### Project/publication

### Initiator
The Norwegian Petroleum Directorate

### Objective
The Norwegian Petroleum Directorate is challenged with reduced oil production, increasing costs, smaller and fewer discoveries and a weak recruitment of professionals. Through building scenarios, the Directorate wants to increase the understanding of the uncertainties associated with the estimates of the total resources.

### Geographical delimitation
The Norwegian Continental Shelf.

### Time horizon
2046

### Thematic focus
The main emphasis is on the petroleum resources and the economic and societal consequences of different levels of future petroleum activity.

### Images of the future
Four future scenarios are drawn up, which are based on an axis system with oil prices on one axis, and undiscovered resources on the other. The scenarios are labelled: Full speed ahead; Technolab; Sorry, we’re closed; Blood, sweat and tears. The scenarios are presented in chapter 6 of the report.

### Key driving forces
The scenarios are built upon five main driving forces:  
1. Global demographic developments and demand for energy  
2. Security of supply  
3. Global climate change due to energy consumption  
4. Oil and gas prices  
5. Undiscovered resources

### Uncertainties / wildcards
There are no special wildcards. The uncertainties are found in the central driving forces.

### Accomplishment and collaboration
This is an expert-based study, carried out by the Norwegian Petroleum Directorate itself. There might have been external collaborators, but they are not mentioned.

### Method
The study largely uses a qualitative approach. However, the scenarios are built around two central dimensions - price and recoverable oil and gas reserves – and hence it has the appearance of a modelling study. The scenarios can be summarized as four different developments for total production of oil and gas.

### Sources of information
The study uses information/numbers from the Petroleum Directorate itself as well as information from the International Energy Agency.

### Strengths
The study presents the consequences of different levels of petroleum activity.

### Weaknesses
The study shows low/high projections. The study could have integrated political and environmental forces in a better way.

### Attention and significance
This study has on many occasions been presented by representatives of the Petroleum Directorate, but its significance in internal strategy and decision-making processes is not known.
| 16. Relevance for the Fram Centre | The study provides an overview of Norwegian oil and gas activities and alternative paths of development. The Petroleum Directorate is an important government agency when it comes to defining the framework conditions for petroleum development in the north. |