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MULTILATERAL INVESTMENT FUND

CHILE

**INCLUSIVE RECYCLING: GOVERNMENT, BUSINESSES, AND
WASTE PICKERS**

(CH-M1055)

DONORS MEMORANDUM

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INCLUSIVE RECYCLING: GOVERNMENT, BUSINESSES, AND WASTE PICKERS (CH-M1055)

The Multilateral Investment Fund (MIF), together with Fundación Casa de la Paz, is proposing a project for the development of inclusive businesses in the recycling market. The objective of the project, in the amount of US\$1,374,293, is to improve working conditions and increase waste pickers' average annual income from selling recyclable materials, and to enable collection centers to continue to operate, resulting in increased sales of recyclable materials by waste pickers in the participating *comunas* and effective coordination among stakeholders.

The National Movement of Chilean Waste Pickers (MNRCh) estimates that in 2012 there are approximately 60,000 waste pickers nationwide, who collect nearly 70% of the household solid waste delivered to recycling plants. They are a low-income and vulnerable population. Currently, public policies are being discussed that represent opportunities for the formal inclusion of waste pickers in recycling value chains and as business partners of firms. Options under discussion could promote increased recovery of recyclable materials by the firms that produce them or that initially place them on the market.

Contacts have been established with businesses that purchase materials, such as Sorepa, Tetra Pak, and Gerdau AZA, and with municipalities in the participating *comunas*, in an effort to gain access to the infrastructure offered by the Santiago Recycles Plan. Santiago Recycles provides a perfect complement, given that the plan itself can offer tools to finance the construction of infrastructure, though it does not offer the technical assistance needed to operate the centers or strengthen their management. These public and private organizations will provide counterpart resources, to which end letters of commitment are presently being negotiated.

The project is in line with the Regional Initiative for the Economic and Social Inclusion of Recyclers (RRI) (RG-M1179), as a proposal for process innovation and for strengthening of recycling business development opportunities. The RRI seeks to contribute to the transformation of the recycling market in Latin America and the Caribbean.

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ABBREVIATIONS

| | |
|--------|---|
| CC | Collection Center |
| CONAMA | Comisión Nacional del Medio Ambiente [National Environment Commission] |
| CP | Collection Point/Clean Point |
| DNA | Executing Agency Diagnostic of Needs |
| EPR | Extended Producer Responsibility |
| FNDR | Fondo Nacional de Desarrollo Regional [National Fund for Regional Development] |
| RRI | Regional Recycling Initiative |
| MMA | Ministry of Environment |
| MNRCh | Movimiento Nacional de Recicladores de Chile [National Movement of Chilean Waste Pickers] |
| MSMEs | Micro, small and medium-sized enterprises |
| NGO | Nongovernmental organization |
| PET | Polyethylene terephthalate |
| PSR | Project Status Report |
| SEREMI | Secretaría Regional Ministerial del Ministerio de Medio Ambiente [Ministerial Regional Department of the MMA] |

GLOSSARY

| | |
|--|--|
| Collection point | Location for the storage of waste collected by waste pickers on recycling routes. These points are in the area of influence of the waste pickers' removal routes. |
| Commercial agreements | Agreements between waste picker groups and recycling firms for the delivery of material under conditions set by mutual agreement |
| Generating businesses | Businesses or industries that generate large volumes of recyclable materials and that deliver them directly to the waste pickers. |
| Movimiento Nacional de Recicladores de Chile A.G. [National Movement of Chilean Waste Pickers] (MNRCh) | Trade association formed in 2010, made up of 26 waste picker organizations throughout the nation |
| Project execution unit | Unit responsible for executing the project's administrative and operational activities, serving under the supervision of the Project Director. |
| Recycling firms | Firms that purchase and/or recycle the waste recovered by waste pickers. |
| Separation at the source | Generators of municipal waste (industrial, commercial, institutional, and household) separate their waste at home or at clean points, to be picked up subsequently by waste pickers. |
| Valorization center / collection center | Infrastructure for storing, processing, and selling waste, administered by groups of waste pickers |
| Waste pickers | People living in vulnerable conditions who collect recyclable materials of value from trash in order to generate income. Their work reduces the volume of waste delivered to sanitary landfills or dumps, and provides industry with low-cost raw materials. |
| Waste picker groups | Waste picker groups provide waste collection services in communities and businesses in an organized manner and under a model that provides economic, environmental, and social benefits for members and their families |

CHILE
INCLUSIVE RECYCLING: GOVERNMENT, BUSINESSES, AND WASTE PICKERS
(CH-M1055)

I. EXECUTIVE SUMMARY

| | |
|-----------------------------|--|
| Country/Region: | Chile |
| Project title: | Inclusive Recycling: Government, Businesses, and Waste Pickers |
| Project number: | CH-M1055 |
| Executing agency: | Fundación Casa de la Paz |
| Beneficiaries: | The beneficiaries will be: (i) 400 waste pickers who will increase their income and sales of recyclable materials, while improving their working conditions; (ii) three <i>comunas</i> [political-administrative subdivisions of Chilean provinces] that will have comprehensive inclusive recycling programs; and (iii) six firms, through a constant supply of materials by the waste pickers. |
| Financing: | MIF – Nonreimbursable: US\$ 683,000 Counterpart: <u>US\$ 691,293</u> Total: US\$ 1,374,293 |
| Objectives: | The expected impact of the project is that the waste pickers will improve their working conditions, increase their average annual incomes from selling recyclable materials, and that collection centers will continue to operate. The expected outcome is that the waste pickers in three <i>comunas</i> in the metropolitan region will increase their sales of recyclable materials and that there will be effective coordination among stakeholders. |
| Execution timetable: | Execution period: 36 months Disbursement period: 42 months |

| | |
|--|--|
| Special contractual conditions: | As a condition precedent to the first disbursement, Fundación Casa de la Paz will demonstrate to the Bank's satisfaction that: (i) a project coordinator has been designated; (ii) the project's Operating Regulations have been agreed upon and approved; (iii) letters of commitment from the private-sector firms participating in the project have been processed; and (iv) an agreement has been signed by Fundación Casa de la Paz and the <i>Santiago Recicla</i> [Santiago Recycles] Program of the Ministry of the Environment's Metropolitan Regional Department (SEREMI) regarding the contribution of resources for the project. |
| Social and environmental Review: | This project has been classified as a category "C" operation (reviewed by ESR on 26 September 2012). |
| Coordination with other institutions: | The project will be part of the Regional Initiative for the Economic and Social Inclusion of Recyclers (RG-M1179). There will be close coordination with other private organizations such as the Coca-Cola Company and the Avina Foundation, as well as with the Bank's Water and Sanitation Division (INE/WSA). In addition, conversations are under way with firms such as Sorepa, Gerdau AZA, Tetra Pak, Unilever, Procter & Gamble, SEREMI, and the municipalities of the <i>comunas</i> ¹ participating in the project. |
| Exceptions to Bank policy: | None. |

II. BACKGROUND AND RATIONALE

A. Recycling situation in Chile

- 2.1 The volume of urban solid waste (household and non-household) in the Santiago Metropolitan Region was 2.8 million tons² in 2009, of which 52% consisted of recyclable materials. However, the rate of recycling was less than 15% (CONAMA, 2009).
- 2.2 The National Movement of Chilean Waste Pickers (MNRCh)³ estimates that in 2012 there are approximately 60,000 waste pickers nationally, who collect nearly 70% of the household solid waste delivered to recycling plants.⁴ In 2004, these "scavengers" (who call themselves "*recicladores*") earned monthly average

¹ Tentatively, the three will be selected from among La Reina, Peñalolén, Maipú, El Bosque, El Monte, Cerrillos, and Quinta Normal.

² Informe del Estado del Medio Ambiente [Report on the State of the Environment], Ministry of Environment, 2012.

³ www.recicladoreschile.cl

⁴ [Ruiz, A., Estay, E., Olarte, V., 2010](#)

incomes of approximately US\$350, which is below the average end-2004 wage of US\$581. These waste pickers work in the informal sector under vulnerable conditions, due to the inequality that exists between the purchase and sale of materials (the sales price to the intermediary is estimated to be 30% of the final purchase price); the instability of the recycling business and consequent variability in income; and above all, the poor working conditions and social exclusion resulting from the negative perception within most of society, which fails to recognize the contribution waste pickers make, through their activity, to improving the environment and the health of the communities in which they operate.

- 2.3 Public policies are currently being discussed on the subject of waste management, in terms of extended producer responsibility (EPR). The relevant legislative bill could encourage increased recovery of recyclable materials by firms that produce such materials or that initially place them on the market.
- 2.4 **Extended Producer Responsibility (EPR).** As defined in the bill submitted to the Chamber of Deputies in April 2012, this is a special system to which producers of products identified as having priority status must adhere, whereby such producers are required to assume responsibility for managing the waste resulting from the products involved. Priority products are those that represent a benefit, based on their valorization, and/or that may pose risks to the environment. For a product to be considered to have priority status, a supreme decree must be issued by the Ministry of Environment (MMA).⁵
- 2.5 The bill mandates that producers of priority products have a general obligation to establish management systems to recover those products and avoid generating waste. When this is not possible, they must seek to minimize the negative impact of the waste and place a value on it. In the event that it is ultimately disposed of, the producers will be required to adopt whatever measures are necessary to ensure that this is accomplished in an environmentally appropriate manner. For purposes of this project, the main recyclable materials involved will be containers and packaging materials, such as cardboard, polyethylene terephthalate (PET), and other plastics, metals, and Tetra Brik.
- 2.6 As envisaged in the legislative bill, producers are to be responsible for maintaining **waste management systems**. These may be individual, in cases where a single producer assumes responsibility for organizing all of the management-related activities, or collective, where a number of producers organize these activities jointly. Through open bidding, the management systems would hire authorized agents to handle the waste resulting from the producers' priority products, from collection of the waste to its valorization and disposal. In

⁵ This involves: a process of identification by the MMA; a diagnostic assessment of the sector and identification and evaluation of the environmental, economic, and social impacts of applying the EPR to the proposed products; and a process of consultation with various agencies within the Administration, as well as with producers, waste management entities, and other relevant stakeholders.

such bidding processes, any authorized agent would be able to submit bids, with the call for bids being publicized through the media or through available public access systems.

- 2.7 The bill also provides that each management system must, at a minimum, finance collection centers and their operation and maintenance, collection, valorization, or elimination of the waste resulting from priority products collected, as well as related communications and awareness-raising strategies. These activities may also be implemented through agreements with the respective municipalities for the installation and/or operation of collection and/or bulking centers for waste resulting from priority products. Waste pickers are defined in the bill as agents involved in carrying out selective collection activities and/or managing collection centers.
- 2.8 **The “Santiago Recycles” Plan.** In the framework of the 2005 National Solid Waste Management Policy, the Executive Secretariat for Solid Waste of the Santiago Metropolitan Region is in the process of approving and implementing the Metropolitan Region Solid Waste Master Plan. The Master Plan is designed to minimize waste generated in the region, while at the same time proposing an action plan whose main goal is to achieve 25% recycling of recyclable household solid waste in the Metropolitan Region by 2020. At the regional level, a multisector board was formed in 2010, known as “Santiago Recycles,” as a joint initiative of the Ministry of Environment and its Regional Department (SEREMI), Santiago City Hall, and Fundación Casa de la Paz, together with municipios and businesses. The purpose of Santiago Recycles is to increase recycling, reach a pre-defined target for recycling, and improve municipal management in order to extend the useful life of sanitary landfills in the Metropolitan Region.
- 2.9 The 25% recycling target set for 2020 represents a major challenge, given that the current level of recycling is around 15%. The volume of urban solid waste, in a medium scenario, is expected to be 4.4 million tons per year by 2020.⁶ In order to achieve the 25% target, the annual volume of recycled materials would need to be 1.1 million tons per year.
- 2.10 The Santiago Recycles Plan envisages investment in infrastructure and the design and implementation of a clean-points network. In order to reach the planned target, it is estimated that 10 valorization centers (also known as collection centers, where waste pickers store materials to be sold subsequently) will need to be built, along with approximately 1,000 “clean points” (i.e., locations where citizens can deposit recyclable waste), drawing on the participation of some 3,000 to 4,000 waste pickers, in order to accommodate a system capable of handling 750,000 tons per year. The main lines of action include the formation of Municipal Associations, the establishment of systems for collection of waste, storage of materials, and operation of valorization centers. This will involve the inclusion of waste pickers and the presentation of projects at the *comuna* level to

⁶ Ingeniería Alemana, S.A.

the National Regional Development Fund (FNDR) so that the necessary infrastructure can be put in place.

- 2.11 The infrastructure will legally underpin the action plan and will strengthen the operations of *municipios*, in order to achieve effective interactions among all the stakeholders. Santiago Recycles provides an excellent opportunity to advance the process of organizing the sector, improving its working conditions, and increasing the volume of materials collected. The waste pickers will be managed as a real and ongoing work force that contributes to improving the environment and minimizing the final disposal of waste in dumps, transfer stations, and sanitary landfills, thereby improving the economies of scale of the *municipios* and generating savings in municipal budgets.

B. Problems and opportunities associated with the MIF intervention

- 2.12 The current scenario indicates that there is a high probability that an EPR-based system will be approved, which would generate economic opportunities for waste pickers, as well as a strong incentive for firms that sell priority products (cardboard, PET and other plastics, metals, Tetra Brik, etc.) to recycle.
- 2.13 Since the implementation of the 2005 comprehensive waste management policy, waste pickers and various stakeholders involved in recycling have worked and have earned the opportunity to propose and develop initiatives to improve waste treatment at the public policy level in Chile. There is consensus on the need to develop and update a public policy based on local capacities and their strengthening, as well as to foster integrated municipal solid waste management programs, using a range of instruments to promote ecologically efficient management.
- 2.14 Despite the progress achieved, through the existence of the MNRCh, in organizing waste pickers, at the *comuna* level it has not yet been possible to position the waste pickers' activity as an alternative, or complement, to the removal system in the *comunas*—an alternative that would provide for installing and coordinating recycling services in the *comunas*. Such a solution would address the needs of both local governments and private firms. At the same time, the business potential of waste collection, bulking, preparation, and sale of recyclable materials is not being maximized, due to the fact that waste picker organizations lack market access.
- 2.15 There are some cases of *municipios* or waste picker groups that have managed to enter into agreements with the community under which recyclable waste is delivered to them. In many cases, however, such arrangements do not cover the entire *comuna*, due to a lack of organization on the part of the waste pickers, the lack of specific contracts—attributable to the inadequate relations and negotiating power of waste picker organizations with regard to both the public and private sectors—and the lack of adequate infrastructure and knowledge on business management and technical requirements.

- 2.16 Given this environment, waste pickers could benefit enormously under a situation in which they were recognized as a viable and reliable alternative for waste management and were able to sell recyclable materials and improve both their incomes and their working conditions. This is not possible for the following reasons:
- a. Lack of coordination among stakeholders (municipios, waste pickers, private firms, and communities). The basic reasons for this are: (i) lack of incentives and information on the benefits that an inclusive management system would bring to the various stakeholders; (ii) lack of systematization of replicable experiences that have proven to be successful and viable in incorporating waste pickers into municipal waste management systems; (iii) lack of direct relationships (and mistrust due to lack of familiarity) between waste picker organizations and generators and buyers of recyclable materials; (iv) weak or limited association building; (v) need for greater training in management and marketing; (vi) public misconceptions regarding the economic, social, and environmental contribution of waste pickers to society; and (vii) lack of infrastructure, equipment, and adequate technical assistance.
 - b. Low levels of recycling and of recovery of recyclable materials at the comuna, regional, and national levels, as a result of: (i) low percentage of separation of waste at points of origin, both in households and elsewhere; (ii) lack of information on how to recycle, and a lack of services and infrastructure for the disposal of recyclable waste; and (iii) absence of policies to provide incentives for recycling.

C. Proposed project

- 2.17 The current situation in Chile is conducive to including waste pickers in formal recycling markets. This project seeks to strengthen the organizations of three *comunas* within the Metropolitan Region (to be selected from among the *comunas* of La Reina, Peñalolén, Maipú, El Bosque, El Monte, Cerrillos, and Quinta Normal), to facilitate their access to certain infrastructure and promote its operation, thereby improving their capacity to handle higher volumes and additional materials and offer quality services. This will make it possible for waste pickers to take advantage of the opportunities available within the Metropolitan Region. In addition, it will facilitate their relationship with other public and private stakeholders involved in the market, thus improving waste pickers' negotiating power to establish fairer relationships with buyers and sellers of materials and with the municipalities. As waste generation continues to increase, the opportunities for recycling and reusing materials will similarly grow and, with this, the opportunity to create businesses, jobs, and better incomes for waste pickers.
- 2.18 The EPR-based legislative bill lays the foundation for businesses to become actively involved and creates an opportunity for waste pickers to position themselves as service providers for recycling systems. Contacts have been

- established with businesses that buy materials, such as Sorepa and Gerdau AZA, with businesses that generate materials, such as Tetra Pak, Unilever, and Procter & Gamble, and with governments in the participating *comunas*, in an effort to gain access to the infrastructure offered under the Santiago Recycles Plan. Santiago Recycles (and its target of 25% recycling by 2020) provides a perfect complement, given that the plan can offer tools to finance the construction of infrastructure, though it does not offer the technical assistance needed to operate the centers or strengthen their management. These public and private organizations will provide counterpart resources, to which end letters of commitment are presently being negotiated.
- 2.19 With **Fundación Casa de la Paz** responsible for execution, the idea is to change the relationship between stakeholders involved in the process, while strengthening the waste pickers. At the same time, the internal processes of public and private entities will be affected by promoting the formulation and implementation of internal policies for managing the social and environmental facets. Casa de la Paz participated in coordinating and developing the Santiago Recycles Plan, which is a result of the work of some one hundred representatives of various sectors, including public utility companies, *comunas*, waste pickers, businesses, and nongovernmental organizations (NGOs) that helped develop a consensus-based action plan in the context of applying the Comprehensive Solid Waste Management Policy.
- 2.20 **Contribution to the objective of the agenda.** The project will contribute to the objectives and indicators of the MIF Agenda “Linking small firms to value chains,” under the Access to Markets and Capabilities (AMC) Unit. The objective of this agenda is to create better economic opportunities for low-income and vulnerable populations, by developing practices involving economic inclusion in value chains, with a special focus on the recycling market. The purpose of the agenda is to test and systematize methodologies for creating business opportunities (in this case, for waste pickers) and lowering the barriers that keep them from effectively entering the recycling chain. The project will contribute directly to this objective by establishing a comprehensive solid waste management methodology that will coordinate the efforts of public and private stakeholders so that waste picker organizations are able to take advantage of economic opportunities, improve their working conditions, and increase their incomes.
- 2.21 **Contribution to the agenda’s results indicators.** The project will contribute to the results indicators as follows: (i) an increase in the incomes of 400 waste pickers; (ii) development of a methodology for linking waste pickers to the recycling market, with coordination between public and private stakeholders; and (iii) five strategic partners actively involved in promoting and supporting efforts to link waste pickers to the formal recycling sector.
- 2.22 This project is part of the **Regional Initiative for the Economic and Social Inclusion of Recyclers (RRI)** (RG-M1179), and will employ the best practices

learned from that initiative, as well as from other recycling-related operations financed to date by the MIF. At the same time, the knowledge gained through this project will contribute to the RRI's body of knowledge. The RRI is designed to help transform the recycling market in Latin America and the Caribbean, and seeks to produce systematic change in three areas: (i) with regard to the economic and social conditions of informal recyclers and their families, by professionalizing their services and enabling them to engage in more secure and profitable economic activities, with greater access to basic services, and by changing the public perception of waste picker from "social problem" to "social, environmental, and economic asset"; (ii) with regard to public policy, by improving the capacity of municipalities to work with informal recyclers and develop inclusive waste management systems, as well as by strengthening the regulatory framework and passing laws to ensure compliance with the sector's rules and policies; and (iii) with regard to the private sector, a range of actions in various facets—from including waste pickers in the value chains and promoting greater responsibility and transparency in the market, to allowing for greater traceability of recycled materials used as inputs.

- 2.23 **Lessons learned.** As mentioned earlier, the MIF has a number of recycling projects now in execution.⁷ The lessons learned to date demonstrate that these interventions are achieving their objectives and are changing the lives of waste pickers and their families. The intention is to transfer to this project the lessons learned and best practices with regard to cluster development, business development, relations with *comunas* and businesses (both businesses that generate and those that buy recyclable materials), route zoning, etc., as well as certain knowledge products that would be adaptable to the Chilean context. In addition, the project will contribute to the accumulation of knowledge on the RRI, currently in execution, while also providing feedback on knowledge generated by the experiences of the projects and activities, such as events, being developed in the framework of the RRI.
- 2.24 **Country Strategy 2011-2014.** The project is aligned with the Bank's strategy with the country, which identified as a priority supporting improved conditions of equity, productivity, and competitiveness of companies and enhanced economic conditions for families in vulnerable groups.

III. THE PROJECT

A. Impact and outcome

- 3.1 The expected impact of the project is that waste pickers will improve their work conditions and increase their annual average incomes by selling recyclable

⁷ ATN/ME-12231-AR: Socioeconomic Inclusion of Recycling Collectors; ATN/ME-11339-BR: Socioeconomic Integration of Recycling Collectors; ATN/ME-11535-CO: Development of a Business Model for the Economic Consolidation of Recycling Organizations; ATN/ME-12330-BO: Decent Employment for Urban Solid Waste Collectors; ATN/ME-11267-PE: Development of the Market for Integrated Management of Recyclable Solid Waste.

materials, and that the collection centers will continue to operate. The expected outcome is that waste pickers in three *comunas* in the Metropolitan Region⁸ will increase their sales of recyclable materials, and that there will effective coordination among stakeholders.

B. Components and activities

- 3.2 The project consists of the following components: (i) start-up of collection centers and collection points (or “clean points”) and strengthening of waste pickers’ business management; (ii) establishment of business ties with the private sector (businesses and civil society); (iii) strengthening of municipalities to contribute to a recycling system that involves both the waste pickers and the community; and (iv) knowledge management and communications strategy.

Component I: Start-up of collection centers and collection points and strengthening of waste pickers’ business management (MIF: US\$292,130; Counterpart: US\$323,210)

- 3.3 The purpose of this component is to develop a process of training and technical assistance for waste pickers that enables them to provide quality recycling services and meet the needs of the community, businesses, and the municipio. This will be achieved by means of developing the skills and competencies for waste pickers to become recycling entrepreneurs offering the quality services required by private organizations and local government as waste manager.
- 3.4 The resources allocated to this component will finance the organization of meetings, workshops, and the contracting of consulting services for the following activities: (i) developing the competencies and skills of the waste pickers (leadership, teamwork, group management, spokespersons, and negotiation); (ii) preparing plans for waste picker organizations at the *comuna* level, including the definition of a collection strategy; (iii) advising the organizations in the identification, processing, and establishment of the most appropriate legal status for waste picker organizations; (iv) developing technical skills and competencies in administrative management (including identification of appropriate equipment) and providing financial education; (v) providing training on the operation and use of collection-center infrastructure; (vi) increasing familiarity with alternatives available in the market, and identifying existing products that can best be adapted to the financing needs of waste pickers; (vii) supporting the development of business plans for the sustainable operation of infrastructure, collection centers, and collection points; and (viii) enhancing the technical knowledge of the organizations through technical visits to other recognized national and international experiences.
- 3.5 The expected outcomes are: (i) completion, by 300 waste pickers, of the entire cycle of workshops for developing competencies (technical, management, and

⁸ To date, seven *comunas* have been preselected, from among which at least three will have to be chosen for the project. The preselected *comunas* are Maipú, Quinta Normal, Cerrillos, La Reina, Peñalolén, El Bosque and El Monte.

soft skills); (ii) three collection centers managed by waste pickers participating in the program; (iii) three strategic plans for waste picker organizations at the *comuna* level; (iv) access to adapted financial products by three organizations; and (v) implementation of three business plans.

Component II: Establishment of business ties with the private sector (businesses and civil society) (MIF: US\$35,200; Counterpart: US\$22,790).

- 3.6 The objective of this component is to link and coordinate businesses that generate recyclable waste and recycling firms and waste pickers, around a common objective and joint work aimed at achieving inclusive waste management. Generating businesses will be encouraged to enter into waste removal contracts with waste pickers. In the case of recycling firms, avenues for negotiation will be created to forge agreements based on fulfilling the needs and requirements of the parties.
- 3.7 Among the activities included in this component are the following: (i) analyzing the recyclable materials value chain in Chile (PET, paper, cardboard, ferrous and non-ferrous metals, etc.); (ii) raising awareness among recyclable solid waste generating businesses (potential providers of materials); (iii) organizing and implementing the logistics for collecting recyclable materials from commercial and industrial sources; (iv) training personnel of participating generating businesses; (v) setting up a dialogue group to develop and implement an action plan with the firms that buy materials, so as to align procedures for the supply/sale of materials; (vi) investigating possible alternatives for developing a traceability system; and (vii) validating alternatives with generating businesses and those that buy recyclables.
- 3.8 As a result of this component, there will be: (i) 20 agreements/arrangements signed by firms for the collection or delivery of recyclable materials; (ii) 12 agreements for the removal of materials at six generating businesses; (iii) 40 employees from companies that are party to such agreements, who are responsible for delivering the waste products, trained in separating the waste; and (iv) awareness-raising for personnel of waste-generating businesses that are party to such agreements on the importance of separating waste.

Component III: Strengthening of municipalities to contribute to a recycling system that involves the waste pickers and the community (MIF: US\$16,000; Counterpart: US\$73,440).

- 3.9 The purpose of this component is to establish opportunities for waste pickers, the municipio, and the community to co-design, evaluate, and establish ongoing recycling systems. Work at the municipal level is justified by the fact that they are key actors in the implementation and continuity of the initiative, given that they are currently responsible for managing municipal waste. Accordingly, the actions to be carried out are aimed at establishing agreements to allow waste pickers to be part of the formal management of waste within the *comuna*.
- 3.10 The main activities of the component are the following: (i) choosing which *comunas* are to participate, based on criteria related to selection, identification of threats, potential, and commitments; (ii) providing technical advice to the municipios on preparing and presenting investment plans for infrastructure projects; (iii) forming an ongoing, territory-based working group at the *comuna* level,⁹ whose members include representatives from the municipio, waste pickers, civil society, and the community; (iv) advising the municipio on preparing and presenting an inclusive municipal recycling plan consistent with the waste pickers' *comuna* plan (activity 1.2);¹⁰ (v) training municipal employees based on the needs identified in the diagnostic assessment and municipal requirements; and (vi) raising awareness within the communities.
- 3.11 The expected outcomes are: (i) implementation of three plans; (ii) ongoing operation of three working groups involving the municipality, the waste pickers, and the community; (iii) awareness raised among 15,000 households regarding the project and the importance of participating in separating waste at the source; and (iv) 10 employees from three departments in each of the participating municipios trained in competencies related to inclusive municipal waste management.

Component IV: Knowledge management, monitoring, and communications strategy (MIF: US\$150,100; Counterpart: US\$24,300).

- 3.12 The objectives of this component are two-pronged: first, designing and implementing a knowledge management plan and developing a baseline and a suitable system for monitoring and tracking the project's activities; and second, conducting a strategic communications campaign to increase the visibility of the role of waste pickers, while ensuring coordination of actors in the ecosystem and raising the awareness of the community regarding the importance of recycling.

⁹ The working group consists of waste pickers, at least three municipal departments, and representatives from civil society and businesses.

¹⁰ The plan will include a diagnostic assessment of municipal needs, existing opportunities in the municipio, objectives, targets, responsible parties, duration, implementation, monitoring, and adjustments.

- 3.13 The main knowledge product will be the systematization of the methodology for economic inclusion of waste pickers in the various aspects and phases of the process (organizing and formalizing the groups; establishing links with the public and private sectors; and altering the perception of and relationship with the community). In terms of communication, a campaign will be implemented to enhance the visibility of waste pickers, in tandem with raising awareness within society in general as to the importance of recycling. One key factor in increasing the efficiency of the waste collection process is the degree of participation by the population (volume of waste that is delivered already separated). The communications strategy aimed at increasing awareness among the residents themselves is therefore of vital importance.
- 3.14 This component envisages carrying out the following activities: (i) designing and implementing the project monitoring, tracking, and evaluation system; (ii) preparing profiles of the waste pickers in the three selected *comunas*; (iii) forming an intersectoral board for linkage (Santiago Recycles-SEREMI,¹¹ regional government, municipio, city hall, businesses, and the MNRCh), and coordination with Santiago Recycles; (iv) designing and implementing the communications strategy on the topic and the project; and (v) designing and implementing the knowledge management plan (systematizing the methodology).
- 3.15 The communications strategy with the stakeholders, particularly with households, is key to promoting waste separation at the source and to achieving the expected recycling rates in 2020 according to Santiago Recycles. In addition, the scale will need to be broadened in the future, based on the knowledge generated by the project (and by other interventions).
- 3.16 The monitoring and evaluation system will be compatible with that of the Regional Initiative for the Economic and Social Inclusion of Recyclers (RG-M1179), given that the information and knowledge derived from this project will provide feedback for the monitoring system and knowledge collected under the RRI.
- 3.17 **Gender.** The project monitoring system will include the monitoring of indicators broken down by sex. In the profile studies, the gender of the waste pickers will be highlighted, with the inclusion of a set of questions that takes into account the differences between men and women and the way they work; based on this, the project's intervention methodology will include empowering the role of women and facilitating their participation. In the strengthening and technical assistance programs, potential gender considerations will be taken into account that could affect access to the programs by men and women. Moreover, under the RRI, a toolkit is being developed for ways of incorporating the subject of gender in recycling projects. The toolkit will also be consistent with existing MIF tools. The outcomes of this component will include: (i) a monitoring and supervision system in operation; (ii) an intersectoral board to facilitate linkages and coordination;

¹¹ Regional Department of the Ministry.

- (iii) 1,000 people familiar with the project’s lessons, outputs, and outcomes; and
- (iv) 1,000 people familiar with the project’s intervention methodology with key stakeholders (government entities, community-based organizations, etc.).

IV. COST AND FINANCING

4.1 The total cost of the project is US\$1,374,293, with the MIF contributing US\$683,000. The counterpart contribution is US\$691,293,000 and will be financed with resources from Fundación Casa de la Paz, businesses,¹² and contributions from Santiago Recycles. Fundación Casa de la Paz and the Santiago Recycles program, overseen by the Ministry of Environment’s Metropolitan Regional Department (SEREMI), will sign an agreement on contributions of resources to the project. The implementation period for the project will be 36 months, and the disbursement period will be 42 months.

| Budget Categories | MIF | LOCAL CONTRIBUTION | TOTAL |
|--|----------------|--------------------|------------------|
| Component I Start-up of collection centers and collection points (or “clean points”) and strengthening of waste pickers’ business management | 292,130 | 323,210 | 615,340 |
| Component II Establishment of business ties with the private sector (businesses and civil society) | 35,200 | 22,790 | 57,990 |
| Component III Strengthening of municipalities to contribute to a recycling system that involves both the waste pickers and the community | 16,000 | 73,440 | 89,440 |
| Component IV Knowledge management, monitoring, and communications strategy | 150,100 | 24,300 | 174,400 |
| Project administration | 4,960 | 243,720 | 248,680 |
| Baseline, monitoring, and evaluation | 45,000 | 0 | 45,000 |
| Ex post reviews | 20,000 | 0 | 20,000 |
| Contingencies | 21,167 | 3,833 | 25,000 |
| SUBTOTAL | 584,557 | 691,293 | 1,275,850 |
| Institutional strengthening (training on procurement) | 3,000 | 0 | 3,000 |
| Agenda account “Linking Small Firms to Value Chains” | 30,000 | 0 | 30,000 |
| Impact Evaluation Account (5%) | 65,443 | 0 | 65,443 |
| OVERALL TOTAL | 683,000 | 691,293 | 1,374,293 |

¹² Preliminary conversations with Sorepa, Gerdau AZA, and Tetra Pak.

- 4.2 **Sustainability of the project.** The project will support greater sustainability of the model on which the organizations of informal waste pickers are based, by strengthening them and preparing them to have a stronger position in negotiations with both buyers and sellers of recyclable materials and vis-à-vis the municipalities. With project support, the activity of collecting, bulking, and selling recyclable materials is expected to become profitable, supplementing (or subcontracted to perform) the activities of the municipality.
- 4.3 At least six months before the end of the project execution period, a sustainability workshop will be held, with the participation of representatives from the MIF, the executing agency, and others to be agreed upon. They will evaluate the progress achieved and identify whatever measures and steps may be needed to ensure the continuity of the actions once the project's funding has ended. The scope and structure of this sustainability workshop will be determined by the executing agency, after prior consultation with other interested parties. The result of the workshop will be the formulation of a Sustainability Plan.

V. EXECUTING AGENCY AND EXECUTING MECHANISM

- 5.1 The project's executing agency will be **Fundación Casa de la Paz**, a nonprofit organization created in 1983. Its regular work involves sustainable development and the associated economic, environmental, and social variables. Accordingly, it has in place a multi-disciplinary team of specialized professionals in the areas of community development, environmental education, and citizen participation.
- 5.2 The executing agency's objectives include: (i) investigating and disseminating the issues and values associated with peace and environmental protection; (ii) proposing methodologies, educational materials, training opportunities, and technical assistance to enhance the participatory environmental management capacity of the various stakeholders; (iii) facilitating agreements that provide links among different citizen organizations, and between such organizations and other actors involved in sustainable development; and (iv) promoting social responsibility based on the proposition that economic growth, social peace, and environmental protection are three basic pillars of sustainable development.
- 5.3 Since 2004, Fundación Casa de la Paz has been implementing a series of projects designed to strengthen waste pickers and improve recycling management in a number of localities throughout the country. The foundation will set up a unit for this project, comprised of a project coordinator and an administrative/accounting assistant.
- 5.4 **Results-based disbursement:** Project disbursements will be contingent upon verification, according to the methods specified, that the milestones agreed upon by Fundación Casa de la Paz and the MIF (see Table of Milestones in the project's Technical Files) have been met. Achievement of these milestones does not exempt the foundation from responsibility for meeting the project objectives and the indicators established in the logical framework.

- 5.5 Pursuant to the risk- and performance-based project management modality, project disbursement amounts will be determined based on the liquidity needs of the project, for a maximum period of six months. These needs will be agreed upon by the MIF and the executing agency, and will reflect the activities and costs programmed in the annual planning exercise. The first disbursement will be subject to attainment of Milestone 0 (conditions precedent) and subsequent disbursements will be made provided the following two conditions are met: (i) verification by the MIF that the milestones have been met, as agreed in the annual planning exercise; and (ii) the executing agency has justified 80% of the cumulative advances of funds.
- 5.6 **Procurement.** For the procurement of goods and the contracting of consulting services, the executing agency will be governed by the Bank's Procurement Policies (documents GN-2349-9 and GN-2350-9). Given that the Executing Agency Diagnostic of Needs (DNA) indicated a *medium* level of need/risk, the project team determined that, in accordance with Appendix 4 of the above-referenced procurement policies, the executing agency, a private-sector entity, will use the private-sector methods describe in Annex 1 to the Technical Cooperation Operational Guidelines (document OP-639). Moreover, project procurement will be reviewed *every six months on an ex post basis*. Using resources from the MIF contribution, the IDB/MIF will hire a consulting firm to conduct training on any procurement area in need of strengthening, as identified in the DNA analysis (<http://mif.iadb.org/projects/prjrissummary.aspx?proj=CH-M1055>). Prior to the start of any contracting or procurement process for the project, the executing agency will submit the project's Procurement Plan for MIF approval. This plan will be updated annually and whenever there is any change in the methods and/or in the goods or services to be procured.

VI. MONITORING AND EVALUATION

- 6.1 **Baseline and monitoring.** Fundación Casa de la Paz will establish a results- and impact-based monitoring system for the project, which will be based on the indicators contained in the logical framework, the annual work plan, and other programming instruments agreed upon with the MIF. The system will provide for establishing an appropriate baseline at the start of the project in order to measure, at a minimum, the progress achieved during the course of project execution as well as midway through and at the end of the project. Fundación Casa de la Paz will provide the MIF with updated information on the basic parameters for the indicators contained in the logical framework as of the date the agreement between the MIF and Fundación Casa de la Paz is signed. The foundation will be responsible for compiling and analyzing the information needed to carry out ongoing monitoring of the project's execution and of the indicators established in the logical framework (Annex I), and will report such information to the MIF every six months.

- 6.2 **Project Status Reports.** The executing agency will be responsible for submitting Project Status Reports (PSRs) to the MIF within 30 days following the end of each six-month period, or more frequently, and on the dates stipulated by the MIF, subject to advance notice to the executing agency of at least 60 days. The PSRs will report on progress in executing the project, the attainment of milestones, the outcomes obtained, and their contribution to the achievement of the project's objectives, as indicated in the logical framework and in other operational planning instruments. The executing agency will also report any problems encountered during execution, along with possible solutions, lessons learned, and prospects for sustainability. Within 90 days following the end of the execution period, the executing agency will submit a Final PSR to the MIF prioritizing results achieved, the sustainability plan, findings of the final evaluation, and lessons learned.
- 6.3 **Financial management and supervision.** The executing agency will establish and be responsible for maintaining an adequate accounting system for project finances, internal controls, and filing systems for the project, pursuant to the provisions established by IDB/MIF financial management standards and policies. Given that the DNA indicated a *low* level of need/risk for the financial management section, the review of supporting documentation for disbursements will be conducted **annually on an ex post basis**. (<http://mif.iadb.org/projects/prjrissummary.aspx?proj=CH-M1055>).
- 6.4 The MIF, through the Bank's Country Office in Chile, will hire independent auditors to conduct the ex post reviews of procurement processes and supporting documentation for disbursements. The scope of the ex post reviews will include a review of the annual financial statements that the executing agency is required to prepare as part of its financial management. The cost of contracting these services will be financed with funds from the MIF contribution, in accordance with Bank procedures. During project execution, the frequency with which ex post reviews of procurement procedures and of supporting documentation for disbursements are carried out, and the need for additional financial reports, may be modified by the MIF based on the external auditors' findings from the ex post reviews.
- 6.5 **Evaluations.** The project provides for two process evaluations—midterm and final—both to be carried out by a specialized consultant selected and hired directly by the Bank. The midterm evaluation will be conducted 18 months after the first disbursement or when 50% of the committed resources have been disbursed, whichever occurs first. This evaluation will cover the following, among other matters: (a) the extent to which the project's components and activities are consistent with achieving the project's defined objectives; (b) an assessment of the progress made during project execution; (c) the results achieved in executing the various components; (d) any potential deviations in executing the project; (e) lessons learned during project execution; and (f) any recommendations deemed necessary to alter the project in order to achieve its defined targets. In particular, the quantitative and qualitative indicators set out in

- the operation's logical framework will be taken into account. Based on the status reports and the midterm evaluation, the Bank's Country Office in Chile will conduct an analysis, with support from the Bank's project team, to determine whether the project should continue, be adjusted, restructured, or, potentially, totally or partially terminated.
- 6.6 The final evaluation will be carried out when the project has been completed or when 95% of the resources have been disbursed, and will take into account, in addition to the factors considered in the midterm evaluation: (i) progress achieved in terms of consolidating the business models of the waste picker organizations; (ii) scope and coverage of the project with regard to the communities in which the interventions occurred; (iii) the likelihood of achieving the impact indicators defined, such as increased income for the waste pickers and improvement of their working conditions; (iv) evidence of the effectiveness of the intervention; and (v) lessons learned and recommendations for the sustainability of the initiative, as well as for the design of future similar projects.
- 6.7 As in the case of the monitoring system, the results of the evaluations will provide feedback for the knowledge on recycling in the RRI. The RRI evaluation plan envisaged that midterm and final evaluations will be designed individually for each project, given that the approach, objectives, and beneficiaries of each operation (as would be the case for this project) may vary.
- 6.8 **Startup and closing/sustainability workshop.** A startup workshop will take place when project execution begins and, in the context of the final evaluation, a closing workshop will also be organized, with the participation of Fundación Casa de la Paz, the MIF, and other participants to be agreed upon with the MIF, in order to collectively evaluate the results achieved and to identify any additional tasks required to ensure the sustainability of the actions initiated by the project, as well as to identify lessons learned. In addition, steps will be taken to identify any measures necessary to ensure the continuity of the project's actions once the MIF funds have been exhausted.

VII. PROJECT BENEFICIARIES AND RISKS

- 7.1 **Beneficiaries.** The direct beneficiaries of the project will be 400 waste pickers and their families, who carry out their activities in one of the three Metropolitan Region *comunas* selected. The indirect beneficiaries of the project will be the community as a whole, in that natural resources will be used more rationally and the volume of waste subject to final disposal will be reduced.
- 7.2 **Risks.** The potential political, economic, environmental, sectoral, sustainability, implementation, and technical risks that could affect the project were analyzed.
- 7.3 Lack of infrastructure: In order for the strengthening of the waste picker organizations to be effective, and for the business model to function, collection

- center and/or clean point infrastructure is needed. Mitigant: Coordination and complementarity with the Santiago Recycles Plan and the resources it provides.
- 7.4 Poor participation by the municipalities: Participation by the municipalities is essential to be able to incorporate waste pickers in the formal systems, since the municipalities “own” the waste in the *comunas*, provide permits to establish collection centers, and subcontract the services. Mitigant: The project establishes an intervention model by which the municipality is a close ally and an integral part of that model in various capacities, including the training of technical personnel and municipal employees to bolster local capacities.
- 7.5 Complexity in the intervention with the beneficiaries. Waste picker organizations are highly diverse groups with differences in terms of gender, level of education, and degree of organization, among other factors. Mitigant: The project will establish a baseline profiling the beneficiaries in the three *comunas*, so as to be able to carry out activities in harmony with their respective circumstances and characteristics in order to ensure the success of the project.
- 7.6 Lack of citizen participation. Citizen participation is essential to attaining the volumes needed for the success of the organizations and of the overall system. There are few programs involving separation of waste at the source and selective collection. Mitigant: The project includes communication and awareness-raising activities directed at citizens and municipalities alike, in order to give the issue greater visibility and promote solutions to these challenges.
- 7.7 Present lack of an established set of regulations for managing solid waste. Mitigant: The project will work closely with the *municipios* and relevant government agencies in order to develop effective coordination between them, and with other stakeholders, so that, regardless of legislation, a model that includes waste pickers and increases recycling rates will be promoted.

VIII. ENVIRONMENTAL AND SOCIAL ASPECTS

- 8.1 No adverse environmental impacts are expected. The project will contribute to increasing the volume of solid waste that is recycled and to reducing the amount of waste that must be disposed of, while also helping to build a model, with the participation of the waste pickers, that formally incorporates them into the recycling market as buyers/sellers of materials, and as providers of quality services, thus increasing their incomes. The planned activities are also designed to improve their working conditions.
- 8.2 An analysis will be made of gender and ethnic issues and of the need for specific interventions, and these will be taken into account in the baseline indicators for purposes of monitoring. The awareness of the population regarding environmental issues will be raised and residents will have the opportunity to participate in recycling programs in the *comunas*. All of these factors will help grow the economy of the waste picker groups.

- 8.3 This operation was analyzed and classified, as required by the IDB's safeguards policy (OP-703). Given the limited impacts and risks, the category proposed for this operation is a "C".