

# Denmark's Petroleum Resource

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January 2019 - 1st Period

# Introduction

I have chosen Denmark because I am Danish on my mother's side of the family. I have always wanted to visit this country as we still have family there. I am also very interested in Viking history and realize that the Vikings were somewhat forced to go on their raids due to the lack of natural resources in the brutal Scandinavian lands. I have chosen to research the natural resource of PETROLEUM due to its extensive economic impact on Scandinavian culture.



# Denmark

According to the Central Intelligence Agency (CIA), Denmark can be described

as, “Once the seat of Viking raiders and later a major north European power, Denmark has evolved into a modern, prosperous nation that is participating in the general political and economic integration of Europe.”



Image source: <https://www.bbc.com/news/world-europe-17929661>

# Natural Resources in Denmark: Petroleum

According to the CIA, Denmark's natural resources include petroleum, natural gas, fish, arable land, salt, limestone, chalk, stone, gravel and sand. However, Denmark is a net exporter of food, oil, and gas and enjoys a comfortable balance of payments surplus, but depends on imports of raw materials for the manufacturing sector.

Denmark's economy heavily depends on their rather recent discovery of their petroleum natural resource. Until this was discovered, Denmark relied upon the import of petroleum products like oil, gas, and plastics.

Petroleum is a fossil fuel and is considered a non-renewable resource.

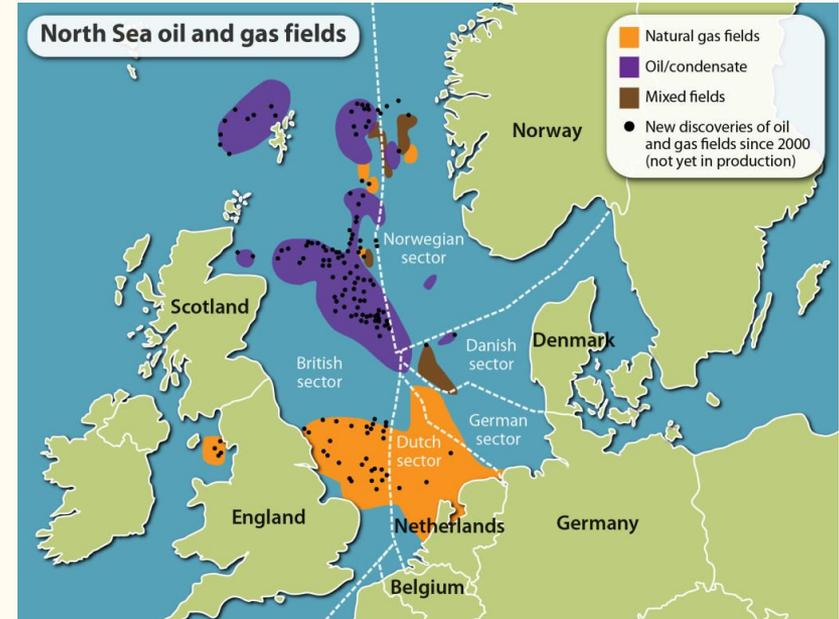


Image source: <https://www.crystolenergy.com/assessing-future-north-sea-oil-gas/>

# How We Use Petroleum

According to the United States Energy Information Agency (EIA),

“Petroleum products include transportation fuels; fuel oils for heating and electricity generation; asphalt and road oil; and [feedstocks](#) for making the chemicals, plastics, and synthetic materials that are in nearly everything we use. In 2017, of the approximately 7.3 billion barrels of total U.S. [petroleum consumption](#), 47% was motor gasoline (includes ethanol), 20% was distillate fuel (heating oil and diesel fuel), and 8% was jet fuel.”

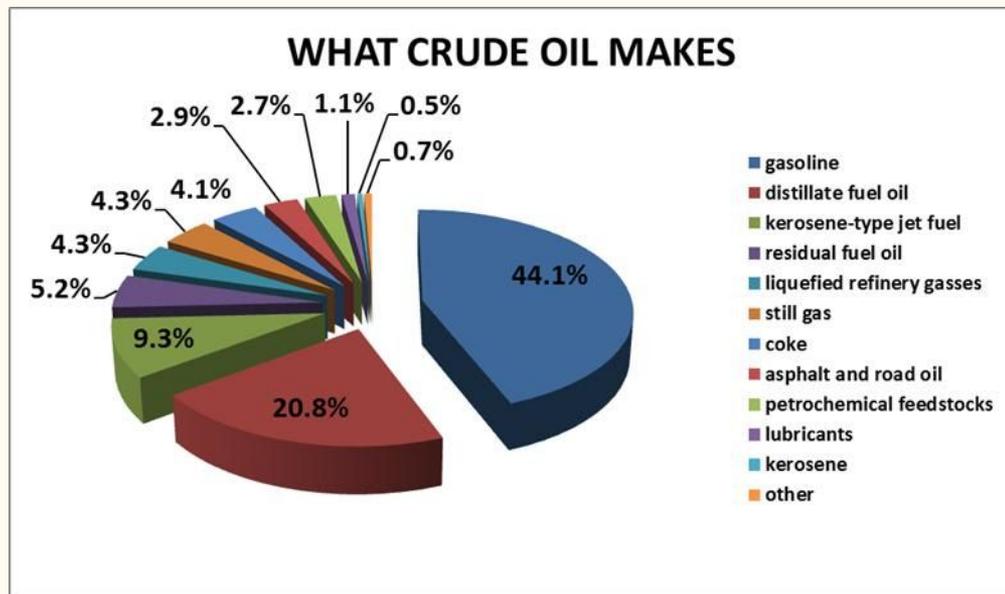
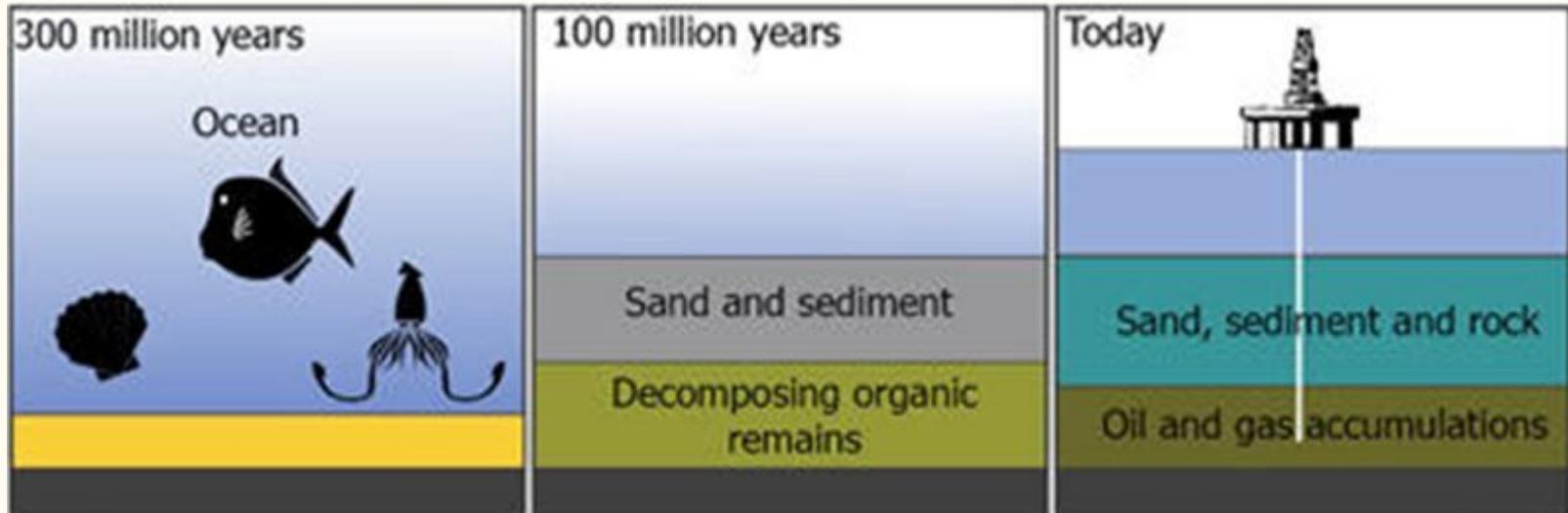


Image source: <http://dolphinlogisticsvc.com/about-crude/>

# How Petroleum is Formed

According to National Geographic, petroleum is formed over hundreds of millions of years as the remains of sea life (plants and animals) decay and are compressed (heat and pressure) under layers of sedimentary rock.

Denmark has access to an underwater field of petroleum (known as a reservoir) off its western shore.



# Properties of Petroleum

- Made of HYDROCARBONS (molecules made of hydrogen and carbon)
- Have some impurities like nickel and vanadium
- No two oils are exactly alike due to the impurities
- Appearance can vary from yellow to green and brown to black
- Oily in texture
- Ignite and burn easily
- Release their energy completely
- Have the general chemical formula of

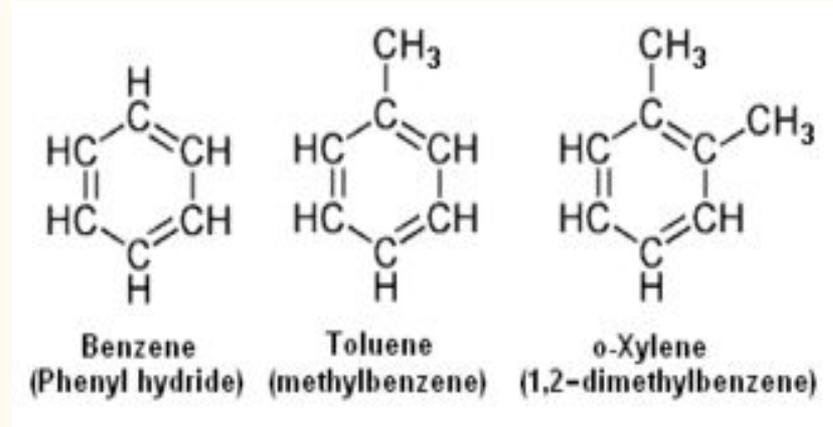
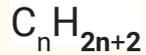


Image source: [http://en.citizendium.org/wiki/Petroleum\\_crude\\_oil](http://en.citizendium.org/wiki/Petroleum_crude_oil)

# How Petroleum is Extracted

- Petroleum (also known as crude oil) is extracted mainly by drilling.
- On land drilling is done with Oil Rigs.
- Offshore drilling is done with Oil platforms.
- Once oil is found, pumps are then used to bring the oil to the surface.



Image source: <http://www.hess.com/lean-advantage/oil-and-gas-resource-recovery/denmark-oil-well-challenges-and-lean-processes>

# What Petroleum Has Done for Denmark

According to the Danish Energy Agency (DEA), “Oil and gas is found in the Danish part of the North Sea and Denmark. Denmark has produced oil and gas since 1972, a production of great importance to the Danish economy, which creates workplaces both onshore and offshore.”

Denmark relies heavily upon the taxes generated from crude oil production, the jobs created, and the export income.

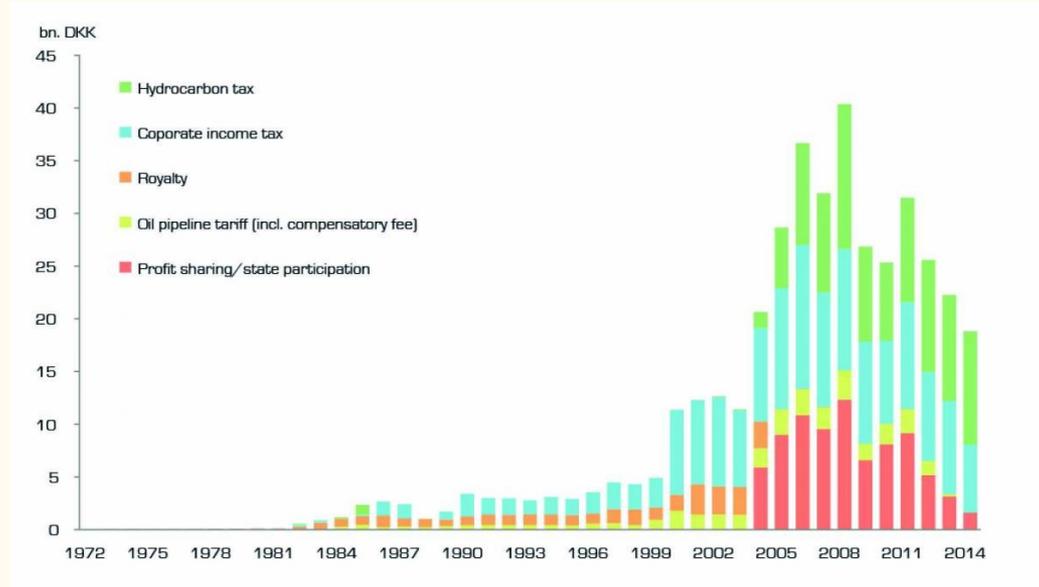


Image source: <https://ens.dk/en/our-responsibilities/oil-gas/economy-oil-and-gas>

# The Future of Petroleum in Denmark

According to CPH Post On-Line, in February of 2018, the Danish government announced,

“ it is stopping all future oil and gas extraction from Danish land and internal waters.

The decision concludes years of uncertainty regarding the future of the fossil fuel industry in the country.”

This is, in part, due to the fact that no new oil reservoirs have been found. For years the government relied upon the prospects of finding new oil reservoirs within the Country’s borders and waters but these have simply not been found. Denmark is, therefore, beginning to wean itself from its half a century long reliance on crude oil production. It has not yet been determined exactly how the economy will be affected and recover from this loss.

## CRUDE OIL PRODUCTION in DENMARK

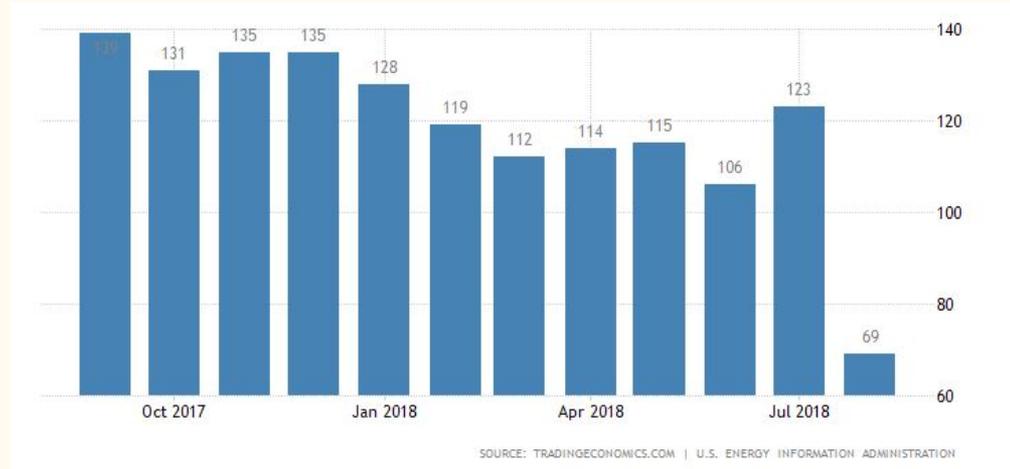


Image source: <https://tradingeconomics.com/denmark/crude-oil-production>

# Summary

- Petroleum aka Crude Oil
- Petroleum is a fossil fuel
- Petroleum is a non-renewable natural resource
- Petroleum is created over hundreds of millions of years from the remains of decaying plants and animals that have been compressed beneath sedimentary rock layers in the oceans.
- Petroleum is a hydrocarbon
- Denmark has on and offshore reservoirs of petroleum
- Denmark has relied upon crude oil production since 1972
- Denmark faces unknown economic repercussions due to the discontinuation (and lack of resource) crude oil production



Image source: <https://www.swedishnomad.com/interesting-facts-about-denmark/>

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