CETYS UNIVERSIDAD

CETYS Universidad apoya los Objetivos de Desarrollo Sostenible

Sustainability Report

2022

Base line

Baja California, Mexico, September 2022

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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.

Contents

President´s Words

CETYS University has always been committed to its mission and vision of training people who support regional development, based on the operation of long-range strategic plans. For more than a decade and framed in the CETYS 2020 Plan, sustainability has become 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 be known and will permeate all the educational programs of their 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: optimal use of water resources; taking advantage of the region's abundant solar energy, with which it currently has the potential to generate 1.2 MW, positioning CETYS as the leading Latin American university in photovoltaic energy generation, and comprehensive waste management that operates under the "Zero Waste", among many other actions.

It is through education that people can be involved and lead change in society. It is not only what we do, but the way we create the mentality of change, how we will be able to envision a better future and act to have a more sustainable world. In this sense, 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 University 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 Instituto Educativo del Noroeste, AC

From the definition of its mission: "CETYS's purpose is 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) the scientific training, b) character training and c) general cultural training, all through an educational model based on comprehensive training, currently supported by 10 Distinctive Competencies of education at CETYS that promote competitive training at the national and international levels. international:

1. The reason for being:
    a. Identity and integrity
    b. Leadership and social responsibility
    c. Permanent learning
2. Time at the University:
    a. Innovation and entrepreneurship
    b. Internationalization and inter-culturalism
    c. Sustainability
3. University learning
    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 their educational level- have been sensitized, educated and/or trained in knowledge and experiences related to sustainability, among other issues.

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

The initial objective of this new institute is to organize, coordinate, promote and promote 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 that it contributes in a clear and decisive way with actions leading to a faster transition towards sustainable development, from the local to the global level.

The INESU-CETYS, seeks from its conception and creation to be perfectly aligned and promote the achievement of the 17 United Nations Sustainable Development Goals (SDG), in the areas: education, research, linkage, improvement of spaces and infrastructure, of construction of a global citizenship, as well as of the diffusion of sciences, arts and culture.

In this sense, during the first semester of 2022, a survey was carried out among full-time staff at all levels of CETYS, to have a baseline of knowledge and application -in the educational field- of the SDGs (UN, 2015 a, b). With a response level of 80%, the results indicated the following:

a) 76% of CETYS teachers are aware of the United Nations “2030 Agenda” for development.

b) 67% of CETYS teachers state that they have a "high" or "medium" knowledge of the SDGs.

c) 53% of CETYS teachers have informed students about the SDGs during their teaching practice.

d) 24% of CETYS professors have developed a research proposal or project where explicit reference is made to one of the SDGs.

e) 37% of CETYS teachers have carried out some linking activity, educational intervention or community project that involves any of the SDGs.

The main motivation for the creation of the CETYS Sustainability Studies Institute 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 reference framework such as the United Nations Sustainable Development Goals.

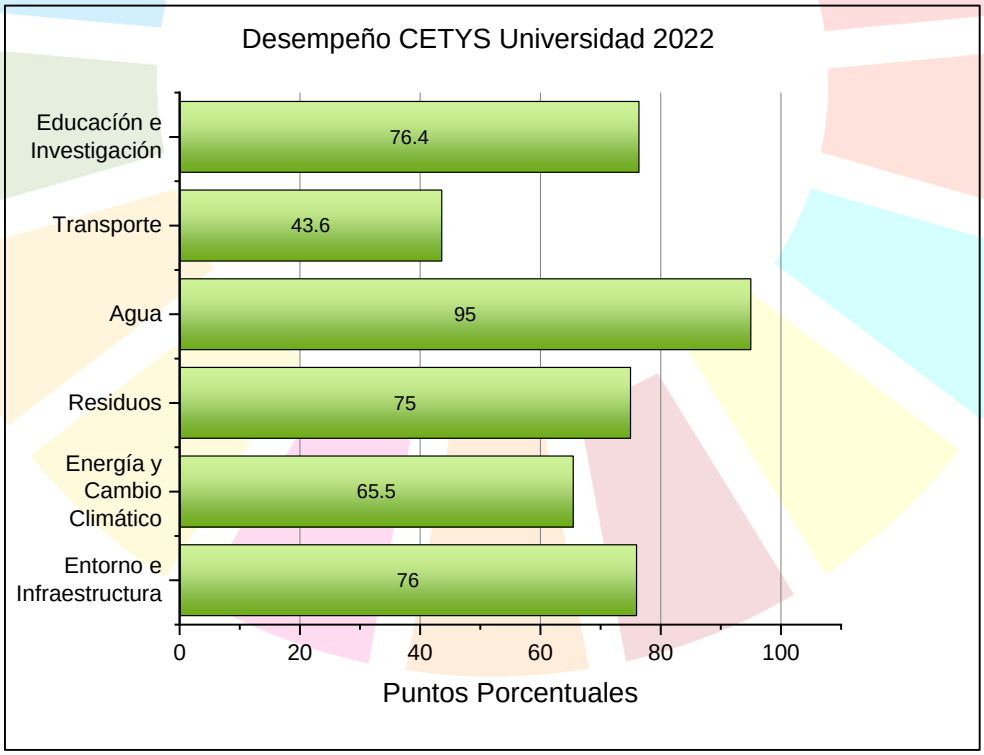
- The urgent need to contribute with ideas and actions -from the local to the global level- to the transition towards sustainable development.
- Contribute to a space for discussion and analysis in the California-Baja California region that brings together the main actors and agents of change, so that ideas and recommendations are generated with a long-term action horizon and strategic vision, with the ultimate goal of improve 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.

This document "Sustainability Report 2022", gives an account of the state of the institution regarding sustainable development and the actions carried out in the return to face-to-face activity in the post-pandemic era.

The objective of this document is to establish a baseline to regularly (annually) evaluate institutional progress on six key aspects of sustainable development:

a) Environment and infrastructure
b) Energy and actions against climate change
c) Waste management
d) Water resource
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. The expected performance scores of CETYS University for the year 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 (SDG).

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):

- Settings and infrastructure (15%)
- Energy and climate action (21%)
- Waste management (18%)
- Water management (10%)
- Transportation use (18%)
- Education and research (18%)

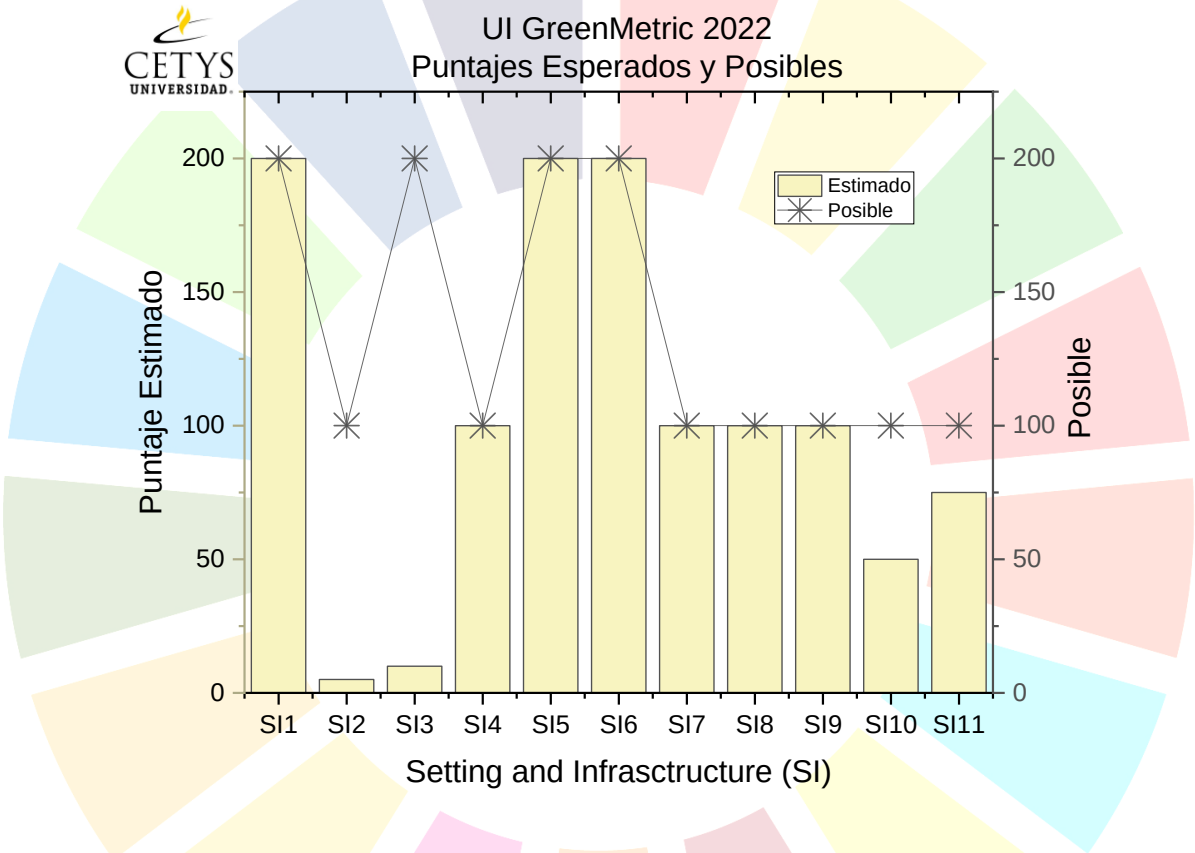
In this study, this methodology was followed, considering the information and existing conditions in each campus and throughout the CETYS System.

Additionally, a questionnaire was applied to find out the knowledge that full-time faculty 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 UI GreenMetric analysis corresponds to "Environment and Infrastructure", comprising 11 indicators and 13 variables, some of them related to the characteristics and location of the Campus. The maximum possible score for this dimension is 1,500 points and corresponds to 15% of the overall evaluation. Below is the graph with the estimated scores that CETYS University could obtain and the description of the indicators.



YES1	The ratio of open space area to the total area	SI7	Percentage of operation and maintenance activities of building in one year period
YES 2	Total area on campus covered in forest vegetation	SI8	Campus facilities for disabled, special needs and or maternity care
YES 3	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	YES10	Health infrastructure facilities for students, academic and administrative staff's wellbeing
SI5	The total open space area divided by total campus population	YES11	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		

- Remarkable Elements
  - CETYS University System
    - In 7 of the 11 indicators proposed in the "Environment and Infrastructure (SI)" dimension, CETYS University is expected to achieve the maximum possible scores.
    - The SI6 indicator stands out, related to the investment of the institution in items associated with sustainability, which was 22% (average of the last 3 years).
  - Campus Mexicali
    - There is an Emergency and Contingency Care Plan implemented on campus, through which compliance with NOM-002-STPS-2000 can be guaranteed, which has the purpose of safeguarding the well-being of 2,806 people who make up the campus. between students, teachers and administrative staff.
    - The CETYS App is created and implemented to facilitate and speed up access to the facilities, as well as to allow immediate communication with the CETYS community.
    - With an operational team in the maintenance department made up of 77 people, the annual program and maintenance management is executed, which is designed to preserve the optimal state of 36,311.00 m^2 of work and study area, 53,246 m^2 of green areas, and roads. inside 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 manner. Parking lots, ramps, walkways, elevators are some examples; All this developed thinking especially of people who require the use of a wheelchair or have a mobility problem. The plan also has the purpose of ensuring that the 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 the event of natural disasters or emergencies that warrant the safeguarding of people. in less than 10 minutes, through the CETYS University Emergency and Contingency Care Plan.
    - There are parking spaces for people with disabilities, handrails on the slopes, elevators in some of its buildings and parking, as well as the conditioning of bathrooms for people with disabilities, favoring the inclusion and facilitating the mobility of people with motor or visual impairment.
    - Conservation of local flora and fauna. Reforestation activities are carried out in which the 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 inhabit is protected and fed.
  - Ensenada Campus

- The ratio of open space to available space is the highest of any campus, providing an opportunity for sustainable development of physical spaces.
- The ratio between open space and student population is the highest at the system level and is around 23,000 m2/person.

❖ Opportunity Areas

➢ CETYS University System

- In the SI2 and SI3 indicators, proposed in the "Environment and Infrastructure (SI)" dimension, 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 spaces. In both cases, the location of CETYS, its climatic characteristics and the scarcity of water have limited its development in these areas compared to other regions of the world.

➢ Campus Mexicali

- Make the necessary efforts to ensure that 100% of the campus is compatible with the mobility plan.
- Formalize the policy and procedures for the conservation of endemic flora and fauna on campus.

➢ Tijuana Campus

- The campus has little space for water absorption, since most of the land is built on artificial grass.
- The facilities require improving or building ramps that allow the free movement of people with mobility problems or visual impairment.
- It is necessary to formalize a conservation plan for wild flora and fauna.

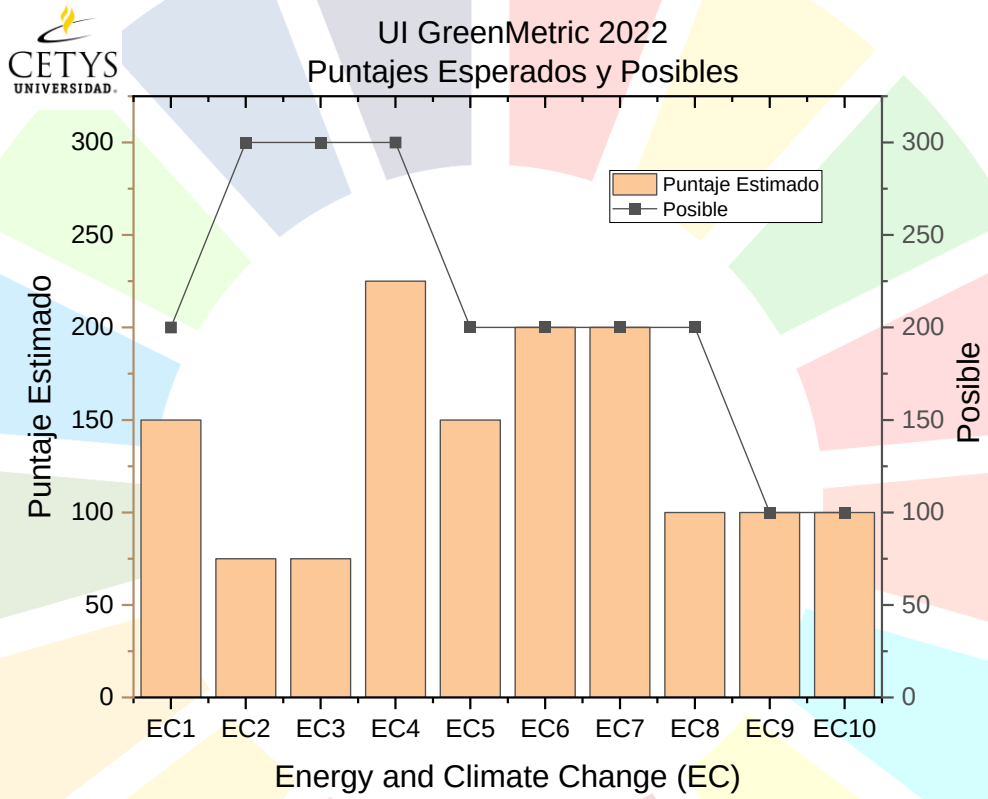
➢ Ensenada Campus

- It is necessary to encourage greater development of wooded areas within the campus.



Energy and Climate Actions (EC)

The second dimension of UI GreenMetric analysis corresponds to "Actions for Climate and Energy", comprising 10 indicators and 14 variables. The maximum possible score for this dimension is 2100 points and corresponds to 21% of the overall evaluation. Below is the graph with the estimated scores that CETYS University could obtain 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

- Remarkable Elements
  - CETYS University System
    - In 4 of the 10 indicators proposed in the “Energy and Actions for climate and energy” dimension, CETYS University is expected to reach the maximum proposed scores.
    - The performance in the EC6 indicator 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 all universities in Latin America.
  - Campus Mexicali
    - It has the largest photovoltaic energy production facilities of all the 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, air flow, skin of buildings for thermal control, etc.
    - The campus has high-efficiency refrigeration technology, based on "Chillers" coolers, being the equipment with the greatest energy savings in this market and serving 60% of 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 who live in isolated areas of the university 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, across the board, respect and actions to improve the environment, in the different generations that are formed 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 laboratory has had a strong impact in promoting this type of career in the community.
- Opportunity Areas
  - CETYS University System
    - 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.
  - Campus Mexicali

- Explore some other sources of renewable energy, in addition to solar photovoltaics.
- Review the technological elements that new buildings need as a professional so that they fall within the category of Intelligent Buildings. At the moment there are two that are on this CEID and CECE list.
- Achieve that 100% of devices for comfort in temperature are of high efficiency

➢ Tijuana Campus

- Update the missing technological equipment, with Energy Star certification criteria, as well as traditional lamps and spotlights to LED light.
- Privilege natural light in buildings and the installation of windows that allow free circulation of air, in order to reduce the use of fans or air conditioners.

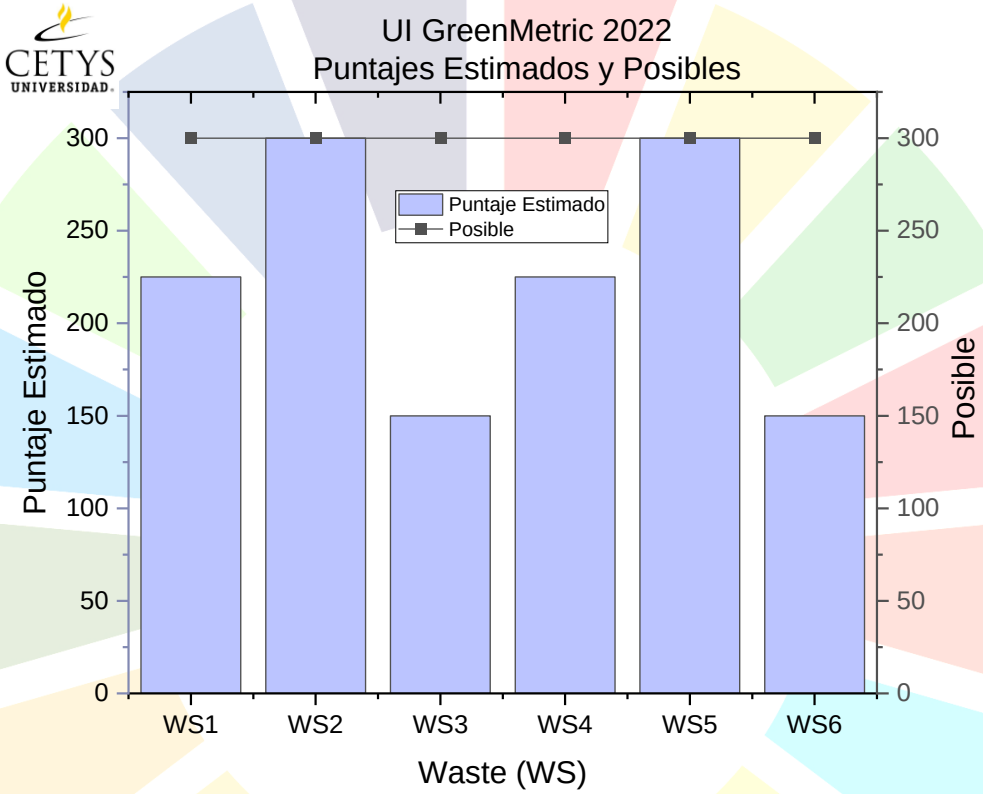
➢ Ensenada Campus

- It is necessary to promote the use of renewable energy sources on campus.
- Energy audits are required to make campus facilities more energy efficient.



Waste (WS)

The third dimension of UI GreenMetric analysis 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 evaluation. Below is the graph with the estimated scores that CETYS University could obtain 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

- Remarkable Elements
  - CETYS University System
    - In 2 of the 6 indicators proposed in the "Waste" dimension, CETYS University is expected to reach the maximum proposed scores.
    - The "Zero Waste" program stands out, which has been deserving of international recognition.
  - Campus Mexicali
    - There are well-established processes and adhered to regulations 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 resulting waste in the university and that goes to the landfill, in the second point the education and awareness of the entire CETYS Tijuana community is promoted 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, reduce the consumption of non-reusable, non-repairable or non-recyclable products, reuse the materials that allow it, select the digital documents over the 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 the complaint to the academic authorities related to faults to the sustainability program.
    - One of the purposes of the Heritage and Purchasing Policies and Procedures Manual is to guarantee the best use of resources, under the criteria of objectivity, responsibility and contribution to the Zero Waste policy for the conservation and sustainable management of resources. natural.
    - The implementation of institutional programs for waste reduction and recycling of paper and plastics, as well as programs generated by the students themselves, such as "Use thermos", with the aim of reducing the use of disposables and plastic bottles among the members of the CETYS community.
    - Organic waste treatment. The compost program has a historical total of pruning of 195,424.40 kg., 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 carrying waste that ranges 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

- The regulations associated with the management of toxic waste and wastewater management are complied with.

❖ Opportunity Areas

➢ CETYS University System

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

➢ Campus Mexicali

- There is a limited number of processes for recycling material such as paper, cardboard or plastic.
- Continue strengthening 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.
- Make alliances with organizations to promote and carry out the primary objective of recycling, which is the safeguarding of the environment.
- Develop a project that is launched for the recycling of inorganic waste.

➢ Tijuana Campus

- Improve the wastewater treatment program by increasing its volume and establish programs with greater impact in the university community on the subject of toxic waste.

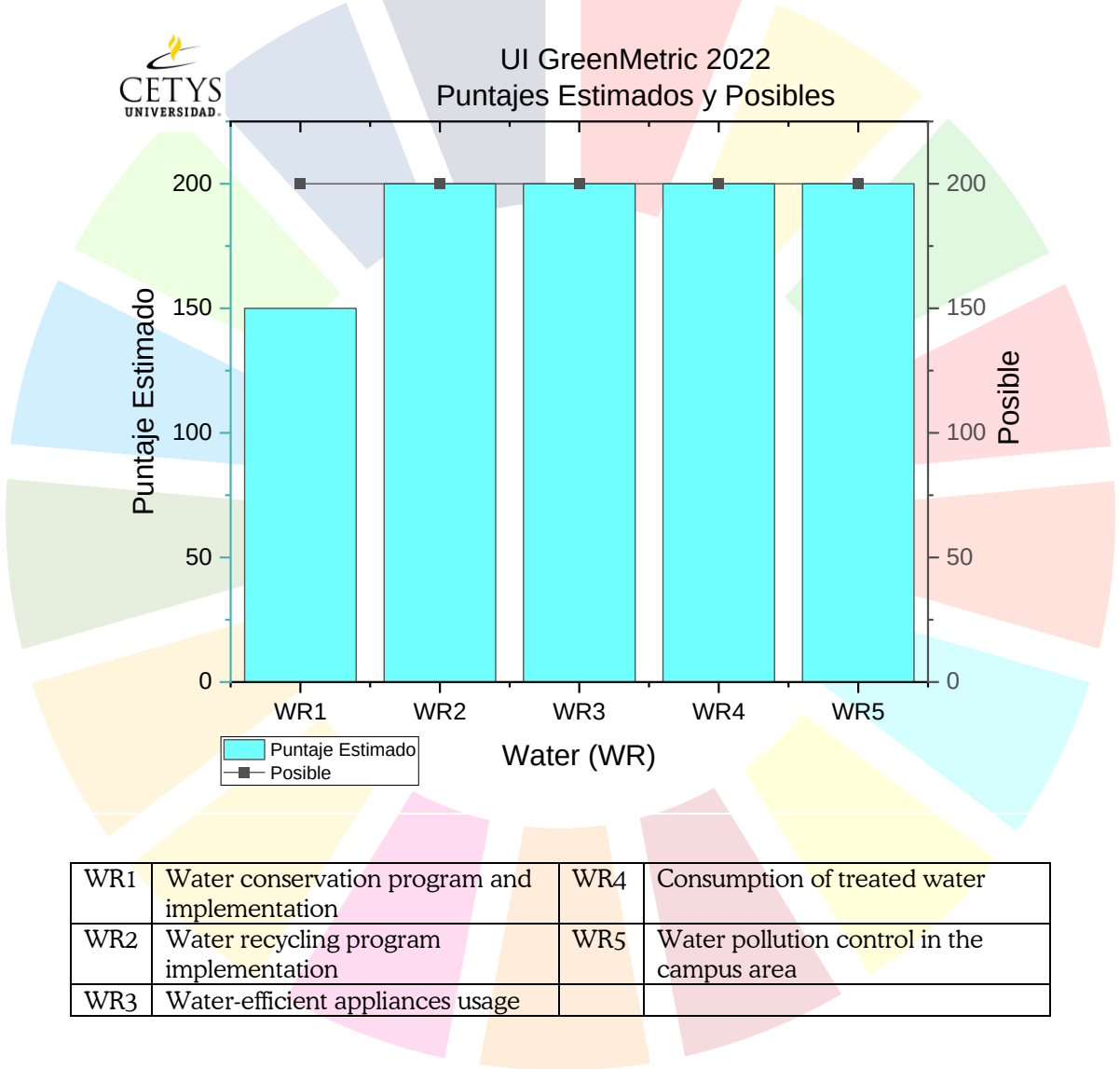
➢ Ensenada Campus

- Implement programs for the handling and management of all types of waste, seeking its minimization and proper recycling.

CETYS zero waste

Water (WR)

The fourth dimension of UI GreenMetric analysis 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 evaluation. Below is the graph with the estimated scores that CETYS University could obtain and the description of the indicators.

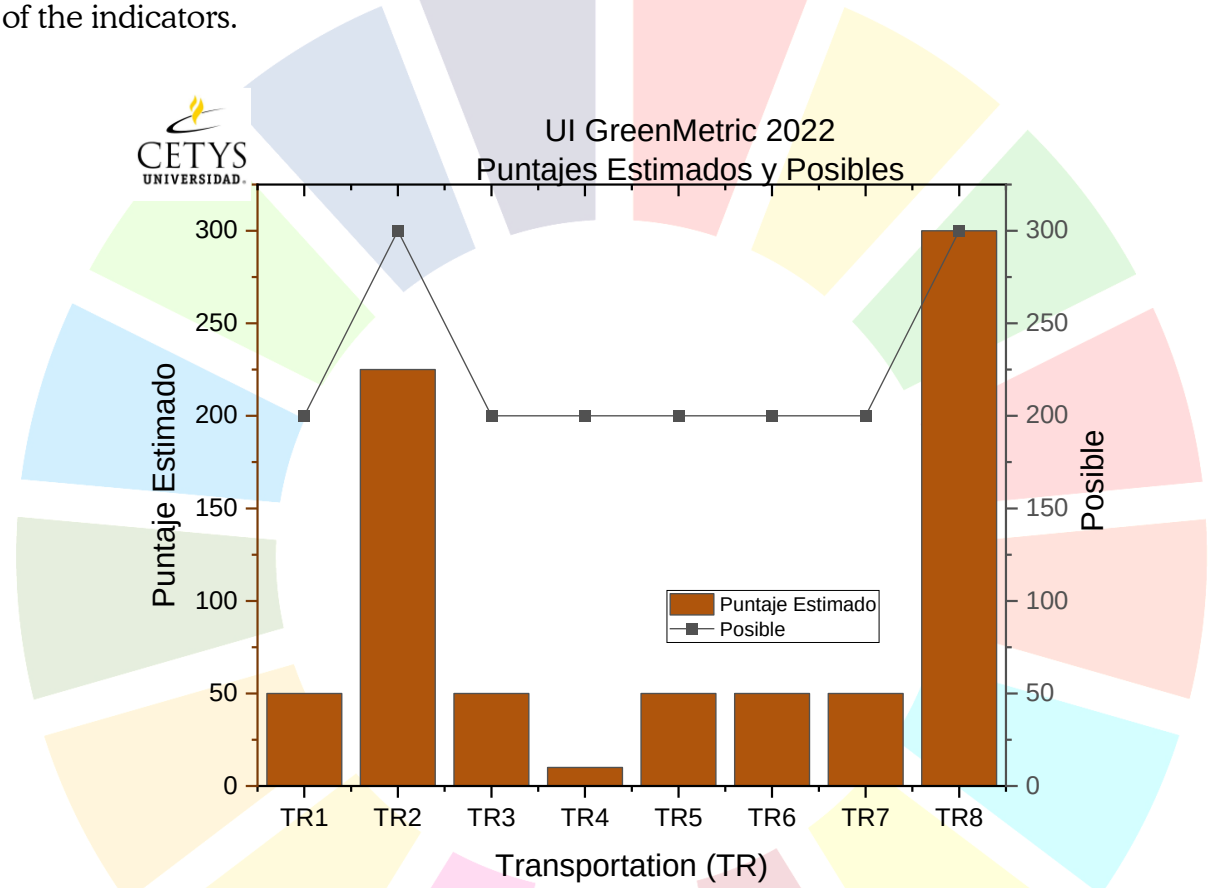


WR1	Water conservation program and implementation	WR4	Consumption of treated water
WR2	Water recycling program implementation	WR5	Water pollution control in the campus area
WR3	Water-efficient appliances usage		

- Remarkable Elements
  - CETYS University System
    - In 4 of the 5 indicators proposed in the "Water" dimension, CETYS University is expected to reach the maximum proposed scores.
    - The use of water from the treatment and water treatment plants stands out.
  - Campus Mexicali
    - There is a water recycling plant that produces 7 liters per second which is used 100% in the irrigation of green areas.
    - 100% of the water sources for human consumption found within the campus are periodically subjected to chemical analyzes -through external laboratories- that guarantee its 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.
  - Tijuana Campus
    - The waste water 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, which provides the vital liquid to the green areas of the campus and is used in the bathroom facilities. by providing clean and reusable water benefiting the environment.
    - The restroom area has furniture with low water consumption and regulating faucets that adjust to the time needed for cleaning and washing hands, which prevents the liquid from being wasted, as well as toilets that comply with CONAGUA Standard 009, respecting the 6 Sufficient liters for each discharge.
  - Ensenada Campus
    - Efforts have been made to implement saving equipment (sinks and toilets) for the efficient use of water.
- Opportunity Areas
  - CETYS University System
    - It is necessary to implement rainwater collection and storage systems and wastewater management (treatment).
  - Campus Mexicali
    - Continue until you have 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 collect rainwater or environmental humidity.

Transport (TR)

The fifth dimension of UI GreenMetric analysis 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 overall evaluation. Below is the graph with the estimated scores that CETYS University could obtain and the description of the indicators.



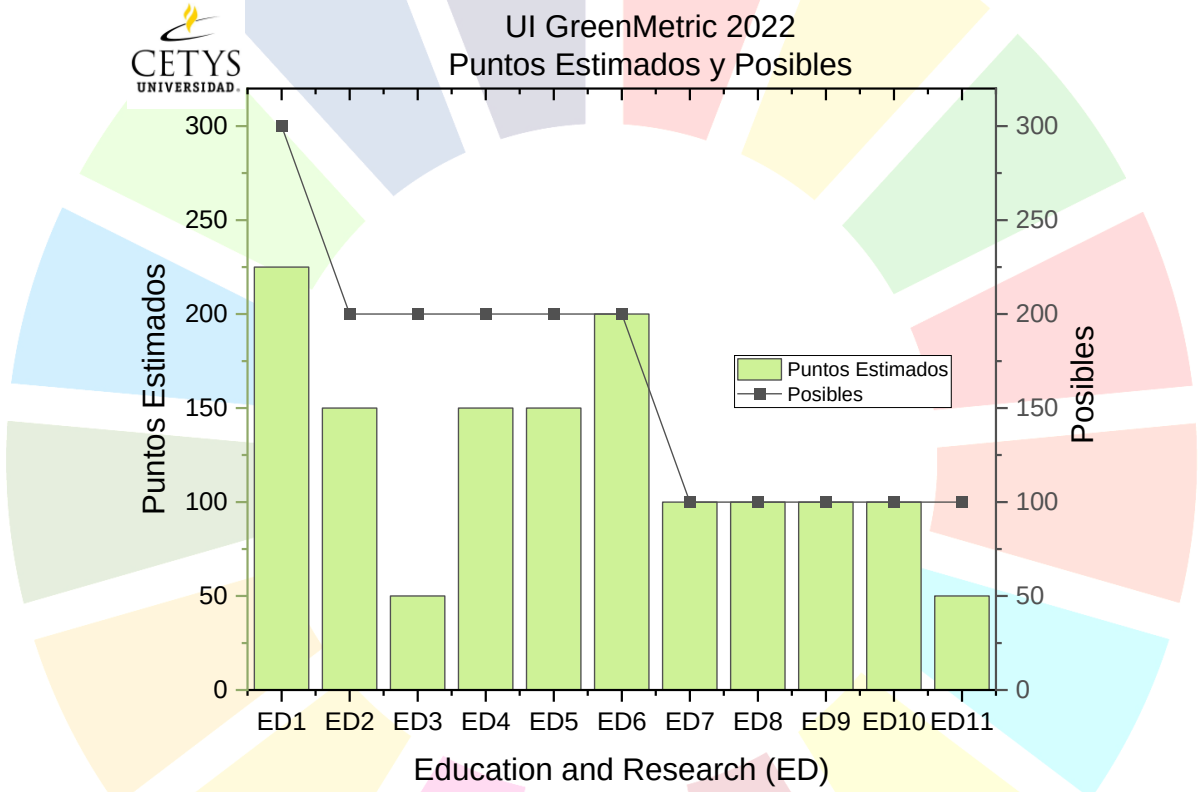
TR1	The total number of vehicles (cars and motorcycles) divided by the total campus' population	TR5	The ratio of the ground parking area to the total campus' area
TR2	shuttle services	TR6	Program to limit or decrease the parking area on campus for the last 3 years
TR3	Zero-Emission Vehicles (ZEV) policy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

- Remarkable Elements
  - CETYS University System
    - In 1 of the 8 indicators proposed in the "Transportation" dimension, CETYS University is expected to reach the maximum proposed score.
    - The spaces for walking on campus stand out (design, signage, dimensions, lighting, security, etc.) and the efforts related to mobility within the campus for people with different abilities.
  - Campus Mexicali
    - There is the Zorro Bus student transport system, which provides service mainly to remote areas of the city, reducing individual mobility 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 signs, handrails on different levels.
    - Transfer program for students: 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”).
    - Spaces for motorcycles have been identified in the parking lots.
- Opportunity Areas
  - CETYS University System
    - It is necessary to start thinking about programs that encourage the use of "zero emission" or electric vehicles by students, assigning preferential spaces in parking lots and charging stations that use renewable sources such as photovoltaic solar installed on campus.
  - Campus Mexicali
    - Promote the use of bicycles on and off campus.
    - Continue reinforcing the culture to reduce the use of private cars.
  - Tijuana Campus
    - Ramps with inclination according to municipal and functional regulations for people with disabilities.
    - Greater 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 lots. Example: Carpool, strategic transport 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 dimension of UI GreenMetric analysis 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 overall evaluation. Below is the graph with the estimated scores that CETYS University could obtain and the description of the indicators.



DI1	The ratio of sustainability courses to total courses/subjects	DI7	Sustainability report
DI2	The ratio of sustainability research funding to total research funding	ED8	Number of cultural activities on campus
DI3	Number of scholarly publications on sustainability	ED9	Number of university program(s) to improve teaching and learning
DI4	Number of events related to sustainability	ED10	Number of sustainability community services projects organized and/or involving students
DI5	Number of student organizations related to sustainability	ED11	Number of sustainability-related startups
ED6	University-run sustainability website		

- Remarkable Elements
  - CETYS University System
    - In 5 of the 11 indicators proposed in the "Education and Research" dimension, CETYS University is expected to reach the maximum proposed score.
    - The number of cultural activities carried out on each campus stands out, along with the teacher education and training programs and the community activities organized or in which CETYS students and academics participate.
  - Campus Mexicali
    - 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 curriculum of the different careers and postgraduate courses, 107 were the courses taught and directed to subjects related to sustainable development
  - Tijuana Campus
    - The institution offers the Renewable Energy Engineering career, and has 109 courses directly or indirectly related to sustainability.
    - The theme of sustainability is considered important in the development of the student's graduation skills, by carrying out at least 7 events related to the theme within the cultural activities.
    - The academic and administrative area provides constant training to teachers, diversifying technological tools and learning modalities, which made it possible to continue with the teacher training program, even in 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 cleanups, reforestation and care of green areas, ecological bazaars, support for the recycling center, events promoting respect and awareness of caring for the environment. environment such as that of the Earth Week, promoted by the student organization: "Terravita".
  - Ensenada Campus
    - A significant number of sustainability-related research projects and publications 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 on SDGs
- Opportunity Areas
  - CETYS University System

- It is necessary to increase the number of academic publications related to sustainability.
- It is necessary to promote and monitor the creation of "start-ups" generated by students, related to some areas of sustainable development.

➢ Campus Mexicali

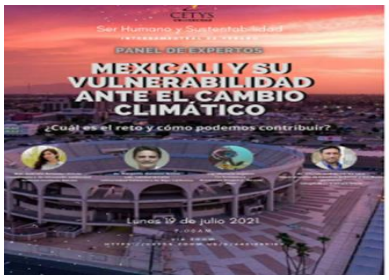
- Support the creation of companies that are directed and related to products and services that contribute to care or that are friendly to the environment.
- Generate events and programs to support the community. It can be direct support or awareness aimed at improving its environment.
- Promote and support research and publication 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 by students and academics at the professional and postgraduate levels.
- Encourage 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 in the highest directive spheres of the institution and in its educational model.
2. During the year 2022, the actions aimed at structuring the institution's efforts around sustainability and the United Nations Sustainable Development Goals are formalized, based on the project to create the CETYS Sustainability Studies Institute.
3. In 2022, CETYS University participates for the first time in an international ranking exercise related to the evaluation of sustainability in academic institutions, in this case the one promoted by the UI GreenMetric organization. This is an unprecedented effort of great depth in which personnel from all administrative, academic, planning and service areas of the institution are involved.
4. Among the most relevant programs in terms of sustainability that CETYS has been operating, the following should be highlighted: CETYS Solar Power, which positions the institution as the leading university in Latin America for its capacity to generate photovoltaic solar energy and the Zero Waste program for the management and handling of waste, which has earned international recognition from the International Network of Sustainable Campuses.
5. The design, construction and operation of smart and green buildings on the 3 campuses (eg CECE, CEID, CEVIT, Auditorium Gym), is a very important element in the transition towards sustainable development.
6. 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 the university education of students.

Opportunity Areas

1. Standardize criteria between campuses for the design, planning and development of future physical spaces under the concept of sustainable and sustainable spaces.
2. Develop policies, programs and institutional actions related to the energy efficiency of its physical spaces and with proposals to minimize the impacts of climate change from the academy, the administration and the student community.
3. Waste management must follow the successful model implemented in Campus Tijuana at the System level.
4. The water resource is a scarce resource 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 influence more decisively in 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 others. items. The use and management of the resource within CETYS should be an example to follow in the Baja Californian 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 the matter.
6. Research and training in areas related to sustainability and the United Nations Sustainable Development Goals should increase substantially, as well as the creation of "green" productive companies or those focused on aspects of sustainability by students, with the support of the academics of the institution.

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Annexes

Annex 1: List of buildings considered smart and their characteristics

Nope.	Yam	Place	Automation		Safety				Energy		Toilet		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
two	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, Mexico; TIJ= Tijuana, Baja California, Mexico, ENS=Ensenada, Baja California, Mexico

Annex 2: List of energy saving applications

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 applications

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: Calculation of the carbon footprint

a) Electricity Usage per year (kWh)				
	Mexicali	Tijuana	Ensenada	System
Diciembre 2020	80 567.00	38 442.00	25 304.00	144 313.00
Enero 2021	73 179.00	45 713.00	15 520.00	134 412.00
Febrero 2021	47 252.00	35 808.00	18 088.00	101 148.00
Marzo 2021	39 202.00	40 441.00	22 400.00	102 043.00
Abril 2021	110 244.00	42 850.00	19 192.00	172 286.00
Mayo 2021	162 322.00	56 152.00	20 904.00	239 378.00
Junio 2021	233 963.00	57 389.00	22 464.00	313 816.00
Julio 2021	258 017.00	66 610.00	22 648.00	347 275.00
Agosto 2021	302 932.00	78 779.00	29 856.00	411 567.00
Septiembre 2021	358 176.00	88 923.00	32 576.00	479 675.00
Octubre 2021	219 108.00	80 029.00	30 728.00	329 865.00
Noviembre 2021	189 616.00	72 356.00	30 032.00	292 004.00
TOTAL Año 2021	2 074 578.00	703 492.00	289 712.00	**3 067 782.00**

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	2218	544	5602
Cajones de Estacionamiento	1420	1109	272	2801
Distancia Recorrida (km)	0.244	0.138	0.175	0.186
TOTAL	984 003.20	338 832.22	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	1742.65	590.93	243.36	2576.94
b) Transporte (Shutt	0.72	0.02	0.07	2.42
c) Transporte (carro	66.52	29.33	9.14	99.81
d) Transporte (motc	0.35	0.73	0.18	1.69
TOTAL (Ton/year)	**1 810.24**	**621.01**	**252.75**	**2 680.85**