



# Protecting Our Environment

## Reducing Auto Emissions And Environmental Concerns

(NAPSA)—Although the number of cars on the road has doubled since 1970, innovative technology is helping to clear the air and protect the environment.

Since the removal of lead from gasoline in the early 1970s, the petroleum refining industry has continued to make major additional improvements in the manufacture of motor fuels, making the air we breathe today cleaner than it has been in years.

Refiners use new technology to develop fuels that help cars run cleaner and more efficiently while reducing pollution at the same time.

In areas that use reformulated gasoline, smog-forming pollutants are reduced by more than 100,000 tons per year—the equivalent of eliminating the harmful emissions from more than 20 million vehicles, according to the Environmental Protection Agency.

Reducing sulfur in gasoline further reduces tailpipe emissions that adversely affect human health and the environment. A new breakthrough refining technology significantly lowers gasoline sulfur content and promotes cleaner air while limiting manufacturing costs.

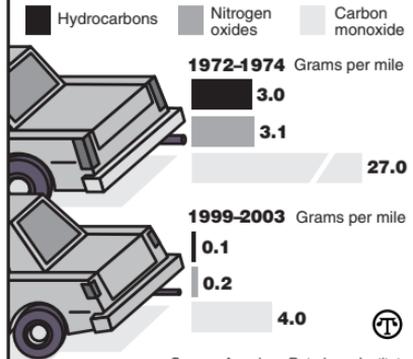
Sulfur content in gasoline has already been reduced by 90 percent since 1970, and future reductions of sulfur content in gasoline and diesel fuel from new technologies will address the demands of refiners, automakers and the public.

Petroleum companies have been working with auto manufacturers to develop further advances in vehicle power trains to help cars run more efficiently and be more environmentally friendly.

One concept being evaluated is the fuel cell. Fuel cells operate like a battery but do not run down or require recharging. The cells produce electricity from an electrochemical reaction between

### New fuels, cleaner air

Advances in engine and fuels technologies have helped to reduce vehicle emissions over the last 30 years.



Source: American Petroleum Institute

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hydrogen and oxygen. Fuel cells running on hydrogen will emit only water vapor.

Companies are experimenting with methods of generating the needed hydrogen from a variety of sources, including gasoline and diesel, methanol, compressed natural gas and others. A major issue being considered is whether the hydrogen is generated onboard the vehicle or at some centralized location. The fuel cell vehicle remains a long-term concept.

Beginning in 2004, new cars running on low-sulfur fuel and utilizing the most advanced emissions reduction equipment will produce as little as 5 percent of smog-forming emissions produced by automobiles on the road today.

As new fuel technologies become more widely implemented, consumers who purchase gasoline will know they are playing an important role in keeping our air clean.

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