



**CURITIBA**

Curitiba is often reported as an example of a sustainable city for the world. Since the 60s, the city has been adopting visionary actions to deal with environmental issues, mobility, and urbanism, becoming a model to other cities that are seeking solutions for urban challenges. Also, in the '70s, Curitiba inaugurated the Industrial City, a neighbourhood dedicated to industrial activities attracting diverse businesses and improving economic development. The Bus Rapid Transit (BRT), created in 1974, made Curitiba a worldwide example of public transportation. Curitiba had a smart growth, under the concepts of sustainability and humanity, making its urban planning a reference for hundreds of cities around the world. In 2017, with the Pinhão Valley, Curitiba is taking the lead to build an even more innovative, smart and sustainable city. Pinhão Valley is an innovative strategy to promote Curitiba as a Smart City and improve the socio-economic development of the city; a public policy to support sustainable development and help the city to be prepared for any instabilities, crises or challenges of the present and future. Moreover, it is the movement of the Innovation Ecosystem of Curitiba to promote Smart City actions, aligned with the UN Sustainable Development Goals and to build a better city for the people. Some characteristics that make Curitiba a Sustainable City are efficient Public Transportation; Smart Urban Planning; Parks and green areas: Curitiba has 48 parks, including the Botanical Garden, and 94 million m<sup>2</sup> of urban green area, including public and particular areas; 69,66 m<sup>2</sup>/inhabitant, 5,8x the recommended by WHO; Waste management, with a 22,5% recycling average, much higher than the Brazilian average of 3%; Environmental Education; Innovation and citizen participation. In summary, Curitiba is considered a pioneer city in urban sustainability and is an inspiration for many other cities that seek to adopt more sustainable and efficient practices. Curitiba is building a more sustainable and smarter city taking care and investing in the present, in a transversal and multidisciplinary way, supporting socioeconomic development and environmental preservation and giving the best opportunities for its people to grow and thrive. More information:

<https://www.curitiba.pr.gov.br/noticiasespeciais/curitiba-a-capital-da-sustentabilidade-do-brasil/47>

[https://www.youtube.com/playlist?list=PLDQyffvTsbTA2oxabL\\_YPZUALM3TIPZFr](https://www.youtube.com/playlist?list=PLDQyffvTsbTA2oxabL_YPZUALM3TIPZFr)

# ENVIRONMENTAL SUSTAINABILITY

Curitiba is a city that seeks to preserve the environment, rivers and water basins and expand its green areas while working closely with the citizens so that environmental education is part of the sustainability process and for everyone to do their part when we speak of sustainability.

- **PlanClima:** Curitiba started building its Plan for Mitigation and Adaptation to Climate Change (PlanClima) with support and consultancy from C40, a global network of cities committed to the climate emergency. PlanClima is the result of a joint effort between the Curitiba City Hall, Municipal Secretariats (Environment; Planning, Finance, Works, Social Defense, Nutritional Food Security), Institute of Research and Urban Planning of Curitiba (IPPUC), Curitiba Agency for Development, water and energy state companies, universities, NGOs and institutions, and technical support from C40, iCare & Consult, ICLEI and WayCarbon. PlanClima has 5 five strategic axes - Environmental and Urban Quality; Energy Efficiency; Solid Waste and Effluents; Sustainable Urban Mobility; and Urban Hypervisor - and 20 priority actions to make the city resilient and neutral by 2050. Among them, action to preserve and expand green areas; stormwater management; expansion of food and nutritional security; energy efficiency and renewable energy; waste management; low-carbon emission mobility; circular economy strategies; environmental education; implementation of 'Urban Hypervisor' for data analysis; and governance.

- **Water Reserve of the Future:** Water Reserve of the Future is a project to guarantee water security in Curitiba and the Region, connecting the caves of the Iguçu River to supply water. It is a partnership of the Curitiba City Hall, the Paraná State Government and Sanitation, Water and Land Institute and the Metropolitan Region of Curitiba. It is a project to expand the water reserve capacity for population consumption, with the implementation of water tanks in communities and a water reserve along the areas of the Iguçu River. The project has a public call notice open to receive studies and projects that will allow the development of environmental recovery actions in the Iguçu River Basin. The objective is to implement and conserve the river's floodplains, improving the water quality, based on Nature-based Solutions. In addition to cleaning rivers and environmental education, the program includes environmental inspections to regularize sewage connections, monitoring the quality of water in urban rivers, dredging lakes, shore recovery works and land regularization actions together with the Company of Social Housing. Since the implementation in 2019, the program impacted more than 140,000 people.

- **Waste Management:** Curitiba was the first city in Brazil to implement the recyclable waste collection, the 'Waste that is not Waste' program (*Lixo que Não é Lixo*). In addition, the city has programs to strengthen and improve the recyclables chain in the city and engage citizens. In the 'Ecocitizen' (*Ecocidadão*), 40 Associations and Cooperatives of Recyclable Material Collectors receive, sort and sell waste from the city's collection. It is managed by the Municipal Environment Secretariat and aims to reinforce recyclable practices within the community, improve waste pickers' work conditions and strengthen the network for collecting and sorting recyclable materials. In the 'Green Exchange' (*Câmbio Verde*), the City Hall promotes the exchange of recyclable material for fruit and vegetable products. Every 4 Kg of recyclable is worth 1 kg of fruits and vegetables from local producers. The program also accepts cooking oil for the exchange. This Program reinforces environmental awareness actions, promotes the distribution of local production from family farming, provides quality food and allows families to save money. Every month, an average of 250 tons of recyclable waste is exchanged for 80 tons of food by the 5,200 families participating in the program and benefits more than 370 families of urban agriculture. In addition, waste from the selective collection, Fuel Derived from Waste, is sent for co-processing in kilns in cement industries in the region, reducing waste destined for landfills, disposal costs, the risk of environmental liabilities and carbon emissions, in addition to increasing the income of waste pickers. The city also has 11 Ecopoints, which are public spaces available for the population to voluntarily deliver small amounts of waste, such as construction waste, garden cleaning, debris, unusable furniture, compostable organics, paper and cardboard, plastic packaging, metal, glass and electronics in general, which can have correct disposal.

- **Friends of the River (Amigos do Rio):** The program, by the Municipal Environment Secretariat, realized together with the State Sanitation Company, other city departments and the society, encompasses actions for preserving rivers and water basins. It includes community planting actions on the river banks, parks and woods, lectures to emphasise the biodiversity conservation importance and guidance on waste management and sanitation. The target audience includes students from municipal, state and private schools; condos; neighbourhood entities, and community centres, among others. The program has 'Local Support Groups', which act as multipliers of the knowledge acquired in the program, ensuring its continuity, and motivating the population about the importance of conservation and recovery of water resources in Curitiba. In addition to awareness-raising lectures, interactive workshops, webinars, educational activities and games, workshops and interactive theatre plays are conducted to improve and increase the program's reach.

- **Planting 100,000 trees/year:** To further engage the population in climate actions, City Hall, through the Municipal Secretariat of Environment, launched a project to plant 100,000/ year, starting in 2019. The trees are planted by the City hall and distributed to the population so they can help the program and engage in the action. The program increases the planting of trees in the City to mitigate the effects of climate change, with a positive impact on improving the quality of life of the population. The seedlings are produced by the municipality, which guarantees the continuity and sustainability of the action, and since the launch of the project, more than 396,000 trees have been planted.



Waste that is not Waste



Ecocitizen



Green Exchange



100,000 trees

# ENVIRONMENTAL SUSTAINABILITY

- **'Leaves Family' (Família Folhas) – Environmental Education:** The Curitiba City Hall invests in environmental education as an important pillar to engage the population in building environmental sustainability. The 'Leaves Family' is the main program, a City Hall campaign of a group of characters full of vitality, who apply their experience and diversity to teach children, but also adults, the importance of constant care for the environment. They are friendly and pleasant characters, part of the sustainability programs from the Municipal Environmental Secretary. 'Leaves Family' is an educational program that teaches not only about the proper separation and proper disposal of different types of solid waste, but also about the importance of green areas, preservation of water resources, caring for animals, and correct attitudes to minimize environmental impacts and climate change. The Folhas Family interacts directly with the public, participating in campaigns in schools, parks, health units, neighbourhood associations, regional administrations, companies and condos, among others. The content of the group's presentations summarizes a series of good practices that can be adopted by citizens in their daily lives, and that lead to a better quality of life for each and everyone, such as properly separating recyclable waste from common waste, implementing compost bins with organic waste, plant more trees and do not deforest, preserve the soil, sustainable use of water, capture rainwater through cisterns, preserve springs and conserve rivers, correctly allocate sewage, do not throw dog waste in sewers, protect animals, use bicycles more and vehicles less, and use clean energy. <https://www.youtube.com/playlist?list=PLDQyfvTsbTB8jYlqZT7q8gxaAY9ulQRE>

- **Curitiba More Energy:** The program from the Curitiba City Hall to develop and implement clean and renewable energy projects in the city, with the aim of reducing energy consumption, and carbon emissions and combating climate change with technology and new solutions, managed by the Municipal Secretariat of Environment. Curitiba is committed to the Paris Agreement and the UN SDGs and is part of the C40, a network of cities focused on combating climate change and conducting urban actions to reduce climate risks. Curitiba More Energy started in 2018, with studies for the implementation of photovoltaic panels in public buildings, hydroelectric plants in parks and a photovoltaic plant in an old landfill to generate clean and renewable energy within the city, reducing emissions with energy generation and transmission. With the support of the C40, Curitiba developed studies to analyse the technical, economic, social and environmental viability of the projects – which led to the development of viable projects that are being implemented. In 2018, the program received US\$1 million from the Cities Finance Facility (CFF) to develop projects, including photovoltaic panels in bus terminals, and C40 supported the development of the Caximba Pyramid project – a pyramid-shaped photovoltaic plant in the former Caximba landfill, which started operating in March 2023. In addition, the City Hall building, the Municipal Institute of Public Administration complex, in Barigui Park and the Botanical Garden already have photovoltaic panels, and the city has implemented the first Power Plant Hydroelectric on the Barigui River.



Família Folhas



Família Folhas



Barigui Hydroelectric



Caximba Pyramid



PVs in bus terminal



Barigui Park

# ENVIRONMENTAL SUSTAINABILITY



**- Urban Agriculture:** The program encompasses the chains of food production and food cycle; planting techniques; social, nutritional and environmental education processes; food security; income generation and improvement of social relations in an innovative and sustainable manner. There are currently 147 areas of urban gardens with more than 37,000 people involved direct and indirectly. In addition, the Curitiba City Hall inaugurated the first public Urban Farm in Brazil, in 2020, in a space of 4,435m. It is a place with new methods of planting, use of renewable energies and reuse of rainwater. It is also a centre for the study of urban and local agriculture practices for companies, startups and universities to test solutions and new technologies, and has a structure to host classes and workshops for the urban garden producers, available to the 34,000 farmers of Curitiba and the Metropolitan Region. The 2<sup>nd</sup> Urban Farm will be inaugurated in 2024. The Urban Gardens foment food planting in urban voids, occupying areas that are usually garbage disposal or have limitations on public or private constructions. It provides a more sustainable practice for the local population, creating environmental zones and expanding green spaces. These gardens use rainwater for irrigation and organic waste for fertiliser, controlling local climate change and providing the neighbourhoods with quality landscapes. The Urban Gardens in Curitiba also help to control soil erosion and improve air quality. The gardens restore green to the city using fewer resources and engaging the citizens.

**- Honey Gardens:** The program consists of installing boxes with native stingless bees across the city, where the bees can be protected and reproduce, and where the population can learn about their importance. It encompasses educational activities to highlight the importance and benefits of native bees to the ecosystem, aligned with environmentally sustainable development strategies. The project engages the population and kids, highlighting bees' importance to the ecosystems and biodiversity and the benefits of protecting and increasing their population. Furthermore, encompasses management measures to protect the native pollinators and awaken ecological awareness to the importance of conservation and maintenance of urban biodiversity to the quality of life. The Honey Gardens disseminate the importance of bees in pollination, food production and biodiversity; as well as preserve, increase and keep stingless native bees in Curitiba.



Urban Farm



Urban garden



Urban garden



Honey garden



Honey garden



Honey garden

# ENVIRONMENTAL SUSTAINABILITY

- **Sustainable Mobility:** The program is anchored with projects for the Inter 2, Interbairros II (circular bus line) and West-East BRT bus lines, with financing from the Inter-American Development Bank (IDB) and the New Development Bank (NDB). These lines are the first that will receive electric vehicles, starting in 2024. The goal is that, by 2030, 33% of the fleet will operate with zero emissions, reaching 100% by 2050, as part of PlanClima. One of the initiatives is the Project to Increase the capacity and speed of the bus lines, with new technologies, renewable energies and better infrastructure aimed at sustainability and modernization of public transport. With the project, 70 km of roads are being requalified; 30 km of dedicated lanes for buses are being implemented; and 13 new stations and new terminals will be constructed. The new stations will have intermodal integration with micromobility, car-sharing and app transport systems. The BRT (Bus Rapid Transit) East-West, an important structural axis of metropolitan connection, is also receiving interventions that will allow for intermodality. In addition, to change the energy matrix of public transport, the city launched a public notice calling for electric bus tests in 2022, and seven manufacturers have already signed up to carry out the tests in the city. The city is also investing in micro-mobility, with better sidewalks to improve pedestrians' comfort and safety and bike sharing.

- **Caximba New Neighbourhood:** Curitiba City Hall is implementing the Caximba New Neighbourhood, a Climate Risk Management Project to restore the environment and resettle families in socioeconomic vulnerability that occupies the Barigui riverside, an irregular settlement and an environmentally fragile area. It will provide infrastructure, housing, and socioeconomic development. It is a project to engage citizens and tackle climate change, encompassing macro-drainage, environmental recovery, urban infrastructure, and public equipment. This area, since 2010, has been an irregular settlement by the Barigui Riverbank, and to mitigate the poor conditions of the population and environmental vulnerability, a discussion started in 2017, integrating multisectoral government areas, the community and civil society, resulting in the elaboration of the New Caximba Neighbourhood project. The proposal is structured in two axes: Macro-drainage and Environmental Recovery, to resettle 1,147 households from the permanent and flood-protected area (risk area) in new housing to be built, restore the river ecological corridor; implement flood basins, construct talus/dykes and macro drainage channel for flood control, delimit the environmental area from the urbanisation, implement a Park, with sports and leisure areas, bicycle paths and living centre; socio-economic development and income generation for the community with flower planting areas; and Urban Infrastructure, Social and Public Facilities to provide the population with adequate public transportation infrastructure, sewage, water supply, electricity and housing, guaranteeing services in education, health and social assistance with the construction and refurbishment of equipment. Caximba New Neighbourhood integrates urban planning and multi-governance, enabling co-creation with the community, municipal team and the private sector; also fosters the increase of job opportunities and local income, benefiting the 1,693 families of the area, directly, and 669,000 indirectly (estimated). The financing for the New Caximba Neighbourhood Climate Risk Management Project is signed with the French Agency for Development (AFD) and covers € 47.6 million in investments - € 38.1 million from AFD and € 9.5 million from the municipality.



Caximba New Neighbourhood execution and project



Electric buses



Bike sharing



New Inter 2

# SOCIAL SUSTAINABILITY



Curitiba takes care of its citizens and provides them with social assistance and opportunities to access the job market and have a better quality of life. Curitiba, with its socially sustainable approach, is known as the “City that Never Sleeps”. In addition, valuing and supporting local culture is also an important axis of social and economic sustainability.

- **Family Markets (*Armazém da Família*):** Markets that sell food, hygiene and cleaning products up to 30% cheaper than in traditional commercial establishments, a program implemented and subsidized by the Curitiba City Hall. The Family Markets are accessible for socially vulnerable people and low-income families that earn up to 5 minimum wages. There are 35 Family Markets in the city that benefit 350,000 families.

- **Fruit and Vegetable Fair (*Sacolé da Família*):** In addition to access to the Family Markets, the Curitiba population also has access to 11 Fruit and Vegetable Fairs that sell products at US\$ 0.75/kilogram. On average, fruit and vegetables sold in the fairs are 30% cheaper than in supermarkets, providing quality food and products from family farming to the citizens.

- **Solidarity Table (*Mesa Solidária*):** The program assists people with economic vulnerability and homelessness, providing meals for free. The objective of the program is not only to offer nutritious and free meals but also to provide shelter and dignity for vulnerable and homeless people. The Solidarity Table is a joint action by the City Hall, the Municipal Secretariat of Food and Nutrition Security, the Social Action Foundation and the Municipal Secretariat of Social Defense, which provide premises and logistical support, with partner entities - religious institutions, NGOs and aid movements to homeless people - who purchase, prepare and serve food. There are four places that serve 1,100 free meals located in the city. Since the beginning of the program, in December 2019, more than 1,000,000 meals have been distributed.

- **Popular Restaurant (*Restaurante Popular*):** Curitiba has 5 Popular Restaurants, places where citizens can have a healthy meal for only US\$ 0.60. Restaurants are subsidized by the City of Curitiba and offer quality meals with full use of food. More than 4,500 meals are provided per day, which are prepared by cooks, assistants, nutritionists and nutrition technicians.

- **Food Bank (*Banco de Alimentos*):** The Food Bank of Curitiba has been helping to avoid food waste and improving the quality of meals served in the social programs. The Bank receives food from the Urban Farm, supermarkets, local markets and street fairs that are still good for consumption but that lost commercial value, which is close to the expiration date or presents some imperfection, however, still can be used to produce healthy meals or consumed by the population. Private institutions also can donate to the program. In total, the Food Bank, since its implementation in 2019 avoided wasting 837 tons of fruits and vegetables, food used to produce meals and be served at the social programs and distributed to the population. Curitiba Food Bank has benefited nursing homes, houses for vulnerable children and partner institutions of Solidarity Table. In this way, countless people in social vulnerability have access to healthy and nutritious meals.

- **Local culture:** Curitiba is a city that values cultural development as a tool for socioeconomic. The Cultural Foundation of Curitiba is responsible for implementing the cultural public policies and for promoting the socio-cultural and artistic development, engaging with the artistic segments to listen to their demands to enrich and share knowledge, and creating equal opportunities for all. The Foundation seeks, in permanent dialogue with the community, to develop actions that are inclusive, innovative, preserve the Cultural Heritage and guarantee democratization and access to cultural goods. To encourage cultural development, the city implemented the Municipal Culture Incentive Law, which promotes financial support for projects in Music, Performing Arts, Audiovisual, Literature, Visual Arts, Historical Cultural Heritage, Folklore, and Handicrafts. In addition, in recent years, the city opened cultural spaces, street cinemas and theatres in different neighbourhoods, to bring culture closer to the population. In 2022, the Cultural Foundation invested more than US\$ 650,000 in cultural projects. The main spaces in the city for culture are the Village Theatre, Cine Passeio (street cinema), Paranista Memorial, and Comics Library, and the city also promotes the Music Festival, Winter Festival and Christmas in Curitiba, with cultural attractions that attract thousands of visitors every year.

<https://www.curitiba.pr.gov.br/noticias/as-bodas-de-ouro-da-democratizacao-cultural-de-curitiba/66857>



Family Markets



Solidarity Table



Food Bank



Popular restaurant

# SOCIAL SUSTAINABILITY

- **Urban Agriculture:** The Urban Agriculture programs in Curitiba go beyond simply planting urban gardens but create an intelligent and sustainable chain of healthy food production and distribution and socialization, involving public actors, the community and the private sector. The urban gardens, together with the other food security and social protection programs, formed a food safety net that guarantees healthy food to the citizens. To the population, working in the urban gardens is good for physical and mental health, in addition to providing fresh and healthy food. Moreover, since July 2020, when the Farm was inaugurated, more than 4 tons of vegetables produced at the Urban Farm have been delivered to religious institutions, NGOs and movements that support the homeless or people at social risk to provide healthy meals for them, in particular, the ones attended at the Solidarity Table. Furthermore, Urban Gardens have a socioeconomic impact by increasing families' income since they can sell the products. Furthermore, it is an initiative that brings communities and citizens together to take care of urban spaces and put them into community use. The urban gardens are also implemented in schools, to bring environmental and food education actions to children, and in institutional spaces, such as Health Units, Social Assistance Reference Centre, NGOs and Special Education Schools with occupational, therapeutic and social objectives.

- **Speaks Curitiba (Fala Curitiba):** The Curitiba City Hall, aiming for a more effective and efficient model of public consultation where the population can help decide the priorities of the city in spending the municipal budget, launched, in May 2017, the Speaks Curitiba, currently in its 7th edition. The Speak Curitiba is a consultation model that brings the citizens together with the City Hall to construct and define the Budget Guidelines Law (LDO) and Annual Budget Law (LOA). It aims to guarantee the democratic character of public management, with citizen engagement being necessary for promoting socially sustainable development. Therefore, Speaks Curitiba pursues a dynamic balance between the bureaucratic management mechanisms and the citizen's participation. The program is increasing the capacity to process society's demands and stimulating population participation as a way of contributing to the improvement of the quality of life in the city. Speak Curitiba is managed by the Municipal Institute of Public Administration (IMAP), with the support of the Regional Administrations to promote and publicise the program. The program starts with internal meetings of City Hall teams aiming for their qualification; these initial meetings explain how the program works, what are the budget laws, how they are built, and how to engage citizens to have a qualified and coherent participation. After these meetings, the program has two phases: the 1st consists of defining the main city's priorities to compose the LDO; and the 2nd, is to vote on the priorities to build the LOA. Both phases have in-person meetings, online forms and an itinerant vehicle that goes to different neighbours of the city to allow more people to participate. The top priorities are sent to the City Council as a suggestion for the city's budget laws. Speak Curitiba is increasing the quality of public participation, guiding the population on how the laws are built and how the municipal resources are spent – covering investments, ordinary expenses, debt financing and guaranteeing the mandatory legal reserve. It is based on transparent information, active listening, classification and collective responses aiming for the improvement of quality of life in Curitiba and for socially sustainable development.



Urban Agriculture



Speak Curitiba



Speak Curitiba

# SOCIAL SUSTAINABILITY



**- Social Action Foundation Assistance:** The Curitiba City Hall, through the Social Action Foundation (FAS), provides assistance for the homeless, low-income and vulnerable population. FAS is responsible for managing public policies for social assistance and employment in Curitiba, acting integrated with governmental and non-governmental institutions. The services are decentralized, in the 10 regionals of the city, and with continuous training of its servers, improves and values the quality of services provided to the population at risk, in vulnerability or homeless people. The services are organized into two levels of social protection: primary, which refers to the prevention of risk situations and the provision of services aimed at socialization and family and/or community coexistence; and the special, which is characterized by comprehensive care and is aimed at families and individuals with violated rights and broken or weakened family or community ties. The socio-assistance action in Curitiba includes professional training and development of entrepreneurs, with courses in several areas and integration workshops. FAS has Social Assistance Reference Centers, hotels and shelters to provide the best service to the population, as well as spaces for training for employment and assistance with the search for vacancies in the labour market.

**- Lighthouse of Knowledge and Innovation (Faróis do Saber e Inovação):** The Lighthouses of Knowledge revolutionized public education in Curitiba when they were implemented as a decentralized network of libraries with the first Brazilian public internet connection, in 1993. In 2017 with the Pinhão Valley, these spaces are being reformulated and revitalised as the Lighthouses of Knowledge and Innovation; educational and maker spaces with 3D printers to foment the creation, critical thinking, creativity, collaboration and social inclusion. These new spaces, 32 in total, provide maker spaces for students and teachers from municipal public schools and also are open to the entire community. Moreover, the teachers receive training for using the spaces and learning about innovative methodologies. It has the concept based on hands-on creation and learning, in practice, encompassing projects, partners, passion and games but adding a purpose, giving meaning to the process of creation. The main objective is to provide the students, teachers, and community access to new technologies and equipment, such as 3D printers, the maker culture, and improve municipal public education. The Education Secretariat, in 2022, implemented the itinerant Lighthouse of Knowledge and Innovation project with the objective of taking the idea of the maker spaces of the Lighthouses of Knowledge and Innovation into the Municipal Centers and Schools for Early Childhood Education (CMEIs and EMEIs). The itinerant Lighthouse is an item of designed furniture with a 3D printer, technological equipment, virtual reality glasses, notebook, microscope, magnifying glass, globe, lightbox, books, blacklight pens, binoculars, magnetized alphabet and toys that serve as a portable maker space for children in early childhood education. The program democratizes access to innovation, new technologies and maker culture, giving public school students tools to have a better education and better opportunities.



Lighthouse of Knowledge and Innovation



Lighthouse of Knowledge and Innovation



# ECONOMIC SUSTAINABILITY



Curitiba supports entrepreneurship, startup development and business growth through programs of entrepreneurial training, consultancies, public coworkings, and assistance for individual microentrepreneurs and micro and small businesses. Moreover, the city has fiscal incentives for companies that invest in innovation and technology, fomenting the job market within the city.

- **Entrepreneurship support:** Since 2017, with the Pinhão Valley, Curitiba City Hall has worked to support sustainable economic development, fomenting entrepreneurship and local businesses. The Curitiba Agency is responsible for entrepreneurship programs: Entrepreneur Spaces, Good Business Pinhão Valley and Woman Entrepreneur Program, with the support of the Innovation Ecosystem, through partnerships for the development and implementation of training, mentorship, events, workshops and assistance. The Entrepreneur Spaces are public offices that provide guidance and consultancy to the population, helping before, during and after the process of becoming a microentrepreneur. The Good Business Pinhão Valley is an Entrepreneurial Training Journey, that capacitates citizens to improve their businesses through new technologies, innovative solutions and sustainability or helps them on creating their own businesses. The Woman Entrepreneur Program encourages women in Curitiba to develop their own businesses. It encompasses specialized qualifications and tools needed for the development and strengthening of women-led businesses and creates networking and collaboration opportunities, including an award to recognize and inspire woman. The support for entrepreneurship and the local economy in Curitiba is key to achieving a more sustainable city.

- **Worktiba:** Curitiba launched, in 2017, the first public coworking in Brazil, the Worktiba. It is more than a public coworking, is a space for networking, training, business development and building connections. Currently, there are three spaces in the city, public coworking for entrepreneurs and startups in the early stages, offering space for work, training and networking among participants and with the entire innovation ecosystem in the city, including the connection with potential investors. The entrepreneurs and startups do not have any cost to use the space, but as a counterpart to the free use of City Hall coworkings, entrepreneurs and startups have to develop a collaborative project with a social impact for Curitiba. Worktiba also encourages the development of social projects that will benefit society and the city and improve the economic sector and employability in Curitiba. The program also has partners that offer free mentorship, training and guidance for coworkers.

- **Tecnoparque:** It is the program set to foment the development of companies and institutions of technology and science and disseminate the culture of knowledge and innovation in the city, reducing the Tax on Services from 5% to 2% for the companies. It was reactivated in 2018 within the Pinhão Valley and currently has 113 companies participating in the program. Together the companies generate more than 20,000 jobs and earn U\$S 2 billion. Since its relaunch, the program has already guaranteed more than U\$S 63 million in investments for the companies. The incentives are helping the IT sector grow in Curitiba, with the overall goal being that the companies and the City Hall work together to transform Curitiba into a laboratory of solutions development that can benefit the population.

- **Lyceums of Craft, Innovation and Creativity:** The programs, a partnership with the Curitiba City Hall, Social Action Foundation and private and institutional partners, offers free professional qualification courses for the population, with priority for low-income people and in situations of vulnerability and social risk. The objective is to enable the access, permanence or re-entry of citizens in the world of work, digital inclusion and income generation. Since 2018, the programs are being modernized to offer courses related to technology and Industry 4.0, enabling access to modern equipment and a prototyping laboratory to provide digital inclusion for the participants. The emphasis is on professional guidance and technical training, with lectures and workshops. The Partner Institutions offer an introduction to entrepreneurship and volunteer service, workshops focused on financial education, preparation for the job market, entrepreneurship and workshops that seek to promote protagonism, interactivity and learning through experience.

- **First Job Program:** The program, from the Curitiba City Hall, Social Action Foundation (FAS), Center for Company-School Integration, Federal Institute of Paraná and the Brazilian Micro and Small Support Service, was implemented in 2018 to help the youth population to prepare for the job market and find job opportunities even without experience. It aims to raise the employability level of adolescents, preferably those linked to FAS services – low-income and vulnerable young people. The program offers a training path that covers the cognitive, relational and behavioural areas. The First Job Program is aligned with the Charter of Educating Cities and the SDGs. The young people are referred to employment opportunities through vocational apprenticeships in companies in the city. After entering the job market as an apprentice, the young people participating in the program have the opportunity to take additional modules of professional learning, with content on reading and communication, socio-professional relations, citizenship and ethics, work planning and organization, accounting and financial management and operations logistics.



Good Business



Worktiba



Woman Entrepreneur



First Job Program

# ECONOMIC SUSTAINABILITY

- **1º Empregotech e Empregotech 40+:** 1st EmpregoTech was implemented in 2020 to offer free training in technology for young people, in particular, low-income and vulnerable, and to increase their employability in the IT industry, revealing talents for the technology market and bringing them closer to companies and startups. In 2023, the city verified the need to expand the program's activities and offer training to people over 40 years old who want to reposition themselves in the job market or who are looking for a career transition and launched the EmpregoTech 40+. The programs are a partnership between the Curitiba City Hall, Curitiba Agency for Development, Social Action Foundation (FAS), DIO., Human Robotics, Prime Control, Minsait – an Indra Company, Positivo University, Innovation Hub Hotmilk, and Brazilian Association of Technology Companies (ASSESPRO). The 1st EmpregoTech consists of five months of classes, encompassing computer programming and soft skills. EmpregoTech 40+ offers Java (40 hours/class) and Low Code (20 hours/class) courses. The training cycle lasts up to three months, depending on the learning path, and includes guided training, training in virtual and in-person classes, and assessments, with certification at the end of the course. The participants have the opportunity to know the partners' companies and the technologies used by them, through monitored visits, and participation in interviews. In the end, the best students can be hired as apprentices by the companies.



1º Empregotech

- **Fab Lab:** In March 2019, the Curitiba City Hall inaugurated the first public Fab Lab in the city, a prototype and digital fabrication laboratory. It is open to the community, universities, and companies to develop and share knowledge and projects, a space to encourage creativity, maker culture and innovation in Curitiba. The Fab Lab had a big importance during the pandemic. In March 2020, the Fab Lab temporarily became the space to produce face shields for health professionals, frontline professionals in the fight against Covid, social workers, teachers, and municipal guards. The Curitiba City Hall, FAS and Curitiba Agency, to guarantee the supply of PPE, articulated the public structure of Fab Lab for the production of the face shield. The production of face shields at the Fab Lab was highlighted as a smart and articulated response to the pandemic at Cities for Global Health and Unesco. In 2022, the Fab Lab resumed its activities and is back to developing projects with the universities, students, entrepreneurs and citizens. The Fab Lab is connected to the global network of 2,000 Fab Labs located in more than 149 countries. From community-based labs to advanced research centres, Fab Labs share the goal of democratizing access to the tools for technical invention, sharing the same equipment and open-source projects, and integrating data and knowledge.



Empregotech 40+

- **Guarantee Fund:** In August 2020 the City Hall, with the support of the Curitiba Agency and the Brazilian Micro and Small Support Service (SEBRAE), approved the Guarantee Fund, law n° 15.676/2020, with US\$ 1.9 million to help Individual Microentrepreneurs, Microentrepreneur, Small Businesses and Rural Producers to obtain loans and financing to support them during this period of crisis. It is the largest contribution ever made by a municipality in the country to a Credit Guarantee Society (SGC) – the GarantiSul, responsible for operating the Guarantee Fund with financial credit institutions, and which can leverage up to US\$ 19.0 million in loans. The financial institutions accredited for the fund are: Sicredi (98), Sicoob (87), Coopesf (31), Fomento Paraná (24), Credisol (15), Rapidium (03) and Viacredi (01). The Guarantee Fund already benefited 259 companies with US\$ 3.19 million in credit letters.

- **Debureaucratization:** The Curitiba Economic Acceleration Program also encompasses measures to reduce bureaucracy and to make it easier to open businesses in the city. businesses. The City Hall increased from 242 to 545 the number of activities included in the Economic Freedom Act, which do

not require a license to open, an increase of 125%. The measures also facilitate the business opening for entrepreneurs that need a license, reducing the bureaucracy for them. The City implemented the integration of services and an online system, through the City Hall website the entrepreneurs can make a registration request, send documents and pay the fees to obtain the licenses. Curitiba is among the fastest cities to open a company in Brazil. The average is 25 hours, according to data from the Business Map by the Ministry of Economy, for the second quarter of 2021, 60% faster than the Brazilian average of 64 hours. The reduction of bureaucratic ties represents an incentive for entrepreneurs, facilitating the opening of businesses to generate income and jobs.



Fab Lab