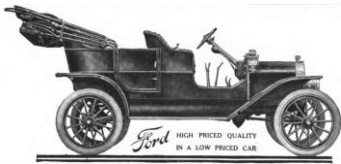


# Three-way catalysts in cars



# The era of mobility



1908 Ford Model T advertisement



Ford Model A



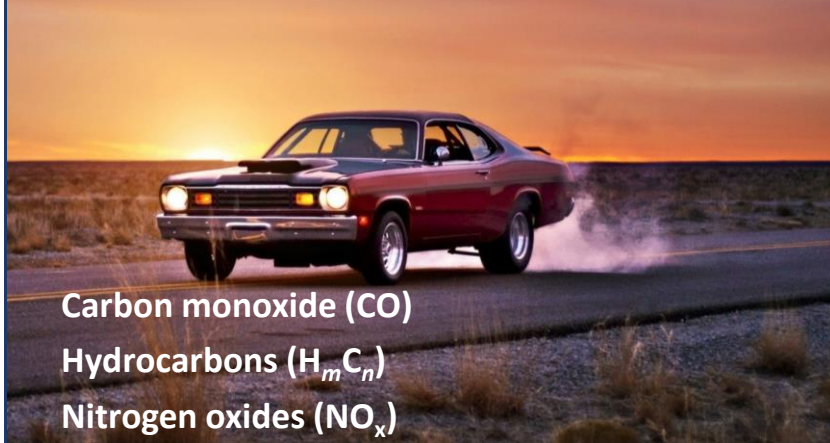
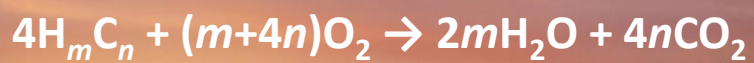
1925 Ford Model T Touring Car

## The consequence



*The Empire State Building on Nov. 24 1966 - Neal Boenzi (The New York Times)*

## What is the origin?

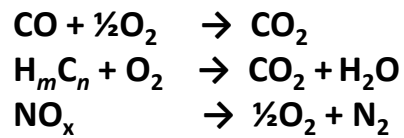


Carbon monoxide (CO)

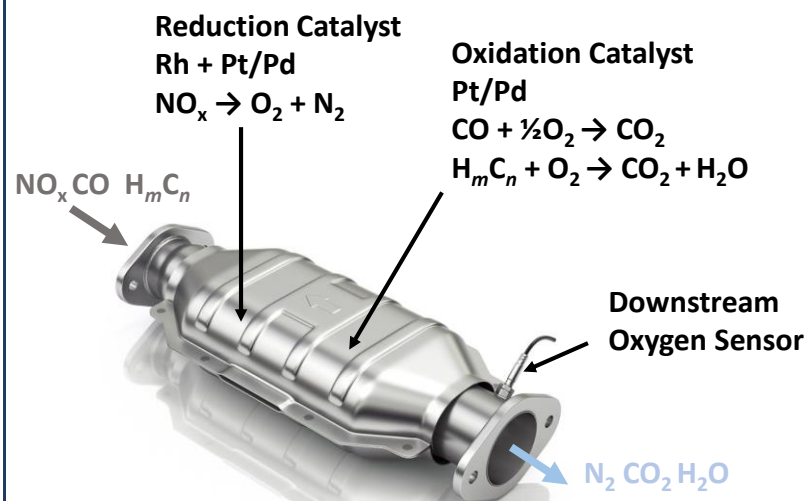
Hydrocarbons ( $\text{H}_m\text{C}_n$ )

Nitrogen oxides ( $\text{NO}_x$ )

## The catalytic converter



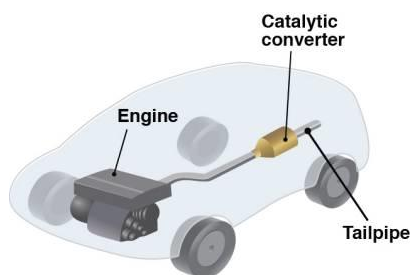
## The three-way catalyst



# Catalyst considerations

**Metals**  
**Pressure dependence**  
**Alternative fuels**

**Thermal flexibility**  
**Poison tolerance**



# Is it successful?

