

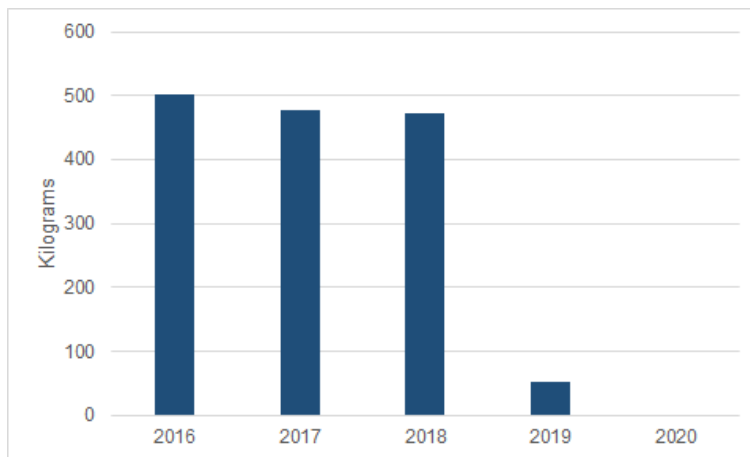
### Program to Reduce Plastic in Campus

1. Point of separation of organic, and recyclable waste (plastic, paper, metal and glass).



1

2. Consolidated reduction of single-use plastics 2020



2

Green-Crown Awards  
 Universidad CES  
 Un compromiso con la excelencia

**12** RESPONSIBLE CONSUMPTION AND PRODUCTION  


**13** CLIMATE ACTION  


3. International recognition The 6th International Workshop on UI GreenMetric and the 3rd International Conference on Green University, Zanjan, Iran, September 2020.



## ZERO SINGLE-USE PLASTICS UNIVERSITY

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### Abstract

Since 2019 CES University took action and joined forces with suppliers to work for sustainability. This is how the path to the implementation of the zero single-use plastics guidelines begins in order to restrict 100% the use of all single-use plastics at Campus and thus avoid the final disposal in sanitary landfills, resulting in contamination of water sources, high permanence in the environment, affection to the fauna and flora, affection to the marine life, etc.; eliminating the generation of plastic waste through prevention, reduction, reuse and recycling.

**Keywords:** climate action, plastic, single use, sustainability, zero.

CES University a private and nonprofit higher education located at Medellín-Colombia became the first in the "Aburrá" Valley to say goodbye to cigarettes, PET bottles, disposable plates and cutlery, all of them considered single-use plastics, as a contribution to sustainability.

Since 2019 CES University took action and joined forces with suppliers to work for sustainability. This is how the path to the implementation of the zero single-use plastics guidelines begins in order to restrict 100% the use of all single-use plastics at Campus and thus avoid the final disposal in sanitary landfills, resulting in contamination of water sources, high permanence in the environment, affection to the fauna and flora, affection to the marine life, human health, among others; eliminating the generation of plastic waste through prevention, reduction, reuse and recycling.

These single-use plastic products were replaced by elements such as cane bagasse and starch of corn; among others, whose characteristics were biodegradable and compostable, in order to end the life cycle of these products transforming them into compost.

Audits are carried out permanently to verify the campus is free of these plastics. All accompanied by strong awareness and communication campaigns to different stakeholders.

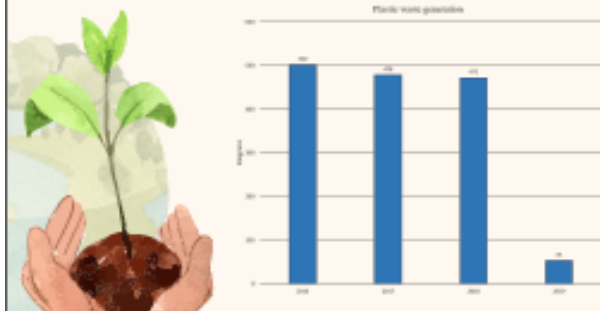
Since the use of single-use plastic elements was banned, we managed to reduce the generation of these products by 89% (in 8 months). From 471,5 Kg in 2018 to 53 Kg in 2019.

With this practice, we contribute to:

- SDG 13 - goal 13.2: improve education and awareness regarding climate change mitigation, reduction of its effects and early warning. This contributes to the total greenhouse gas emissions reduction.
- SDG 12 - goal 12.4, achieving the ecologically sound management of waste throughout its life, also reducing its release to soil and water; in order to minimize adverse effects on human health and environment; in goal 12.5 reducing the generation of waste through prevention, reduction, recycling and reuse activities.

This practice is being replicated in more than 20 organizations countrywide.

Graphic 1: Quantity (Kg) of single-use plastics generated month to month, from 2016 to 2019.



All this together is reflected in the reduction of 11,432 Kg of CO<sub>2</sub> in our carbon footprint scope 2, and the reduction of 45 tons in greenhouse gas (GHG) emissions.



Figure 1, Biodegradable and compostable elements Figure 2, Composting system

### Concluding Remarks

Among the main conclusions that can be highlighted by the implementation of the initiative, are:

- A study conducted by the World Wide Fund for Nature (WWF) in conjunction with the University of Newcastle, Australia indicates that on average a person can ingest, through water, air and food, and depending on consumption habits, about 5 grams of plastic weekly. An amount that is equivalent to eating a credit card. Situation that we are not oblivious to, since drinking water and beverages may contain micro plastics (plastic particles measuring less than 5 mm). The reduction of the generation of this type of plastics contributes directly to improving health issues, even more so in our country where, according to data provided by the Attorney General's Office, one million tons of plastic waste are generated in Colombia annually, of this total only 7% is recycled, the remaining 93% ends up accumulated in the sanitary landfills [6].
- Demystification in relation to the dependence of single-use plastics; it is possible to find alternatives to this type of elements.
- 89% reduction of single-use plastics, which was generated on the University Campus, between 2018 and 2019.
- Thanks to these guidelines, relationships and alliances were established with both regional and national suppliers, which provide environmentally friendly elements.
- Acceptance and appropriation of different interest groups, in relation to the restriction of single-use plastics.
- Opportunities to replicate and scale the practice, which contributes to the generation of culture. This is reflected in the great acceptance of the practice that will allow it to expand its impact to other organizations that join in its adoption: 68 universities, 5 universities in other regions, 1 school, Governments of municipalities in Colombia.

4. National Recognition Global Compact Red Colombia SDG 12. First university in the Metropolitan Area of Valle de Aburrá to implement guidelines for zero single-use plastics.



5. Socialization of single-use plastic guidelines, Council of Medellín



Paper sheets saving (unit)	Paper reams saving (unit)	Tree felling avoided (unit)	Consumption of electrical energy avoided (kWh)	Water consumption avoided (lt)	CO2 emissions avoided (Kg of CO2)	Savings for reams not consumed (\$)
8856	18	1,1	11,6	3276	68,4	183.636