



CHANGE FOR THE
BETTER WITH
ENERGY STAR

The ENERGY STAR[®] guidelines for superior energy management were established by the U.S. Environmental Protection Agency to help organizations reduce their greenhouse gas emissions.
www.energystar.gov

Toyota plant to be lean and green

San Antonio Express-News

April 16, 2005

Sean M. Wood,

Apr. 16--Manufacturing is not typically seen as a clean operation. It conjures images of smokestacks belching black clouds and corrugated steel pipes pumping sludge into local water supplies.

But when Toyota Motor Corp. President Fujio Cho announced two years ago that Toyota would build a new \$800 million manufacturing plant in San Antonio, he said it would be one of the most environmentally friendly automotive manufacturing plants in the world.

Toyota has been seen as a leader in environmental manufacturing. In March its North American manufacturing operations won the Environmental Protection Agency's ENERGY STAR Award for excellence in energy management.

Toyota's south campus in Torrance, Calif., was awarded LEED certification -- Leadership in Energy and Environmental Design -- by the U.S. Green Building Council.

"We're trying to be a good environmental steward," said Jorge Garcia, assistant manager of plant engineering in San Antonio. "It's all environmental-driven."

Toyota sets goals every five years to reduce energy use, water use, air emissions and landfill waste. In 2004 the company hit its targets, reducing water usage by 15 percent, electricity and gas usage by 17 percent, emissions by 40 percent and landfill waste by 95 percent since 1999.

Kevin Butt, general manager of environmental affairs at Toyota, said the company is working on new goals for 2011.

"One of our objectives is zero landfill waste," Butt said. "When we set these targets, we look at ways to hit these targets and not have any cost increase to our company."

Butt said reducing landfill waste by 95 percent saved the company \$1.2 million annually. Using recycled water in the painting process costs about the same as using fresh water. Having suppliers on site with the manufacturing plant reduces the time it takes to get supplies and creates cost-efficiencies.

"We seek to eliminate waste in everything we do," said Toyota spokesman Mike Goss. "Whether it's trash or an extra motion in the process of building a product. It applies to everyone and everything we do."

Kim Carlson of Minneapolis, who does TV talk show appearances as the EarthSmart Consumer, said Toyota has built a reputation as a green company -- not just for its fuel-efficient vehicles like the Toyota Prius hybrid gas/electric vehicle, but also for the way it conducts business and builds its products.

"Their company philosophy seems to be truly green," Carlson said. "A company is green when greenness gets into the fabric of an entire company. It's not 'green-washing.' That's appearing green but not really being green."

She said there is no perfect green company, but Toyota seems to be better at its environmental processes than other carmakers.

"I think Toyota, as an example, has had the leanest manufacturing," said Joseph Blackburn, a professor of management at Vanderbilt University in Nashville, Tenn. "They basically invented this system. They're setting the standards for a lot of these companies."

Toyota's manufacturing process tries to incorporate energy-efficient lights and motors to run shorter conveyors, which allow for a smaller plant. That means more efficient heating and cooling.

The San Antonio plant will produce 150,000 Tundra pickups in 1.8 million square feet, or 12 feet per truck. The Georgetown, Ky., plant builds 500,000 trucks in 9 million square feet, or 18 feet per truck. With those figures, San Antonio would need 3 million fewer square feet to build the same number of trucks as Georgetown.

Garcia said Toyota reviews its plant processes often, and groups visit each location to see what is working and what areas can be improved. There is also a database of processes that each facility can tap into to see how their Toyota brethren are doing it.

"There's been a lot of learning to achieve what we've achieved," Garcia said.