



*Tomorrow's
Buses for Today's
Children*

Clean School Bus USA



National Clean Diesel Campaign
www.epa.gov/cleandiesel/schoolbus

America's School Buses: Graduating to Cleaner Fleets for Kids

School buses transport more than 25 million American students every day, and they provide the safest transportation for children to get to and from school. However, many older school buses emit harmful diesel exhaust that directly affects children.

The U.S. Environmental Protection Agency (EPA) is ensuring that all new buses meet tighter standards developed to reduce diesel emissions and improve safety. Today's new buses are cleaner—60 times cleaner than buses built before 1990—and feature additional emergency exits, improved mirror systems, and pedestrian safety devices. But replacing America's school bus fleet will take time because diesel school buses can operate for 20 to 30 years.

Clean School Bus USA is a national, innovative program designed to help communities reduce emissions from diesel school buses. It provides resources and assistance to fleet owners and operators as well as educators, transportation officials, and community partners committed to improving school bus fleets and protecting children's health.

Improving Air Quality Across the Country for Children

Clean School Bus USA focuses on helping to clean up school buses in use today by providing resources and assistance to school districts and fleet owners and operators across the country. Clean School Bus USA provides:

- Funding and financial incentives for retrofitting and replacing diesel school buses.
- Information about approved retrofit devices and other technologies.
- Tools to inventory school bus fleets and calculate potential emission reductions.
- Materials, publications, and related resources.
- Idle reduction materials and school bus driver awareness program.

Through NCDC, EPA provides grants and innovative financing mechanisms to assist eligible partners in building diesel emission reduction programs. The Diesel Emissions Reduction provisions in the Energy Policy Act of 2005 are a significant funding source to bring verified and emerging, cost-effective technologies to communities nationwide.

The Effects of Diesel Emissions on Children

Diesel exhaust produces harmful air contaminants such as ozone-forming nitrogen oxides (NO_x) and particulate matter (PM). Breathing these emissions is harmful to everyone, but especially to children because they have a faster breathing rate than adults. Exposure to these emissions can also lead to respiratory diseases—and aggravate conditions such as asthma, which affects nearly 6.3 million U.S. children, making it the most common long-term childhood disease in America.





Delivering Health and Environmental Benefits

Since its launch in 2003, EPA's Clean School Bus USA program has worked to reduce children's exposure to diesel exhaust by reducing the amount of pollution created by diesel school buses. As a result, more than 3 million students are riding on cleaner buses. It is estimated that more than 45,000 buses are using emission reduction technologies and cleaner fuels. School districts across the United States are implementing idle reduction programs, reducing air pollution, and saving money on fuel costs.

We can reduce harmful emissions from today's older school buses by 90 percent or more by taking advantage of clean diesel technologies, clean burning fuels, and smart driving practices. To achieve these reductions, owners and operators of school buses can:

- Retrofit current school bus fleets with PM filters,

oxidation catalysts, or other new technologies.

- Switch to cleaner fuels, such as biodiesel or compressed natural gas.
- Reduce school bus idling, deploy the cleanest buses on the longest routes, and minimize time students spend outside when buses arrive and depart.
- Replace older buses with new models that meet more stringent standards.



Case Study: Pinellas County

You won't find school buses idling within the Pinellas County School District in Florida. The 22nd largest public school district in the country—seventh in Florida—recognized that idling engines were not only driving up fuel costs, but also generating harmful pollution that affects children's health.

With funding from Clean School Bus USA and a local Air Pollution Recovery Trust Fund, Pinellas County retrofitted 270 school buses in 2006 with clean diesel technology and began an idle reduction outreach campaign.

By training bus drivers in the importance of idle reduction, posting "No-Idle" signs in bus circles of each school, creating a voluntary pledge for drivers, and formulating a district-wide idle reduction policy, the school district reduced idle times to less than 30 minutes per day—well below the 90 minute national average. Reduced idling and retrofits have decreased emissions by more than 177 tons and saved more than 38,000 gallons of fuel per year.

For More Information

To learn more about Clean School Bus USA, visit
www.epa.gov/cleandiesel/schoolbus.



About the National Clean Diesel Campaign (NCDC)

EPA established NCDC to promote strategies that reduce harmful emissions from America's diesel engines. Through regulatory and innovative approaches, NCDC addresses new diesel engines as well as the millions already in use.



National Clean Diesel Campaign

August 2010
EPA-420-F-10-019

 Recycled/Recyclable — Printed with vegetable oil based inks on 100% postconsumer, process chlorine free recycled paper.