

## Ozone Action Days in the US permits the use of propane lawnmowers



### Did you know?

- An Ozone Action Day can be declared by a local municipality, county or state in the United States of America and is observed at certain times during the summer months, **when weather conditions** (such as heat, humidity, and air stagnation) **run the risk of causing health problems**.
- Ozone is a colourless gas that can be found in the air we breathe.
- **Ozone is the primary ingredient in urban smog**. It is formed by a chemical reaction in the presence of sunlight. Sources of VOCs and NOx include:
  - on-road vehicles such as cars, trucks and buses
  - off-road engines such as lawn and garden equipment, all-terrain vehicles, aircraft, motor boats, locomotives, and construction and farm equipment
  - large industry and stationary combustion sources such as chemical plants, petroleum refineries, and coal-fired and natural gas power plants
  - storage and transport of petroleum and related products
  - small industry
  - consumer products such as oil-based paints and solvents
- Most people might not equate a small engine, such as a gasoline or diesel powered lawn mower with smog or substantial emissions, however their cumulative impact on the environment is quite large.
- **These engines do not tend to have catalytic converters**; a device used to lower emissions, commonly found in automobiles, and therefore can produce 4 times the amount of pollution than from a car per hour.



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## What are we doing?

- Based on factors ranging from cost to local contract requirements, **a growing number of lawn care companies are turning to propane** to power their mowers. Earlier this year, Clean Scapes Lawn Solution in Austin, Texas, made a significant investment to convert its lawn mowers from gasoline to propane. “We maintain hundreds of properties around Central Texas and San Antonio, and we feel we should do it in the most environmentally responsible way. So converting our mowers from gas to propane seems like the most environmentally productive way,” Ivan Giraldo, Clean Scapes co-owner, says.
- **There were several benefits** in transitioning to propane-powered lawn mowers. For starters, because propane is deemed by the EPA to be an **“approved alternative fuel,”** propane-powered mowers can be used even when Austin’s “Ozone Action Days” prohibit the use of gas-powered equipment. That means more days out mowing lawns—and making money.

## What is the result?

- The local municipality in the city of Austin, Texas have stipulated that if you’re bidding to cut grass for any government entity in the county, **you have to cut with a propane lawn mower.** The city’s effort in going green.
- In Texas, lawn care companies that join the Texas Clean Cities programme can get half the cost of the conversion back.
- **Propane is cheaper than diesel,** and some government accounts are beginning to require the use of propane-powered mowers - so making the investment can lead to greater opportunities for business.
- Propane-powered mowers can be used even when “Ozone Action Days” prohibit the use of gas-powered equipment.
- The benefits of using propane equipment include an **80% reduction in toxic emissions** compared with diesel and gasoline, and propane is about a **30% cheaper** per gallon.
- Propane burns clearer than gasoline and may reduce repair and maintenance costs on the lawn mower. **There’s less dirt and contaminants in the fuel.** The oil in the equipment stays cleaner and lasts longer. Internal engine parts will also stay cleaner and more efficient.
- Studies indicate that because propane is cheaper and more efficient, using a propane lawn mower **can double lawn cutting time before refueling.**