CETYS UNIVERSIDAD

CETYS Universidad apoya los Objetivos de Desarrollo Sostenible

Sustainability Report

2023

Building Lasting Efforts

Baja California, Mexico, September 2023

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For the preparation of this report, we had the collaboration and support of a large number of people from different areas of the CETYS System and its academic community. To all of them our greatest thanks.

Content

Remarks by the Rector

The Center for Technical and Higher Education, CETYS University, has always been committed to the full development of its mission and vision, based on the operation of long-range strategic plans.

For more than a decade and within the framework of the CETYS 2020 Plan, sustainability became an outstanding pillar of the institutional model, having been incorporated as one of the six distinctive elements of its education, with the intention that its principles would be known and permeated in all educational programs at its different academic levels.

Over the last few years, CETYS has developed several initiatives that have positioned it as an institution strongly committed to sustainability, such as: the optimal use of water resources; taking advantage of the abundant solar energy of the region, with which it currently generates 1.2 MW, positioning CETYS as the main university in Latin America in the generation of photovoltaic energy, and the comprehensive management of waste that operates under the "Zero Waste" program, among many other actions.

In this context, in 2023 the Institute for Sustainability Studies (INESU) was created, with the aim of: organizing, coordinating, promoting and promoting the actions that the institution has been developing over the years around sustainability. Among the actions developed by INESU, it is worth highlighting the awareness of more than 2000 students and teachers in relation to the United Nations Sustainable Development Goals, the proposal of the CETYS Climate Commitment and the deployment of several projects aimed at offsetting emissions into the atmosphere, conserving biodiversity and promoting green entrepreneurship hat actively involve the entire community.

Finally, I am pleased to inform the community that in the CETYS 2036 Development Plan, the institution not only reaffirms its commitment to sustainability, , but also seeks to intensify its actions in this regard, in all areas of university work, with special emphasis on the renewed commitment to the Sustainable Development Goals of the United Nations 2030 Agenda.

Dr. Fernando León García
President CETYS System

Introduction

The Center for Technical and Higher Education (CETYS University) is a private institution of educational excellence, born in 1961 in Baja California, Mexico, under the auspices of a group of visionary entrepreneurs committed to education grouped in the Educational Institute of the Northwest, A.C.

Since the definition of its mission: "It is the purpose of CETYS to contribute to the formation of people with the moral and intellectual capacity necessary to participate in an important way in the economic, social and cultural improvement of the country", the institution has systematically promoted: a) scientific training, b) character formation and c) general cultural formation. Currently, its multi-experiential educational model, based on a humanistic vision, a flexible educational experience and experiential learning, is based on 10 Distinctive Competencies that promote competitive training at a national and international level:

1. The raison d'être:
    a. Identity & Integrity
    b. Leadership and Social Responsibility
    c. Lifelong learning
2. The College Era:
    a. Innovation and entrepreneurship
    b. Internationalization and interculturality
    c. Sustainability
3. The learning of the university student:
    a. Critical Thinking
    b. Information management and use of technology
    c. Collaborative work
    d. Communication

Under this model, the institution ensures that all its graduates – regardless of the level of education studied – have been sensitized, trained and/or trained around knowledge and experiences related, among other topics, to sustainability.

In the context of the Development Plan of the Center for Technical and Higher Education, CETYS 2036, the Rector Fernando León García, in January 2022, commissioned a group of academics and external advisors to begin exploratory work for the creation of the Institute of Studies for Sustainability of CETYS University (INESU-CETYS).

The Institute of Studies for Sustainability of CETYS (INESU), begins operations in 2023, with the initial objective of organizing, coordinating, promoting and promoting the actions that the institution has been developing over the years around sustainability, so that there is greater regional and international visibility on the subject, and to contribute in a clear and decisive manner with actions leading to a more rapid transition towards sustainable development, from the local to the global level.

Since its conception and creation, INESU-CETYS has sought to be perfectly aligned with and promote the achievement of the 17 United Nations Sustainable Development Goals (SDGs) in the following areas: education,

research, outreach, improvement of spaces and infrastructure, construction of global citizenship, as well as the dissemination of science, arts and culture.

The main motivation for the creation of the CETYS Institute of Sustainability Studies revolves around the following main ideas:

• The need to organize, structure and make visible all the efforts developed by the CETYS community on the subject.

• The importance of unifying, articulating and directing future institutional efforts under a universal frame of reference such as the United Nations Sustainable Development Goals.

• The urgent need to contribute with ideas and actions - from the local to the global level - to the transition towards sustainable development.

• Contribute to a space for discussion and analysis in the California-Baja California region that brings together the main actors and agents of change, so that ideas and recommendations are generated with a long-term horizon of action and strategic vision, with the ultimate goal of improving the living conditions of its inhabitants.

• The desire to make operational a space for reflection-action of a multidisciplinary nature, where lasting solutions to complex problems are proposed.

Among the main actions carried out by INESU during 2023, the following can be highlighted:

1. Holding of the forum: "Use of water in agricultural activities under conditions of scarcity and climate change".
2. Participation in the "9th International Workshop on UI GreenMetric University Rankings. Innovation, Impacts and Future Direction of Sustainable Universities" at the University of Minho, Portugal.
3. Deployment of the program to raise awareness about the Sustainable Development Goals for all areas of the institution.
4. Elaboration of the flagship project program: "300 x 500", "Charity Gardens" and "Experiential Gardens".
5. Joining the Higher Education Institutions for Sustainability (HESI) initiative.
6. Participation in events related to "UI GreenMetric"
7. Start of the certification process as a Sustainable Campus (IFEE).
8. Collaboration in the realization of the first "Environmental InterCETYS".
9. Preparation of the proposal for the CETYS Climate Commitment.

This document "Sustainability Report 2023. Building Lasting Efforts", gives an account of the institution's state of sustainable development and the actions that have been planned in the context of the CETYS 2036 program.

The objective of this document is to define future actions and report on institutional progress on six key aspects of sustainable development:

(a) Environment and infrastructure

(b) Energy and climate action

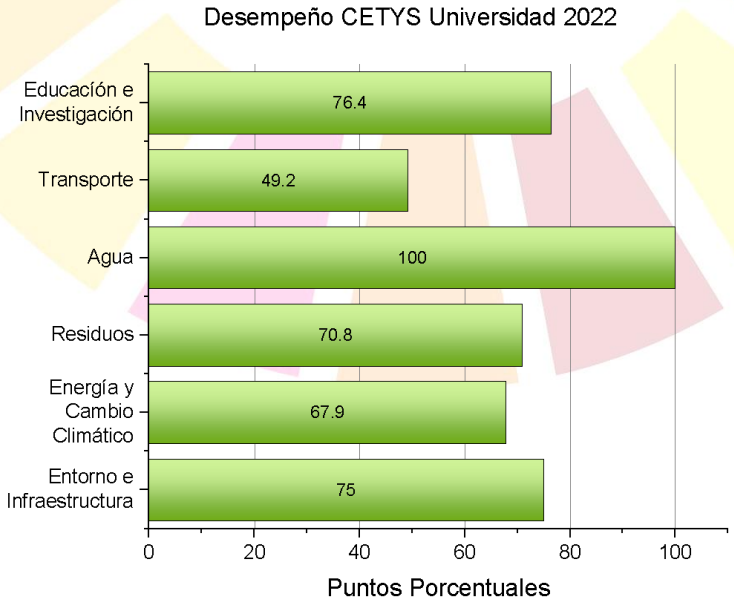
(c) Waste management

(d) Water resources

(e) Transport and internal mobility

(f) Education and research

These lines of evaluation respond to the conceptual structure of the international organization "UI GreenMetric", which has developed a system for evaluating sustainability in university spaces that is widely accepted worldwide. In 2022, CETYS University ranked 277th out of 1050 participating universities worldwide, and 12th out of Mexican institutions (private and public). The scores by category achieved by CETYS University in 2022 are presented in the following figure:



Methodology

The methodology followed in this report is based on the evaluation areas proposed by "Universitas Indonesia GreenMetric" (https://greenmetric.ui.ac.id/), and incorporates additional material related to the knowledge and academic application of the United Nations Sustainable Development Goals (SDGs).

The world ranking of universities proposed by UI GreenMetric in 2010 is based on 6 criteria or dimensions of analysis (the percentage weight of each criterion in the final evaluation is indicated in parentheses), which are quantified from the evaluation of 82 variables and the construction of 51 indicators (UI GM, 2022 a,b, c):

- Physical infrastructure of university facilities (15%)
- Actions related to energy efficiency and climate action (21%)
- Waste management (18%)
- Water management (10%)
- Use of transport (18%)
- Education & Research (18%)

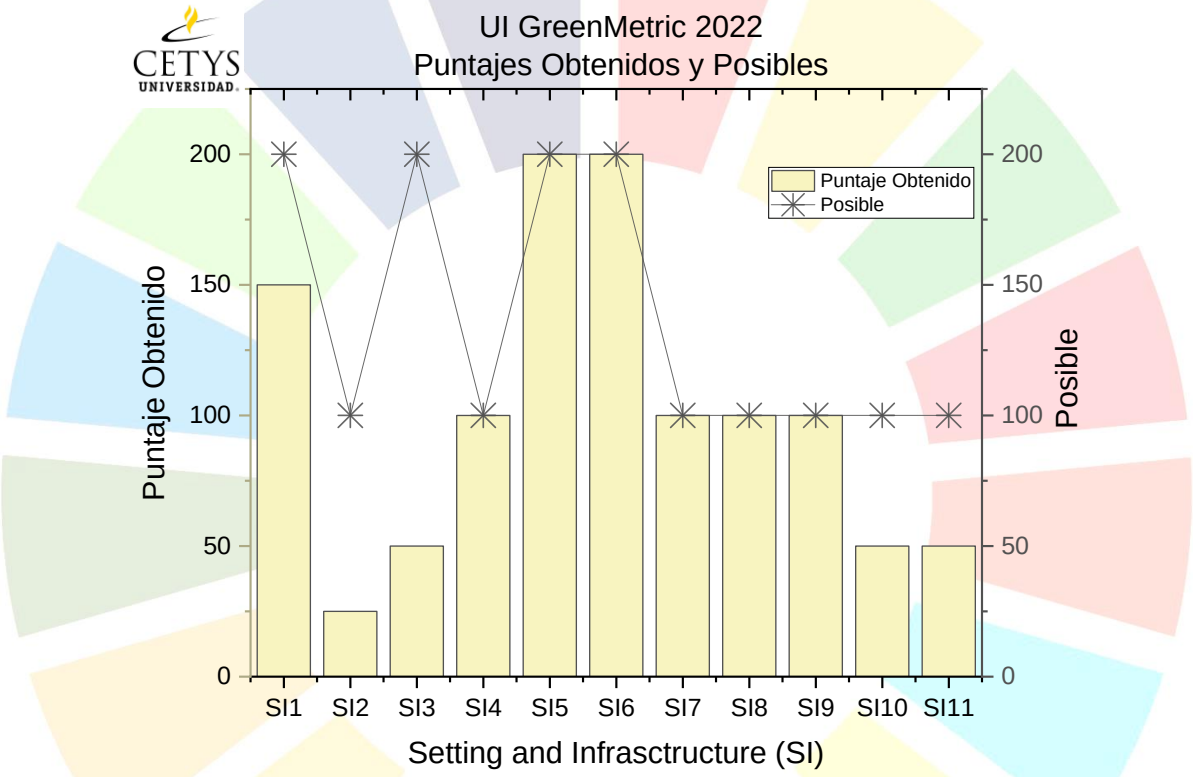
In this study, this methodology was followed, considering the information and conditions existing in each campus and throughout the CETYS System.

Additionally, a questionnaire was applied to find out the knowledge that full-time teachers have about the SDGs and their application in the different subjects taught at the institution.

Finally, a section is integrated where the most relevant actions at the institutional level and the existing areas of opportunity at the campus level are highlighted.

Settings and Infrastructure (SI)

The first dimension of analysis of UI GreenMetric corresponds to "Environment and Infrastructure", comprising 11 indicators and 13 variables, some of them contextual. The maximum possible score for this dimension is 1500 points and corresponds to 15% of the overall assessment. Below is the graph with the scores achieved by the institution in 2022 and the description of the indicators.



SI1	The ratio of open space area to the total area	SI7	Percentage of operation and maintenance activities of building in one year period
SI2	Total area on campus covered in forest vegetation	SI8	Campus facilities for disabled, special needs and or maternity care
SI3	Total area on campus covered in planted vegetation	SI9	Security and safety facilities
SI4	Total area on campus for water absorption besides the forest and planted vegetation	SI10	Health infrastructure facilities for students, academic and administrative staff's wellbeing
SI5	The total open space area divided by total campus population	SI11	Conservation: plant (flora), animal and wildlife (fauna), genetic resources for food and agriculture secured in either medium or long-term conservation facilities
SI6	Percentage of university budget for sustainability efforts		

❖ Highlights

* CETYS University System

§ In 6 of the 11 indicators proposed in the "Environment and Infrastructure (IS)" dimension, CETYS University achieved the maximum possible scores.

§ The SI6 indicator related to the institution's investment in areas associated with sustainability stands out, which was 16% of its global budget (average of the last 3 years).

* Mexicali Campus

§ There is an Emergency and Contingency Response Plan implemented on campus, through which compliance with NOM-002-STPS-2000 can be guaranteed, which aims to safeguard the well-being of 2806 people who make up the campus, including students, professors and administrative staff.

§ The CETYS App is created and implemented to facilitate and speed up access to the facilities, as well as allow immediate communication with the CETYS community.

§ With an operational team in the maintenance department made up of 77 people, the annual Maintenance Program and Management is executed, which is designed to preserve the optimal condition of 36,311.00 m2 of work and study area, 53,246 m2 of green areas, and the roads within the campus.

§ In accordance with the mobility master plan, more than 87% of the campus has facilities that facilitate movement within it, in a safe and accessible way. Parking lots, ramps, walkways, elevators are some examples; All of this has been developed with people who require the use of wheelchairs or have mobility problems in mind. The plan also aims to ensure that new developments meet the quality and functionality standards defined therein.

* Tijuana Campus

§ The campus attends to the safety of students, teaching staff, administrative staff and visitors through the digital and physical security infrastructure, evacuation routes, as well as support brigades in case of natural disasters or emergencies that merit the safeguarding of people in a time of less than 10 minutes, through the Emergency and Contingency Response Plan of CETYS University.

§ There are parking spaces for people with disabilities, handrails, ramps that comply with the regulation, elevators in some of its buildings and parking, as well as the conditioning of bathrooms for people with disabilities, favoring inclusion and facilitating the mobility of people with motor or visual impairment.

§ Conservation of local flora and fauna. Reforestation activities are carried out where students are involved to promote respect and protection of the biodiversity of the area. Likewise, the wildlife that chooses the campus as a space to live is sheltered and fed.

* Ensenada Campus

§ The ratio of open space to available space is the highest of all campuses, which provides the opportunity for sustainable development of physical spaces.

§ The ratio between open space and student population is the highest at the system level and is in the order of 296m2/person.

❖ Areas of Opportunity

* CETYS University System

§ In the SI2 and SI3 indicators, proposed in the dimension of "Environment and Infrastructure (SI)", CETYS University is expected to obtain the lowest scores. These two indicators are related to the existence of green areas with planted vegetation and forest areas. In both cases, the location of CETYS, its climatic characteristics and the scarcity of water have limited its development in these areas. In 2023, INESU is rolling out an important reforestation project called "300x500".

* Mexicali Campus

§ Make the necessary efforts to ensure that 100% of the campus is compatible with the mobility plan.

§ Formalize policy and procedures for the conservation of endemic flora and fauna on campus.

* Tijuana Campus

§ The campus has little space for water absorption, as most of the land is built or with artificial grass.

§ The facilities need to improve or build ramps that allow the free transit of people with mobility problems or visual impairments.

§ It is necessary to formalize a conservation plan for wild flora and fauna.

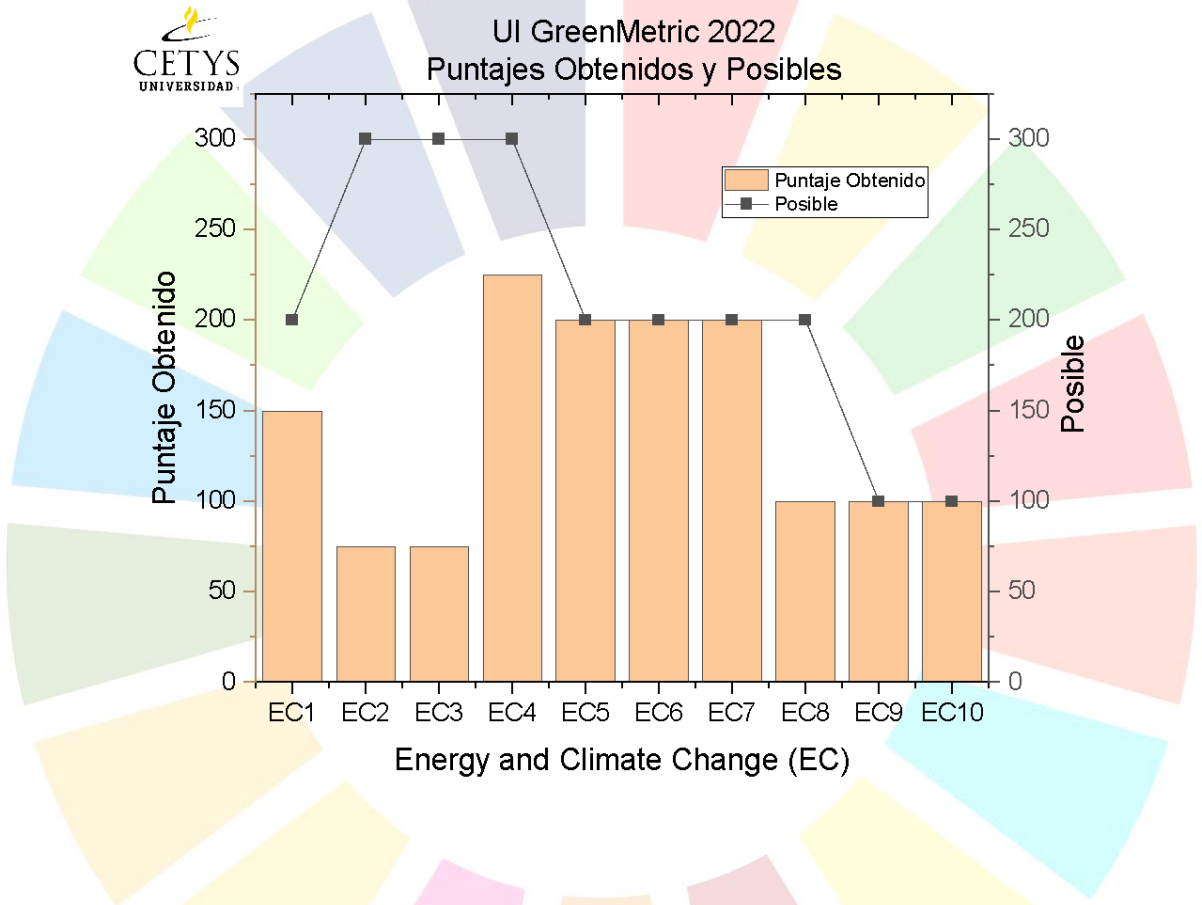
* Ensenada Campus

§ There is a need to encourage further development of wooded areas within the campus.



Climate Actions and Energy (EC)

The second dimension of analysis of UI GreenMetric corresponds to "Climate and Energy Actions", comprising 10 indicators and 14 variables. The maximum possible score for this dimension is 2100 points and corresponds to 21% of the overall assessment. Below is the graph with the scores obtained by CETYS University in 2022 and the description of the indicators.



EC1	Energy-efficient appliances usage	EC6	Elements of green building implementation as reflected in all construction and renovation policies
EC2	Smart building implementation	EC7	Greenhouse gas emission reduction program
EC3	Number of renewable energy sources on campus	EC8	Total carbon footprint divided by total campus' population
EC4	Total electricity usage divided by total campus' population (kWh per person)	EC9	Number of the innovative program(s) in energy and climate change
EC5	The ratio of renewable energy production divided by total energy usage per year	EC10	Impactful university program(s) on climate change

❖ Highlights

* CETYS University System

§ In 5 of the 10 indicators proposed in the "Climate and Energy Actions" dimension, CETYS University achieved the maximum possible scores.

§ The performance in indicator EC6 stands out, where the adoption of "green" measures in the construction or renovation of buildings is observed.

§ The installed capacity of photovoltaic solar energy production is the largest of any university in Latin America.

* Mexicali Campus

§ It has the largest photovoltaic energy production facilities of all universities in Latin America, with an installed capacity of 1,112 MW.

§ In the new CECE, Professional and CEID buildings, elements of "green buildings" were incorporated, such as: use of natural light, airflow, building skin for thermal control, etc.

§ The campus has high-efficiency refrigeration technology, based on chillers, being the equipment with the highest energy savings in this market and providing service in 60% of the campus facilities.

* Tijuana Campus

§ There is a photovoltaic system located in the campus parking lot that generates an average of 112,000 kWh of solar energy annually.

§ The "Smoke-Free Campus" program and the transportation program for students living in isolated areas of the university's facilities promote the reduction of greenhouse gas emissions.

§ There are permanent institutional programs that have a positive impact on climate change, such as Zero Waste, promoting a philosophy of life that promotes, transversely, respect and actions to improve the environment, in the different generations that are trained in the institution.

* Ensenada Campus

§ The design and construction of the Center for Wine Studies (CEVIT) have taken into consideration elements that contribute to sustainability.

§ The renewable energy lab has had a strong impact on the spread of these types of careers in the community.

❖ Areas of Opportunity

* CETYS University System

§ Diversify renewable energy generation sources by implementing academic projects that use, for example, wind energy.

§ Implement automatic control and monitoring systems for the most important buildings on each campus.

§ Reduce the carbon footprint produced by the use of motor vehicles.

* Mexicali Campus

§ Explore some other renewable energy sources besides solar photovoltaic.

§ Review the technological elements that are missing from new buildings as a professional so that they fall into the category of Smart Buildings. At the moment, there are two on this list: CEID and CECE.

§ Achieve 100% of high-efficiency temperature comfort appliances

* Tijuana Campus

§ Upgrade missing technological equipment, with Energy Star certification criteria, as well as traditional LED light fixtures and bulbs.

§ Favor natural light in buildings and the installation of windows that allow free air circulation, in order to reduce the use of fans or air conditioners.

* Ensenada Campus

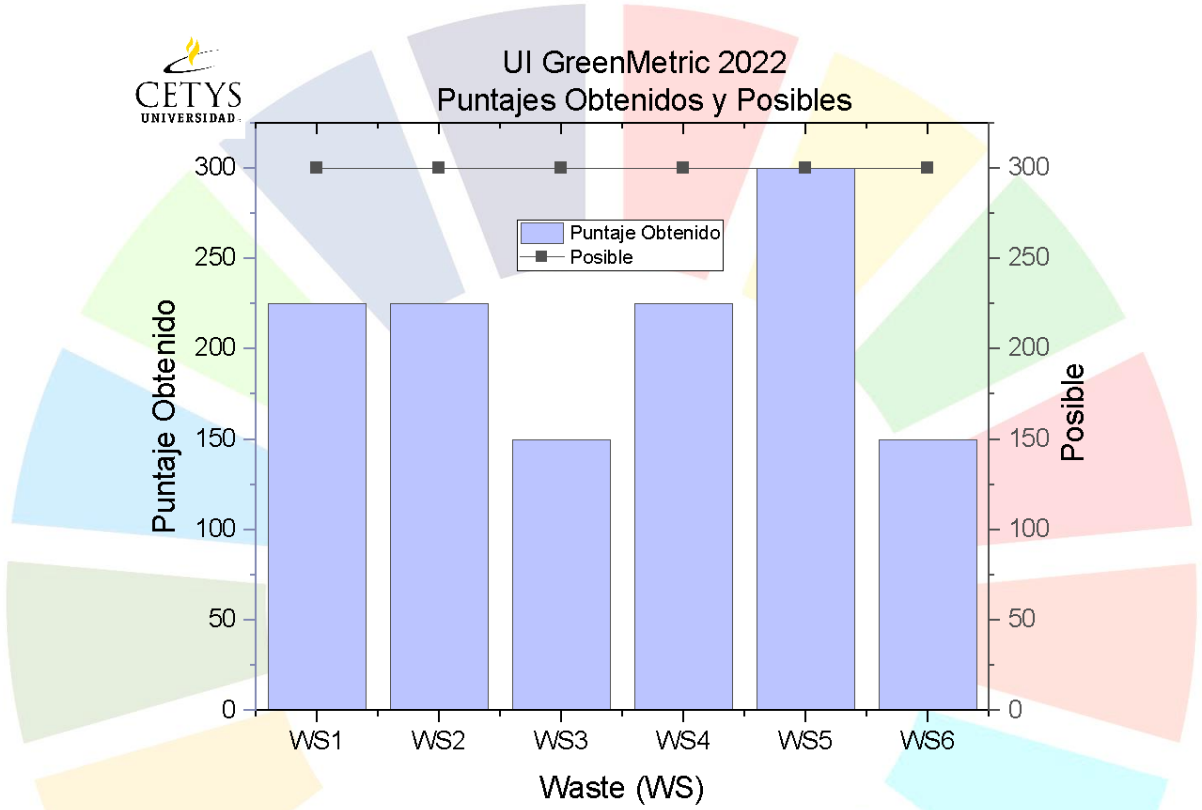
§ It is necessary to promote the use of renewable energy sources on campus.

§ Energy audits need to be conducted to make energy use more efficient on campus premises.



Waste (WS)

The third dimension of analysis of UI GreenMetric corresponds to "Waste", comprising 6 indicators and 6 variables. The maximum possible score for this dimension is 1800 points and corresponds to 18% of the overall assessment. Below is the graph with the scores obtained by CETYS University in 2022 and the description of the indicators.



WS1	Recycling program for university's waste	WS4	Inorganic waste treatment
WS2	Program to reduce the use of paper and plastic on campus	WS5	Toxic waste treatment
WS3	Organic waste treatment	WS6	Sewage disposal

❖ Highlights

* CETYS University System

§ In 1 of the 6 indicators proposed in the "Waste" dimension, CETYS University achieved the maximum possible scores.

§ The "Zero Waste" program stands out, which has been worthy of international recognition.

* Mexicali Campus

§ There are well-established and compliant processes for the management of toxic waste.

* Tijuana Campus

§ The campus works with the Zero Waste program, which has 3 main goals for the entire campus community: reduce waste, raise awareness and conserve resources. In the first point, it is established to reduce by 90% the waste resulting in the university and that goes to the landfill, in the second point it is promoted the education and awareness of the entire CETYS Tijuana community about the actions that affect the environment and in the third the goal is to maximize the use and conservation of resources.

§ There is a Zero Waste decalogue where it is promoted to avoid waste and single-use materials, not to introduce materials with a negative impact on the environment on campus, to reduce the consumption of non-reusable, non-repairable or non-recyclable products, to reuse the materials that allow it, to select digital documents over printed ones, separate waste according to the containers distributed on campus, report to the academic authorities the improper use of the Zero Waste stations and denounce to the academic authorities related to the failures of the sustainability program.

§ One of the purposes of the Heritage and Procurement Policies and Procedures Manual is to ensure the best use of resources, under the criterion of objectivity, responsibility and contribution to the Zero Waste policy for the conservation and sustainable management of natural resources.

§ The implementation of institutional programs for waste reduction and the recycling of paper and plastics, as well as programs generated by the students themselves, such as "Use thermoses", in order to reduce the use of disposables and plastic bottles among members of the CETYS community.

§ Organic waste treatment. The compost program has a historical pruning total of 195,424.40 kg., a historical total of organic 13,923.50 kg., and an annual production of between 13 and 15 tons, which are used as nutrients for the plants and green areas of the campus.

§ The Zero Waste program in the community provides a space for local families to participate in caring for the environment by taking waste ranging from PET, PETE, HDPE and PP plastics, as well as aluminum and metal, paper, cardboard and some electronic devices to the CETYS recycling center.

* Ensenada Campus

§ It complies with the regulations associated with the management of toxic waste and the management of wastewater.

❖ Areas of Opportunity

* CETYS University System

§ It is necessary to work for the implementation of waste management programs, especially organic waste management on all campuses.

* Mexicali Campus

§ There are a limited number of processes for the recycling of material such as paper, cardboard or plastic.
§ Continue to strengthen the culture of recycling on and off campus.
§ Resume the existing recycling procedures for cardboard, aluminum, paper, PET and batteries that were suspended due to the pandemic.
§ Establish alliances with organizations to promote and carry out the primary objective of recycling, which is the safeguarding of the environment.
§ Develop a project to be implemented for the recycling of inorganic waste.

* Tijuana Campus

§ Improve the wastewater treatment program by increasing the volume of wastewater and establish programs of greater awareness.

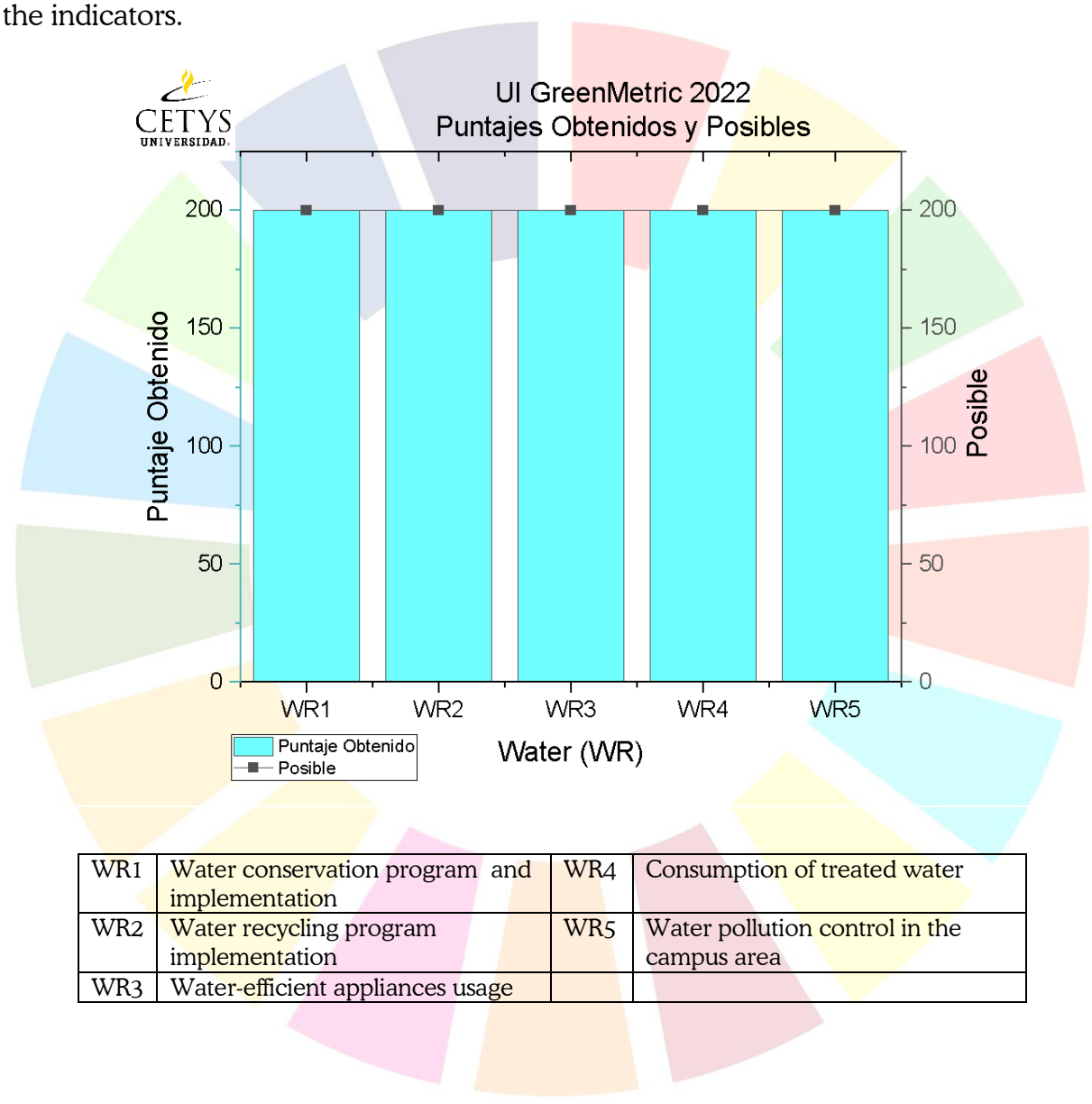
* Ensenada Campus

§ There are a limited number of processes for the recycling of material such as paper, cardboard or plastic.
§ Continue to strengthen the culture of recycling on and off campus with the support of student organizations.

CETYS zero waste

Water (WR)

The fourth dimension of analysis of UI GreenMetric corresponds to "Water", comprising 5 indicators and 5 variables. The maximum possible score for this dimension is 1000 points and corresponds to 18% of the overall assessment. Below is the graph with the scores obtained by CETYS University in 2022 and the description of the indicators.



WR1	Water conservation program and implementation	WR4	Consumption of treated water
WR2	Water recycling program implementation	WR5	Water pollution control in the campus area
WR3	Water-efficient appliances usage		

❖ Highlights

* CETYS University System

§ In 5 of the 5 indicators proposed in the "Water" dimension, CETYS University achieved the maximum scores proposed, positioning the institution as the highest at the national level in the management of water resources. The use of water from the treatment and water treatment plants of Camps Mexicali and Tijuana stands out.

* Mexicali Campus:

§ There is a water recycling plant that produces 7 liters per second, which is 100% used in the irrigation of green areas. 100% of the water sources for human consumption found on campus are periodically subjected to chemical analysis by external laboratories to guarantee their quality. To guarantee the supply and quality of water for human consumption, there is a water treatment plant with reverse osmosis technology with a production of 2,200 gallons per day

* Campus Tijuana

§ The wastewater treatment plant. Once the water is recycled, it is stored in 3 tanks with a capacity of 25,000 m3, giving a total of 75,000 m3 that provides the vital liquid to the green areas of the campus and that is used in the bathroom facilities by providing clean and reusable water benefiting the environment.

§ The toilet area has low-water consumption furniture and regulating taps that adjust to the time needed for cleaning and hand washing, which prevents wasting liquid, as well as toilets that comply with CONAGUA Standard 009 respecting the 6 liters sufficient for each flush.

* Ensenada Campus

§ Efforts have been made to implement energy-saving equipment (sinks and toilets) for the efficient use of water.

❖ Areas of Opportunity

* CETYS University System

§ It is necessary to implement rainwater collection and storage systems and waste water management (treatment).

* Mexicali Campus

§ Continue until the campus has 100% water-saving bathroom and toilet elements.

§ Explore the possibility of recycling the water used on campus.

* Tijuana Campus

§ Improvement in the water collection and conservation system, greater than 50%.

* Ensenada Campus

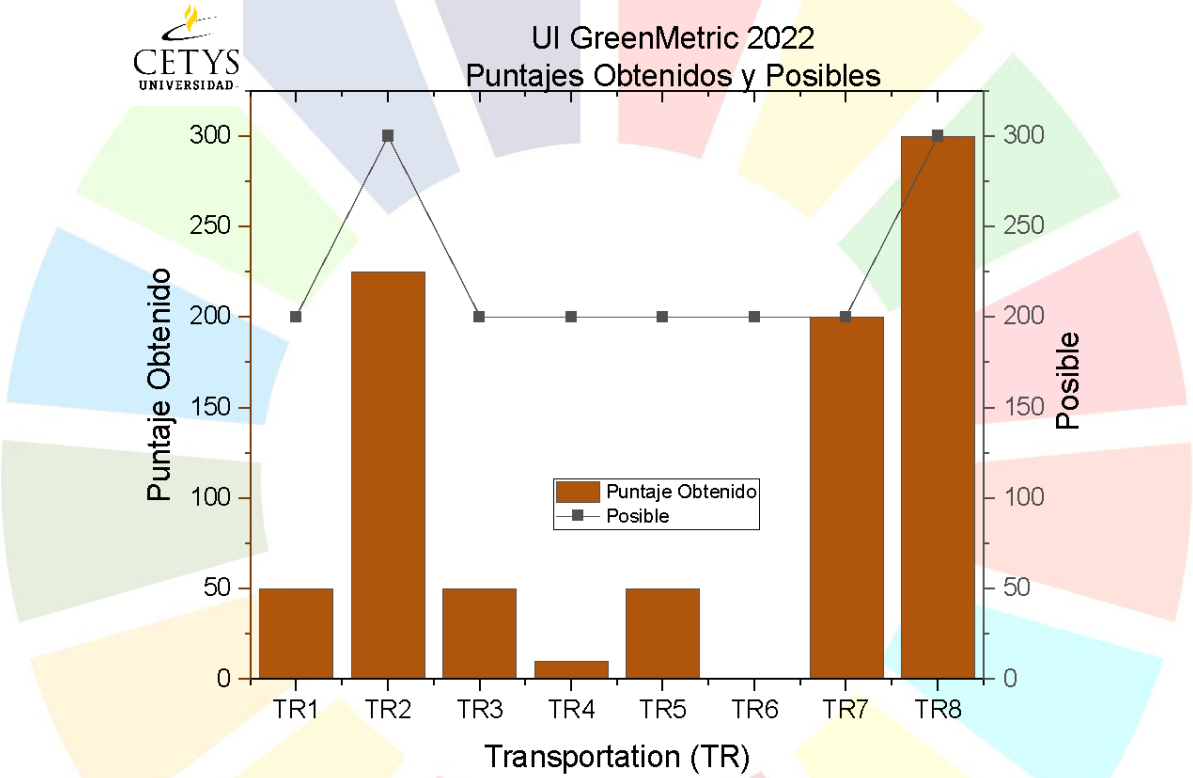
§ Seek to implement mechanisms for the treatment and use of wastewater.

§ Establish projects to capture rainwater or environmental humidity.



Transportation (TR)

The fifth analysis dimension of UI GreenMetric corresponds to "Transportation", comprising 8 indicators and 17 variables. The maximum possible score for this dimension is 1800 points and corresponds to 18% of the global evaluation. Below is the graph with the scores obtained by CETYS University in 2022 and the description of the indicators.



TR1	The total number of vehicles (cars and motorcycles) divided by the total campus' population	TR5	The ratio of the ground parking area to the total campus' area
TR2	Shuttle services	TR6	Program to limit or decrease the parking area on campus for the last 3 years
TR3	Zero-Emission Vehicles (ZEV) policy on campus	TR7	Number of initiatives to decrease private vehicles on campus
TR4	The total number of Zero-Emission Vehicles (ZEV) divided by the total campus population	TR8	The pedestrian path on campus

❖ Highlights

* CETYS University System

§ In 2 of the 8 indicators proposed in the "Transportation" dimension, CETYS University achieved the maximum possible score.

§ The spaces for walking on campuses (design, signage, dimensions, lighting, security, etc.) and the efforts related to mobility within the campuses of people with different abilities stand out..

* Mexicali Campus

§ There is the Zorro Bus transportation system for students, which primarily serves remote areas of the city, allowing individual mobility to be reduced and therefore the carbon footprint.

§ There are a total of 40 bicycles provided free of charge by CETYS, which allow movement within the campus without gas emissions.

§ The car pool program is promoted, which encourages sharing personal transportation with colleagues.

* Tijuana Campus

§ There is security in the parking area, signage, lighting, elevator for people with disabilities, visible indications, and handrails on slopes.

§ Student transport program: Real del Mar-CETYS/CETYS-Real del Mar and, Tecate-CETYS/CETYS-Tecate.

* Ensenada Campus

§ Preferential parking spaces have been established for cars with more than 3 occupants ("Carpool").

§ There are spaces for motorcycles identified in the parking lots.

❖ Areas of Opportunity

* CETYS University System

§ It is necessary to start thinking about programs that encourage the use of "zero emissions" or electric vehicles by students, assigning preferential spaces in parking lots and charging stations that use renewable sources such as photovoltaic solar installed on campuses.

* Mexicali Campus

§ Promote the use of bicycles on and off campus.

§ Continue reinforcing the organizational culture to reduce the use of private cars.

* Tijuana Campus

§ Ramps with inclination according to municipal and functional regulations for people with disabilities.

§ Increased number of parking spaces for people with disabilities in plate 1.

§ Promote the use of bicycles for maintenance and security personnel, as they are zero-emission vehicles.

§ Development and implementation of programs to reduce the use of parking. Example: Carpool, strategic transportation route within the municipality.

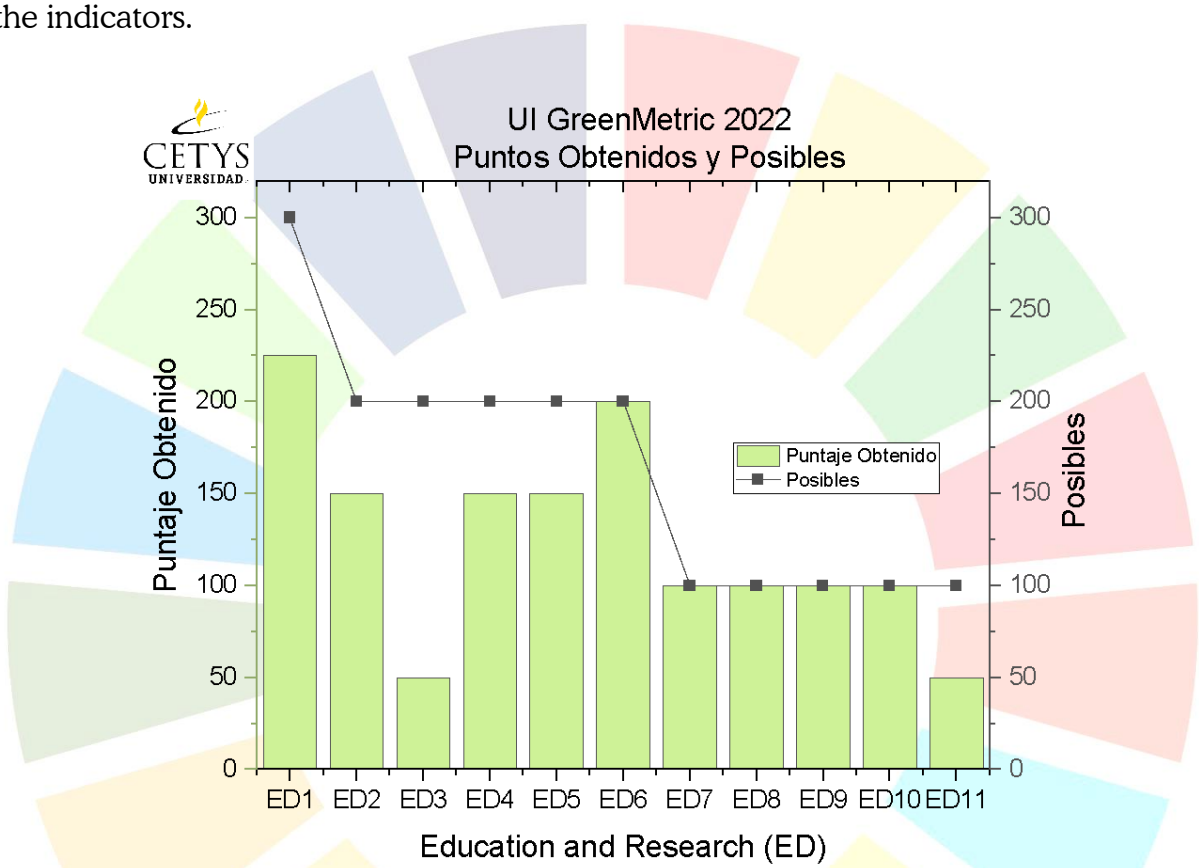
* Ensenada Campus

§ Promote programs for the transportation of several people in a single vehicle, taking advantage of the characteristics of the student body and the city.

§ Promote the use of bicycles and motorcycles among students.

Education and Research (ED)

The sixth analysis dimension of UI GreenMetric corresponds to "Education and Research", comprising 11 indicators and 16 variables. The maximum possible score for this dimension is 1800 points and corresponds to 18% of the global evaluation. Below is the graph with the scores obtained by CETYS University in 2022 and the description of the indicators.



ED1	The ratio of sustainability courses to total courses/subjects	ED7	Sustainability report
ED2	The ratio of sustainability research funding to total research funding	ED8	Number of cultural activities on campus
ED3	Number of scholarly publications on sustainability	ED9	Number of university program(s) to improve teaching and learning
ED4	Number of events related to sustainability	ED10	Number of sustainability community services projects organized and/or involving students
ED5	Number of student organizations related to sustainability	ED11	Number of sustainability-related startups
ED6	University-run sustainability website		

❖ Highlights

* CETYS University System

§ In 5 of the 11 indicators proposed in the "Education and Research" dimension, CETYS University achieved the maximum proposed score.

§ The number of cultural activities developed on each campus, the teacher training programs and the community activities organized by or in which CETYS students and academics participate stand out.

* Mexicali Campus

§ There is a significant number of student organizations with various purposes, of which 4 (RECICALI, REDES, MUN and UNIRED) are directly related to sustainability.

§ The Comprehensive Teacher Training program (FIP) developed 65 courses and activities related to improving teaching and learning.

§ Within the study plans of the different careers and postgraduate courses, 107 courses were taught and directed to subjects related to sustainable development.

* Tijuana Campus

§ The institution offers the Renewable Energy Engineering degree. In addition, it offers 109 courses directly or indirectly related to sustainability.

§ The topic of sustainability is considered important in the development of the students' graduation skills, by carrying out at least 7 events related to the topic within cultural activities.

§ The academic and administrative area provides constant training to teachers, diversifying technological tools and learning modalities, which allowed the teacher training program to continue, even during the global health contingency season caused by COVID-19.

§ The student community actively participates in events related to sustainability, including off-campus activities such as beach cleaning, reforestation and care of green areas, ecological bazaars, support for the recycling center, events promoting respect and awareness of environmental care, such as Earth Week, promoted by the student organization: "Terravita".

§ The Business Incubation Area publishes the results of the contests in which the campus students participate, related to the 2030 agenda of the United Nations, promoting that the initiatives presented generate formal projects, which have the support of the area through mentoring sessions. Of 10 active incubation projects, 3 correspond to sustainable models and 4 projects participated in Heineken's "Green Challenge".

* Ensenada Campus

§ A significant number of research projects and publications related to sustainability come from campus academics.

§ The number of sustainability-related courses offered on campus is similar to those on other campuses.

§ A significant number of cultural activities have been offered.

§ A group of students won the Millennium Fellowship award on SDGs.

❖ Areas of Opportunity

* CETYS University System

§ It is necessary to increase the number of academic publications related to sustainability.

§ It is necessary to encourage and monitor the creation of "start-ups" generated by students, related to some areas of sustainable development.

* Mexicali Campus

§ Support the creation of companies that are aimed at and related to products and services that contribute to caring for or are friendly to the environment.

§ Generate community support events and programs. It can be direct support or awareness aimed at improving the community's environment.

§ Promote and support research and publications related to sustainability.

* Tijuana Campus

§ Promotion of new companies related to sustainability and sustainability.

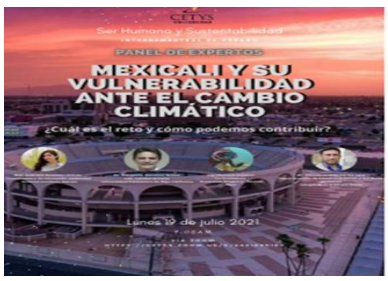
* Ensenada Campus

§ Increase the number of events related to sustainability.

§ Promote the creation of student organizations (professional and postgraduate) related to aspects of sustainability.

§ Increase the number of projects and community actions related to sustainability organized by students and academics at the professional and postgraduate levels.

§ Promote the creation of companies ("Start-ups") related to sustainability.



Relevant Actions

1. The efforts aimed at moving CETYS towards a more sustainable development are present at the highest management levels of the institution and in its educational model.
2. During the year 2023, actions aimed at structuring the institution's efforts around sustainability and the United Nations Sustainable Development Goals were formalized, based on the creation of the CETYS Institute for Sustainability Studies (ISS).
3. In 2023, CETYS University, and thanks to the good results obtained, will once again participate in the international "ranking" related to the evaluation of sustainability in academic institutions, promoted by the UI GreenMetric organization.
4. Ensenada International Campus begins the certification process as an "Eco-Campus" promoted by the organization Foundation for Environmental Education (FEE).
5. Among the most relevant programs in terms of sustainability that CETYS has been operating, we should highlight: CETYS Solar Power, which positions the institution as the main university in Latin America for its photovoltaic solar energy generation capacity and the Zero Waste program for waste management and handling, which has earned international recognition from the International Network of Sustainable Campuses.
6. The design, construction and operation of smart and green buildings on the 3 campuses (e.g. CECE, CEID, CEVIT, Gymnasium Auditorium), is a very important element in the transition towards sustainable development.
7. The permanence of the concept of "sustainability" as a differentiating element of education at CETYS has been incorporated into the CETYS 2036 Plan as a distinctive competence of students' university education.
8. Around 2,500 students and teachers of the institution have participated in the process of raising awareness about the SDGsS.

Areas of Opportunity

1. Homologize criteria between campuses, for the design, planning and development of future physical spaces under the concept of sustainable spaces.
2. Develop institutional policies, programs and actions related to the energy efficiency of their physical spaces with proposals to minimize the impacts of climate change from the academy, administration and the student community.
3. Waste management must follow the successful model implemented at Campus Tijuana at the System level.
4. The water resource is a scarce commodity in the region where CETYS University is located and is a key element for the future development of the California-Baja California binational region. The institution should try to have a more decisive influence on all aspects related to water, from specific training and awareness programs, contribution to public policies, development of research projects and formation of binational and international collaboration networks, among other items. The use and management of the resource within CETYS should be an example to follow in the Bajacalifornian university community.
5. In the collective imagination of CETYS University, the routine use of zero-emission vehicles is not yet in sight. It is necessary to promote an action plan on this matter.
6. Research and training in areas related to sustainability and the United Nations Sustainable Development Goals should increase substantially, as should the creation of "green" productive companies or those focused on aspects of sustainability by students, with the support of the institution's academics.

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Annex 1: List of buildings considered intelligent and their characteristics

No.	Name	Place	Automation		Safety				Energy		Water		Indoor Environment				Lighting				Building Area (m2)
			B1	B2	S1	S2	S3	S4	E1	E2	A1	A2	I1	I2	I3	I4	L1	L2	L3	L4	
1	CECE	MXL				X	X						X	X	X			X			4,400
2	CEID	MXL			X	X	X						X	X	X		X	X			6,500
3	GRAD	TIJ		X	X	X	X							X		X	X			X	2289
4	AG	TIJ		X	X	X	X		X							X	X				4,250
5	CEVIT	ENS				X											X	X	X	X	3,501
Total																					**20,940**

Notes:

1) CECE= Excellence Center in Competitiveness and Entrepreneurship

2) CEID= Excellence Center in Innovation and Design

3) GRAD= Graduate Studies Building

4) AG = Auditorium Gymnasium

5) CEVIT= Center for Wine Studies

5) MXL= Mexicali, Baja California, México; TIJ= Tijuana, Baja California, México, ENS=Ensenada, Baja California, México

Annex 2: List of energy-saving appliances

MEXICALI			
Appliance	Total Number	Total number energy efficiency appliances	Percentage
Lamps and LED Lamps			
A/C and Ecologic A/C (minimum SIR 13)	284	131	46.13
Computers and Energy-Star Certified Computers	836	323	38.64
Servers and Energy-Star Certified Servers	10	10	100.00

TIJUANA			
Appliance	Total Number	Total number energy efficiency appliances	Percentage
Lamps and LED Lamps	448	246	54.91
A/C and Ecologic A/C (minimum SIR 13)	120	30	25.00
Computers and Energy-Star Certified Computers	1013	464	45.80
Servers and Energy-Star Certified Servers	5	5	100.00

ENSENADA			
Appliance	Total Number	Total number energy efficiency appliances	Percentage
Lamps and LED Lamps	185	81	43.78
A/C and Ecologic A/C (minimum SIR 13)	13	11	84.62
Computers and Energy-Star Certified Computers			#DIV/0!
Servers and Energy-Star Certified Servers	3	3	100

SISTEMA			
Appliance	Total Number	Total number energy efficiency appliances	Percentage
Lamps and LED Lamps	633	327	51.658768
A/C and Ecologic A/C (minimum SIR 13)	417	172	41.247002
Computers and Energy-Star Certified Computers	1849	787	42.563548
Servers and Energy-Star Certified Servers	18	18	100.000000

Annex 3: List of water-saving appliances

MEXICALI			
Appliance	Total Number	Total number water efficiency appliances	Percentage
Hand Washing Taps	147	118	80.27
Toilet Flush (tasa de baño)	215	215	100.00
Mens Urinals	89	56	62.92

TIJUANA			
Appliance	Total Number	Total number water efficiency appliances	Percentage
Hand Washing Taps	90	90	100.00
Toilet Flush (tasa de baño)	108	108	100.00
Mens Urinals	45	45	100.00

ENSENADA			
Appliance	Total Number	Total number water efficiency appliances	Percentage
Hand Washing Taps	26	24	92.31
Toilet Flush (tasa de baño)	24	24	100.00
Mens Urinals	19	14	73.68

SISTEMA			
Appliance	Total Number	Total number water efficiency appliances	Percentage
Hand Washing Taps	263	232	88.21
Toilet Flush (tasa de baño)	347	347	100.00
Mens Urinals	153	115	75.16
	TOTAL AVERAGE PERCENTAGE		87.79

Annex 4: Carbon footprint calculation

a) Electricity Usage per year (kWh)				
	Mexicali	Tijuana	Ensenada	System
Jul-22	363,482.00	75,041.00	30,324.00	468,847.00
Aug-22	567,306.00	130,728.00	52,388.00	750,422.00
Sep-22	490,584.00	125,841.00	50,624.00	667,049.00
Oct-22	262,984.00	110,716.00	44,786.00	418,486.00
Nov-22	149,905.00	88,845.00	37,562.00	276,312.00
Dec-22	106,017.00	69,073.00	28,014.00	203,104.00
Jan-23	113,512.00	73,414.00	36,290.00	223,216.00
Feb-23	100,222.00	75,697.00	36,554.00	212,473.00
Mar-23	136,315.00	83,996.00	40,432.00	260,743.00
Apr-23	189,113.00	74,115.00	33,628.00	296,856.00
May-23	301,353.00	83,743.00	38,668.00	423,764.00
Jun-23	286,496.00	69,947.00	52,178.00	408,621.00
TOTAL Año 2023	3,067,289.00	1,061,156.00	481,448.00	**4,609,893.00**

b) Transportatio per year (shuttle)				
	Mexicali	Tijuana	Ensenada	System
Número de Shuttles	10	3	1	14
Servicios Diarios	2	2	6	10
Distancia Recorrida (km)	1.500	0.156	0.501	0.719
TOTAL	30	0.936	3.006	

c) Transportation per year (cars)				
	Mexicali	Tijuana	Ensenada	System
Numero de Carros por día	2840	2342	544	5726
Cajones de Estacionamiento	1420	1171	272	2863
Distancia Recorrida (km)	0.244	0.138	0.175	0.186
TOTAL	984,003.20	377,776.90	25,894.40	

d) Transportatio per year (motorcycles)				
	Mexicali	Tijuana	Ensenada	System
Número de motos por día	30	110	12	152
Cajones de motos	15	55	6	76
Distancia Recorrida (km)	0.244	0.138	0.315	0.232
TOTAL	109.80	833.39	22.68	

TOTAL Carbon Footprint (Ton/year)				
	Mexicali	Tijuana	Ensenada	SYSTEM
a) Electricity	2576.52	891.37	404.42	3872.31
b) Transporte (Shutt	0.72	0.02	0.07	2.42
c) Transporte (carro	66.52	30.97	9.14	102.01
d) Transporte (motc	0.35	0.73	0.18	1.69
TOTAL (Ton/year)	**2,644.12**	**923.09**	**413.81**	**3,978.43**