighting of dormitories) Development of electric vehicle supply infrastructures adjacent to buildings	Min 30% LED lighting Number of stations (min.2)	3	2024
E7	Implementation of infrastructures to support transformations in the heritage of buildings, where possible, to become prosumers	15% of energy from renewable sources Number of prosumer buildings (min. 1)	2	2024
E8	Green-buildings certification for new spaces under renovation	Certificates for new buildings on Campus (BT and CM)	1	2024
CC1	Raising awareness in Campus and Community about the appreciation of biodiversity for ecosystem health, well-being and personal health through information actions and promotional materials	Number of information actions (min. 1)	0	Ongoing
CC2	Prioritizing the employment of students in various social and sports activities.	Number of students (min. 25%)	3	Ongoing
CC3	Development of Community-wide initiatives to support and monitor physical and mental health (safety of Internet use, cyberbullying)	Number of shares (min. 1 /semester)	1	2023
CC4	Development and implementation of a sustainable procurement policy	Acquisition policy 25% of sustainable purchases	4	2024
CC5	Development and implementation of a waste management policy, reduction of paper consumption and single use of plastic containers. Implementation of eco-containers.	No eco-containers (min.2) Plastic free campus 2030 50% reduction of paper consumption 2025	2	2024

No.	Measure	Indicators	Degree of achievements (0-4)	Term
CC6	Reducing water consumption. The use of rainwater for the maintenance of green spaces in the Campus and sanitary systems	10% yearly	2	Ongoing
CC7	Active transport (bicycles, electric vehicles) carried out, and Campuses with prioritized pedestrian access, made with the support and collaboration with the local public administration, that already implemented its own public policies and infrastructures, as the University has a city distributed structure of the Campus	Specific spaces for bicycle parking (min 1 / site on Campus) Electric vehicles (min. 2)	0	2024
GP1	Development of the "Green University" Charter, in accordance with international and national policies	Green Metric UI Rating and Certification	2	2024
GP2	Establishing new strategic partnerships at the level of the local, national and international community for the implementation of the SDG objectives. Establishing new strategic partnerships at the level of the local, national and international community for the implementation of the SDG objectives	No.of Partnerships (min 2/year)	4	Ongoing
GP3	Evaluation and documentation of the University's progress in achieving the established targets correlated to the Sustainable Development Goals (the 17 SDGs)	Sustainable development goals Report	4	yearly
GP4	Dissemination and transfer of knowledge and results within the Consortium of Technical Universities in Romania ARUT	Number of meetings / workshops (min. 1)	2	Ongoing
GP5	Dissemination and transfer of knowledge and results within the EUT+	Number of meetings / workshops (min. 1)	4	Ongoing

Appendix 2.Scholarly output per SDG

Name	Scholarly Output	FWCI	Citation Count
SDG 1: No Poverty	11	0.41	39
SDG 2: Zero Hunger	21	0.49	66
SDG 3: Good Health and Well-being	358	1.45	2537
SDG 4: Quality Education	98	0.63	222
SDG 5: Gender Equality	5	0.08	3
SDG 6: Clean Water and Sanitation	89	0.85	481
SDG 7: Affordable and Clean Energy	601	1.07	3486
SDG 8: Decent Work and Economic Growth	85	0.79	477
SDG 9: Industry, Innovation and Infrastructure	371	1.51	2013
SDG 10: Reduced Inequality	19	0.19	11
SDG 11: Sustainable Cities and Communities	267	0.91	925
SDG 12: Responsible Consumption and Production	178	1.02	1064
SDG 13: Climate Action	154	0.879	527
SDG 14: Life Below Water	12	0.83	75
SDG 15: Life on Land	124	0.75	138
SDG 16: Peace, Justice and Strong Institutions	4	0.43	3
Total 2017-2021	2416		14067

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The information in this report is taken from the Rector's Report 2022 (accessible at the address https://www.utcluj.ro/universitatea/raportul-rectorului/) and from the Newsletters regarding the activity of the Board of Directors, and the statistical bibliometric data are taken from ScopusSciVal (https://www.scival.com/home). These data represent the activities of the community of teaching staff, researchers and students within the Cluj-Napoca Technical University and reflect their alignment with the Sustainable Development Goals.

Thanks to the Academic Community for the effort made in achieving the sustainable development goals


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