FORGING VALUE FROM SCRAP

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The Inter-American Development Bank is working with a steel company in Ecuador to turn what was once a small incentive program for scrap collectors into a pillar of its growth strategy—and in the process, build shared value.

Ecuador's largest steel company, Adelca, has a supply chain that crisscrosses the country's highways and byways, reaching into practically every city or small town where someone might have an antiquated stove or some beat-up tools to discard.

Adelca Chief Financial Officer Juan Xavier Falconi likes to joke that he and his competitors are "fighting over an old tricycle." But in a country with a shortage of ferrous scrap—recyclable iron and steel—enough of those tricycles can make a real difference.

Short for Acería del Ecuador C.A. (Steelworks of Ecuador, Inc.), Adelca has a large foundry in the Andean town of Alóag, on the outskirts of Quito. The plant's melt shop turns ferrous scrap into lengths of steel known as billets. These are then put through a rolling mill to produce rebar, galvanized wire, mesh, nails, and other "long steel" products used in the construction industry.

Adelca gets its raw materials from a range of sources: It has its own scrap-collecting operations in Central America, as well as a ship-breaking facility in southwestern Ecuador to repurpose old vessels. It also imports scrap from other countries, mainly the United States.

But more than half of its raw materials come from wholesale and retail suppliers in Ecuador. And a critical component of that supply chain is the network of small to medium-sized providers who accumulate the scrap piece by piece, pile by pile, ton by ton.

As the company prepares to build a second steel plant—with significant financing from the Inter-American Development Bank (IDB)—it is looking to maximize the amount of scrap it can source from these smaller providers. That will not only save Adelca money but will also help individuals and small businesses at the lower end of the supply chain, and ultimately benefit their communities.

That alignment of interests produces "shared value"—the win-win that occurs when corporate and societal goals overlap. The IDB has developed a mechanism called the Shared Value Appraisal, which it is implementing for a growing number of its private-sector investment projects. The appraisal process includes a rigorous cost-benefit analysis to identify targeted actions that would both add social value and help a company's bottom line.

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In the case of Adelca, the opportunity for enhancing shared value was evident from the start. The company needs scrap iron—lots of it—and many of the small businesses that collect it could use some support and training to be able to grow. The more Adelca can help them succeed, the more reliable these suppliers will become.

“In this case in particular, the interests are very aligned—the Bank’s interest in bringing about a social benefit and the company’s interest in improving its business,” said Carlos Narvaez, the lead investment officer on the IDB loan. “This was clearly an important opportunity both to improve the company’s scrap collection and its margins, and to improve the quality of life for the scrap collectors.”

The company had started an incentive program, called the Recyclers Club, to build loyalty among its smaller suppliers. The IDB team quickly realized that this effort had the potential to reach a whole new level. Through its appraisal process, the IDB team developed a comprehensive, five-year strategy, laying out several key areas where the company could invest in its smaller suppliers and expect to see a return on that investment in just a few years.

“By quantifying the impact of the investment, we were able to demonstrate to them with a greater degree of certainty that this is viable and sustainable,” said Andrés Lavarte, who managed the Shared Value Appraisal. “Once the program is fully scaled up, it will no longer be just a loyalty program but an integral, structural part of the company’s growth strategy.”

“GRAB WHAT YOU CAN”

An alloy of iron and carbon, steel can be produced either from iron ore or from scrap metal. Ecuador does not mine any iron ore, so all of its domestically made steel is manufactured from scrap. This might include excess material from production—say cuttings from an appliance manufacturer—or metal that can be recycled at the end of a product’s useful life.

Steel can be recycled over and over again with no loss of strength, and in fact it is the most recycled material in the world, according to the American Iron and Steel Institute. The most developed economies tend to have the most scrap, since they have a longer history of producing steel products.

Demand for steel has risen at a healthy pace in Ecuador in recent years, a result of growth in the construction industry and public infrastructure investment. While Ecuadorian companies produce most of the long steel the country needs, the domestic scrap supply falls far short of demand. This forces manufacturers to import some of their raw materials, adding to their costs.

The name of the game is to secure as much local market share as possible—“Grab what you can,” as one Adelca official put it. “Any volume you can buy locally is volume you don’t have to buy abroad,” explained Daniel Carrión, who along with Fernando Calisto runs the company’s scrap metal operations.

Adelca not only wants to source as much material as possible domestically, but also to lessen its dependence on intermediaries. Currently, more than two thirds of the scrap metal the company is able to source in Ecuador comes from large dealers who buy it up from small suppliers. By increasing the amount of business it does at the lower end of the chain, Adelca can eliminate a layer of costs and get more people collecting scrap metal on its behalf.

When it created the Recyclers Club, in 2011, the company was already paying competitive prices for its main raw material, but it wanted to give scrap suppliers additional incentives to do business with Adelca instead of its competitors. Adelca earmarked a $50,000 marketing budget to start the program on a trial basis.

That effort was starting to pay off when the company approached the IDB about a loan for its new plant. IDB officials recognized that the Recyclers Club was not just a good marketing idea but that it had the potential to create shared value on a large scale. From the beginning of the loan approval process, the IDB set into motion—at no cost to Adelca—its Shared Value Appraisal to determine how to expand the effort most effectively.

The result was a detailed roadmap with recommendations that would enable the company to take what had started out as a $50,000 experiment and turn it into a $2.7 million program central to the company's core business.

"Unlike traditional lenders, we're always looking at projects within a broader development context," said Kelle Bevine, chief of strategy in the IDB's Structured and Corporate Finance Department, which makes loans to the private sector. "As important as it is to finance a new plant, we don't want to stop there. We also want to work with borrowers to see how they can sustainably strengthen their business model and increase their social and economic impact."

A STRONG FOUNDATION

A family-owned company that got its start more than 50 years ago, Adelca is currently run by Carlos and Felipe Avellán, sons of the company's founder, Patricio Avellán. Falconi said the company's philosophy has always been community-minded: "You take care of people and people take care of you."

Adelca has more than 1,300 employees nationwide, about 800 of whom are in Alóag, located in an agricultural and ranching region in Pichincha Province. As the town's largest employer, Adelca has taken numerous steps in recent years to improve the community. It provided the town with an Internet center and a sports complex, and runs a number of programs to support area schools. The company opened a free medical clinic for local residents and supports efforts to raise awareness about autism and cancer. It also implements some of its social programs around the country, where its 14 scrap collection centers are located.

Now Adelca is gearing up to build a second, larger steel plant in Milagro, in the southwestern province of Guayas. The $131 million project is scheduled for completion in 2017. The new plant will add more than 500 permanent jobs and will more than double Adelca's potential output, adding an installed capacity of some 400,000 metric tons per year to the 309,000 at the Alóag plant.

Once the Milagro plant is finished, Adelca will have to increase its imports—a new product it will make there requires a type of scrap not available in Ecuador—but it will also need to source a larger volume locally to meet growing market demand. That makes it more important than ever to optimize its supply chain.

THE RECYCLERS CLUB

Think of scrap metal, and the first words that come to mind are probably not all that attractive: "scavenging," "junkyard," even "the scrap heap of society." When Carrión and Calisto started working on the idea of a loyalty program for Adelca, they decided from the outset not to refer to their suppliers as chatarreros (scrap collectors).

"The first important point is to call them recyclers, so that they understand they are fulfilling an important role for the environment," Carrión said.

The Recyclers Club offers incentives for providing scrap metal exclusively to Adelca. It starts with simple perks such as T-shirts, protective gear, and signage. As providers increase their volumes, they earn vouchers that can be redeemed in grocery stores and fast-food restaurants. Once they establish a relationship with Adelca, they become eligible for the most valuable reward—money up front to finance purchases of scrap metal. The company advances up to 75 percent of expected sales, with the balance paid upon delivery.

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Adelca buys more than 14,000 metric tons of scrap metal per month from all of its suppliers in Ecuador. Most members of the Recyclers Club provide anywhere from 5 to 60 tons per month, though some have graduated to larger volumes.

On the smaller end, a recycler may collect scrap by driving up and down city streets in a pickup with a loudspeaker mounted on the roof, offering to buy people's old bicycles or refrigerators. Maybe he has a small neighborhood collection point where he can buy up metal and store it until the pile gets big enough to sell to Adelca.

Most of the business at this level is done in cash, and a major challenge for small suppliers is to have enough capital on hand. The amounts are hardly negligible: Depending on the volume it handles, a small scrap metal business may need several thousand dollars per week to be able to pay its suppliers.

Having access to cash in advance can make all the difference for a small business. Take César Morante and his wife, Lucy Abad, who run a recycling operation in Guayaquil [see Page 6]. They joined the Adelca rewards club in 2012, and in the first three years their weekly advances from the company climbed from about $3,000 per week to as high as $7,000.

"Thanks to those benefits, we were able to open up the market," Morante said in a phone interview. "Adelca pays us in advance, so we can pay our suppliers in cash. The people who sell to us don't have to spend the time to go to a bank and get a check cashed. That's part of the strategy."

Their company, which used to sell Adelca about 30 tons per month, now provides 100 tons or more—exactly the sort of success story the shared value program is designed to replicate. Of course, there's still a huge gulf between what a mom-and-pop business can provide when compared with a large wholesaler. But added all together, the more than 150 members of the Recyclers Club are now Adelca's second largest local provider, according to Carrión. Plus, he said, the default rate on the funds paid in advance has been extremely low, less than 1 percent.

When it designed the program, Carrión said, Adelca talked to its smaller providers to figure out what would make their lives easier. For example, some drivers who were on the road all day said they often ended up skipping lunch—hence the food vouchers. The club members "feel they are treated well," Carrión said. "It's a cost for Adelca, but the benefit is higher than the cost."

That concept—the benefits of social investments outweighing the costs—goes to the heart of shared value. As Michael E. Porter and Mark R. Kramer explained in their 2011 seminal piece on shared value in the Harvard Business Review, "It is not philanthropy but self-interested behavior to create economic value by creating societal value."

Adelca started its Recyclers Club to create economic value, but it found the potential for added societal value appealing. The IDB Shared Value Appraisal, Carrión said, helped the company understand that there were aspects involved "beyond merely what is advantageous for the company in terms of dollars in cash flow."

THE APPRAISAL PROCESS

Through the Shared Value Appraisal, the IDB set out to identify what investments would make the most sense for Adelca and create the most value all around. For example, how many days of training would a small scrap supplier need to become more efficient? How much would that cost Adelca? If a recycler received proper training, how much more scrap metal could he deliver to the company? What impact would that increase have on the company's bottom line? How many jobs might be created in the community if recyclers could grow their businesses by a certain percentage? How could more women be included in a traditionally male-dominated industry?

The IDB conducted the detailed assessment over a period of several months, in close consultation with Adelca and in parallel with the due diligence on the overall loan. The team interviewed many of the key players involved, from recyclers to company executives. It delved into the numbers to break down the short- and long-term costs and benefits of taking different actions.

UPWARD MOBILITY

To get an idea of how a small recycling company can grow and thrive—and, by extension, benefit Adelca—take a look at César Morante and Lucy Abad.

The couple started out with not much more than a little know-how (passed along from some of his uncles who are in the business), a pedal-powered cart, and a spare room in her mother's house where they could amass any scrap metal they collected. They soon outgrew that arrangement and rented a small space. Now, some 10 years later, they own their own warehouse in Guayaquil, along with two trucks, and employ three members of the family—Abad's father and brother, who drive the trucks, and a niece who helps Abad out in the office.

Over the years, they've been able to invest in equipment, including a forklift, a compactor, heavy-duty scales for weighing trucks loaded with scrap, and security cameras to help protect it all. Since they've been with the Recyclers Club, the volume of scrap they sell to Adelca has more than tripled. Now they have three Adelca containers on their property which they fill up as they go along, saving them hours in loading time when an Adelca truck comes to collect the scrap.

Their company, Reciclamos, buys scrap from smaller collectors in nearby towns, local schools, and businesses ranging from appliance manufacturers to companies in the fishing industry, as well as from customers who show up at their warehouse with a sack or cart or carload of items to sell. In addition to the scrap metal they collect for Adelca, they also handle bottles, plastic, cardboard, and other items.

"Sometimes we have a line here as long as you see at the bank," Abad said with a laugh. She and her husband have taken their children on vacations to Colombia and Panama. He was able to finish his university degree, and she is now studying for a degree in economics. Someday, Morante said, he hopes they can buy a bigger lot and expand the business even further.

"Every day I'm growing more, with new goals," Morante said. "This is good work, decent work," he said, adding that he now thinks of himself "not as a collector but as a microbusiness owner."

The appraisal process was funded through grants and carried out by a team that included local and international experts from the IDB and the Deloitte consulting firm, which the IDB retained to assist in the process. The appraisal team also worked with nongovernmental organizations in Ecuador, as well as consultants with experience in training small businesses in the scrap metal industry in other countries, to ferret out some of the most pressing social needs.

Ultimately, the IDB team identified four areas where Adelca could come out ahead while helping its small providers: improving storage, transportation, and logistics; providing business and technical training; helping providers get financing from local banks; and expanding loyalty programs. The appraisal concluded that by taking all these actions together, the company could increase the overall volume of scrap it bought from smaller providers across the country. And it would earn a return on its investment within two to three years, depending on different variables.

The shared value program, which will be financed jointly by the IDB and Adelca, has been incorporated into the loan agreement, meaning it can be financed over a longer period of time than most such investments.

Adelca CFO Juan Xavier Falconi said that when the appraisal process first began, the company had not yet decided whether to try to further expand the Recyclers Club. This was a pilot marketing initiative that had been growing organically, he said, and Adelca had not done an in-house analysis to determine how well the effort was working.

With the Shared Value Appraisal, he said, the initiative was "validated by a third party," with numbers to back it up. The appraisal process fleshed out details about what could be done and helped formalize the initiative and lay out the next steps to expand it, he added.

"It gave the program a little more relevance and importance within the company," Falconi said. "It's easier to understand it. It's easier to sell internally."

RAMPING UP

The IDB team estimates that by year five of implementation, the shared value program will benefit more than 800 suppliers in its value chain and provide the company with an additional 80,000 tons of scrap. While all of its suppliers stand to benefit from some aspects of the program, the main goal is to target two specific groups: small businesses (both informal and formal) that currently supply 5 to 60 tons per month, and slightly larger ones that supply 60 to 200 tons. These latter suppliers are formal companies with sizeable scrapyards, but still not on the scale of wholesalers. As businesses in these two categories grow, they will create more jobs and also buy more scrap, which in turn benefits the poorest scrap collectors at the base of the recycling pyramid.

The appraisal report lays out a schedule for implementing each step, with four broad categories for investment:

Storage, transportation, and logistics—Scrap metal is heavier, bulkier, and therefore harder to store and transport than many recyclables. This creates a disincentive for some truckers and small recycling businesses; they may simply decide that plastic is easier to handle. Essentially, as one Adelca official put it, the company is "competing for space in people's trucks." One step Adelca has started taking to overcome that obstacle is to provide suppliers with storage containers that can be easily rolled on and off Adelca trucks equipped with hydraulic equipment. These "roll-on roll-off" containers save the suppliers valuable loading and unloading time. They also keep everything cleaner, since the metal doesn't sit on the ground. By providing these containers, Adelca can operate a "milk run"-style system in which one company truck can pick up several loads a day, making the rounds among different suppliers.

The shared value program will enable the company to implement this system on a large scale; in fact, for maximum efficiency, virtually all Adelca suppliers of any size will have these containers on site. This is by far the most expensive of the steps planned, accounting for almost two-thirds of the total investment—think of all those trucks, hydraulic systems, and containers—but it also has the potential to add the most volume collected. The appraisal team stressed that smaller suppliers should be given training and other incentives to ensure that they can use this system effectively to increase the amount of scrap they collect.

Business and technical training—Small recyclers often lack any formal training and are not necessarily equipped to grow their businesses effectively. Segundo Llerena, one of the first members of the Recyclers Club, explained how he got into the scrap business a few years ago: “I saw a way to help myself because I was in a difficult financial situation,” he said. “Thank God we’ve been able to get ahead.” Llerena has a small collection site where people bring him scrap metal, which he is now able to pile into an Adelca roll-on roll-off container. He doesn’t own a truck, though, which he said would help him grow, and he doesn’t think he would be able to get a vehicle loan at the bank. Llerena said he would be interested in receiving some business training. “It’s always important to learn in all walks of life,” he said.

Training is one of the most important components of the overall program, and plans are underway to develop a comprehensive training plan geared to the needs of small and medium-sized suppliers, according to Lavarte. “It’s by building capacity that you’re going to be able to get a business to grow from 5 to 60 tons,” he said. Possible training topics include courses in accounting and financing as well as technical instruction on how to sort and classify scrap, properly dispose of hazardous materials, and improve worker safety.

Many smaller suppliers also need training in how to formalize their businesses—a step that can produce benefits both for individuals (for example, access to bank loans) and for society (tax payments). Under Ecuador’s tax system, small-scale recyclers can operate legally on an informal basis, but there are restrictions on the number of transactions they can perform. Also, Adelca officials say, informal businesses are sometimes taken advantage of by unscrupulous buyers, who may pay them less than the market price or charge them high fees for paperwork. Plus, these smaller collectors do not necessarily have bank accounts, raising safety concerns. Adelca has already worked with some of its smaller providers to help them formalize their operations and mitigate any tax impact, an effort that will expand under the shared value program. “For a provider that’s growing and gets to a certain size, it’s no longer an option, it’s a necessity,” Carrión said.

Financing from local banks—Another common obstacle for recyclers is access to financing, especially for small providers who may lack a credit history or have poor credit. Building on its practice of providing up-front financing for members of the Recyclers Club, Adelca recently began to partner with Ecuador’s Banco Pichincha to help some of its suppliers establish a direct relationship with the bank.

This effort is designed to help suppliers gain access to more credit—not only for working capital, but perhaps even to buy equipment or make other investments. The idea is that once some of these businesses have worked out their logistics and transportation challenges, they will be more equipped to grow and will need more financing.

Expanded loyalty programs—Based on the success of the Recyclers Club, the appraisal team recommended marketing the club to bring in new small providers and make some loyalty benefits available to truck drivers, not just the businesses that warehouse the scrap.

Across all these areas for action, the IDB team looked at ways to address the needs of minority or disadvantaged groups. For example, it recommended helping to set up scrap collection centers in rural regions with predominantly indigenous or Afro-Ecuadorian populations. Currently, outsiders tend to drop into these communities sporadically to collect recyclables, but with local collection centers, the supply would be more reliable and more income would likely stay in the community.

Although the vast majority of scrap recyclers are men, the Shared Value Appraisal looked at ways to ensure that women would also benefit. In many cases, women handle the administrative side of the business and could use some training in accounting and money management. Such training sessions could help women feel more empowered in other areas of their lives as well.

“Through the shared value framework we try to make sure that as many people and communities as possible can share in both tangible and intangible benefits,” said the IDB’s Kelle Bevine. “The bottom line is that something can be good for business and good for society too.”

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www.iic.org.

For inquiries please contact:
iicmail@iadb.org