



Centro Cemex-Tec

Building sustainable communities

Centro Cemex-Tec encourages sustainability among communities by means of applied research, innovation, and entrepreneurship programs, creating opportunities to connect with academia, the civil society, and the public and private sectors, in order to improve the quality of life in rural and urban settings.¹

¹ Cemex-Tec presentation at <https://www.cdcs.com.mx/>

**Centro
Cemex-Tec:**
Building
sustainable
communities



LOCATION:
International



MAIN PARTNERS:

- Tecnológico de Monterrey

OTHER PARTNERS:

- Makesense
- Ashoka
- Unreasonable México
- Cirklo
- Consejo Cívico
- Impact Hub
- Mass Challenge México
- Unboxed
- yCo



FINAL BENEFICIARIES:

- Children, adolescents, and/or youth
- Women
- People with physical and/or mental disabilities
- People living in poverty and/or extreme poverty
- Entrepreneurs in rural and urban communities



SECTOR:

Entrepreneurship, social and economic development.



TYPE OF INVESTOR/SILO:

Company



TYPE OF FINANCING:

Donations and payment for services provided.



DURATION:
2009
–now



**MOTIVATION/
PROBLEM TO TACKLE:**

Contribute to the development of sustainable cities and communities in Mexico and the world.



NON-FINANCIAL SUPPORT OFFERED:

- Impact management and measurement.
- Business model and/or strategy
- Governance
- Operational (marketing, logistics, IT, sales, purchases, legal).



SDGS ADDRESSED:

IMPACTS:

360 students
and teachers **benefited.**

1680 people
trained in self-construction.

Communities strengthened by
8 sustainable
transformation **projects.**

Improvement actions implemented in several communities after identifying opportunity areas for sustainability by means of

65 environment surveys.

Environmental conservation and recovery capacities installed in communities by training

1800
environmental promoters.



Construction manual for **self-built** sustainable housing in the context of the

“Yo Construyo”

(I Build) program, adopted by SEDATU (Mexican Secretariat for Agrarian, Land and Urban Development).

Partnerships with different organizations that have encouraged initiatives for a sustainable future.



BACKGROUND AND CONTEXT

Mexico's rapid urbanization has led to a growing number of marginal neighborhoods, with inadequate infrastructure and water, sanitation, and waste collection services.² And if what happens in the cities will outline the future of this country in terms of economic growth, poverty reduction, inequality, demographic modulation, environmental sustainability, and exercise of human rights, there is a need to build more sustainable cities, where urban does not equate poverty but rather provides opportunities for the most vulnerable groups.³

Rural communities in Mexico also face their own challenges. In 2018, 55.3% of this population was living in poverty, while in urban areas the percentage was 37.6%.⁴ More recent figures by Universidad Nacional Autónoma de México estimate that the COVID-19 pandemic made at least 16 million people fall into income extreme poverty. In terms of social security, 52.2% of the rural population lacked access to basic housing services, 28.2% had an education lag, and 25.8% a gap in access to food. In addition to that, environmental degradation due to water pollution, soil salinization, deforestation, and land erosion is also a serious issue that jeopardizes farming production.⁵ In light of these challenges, more inclusion, resilience, productivity, and sustainability is needed in rural economies. This would contribute to positioning Mexico as a competitive economy.^{6,7}



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² United Nations Organization (UN), Sustainable Development Goals. Goal 11: Make cities inclusive, safe, resilient and sustainable. Accessed at: <https://www.un.org/sustainabledevelopment/es/cities/>

³ Sobrino, J., Garrocho, C., Graizbord, B., Brambila, C., Aguilar, A. Ciudades sostenibles en México: una propuesta conceptual y operativa. Accessed at: https://mexico.unfpa.org/sites/default/files/pub-pdf/Ciudades_sostenibles_Mex_esp.pdf

⁴ Dirección de Información y Comunicación Social, Coneval, 2019. 10 años de medición de pobreza en México, avances y retos en política social. Press release. Mexico City. Accessed at: https://www.coneval.org.mx/SalaPrensa/ComunicadosPrensa/Documents/2019/COMUNICADO_10_MEDICION_POBREZA_2008_2018.pdf

⁵ Arias, Altnai and Salazar, Jorge Luis, editors, 2018. Visión social del desarrollo sustentable. Centro de Estudios para el Desarrollo Rural Sustentable y la Soberanía Alimentaria (CDRSSA). Accessed at: http://www.cedrssa.gob.mx/files/b/8/60Visi%C3%B3n_social_desarrollo_rural_sustentable.pdf

⁶ World Bank, 2018, Tres grandes ideas para lograr ciudades y comunidades sostenibles. Accessed at: <https://www.bancomundial.org/es/news/immersive-story/2018/01/31/3-big-ideas-to-achieve-sustainable-cities-and-communities>

⁷ Centro de Estudios para el Desarrollo Rural Sustentable y la Soberanía Alimentaria, 2018. Resultados de la medición de pobreza multidimensional en materia alimentaria 2018. Mexico City. Accessed at: http://www.cedrssa.gob.mx/files/b/13/42Resultados_Medici%C3%B3n_Pobreza_2018.pdf

In 2009, in a context of economic and social uncertainty due to the financial crisis of the previous year, Cemex identified the need to advocate for the development of cities and communities in Mexico. Based on that, Centro Cemex-Tecnológico de Monterrey para el Desarrollo de Comunidades Sostenibles (Centro Cemex-Tec) emerged in 2010, conceived as an interinstitutional center in the framework of which the company shares its practical business experience and contributes economic resources, while Instituto Tecnológico provides applied research, knowledge, and human resources—researchers, graduate students, and specialized staff. It also commits to providing spaces for Centro at its facilities.



DESCRIPTION

Cemex, a Mexican company, supplies the construction industry with products and services in more than 50 countries. Its social purpose revolves around “building a better future.” With this vision in mind, Cemex approached Tecnológico de Monterrey—one of the most important education institutions in the country—to launch a sustainable development project.

For Cemex, collaboration between companies and academia is essential to develop initiatives with a long-term vision and a high level of technical expertise to bolster structural change. In the ten years it has existed, Centro Cemex-Tec has evolved from a national to an international scope, where it has built an extensive network of allies.

Centro believes that, in order to promote community development, it is important to assess the potential of each community development dimension and analyze the need communities have to connect with different subject matter experts. Hence the importance of developing multisectoral partnerships.

Today, this intersectoral collaboration network relies on 3800 entrepreneurs, 500 social and entrepreneurial organizations, 15,000 enterprises, 300 universities, 9000 community partners and environmental and social activists, and 25 governments and agencies.

Centro Cemex-Tec also works as an adviser for enterprise networks like RedEAmérica, Red SumaRSE, Red ARISE, and the United Nations Global Compact.



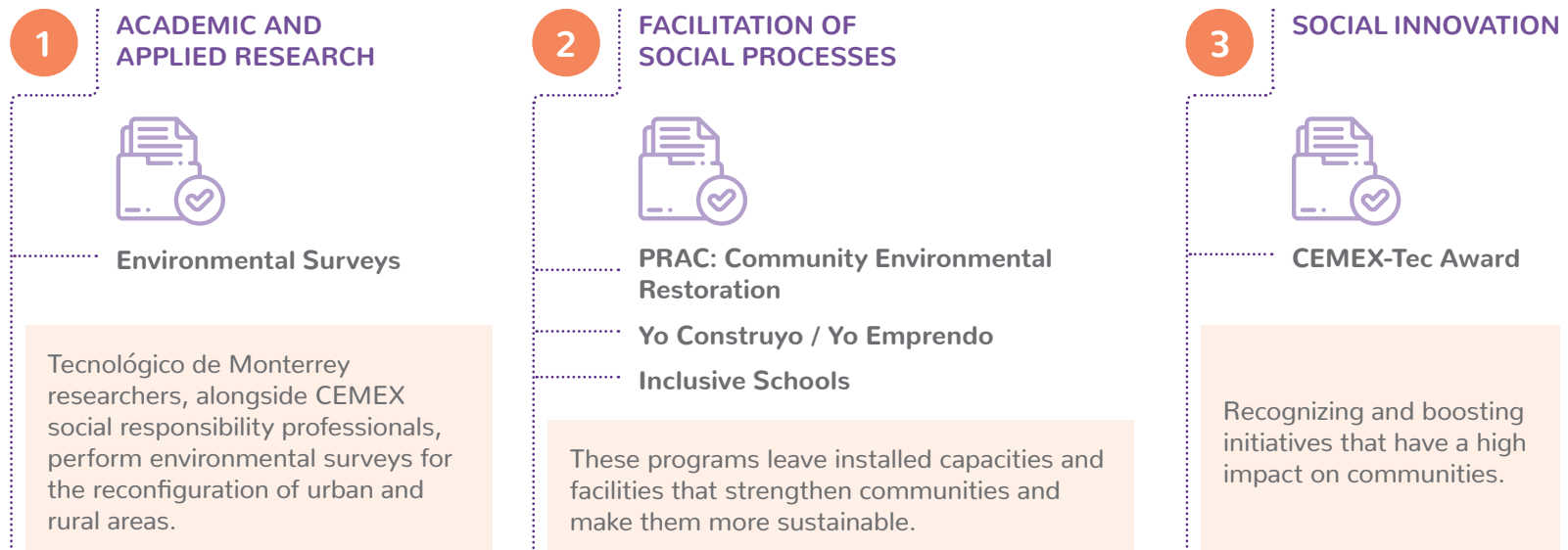
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IMPLEMENTATION

Centro Cemex-Tec has positioned itself as an applied research and social innovation space, which has three main operation nodes:

Figure 1: Centro Cemex-Tec operation nodes



Source: Centro CEMEX-Tec para el Desarrollo de Comunidades Sostenibles.

The environmental surveys are carried out by applying an internal model known as “Modelo Cemex-Tec de Comunidades Sostenibles” (Cemex-Tec Sustainable Communities Model), which sets forth the ideal characteristics that a community should have to be sustainable. For 2020, surveys have been carried out in seven states of Mexico and four Latin American countries, where lines of action—used by Cemex and the communities as a guide to build development projects—have been established.

Additionally, Centro has three programs to facilitate social processes. PRAC (Community Environmental Restoration Program) trains youth as environmental promoters that develop projects for environmental restoration in their communities. Yo Construyo / Yo Emprendo promotes self-employment and trains people in self-construction to build quality constructions with sustainability parameters. And Escuelas Inclusivas seeks to support public schools so that they are self-sufficient, improve their infrastructure, and include environmental care programs.

Centro also mobilizes resources in the social impact ecosystem through the Cemex-Tec Award,⁸ which rewards sustainable development, entrepreneurial, and social innovation projects in the early stages. These programs receive financial support and training to accelerate their businesses.

For example, the Cemex-Tec Award call for proposals was launched—in partnership with Ashoka—in the Dominican Republic to develop the social business ecosystem in that country. As part of this effort—and alongside the Ministry of Higher Education, Science and Technology—university professors were trained in the promotion of social businesses and innovation, which had an impact on half a million students in different universities, boosting the rising ecosystem.



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 **Tailored Finance**

To determine the number of financial resources required by Centro Cemex-Tec, the directors of Tecnológico de Monterrey, along with the Cemex team, draw up annual strategic plans. In these meetings, both institutions set a medium- and long-term purpose and ensure that their visions for Centro are aligned.

Since Centro Cemex-Tec does not have its own legal form, its financial resources come from Cemex donations that go directly to Tecnológico de Monterrey. Centro also generates its own profits through consultancy or mentorship for third-party organizations. In line with the impact-first approach, Cemex

⁸ The award has a national and international scope. It has been awarded to 65 projects in Mexico and 63 in 23 countries like Venezuela, Peru, Chile, Nicaragua, India, Germany, Ghana, the Philippines, Spain, and the United States, among others.

does not expect financial returns or compensation from Tecnológico de Monterrey, other than the intellectual support provided by the academic institution.

Centro is also a source of financing for high-social-impact projects, as in the case of the Cemex-Tec Award, whose winners receive support ranging from USD \$10,000 to \$25,000.

Each of the four categories of the award has its own criteria to determine the impact potential of the participating projects. For example, for the "Transforming Communities" category, the assessments are based on a diagnosis of the affected community, master plans for transformation, viability and implementation studies, innovation and social engagement strategies, financial sustainability, and replicability potential. In 2017, the winning project for this category—Casa Partera—received USD \$25,000 to implement its proposal: to build birth centers for the benefit of Tzeltal communities, located in the state of Chiapas. The investment made by Casa Partera was around USD \$3400, and the communities participated in the design of the birth centers.



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Non-financial Support

"We are interested in really getting to know the communities by building capacity, collaborating with them, being a part of the community's co-design and co-development." Martha Herrera, Cemex Corporate Director for Social Responsibility and Centro Cemex-Tec Director.

Cemex acts as a companion and guide during the community development process. In order to make a lasting impact, Cemex installs the capacities and skills needed for communities to be stronger and more independent.

A type of essential support Cemex has provided Centro with is the connection with other stakeholders. When the Centro personnel seeks help for different issues, they have access to the company's relational capital to meet their needs. Cemex has also provided support for the professional growth of the Centro working group by means of training.

Besides that, Centro Cemex-Tec teams up with other organizations like Makesense México, Ashoka, Mass Challenge México, Unreasonable México, and Impact Hub to train entrepreneurs who have won the Cemex-Tec Award. During these workshops, training is provided on subjects like impact measurement, helping entrepreneurs align their actions with standards such as the Sustainable Development Goals (SDGs), and communicate impact metrics to receive new sources of financing. Centro also established a partnership with Unboxed and yCo to create Sikuli, a social business design laboratory in the state of Nuevo León.



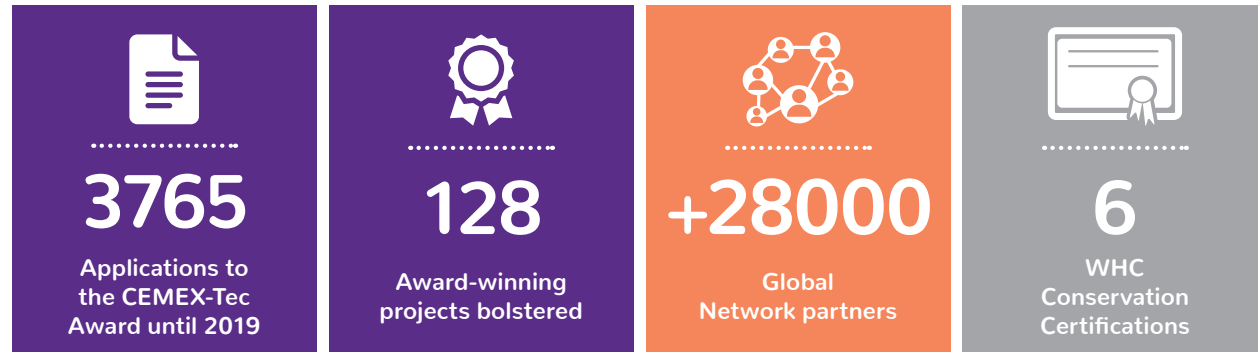
RESULTS

Centro Cemex-Tec rises a baseline in each community or city where it operates, which allows it to know the environment, calibrate the type of intervention for each program, and estimate the medium- and long-term progress. Additionally, an external evaluation is conducted for each program, with its own management and results indicators to evaluate the accomplishments.

Some of the main results achieved by Centro Cemex-Tec are:

Figure 2: Centro Cemex-Tec results





Also, the construction manual for self-built sustainable housing—one of the products derived from the Yo Construyo program—has been adopted by the Mexican Secretariat for Agrarian, Land and Urban Development⁹ for one of its housing development programs.



LEARNINGS AND PERSPECTIVES

The actions undertaken by Cemex are based on the premise that communities can be resilient and sustainable. The company aspires to promote systemic changes based on new societal paradigms. To this effect, it recognizes the need to listen to communities and test methodologies that adapt to different contexts, placing final beneficiaries at the very heart of the solutions.

Forming long-term partnerships is also one of the most important strategic themes for Cemex, as solutions for major social issues require the coordination of several sectors to be really feasible. Setting



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⁹ Secretaría de Estado del Gobierno de México.

up and maintaining partnerships is hard work, which requires a clear understanding and delimitation of the way in which each partner contributes.

The Centro Cemex-Tec experience has shown how important it is to include several visions. This involves developing empathy skills, embracing different views, and including other stakeholders from different fields, even beyond academia and enterprises. One of its premises consists in working based on a continuous learning mentality. This stance allows Centro to position itself as an articulator of the sustainable development, social businesses, and social innovation ecosystems where it operates.