

Getting the most of our resources

Improved Recovery



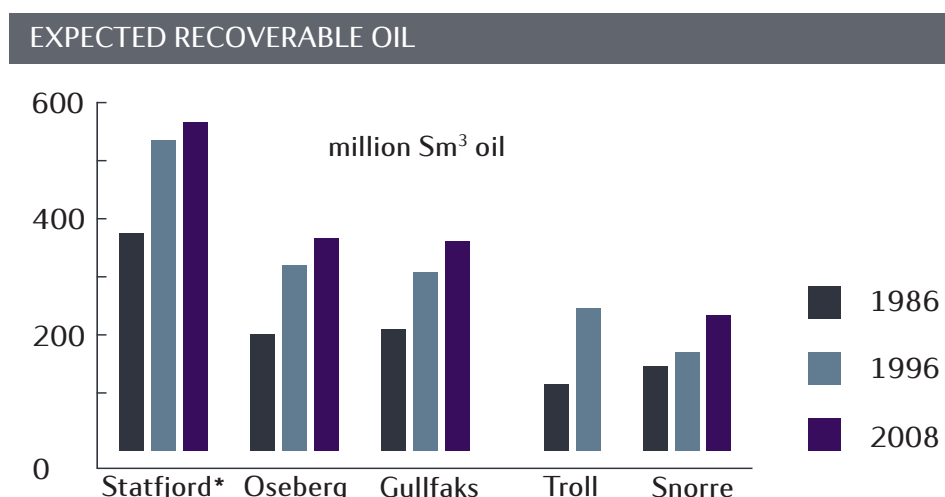
Statoil

Statoil is a world leader in operations designed to Improve oil and gas recovery.

Knowledge gained from decades of experience on the Norwegian continental shelf has enabled us to apply our skill with improved recovery technologies to advanced work processes that extend field life everywhere we operate.

We invite you to take a look at some of our success stories from Norway, and discover how we are developing and applying cutting-edge recovery techniques to get the most out of our resources around the world.

Discover how we get the most out of our resources at statoil.com/technologyinnovation



*Norwegian share

12 year total compiled from results at Statfjord, Gullfaks, Oseberg, Troll and Snorre.

2,000,000,000

Two billion additional barrels of oil recovered from five mature NCS fields, thanks to operations that improve recovery.

Oseberg

At the Oseberg field in the North Sea, we've seen an enormous rise in hydrocarbon reserves resulting from the application of improved oil recovery technology. In fact, current projections show that improved recovery operations will more than double the field's reserves, compared to original estimates.

Oseberg's lifetime has been extended by 14 years thanks to operations such as the extensive use of gas injection, application of sophisticated seismic systems and continuous development of new drilling technology. The field is now set to continue producing until 2031, with high recovery rates across the entire development.

For more on how we are extending Oseberg's field life, go to [statoil/technologyinnovation](#)



14 years

Oseberg's field life has been extended fourteen years, from 2017 to 2031, as a result of our innovative use of improved recovery technology.

Statfjord

As a late life field, Statfjord has seen significant results created from improved recovery operations. It is expected that increased recovery from the blow down of reservoir pressure will add some 9 billion US dollars to value creation from this North Sea site.

By shifting the drainage strategy from pressure maintenance by injection, to low pressure production from reservoir blow down, the skilled and experienced Statfjord team is securing high ultimate recovery of the field's remaining resources. Artificial lift, particularly gas lift and electric submersible pumps, play crucial roles in aiding production in high water cut wells at low reservoir pressure, beyond what is usually considered standard cutoff criteria.

Late life fields can represent opportunities and value;
find out more at statoil.com/technologyinnovation



9,000,000,000

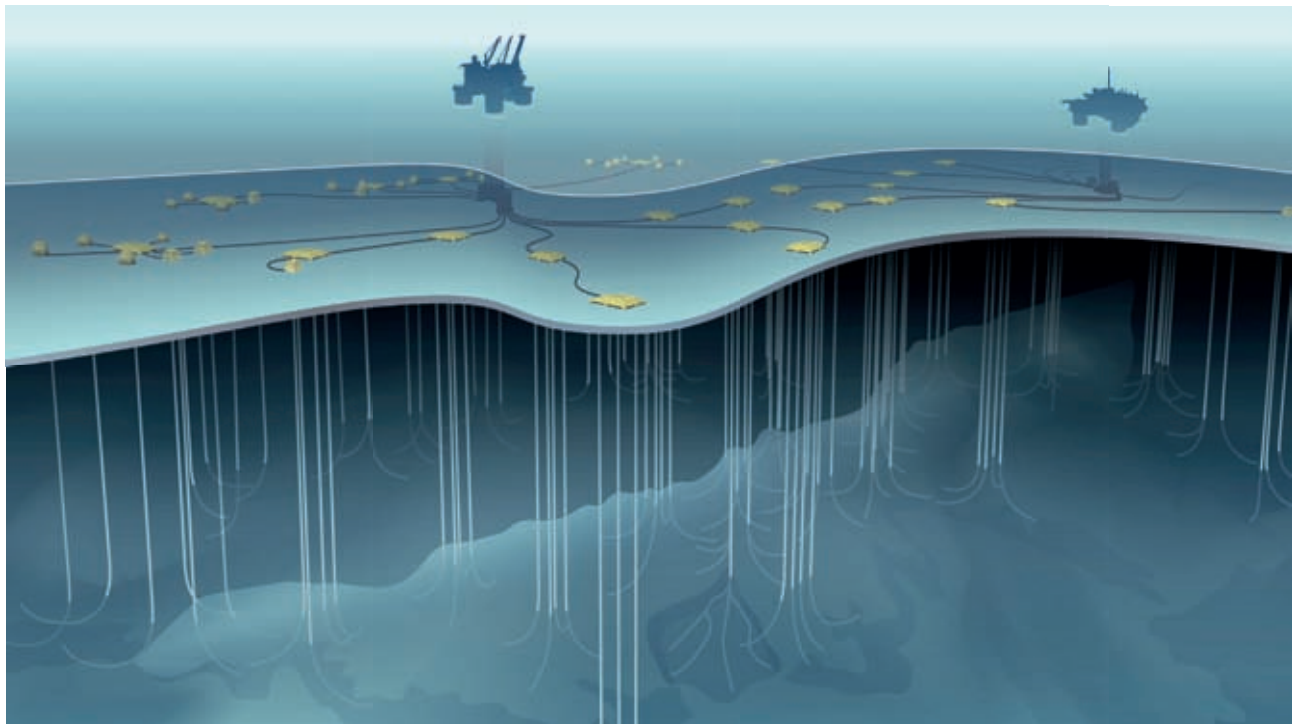
Nine billion USD in additional value drawn from Statfjord by the application of improved recovery techniques.

Troll

Maximum reservoir contact is the key to increased recovery from the thin oil zones of Troll. To achieve this, we've placed close to one million metres of multilateral wells at the site, with individual well length up to 7,700 metres.

Multilateral drilling and completion with advanced wells are crucial to success on Troll and other fields as we work to achieve maximum recovery. In total, approximately 20% of our completed wells on the Norwegian continental shelf have been equipped with advanced instrumentation, downhole valves, other downhole flow control devices or multiple branches.

Learn more about our achievements at Troll at statoil.com/technologyinnovation



1,000,000

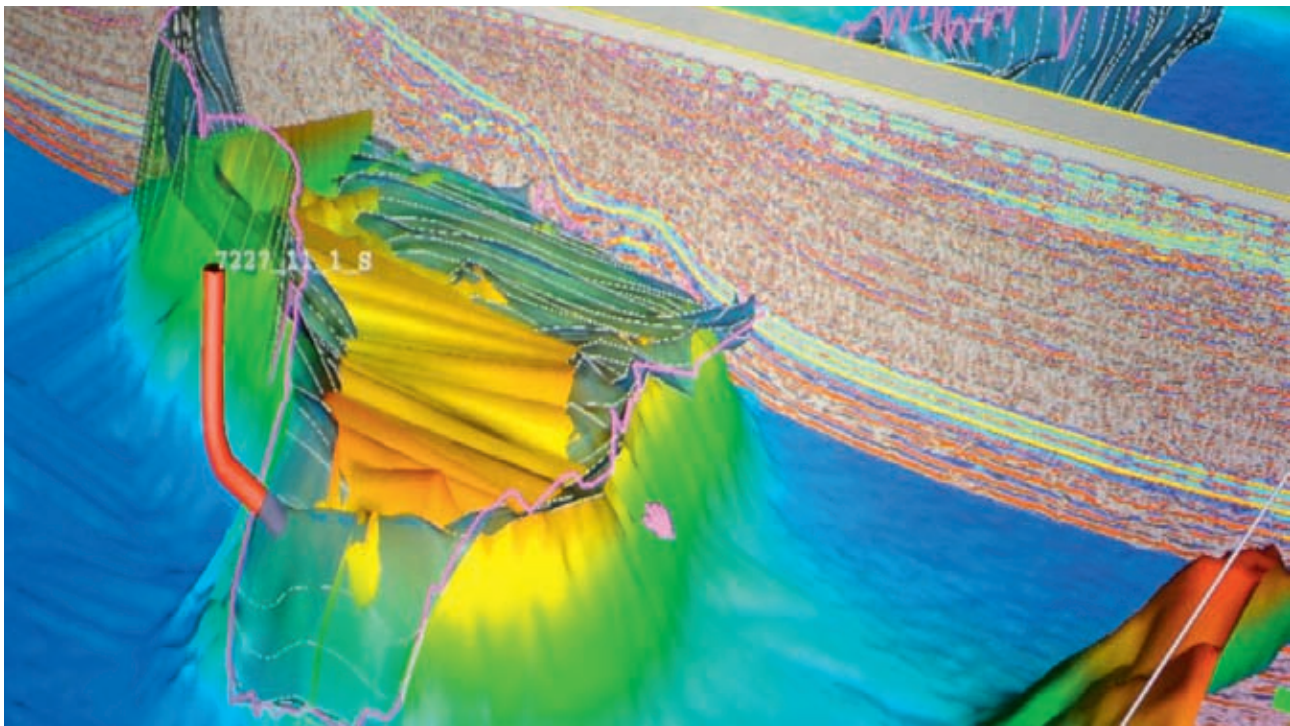
We have placed one million metres of multilateral wells in the thin oil zones of Troll.

Gullfaks

The high recovery rate at Gullfaks is a leading example of the benefits of applying cutting-edge technologies such as seismic inversion, seabed seismic acquisitions and reservoir monitoring based on time-lapse (4D) seismic technology.

Four-dimensional seismic surveys have proven to be a particularly successful improved recovery tool, creating greater certainty in the placement of production wells in the fields. On Gullfaks alone, 4D seismic surveys have contributed to 62 million barrels of additional production. The technique is based on comparative results of 3D seismic surveys, providing quantitative imaging for production of oil saturation maps.

4D seismic is just one of the advanced Improved Recovery technologies we employ. Learn more at statoil.com/technologyinnovation



300,000,000

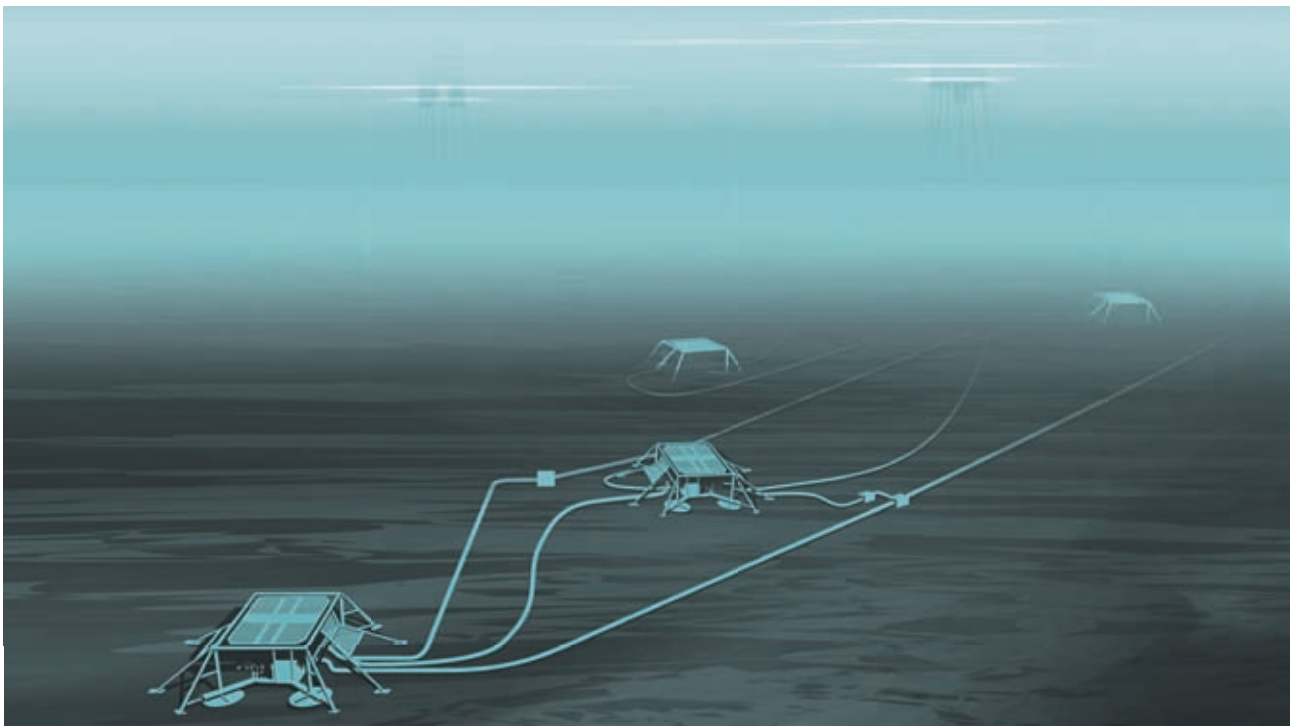
Advanced Improved recovery technology has yielded three hundred million barrels of additional recovery at Gullfaks.

Tyrihans

Knowledge gained from improved recovery operations in mature fields will serve as the backbone of new developments such as Tyrihans. At all our early stage fields, the skills and processes developed by Statoil for existing sites will be applied through focused technology implementation, leading to better resource management and higher recovery. Overall, Improved recovery measures already implemented in the field's development are expected to increase recovery at Tyrihans by some 50%.

Our experience in operating subsea fields confirms that the application of early-phase IOR technology, such as subsea raw water injection, creates a key first step towards achieving our high recovery ambitions.

The future is bright at Tyrihans and other new fields. Take a look at tomorrow's developments on statoil.com/technologyinnovation



50%

The implementation of advanced Improved recovery measures at Tyrihans is estimated to lead to a fifty percent increase in oil recovery at the site.

Today's energy realities demand that we get the most out of our current resources, while continuing to develop renewable energy to help meet the needs of the future. At Statoil, our focus on increased recovery is strengthened by our fundamental belief that natural resources should be used wisely.

Learn more on how we work to protect and value our resources at statoil.com/technologyinnovation

100%

Commitment to caring for our resources