

LKQ 2011 Environmental Facts and Figures

January 2012

2011 LKQ Fluid Collection				
<u>Materials/Fluids</u>	<u># of Vehicles</u>	<u>Recovery Index¹</u>	<u>System Quantity¹</u>	<u>Total Quantity</u>
			<u>(Gallons)</u>	<u>(Gallons)</u>
Gasoline	553,438	0.90	5.0	2,490,471
Engine Oil	553,438	0.95		
Transmission Oil	553,438	0.95	2.0	10,515,322
Other Oils	553,438	0.95	(Oils combined)	
Coolant	553,438	0.90	0.9	448,285
Wiper Fluid	553,438	0.90	0.5	249,047
Total Fluid Collection in Gallons				13,703,125
	<u># of Vehicles</u>	<u>Recovery Index²</u>	<u>System Quantity²</u>	<u>Total Quantity</u>
Refrigerant (SS)	334,275	0.10	1.3 lbs	43,455
Refrigerant (FS)	219,163	0.72	1.3 lbs	205,137
Refrigerant Collection in Pounds				248,592

¹Index and system quantity based on published research by the Society of Automotive Engineers

²Index and system quantity based on research conducted by LKQ

Battery Recycling

LKQ Processes Batteries for Reuse and Recycling

<u>Material</u>	<u>Number of Vehicles</u>	<u>Recovery Rate*</u>	<u>Weight (lbs)</u>	<u>Weight Recycled (lbs)</u>
Lead Battery	553,438	0.97	33	17,715,550
Plastic Casing	553,438	0.97	1.5	805,252
	Total Weight Reused or Recycled			18,520,802
	Total Weight Reused or Recycled (U.S. Tons)			9,260

*Recovery rate based on published estimate by Battery Council International.

Catalytic Converters and Mercury Switches Recycled

Material	Vehicles Processed	Capture Rate	Total Recycled
Catalytic Converters	553,438	.98 ¹	542,369
Mercury Switches	553,438	.33 ²	182,634

¹Catalytic converters are air pollution control devices that contain precious metals: Platinum, Palladium and Rhodium. Non-renewable natural resources. Capture rate based on internal LKQ estimate.

²Mercury switches contain elemental mercury which may cause adverse human health and environmental effects if released to the environment. Capture rate based on End of Life Vehicle Solutions estimate of 1 mercury switch per 3 cars.

Total number of tires generated from all LKQ vehicles						
			Processed	Tires/Car	% Recovered*	Tires Recovered
Tires from self service facilities			334,275	5	80	1,337,100
Tires from full service facilities			219,163	5	80	876,652
Total number of tires reused, recycled, recovered for energy						
				Weight/Tire	Tires Recovered	Total Weight
Passenger Car Tires				22.4 lbs	2,213,752	49,588,044
Total U.S. Tons of Tires Diverted from Landfill						24,794

* % of tires diverted from landfill according to Scrap Tire Management Council

LKQ Metal Recycling¹

Number of Vehicles Processed 2011	Average Steel Content 1985-2004 (Tons/Car) ²	Recovery Efficiency ³	Total U.S. Tons
553,438	2252 pounds = 1.13 tons	0.97	606,623
	Average Aluminum Content 1984-2004 (Tons)		
	216 pounds = .108 tons	0.88	52,599
	Average Copper Content 1984-2004 (Tons)		
	52 pounds = .03 tons	0.88	14,611
	Average Zinc Content 1984-2004 (Tons)		
	14 pounds = .007 tons	0.88	3,409
Total Metal Content Recycled (U.S. Tons)			677,242

¹Includes metal part sales and hulks delivered to automotive shredders for processing.

²Average metal content based on published reports by Society of Automotive Engineers.

³Recovery efficiency based on shredder industry and equipment manufacturers' estimates.

Green House Reductions

Metal	GHG reductions per MT*	MT of Recycled Material	GHG Reductions
Recycled Steel	0.86	550,319	473,274
Recycled Aluminum	9.87	47,717	470,967
Recycled Lead	1.28	8036	10,286
Recycled Copper	3.52	13,255	46,658
Total GHG Reductions (Metric Tons)			1,001,185

*Green House Gas reductions per MT estimated by the Fraunhofer Institute for Environmental, Safety and Energy Technology of Oberhausen, Germany

GHG Emissions Comparisons*

- LKQ's 2011 GHG emission reduction of 1,001,185 metric tons is approximately the annual GHG emissions of a city with over 92,000 people.
- To absorb this level of GHG emissions, a mixed forest of about 360 square miles would be needed.
- This level of GHG emissions is also approximately equal to the lifetime emissions of 23,624 automobiles

*GHG comparisons developed by the Fraunhofer Institute for Environmental, Safety and Energy Technology of Oberhausen, Germany

LKQ Remanufactured Parts 2011

<u>PART</u>	<u>QUANTITY</u>
• Aluminum Wheel	558,027
• Plastic Bumper	383,433
• Steel Bumpers	184,035
• Engines	57,060
• Tail Lamp Assembly	3,292
• Head Lamp Assembly	55,687



LKQ Part Remanufacturing GHG Reductions

Part ¹	GHG Reductions per Part (Kg)	Number of Parts	GHG Reductions (Kg)
Aluminum Wheel	7.4	558,027	4,129,400
Steel Bumpers	18.5	184,035	3,404,648
Plastic Bumper ²	22.0	383,433	8,435,526
Tail Lamp Assembly	10.5	3,292	34,566
Head Lamp Assembly	10.5	55,687	584,714
Engine	261	57,060	14,892,660
	Total GHG Reductions (Metric Tons)		31,482

1-Model evaluated is compact, 1999 MY. Verified by Waseda University and JARPRA.

2-Average of front and rear

Environmental Benefits of Recycling

- Energy Saved
- Green House Gas Reductions
- Water Conserved
- Landfill Diverted
- Air Emissions Reductions
- Natural Resources Saved

Aluminum Recycling Benefits*

- When LKQ separates and collects aluminum parts for recycling it reduces the energy required for making new aluminum parts and the CO2 emissions by 95%.
- Aluminum parts made from recycled material also reduces air pollution by 95%
- Generation of landfill waste and use of water is also reduced by recycling aluminum
- Aluminum can be recycled and reused indefinitely without a decline in material performance or quality

*Aluminum recycling benefits quantified by Aluminum Association, Washington, DC.

Steel Recycling Benefits*

- LKQ prepares vehicles for treatment by scrap metal processors to separate and recycle large quantities of iron and steel.
- Using recycled steel saves 74% of the energy opposed to producing it from raw material
- Every pound of steel recycled saves 5,450 BTUs of energy
- Every ton of recycled steel saves 2,500 pounds of iron ore, 1,000 pounds of coal, and 40 pounds of limestone.

*Steel recycling benefits quantified by the Steel Recycling Institute.