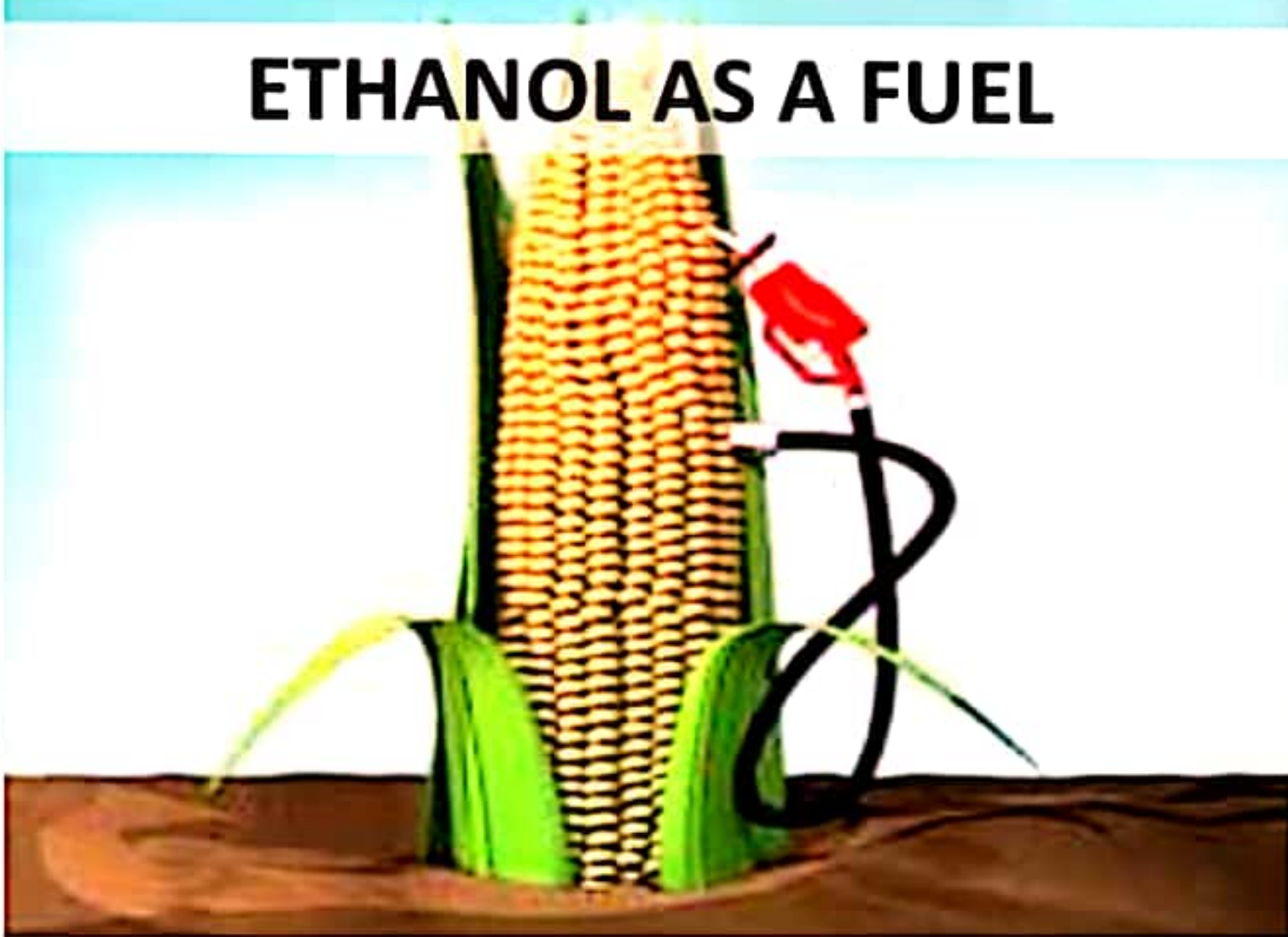


ETHANOL AS A FUEL



Ethanol is used as an automotive fuel by itself and can be mixed with gasoline to form what has been called "**GASOHOL**" or FUEL ETHANOL.

How is ethanol being used as transportation fuel ?

FUEL EFFICIENT

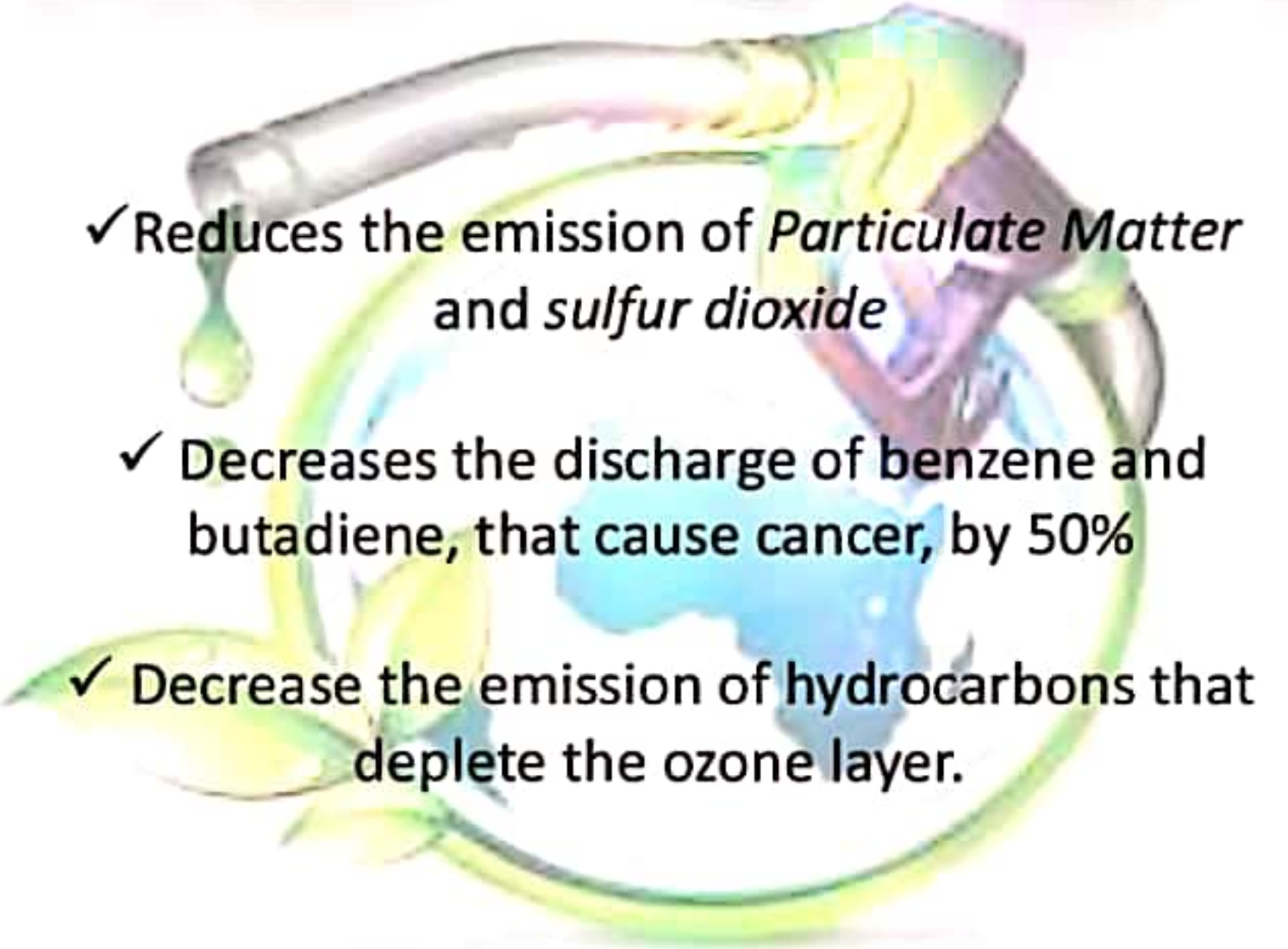
When mixed with unleaded gasoline,

- ✓ ethanol increases octane levels
- ✓ improves combustion
- ✓ extends the supply of gasoline



ECO-FRIENDLY

- ✓ A *renewable* source of energy
- ✓ Its production or the combustion does not emit *green house gases* or poisonous pollutants



✓ Reduces the emission of *Particulate Matter* and *sulfur dioxide*

✓ Decreases the discharge of benzene and butadiene, that cause cancer, by 50%

✓ Decrease the emission of hydrocarbons that deplete the ozone layer.



Etanol Comum Super Premium

There are currently **over 2,250 gas stations in the U.S. that sell E85 fuel.** This ethanol-fuel blend is for use in flex-fuel vehicles (FFV) only.

Source: Renewable Fuels Association



In 2012, American ethanol use helped reduce the need for imported oil by an estimated *462 million barrels*. For perspective, that is more ethanol than America imports from Saudi Arabia each year.

Source: Renewable Fuels Association



Oil import dependence **dropped to 41%** in 2012. Without ethanol, oil import dependence **would have been 48%.**

Source: Renewable Fuels Association

11 units in Uttar Pradesh -75 million liters
7 units in Tamil Nadu -62.5 million liters
8 units in Karnataka- 66.5 million liters
4 units in Andhra Pradesh-over 40 million

Similar steps have also be taken up by the cooperative sector units in **Maharashtra, Punjab and UP**. By the end of the year it is estimated that about **300 million liters** capacity would have been created for the production of anhydrous ethanol.

Source: Ethanolindia.com