

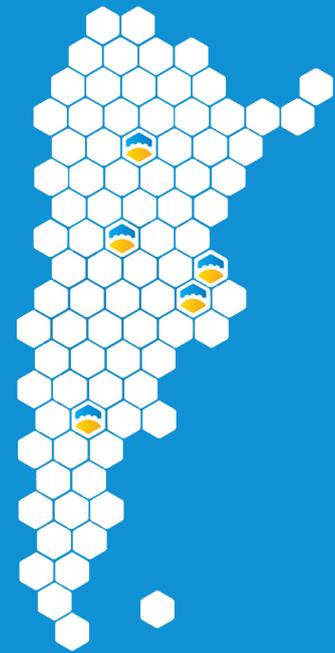
Engineering Without Borders Argentina



Annual Report
2020

Who we are? What we do?

Engineering without Borders Argentina (EWB-Argentina) is an interdisciplinary civil association working for the development of socially deprived local communities. Since 2012, we have been developing engineering projects with a comprehensive approach across the country. Furthermore, we share our perspective and experience offering courses and training programs with the purpose of contributing to the education of students and professionals.



Lines of work



Our philosophy



Community
development



Sustainability



Participation



Diversity



◀ RESPONDING TO COVID-19

In 2020, the pandemic impacted the course of all activities in many countries around the world. In our case, infrastructure tasks, access to water projects, and attendance-based courses were interrupted. This state of uncertainty demanded more flexibility and a stronger networking with the rural communities, neighborhoods, and community organizations that we work with. These are some of the actions we are currently carrying out:

Biomedical Technology development

We developed a kit that allows to expand commercial respirators' capacity so they can be used by more than one person at a time with the purpose of alleviating the health system in the event it becomes overwhelmed by COVID-19 cases. This development was possible thanks to the efforts of an interdisciplinary team of volunteers trained and experienced in biomedicine, industrial engineering, electronics, mechanics, systems, industrial design, and safety.

Support to community kitchens

Food emergency has deepened and social organizations became community kitchens. During these past eight months, we have been giving support to six organizations in Gran Buenos Aires and Córdoba by donating fresh food and cleaning kits thanks to a fundraising campaign. Furthermore, we were able to provide nutritional counseling thanks to a team of volunteers.

33.000 kg
of fresh
foods

AR\$1.500.000
raised

224 days
of pandemic
covered



Connectivity in rural isolated locations

El Negrito is a rural isolated location we worked in Santiago del Estero that has no Wi-Fi or phone signal. There, we installed an Internet antenna so the whole community has access to connectivity, and it's easier for the children to gain access to their school classes during isolation.

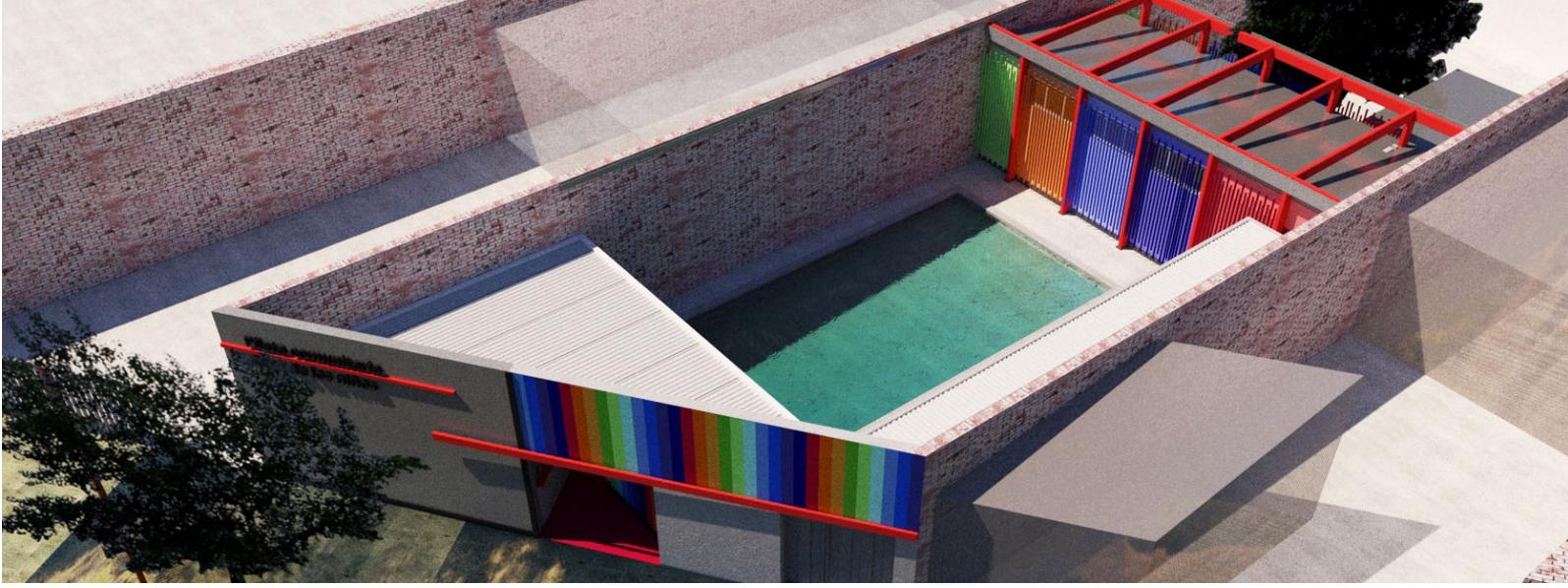
Design of solutions with “El Futuro está en el monte”

During 2020, we worked together with this network of organizations from Gran Chaco in the design of rural roads projects and water systems for production and consumption in isolated locations. We will keep working together, maximizing networks and exchange of knowledge for social innovation.

Water + Work

We are working in connection with the Municipality of San Martin, Cooperativa 9 de Julio, and AySA in order to provide drinking water to a sector in Villa Hidalgo where several neighbors are not connected to the water supply network. In 2021, we will coordinate the project that will be carried out by members of Cooperativa 9 de Julio.

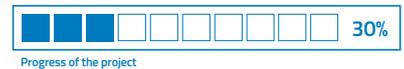




COMMUNITY INFRASTRUCTURE

The role of community organizations is vital in those contexts of greatest risk. We continue to work in the strengthening of these organizations and educational institutions that specially accompany boys and girls and that were a pivotal support during 2020. Due to the lockdown, these projects had to be paused during most of the year until the last months of 2020.

Expansion of Jardín de la Montaña



Sarmiento neighborhood, San Martín, province of Buenos Aires.

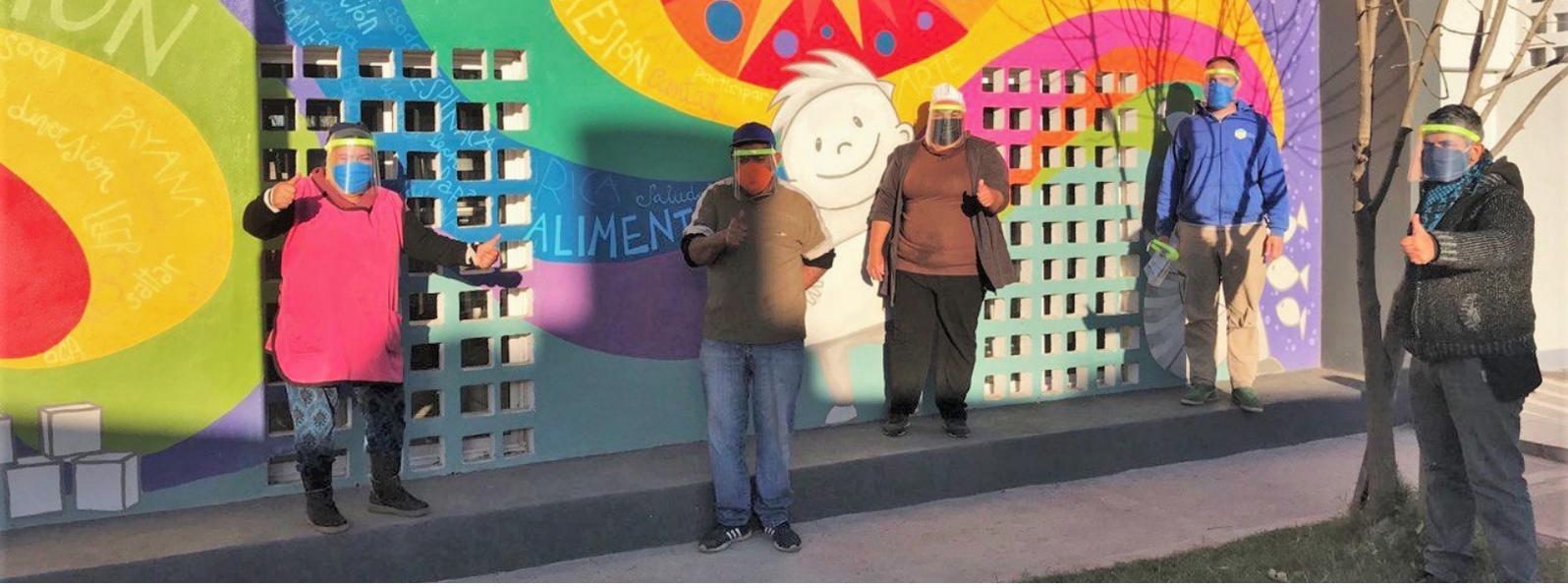
We are working on the expansion of this community nursery school so that more children have access to early education. Also, we will provide training and advice to enhance its management.

Construction of a community pool



Bernal Oeste, Quilmes, province of Buenos Aires.

The goal of this project, designed jointly with children's center El Hogar de mis Sueños, is to provide more than 1,000 children who participate in local organizations with opportunities to practice water sports and other recreational water-based activities.



COVID-19: Application of our completed projects

These community spaces that we built and expanded were essential to contain the health and economic crisis in high vulnerability neighborhoods.

» Multi-purpose room of Kindergarten N° 4, Quilmes

It has become an isolation center for COVID-19 infected people.

» Community room El Polito, Córdoba

From the beginning of the pandemic, it was used as a community kitchen that feeds over 200 people per week.

» Childcare center Tierra de Encuentro, San Martín

This center was used to deliver food bags and to set up activities for children at home.

» Community kitchen Todos por una sonrisa, La Plata

During 2020, this space fed over 300 people affected by the health crisis.

» Community kitchen Pequeños Gigantes, Comodoro Rivadavia

This space was used to grant ICT access to children so they can do their homework.

» Nuestra Señora de la Esperanza Children's Center, Quilmes

This space was used to prepare and deliver food bags.



◀ SPACES FOR WOMEN'S RIGHTS

Women, especially those who were already in a vulnerable situation, were the most affected by the economic crisis. During the lockdown, domestic gender-related violence increased, as well as unpaid care work, and all of this had an impact on access to other rights. This year we maintained our support of education and work, since they are key factors for women to achieve economic autonomy.

Construction of Las Omas meeting hall/workshop

Camino a Chacra de la Merced, Córdoba.

Las Omas is a nonprofit organization that offers training and job opportunities to more than 250 women, but it does not have a building of its own. In 2021, we plan to build, together with these women, a 210 m2 meeting hall and workshop area. During this year we raised funds and finalized the architectural design through virtual meetings.

Construction of a recreational hall at San Martín prison

District of San Martín, province of Buenos Aires.

At Unit No. 46, women deprived of their freedom have a common space, both for recreational activities and for meeting their relatives, but it is too small. The goal of this project is to promote the fulfillment of women's rights, as well as those of the children and teenagers who visit them, by refurbishing a multipurpose room for recreation, training, and sports.

>> Journey

2019. Construction workshop at Ezeiza prison aimed at young women who are deprived of their freedom. Together with them, we refurbished the multipurpose room.

Low-income Argentine population (40%) is mostly comprised of women (62,5%).¹

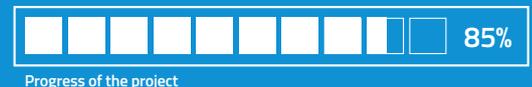




◀ BRIDGE ACROSS LAS PIEDRAS STREAM

This 15-km stream runs through several municipalities of the southern area of Greater Buenos Aires. The dumping grounds that line its banks generate high pollution levels. The combination of the waste and the rising intensity of storms (as a consequence of the climate crisis) results in overflows and floods that endanger families when they cross the stream to perform their daily activities.

We are working on the construction of a vehicular bridge over the stream, between the neighborhoods of El Molino (Florencio Varela) and Los Eucaliptus (Quilmes), to mitigate the risks derived from floods and to guarantee safe transit. This project, originated in the neighborhood committee, was halted for 8 months due to the lockdown. In the last months of 2020 we resumed activities with a special protocol and a reduced team.



Mapping of bridges crossing Las Piedras Stream

Crossing the Stream through precarious and dangerous pedestrian and vehicular bridges poses a permanent risk. During 2020, we mapped 14 pedestrian bridges to make their condition visible and to facilitate the estimation of the investment that will be required to repair them and mitigate the risks. We are also making alliances with academic institutions, social organizations and public agencies which are also concerned about this situation.





176.000 people in Santiago del Estero have to move in order to obtain water.²

◀ WATER IN ISOLATED RURAL COMMUNITIES

There are still 7 million people in Argentina who do not have access to drinking water. Although the execution of projects was halted due to the pandemic, during 2020 we transformed this line of work into a larger-scale access to water program that will strengthen its impact in more isolated rural communities located in Santiago del Estero.

>> Journey

2014-2020. We developed three access-to-water projects in rural isolated areas with the participation of the communities at its different stages, providing water to more than 500 people.



Only 2% of the people who have access to university education come from rural areas.³

◀ INFRASTRUCTURE WORKS FOR YOUNG PEOPLE LIVING IN RURAL AREAS

The distance and the lack of resources make it difficult to access education in isolated rural areas. 70.7% of the 20-year-old young people living in rural areas have not finished secondary education. We are working on the expansion of educational buildings in Santiago del Estero province, since the access to higher education offers better living conditions for young people, and provide them with tools to foster the development of their local communities.

Extension of the residence hall “Fundación Sí”

El Zanjón neighborhood, Santiago del Estero province.

We finished the building of a residence hall located at the capital city of the province, so that more young people living in rural areas can access to university education.

Building of the residence hall “Fundación Sí”

Santa Fe province.

We are designing a new residence hall to provide young people from Santa Fe province with accommodation and assistance so that they can access to university education in the capital city.



>> Journey

2015-2019. extension of the EFA-Avellaneda secondary school located at Colonia Dora, Santiago del Estero province.



El 91,1% of primary energy derives from non-renewable sources in Argentina.⁵

◀ NEW SOCIAL COMPANY: RAYO

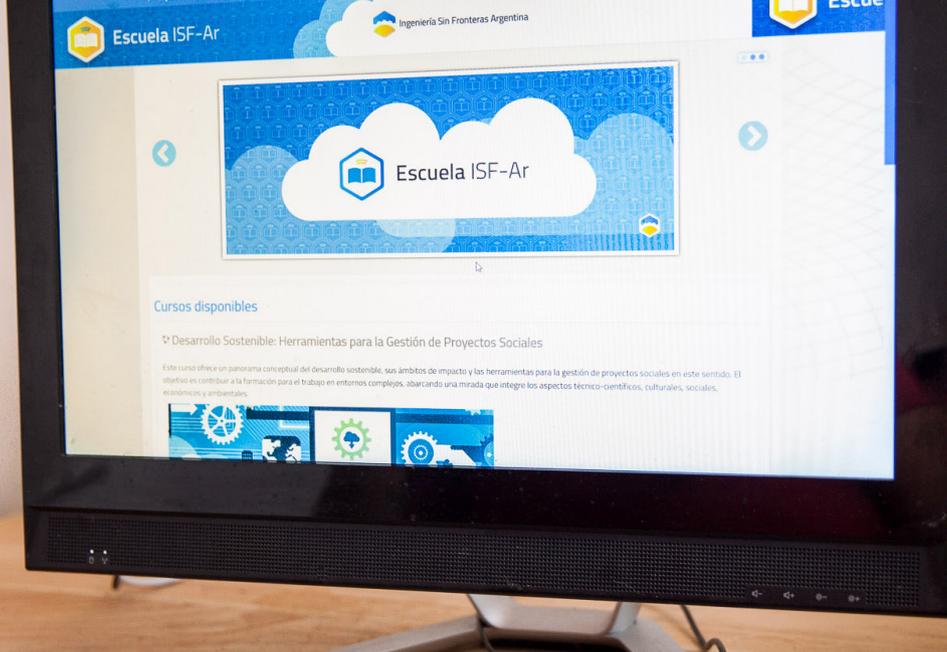
Rayo is a social company created by EWB-Ar that installs photovoltaic solar panels. It represents the outcome of the path we decided to walk through as an organization in order to foster renewable energies and, thus, accelerate the energy transition which is one of the main mechanisms to mitigate the current climate crisis.

Through Rayo, we intend to offer a service to facilitate and simplify the solar panel installation process, so that more people invest in more sustainable consumption. We also intend to offer training for skilled occupations and promote labor inclusion. In 2020, we finished three photovoltaic systems installations in Buenos Aires province.

>> Journey

2018-2019. We offered solar panel installation courses in San Martín (Buenos Aires province) and Villa Soldati (Buenos Aires city). More than 77 people were trained in a new skilled occupation.





◀ TRAINING AND IMPACT

Courses lectured at universities

**Energy and Sustainable Development:
tools for the practice Degree Course**

[National University of La Matanza](#)

Sixth edition

37 students

Academic Director:
Mg. Agustín Lohigorry

**Sustainable Development: tools for the
management of social projects Online
Course**

[National Technological University - Santa Fe](#)

Fifth edition

108 students

Academic Directors:
Ing. Estela Cammarota - Lic. Natalia Zlachevsky

Discussion meetings and events

In 2020, we adjusted our discussion meetings to virtuality, and we held several events to talk about relevant issues for EWB-Ar. More than 650 people attended our discussion meetings and talks on the following topics:

- Climate crisis and Human Rights
- The role of the State during the pandemic
- Universal basic income
- Energy transition
- Engineering with gender perspective
- Architecture for non-architects

¡VIVO DE INSTAGRAM!

DIÁLOGOS SOBRE INGENIERÍA Y PERSPECTIVA DE GÉNERO

MORA LAIÑO
COMUNICADORA SOCIAL

NATALIA ZLACHEVSKY
ANTROPOLOGA SOCIAL

VIERNES 17/07 - 20:00 HS

SUMATE EN @INGENIERIASINFRONTERAS_AR

Ingeniería Sin Fronteras Argentina #ISFENCASA

CONVERSATORIO

Crisis Climática y Derechos Humanos

La dimensión política y social de la crisis ambiental y ecológica

Invitados/as:

Gabriel Blanco
Docente / Autor coordinador en el Panel Intergubernamental del Cambio Climático (IPCC)

Fabiana Menna
Presidenta Fundación Gran Chaco

Lucrecia Wagner
Docente / Investigadora del CONICET / Especialista en conflictos socioambientales

Enrique Viale
Abogado ambientalista

Moderadora: Mora Laiño
Comisión Directiva ISF-Ar

Jueves 6 de agosto 19 hs por Zoom

CON INSCRIPCIÓN PREVIA

Ingeniería Sin Fronteras Argentina

¡VIVO DE INSTAGRAM!

TRANSICIÓN ENERGÉTICA EN TIEMPOS DE PANDEMIA

AGUSTÍN LOHIGORRY
CO-COORDINADOR ÁREA ENERGÍA ISF-Ar

LEANDRO MAGRI
DIRECTOR COLECTANDO SOL

VIERNES 31/07 - 20:00 HS

SUMATE EN @INGENIERIASINFRONTERAS_AR

Ingeniería Sin Fronteras Argentina #ISFENCASA



◀ INTERNAL ISSUES

Change of the Board of Directors

A change of authorities was made this year. Estela Cammarota continues as president and Víctor Liste is the new vicepresident of EWB-Ar.

Protocol for the prevention and elimination of violence with gender perspective

The Equity and Fair Treatment Committee designed a protocol to prevent and eliminate violence in any form, as well as make people aware of and offer training on this subject.

Governance model

We changed the EWB-Ar decision making scheme. The monthly meetings now involve 60 partners which are members of our civil organization.

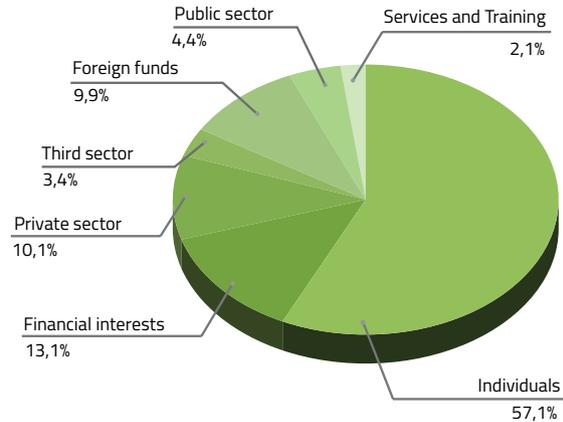
New fundraising scheme

The pandemic forced us to change our fundraising strategy which was mainly based on outdoor spreading. In record time, we were able to create a call center to recruit donors, which meant a great challenge both at the computing and organizational levels.

FINANCIAL REPORT

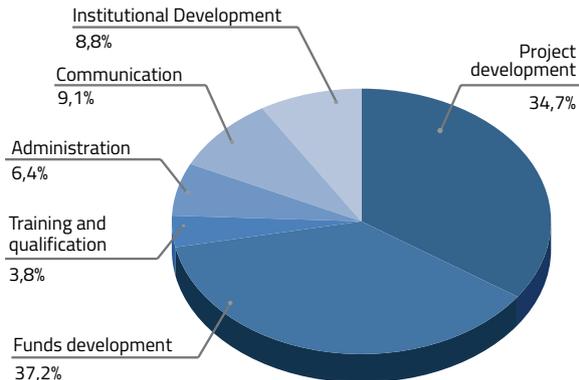
Total Revenue
48.01M

Income according to fund origin (1)	Amount	Percentage
Individuals	\$27.407.044	57,1%
Financial interests (2)	\$6.302.983	13,1%
Private sector	\$4.851.002	10,1%
Third sector	\$1.622.000	3,4%
Foreign funds	\$4.730.626	9,9%
Public sector	\$2.091.352	4,4%
Services and Training	\$1.009.154	2,1%
Total revenue	\$48.014.161	100%



Total Expenditure
31.98M

Expenditures according to destination	Amount	Percentage
Project Development	\$11.108.496,51	34,7%
Funds Development	\$11.896.357,90	37,2%
Training and Qualification	\$1.219.153,38	3,8%
Administration	\$2.051.962,00	6,4%
Communication	\$2.912.364,95	9,1%
Institutional Development	\$2.797.663,07	8,8%
Total Expenditure	\$31.985.997,81	100%
Sustainability fund (3)	\$10.480.831	
Projects Fund (4)	\$5.547.332	



(1) Incomes are composed of 89% monetary contributions and 11% of in-kind contributions.

(2) They represent the interests of time deposits and foreign currency appreciation.

(3) It is a reserve fund consciously created by the organization with the objective of guaranteeing the operation of its structure in the face of current scenarios.

(4) Amount of money assigned to programs that couldn't be disbursed due to the pandemic. Projects will be carried out in 2021.

WHO SUPPORT US

Without the continuous support of the following organizations and companies, it would not have been possible for us to accomplish our projects. We would like to thank each of them for their trust and commitment to engineer a better world together.

ORGANIZATIONS AND NETWORKS



COMPANIES



UNIVERSITIES



Universidad Nacional
de La Matanza



UTN.BA
UNIVERSIDAD TECNOLÓGICA NACIONAL
FACULTAD REGIONAL BUENOS AIRES



Universidad
Nacional de
General
Sarmiento



UNIVERSIDAD
NACIONAL
DE LA PLATA



FACULTAD DE INGENIERÍA



UNC

Universidad
Nacional
de Córdoba



UNIVERSIDAD
CATÓLICA DE CÓRDOBA
Universidad Jesuita



UNIVERSIDAD
NACIONAL DE
SAN MARTÍN



FLACSO
ARGENTINA

PROFESSIONAL COUNCILS



ADIMRA
ASOCIACION DE INDUSTRIALES METALURGICOS
DE LA REPUBLICA ARGENTINA



Consejo Profesional
de Arquitectura y Urbanismo



COLEGIO DE
INGENIEROS CIVILES
DE CÓRDOBA



Consejo Profesional de
Ingeniería Civil

IN 2020, WE WORKED TOGETHER WITH:

Public Sector

- Centro de Formación Profesional N° 38
- Consejo Provincial de Políticas Sociales - Fondo Ayudar - Gobierno de la Provincia de Córdoba [Provincial Council of Social Policies - Government of the Province of Córdoba]
- Dirección Nacional de Agua Potable y Saneamiento [National Department of Water and Sanitation]
- Gobierno de la Provincia de Córdoba
- Hospital Álvarez
- Hospital de Quemados
- Hospital Muñiz
- Instituto Nacional del Agua (INA) [National Institute of Water]
- INTA [National Institute of Agriculture and Livestock Technology]
- INTI [National Institute of Industrial Technology]
- Ministerio de Desarrollo Social de la Nación [National Ministry of Social Development]
- Municipalidad de Córdoba
- Municipalidad de Quilmes
- Municipalidad de San Martín
- Municipalidad de Florencio Varela

- Secretaría de Políticas Universitarias [Department of University Policies]
- National Weather Service

Civil Society Organizations

- AEDROS [fundraising organization]
- Asociación Argentina de Estudiantes de Ingeniería Industrial (AAReII) [industrial engineering students' association]
- Creadores de Sueños civil association
- Las Omas civil association
- Los Amigos civil association
- El Polito community room - civil association
- Todos por una Sonrisa civil association
- Asociación Nacional de Estudiantes de Ingeniería Civil (ANEIC) [Civil engineering students' association]
- Nuestra Señora de la Esperanza Daycare Center
- Vientos de Cambio - Neighborhood Association
- 9 de Julio Cooperative
- Escuela de la Familia Agrícola Avellaneda [Avellaneda farming school]

- Sí Foundation
- INVAP Foundation
- GlobalGiving
- IEEE Foundation Inc.
- Nuestras Huellas

Universities

- Centro Universitario San Martín
- Facultad de Ingeniería del Ejército
- Universidad Blas Pascal
- Universidad Pepperdine
- Universidad Nacional Gral. San Martín

International Organizations

- World Bank

Companies and Business Associations

- 500 RPM
- Asana
- AySA
- Besna Ingeniería
- Bring Ingeniería
- Cámara de Industriales Metalúrgicos y de Componentes de Córdoba (CIMCC)
- Cementos Avellaneda

- Centro Construcciones S.A. Colectando Sol
- ERM
- FARO Ingeniería
- Ferrocons S.A.
- Ferrum S.A.
- Fundación Acindar
- Fundación Holcim
- Goodyear Argentina
- Grundfos de Argentina S.A.
- Hacono Energía
- Hernán Buteler Producción Audiovisual
- Hilti
- Leren
- Neu Y Serv SAS
- Radio Difusora del Centro S.A.
- RDA Ingeniería
- Roca Argentina
- SAP
- SICCO
- Staco
- Ledevit
- Total Argentina S.A.
- Transener
- YPF

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2. Sed Cero [Zero Thirst]. Plataforma del Agua [Water Platform]. (2017). Mapa del Agua [Water map]. Taken from: <http://plataformadelagua.org.ar/mapa/santiago-del-estero>
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