

CASE STUDY

ACHIEVING & MAINTAINING
ZERO LANDFILL



SUBARU of INDIANA AUTOMOTIVE, INC.

When you open [Born Green](#), an environmental overview from Subaru of Indiana Automotive, Inc. (SIA), the first thing you read is: “Being an environmental steward means you are always thinking about the future. This forward-thinking has helped SIA achieve many firsts in our industry.”

One significant first for SIA was to earn the title of the first automotive assembly plant in the U.S. to achieve [zero landfill status](#), with some assistance from Covanta, a world-leading provider of [renewable waste and energy solutions](#).

That was in 2004, two years ahead of its parent-company-driven schedule.

And the company continues to maintain this mindset today, according to [Born Green](#), “ensuring that vehicles are [green](#) from the moment they are ‘born.’ Every Subaru built at SIA is built with environmental stewardship as a guiding principle.”

The manufacturer of Subaru Outback and Legacy vehicles is often referred to as a pioneer in adopting the holistic [reduce, reuse, recycle, recover](#) (the four “Rs”) mantra of the waste management strategy. Commenting on this well-deserved reputation, Michelle Long, Assistant Manager of Subaru’s Environmental Compliance & Energy Section, said: “We were given the tools to pursue zero landfill before others and we invested in it. Today, we’ve had thousands of companies visit the site to see what we do, so yes, you can say we’re living up to the ‘pioneer’ title.”

But how did this 3.5 million square foot car manufacturing plant working with huge coils of steel, and literally thousands of tons of metal, glass, electronic components, and all the associated packaging, achieve [zero landfill](#)?

FACT
As champions of [sustainability](#) and [zero landfill](#), SIA encourages companies from other industries to visit and study their processes.

GETTING DIRTY AND CREATIVE

The journey began back in 2002 with a group of dedicated, enthusiastic associates who seized the corporate directive to [reduce waste](#) and get to [zero landfill](#). The first order of business was a series of carefully orchestrated “dumpster dives” to examine in minute detail what was being thrown away. Accomplishing this entailed spreading the plant’s trash out within a controlled area to analyze the content and understand its origin and contribution to the car manufacturing process. This very visual display of its waste stream enabled SIA to evaluate opportunities to [reduce](#) consumption, [eliminate](#) unnecessary packaging, utilize [reusable](#) containers, and develop new markets for [recycling](#) of by-products through innovative and efficiency-oriented techniques.

This same spirit of passion and enthusiasm in meeting challenges head on continues today. SIA’s nearly 4,500 associates continue to play a vital role in sustainability. “All associates – whether they work in HR, Legal or the plant -- are given [environmental goals](#) or challenges,” said Long. “The spirit of Kaizen – or continuous improvement – is alive and well within our walls. Associates are encouraged to think about ways to do things differently. And they are rewarded for their creativity and dedication to [sustainability](#). Prizes help keep the ideas coming!”

PARTNERING FOR THE LONG HAUL

Getting to **zero landfill** also meant enlisting Covanta as a strategic partner.

“We began working with SIA in 2004,” said Dave Schroeder, Director of National Accounts for Covanta Environmental Solutions. “Together we developed best practices in **sustainable waste management** and provided the plant with a local **Energy-from-Waste (EfW)** disposal solution.”

There are 215 pounds of waste generated per vehicle at SIA’s plant. Approximately 185 pounds are **recyclable** steel. For the non-hazardous waste left over after efforts to **reduce, reuse and recycle** are exhausted, SIA ships approximately four percent of the total waste, or 3,000 tons, to Covanta for disposal and energy and metal recovery each year. From 2000 to 2015, SIA reduced the amount of waste per vehicle produced by 53 percent and cut costs to the tune of millions of dollars each year through adoption of the four “Rs.”

“At our Indianapolis Resource Recovery Facility, SIA’s non-hazardous waste is diverted from the landfill and used as fuel to create steam power for Indianapolis’ downtown heating loop,” said Schroeder.

Long added: “Leveraging Covanta’s EfW facilities benefits the local community and advances our **sustainability and zero landfill** initiatives. We’ve also seen value within our business from our partnership with Covanta – increased product quality, efficiency of the line and cost reductions are just a few examples.”

The benefits also extend to reputation and factor into recruitment. “Our **zero landfill status** provides a positive image for SIA in the Lafayette area,” said Long.

“**There are five-to-10 large industrial businesses in the area but we stand out to people looking for work because we’re committed to preserving the environment. Associates like working here – they’re proud of it.**”

Michelle Long,
Subaru
Assistant Manager
Environmental Compliance &
Energy Section

LASTING LEGACY

As champions of **sustainability and zero landfill**, SIA encourages companies from other industries to visit and study their processes. The company also started the **Zero Landfill Pledge (zerolandfillpledge.com)** to encourage others to join the effort.

When asked to provide guidance to companies interested in launching their own successful zero landfill programs, Long said, “There are three major steps to consider: One, create an inventory of waste, understanding where it is generated and what happens to it. Two, make the program your own, customizing it to what works within your culture. And three, get associate/employee input – some of the best ideas come from the workforce. It’s also important to celebrate your successes, both large and small. It will help motivate you for each new step along the way.”

