

Reducing vehicle emissions in your town

Greenhouse gases (GHGs) pose a serious and worsening threat not only to the environment but also to human health and safety, quality of life and the economy. About 40 percent of New Jersey's total carbon footprint comes from the transportation sector, with on-road gasoline consumption comprising the great majority of those emissions.

Background

The science overwhelmingly shows that [GHGs contribute to climate change](#), leading to a host of challenging results, including:

- more severe and frequent storms with their resulting loss of life and damage to property and infrastructure;
- sea level rise and its associated loss of coastal lands and habitat;
- health impacts due to food and water scarcity, heat-related deaths and insect borne diseases;
- threats to endangered species and unique systems.

Human activity accounts for much of the greenhouse gas production on our planet. The GHGs emitted include CO₂, CH₄, nitrous oxide (N₂O), and several others.

[Burning fossil fuels](#) is the activity most responsible for the amount and rate of climate change, with the transportation sector contributing more greenhouse gas emissions in New Jersey than any other activity.

Health effects

While a changing climate will likely cause many serious health risks, our society's dependence on vehicles can jeopardize human health in other ways.

The chemicals in car and truck exhaust contribute to cancer, asthma, heart disease and a host of other life-threatening diseases. In New Jersey, no county has ever achieved the level of air quality required by the National Clean Air Act set in 1990. Fine particle pollution from exhaust alone may cause more premature deaths in New Jersey than homicides and car accidents combined. Auto emissions result in up to 46,000 cases of chronic respiratory illness and 40,000 premature deaths each year nationwide. Research shows that just sitting in heavy traffic for up to an hour can triple heart attack risk. Children are especially vulnerable to the unhealthy effects of exhaust because they breathe up to 50 percent more air per pound of body weight than adults.

In 2007, the US Supreme Court ruled that greenhouse gases constitute air pollution and are therefore subject to regulation by the US Environmental Protection Agency. On June 26, 2012, the Court of Appeals for the District of

Columbia Circuit (DC Court) upheld EPA Regulation of GHG emission from new motor vehicles and major stationary sources. This led to setting up a number regulations on GHG emissions such as [cars and trucks](#).

Dependence on cars can also be linked to a reduction of physical activity leading to obesity. Numerous studies have shown a strong correlation between obesity and sedentary lifestyle. [Obesity](#) is a known risk factor for a whole host of serious health conditions, while increased physical activity reduces the risk of premature death, coronary heart disease, hypertension, colon cancer and diabetes. In countries where people do more walking and cycling, the rate of obesity is much lower than in the US. More than three in five New Jersey adults are overweight or obese, and over 15 percent of the state's children and adolescents are considered obese.

Strategies for reducing vehicle emissions

Reduce vehicle-miles traveled

- [Walk or ride a bike](#)
- [Choose mass transit](#)

Drive Greener

- [Eco-driving techniques](#)
- [Switch to Electric Vehicle – Drive Green](#)
- [Alternative fuel vehicles](#)
- [Regular car maintenance](#)
- [Don't idle more than 10 seconds](#)

What ECs can Do

Anti-Idling Campaign

Idling for more than 10 seconds uses more fuel and produces more emissions that contribute to smog and climate change than stopping and restarting your engine does. Researchers estimate that idling from heavy-duty and light-duty vehicles combined wastes about 6 billion gallons of fuel annually. Many ECs and Green Teams have launched anti-idling campaigns such as the [Borough of Highbridge](#). [Contact](#) ANJEC for model anti-idling ordinances.

Walking and Biking

Air pollution from vehicle emissions is a particular concern in Leonia a very compact, walkable community in Bergen County, just over a mile square, located adjacent to the New Jersey Turnpike and I-80 and less than two miles from the George Washington Bridge.

While emissions from these major highways are outside the control of local residents, there was an opportunity to address locally generated emissions. The Leonia Environmental Commission recognizing an opportunity to increase walking and biking in Leonia completed a Bicycle and Pedestrian Master Plan in 2011 and set a goal to examine ordinances and make recommendations to increase bicycle and pedestrian activity and enhance safety. Members of the Leonia Environmental

Commission, the Green Team and an ANJEC representative met several times to discuss a variety of possible approaches for an educational program to reduce local vehicle emissions. The team decided on a campaign to reduce vehicle dependence and get people walking more in Leonia.

The campaign included displays at their annual Health Fair, "Get out of Your Car" stickers, handouts, powerpoint presentations, campaign logos and design of a walking map for the town.

Other Resources

Communities around New Jersey have tackled the issue of vehicle emissions in a variety of ways:

- **Walk to school programs**
 - [NJ's Safe Routes to School program overview](#)
 - [How to plan a walk or bike to school event](#)
- **Anti-idling programs**
 - [Anti-idling programs](#)
 - [Anti- idling Sustainable Jersey action](#)
 - [Idle-free school materials](#)
 - [New Jersey's Stop the Soot program](#)
 - [Diesel truck idling enforcement in NJ](#)
- **Eco-driving**
 - [US government web site for fuel economy info](#)
- **Alternative transportation programs**
 - [NJ Department of Transportation Ridesharing Program](#)
 - [NJ Transit Bike and Ride services](#)
 - [EZride carpool](#), vanpool and shuttle services for businesses, colleges, universities and municipalities
 - [Carpool World free carpool matching service](#)
 - [NJ alternative fuel station locations](#)