



Contaduría y Gestión
Dirección de Negocios
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ROUND 1: SOCIAL INNOVATION GENERATION



+composta

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ROUND 1 - SOCIAL INNOVATION GENERATION

A. Social business idea

A1. Social mantra one-liner

“+Composta bring your waste back to life, nourishing the earth and cultivating the future.”

A2. Contributions to UN goals

+Composta contributes to the achievement of the United Nations 2030 Agenda through the Sustainable Development Goals such as:

SDG 11: Sustainable Cities and Communities:

+Composta helps create more sustainable communities by promoting the proper management of organic waste in the Veracruz. By diverting this waste from landfills and encouraging composting practices, it contributes to reducing pollution and improving the quality of life in urban areas.

SDG 12: Responsible Consumption and Production:

The project promotes the reduction, reuse, and recycling of organic waste, which aligns with SDG 12. By converting organic waste into compost, a valuable resource is created that can be used to improve soil fertility and promote sustainable agricultural practices.

SDG 13: Climate Action:

+Composta contributes to climate change mitigation by reducing greenhouse gas emissions associated with the anaerobic decomposition of organic waste in landfills. Composting promotes aerobic decomposition, which emits fewer greenhouse gases, and produces compost that can help sequester carbon in the soil.

B. ESG preparedness

B1. Target issues

"Inadequate waste management is polluting the world's oceans, clogging drains and causing flooding, transmitting diseases, increasing respiratory ailments from burning, harming animals that consume waste, and affecting economic development, for example, by harming tourism," said Sameh Wahba, director of Urban and Territorial Development, Disaster Risk Management, and Resilience at the World Bank.

The first thing that we need to understand is that food waste should not end up in the garbage, especially because while more than 820 million people suffer from hunger, 14% of the world's food is wasted. When they reach landfills, they begin to decompose due to the action of bacteria and in conditions without oxygen, they generate greenhouse gases (GHG) such as methane gas (CH₄) whose global warming potential is 28 times higher than carbon dioxide (CO₂). For this reason, recycling organic waste contributes directly to reducing GHG emissions and, thus, to mitigating climate change.

B2. Root causes

"Garbage is considered one of the biggest environmental problems in our society. Population and per capita consumption is growing, and so is garbage; but space is not, and its treatment is not adequate. Until today, waste management has focused mainly on a single aspect, the elimination of waste (making it disappear from sight) through landfills, sanitary landfills and, in some cases, incinerators". (Garcia, s.f.).

Mexico is one of the countries that produces the most garbage in Latin America, contributing significantly to global pollution thanks to poor waste management.

One third of the country's waste ends up in landfills without adequate infrastructure for its management, as they can store millions of tons of garbage and occupy up to 100 hectares.

That said, open dumps are the main source of greenhouse gas generation, in addition to generating, to a large extent, pollution of the skies and bodies of water. It is common that in uncontrolled landfills there is a risk of combustion, generating polluting gases.

Another challenge in our society is that as a community we do not have a culture of recycling, so recycling rates are very low, causing 90% of the population's trash to go to waste.

B3. Current solution landscape

Waste generation occurs all over the world, but waste management differs from place to place. Each country has unique economic, cultural, social and geographic conditions, which means that different waste management strategies have been adopted in each country.

Waste management has several stages: recovery, transportation, and treatment. It is very important that these three stages are well coordinated to achieve the best results.

A clear example of a country with good waste management is South Korea. According to the Global Waste Index 2022, South Korea is the best country in terms of waste management, with a recycling rate of 60.8% and a waste generation of 400 kg per capita. It stands out because it is able to recycle 95% of its food waste. How did they do it? By introducing public policies. Starting in 2005, throwing food in landfills was banned, and in 2013 food recycling became mandatory.

What is done with waste in Mexico? In Mexico the final disposal sites are sanitary landfills, controlled landfills, uncontrolled landfills, and open dumps.

Article 18 of the General Law for the Prevention and Integral Management of Waste (LGPGIR) establishes that municipal solid waste may be subclassified into organic and inorganic in order to facilitate its primary and secondary separation, in

accordance with the State and Municipal Programs for the Prevention and Integral Management of Waste, as well as with the applicable legal ordinances.

In the CDMX an average of 1,487 tons of organic waste is collected daily, which is used to generate compost to improve the soil of the city's medians, green areas of road networks, parks and gardens. In Bordo Poniente, 94,482 tons of compost were produced in 2015, according to SEDEMA.

Veracruz has implemented several actions to manage the organic waste problem. Among them are the following:

- The creation of Composting Centers, such as the one in Xalapa, for the use of organic waste.
- The implementation of the Zero Waste program in public institutions, which seeks environmental, technological, economic and social efficiency.
- Collaboration with municipalities to train local personnel in the management of waste disposal sites (Government of Mexico, n.d.). Projects such as the use of municipal organic waste and its transformation into worm humus in Teocelo (Government of Mexico, n.d.).

These actions are part of the effort to reduce environmental impact and improve waste management in the region.

B4. Solution to implement

Given the growing problems in the Metropolitan Zone of Veracruz, the need to implement effective solutions for the proper management of organic waste arises, which is where the idea of "+Composta" arises. This project emerged as an innovative and proactive response to the growing need to address the problem of organic waste in a comprehensive and sustainable manner. The central focus of +Composta is the collection and management of organic waste in a sustainable manner, with the objective of reducing the amount of waste sent to landfills and promoting environmentally responsible practices in the community.

The project seeks to involve the population in a participatory process of environmental awareness and action, seeking to create a cultural change towards greater environmental and social responsibility. One of the distinctive features of +Composta is its collaborative approach, which goes beyond mere waste collection to also address aspects such as environmental education, community participation and the promotion of the circular economy. Through educational programs, practical workshops and awareness campaigns, the project seeks to empower citizens and foster greater collaboration among all actors involved in organic waste management.

B5. Solution uniqueness

As part of our proposed solution, we seek to offer a service of collection, separation and management of organic waste, which will go through a composting process to later become fertile soil that will be used mostly for the reforestation of green areas within the Metropolitan Zone of Veracruz.

One of the fundamental objectives of +Composta is to sensitize the community about the importance of proper waste management, especially organic waste, so we carry out environmental education activities in schools, communities and businesses to raise awareness about the negative impacts of improper waste management and encourage more responsible and sustainable practices.

As mechanisms for monitoring and evaluation of the actions we seek to develop a mobile application to measure the efficiency and impact of the activities carried out in +Composta, we seek to measure the amount of waste collected during a given period of time, promote and monitor the composting process and include video tutorials for the development of compost, also, we seek to raise awareness and sensitize the community through various interactive games that will be available within the platform. Data will be collected on the amount of organic waste collected, the amount of compost produced, citizen participation and other relevant indicators to evaluate the success of the project and guide future actions.

C. Stakeholder engagement

C1. Engagement strategy

Once we have collected the information and identified our target audience, we will seek to give visibility to the project in different areas by implementing the following strategies.

- Offer a service for the collection of organic waste in a variety of specific areas (homes, schools, restaurants, hotels and businesses) within the Metropolitan Zone of Veracruz, thus promoting more sustainable waste management practices in the sector.
- Conduct composting workshops in schools to sensitize and raise awareness among new generations about the importance of waste separation and foster a culture based on environmental education. • Approach parents and the public, to talk to them about the service offered by "+ composta" and thus turn them into our potential customers.
- Seek alliances with local governments to carry out reforestation companies to use compost to nourish and maintain green areas.

C2. Social support Champaign performance

Since 2021 +Composta has had the support of its community, the project involves more than 100 families, public and private schools, restaurants, businesses and hotels in the Metropolitan Zone of Veracruz. This participation demonstrates the positive impact and community acceptance of +Composta.

We have knocked on doors in schools such as "Universidad Veracruzana"; "Colegio la Paz"; "Colegio Jean Piaget"; "Cbtis 190" among others, to provide awareness workshops on this practice, which have shown interest in this work, allowing us to share the activity with the student community.

We have also teamed up with private companies, a clear example of this is the organic waste composting project at the "Camino Real" hotel. The collaboration between +Composta and the Camino Real Hotel in Boca del Río, Veracruz, represents a joint effort to promote sustainable waste management practices and contribute to the care of the environment in society.

D. Learning curve

Through this comprehensive process, +Composta not only manages organic waste effectively, but also promotes community participation and the adoption of responsible environmental practices, thus contributing to the construction of a more sustainable and healthier environment in the Veracruz Metropolitan Area.

The impact of +Composta goes beyond organic waste management; it also extends to environmental education, community awareness and strengthening local resilience. As the project continues to grow, its influence multiplies, inspiring others to follow suit and join forces for a more prosperous and sustainable future for all. +Composta is much more than an environmental project; it is a movement for positive change rooted in collaboration, commitment, and hope, reminding us that every action, no matter how small, can make a difference in building a better world for present and future generations.



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Annexes:

Viernes 12 de abril, Preparatoria Jean Piaget, Veracruz, Ver., México



Viernes 26 de abril. Preparatoria CBTis N° 190, Veracruz, Ver., México

