Fact sheet: The DEA's forecasts

The DEA regularly makes an assessment of Danish oil and gas resources. This resource assessment is used as a basis for preparing oil and gas production forecasts.

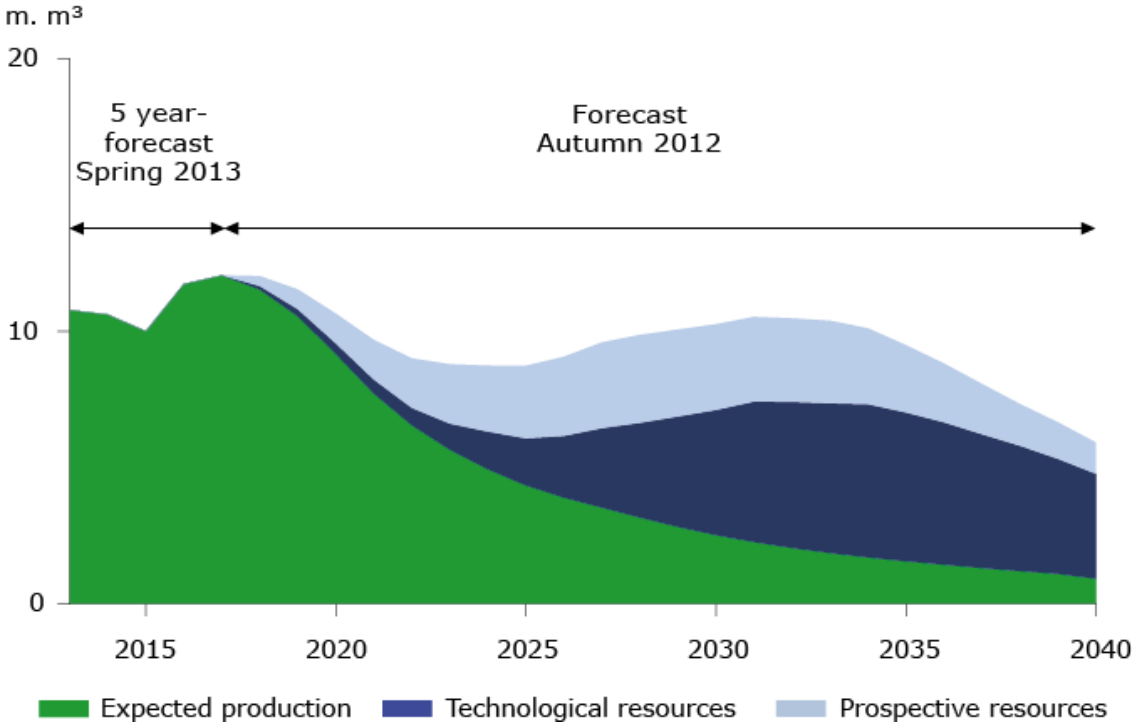
Previously, the DEA published a revised short-term production forecast – the so-called five-year forecast – and a long-term 20-year forecast every spring. In future, the DEA will prepare an updated resource assessment and a long-term production forecast every other year, and an updated five-year forecast every year.

The report "Denmark's Oil and Gas Production and Subsoil Use 2012" includes an updated five-year forecast from spring 2013 and an unchanged long-term production forecast from autumn 2012; see figure 1 below.

A forecast based on total resources can be divided into the following contributions:
Expected production profile, technological resources and prospective resources.

- The expected production profile is a forecast of production from existing fields and known discoveries.
- Technological resources are an estimate of the volumes recoverable by means of new technology.
- Prospective resources are an estimate of the volumes recoverable from future new discoveries made as a result of ongoing exploration activity and future new future licensing rounds.

Fig. 1 Forecast elements



mio. m^3 = m. m^3
5 års prognose = Five-year forecast
Forår 2013 = Spring 2013
Prognose = Forecast
Efterår 2012 = Autumn 2012
Forventet forløb = Expected production profile
Teknologiske ressourcer = Technological resources
Efterforskningsressourcer = Prospective resources

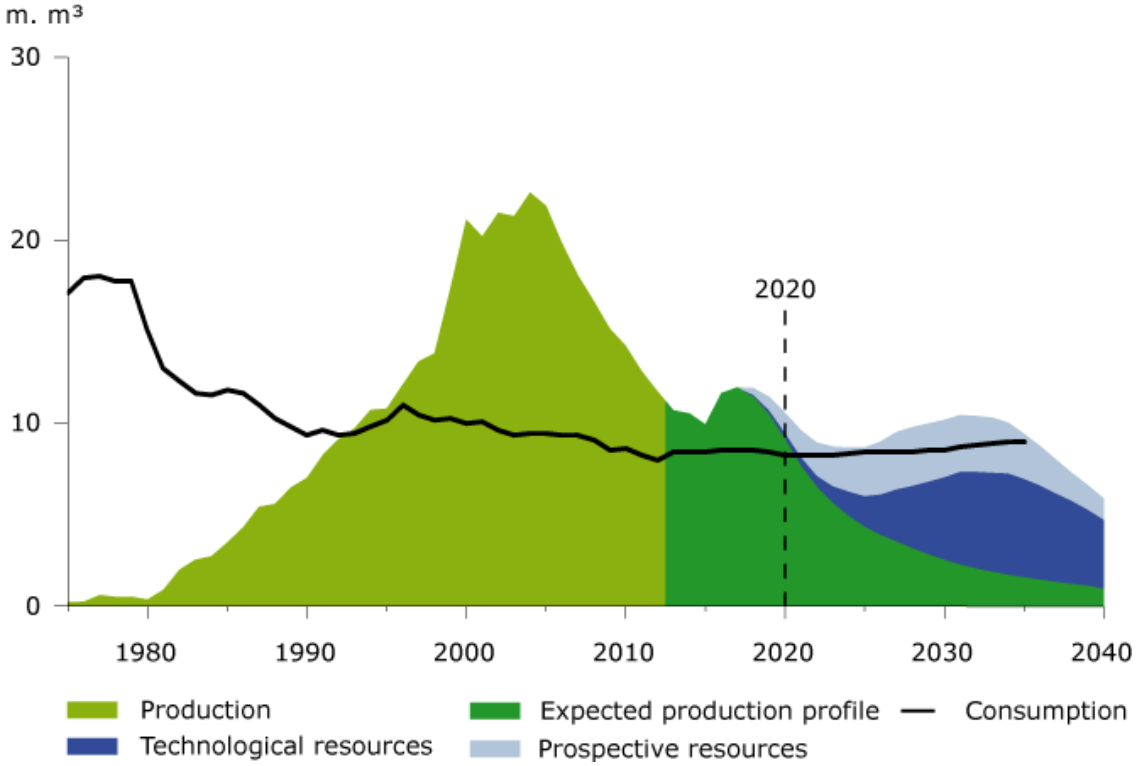
Oil

The oil production forecast is divided into the three above-mentioned contributions, the expected production profile, technological resources and prospective resources, which are shown in figure 2 along with the consumption forecast from "The DEA's baseline scenario, 2012".

It appears from the figure that Denmark is anticipated to be a net exporter of oil for eight years up to and including 2020, based on the expected production profile. The period in which Denmark will be a net exporter can be assessed fairly reliably for the expected production profile, as the production deriving from this contribution is known with a great degree of certainty and is expected to decline substantially, while consumption is expected to remain fairly constant.

The oil production forecast that includes technological resources and prospective resources fluctuates somewhat from 2015 to around 2035, after which estimated production is expected to decline. If technological and prospective resources are included, Denmark is estimated to remain a net exporter until about 2035. However, it should be noted that around 2025, the amount produced, based on all contributions, is not expected to differ significantly from the amount consumed.

Fig. 2 Production and possible production profile, oil



mio. m^3 = m. m^3
Produktion = Production
Teknologiske ressourcer = Technological resources
Forventet forløb = Expected production profile
Efterforskningsressourcer = Prospective resources
Forbrug = Consumption

Sales gas

Figure 3 shows the sales gas production forecast, divided into the expected production profile, technological resources and prospective resources. The figure also shows the consumption forecast from "The DEA's baseline scenario, 2012". It appears from the figure that Denmark is anticipated to be a net exporter of sales gas for 13 years up to and including 2025, based on the expected production profile.

For sales gas, the DEA anticipates no significant contribution from technological resources for producing fields because current technology has already generated a much higher recovery factor than for oil. However, a contribution reflecting the potential for developing new well technology has been included.

If technological and prospective resources are included, Denmark is estimated to remain a net exporter of natural gas until about 2035.

Fig. 3 Production and possible production profile, sales gas

mia. Nm^3 = bn. Nm^3
Produktion = Production
Teknologiske ressourcer = Technological resources
Forventet forløb = Expected production profile
Efterforskningsressourcer = Prospective resources
Forbrug = Consumption