

## MEMORIA FUNDACION LA CIUDAD POSIBLE

- La Fundación opera desde el año 2019, el directorio está compuesto por profesionales que se ubican en las regiones de Valparaíso, Metropolitana, Araucanía y Los Lagos. Al mismo tiempo, las acciones que realizamos hoy día tienen una cobertura territorial desde Arica hasta Valdivia. Por lo tanto, este equipo profesional, desde la pandemia, funciona mucho de forma virtual con el fin de disminuir costos y tiempos de traslado.
- En diciembre del año 2020 nos adjudicamos un fondo de la Fundación Coca Cola que busca potenciar y desarrollar a pequeñas empresas valorizadoras de PET, este proyecto tenía una duración inicial de un año y considera recursos para financiar el equipo profesional encargado y dar apoyo en equipamiento a los gestores, además de sensibilizar a la comunidad (este año 13 mil familias sensibilizadas). Actualmente estamos proyectando el tercer año de este proyecto.
- Esta iniciativa se llama Conecta, Recicla y Colabora, y es ejecutada por la Fundación La Ciudad Posible, y busca incorporar empresas que quieran ayudar y participar a potenciar las capacidades de los territorios para valorizar y reciclar residuos. Actualmente, además de Coca Cola, se ha incorporado Tetra Pak y esperamos que otras empresas se sumen.
- Otro proyecto de la Fundación se realiza con SCJohnsons, llamado Recupera y Transforma que busca limpiar la Patagonia de residuos plásticos junto a la comunidad, esta iniciativa ha beneficiado a artesanos, vecinos y ecosistemas de la provincia de Chiloé.
- Algunas publicaciones que muestran el trabajo realizado:

[https://www.cocacoladechile.cl/novedades/medio-ambiente-\\_\\_conecta--recicla-y-colabora-nueva-iniciativa-para-incentivar-r](https://www.cocacoladechile.cl/novedades/medio-ambiente-__conecta--recicla-y-colabora-nueva-iniciativa-para-incentivar-r)

<https://accionempresas.cl/noticias/coca-cola-apuesta-por-el-reciclaje-colaborativo-a-traves-de-conecta-recicla-y-colabora/#:~:text=%E2%80%9CConecta%2C%20Recicla%20y%20Colabora%E2%80%9D%2C%20la%20iniciativa%20creada%20por,se%20inicia%20con%20la%20decisi%C3%B3n>

<https://www.diariosustentable.com/2021/12/sc-johnson-se-asocia-con-la-ciudad-posible-y-cempe-para-aumentar-la-recuperacion-y-el-reciclaje-de-material-de-desecho-en-chiloe/>

<https://radiolaisla.cl/2021/12/13/sc-johnson-potencia-el-reciclaje-de-material-de-desecho-en-chiloe/>

Nr o	Nombre del gestor	RUT	Nombre del representante	RUT	Direccion	Ciudad	Tipo de equipamiento donado	Monto asignado
1	Cooperativa de servicios de reciclaje tres cerros limitada	77.119.422-2	Italo Michel Silva Sepulveda	12.878.216-8	Los Amerindios 1085, Quilicura	Santiago	Aporte para compra de camion modelo DF 2.0T marca Dongfeng (patente HLYL 64-0)	\$ 5,000,000
2	Cooperativa de Trabajo Francisco Bilbao		Nelson Orlando Urbina Reyes	6.448.096-0	Magdalena Carrera 233, Recoleta	Santiago	1 triciclo electrico modelo Y19 marca Yonsland	\$ 1,300,000
			Maria Ignacia Mora Barrera	9.391.632-8			1 triciclo electrico modelo Y19 marca Yonsland	\$ 1,300,000
			Lidia Jannette Borquez Borquez	10.168.885-2			1 triciclo electrico modelo Y19 marca Yonsland	\$ 1,300,000
3	Recicladores de barrio Yungay		Ana Maria Ester Juana Briceño Iligaray	5.547.326-9	Rafael Sotomayor 643, Santiago	Santiago	4 jaulas para acopio PET	\$ 700,000
							1 compactadora modelo E200	\$ 2,842,363
							1 triciclo electrico modelo Y19 marca Yonsland	\$ 1,300,000
4	Sindicato cartoneros y perseros de Peñalolen		Salvador Allendez	9.771.960-8	Aladiero 1255, la Faena, Peñalolen	Santiago	1 compactadora modelo E200	\$ 2,842,363
							54 chaquetas	\$ 827,655
5	Reciclaje Inclusivo Estación Central		Gypsy Ruvilar Salvo	11.740.397-1	Maylef 6091, Estacion Central	Santiago	materiales construccion	\$ 800,000
							4 jaulas para acopio PET	\$ 700,000
							1 compactadora modelo E200	\$ 2,842,363
6	Recicladores de Puente Alto		Cecilia Saavedra Melendez	9.454.840-3	Achelpen 2400 Villa Padre Hurtado, Puente Alto	Santiago	1 triciclo electrico modelo Y19 marca Yonsland	\$ 1,300,000
							1 compactadora modelo E200	\$ 2,842,363
7	Grupo de Recicladores de Viña del Mar		Pietro Caneo Acevedo	11.386.948-8	13 Norte 1398, Viña del Mar	Viña del Mar	5 triciclos mecanicos	\$ 1,400,000
							materiales construccion	\$ 1,650,863
							1 compactadora modelo E200	\$ 2,842,363
8	Agrupacion Social y Ambiental el Monte		Juan Guillermo Perez Catalan	15.402.294-5	Av. Los Libertadores 433, El Monte	Santiago	materiales construccion	\$ 360,000
			Patricio Humberto Perez Catalan	12.690.190-9			1 triciclo electrico modelo Y19 marca Yonsland	\$ 1,300,000
			Veronica Lorena Zuñiga Contreras	16.519.525-6			1 triciclo electrico modelo Y19 marca Yonsland	\$ 1,300,000
							1 triciclo electrico modelo Y19 marca Yonsland	\$ 1,300,000

Nr o	Nombre del gestor	RUT	Nombre del representante	RUT	Direccion	Ciudad	Tipo de equipamiento donado	Monto asignado
9	Asociacion Nacional de Recicladores de Chile (ANARCH)		Soledad Mella	11.865.387-4	Av. Grecia 7175, Peñalolen	Santiago	1 torre CPU Gear desktop Intel Core i7-10700 8GB 1 TB	\$ 566,390
							1 Samsung Monitor 21,5" Full HD, panel TN HDMI	\$ 109,962
							1 Asus Notebook VivoBook S14 14" 16GB 512GB SSd Window 10 Pro Indie	\$ 819,828
							2 HP Notebook G8 15.6" HD Intel i3 4GB 1TB Window 10	\$ 859,773
							2 impresoras Canon Multifuncional fotografica tinca continua	\$ 299,832
							1 combo teclado y mouse inalámbrico Kensington	\$ 24,234
							4 Samsung Tablet Galaxy A7 10,4" 3GB 32GB wifi	\$ 679,961
							1 camara fotografica	\$ 899,990
							1 microfono	\$ 195,980
							1 data/ proyector	\$ 329,990
							1 Motorola radio controlador20 millas 33 canales	\$ 48,206
							Microsoft 365 familia formato digital 6 usuarios suscripción por 12 meses	\$ 62,671
							3 Genius mouse inalambrico	\$ 23,114
							1 Canon botella tinta	\$ 13,201
							1 Canon botella tinta	\$ 12,141
							1 Canon botella tinta	\$ 12,141
							1 Canon botella tinta	\$ 12,141
8 Resma de papel	\$ 24,613							
10 Resma de papel	\$ 8,081							
Tintas Canon 6 negras, 3 cyan, 3 magenta y 3 amarillo	\$ 199,490							
							<b>\$ 41,252,072</b>	

N de factura	Respaldo
N/A	carta de cesion de uso gratuito y contrato compra venta
2731	carta cesion de uso
2732	carta cesion de uso
2733	carta cesion de uso
N/A	carta cesion de uso
638	
2734	
638	carta cesion de uso
N/A	carta cesion de uso
N/A	
638	
2734	carta cesion de uso
638	
3294	carta cesion de uso
113195344	
638	
N/A	carta cesion de uso
2734	
2734	
2734	

N de factura	Respaldo
4365382	carta cesion de uso
4274898	
4274898	
4274898	
4274898	
4274898	
4274898	
2745298	
130900	
719131111	
4275694	
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12806301	



**CONECTA  
RECICLA  
COLABORA**

**2021**

**FINAL REPORT**

# **Inclusive Recycling Project**



**LA CIUDAD  
POSIBLE**

**This project has been possible thanks to:**

**EXECUTOR**



**SPONSOR**



**PARTNERS**



Movimiento Nacional de  
Recicladores de Chile AG.

# Índice

**I. — Introduction**

**II. — Objectives**

**III. — Results**



# I. Introduction

The following report presents a summary of each of the actions developed by the Recycle Inclusion project, during the year 2021.

The project aimed to recognize and strengthen the initiatives that have emerged from recyclers and waste managers, with the purpose of contributing to the recovery and sustainable management of organic waste. To achieve this, the project was based on the following principles:



**Be inclusive:** Being able to integrate and support current waste managers (recyclers, municipalities and private managers), generating a process of continuous improvement, learning from what exists, and the experience of different territories. This support is manifested through technical strengthening, equipment and infrastructure.



**Colaborative:** Promote a dynamic and strong link between public and private actors, which contributes with their experience and resources for the fulfillment of objectives, scalability and continuity



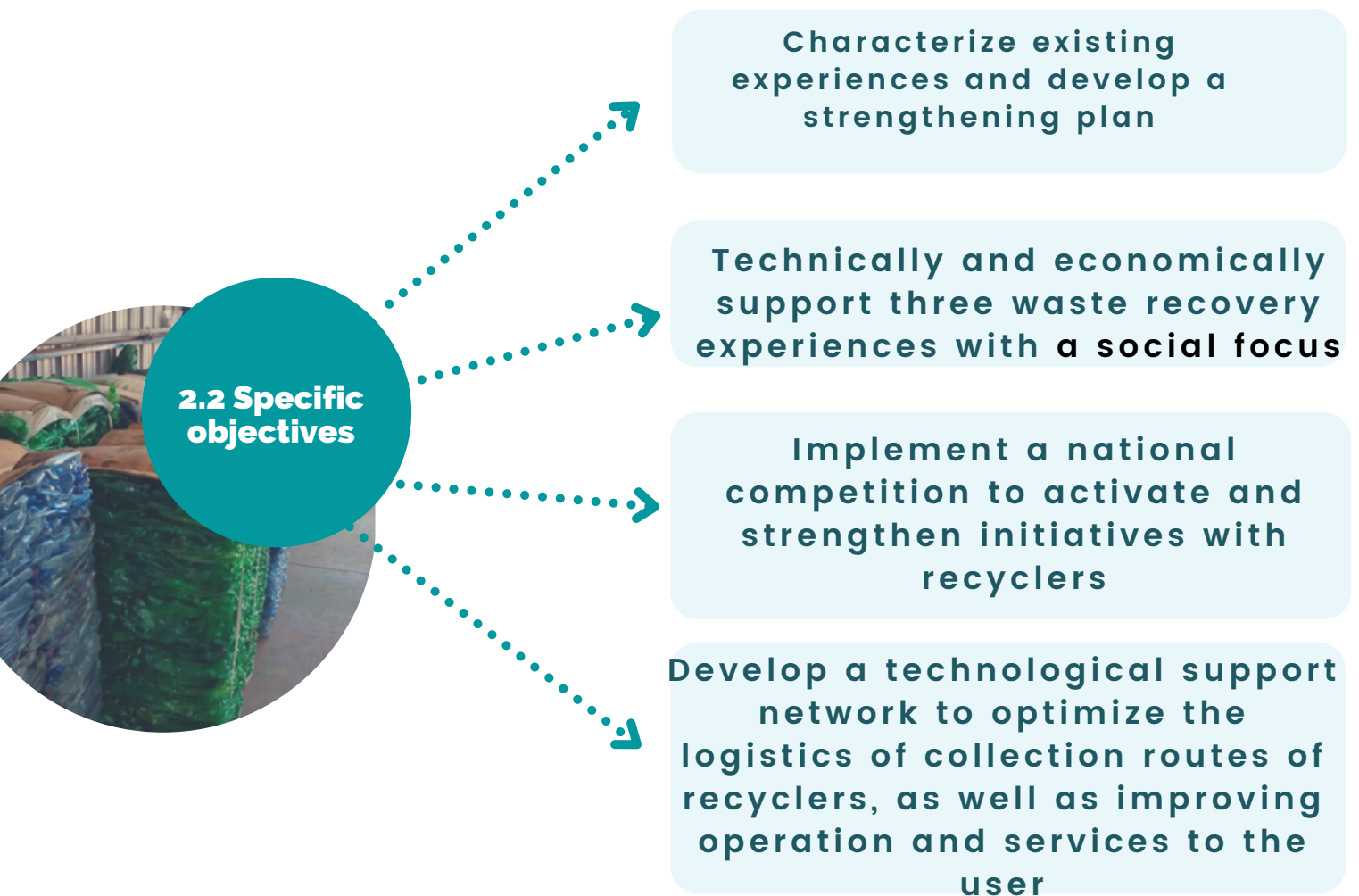
**Be innovative:** Identifying and learning from what exists today, promoting innovation and contributing to the consolidation of the recycling chain, to improve local economies and facilitate a virtuous process of continuous improvement of collaboration.

During this project, we focused our work on a communicative strategy, which lead us to an adjustment in the name project, changing to **Connect, Recycle and Collaborate**. This will be the fantasy name that will be used in this report

# II. Objectives

## 2.1 Main objective

Implement a collaborative inorganic waste collection strategy, which will strengthen local economies and give guidance to efficient cost management collection, with the possibility of replication and scaling.



# III Results

This chapter describes the main results obtained in each of the project objectives.

## **3.1 SPECIFIC Objective 1: Characterize existing experiences and develop a strengthening plan**

**3.1.1 Systematize and prioritize gaps and opportunities of the initiatives identified by Small and Medium Enterprises, entrepreneurs, recyclers and municipalities.**

### **a. Description:**

The purpose of this activity was to document the current state of the chain recycling implemented by recyclers, municipalities and / or private managers, in order to raise awareness of their contribution to the system and enhance the rise in the current service to the community and management of recyclable materials.

In this way, this first X-ray gives an account of the diagnosis of the recycling ecosystem, which describes who are the participants in this value chain, what are their needs and what are the services offered for this management to the community.

Some the main objectives are to recognize and make visible the main managers of the recycling service, relieve their work and acquire learning in their development. Another important objective is the necessity to boost the demand and uses of recycled waste in the national market, in order to increase the size of the entire system for the recovery of this materials and contribute to access to recycling services, especially in communities that do not have access to this service today.

## b. Main results

# 50

Recycling waste  
managers interviewed

Interviews were conducted within 50 managers, and finally 34 of them were selected from the total number of interviewers. The reason why not all of the managers were incorporated was because some of them did not attach all the requested information.

Based on the collected information and the knowledge of the managers, it was determined to assemble the identified actors, linking up the services offered with the territorial scope of their management, allowing us a higher clarity of the chain operation and the material flow in different territorial spaces (traceability).



### **LOCAL MANAGER:**

Within this category are considered all those managers who offer their services only in one particular commune. In this category are considered municipalities, recyclers, as well as other private managers identified as small businesses.



### **MACROZONA MANAGER:**

Managers who have the capacity to perform material recovery services in more than one commune and are even capable of managing interregional recycling services. In addition, some of these managers have the ability to accumulate and buy recyclable material from other smaller managers. In this categorization of managers we can find recyclers, as well as private, medium and large managers.



### **ACOPIADOR MANAGER:**

Manager with national presence and interregional coordination of recyclable materials management. Its service considers the purchase of waste from smaller and macro-zone managers.

# 5.440

Tons identified

Through this process of interviews, it was possible to identify the tons of recycling waste recovered by each of the participants. The total amount of recycling waste tons reported was 5,440.

This information is very important to understand the material flow, identify those managers who are most important in today's chain value and to analyze from this experience those that could be shared as a great experience and replicated.

All the recycling waste managers incorporated in this process, as a whole, contributed to prevent these 5,440 tons from reaching the sanitary landfill, and also, it gave the possibility to various families from different regions of the country to have recycling services.

## Recyclers

Restrictions

The recycler, due to the lack of capital and/or financing, they are specialized in services that require low investment and that ensure a quick return on capital. It is also observed that in just a few situations they have an initial capital which could allow them to have the cash to provide a large-scale material purchase service.

Regarding their equipment and transport resources, it is observed that an important part of them does not have a wide place to store the collected recycling materials, and also, with the basic conditions that allow them to obtain a sanitary resolution from the government authorities. A similar situation occurs with their transport resources, which many times does not have the capacity to transport large volumes of recycling material. This reduces the possibility of diversifying and expanding its amount of clients and offered services, limiting its growth potential and making new contracts with new clients.

According to the background obtained in the interviews, working with recyclers requires a prior preparation time for the management of recyclable waste. Not in terms of the activities of classification and recovery of materials, but in relation to their formalization, certification, environmental and sanitary permits, bank account, the start of activities and legal personality.

### 3.1.2 Create a committee of experts with key actors



The project committee was constituted with representatives of: The Ministry of the Environment, the National Movement of Recyclers of Chile, Latitud R and Coca Cola Chile.

#### Why having a committee?

- Be a support point in the execution of the project
- Establish collaboration networks
- Promotion of recycling experiences

#### Committee objectives

- Propose strategic lines for project management
- Articulate common actions to contribute to recycling
- Consolidate findings, and learnings

## Actors

## Responsibilities per actor



## Committees sessions

- Committee 1:
  - Presentation of the project and its progress, Create a committee and next actions
- Committee 2:
  - Validation of the Recyclers Work Plan
  - Presentation of final results of the ecosystem recycling
  - Presentation and validation of proposals with technical and financial support
- Committee 3:
  - Validation of findings, learning and recommendations regarding the diagnosis of the ecosystem recycling
- Committee 4:
  - Review of the implementation of the Recycle at Home 2.0 platform. Presentation of the progress of the Recyclers work plan, Presentation of the progress of the three supported experiences.

## 3.2 SPECIFIC OBJECTIVE 2

### Give technical and economical support to three waste recovery experiences with a social focus

#### 3.2.1 Define initiatives to support according to selection criteria based on scalability, social benefits and strategic alliances.

a) Define initiatives to support according to selection criteria based on scalability, social benefits and strategic alliances.

The recycling initiatives were identified through the initial diagnosis of the recycling chain of the managers participating in the study (objective 1). Subsequently, the following criteria were defined to select the initiatives of objective 2.



Installed Capacity. Indicator determines the availability of equipment and infrastructure that the manager has to offer recycling services to the community.



Scalability. This indicator represents the growth potential in waste recovery from each of the experiences analyzed.



Participation of recyclers. This indicator assesses the participation of recyclers in the current management of the services developed by experience.



Sensitized community. Through this indicator, it was aimed to know the number of families that are currently part of the recycling services, but also those that are possible to raise awareness and incorporate into the services offered.



Recovery of tons of recyclable waste. This indicator shows the current tons of waste recovered by each of the experiences analyzed.



## 3.2.2 Improve the impact and profitability of businesses associated with waste management through a cost study.

### a. Background

During the development of the project, it was determined that carrying out a cost study could be useful to carry out a comparative analysis between the different recyclable waste managers, which would allow the identification of low-cost and high-productivity services that could improve the profitability of the business. A second purpose was to determine the real cost of the services since during the project we have identified that many operators do not consider all the costs involved in the services.

### b. Presentation of Results

The results are presented in two ways, the first corresponds to a comparative table based on the most significant expenses and the second, according to the estimated margins.

The comparison table allows a comparison of efficiency between different operators. In this way, different infrastructures, in different territories, can be compared. Some indicators are: i) cost per kilogram of collected, or ii) cost in remuneration per kilogram of collected.

The second way corresponds to the margins of the business. For this, two cost scenarios were defined:

- **Current cost:** This scenario only includes compensation costs and direct costs. It should be considered that in some cases the payment of remuneration is made without incorporating the health system or taxes, required by Chilean law. In those cases the amount paid was maintained. It must be said that most operators consider only these two costs as the ones of their business.
- **Business cost:** This scenario incorporates, in addition to the current cost, infrastructure and indirect costs. In addition, it incorporates the payment of taxes, health system and provision of vacations and compensation to the costs of salaries.



### c. Conclusions



- Currently, the purchase price of recycled is not enough to cover all the costs associated with the business so it can have an adequate margin (35%) that will allow managers to renew equipment and project themselves in the long term by developing efficiency.
- There are many differences between managers depending on the working techniques and the territories in which they operate.
- This study should be complemented by incorporating an analysis of the effect of scale on the different types of services. This should be reviewed by identifying how the equilibrium point varies for different levels of production for each of the services.
- It is necessary to incorporate other types of services to identify, according to each territory, and according to the amount of tons of PET collected, which is the most cost-efficient service for each situation.

### 3.3 SPECIFIC OBJECTIVE 3. Implement a national competition to activate and strengthen initiatives with recyclers

Initially, objective 3 aimed to generate an open tender to provide technical and financial support to any waste manager with collecting potential (recyclers, municipalities and private managers). However, in order to improve the social impact of this project, it was decided to focus these resources on recyclers who are part of the National Association of Recyclers of Chile (ANARCH). In this way, the ANARCH organizations were prioritized to apply for the strengthening funds. Each of the organization applicants made their proposals and later in the Project Committee, altogether they evaluated each of the applicant initiatives.

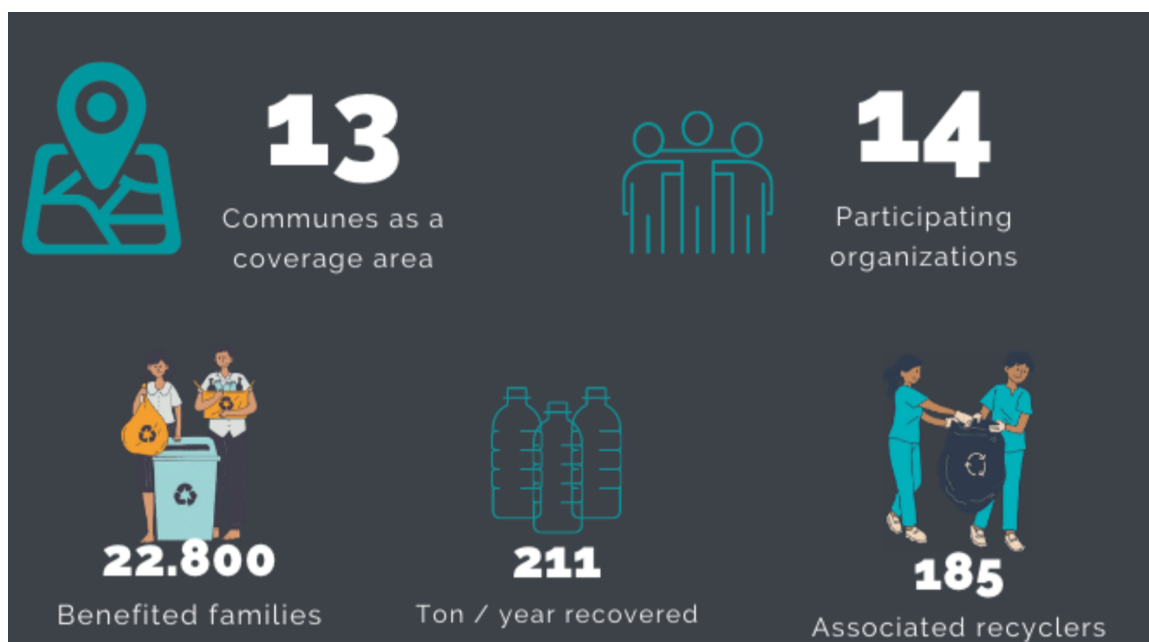
#### 3.2.1 Evaluation and Results ANARCH Work Plan Project Proposals

a. Evaluation of the proposals from the Committee.

Once all the recycling background information on the organizations and the details of the proposals of each of the participating organizations had been gathered, the information analysis stage was carried out. This action was developed by the professionals of La Ciudad Posible together with the Project Committee, made up of representatives of Coca-Cola Foundation, leaders of the National Association of Recyclers of Chile (ANARCH), professionals of the Ministry of the Environment and of the Latin American organization that supports the work of waste pickers Latitud R.

The general count of the applicant organizations is summarized in the following Images 1.

Image N.1 Characteristics of the applicant organizations



At the evaluation meeting, an individualized file of each applicant organization was presented to the committee, including the name of the organization, description and rationale for the proposal, requested budget and compliance indicators, as presented in Images 4 and 5.

Image N.4 Proposal presentation form

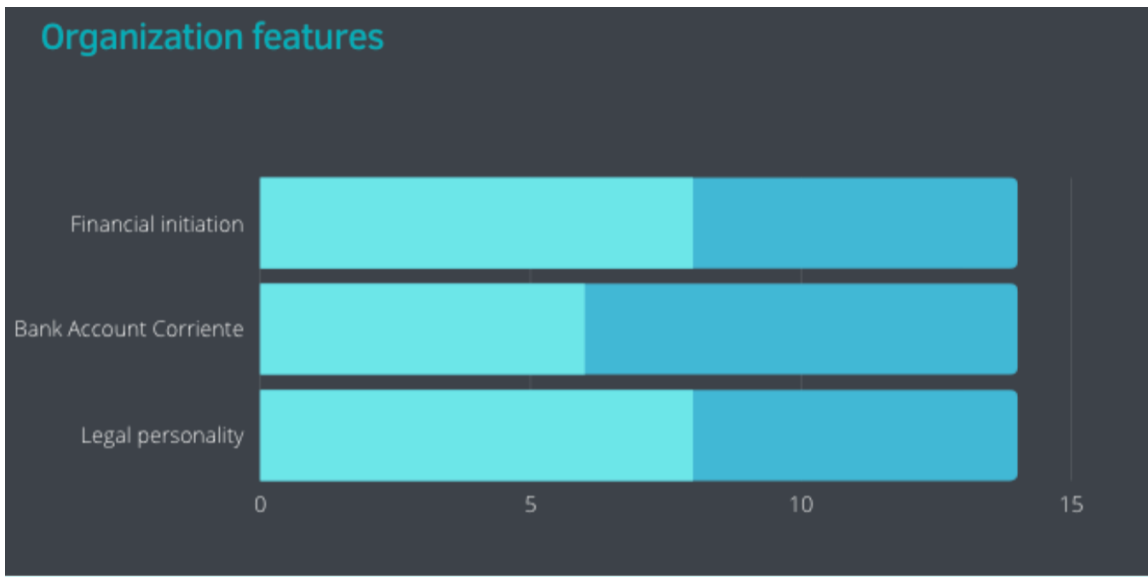
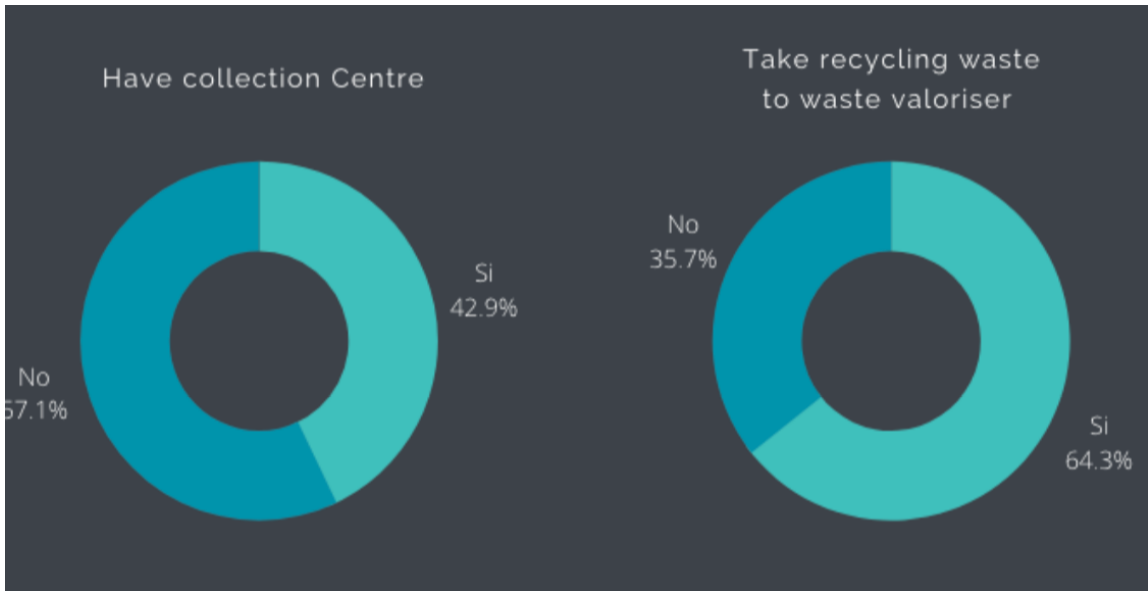
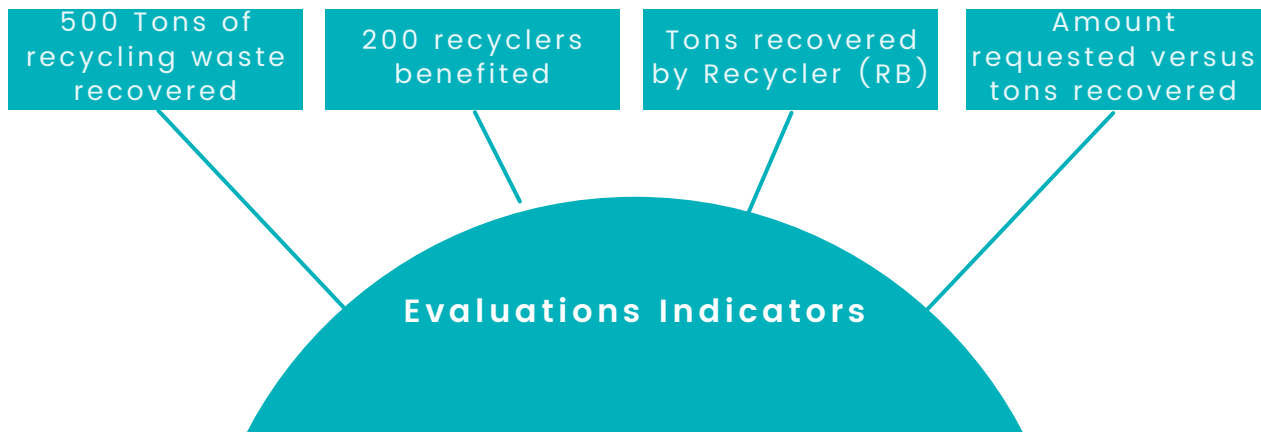


Image N.5 Proposal presentation form



Once the proposals were presented and analyzed as a whole, they were evaluated based on the evaluation indicators presented in Image N.6

Image N.6 Indicators, evaluation ranges and scores



Below is a description of each of the indicators, as well as the score assigned for each organization.

### **500 Tons of recycling waste recovered**

Indicator that shows the amount of recycling waste tons recovered by each of the organizations. As part of the project indicators, it is expected that based on all the selected proposals, a total of 500 tons will be recovered together.

To value this indicator, each of the organizations was evaluated based on the tons reported in their proposals. In this way, the organization that recovers a greater quantity of recycling waste, obtains a greater quantity of points.

### **200 recyclers benefited**

Indicator that shows the number of recyclers who will participate and will be benefited through this project. It is expected that, based on all the selected proposals, a total of 200 recyclers will be benefited together.

To value this indicator, each of the organizations was evaluated based on the number of recyclers participating and benefiting from the proposal. In this way, the organization that has a greater number of recyclers working and benefiting from the project, obtains a higher score.

### **Tons recovered by recycler**

This is an indicator that combines the two indicators mentioned above. This data is obtained by dividing the number of tons recovered by the number of recyclers participating in the project. This indicator is intended to evaluate the effectiveness of recovery by each recycler.

Like the previous indicators, the organizations were evaluated based on the total tons recovered per recycler. In this way, the organization that recovers a greater quantity of recycling waste per recycler, obtains a higher score.

### **Amount requested vs. tons recovered**

Indicator obtained by dividing the amount requested in the proposal by the amount of tons recovered by each organization.

Unlike the previous indicators, this indicator is valued inversely, that is, the organization whose cost of managing a ton is lower obtains a higher score. Conversely, organizations whose cost to manage a ton is very high will have a lower score value.

### **Boost to associativity.**

This is an indicator that seeks to promote associativity and greater participation of grassroots recyclers present in the territories. This is an important value for promoting the work of recyclers around the REP Law, but also as a way to generate value and sustainability of organizations in the future. This indicator was only evaluated for advanced group organizations.

This indicator is evaluated considering the type of organization and some of its characteristics.

- Low: Family organizations of recyclers, which are not associated or have a legal constitution
- Medium: Social organizations of recyclers, which are not associated or have a legal constitution
- High: Social organizations of recyclers, which are associated and have a legal constitution

Based on the data reported by the organizations, an organization that is family-owned has a low level of organization and therefore receives a score of 1. Those that are social organizations receive a score of 2, but if they are also legally constituted they have a score of 3, as can be seen in Table N.2 above.

All the individual scores obtained by each organization in each of the indicators were added together, generating a final score. In this way, the organizations that have a greater number of points are those that will be selected within the work plan, as shown in the following Tables N.3 and N.4.

It is mentioned that, based on the evaluation and the scores obtained, it was defined that organizations that carry out their work in the same commune will not benefit.

Moreover, it is on record that all the organizations that were selected did not receive the total funding requested, but rather, all the beneficiary proposals agreed to have a reduction in the amount of money, which allowed increasing the amount of winning organizations.

Table N.3: Score obtained by organizations of basic and medium recyclers (non-formal / Formal)

Name of organization	Total score obtained	Organization selected
Cooperativa de trabajo Francisco Bilbao	31	✓
Recicladores de Puente Alto	24	✓
Sindicato de Cartoneros y Percheros de Peñalolén	24	✓
Recicladores de Estación Central	21	✓
Grupo de Recicladores de Viña del Mar	21	✓
Agrupación de Recicladores del Barrio Yungay	15	✓
KascaraVerde	8	
Agrupación Ecológica Los Maipucinos	7	
Agrupación de Cartoneros Las Hormiguitas de Maipú	13	

Table N.4 Score obtained by organizations of advanced recyclers (PYMES)

Name of organization	Total score obtained	Organization selected
Cooperativa 3 Cerros	31	✓
Recicla Monte	24	✓
Force Jimenez	24	
Grupo Recicladores de Quilicura	21	
Pyme. Jimmy Muñoz.	21	

# Photographic record of delivery of materials and equipment

Grupo de Recicladores de Viña del Mar.  
Mechanical tricycles (5)



Grupo de Recicladores de Viña del Mar.  
Compactor (1)





Recicla Monte  
Electric Tricycles (3)



Cooperativa de Trabajo Francisco Bilbao  
Electric Tricycles (4)





Recicladores de Puento Alto  
Electric Tricycles (1)



Cooperativa 3 Cerros  
Truck (1)



RAgrupación de Recicladores Barrio Yungay  
Iron Container (4)

Agrupación de Recicladores Barrio  
Yungay  
Compactor (1)





Reciclaje Inclusivo Estación Central.  
Compactor (1) - Iron containers (8)

Sindicato de Recicladores y Peseros  
de Peñalolén  
Compactor (1) and Safety jackets  
(54)



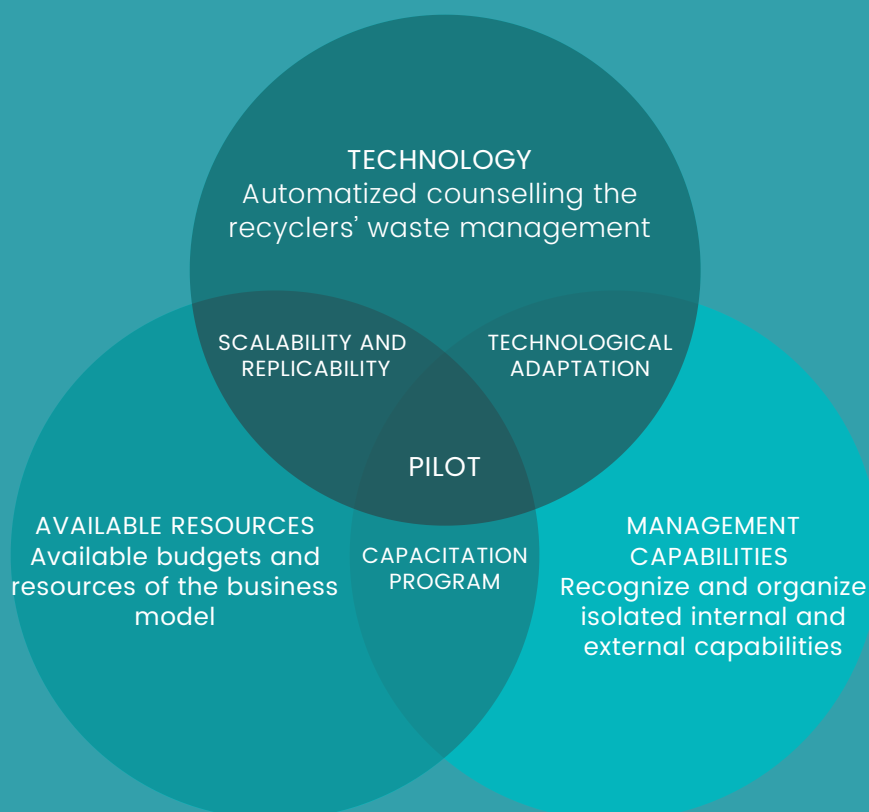
### 3.4 SPECIFIC OBJECTIVE 4 Develop a technological support network to optimize the logistics of collection routes of recyclers, as well as improving operation and services to the user

Through this objective, it was aimed to improve and enhance the performance of the Recycle at Home platform. This platform was created by the Ministry of the Environment during 2020, as a response to provide home recycling options for the community, and also, as a job opportunity for recyclers during the time of lockdown/curfew due to the pandemic of COVID-19.

Through this platform, a payment-for-service system was implemented, allowing for the first time to reach a payment standard for a home recycling service for recyclers, allowing the generation of stable collecting routes in various communes of the Metropolitan Region.

During the first stage of this objective, a diagnosis was developed to identify the gaps, opportunities and minimum requirements for the operation of a collaborative model of recyclers that offers an inclusive recycling service to the community and families in the Metropolitan Region. This diagnosis involved the participation of members from the Ministry of the Environment, professionals from Coca-Cola de Chile, who supported the launch of the platform, members from Latitud R and also recyclers and ANARCH leaders participating as waste managers who were part active of the Recicla platform in Home.

The result of this diagnosis gave the some evidences about the gaps and minimum requirements of the platform such as:

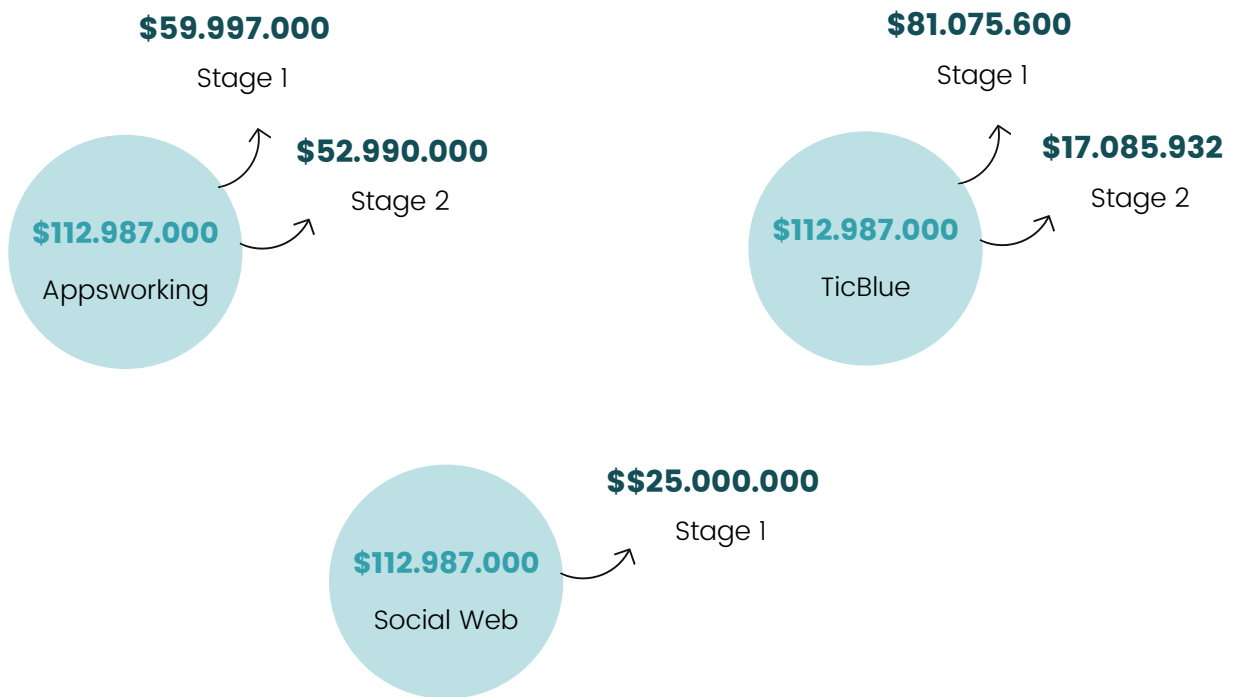


Based on these economic requirements, a tender was called for the development of this new platform.

- Technological development idual state by phases
- Procedures manuals
- Training program

The requirements are pending to be quoted, the technicians, the Branding Strategy and the communications of the platform

5 companies that develop content and technology services were called to participate, and finally 3 of them presented a proposal which is detailed below



The budget of the participating partners was as follows

- Avina Foundation: US\$10.000
- Fundación La Ciudad Posible: Accompaniment in design and implementation pilot Sept-Dec 2021
- Another resources potentials 2022: Corfo Public Good, Allied funds, Sponsors

Considering the high economic cost of developing an application that allows responding to all the minimum requirements identified in the diagnosis, conversations were established with different suppliers that have waste management platforms in operation, which allow a pilot to be carried out on the use of technology and the own management of recyclers by using this application from their own mobile phones.

The companies considered for this request were the following:

#### **Existing technologies for household waste management**

- **Rembre**
- **Recicla Más**
- **Reciclapp**
- **Conrec**
- **0 Waste**

#### **Existing technologies for industrial waste management**

- **Recylink**
- **Plataforma**
- **Industria Circular**
- **CRUM**

The identified companies were diagnosed and evaluated based on the following:

- a) The functional scope, that considers the criteria of:
  - Materials Management,
  - Resident Management
  - Registration and reportability
- b) Implementation level, which considers the criteria of:
  - MVP phase
  - Amount of users
  - Level of maturation of the company
- c) Payment from the client, which considers the following criteria.
  - Free
  - Low cost
  - High price

The evaluation of the recycling service companies was carried out by representatives of Latitud R, Fundación La Ciudad Posible and leaders of ANARCH. Finally, the Rembre company will be the organization that will develop the pilot together with the recyclers.

Rembre home is a door to door waste collection. They collect every two weeks plastics, metals, paper, cardboard, tetra pak, glass, plastic foam, among other materials. They are collecting in 23 communes of Santiago.

The pilot with Rembre will be developed together with two organizations in two different areas

### a) Union of Recyclers and Persers of Peñalolén

The organization carries out withdrawals of recyclable and reusable materials in the communes of La Reina and Peñalolén, offering its services in homes and neighbourhoods. They recover junk and recyclable materials. The former is sold at fairs in the commune. The recyclable materials are sold to intermediaries (PET, cardboard, aluminium). Currently, they deliver the materials with an intermediary who gives them the number of kilograms generated.

Pilot characteristics:

- Project 100% managed by recyclers
- 200-300 potential families to incorporate
- 4-5 associated recyclers
- Peñalolen - Florida - La Reina communes are part of pilot
- The aim is to make the operation more technological and to know if it works.

### b) Copiapó Municipality

Today the municipality has the resources to develop a project financed by a Fund for Recycling of the Environment Ministry (14.5 million) and the municipality of Copiapó (13 million) for the construction of a collection centre administered by the municipality and local recyclers, the implementation of a door-to-door pick-up service for 1000 families carried out by grassroots recyclers and the delivery of 3 electric tricycles for the same program recyclers.

Pilot characteristics:

- 300 families
- No customer charge or payment to recyclers
- Biweekly retreats in 3 pilot neighbourhoods
- Delivery of tricycles and base payment to base recyclers

**Both pilots should consider training and the definition of basic procedures for the operation and services.**



## 3.5 Sensitized families



Together with the project participants, especially with recyclers and municipalities, we worked on a strategy of awareness and dissemination to the community. This strategy put focus on activate the participation in the various recycling initiatives that were deployed in partnership with this project.

Here are some results of this process:

# 10.500

Personas sensibilizadas



Launch of the project together with residents of the Central Station commune and the Minister of the Environment



Online workshops



massive workshops with community



community workshops



workshops in schools



workshops in schools

Door-to-door collection routes in the municipality of Copiapo developed by recyclers. They were incorporated 1300 participating families with this strategy



Training for recyclers





**Una campaña para  
recuperar residuos  
de la naturaleza  
y transformarlos  
en nuevos recursos**

**#ActúaAHORA**

CAMPAÑA

**RECUPERA  
& TRANSFORMA**

Cada año, **se**  
**producen 78**  
**millones de**  
**toneladas de**  
**plástico**







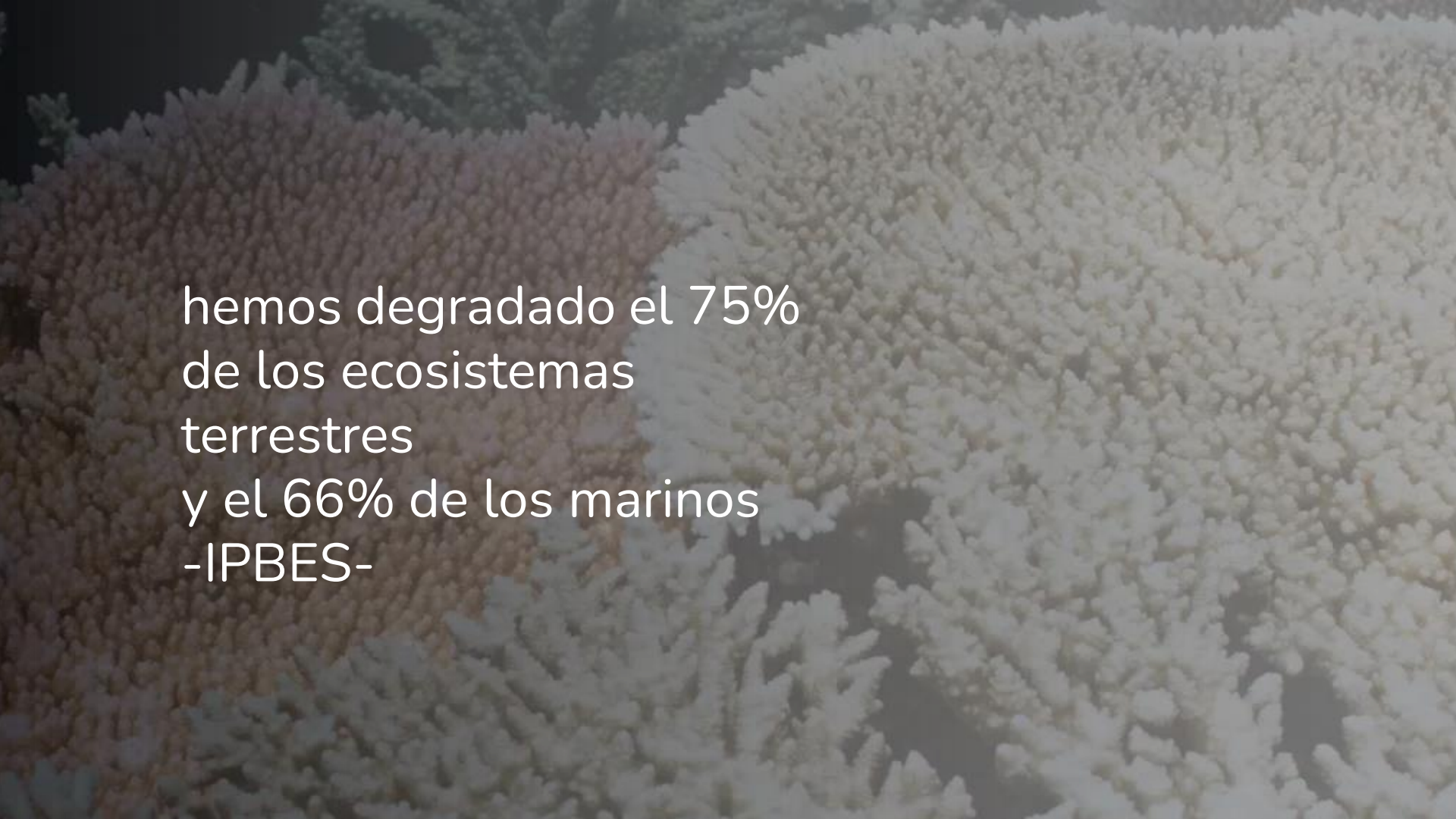
el equivalente al  
peso de **3.4**  
**millones** de  
ballenas francas  
australes

A photograph of a riverbank heavily littered with plastic waste. In the foreground, numerous clear and blue plastic bottles, some crushed, are scattered across the grass. A large, crumpled yellow plastic bag is a prominent piece of trash. Other debris includes sticks, small pieces of plastic, and a white rectangular object. The river flows in the middle ground, with white water rapids visible. The background shows a steep, forested hillside under a bright sky with a lens flare effect in the upper right corner.

más del 30%  
termina en la  
**naturaleza**



y sólo el **14%**  
se recicla

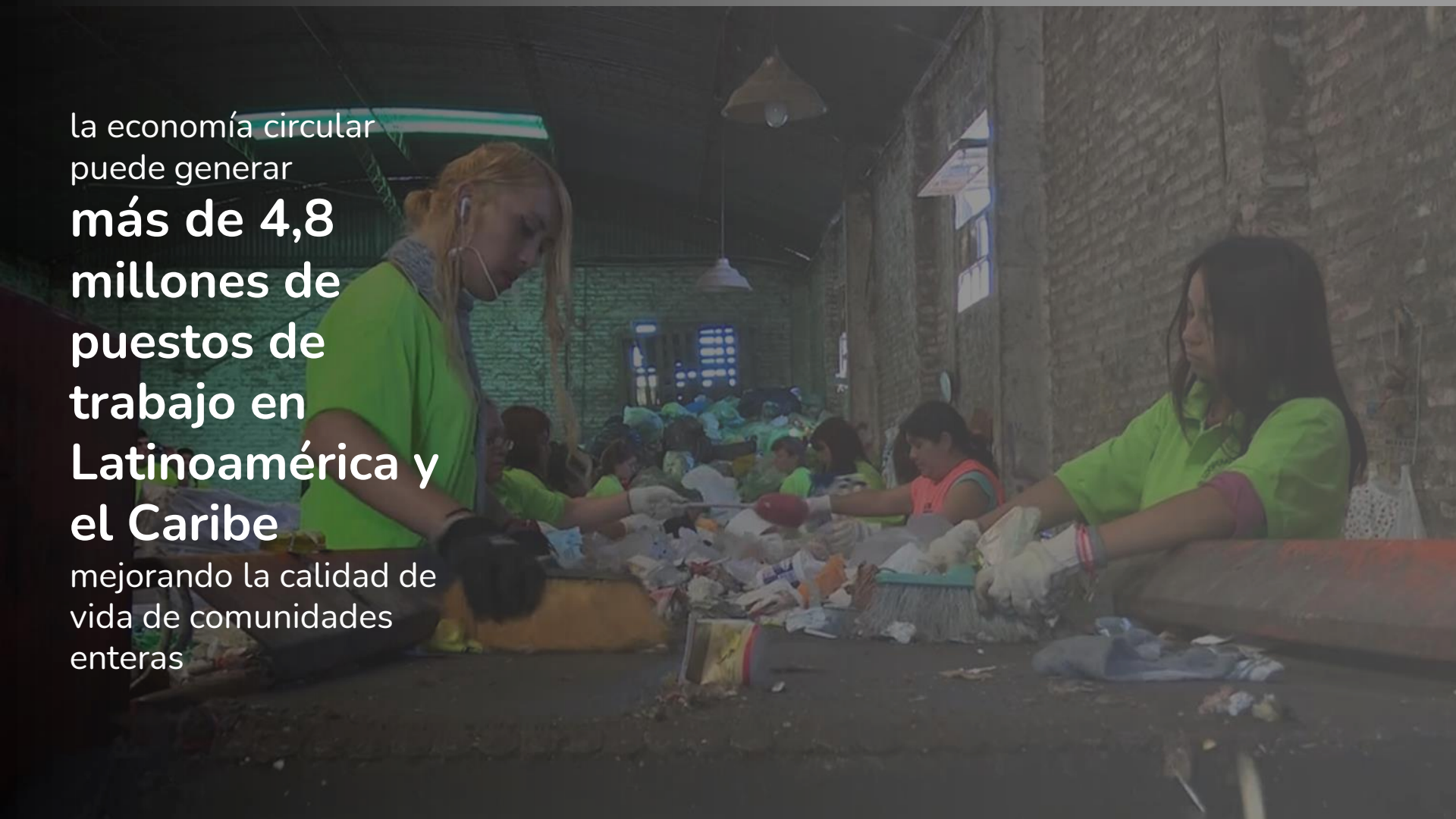
An aerial photograph of a coral reef, showing a dense, textured surface. The color of the reef transitions from a dark brown on the left to a light tan on the right, suggesting a gradient in coral health or species composition. The text is overlaid on the left side of the image.

hemos degradado el 75%  
de los ecosistemas  
terrestres  
y el 66% de los marinos  
-IPBES-

la economía circular  
puede generar

**más de 4,8  
millones de  
puestos de  
trabajo en  
Latinoamérica y  
el Caribe**

mejorando la calidad de  
vida de comunidades  
enteras



An underwater photograph showing a large school of yellow fish swimming in clear blue water. In the foreground, a vibrant coral reef is visible, featuring various types of coral in shades of red, orange, and white. The scene is brightly lit, suggesting a shallow depth.

la transición  
hacia una economía circular  
es vital para regenerar nuestros ecosistemas  
y para construir **sociedades más justas**

An aerial photograph of a beach cleanup activity. Several people are scattered across the sandy beach, some bending over to pick up trash. The beach is bordered by tall grasses on the left and a calm body of water in the background. The sky is clear and blue.

#ActúaAHORA

CAMPAÑA

RECUPERA  
& TRANSFORMA

¿qué hicimos?



Creamos una alianza interinstitucional para impulsar  
la campaña, que promueve la recuperación de  
residuos y su transformación en productos de valor  
social y ambiental  
en dos **áreas naturales protegidas de la Patagonia.**







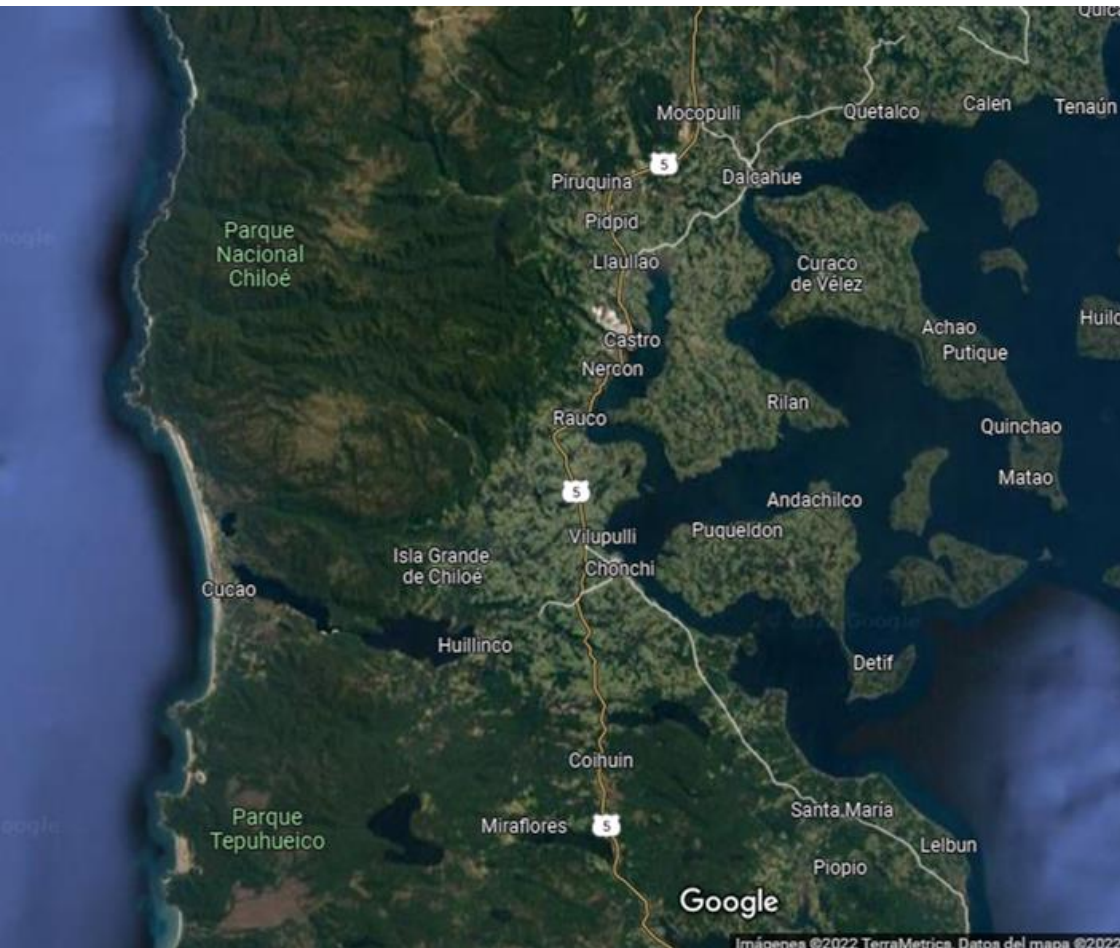
## Puerto Madryn, Península de Valdés, AR

- La Península de Valdés es un área natural protegida, patrimonio de la Humanidad, por UNESCO.
- Sus características oceanográficas hacen que reciba la mayor población reproductora de ballenas francas australes, así como el pingüino de Magallanes, elefantes y leones marinos.
- La ciudad de Puerto Madryn cuenta con apróx 119.000 habitantes









## Comuna de Puqueldón, Isla Chiloé, CH

- Chiloé es la mayor de las islas del archipiélago. Se caracteriza por su actividad marítima y las tradiciones culturales de sus habitantes.
- Posee un Parque Nacional de 43.000 ha, con ambientes protegidos de dunas y bosque valdiviano, entre otros.





**INFRAESTRUCTURA**

# Ecopunto Puerto Madryn



# Puntos verdes Puqueldón



## PUNTO VERDE JOROBADA

Este Punto verde fue construido con madera plástica obtenida del reciclaje de residuos.  
**¡Tú también puedes recuperar y transformar la isla!**

### ALUMINIO



Se recibe  
latas de aluminio



Los residuos que traes deben estar limpios, sin restos de comida, aceites, jugos, batidos u otros.

### No se recibe

Latas de conservas, restos de electrodomésticos,  
chatarra, fierro, escombros o latas sucias.

### PET



Se recibe botellas  
y envases plásticos  
con símbolo PET



### No se recibe

Botellas de aceite, balas plásticas, cobertores,  
tapas, vasos, platos y juguetes.

### VIDRIO



Se recibe botellas  
y envases de vidrio



### No se recibe

Espijos, ampollitas, tubos fluorescentes, loza, pires,  
cristales, vidrio templado, parabrisas y ventanas.





# CAMPAÑA DE COMUNICACIÓN



Nuestras playas son refugio  
de la mayor biodiversidad  
marina de Argentina.

AYUDANOS A

**PREVENIR**

QUE LOS RESIDUOS  
AFECTEN SU HÁBITAT

***#ActúaAHORA***

#ActúaAHORA

CAMPAÑA

**RECUPERA  
& TRANSFORMA**

IMPULSAN

**scJohnson**  
A family company  
A work for a better world

**LA ANONIMA**

**Municipalidad  
de Puerto Madryn**  
Chubut

**LA CIUDAD  
POSIBLE**

**cempre**  
CONSEJO COMARCIAL PARA EL MEDIO

#ActúaAHORA

CAMPAÑA

RECUPERA  
& TRANSFORMA

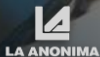
Más de 8 millones de toneladas  
de plásticos terminan en los  
océanos del mundo cada año

# RECUPERA

LOS RESIDUOS  
DE LA NATURALEZA

*#ActúaAHORA*

IMPULSAN



#ActúaAHORA

CAMPAÑA

RECUPERA  
& TRANSFORMA

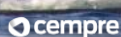
Recuperar los materiales  
y hacerlos circular ayuda  
a proteger nuestros  
ecosistemas

# TRANSFORMA

LOS RESIDUOS EN NUEVOS  
PRODUCTOS CON  
IMPACTO POSITIVO!

*#ActúaAHORA*

IMPULSAN



Nuestras playas son refugio de la mayor  
biodiversidad marina del país:  
**¡Ayúdanos a prevenir que los  
residuos afecten su hábitat!**

#ActúaAHORA

CAMPAÑA  
**RECUPERA  
& TRANSFORMA**

Circular los materiales ayuda a restaurar  
nuestros ecosistemas, y genera empleo  
para los recuperadores urbanos.

**¡Transformamos los  
residuos en productos de  
valor para la comunidad!**



Más de 8 millones de toneladas de residuos  
por año terminan en los océanos.

**¡Recupera los residuos y  
depositalos en el ecopunto!**

IMPULSAN

**sc Johnson**  
A family caring  
at work for a better world

**LA ANONIMA**

**Municipalidad  
de Puerto Madryn**  
Chubut

**LA CIUDAD  
POSIBLE**

**cempre**

**16 DE OCTUBRE**

**PUERTO MADRYN**

**PATAGONIA ARGENTINA**

**#recuperaytransforma**



# **CAPACITACIONES TÉCNICOS Y FUNCIONARIOS**



# EVENTOS DE LIMPIEZA DE PLAYA





# Puerto Madryn





# Limpieza subacuática

de residuos  
en el fondo marino

- Proyecto Sub -

Puqueldón

Stand Instalado!



## Capacitación inicial a los asistentes



Manos a la obra!



*Limpieza Playa Detif*



*Limpieza Playa Aldachildo*

Misión Cumplida!



Al finalizar la limpieza, los materiales recuperados fueron trasladados al ecopunto, donde fueron clasificados por referentes de la cooperativa para su posterior tratamiento y reintroducción en la industria.



# Material cargado

*Rumbo planta de Recollect en Puerto Montt*





# RESULTADOS

+1.700kg

de residuos  
recuperados

-principalmente plásticos  
y residuos de la industria pesquera-

160 personas

Participantes

-de la comunidad y colaboradores de  
SC Johnson-





## **Desarrollo productivo local y equipamiento para el reciclaje**



## Infraestructura: **Maquinaria** **Puqueldón**

Basado en el proyecto Precious Plastic, se implementó un prototipo de máquina de reciclaje de plástico - molino, inyectora, extrusora y horno compresor - para poder trabajar mediante la transformación del plástico en materia prima para distintos objetos y aprender sobre el reciclaje de plásticos a escala comunitaria. Los primeros productos (maceta y planta) se entregaron de regalos a participantes de la limpieza de playa





### Posavasos

*Máquina utilizada: Chipeadora e inyectora*



### Maceteros

*Máquina utilizada: Chipeadora y extrusora*



### Maceteros

*Máquina utilizada: Chipeadora y horno*

Como parte del proyecto, se trabajó con las artesanas y artesanos en la producción de 80 maceteros, los que se compraron por parte del proyecto y se regalaron a los asistentes de la limpieza de playa. La maceta iba acompañada de tierra orgánica y semillas locales.

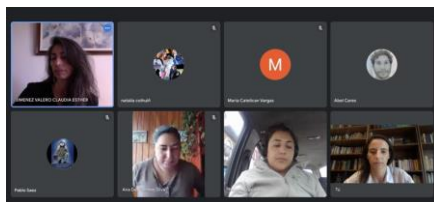
# 10 Participantes Talleres Productivos

Natalia Coñihuin  
Mayra Saldivia



# Capacitaciones y visitas técnicas

70 hrs



Capacitación REKABA  
y Taller de Co-creación

*Presencial: 8 hrs*

Capacitación  
Modelo de negocio

*Presencial y online: 12 hrs*

Capacitación  
Manejo de Máquinas  
y visitas técnicas

*Presencial: 50 hrs*

# Taller Equipado

## *Herramientas, máquinas y matrices*

Moledora



Horno y prensa



Inyectora



Extrusora



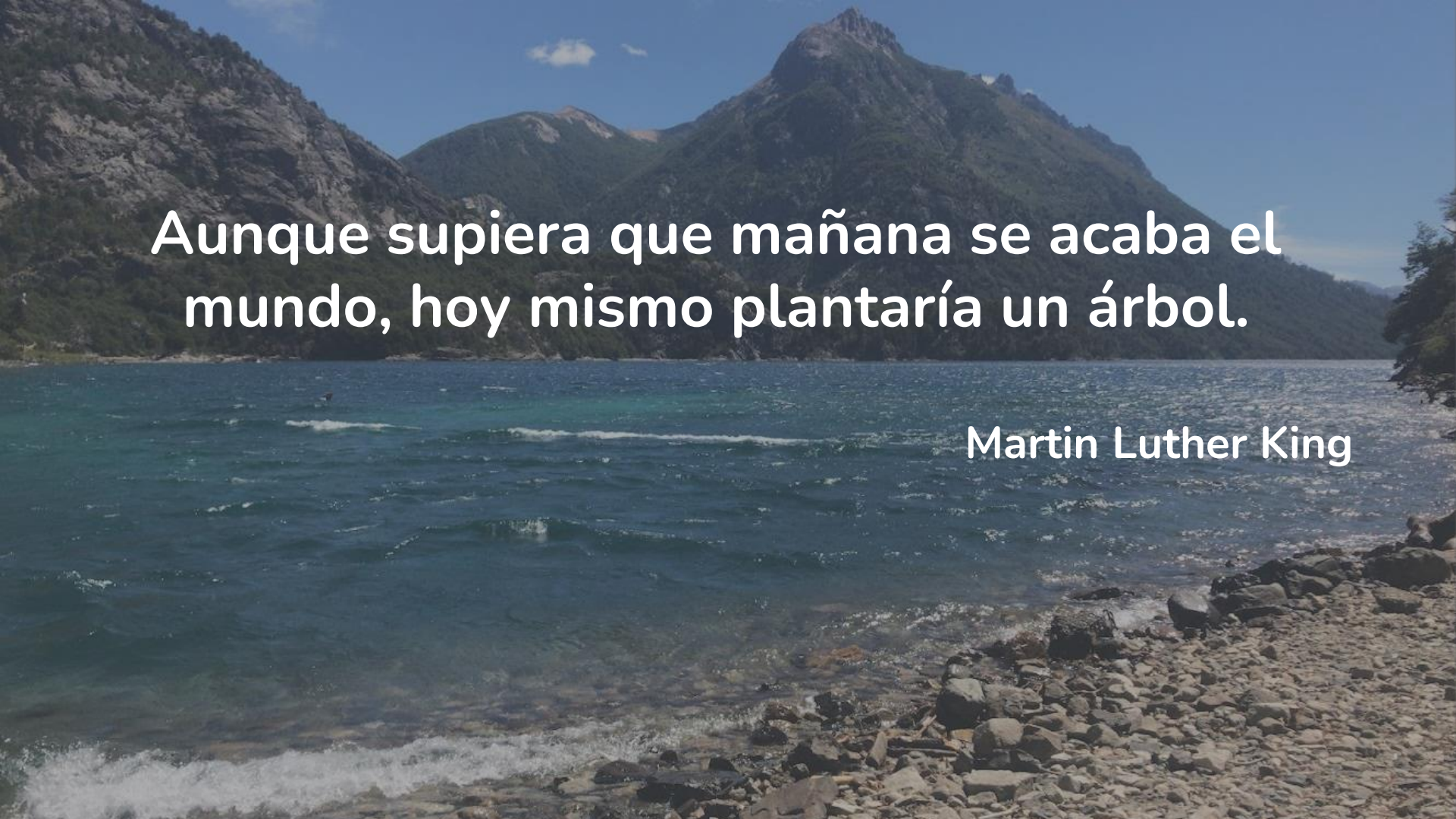
Se implementó el taller con un arreglo en las instalaciones eléctricas, se dotó de herramientas manuales, de seguridad y las máquinas de las fotografías (moledora, horno con prensa, inyectora y extrusora) además de un set de matrices para cada uno de los elementos desarrollados.



# Puqueldón



que hoy contaminan las playas.



Aunque supiera que mañana se acaba el mundo, hoy mismo plantaría un árbol.

Martin Luther King

¡Muchas gracias!