Starting in 1906 in Oregon as a one-man scrap metal business, Schnitzer Steel has long understood the importance of finding new value in discarded materials. Today, we are investing in new technology to enhance recovery of metallics and meet customer quality needs, while minimizing environmental impacts.

Our Metals Recycling Business diverts steel and other metals from landfills and puts this material to productive use throughout the world. Every ton of recycled steel conserves 2,500 pounds of iron ore, 1,400 pounds of coal and 120 pounds of limestone. It also reduces the greenhouse gas emissions associated with mining virgin iron ore and ore-based steel production.

Our Steel Manufacturing Business is operated on highly efficient and sustainable business practices, which are constantly evaluated for improvement. For example, the innovative electric arc furnaces that process scrap metal use 75 percent less energy than furnaces used in ore-based steel production.

Our Auto Parts Business reduces the need to manufacture new parts by providing affordable used auto parts to consumers across the U.S. and Canada. We recycle about 300,000 cars annually, with estimated savings equivalent to 8,811 pounds of CO₂ per car.

As we look to the future, we are confident that sustainability will remain central to our business success, providing additional opportunities to obtain added value from recyclables.
In times of economic and environmental challenges, Schnitzer Steel’s long-held commitment to sustainability is more important than ever. Seeking added value through conservation, preservation, recycling – these are the principles underlying more than a century of success.

As a world leader in the metals recycling sector, we are constantly demonstrating that it is possible to thrive as an environmentally responsible business. We support our environmental initiatives with the capital investment, training and evaluation needed to succeed. And we are always looking beyond what’s required in order to get the best long-term result.

Our environmental policy commits us to practicing sustainable recycling and operating the business in an environmentally responsible manner. We’ve put teeth into this policy by embedding sustainability into decision-making, addressing standards of care, identifying responsibilities, requiring environmental management and mandating continued evaluation.

As you will see from the stories gathered in this brochure, our commitment to sustainability has brought about new opportunities for creativity and leadership. We have chosen stories that represent certain priorities, but for every example featured, there are also many other projects being carried out by our dedicated employees throughout the company.

These stories illustrate that what is good for the environment is also good for people and business in the long run. Finding efficient, creative solutions to tomorrow’s environmental challenges will go hand-in-hand with our continued vitality and success.

FROM THE PRESIDENT AND CEO, AND CHAIRMAN

AUTO PARTS RECYCLING
In fiscal 2009, Schnitzer Steel’s Auto Parts Business, Pick-n-Pull, processed about 342,000 end-of-life automobiles. Skilled technicians remove the fuel, oil and other fluids that arrive with each vehicle. Customers recover and reuse competitively priced, quality parts. Then, the auto bodies are crushed and sent to metals recycling facilities.

METALS RECYCLING
Our Metals Recycling Business processed more than 4.1 million tons of ferrous metal in fiscal 2009. In addition, the company processed 397 million pounds of nonferrous metals.

STEEL MANUFACTURING
Cascade Steel Rolling Mills produces steel reinforcing bar (rebar), wire rod, merchant bar, coiled rebar and other specialty products using recycled steel — the most recycled product in the world — as feedstock.

John D. Carter
Chairman
Tamara Lundgren
President and Chief Executive Officer
Salvaging the past to power the future

“This program has made it easy for fishermen to recycle their unusable, heavy equipment — they don’t have to pay or go out of their way. Some have also found a new source of income in retrieving abandoned gear from the ocean floor.”

— James Banigan, General Manager, Schnitzer Steel Hawaii
Inspired by the successful participation in a Hawaii-based program for transforming ocean debris into energy, Schnitzer Steel is now a partner in the national Fishing for Energy initiative, a project that takes place in Maine, Massachusetts, New Jersey, New York, Oregon and Rhode Island. The partnership is a boon for fishermen, local communities and the marine environment, and has already reclaimed and recycled countless tons of old fishing gear.

**Underwater hazards**
Unseen and largely forgotten, tons of old fishing nets, ropes, lobster traps and fishing buoys litter the world’s oceans. Scientists estimate that 640,000 tons of derelict gear is left behind every year. Once abandoned, this equipment often begins a second life “ghost fishing,” snagging everything from commercially valuable fish to endangered turtles to boat propellers.

With our long tradition of environmental stewardship and expertise at finding value in discarded material, Schnitzer Steel is helping to provide a solution. Our company is a volunteer partner in the Fishing for Energy program, donating hauling and recycling services so that the collected ocean debris can later be turned into clean energy.

**Adding expertise**
One of the first large-scale programs to recover and recycle ocean debris began in Hawaii, where recovered fishing nets were collected and incinerated to produce energy.

Schnitzer Steel Hawaii’s hauling and shredding services helped make that program a success. Now the effort is being expanded to include more partners, more communities, more resources, more fishermen and more old gear. The Fishing for Energy partnership includes the National Oceanic and Atmospheric Administration Marine Debris Program, the National Fish and Wildlife Foundation, Covanta Energy and Schnitzer Steel.

“With Schnitzer Steel and Covanta’s help, the old gear has been recycled and turned into clean energy — enough to power 300 homes on Oahu.”

— Rene Mansho, Community Relations Director, Schnitzer Steel Hawaii

The program brings the solution right to the source. Collection bins are provided at the docks, where fishermen can conveniently deposit their gear. From there, Schnitzer Steel provides the recycling expertise. When the bins are full, the gear is transported to a Schnitzer Steel facility. Metal components from crab pots, gear rigging and other debris are separated for recycling. Ropes and nets are sheared into small pieces. Next, the gear travels to the nearest Covanta Energy-from-Waste facility, where it is converted into electricity.

Now that the program has expanded, more fishermen on both coasts can dispose of their old fishing gear for free, and some even get financial incentives to pull abandoned gear out of the water.

Building on this success, Schnitzer Steel and its partners are exploring other locations for launching new programs.

“Having the fisheries agencies, the ports, and the waste and recycling industries all working together shows what can be done when everyone gets together to solve an environmental problem.”

— Ron Wyden, United States Senator
Fishing for Energy, August 2009
Off the road and into the right hands

This past summer, Americans across the country exchanged their old vehicles for new, more energy-efficient models. Schnitzer Steel played an integral role by handling the “clunkers” in the most efficient, eco-friendly way possible.

By taking more than 700,000 gas-guzzling vehicles off the road, the federal Cash for Clunkers program benefited consumers, car makers and the environment. But what happened to all those clunkers after new vehicle owners went driving off into the sunset? They began a new life of service, providing used parts for area consumers and scrap metal to be melted into new steel products. Schnitzer Steel made it easy for auto dealers to recycle. Hundreds of car dealerships registered with Schnitzer’s Clunkers Recycling dealer program and with our Auto Parts Business, Pick-n-Pull Auto Dismantler.

“We’ve been recycling vehicles for decades. We gave dealers 100 percent assurance that the old vehicles would be handled in an environmentally responsible manner.”

— Ted Horton, Director of Production, Pick-n-Pull

Our commitment to conservation and decades of experience dismantling vehicles helped new car dealers meet the requirements of the federal Cash for Clunkers program. We are experts in identifying, removing, recovering and disposing of hard-to-handle materials in a way that minimizes impact on the environment. That experience ensured that the “clunkers” didn’t end up as future problems.

Obsolete cars may come from programs like Cash for Clunkers, or from sources ranging from individuals or auction house sales to municipal abandoned vehicle tow programs or charitable non-profit donation programs. Whichever the source, Pick-n-Pull is set up to address their needs as well as ensure the vehicles are recycled in the most comprehensive way.

The federal Cash for Clunkers program ended in August of 2009, but visitors to Pick-n-Pull self-service auto parts stores continue to see the benefits, thanks to the increased availability of high-quality, inexpensive, reusable auto parts.

“We’re not just recycling, we are encouraging people to reuse. Cash for Clunkers has benefited not just those who bought new cars, but also the people who wanted to keep their current car running efficiently,” said Ted Horton, Director of Production, Pick-n-Pull.

Schnitzer Steel also partners with state and local vehicle retirement programs with objectives similar to the federal Cash for Clunkers program.
Revitalizing habitat and minimizing impact

The Karileen Project in Federal Way, Washington received the 2009 Friends of the Hylebos “Innovation in Conservation” award.
Good environmental stewardship means looking beyond the drainage pipe to consider how urban, industrial and agricultural activity affects entire watersheds. Schnitzer Steel is doing our part to protect and restore these complex habitats that are so vital to clean drinking water, native wildlife, irrigation and industry.

Restoring Hylebos Creek
Hylebos Creek in Tacoma, Washington was once a prime salmon habitat. Due to causes from loose agricultural practices to urbanization, the stream today cannot support the wide array of plants and wildlife that once thrived there. When Schnitzer Steel acquired our deep water terminal in Tacoma, we began exploring ways to help restore that important area as part of our commitment to natural resource habitat restoration. The Karileen Restoration Project on the West Branch of Hylebos Creek, several miles from the terminal, is our latest contribution to the overall community effort. Watershed experts designed a plan to counteract the damage caused by development, grazing and invasive plants. The enhancements will be implemented throughout the 10-acre Karileen property, located in Federal Way, Washington.

Native plants bring new life to Little Bear Creek
Two hundred years ago, the land abutting Little Bear Creek was dense with Sitka spruce trees and sword ferns, and supported thriving populations of chinook salmon, rainbow trout, heron, falcons and songbirds. More recently, the land in Woodinville, Washington has been used for a variety of commercial purposes with predictable results – the once lush vegetation has thinned and the salmon and songbirds have gone elsewhere.

Since purchasing this former industrial site in 2008, Schnitzer has launched a plan to both develop the site as a metals recycling facility, and protect and restore the fragile habitat. During initial site development, a team of habitat biologists will remove non-native plants and replace them with native species like black cottonwood, Sitka spruce, Western red cedar and sword ferns. The thick canopy of native trees and shrubs is expected to persuade wildlife to return and will serve to cool the stream waters, which encourages salmon reproduction and survival.

Schnitzer Steel will install a state-of-the-art storm water collection, treatment and dispersal system as a critical portion of constructing the recycling facility. The goal is to approximate natural hydrologic conditions at the boundary of the developed area to promote habitat recovery in the nearby creek and wetlands.

The site includes several habitats, including wet pasture, forested wetland, upland pasture and upland forest habitats – a complex challenge for the restoration team.

The project site was chosen in consultation with Friends of the Hylebos for its habitat features and for its potential to enhance other restoration efforts. The Karileen property connects upstream restoration projects to high-quality salmon habitat downstream at the Gethsemane Cemetery.

“We are digging out invasive plants, de-leveling and lowering the compacted soil adjacent to the creek, and even reintroducing woody debris and snags. We’re working with the community to help re-create salmon spawning areas,” says Jim Jakubiak, a Schnitzer Steel Environmental Administrator.

“Our goal is to restore natural conditions and provide an attractive habitat for native wildlife.”

— Scott Sloan, NW Regional Environmental Manager, Metals Recycling Business
Pulling together to solve a toxic problem

Schnitzer Steel’s Auto Parts Business received the Steel Manufacturers Association 2008 Recycler of the Year Award for leadership in mercury switch recycling.

Used and salvaged vehicles are valuable because they contain reusable parts and recyclable steel. Yet many of the millions of cars that reach the end of the road at auto dismantlers arrive with some small, unwanted baggage: under-the-hood or trunk convenience lighting switches containing mercury. Dismantlers must carefully remove and recover these switches and other harmful contaminants before the auto body moves on for further processing to ensure pollutants are not released into the environment during processing.

Understanding the potential environmental impact of improperly handled mercury switches, Schnitzer’s Auto Parts Business, Pick-n-Pull Auto Dismantler, adheres to a rigorous program for extraction and disposal. As a result, Pick-n-Pull has become a national leader in mercury switch recovery.

In recognition of its industry leadership, the Steel Manufacturers Association named Pick-n-Pull “Recycler of the Year” in 2008. Pick-n-Pull participates in the national End of Life Vehicle Solutions (ELVS) program, which was formed by the automotive industry and is a signatory to the U.S. Environmental Protection Agency’s National Vehicle Mercury Switch Recovery Program.

Pick-n-Pull began removing mercury switches before these programs were enacted, but since joining the program in 2006, we have recycled more than 280,000 mercury switches, keeping more than 617 pounds of mercury out of the environment.

“Metal can be recycled over and over again. For us to process it properly, it must arrive at our facility free of contaminants. That’s why we appreciate Pick-n-Pull’s excellent record of reliability when it comes to removing mercury switches.”

— Tom Kniola, Melt Shop Superintendent, Steel Manufacturing Business

“I attribute our success to a company culture that encourages employees to do better than what’s required. We use a scorecard system to make sure all sites are keeping up, checking all vehicles for mercury.”

— Chris Orsolini, Environmental Administrator, Auto Parts Business
Old, unused propane tanks tend to linger – they are thrown under porches, hidden in basements, forgotten in garages. Yet unlike the broken chairs and ancient 8-track players they are keeping company with, old propane tanks are not benign when left unattended – they have the potential to ignite or explode.

Schnitzer Steel formed a partnership with municipalities and the New Hampshire-based company Aurjent to address this problem. Now residents of Maine, New Hampshire, Rhode Island and Massachusetts can dispose of their old propane tanks for free – and stop worrying about a fire hazard in their homes.

It’s a simple process. People turn in old tanks to their local municipality, and once the municipality collects 60 or so, they call Schnitzer Steel. Schnitzer’s contractor, Aurjent, picks up the tanks, evacuates the unused propane, cuts the tanks in half and delivers them to Schnitzer’s shredder facilities, where the tanks are recycled into scrap metal.

“This program has several benefits. It encourages the reuse and recycling of materials that otherwise would end up in landfills, and it removes potentially explosive tanks from private homes.”

— Colin Kelly, Public Relations Manager, Metals Recycling Business
Saving energy with new technology

Understanding that what is environmentally responsible is also good business practice, Schnitzer Steel continues to invest in new equipment with sustainability in mind.

Port of Oakland recycling facility switched to electric generators for pier cranes

“We like to stay on top of new technology – there’s always a better solution around the corner,” says Schnitzer Steel Oakland General Manager Frank Barbeau. To eliminate emissions from the Oakland pier crane, Schnitzer has retired its diesel generator and is operating the crane on power sourced directly from the lowest cost and more efficient shore electrical utility. Less expensive power adds to the environmental benefits and makes this the best business choice.

“Minimizing emissions is part of our ongoing efforts to be good neighbors in our community.”
— Melisa Cohen, Environmental Administrator, California Metals Recycling Business

Auto Parts Business making the switch to electric crushers

Across the many sites of the Auto Parts Business, diesel-powered crushers are being replaced with electric-powered crushers. One reason behind this change is the fact that diesel-powered engines emit pollutants-particulate matter not produced by using electric-powered engines. This change means the company saves energy and reduces pollution. In addition, electric crushers can be more reliable than diesel crushers. This means less time spent on repairs – yet another example of how green upgrades can be smart for the planet and the bottom line.

Cascade Steel Rolling Mills installs more efficient fans, decreases burden to municipal electricity supply

Using incentives provided by local and regional utility companies, Cascade Steel Rolling Mills in McMinnville, Oregon is replacing older ventilation fan blades with new blades that require less energy to operate and can stay in use longer before being replaced.

Cascade Steel engineers anticipate that the new blades will save about 3.5 million kilowatt hours per year, taking a significant burden off the municipal power supply.

“The new impellers save close to $70,000 per year in repair costs and $150,000 per year in electricity.”
— Michael Layfield, Operations Manager, Cascade Steel Rolling Mills

Understanding that what is environmentally responsible is also good business practice, Schnitzer Steel continues to invest in new equipment with sustainability in mind.
Innovating with water

Clean water is one of the planet’s most precious resources. Schnitzer Steel is investing in equipment upgrades that conserve, divert and clean water — and reduce repair costs.

**Shredders stay cool and cost effective with collected rain water**

Metal on metal creates friction, and friction means heat. At Schnitzer Steel’s recycling facility, the feedstock is instantly pulverized by the mega shredder, which stays cool with soothing baths of collected rainwater. Similar to our recycling facilities in other locations, the Oakland plant has installed a 1.2 million gallon tank to collect storm water. The storm water is “harvested” from catch basins and collected in a tank, where it can be treated before being re-used as cooling water. As a result, the facility avoids the need to use 6 million gallons annually from the local municipal water supply.

“Our investment in sustainability makes good business sense. Since completing the project, not a single pump has failed due to water quality, saving us $100,000 a year in repair costs.”

— Vern Floyd, Maintenance Foreman, Cascade Steel Rolling Mills

**Equipment upgrades mean cleaner water for less energy**

In 2008, Cascade Steel Rolling Mills made several upgrades to its Rod Block contact water treatment tank in McMinnville, Oregon to gain energy efficiency and improve performance. Among the changes: two cooling towers, a settling tank and centrifugal filter, a new chemical treatment system for contact water and variable frequency drives for the motors and fans.

As a result, the plant conserves an estimated 1 million kilowatt hours annually, while significantly improving the quality of water prior to discharge to the local Yamhill River.

**Auto Parts Business automates water samplers**

When there is a major storm, managers at Schnitzer’s Pick-n-Pull sites collect and sample storm water. For an accurate read, the water must be collected after about five minutes of rain. And since storms do not always happen during business hours, an innovative, around-the-clock approach was called for.

The solution is both simple and sustainable: solar-powered, automated storm water collectors. Equipped with a rain gauge, timer and vacuum pump, this system automatically fills up a gallon jug of water. Should a storm occur overnight, the site manager arrives in the morning to find a perfect sample ready to send off for testing. And since these collectors are solar, they do not rely on the local energy grid to do the job.

Our Auto Parts Business is testing samplers at several California sites and plans to expand their use at other locations.
Always looking forward

At the turn of the 19th Century, Sam Schnitzer could not have foreseen issues such as greenhouse gas or climate change. But the business he founded was built on the principles that are fundamental to today’s sustainability movement: recycling, reducing and reusing.

Today, we’re proud of our roots and our current accomplishments. As we move forward, we will embrace even higher standards of sustainability and accountability. Growth, creative thinking and innovation are key to our business success. These same values define our commitment to sustainable business practices.

That commitment includes finding new ways, for example, to recover even more metallics from the material we process and to look for added value from residual materials such as plastic and rubber. We will increase and advance our ongoing efforts to reuse and recycle, while reducing the impact of the fluids and contaminants in inflow materials. We will continue to scrutinize and improve every aspect of our operations, from stormwater collection to emissions reduction to use of alternative energy – all with the discipline that has marked our efforts in the past to maximize efficiency and reduce our environmental footprint.

We also look forward to providing an ever-richer variety of data and metrics, so that our success can be measured and compared using globally recognized standards. This effort has already begun and will become a regular part of our reporting to our stakeholders and community at large.
From the very beginning, our success has stemmed from our sense of stewardship and our ability to find new value in the materials we process. Today, the health of our company and the health of our planet are even more closely connected, and our commitment to sustainability has become more transparent and important than ever. We look forward to bolstering that commitment with every decision, every innovation and every improvement we make.