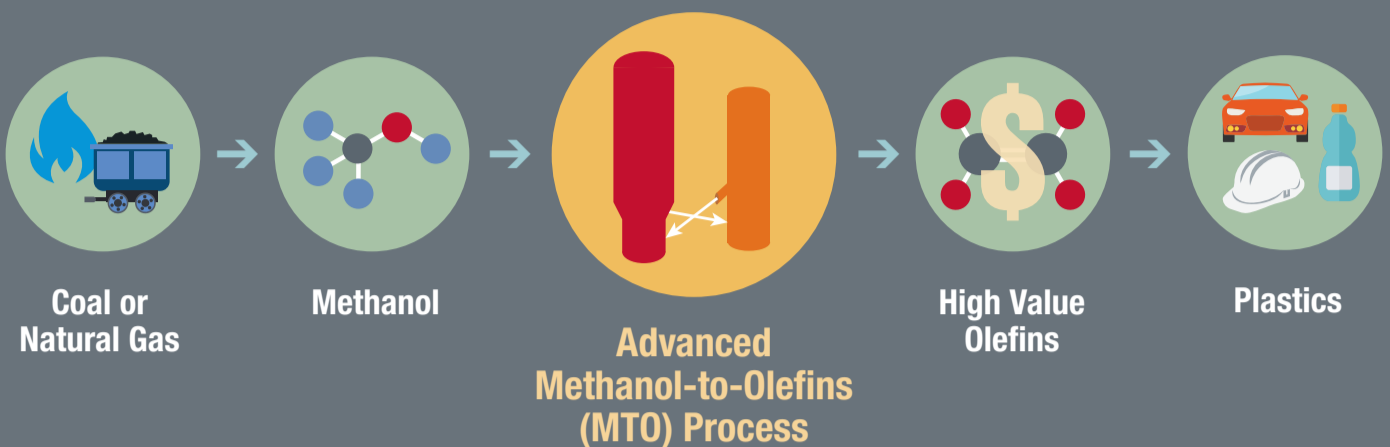


Turning low-cost coal or natural gas into high-value plastics

Traditionally, plastics are derived from crude oil, but regions rich in coal or natural gas can more cost-effectively meet the growing demand for plastics using these domestic resources, rather than imported crude oil.

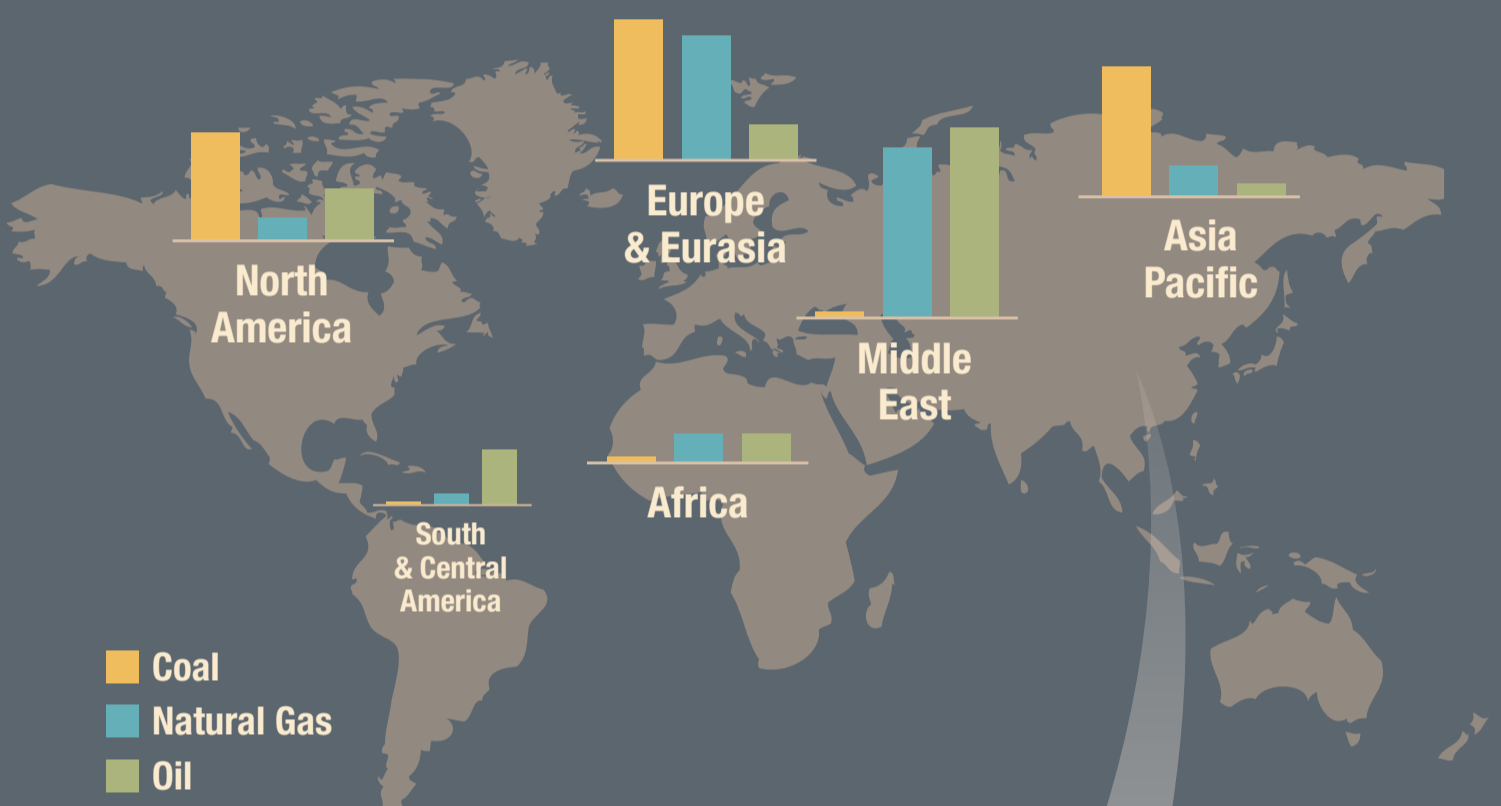
Methanol from gasified coal or natural gas can be turned into the components used to make plastics



100 million metric tons per year of methanol currently is produced from coal or natural gas

Proven fossil fuel reserves worldwide

Coal and natural gas is available almost everywhere in the world.



Source: BP Statistical Review of World Energy 2015

A case for coal

By converting its coal to methanol for plastics production, China can:

- REDUCE** dependence on petroleum imports
- LOWER** exposure to volatile crude prices
- IMPROVE** employment and economic activity in rural, coal-rich regions



In the next 5 years, China will invest **\$100 billion** in coal-to-chemicals*

*According to a 2014 Citi research study, China Coal-to-Chemicals.

Proven technology

8 companies in China have chosen UOP's Advanced MTO technology, representing an annual capacity of nearly **3.2 million metric tons** of ethylene and propylene.

UOP Advanced MTO technology:

Offers the lowest operating cost



Significantly increases yields and feedstock efficiency

Projected < half the cash cost of production compared to traditional cracking methods

AND

nearly double the Return on Investment

Learn more about UOP
Advanced MTO technology:
www.uop.com/mto

Honeywell
UOP