

The Clean Car Campaign is Coordinated by:

- Environmental Defense •
- American Council for an Energy Efficient Economy •
- Ecology Center • Great Lakes United •
- Michigan Environmental Council • Union of Concerned Scientists •

Clean Car Standard

The Clean Car Campaign encourages automakers to produce vehicles meeting these standards:

- 50% more fuel-efficient than other vehicles in its class
- Meets California's stringent tailpipe emission standard (SULEV)
- Cleanly manufactured using non-toxic, recyclable materials

Over 120,000 people have signed this pledge:

“ The next time I shop for a new car or truck, I pledge to buy the greenest vehicle available that meets my needs and fits my budget. I challenge the auto industry to give me the choice to purchase a vehicle that meets the Clean Car Standard. ”

For more information about the Clean Car Campaign, please contact:



Kevin Mills
Environmental Defense
1875 Connecticut Ave., NW (Suite 600)
Washington, DC 20009
(202.387.3500)
or log onto www.cleancarcampaign.org.

Driving Forward is distributed free to members of the automotive industry and journalists. If you would like to receive a copy, please send your request to erinsmith@environmentaldefense.org.

100% recycled, 30% post-consumer content

Volume 6 • Winter 2003

DRIVING FORWARD

News from the Clean Car Campaign

Getting the Lead Out

Decades after the U.S. ban on lead paint and leaded gasoline, lead use has been eliminated or significantly reduced in many industries throughout North America. Despite this progress, lead remains a significant environmental and public health threat throughout our country, especially for children. Recent studies indicate that there is no safe level of lead exposure and that high levels of lead have been associated with learning irregularities and behavioral problems in children. Today, the automobile industry accounts for the majority of lead use, most of which is found in lead-acid batteries.



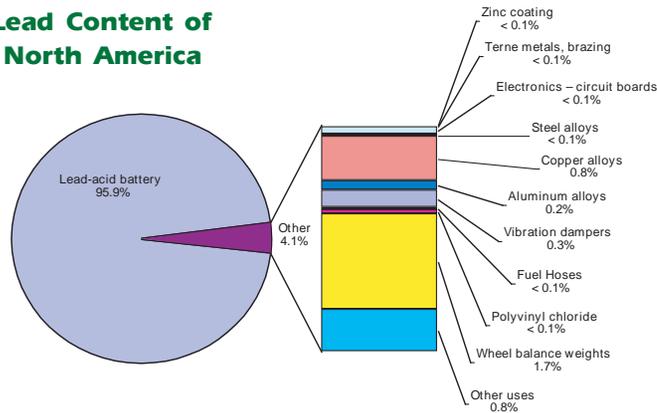
Lead in vehicles

Every year, the North American auto industry is responsible for the release and transfer of more than 300 million pounds of lead through mining, smelting, manufacturing, recycling and disposing of lead-containing automotive components—primarily batteries—as well as through normal vehicular use.

Over the life of an average car, 16 pounds of lead pollution (as direct emissions or waste) is produced, most of which comes from the recycling or disposal of the lead-acid starting-lighting-ignition (SLI) batteries found in nearly all cars on the road. In fact, the amount of lead found in a typical car battery is so high, that SLI batteries actually account for the majority of lead use in the world today.

The Clean Car Campaign encourages automakers to provide drivers with greener vehicle choices.

Estimated Lead Content of Vehicles in North America



In addition to batteries, lead is also found in many other auto components.

Recycling is not the answer

Some people argue that because most lead-acid batteries are recycled, there is no reason to curtail their use. However, because the amount of lead used in auto batteries is so large, even a small percentage of non-recycled batteries results in an enormous quantity of unaccounted-for lead waste. Non-recycled batteries account for nearly one third of the lead pollution resulting from vehicle manufacturing, use and disposal. That's over 40,000 metric tons of lead potentially released into the environment per year from non-recycled batteries alone. In addition, lead smelters that recycle auto batteries release significant quantities of lead to surrounding communities. Soil samples from playgrounds and residential areas surrounding these smelters have shown lead levels many times greater than what the U.S. EPA deems safe. Many of the families living in these communities are unaware of the danger, allowing their children, many of whom already suffer from lead poisoning, to play in these toxic playgrounds.

Alternatives do exist

A Clean Car Campaign report, "Getting the Lead Out – Impacts of and Alternatives for Automotive Lead Uses," outlines available technology and policy options for eliminating lead use within the auto industry and minimizing its impacts on human health and the environment.

Increased consumer demand for specialized electrical options such as on-board entertainment systems, have prompted the auto industry to consider shifting from a 12-volt electrical system to a 42-volt system. During this process, automakers can re-evaluate battery chemistry in an effort to align new performance expectations with the need to eliminate substances of concern. Alternatives to lead batteries, such as nickel-metal hydride and lithium-ion batteries are already establishing a foothold in the hybrid vehicle market; offering improved performance and reduced environmental impact.

Alternatives also exist for many other automotive applications of lead, many of which have little or no cost disadvantage. For

Lead Component	Alternative
SLI batteries	Nickel-metal hydride (NiMH), Lithium-ion
Wheel balancing weights	Tin, Steel
Alloying agents	Limit as percentage of weight
Coatings	Lead-free formulations
Electronic applications	Lead-free solder
Vibration dampers	Cast iron; more research needed
Fuel hoses	Steel tubes; lean-free rubbers
PVC Stabilizers	Polypropylene, other plastics

example, tin or steel can be used as a cost-effective alternative to lead in wheel balance weights, the second largest use of lead within the auto industry.

So what needs to happen?

The European Union has already begun to phase out lead use in automobiles through the 2000 End-of-Life Vehicles Directive. It is time for the United States and Canada to step up and develop similar policies to replace lead in automobiles with safer alternatives.

The Clean Car Campaign recommends the following:

Phase out the use of lead in SLI batteries over the next ten years – the already emerging shift from a 12 to 42-volt system provides the perfect opportunity to look at phasing out the use of lead in batteries.

Phase out all other uses of lead in vehicles – the EU has already shown that technically and economically feasible alternatives exist for many lead components.

Require producer responsibility for the recovery of lead automotive components – while a significant percentage of the larger lead components are currently being recovered, there is still a substantial amount of automotive lead that remains an unmanaged contaminant.

Establish a lead retirement program and ban on lead mining – recovered lead needs to be retired to ensure that it doesn't re-enter commerce and become a contaminant in new products. At the same time, a ban on lead mining should be established in order to avoid adding new sources of lead to the environment.

Improve the environmental standards for industries that handle end-of-life vehicles – storm water plans and air pollution requirements should be aggressively implemented and monitored to ensure best management practices for industries that routinely handle end-of-life vehicles.

Outlook

The auto industry has the means to move away from lead use. Technologically and economically feasible alternatives currently exist for a number of automotive lead uses, and over time the use of lead in batteries can be phased out as well. If automakers choose to make it a priority, the phase-out of lead in automobiles could become a similar success story to the banning of lead paint and leaded gasoline. With viable alternatives becoming readily available, there is little reason for the auto industry to continue to put our children's health at risk.

To view the Clean Car Campaigns full report "Getting the Lead Out – Impacts and Alternatives for Automotive Lead Uses," visit: http://www.environmentaldefense.org/documents/2887_leadbatteries.pdf

Erin Smith
 erin.smith@environmentaldefense.org
 Siddha Parker
 sparker@environmentaldefense.org