



Environmental Savings Summary

Emissions (Pollution) Reduction

Samsung Austin Semiconductor

Energy Efficiency Projects		7,954,151	annual kWh savings		
Air Pollution	Saved this much Carbon Dioxide (CO ₂) from being emitted:	4,776.2	Metric tons	or 10,529,716 pounds	or 5,265 tons
	Saved this much Nitrogen Oxides (NOX) from being emitted:	3.329	Metric tons	or 7,340 pounds	or 3.67 tons
	Saved this much Sulfur Dioxide (SO ₂) from being emitted:	3.011	Metric tons	or 6,638 pounds	or 3.32 tons
	Saved this much Carbon Monoxide (CO) from being emitted:	2.314	Metric tons	or 5,102 pounds	or 2.55 tons
	Saved this much Total Suspended Particulants (TSP) from being emitted:	0.409	Metric tons	or 902 pounds	
	Saved this much Volatile Organic Compounds (VOC) from being emitted:	0.115	Metric tons	or 253 pounds	
Total		4,785.4		10,549,950.120	5,274
Toxic Metals Pollution	Saved this much Mercury (Hg) from being emitted:	62,758	mg.	or 0.138 pounds	or 2.21 ounces of Hg
	Saved this much Cadmium (Cd) from being emitted:	2,856	mg.	or 0.006 pounds	or 0.10 ounces of Cd
	Saved this much Lead (Pb) from being emitted:	92,881	mg.	or 0.205 pounds	or 3.28 ounces of Pb
These projects effectively planted		122,702	trees or	6,135	acres of forest in Austin's parks.
Or					
These projects effectively removed		10,723,649	Vehicle Miles or	915.0	cars from Austin's busy roadways.
Or					
These projects effectively provided electricity to		704	average Austin residences for a year.		
<div>1. Source of Emissions data: "Delta Emissions", a combined effort of Lauer, Muraya, and Breeze (rev.1/18/07). Revised: Muraya 2009</div> <div>2. Average residence (homes and multi-family) consumption: 11,300 kWh for Austin, a combined effort of Muraya, and Glenn Moore (rev.12/20/07).</div> <div>3. 23.2 lbs C/tree or = 0.039 metric ton CO₂ per urban tree 10 year survival rate. http://www.epa.gov/cleanenergy/energy-resources/refs.html#vehicles</div> <div>4. 5.23 metric tons CO2Eq/vehicle/year at 11,720 miles/year. http://www.epa.gov/cleanenergy/energy-resources/refs.html#vehicles</div>					
Water conservation at generation power plant (evaporation only)		3,579,368	Gallons		
Water conservation if air conditioning and cooling tower exists		6,221,306	Gallons costing	\$	60,098

Source of water conservation data: Bill Hoffman City of Austin Water and Waste Water Utility (rev. 06/20/07).