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## Porsche: The Cayenne Launch

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### What is Synthetic Motor Oil?

- Conventional oil is simply refined crude oil. Synthetic motor oil is not only refined, but is also distilled, purified, and broken down into its basic molecules.
- Synthetic Motor Oil is a NATURAL CAPITAL: Natural resources and natural services that keep us and other species alive and support our economies(widely use in air crafts, cars, space shuttles, etc).
- Synthetic Motor Oil is a NON-RENEWABLE resource: A resource that exists in a fixed amount in the earth's crust and has potential for renewal by geological, physical, and chemical processes taking place over hundreds of millions of years.

# What is Synthetic Motor Oil made of?

- 100% man-made
- liquid mixture of thousands of hydrocarbons (organic compounds containing only carbon and hydrogen atoms- these occur in fossil fuels)
- petroleum deposits
- lube oils

### Life Cycle

 Synthetic motor oil is made through a chemical process known as the Fischer-Tropsch process, starting with raw materials like methane, carbon monoxide, and carbon dioxide.

#### **Manufacturing and Use**

- Synthetic oil can then be manufactured using chemically modified petroleum components rather than whole crude oil, but can also be synthesized from other raw materials.
- Once it is broken down to its basic molecules it is rebuilt and added to, so that it can better protect against wear, high heat, cold weather and sludge buildup.
- The process helps engines run more efficiently for a longer period of time.
- Used as a lubricant for internal combustion engines, which powers cars, lawnmowers, engine-generators, and many other machines.

## Disposal

- To dispose of synthetic motor oil you should place the used motor oil in a closed container and then take it to a service station or a collection location that recycles used motor oil.
- Recycled motor oil can be combusted as fuel, usually in plant boilers, space heaters, or industrial heating applications.

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