

## BLACK CARBON, CLIMATE CHANGE AND DIESEL CLEAN UP

### Diesel Black Carbon—Climate Change Facts

Diesel exhaust contains particulate matter, toxic gases, black carbon and many other harmful pollutants. Exposure to diesel exhaust causes many adverse health impacts including heart attacks, lung disease, asthma attacks, adult diabetes and premature deaths. Diesel exhaust also harms our planet by contributing to climate change.

Black carbon, found in diesel exhaust, is a short-lived climate forcing pollutant (like methane). It is one of the largest contributing pollutants to global warming and is nearly 2000 times more potent than the equivalent amount of carbon dioxide (CO2) over a 20-year period.

- Black carbon particles warm by absorbing sunlight and radiating heat into the air (like a blacktop road). It darkens snow and ice, and directly accelerates melting.
- The U.S. has the highest per capita emissions in the world for black carbon.
- More than half of the black carbon emissions in the U.S. come from diesels: 41 percent from on-road and another 16 percent from off-road diesels.

Unlike CO<sub>2</sub>, black carbon has a short lifetime in the atmosphere, only days to weeks. Therefore, reducing diesel black carbon can have an immediate benefit on the climate NOW.



Diesel construction equipment contributes to climate change.



Construction equipment WITHOUT a filter emits high levels of black carbon. (on right)

### WHAT SACE IS DOING:

- SACE is the southeast regional lead organization for the [Diesel Clean Up Campaign](#), a diverse partnership of over 500 environmental, health, faith and industry organizations. Please endorse the “Diesel Clean-Up Platform” and join efforts to reduce diesel emissions in your community.
- Partnering with Rush Truck Centers, SACE has created the “Clean Trucks Make Cents” program to provide innovative financing to customers seeking to purchase a pre-2007 tractor-trailer trucks with diesel emissions reduction equipment.
- SACE conducts outreach to institutions, universities, and local and state governments. We provide them with the necessary toolkits to help identify funding, select retrofit devices, and implement policies for reducing diesel emissions.
- SACE promotes adding clean construction specifications (performance standards for equipment) into existing construction and design certification programs.
- SACE educates companies and organization on the importance of including diesel emissions reduction in climate mitigation programs.
- SACE works to support national diesel emissions reduction policies such as the Diesel Emissions Reduction Act (DERA) and clean construction.