## 1. What is crude oil and how is it formed:

Crude oil is a fossil fuel, meaning it is derived from ancient fossilized organic material. this means that any organic being could potentially become crude oil over a vast period of time (thousands to millions of years) if exposed to the correct conditions. These conditions are mainly specific organic decay (the absence of plentiful oxygen forces aerobic bacteria to find other reactants for the decomposition process) under extreme pressure and heat in a vacuum-tight environment.

## 2. Where to drill for oil and how to find it:

Seismic exploration: Explosions cause sound waves to hit different layers of rock in the ground. Special earth microphones on the earth's surface - called geophones - pick up the reflected waves again. With an accuracy of plus/minus 20 meters, specialists can calculate the structures of the subsurface and make predictions about possible oil deposits. The first test wells are then drilled to provide more precise data. For example, they provide an indication of the size of the reservoir and the quality of the oil.



## 3. How to extract crude oil (different methods):

- Oil is extracted from great depths using drilling rigs on land. There are several phases:
  - 1. The oil reaches the surface through the natural pressure
  - 2. When the pressure decreases, gas or water must also be pumped in to extract the crude oil. This causes the pressure in the oil field to rise again.
  - 3. Otherwise, substances such as chemicals are used to dissolve the oil.
- Extraction on the open sea (offshore extraction) is much more difficult. Oil rigs have to be built for this purpose.
- The third possibility is to extract oil by open pit mining: this means that the oil is really close to the surface



## 4. How to refine crude oil:

An oil refinery is an industrial company that converts the raw material oil into fractions with a defined boiling range by purification. Refinement of the boiling cuts is carried out by processes such as extraction or chemical cleaning. Isomerization and catalytic reforming are used to improve the quality of the products, such as their octane number. The substances are gained in different states of aggregation. Examples of gaseous substances are propane and butane. Liquid are petrol, kerosene, diesel fuel, light and heavy heating oil, lubricating oil and solid are bitumen, sulphur, petroleum coke, calcinate.

After the presentations we split into different political parties and asked ourselves Monday's question: Should we drill for oil in the Oslofjord? and to represent them in a political meeting according to the political views of the representing party. I will explain our political opinion in the next step.