# Equinor in the USA

Review of Equinor's US onshore activities and learnings for the future.

Prepared for Equinor ASA's Board of Directors 9 October 2020



### Key terms used in this report

#### Board of Directors or board

refers to the Board of Directors of Equinor ASA.

#### Business support or back-office

refers to functions and/or processes that support the US onshore business, such as land management, production revenue accounting, joint venture accounting, procurement and other relevant administrative or accounting processes.

#### Equinor

refers to Equinor ASA or relevant subsidiaries thereof, depending on the context.

#### **Executive management**

refers to members of Equinor's corporate executive committee.

#### Senior management

refers to management levels reporting to members of the corporate executive committee or the members of the corporate executive committee.

#### Governance

is the system of rules, practices and processes by which Equinor is directed and controlled.

#### Internal control

refers to processes designed to manage risks related to operational effectiveness and efficiency, reliable reporting and compliance with laws and regulations.

#### Oil price

refers to the Brent oil price unless otherwise stated.

#### Gas price

refers to the Henry Hub price.

#### Onshore, shale and unconventionals

describe assets or activities that are connected to producing onshore hydrocarbons from tight reservoirs.

# Table of contents

Executive summary	04
About the review	08
Part I – Equinor in the USA	
Build up and development of the US business	12
Financial performance and reporting	28
Part II – Learning for the future	
■ Main findings	33
Recommendations	39
Part III – Assurance of audit reports	
■ Follow up of US and international internal audits	42

### **Executive summary**

Since 2007, Equinor has invested around 40 billion USD in the USA, mainly in offshore and onshore oil and gas exploration and production. Through a series of acquisitions, totalling over 10 billion USD, Equinor built a substantial business in US shale gas and oil, or so called "unconventionals".

In 2011, Equinor acquired Brigham Exploration Company (Brigham), a NASDAQ-listed independent oil and gas operator with around 100 employees, for 4.7 billion USD. Equinor grew activity quickly and experienced serious challenges in business support functions such as land management, production revenue accounting, joint venture accounting and procurement. These challenges were wide ranging, and for a period of time resulted in the company losing control over critical business support processes.

Between 2007 and 2019, Equinor recorded an accounting loss of 21.5 billion USD on its US activities. 9.2 billion USD was due to impairments of onshore assets, 4 billion USD was related to impairments of the offshore portfolio, and 4 billion USD was expensed due to unsuccessful exploration activities. The remaining loss was mainly related to commercial contracts and internal financing costs.

Equinor's experience in the US onshore is not unique. Many companies took positions in US onshore during the "boom years" and have since taken impairments. Long periods of growing demand and high prices influenced the outlook and strategic thinking at the time. An entire industry effectively formed a consensus that an oil price above 100 USD was a "new normal". This assumption fuelled investments, created a heated market and ultimately turned the onshore industry into a victim of its own success.

In June 2020, following significant external and internal interest in the US activities, the Board of Directors of Equinor ASA (the board) initiated a review of certain aspects related to Equinor's US and international activities. The full scope of work for the review is included in Appendix B.

# 1.1 Scope of work

The scope of work sets out three main objectives for the review:

- To provide a timeline of events for Equinor's history in the US since 2005, which is included in Part I of the report, Equinor in the US.
- To extract learnings from the acquisition and integration processes of the US onshore activities with focus on governance, internal control and culture. Part II of the report summarises the review team's main findings and recommendations in relation to these.
- To provide assurance that adequate actions have been taken following red audit findings related to internal control pertaining to the US and other relevant international activities. Part III of the report covers this topic.

Three questions have been important to the review team:

- 1. What caused the losses in the US?
- 2. What caused the control problems in the US onshore business and how have they been followed up?
- 3. What can Equinor learn to improve?

As stated in the mandate, the main purpose of the review is to extract learnings for Equinor's future business decisions and operations. We look back in order to enable Equinor to improve for the future. When assessing Equinor's US investments, it is difficult to do so without being influenced by knowing the outcome. The review team has tried to be mindful of the risk of hindsight bias in its work. Hindsight can make the improbable seem inevitable and turn grey areas into black and white. Equally important, hindsight can present opportunities for learning and show the long-term consequences of decisions.

The review team does not point to individual decisions or persons when answering the main questions of this report. No single error or action caused the problems described. Rather, the underlying causes are complex. They deal with: how strategy is developed and implemented; the design of systems to govern a business and manage risk; and how leadership and culture enable the performance of an organisation. These are important considerations for the board of directors and executive management of a company.

The review team has met many of the people involved in Equinor's US business, at all levels of the organisation. Some of them had very difficult jobs. It speaks to their professionalism and dedication to the company that they have tried to help Equinor evolve and improve under challenging circumstances.

# 1.2 Main findings

#### Equinor's US onshore business

- Equinor's growth strategy came at the expense of value and control. Rapid growth outpaced and overwhelmed critical business support processes.
- Corporate oversight should have been stronger and did not sufficiently reflect the underlying risks of the business.
- Limited onshore experience in senior leadership teams and a lack of continuity in important roles negatively impacted the performance and follow-up of the onshore business.
- From 2014, comprehensive improvement efforts were launched by the administration and reported regularly to the board. Today, the internal control environment in the US organisation is significantly improved.

#### US and international audit reports

 Relevant findings from the internal audit reports of Equinor's US and international business have been addressed and closed, except for certain specific issues where improvements are still ongoing.

#### Learnings and recommendations

 The review team has identified areas within strategy and business development; governance, risk and internal control; and leadership and culture, which can be further strengthened.

#### 1.3 Financial performance of the US business

Equinor has recorded an accounting loss of 21.5 billion USD from the activities in the US in the period 2007 to 2019. In Norwegian kroner, the amount is 161 billion.

Net impairments make up 13.7 billion USD of the total loss. This includes 9.2 billion USD onshore, 4.0 billion USD offshore and 0.5 billion USD in the midstream segment. Around 90% of the impairments were due to significantly lower oil and gas prices compared to initial investment assumptions.

The overall development of Equinor's US investments has been available to investors, analysts and the public, through the annual and quarterly reports issued by the company. Equinor's decision to report Exploration and Production USA as a separate operating segment from the second quarter of 2020 will provide additional transparency and added detail.

#### 1.4 Learnings from US onshore

Chapter 5 of the report presents the main findings and learnings from the acquisitions and development of the US onshore business.

It is structured around three perspectives, which collectively impacted Equinor's ability to create value from the onshore business. The points below specifically address the period before 2014.

#### Strategy and business development

Equinor's growth strategy and production targets drove behaviour at all levels of the company. The company made acquisitions and investments in US onshore based on an expectation that the oil price would increase for the foreseeable future. Investments were not sufficiently tested for robustness at a low-price scenario. The business case for acquiring Brigham was marginal and relied on upsides, which Equinor ultimately was unable to realise. There was a push from executive management for the acquisition to go through, and a mindset of "what does it take to win?". This approach encourages more aggressive assumptions to be made in the evaluation and carries with it a risk of bias in decision-making. Following the acquisition, despite not having the necessary control over important business support functions, Equinor grew its activity and investments quickly, partly as an attempt to realise the value assumed in the acquisition case.

#### Governance, risk management and internal control

Equinor underestimated the complexity of operating in US onshore and overestimated the company's capabilities. The rapid growth in activity outpaced and overwhelmed the business support systems on which it relied. The legacy systems of Brigham were not scalable and Equinor was unprepared to close the gap. Corporate oversight and follow-up should have been stronger and did not sufficiently reflect the risks in the business case. The integration of Brigham into Equinor created unclear roles and accountabilities, and there was limited internal transparency on the performance of the new business.

#### Leadership and culture

Few of the senior leaders tasked with overseeing and running Equinor's onshore business had previous experience from the US onshore industry. This made it harder to set direction and successfully manage the risks in a new business. Relatively frequent changes of personnel and multiple reorganisations led to a lack of continuity. Low trust between teams and cultural fault lines that emerged amplified the issues described above.

# 1.5 Strategic shift and improvements

In 2013, Equinor started to move away from its strong focus on volume growth in response to concerns over profitability and total investment levels. During the spring and summer of 2014, the true extent of the problems in the US onshore business support functions became known to Equinor's executive management. Internal audits confirmed the serious nature of the problems and further increased the sense of urgency and follow-up from the administration and the board.

In October 2014, Equinor appointed a new Chief Executive Officer (CEO). In 2015 the company changed its corporate structure, introduced new strategic principles and appointed a new head of the US business. Finally in 2018, the board's audit committee concluded that it was satisfied with the situation in the US onshore business support functions.

There are still certain outstanding issues in the onshore business, which are being addressed. The opinion of the review team is that the combined improvement efforts have resulted in improved quality in the onshore business support functions, and an improved control environment in the US business.

# 1.6 Recommendations

In addition to the review of Equinor's US onshore business, the review team has also considered other relevant transactions as part of its work. These findings, along with the follow-up of the audit reports and over 120 interviews, form the basis of the recommendations provided in Chapter 6 of the report.

The recommendations reflect three areas where the review team believes Equinor can apply the learnings from the US more broadly:

**Strategy and business development,** addressing how decision-making and implementation for transactions outside Equinor's traditional business can be improved.

**Governance, risk management and internal control,** addressing the need for more fit-for-purpose governance and operating models, and the need for corporate oversight and follow-up of these.

**Leadership and culture,** addressing the need for the right competence, relevant experience, expertise and cultural awareness to shape and develop new businesses, as well as the need to increase continuity in critical roles.

Through its work, the review team has met a highly competent and dedicated Equinor organisation, committed to openly learn and improve for the best of the company.

#### About the review

This chapter provides an overview of the review, the scope and the process.

#### 2.1 Overview

On 9 June 2020 the Board of Directors of Equinor ASA initiated the review of certain aspects related to Equinor's US and international activities.

The board appointed PwC to lead the review with Eli Moe-Helgesen (partner PwC) as the chair of the review. The other members which form the review team are:

- Aase Lindahl (partner PwC)
- · Hanna D. Opsahl-Ben Ammar (manager PwC)
- Jon Arnt Jacobsen (senior vice president Corporate Audit Equinor)
- Ann-Elisabeth Serck-Hanssen (senior vice president in Marketing, Midstream & Processing Equinor)

A secretariat consisting of Equinor employees was established to support the review team. The members of the group are: Per Arne Solend (leader), Vibeke Sagvaag Gyldenskog, Lodve Gustavsen, Connor Rea and Xavier Moore.

#### 2.2 Mandate

The main purpose of the review has been to extract learnings for Equinor's future business decisions and operations. The review team was tasked with the following:

- Provide a timeline of events for Equinor's history in the US since 2005.
- Extract learnings from the acquisition and integration processes of the US onshore activities with focus on governance, internal control and culture.
- Provide assurance that adequate actions have been taken following red audit findings related to internal control pertaining to the US and other relevant international activities.

The review team was subsequently requested to include a factual description of how the activities in the US were communicated to the Norwegian Ministry of Petroleum and Energy and how financial performance was presented in financial reports to capital markets.

The mandate is included in Appendix B.

# 2.3 Limitations

In accordance with the scope for the review, the review team has not evaluated the strategic decisions made by Equinor. Investment decisions have not been evaluated except to the extent it was necessary to understand why they led to later impairments. Furthermore, the review team has not evaluated audited accounts and audit statements.

While the review team is confident that it has had access to sufficient information on which to base its findings and recommendations in response to the mandate, there will naturally be topics or questions which could have been dealt with in more depth than what time has allowed for.

Due to the ongoing Covid-19 pandemic, the review team has unfortunately not been able to visit Equinor's US operations or offices. Interviews have largely been conducted using online meetings.

#### 2.4 Methodology and process

The review team has used PwC's standard approach for evaluations as the basis for the evaluation design, with the necessary adaptations.

Objective

#### What do we want to achieve?

The desired outcomes and areas included in the scope of the review are defined in the mandate given by the board to the review team, with an emphasis on learning for future decisions.

Issues

#### What do we need to find out?

The review team has had to make several choices both when it comes to which topics to cover, and how in depth to deal with them. Questions considered to have a broader relevance to Equinor have been prioritised in order to meet the objective.

Evaluation criteria

#### What is the yardstick against which we evaluate?

The review team has primarily looked back with the perspective of evaluating what went wrong, what caused the problems and what can be learned for the future.

The team has used good practices as the main points of reference for its evaluations, as well as Equinor's strategies, procedures and internal requirements.

Evidence and method

### Which information do we need, and how do we obtain and quality assure it?

The passage of time, risk of hindsight bias and the sheer amount of information to study and evaluate, were key challenges that were managed through using a combination of methods. Qualitative and quantitative information has been gathered from multiple sources through extensive interviews and analysis of internal and external documents. Verification techniques have included triangulation of data and quality assurance procedures.

Expected findings

#### What do we expect to find?

Hypotheses regarding expected findings were developed in the early phases of the review to structure the wealth of gathered information into key topics. These were continuously tested, challenged and updated in order to confirm or reject their validity and manage the risk of early biases and tunnel vision.

Feasibility

#### What are the uncertainties, and are the risks manageable?

There were many risks and uncertainties involved in completing the review on time and with the required quality. These were mainly managed by composing a broad and highly skilled review team led by the independent consulting firm PwC, and by rigorous project and risk management throughout.

Figure 1: Methodology flowchart. Source: PwC

Information has been gathered and verified primarily through a combination of interviews and document review. Interviews have been conducted with at least one interviewer from PwC. In total, the review team has interviewed or met with over 120 people with knowledge relevant to the review. This group includes current and former Equinor employees, current and former Equinor managers, current and former members of the corporate executive committee, current and former members of the board, and the current and former external auditors. Some senior executives of the former Brigham organisation relevant for the review have unfortunately not made themselves available to the review team.

Equinor has provided extensive documentation related to the topics subject to the review. Documents reviewed include memorandums to the board and the corporate executive committee, transaction documents, governing documents, management system processes, internal audit reports, management letters from the external auditor, quality assurance reports, management presentations, project updates, economic planning assumptions, and post-deal reviews, among others. The quality of Equinor's written documentation is generally high and documents have been readily accessible even many years after events took place.

The views and opinions expressed in this report are solely those of the review team.

The review team commissioned Rystad Energy to provide external research and input on relevant oil and gas industry context for the time period covered, including the role of shale gas and oil in the US and the performance of Equinor. Rystad's report is based on publicly available information. Any numbers or conclusions presented by them have not been quality assured by the review team. Parts of Chapter 3 are based on this input, and the review team is grateful for their contribution.

The review team also commissioned Kantar to provide an overview of Norwegian media coverage of Equinor's US investments in the period from 2014 to 2020.

The review team has engaged with a reference group throughout the review process. The reference group was comprised of Equinor personnel including senior managers and a union representative. The following persons have been members of the reference group: Tim Dodson (chair), Alex Grant, Christopher Lynn Golden, Gustavo Baquero Méndez, Hanne Knudsen, Ingunn Svegården, Kristina Tau Strand Vestbø, Siv Helen Rygh Torstensen, Veronica Rezende Coelho, and Ørjan Kvelvane.

# 2.5 Acknowledgements

The review team is grateful to the many individuals and teams in and outside Equinor who have contributed to its work. The efforts made by the US team to provide documentation and information have been particularly appreciated, given the challenging situation they have been in, both with regards to the Covid-19 pandemic and the ongoing reorganisation of the business. All levels of Equinor's organisation have shown a willingness to contribute to the work of the review team.

The review team concluded its work on this report on 7 October 2020.

### PART I

# Equinor in the USA

### Building Equinor's US business

# 3.1 Introduction

Equinor has been present in the US since 1987, when the company established a trading office in Manhattan. From the mid-1990's, the company started building a presence in Houston with business interests and activities in the deepwater Gulf of Mexico (GoM).

Today, Equinor's subsidiaries have activities in several states in the US, with the main offices located in Houston and Stamford. Houston is the centre for Equinor's US offshore exploration and production activities. Equinor's activities relating to US onshore and global unconventional oil and gas resources are managed from Austin, however the company has recently announced that it will close the Austin office and consolidate the workforce in Houston.

Around 20% of Equinor's production of oil and gas today comes from the US.

Offshore, in the GoM, Equinor currently holds 154 exploration leases and has equity production of around 123 000 barrels of oil equivalent (boe) per day.

Onshore, Equinor's activities are primarily focused on the Bakken play, located in North Dakota and Montana, and the Marcellus and Utica formations in the Appalachian Basin, which spread across several states in the Northeast USA. These assets currently produce around 290 000 boe per day, primarily crude oil in the Bakken and natural gas from the Marcellus and Utica formations. Equinor also holds a small position in the Louisiana Austin Chalk, which is at an early stage of development.

In renewable energy, Equinor is pursuing the development of offshore wind projects in the US. Equinor currently holds two offshore wind leases on the US East Coast.

Equinor's trading offices in Stamford and Houston are integrated parts of the global trading activities in the company. In addition, Equinor trades power in the US via its wholly owned subsidiary Danske Commodities.

Equinor's organisation consists of eight business areas as well as corporate staffs and functions. Business areas are managed through individual business lines and headed up by executive vice presidents, reporting to the CEO of Equinor, who is responsible for the day-to-day management of the company. The CEO reports to the board, which has the overriding responsibility for managing Equinor and supervising the company's operations and business in general.

Several of Equinor's business areas are represented in the US, and the country manager has the responsibility to ensure alignment across the US activities. These business activities rely on support from the corporate staff and service functions, such as accounting, tax and legal services, procurement and human resources, which are managed both at the corporate level and locally, to support the company's business activities across all business segments and locations.

The sections below will further describe how Equinor built its positions in the GoM and in the US unconventional shale oil and gas industry, as well as the external context that shaped business decisions.

## Equinor in the USA today

Equinor has been present in the United States since 1987.

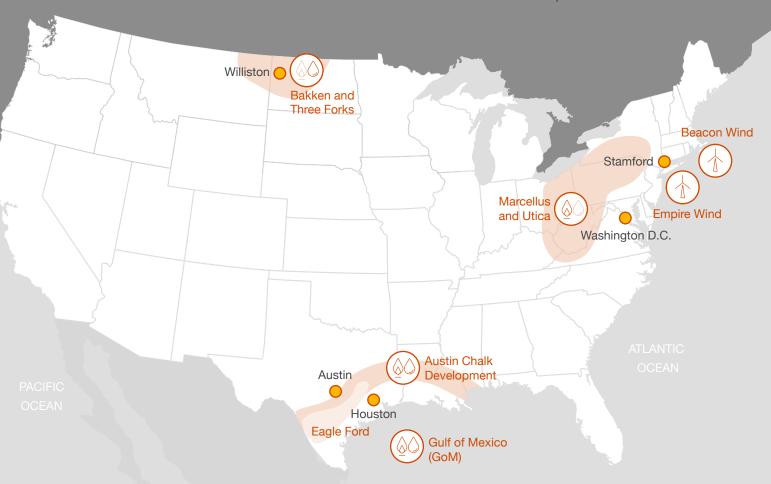
Today, it has 22% of its fixed assets and 19% of its equity production in the US.

893

Permanent employees in the US, 4% of the total of 21 412 globally

 $870_{\scriptscriptstyle \mathrm{mmboe}}$ 

Proved reserves as of end of 2019. 14% of Equinor's total reserves



The onshore activities spread across several states, producing around

290 000

boe per day

In Gulf of Mexico, Equinor currently holds

154

exploration leases Equity production is around

 $123\ 000$ 

boe per day

#### 3.2 Laying the foundation (2005-2010)

Around 2005, anticipated economic growth in China, India and Brazil was firming the industry's expectations for an increase in the global demand for oil. Markets doubted OPEC's ability to expand production as it had in the past, and the market expected an oil supply shortage in the long-term.

With prices expected to increase, the oil and gas industry was collectively focused on growing production. Predictions from the Norwegian Petroleum Directorate in 2005 indicated that the Norwegian Continental Shelf (NCS) offered little growth potential. Exploration drilling was at an all-time low and there had not been any major discoveries since 1997. In response, Equinor, together with many other players in the industry, turned to pursuing more complex resources including those in deepwater, oil sands and the Arctic.

With the lowest ratio of reserves to production in its peer group, Equinor's long-term profitability was questioned by investors. In response, the company set an ambition to maintain production on the NCS beyond 2010 and to build an international portfolio to achieve long-term production growth.

While many resource-rich countries limited the access for international companies, the US was open for business, offering access to resources and assets. The GoM was seen as an attractive place to invest based on expectations of high value creation in the deepwater basins, a good strategic fit with Equinor's capabilities as an offshore operator, favourable economic terms and low country risk. Equinor set a strategy to build a portfolio at scale in the GoM, through exploration partnerships, acquisitions, and competitive lease sales.

#### 3.2.1 Building a Gulf of Mexico position

A systematic approach to building a sizeable portfolio in the GoM was implemented in the early 2000s. In 2005, through the Encana and Spinnaker acquisitions, both Equinor and Hydro substantially expanded their positions in the basin.

In 2007, Equinor merged with Hydro's oil and gas division. Part of the rationale for the merger was to strengthen the international portfolio and to improve the ability to compete for new opportunities globally.

In the following years, Equinor's presence in the GoM grew significantly through various asset acquisitions and lease sales. These activities were complemented by an exploration strategy sanctioned by the board in 2008, which set out ambitious targets for becoming a leading producer and operator in the GoM.

#### 3.2.2 The shale revolution and Equinor's entry into the US onshore

As the GoM was attracting major investments, the US shale industry was also growing rapidly in the mid-2000s.

The history of the US unconventional shale industry dates back many decades, however it was not until the early 2000s that technology development made it possible to commercially produce gas and oil from shale at scale. This was the start of the "shale revolution". Between 2008 and 2019, more than 1.7 trillion USD was invested in the US shale industry, both through acquisitions and development capital.

Production levels from both shale gas and oil have grown significantly. US oil output originally peaked in 1970 and was on a steady decline until 2009. The shale revolution turned this trend around.

#### EIA lower 48 oil production forecast

Million barrels per day

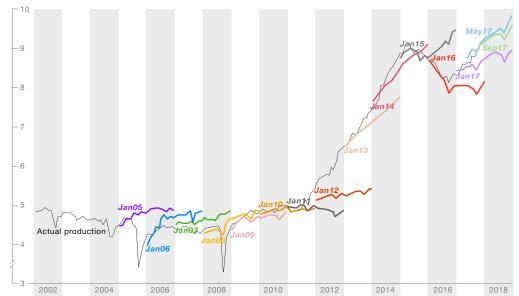


Figure 2:
Onshore oil production forecasts
compared to actual production
volumes in the US for the period
2002 to 2018. Lower 48 refers
to all US states, except Alaska
and Hawaii. Source: US Energy
Information Agency.

The market in general did not foresee the huge increase in production that would come from the US shale industry. The graph above illustrates the significant differences between the production forecasts and actual production of shale oil in 2012. This growth was a key contributor to the oil price collapse in 2014. Despite lower commodity prices, shale technology has continued to improve, costs have decreased, and production has continued to rise.

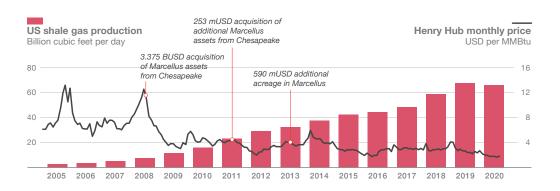
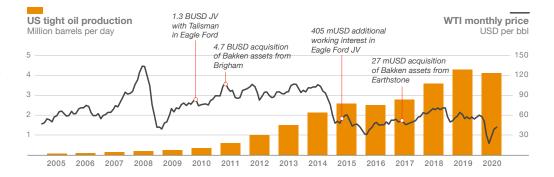


Figure 3:
Development of shale gas and tight oil production volume in the US since 2005 with the unit price. Equinor's major shale gas and tight oil acquisitions are also shown. Source: Rystad Energy



In 2008, Equinor made its first investment in US unconventional shale gas, in a strategic alliance with Chesapeake Energy. It was viewed as an important step in Equinor's ambition to grow its international business, to get access to global unconventional gas opportunities and to strengthen its US gas position overall. Equinor was a relatively early international entrant into the US unconventional business, however this also meant that the company entered the market near the peak of the gas price.

The initial acquisition included a 32.5% ownership interest in the Marcellus shale gas acreage, operated by Chesapeake, for which Equinor paid 3.4 billion USD. The entry into Marcellus was one of the largest projects in Equinor's portfolio at the time.

The partnership with Chesapeake facilitated expansion, and Equinor increased its position in Marcellus in 2010. Later that year, Equinor further expanded its US onshore portfolio by entering the Eagle Ford shale formation in Southwest Texas, in a partnership with Talisman, for a total consideration of 843 million USD.

Both the Marcellus and the Eagle Ford transactions were part of Equinor's ambition to learn and position for future operatorships in the US onshore business. As part of the Marcellus acquisition, Equinor was able to deploy up to 32 secondees into Chesapeake. In the Eagle Ford acquisition, it was agreed that Talisman would initially act as operator for the jointly owned acreage, but that Equinor would have a right to attain operatorship for half the acreage at a later stage. Equinor had a clear ambition to use the partnership with Talisman to expand its shale competence and build its capabilities for becoming a shale operator.

Equinor's early exposure in both Marcellus and Eagle Ford was as a non-operating partner. This exposed Equinor to some of the complexities of the US onshore, related to business support functions, but not to the full extent as those of an operator, a point the report returns to below.

In the case of Chesapeake, Equinor was not able to fill all secondment positions, and therefore terminated the secondment project early. Confidentiality requirements limited the information that could be shared back to Equinor and across its US onshore business. Upon completing their assignments, several secondees were moved into positions outside the onshore business.

As gas prices fell while oil prices increased around 2009, companies turned their focus to US unconventional oil plays. As companies started applying the evolving hydraulic fracturing techniques to liquid-rich basins, a second phase of the shale revolution took place between 2010 and 2014.

3.3 All time high (2011-2013) In 2011, the oil price set new records, averaging 111 USD per barrel of oil (bbl). Both Equinor and the industry in general predicted prices to continue increasing for the foreseeable future. That summer Equinor presented a new strategy. By pursuing growth opportunities through exploration and business development, the company set an ambition to increase its daily production by around 30%, to above 2.5 million boe per day by 2020. Growth in onshore unconventional oil and gas resources was one of the key elements of the strategy.

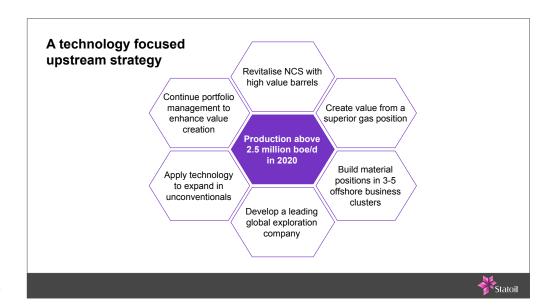


Figure 4: Image of Equinor's corporate strategy as set out in 2011. Source: Equinor

In order to rebalance the portfolio and provide the financial robustness to grow, noncore assets across the company were divested, realising proceeds of more than 18 billion USD between 2009 and 2013.

In 2011 Equinor also changed its corporate structure, establishing Development and Production North America (DPNA) as a separate business area based in Houston. This reflected the importance of the region to Equinor at the time. To drive and support Equinor's growth ambitions, Global Strategy and Business Development (GSB) was also established as a business area, with a leadership team located primarily in London. Its responsibility was to develop corporate strategy and to originate and execute business development projects, including mergers, acquisitions and divestments, for Equinor globally.

In 2011, the mergers and acquisitions activity in the US shale industry was significant. With the rapid growth in this industry and the strong outlook on oil price developments, several large acquisitions took place.

Top 20 US onshore deals by deal value, 2008-2014 Billion USD



Figure 5: Top 20 transactions by value between 2008 and 2014. Source: Rystad Energy

#### 3.3.1 The acquisition of Brigham Exploration Company

At the beginning of 2011, Equinor initiated a screening of potential targets for a US corporate transaction, which included Brigham. Brigham was the seventh largest acreage holder in the Bakken tight oil formation, located in North Dakota and Montana, and had launched a sales process with an investment bank to seek potential buyers.

Equinor saw Brigham as a good strategic fit for its US onshore ambitions and a platform for further growth. It built on Equinor's positions in the Eagle Ford and Marcellus, providing a more diverse oil and gas portfolio that targeted different markets. It would accelerate Equinor's ambition to develop onshore capabilities that could be leveraged across its US onshore portfolio. It also positioned Equinor as a serious player in the US onshore, enabling further growth and attracting talent. The strategic value of securing a platform for future operated growth was considered to be significant.

Equinor believed that it could add value post-acquisition through its technology capabilities. Brigham was one of the leading drilling technology companies in the Bakken play, but did not have the capital and technology expertise to fully optimise its development approach.

Equinor prepared an assessment of its shale capabilities and competencies to assess its readiness for taking on a large operatorship in the US shale industry. An assessment of the company's capabilities in the spring of 2011 concluded:

"Taking on a large shale operatorship in US today is a relatively less complex and smaller challenge than many tasks Statoil has taken on as a company before. The systematic and rapid build-up of competence and experience since acquisition of Marcellus has given us a solid understanding of the value chain, and significantly lowered the gap we need to manage if taking on a large operatorship."

#### A marginal business case

Equinor paid 4.7 billion USD to acquire Brigham. This was a 36% premium on the 30-day average share price, or 21% on the day before the offer was made.

Valuations of upstream oil and gas assets are inherently uncertain. When assessed on metrics such as dollars paid per acre acquired, the price Equinor paid reflects the market in which the transaction took place. The premium compared to the share price was also within market expectations, and the response from external analysts was largely positive to neutral. As part of international media coverage, the acquisition was even called a textbook case of turning a national champion into an international one.

Equinor's internal valuation of Brigham showed, however, a base value well below the acquisition price of 4.7 billion USD. To earn a return on its investment, Equinor depended on realising several potential upsides identified as part of the business case. These included the application of technology to improve recovery, a quicker ramp-up of activity, the sale of non-core acreage at a premium, and the strategic value of acquiring a platform from which to grow the company's shale operations.

Equinor's valuation further relied on the company's expected future oil price. At the time of the acquisition, the oil price averaged around 110 USD/bbl. The business case was based on the oil price increasing to a long-term level of around 125 USD/bbl by 2020. Figure 6 shows the expected price compared to the actual development in price.



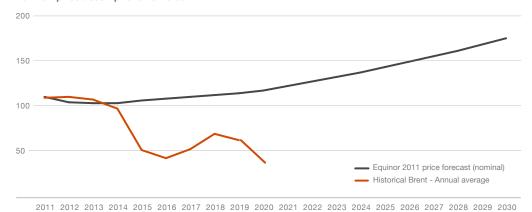


Figure 6: Comparison of Equinor's forecast oil price at 2011 and actual oil prices from 2011 to 2020. Source: Equinor

In sum, the business case as presented was marginal. This risk was raised and discussed in the decision-making process.

The strategic value of operatorship and the future impact of technology development were considered significant. With the improvements already seen in the onshore industry, it was believed that early access would prove valuable. Several interviewees described the mindset at the time as one of "what does it take to win?", and that there was a push from executive management for the acquisition to go through.

The acquisition was matured through six formal interactions with Equinor's corporate executive committee and four with the board. Quality control of the technical and commercial assumptions in the business case was conducted by Equinor's investment arena, which is the company's internal independent quality assurance function for investment decisions. Highlighted risks were assessed to be mitigated through close management attention. There was subsurface uncertainty due to the large acreage position, concerns of costs increasing due to a high activity level in Bakken, and a lack of midstream transportation capacity. The complexity of onshore operations was mentioned, but the quality of business support functions was not assessed in depth as part of the process.

Loss of key personnel was also highlighted as a key risk. Equinor's primary focus for the Brigham acquisition was access to onshore competence and acreage, and the risk was exacerbated by a high demand for talent in a rapidly expanding US onshore industry. Personnel retention therefore became a cornerstone of Equinor's integration strategy for Brigham.

#### Integration challenges

At the time it was acquired by Equinor in late 2011, Brigham had around 100 employees based in Austin, Texas and Williston, North Dakota, and many more contractors who were involved in field operations. Equinor's integration strategy was designed to retain the flexibility of an independent oil company, but with the consistency and resources of a major company. A gradual and phased integration approach over two years was approved by Equinor's corporate executive committee and board. The key objective was to "win hearts and minds" and ensure that the Brigham organisation could continue its activities without being "overwhelmed by the organisational burden" associated with Equinor.

In September 2012, the board travelled to the operational office for the Bakken asset where they conducted a field trip and were given a presentation on the history and future of Bakken, and the Brigham integration process.

A so-called ringfencing approach was used, where, in the initial phase, Brigham would continue its operations as before the acquisition. Equinor's systems were to be introduced gradually. Some processes, including finance and control, health, safety and environment, and human resources, would apply from day one, together with Equinor's Code of Conduct. It was also decided to maintain the Brigham office in Austin. This was expected to help meet the retention goals and to enable establishing a more independent "onshore culture" by locating it away from the existing Houston office.

The review team has heard slightly different versions on exactly how the ringfencing and interaction with the wider Equinor organisation was meant to work in practice. Intentionally or not, it is however clear that a signal was sent that Brigham should be "left alone".

Equinor's integration team consisted of 10 employees and one consultant. Their goal was to work closely alongside Brigham to gradually align and develop the required onshore processes and tools. Most of the critical areas were covered within the integration team, but notably absent was procurement, which created challenges later in the process. For example, there were over 10 000 supplier invoices that had not been entered when IT systems went live, creating an immediate backlog.

The integration work was complicated by competing priorities across the US onshore business. Simultaneous to the Brigham acquisition and integration, Equinor was preparing for future operatorships in both Marcellus and Eagle Ford. By the time of the Brigham acquisition, Equinor had built up an onshore organisation of approximately 120 people since 2009, based in Houston. However, this competence was mainly based on Equinor's non-operating positions and was, to a limited extent, used in the acquisition and integration of Brigham. Maintaining the Austin office for Bakken operations further impacted the integration process, creating a divide between onshore assets as well as operations and support and staff functions.

Equinor's ambition was to also use Brigham's capabilities to strengthen its other onshore operatorships. This only happened to a limited degree. During the initial years following the Brigham transaction, there was limited collaboration between the three onshore assets. Equinor did not have a consistent set of working requirements and standard systems for its onshore assets. The assets had different philosophies and operating cultures, and they were competing for the same resources.

In 2012, the Onshore and Bakken Operatorship IT Solutions (OBOS) project was initiated to support the integration team by delivering a holistic and integrated system for the US onshore business across all onshore assets. At the end of 2013, Equinor considered the project to be a success, and while there are clear elements of Equinor's back-office solutions that were developed and improved through the OBOS project, it did not fully address the root causes that later led to problems.

The integration project concluded its work in November 2013. Most of the team then moved on to other roles. The overall integration was described as an "overwhelming success", having met its retention target and receiving positive feedback from the asset team. However, one year later, a post-deal review of the Brigham acquisition was conducted to analyse how the business had performed against expectations and to evaluate the integration process. This review highlighted several areas for improvement and nuanced the message of success.

#### 3.3.2 Rapid growth

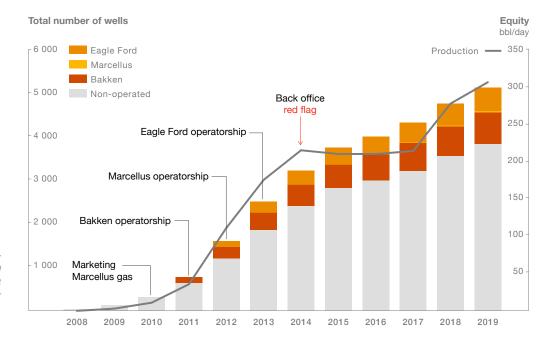


Figure 7: Growth in production and onshore wells between 2008 and 2019. Source: Equinor

#### **Activity level increase**

Following the Brigham transaction, Equinor quickly ramped up investments and activity. Within the first year of the acquisition, Equinor had doubled oil production, increased drilling activity from 12 to 19 rigs (becoming the second most active driller in the basin) and increased headcount by 50%. At the same time, Equinor was also expanding its other positions in US onshore, by acquiring operated acreage in Marcellus and preparing to become an operator in Eagle Ford in early 2013.

The existing Brigham systems were insufficient for this ramp up of activity. A Brigham data backlog prior to the acquisition emerged. Equinor's eventual implementation of new systems took six months instead of two, leaving the back-office processes without system support for an extended period of time. This significantly added to the data backlog. Furthermore, not all details were migrated from Brigham's legacy system to Equinor's new systems. Headline numbers were transferred, but not the detailed breakdowns behind them. This resulted in substantial issues clearing bank balances against payables and receivables.

During this growth phase, Equinor launched a corporate improvement project in 2012 to reduce cost and headcount in its global staffs and services. This caused additional strain on the US onshore and supporting organisation, as they were attempting to increase manning levels to manage the increasingly complex back-office support. At a time when the local organisation needed more support it was challenged to reduce staff and administrative costs. As the extent of the back log in the US became more apparent, some functions were later taken out of the scope for staff cuts, and around 100 consultants were employed.

#### Complexities of US onshore

The US onshore business is uniquely complex due to its land ownership structures and is fundamentally different from Equinor's core offshore oil and gas business. It relies on several business support functions in areas such as land management, production revenue accounting, joint venture accounting and procurement; sometimes referred to as "back-office" processes.

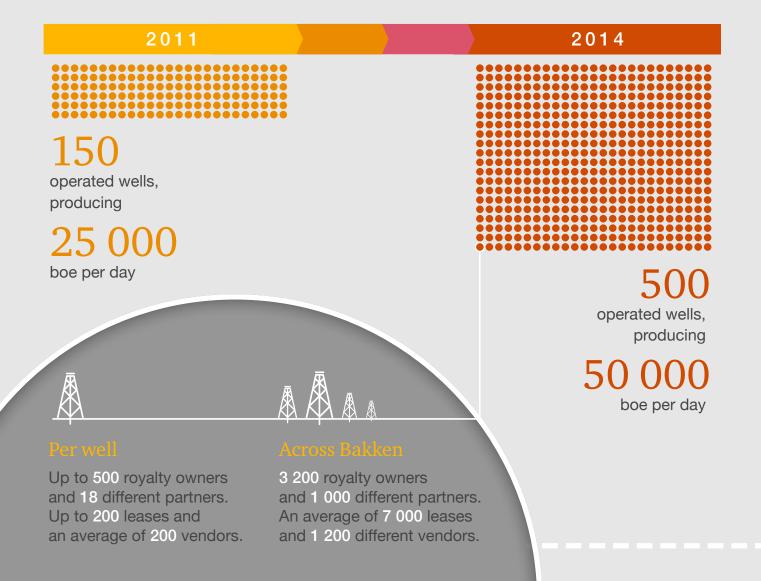
At its peak, Equinor's US onshore portfolio consisted of around 700 000 net acres, 70 000 leases, 4 000 producing wells and over 50 000 royalty owners. Bakken was especially complex, with over 1 000 different partners across the basin.

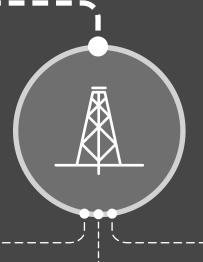
In a typical offshore field, all wells in one asset would share the same partnership structure. In the US onshore however, each well has a different partnership structure, different royalty owners, and often several well-specific provisions according to contracts negotiated with land and mineral owners. Land and mineral owners are often different from one another, and a single well can have hundreds, even thousands, of royalty owners.

Ownership structures also shift continuously, with royalty owners selling or redistributing their rights to multiple different new owners, and partners trading working interests between wells on a regular basis, often backdating the transactions. This makes the administration of the onshore business complex and resource intensive, both in terms of the amount of transactions and required human resources. The support required is highly manual, with paper invoices, printed lease agreements and tens of thousands of cheques to facilitate payments.

#### Operating Bakken

The Bakken asset can be used to demonstrate the scale of data that is handled in support of US onshore activities, and how Equinor's systems processed the information.





# Production volumes

П

П

Automatic and manual inputs

# Land rights and working interests

Manual inputs

#### Well costs

Manual inputs 10 000 supplier invoices received per month

#### **PRA**

Production Revenue Accounting

- Payments to royalty owners and working interest partners
- Regulatory reporting and payments (state and federal)
- ~20 000 cheques per month

#### **QLS**

Quorum Land System

- Records for lease agreements and land ownership
- Critical for acquisitions and divestments
- ~1 000 ownership changes per month

#### **JVA**

Joint Venture Accounting

- Joint venture billing

~900 partner invoices sent per month

Three key back office systems run independently from one another. One ownership change that is recorded incorrectly, or not manually updated simultaneously across these three systems can result in hundreds of errors that need to be fixed. In 2014, less than 50% of Equinor's operated wells had matching ownership records across these three systems.

#### Onshore business support challenges escalate

Equinor started performing significant US onshore business support functions related to Marcellus in 2010. The company went from being a non-operating partner receiving cash payments from the operator, Chesapeake, to taking its equity share in gas and marketing volumes itself. With this came a significant step-up in required support, primarily in the calculation and administration of royalty payments, including the establishment of the royalty relations department.

Even though Equinor had invested considerable time and resources in developing IT systems and processes, the sheer volume and manual nature of processing royalty payments was challenging. The precision of data input was critical, and errors could result in many knock-on effects. In one example, several wells had been entered into Equinor's systems incorrectly, assigning Equinor 100% working interest, instead of approximately 15%. When the first royalty payments were made, Equinor mistakenly paid one royalty owner 1.5 million USD, roughly six times more than they were owed. Royalty relations met with the landowner, explaining the error and collecting the overpaid royalties. In the end, all the money from this error was recovered.

Once Brigham was acquired, and Equinor took on a large operated position, complexity increased considerably, and the back-office challenges escalated. At one point, Equinor was distributing more than 20 000 manual cheques per month to royalty owners.

By 2014, problems had escalated significantly, as illustrated by several examples:

#### · Recording of working interest

Between the three key systems used to process production revenue, joint venture accounting and ownership rights, Equinor had recorded conflicting working interests for more than half of its wells.

#### Production measurements

In the fourth quarter of 2014, US onshore production was overstated by more than 14 000 boe/day<sup>1</sup>.

#### · Payment of bills

More than 1 billion USD sat idle in a suspense account, until the business was able to figure out to whom it should be paid.

#### Billing of costs

Due to working interest disputes and unidentified counterparties, there were several examples of partners not being billed for their share of costs, which led to an increase of outstanding claims to more than 500 million USD.

At the same time, Equinor struggled to maintain continuity in key roles. One of the critical departments for onshore support was production revenue accounting, which had at least five different leaders during 2014 and 2015.

Despite these problems, the Development and Production North America management reported in January 2014 that the onshore activities had solid work processes across most functional areas.

In the third quarter of 2013, the board's audit committee was informed about the findings from the internal audit relating to US onshore operational readiness, with a particular focus on Eagle Ford, which provided some indications of the challenges relating to the back-office support functions. However, the executive management and the board did not become aware of the true extent of the problems until they were communicated through red flags raised by Equinor's accounting function in the second quarter of 2014. Later, several internal audit reports would confirm the challenging situation and increase the sense of urgency.

24 -

This error was corrected in the first quarter of 2015.

When the severity of the challenges relating to the business support functions became known to management, this led to a notable shift in the management's and the board's attention to these challenges, as further described in section 3.4.

#### 3.3.3 Building a midstream position

As Equinor expanded into operated positions in the US onshore, the company also had to develop a substantial midstream position, which added to the size of the complexity relating to the US onshore business. This required new gas processing facilities to be built, extended pipeline capacity, the construction of midstream systems to support produced water disposal, crude and gas gathering, as well as trucking operations at Bakken, to transport oil until gathering pipelines had been constructed for new field development areas.

At Bakken, Equinor also had to establish a crude-by-rail strategy to ensure flow assurance and access to the main markets, to meet the rapid production growth. The Bakken production required more than 1 000 rail cars, capable of transporting up to 72 000 barrels of oil.

To book the right transportation capacity, the midstream business relied on production estimates from the assets. In some cases, production estimates were too optimistic or premature, resulting in overbooking of capacity, and Equinor taking on commitments and costs beyond what it turned out to need.

#### 3.3.4 Disappointing exploration campaign

This was not only a period of growth in the US onshore industry, it was also a period of high activity for Equinor's US offshore activity in the GoM. After the drilling moratorium following BP's Macondo accident in 2010, Equinor resumed its drilling programme in the GoM from 2011. In 2012, Equinor's participation in GoM lease sales peaked when the company won 26 leases for a total cost of 333 million USD.

Over time it became clear that the company's sizable operated exploration portfolio was not delivering the results expected. The partner operated exploration portfolio, on the other hand, has resulted in several discoveries and assets that are currently in production.

#### 3.4 Crisis and response (2014 – 2020)

Towards the end of 2014, the oil price started falling sharply, ultimately to bottom out at around 30 USD/bbl. As a result of the significant drop in oil and gas prices, Equinor took a number of impairments relating to its US assets, as further outlined in Chapter 4.1.

Already in 2013, Equinor had started moving away from its strong focus on volume growth, in response to concerns over profitability and total investment levels. The company had signalled to the market that it would cut capex and reduce production growth to free up cash and maintain a robust balance sheet, and initiated a company-wide improvement project call STEP (Statoil Technology Efficiency Project) to address the company's overall operating and development costs. Through this project, the US organisation also contributed a new concept for drilling more efficient wells, which has since been applied broadly across Equinor's portfolio of both offshore and onshore oil and gas projects.

Stricter capital prioritisation led the US onshore organisation to scale down its activity, and by 2014 the Bakken asset was operating steadily with six drilling rigs.

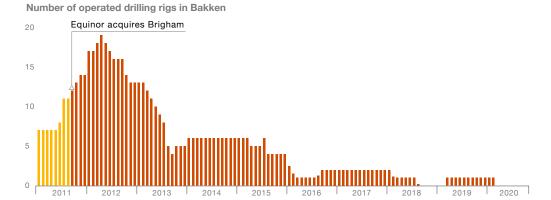


Figure 9: Total Brigham and subsequently Equinor operated rigs in Bakken 2011 to 2020. Source: Equinor

In October 2014, Equinor's CEO resigned to become the CEO of BG Group. To further strengthen the company's position in the market crisis facing the industry, Equinor's new CEO introduced new strategic principles and stronger robustness testing of investment decisions.

#### 3.4.1 Implementing improvements

To remediate the problems relating to the US onshore business support functions, Equinor initiated a number of improvement initiatives in the period from 2014 – 2016, including the "Back Office Excellence" project (BOX), which was among the first high priority efforts to address the challenges in the supporting processes.

In 2015, the corporate structure and parts of executive management were also changed, including the establishment of a new business area, Development and Production USA (DPUSA) with a new leadership team. DPUSA was headed up by the former Chief Financial Officer, who took the role as Executive Vice President and Country Manager in the US. The new Executive Vice President was given a strong mandate to continue strengthening the company's focus on improving operations, the profitability of its offshore and onshore assets in the US, and the quality of the back-office processes.

As part of the efforts to improve profitability for the assets in the US offshore and onshore portfolio, the "90 to 50" initiative was established, with the goal of reducing the oil price needed for Equinor's US business to break-even from 90 to 50 USD WTI (West Texas Intermediate). The initiative began in the first quarter of 2016 and concluded towards the end of 2018.

From the fourth quarter of 2014, the status on the US business support functions was regularly reported to the board's audit committee. In 2018, the audit committee concluded that it was satisfied with the situation. The board also conducted trips to Houston and Austin in 2015 and 2018, including a site visit to the Appalachia basin in Ohio.

The combined improvement efforts have led to improved quality in the onshore business support functions, and a generally improved control environment in the US business.

#### 3.4.2 Revised US strategy and new challenges

In the period from December 2014 to August 2016, Equinor made transactional steps to optimise its US onshore portfolio. This included the divestments of noncore assets in Marcellus and a swap transaction with Repsol, which included acquiring additional ownership interest in Eagle Ford and becoming the sole operator in the joint venture.

In the beginning of 2017, Equinor was awarded 13 leases in the GoM, which marked a re-set of the company's US offshore exploration activities. Later that year, Equinor developed a roadmap for its US business to deliver on the corporate strategic priorities; always safe, low carbon and high value. The company set out an ambition to increase production growth by 50% towards 2020 (mainly by offshore fields coming on-stream), achieving break-even costs per well of 42 USD and generating positive net cash flow at 50 USD (WTI).

In April 2018, Equinor announced adjustments in its corporate structure to reflect the further development of the international portfolio. As a result, the company's US offshore and onshore operations were included as part of its international portfolio, under the business area Development and Production International (DPI).

In December 2019, as part of a strategy to enhance financial flexibility and focus on core activities, Equinor sold its interest in, and transferred operatorship of Eagle Ford to Repsol.

The ongoing Covid-19 pandemic has extensively impacted the global industry and energy markets. Lower oil and gas prices have led to large cuts in production from US onshore plays. Equinor is among the companies that have decided to stop all operated onshore drilling for the remainder of 2020.

# Financial performance and reporting of Equinor's US business

This chapter gives an overview of the financial performance of Equinor's business in the US between 2007 and 2019. It also covers how results have been communicated to the market and public, as well as the main elements in the dialogue with Equinor's majority owner, the Norwegian government, on these issues.

# 4.1 Overall financial performance

Equinor's activities in the US date back several decades, and historically also include both Statoil and Hydro legacy assets. For the purposes of this report, the review team has considered the results of Equinor from the merger in 2007 to year end 2019.

In this period, Equinor invested 40 billion USD in the US. Of this number, net acquisitions onshore and offshore accounted for 12 billion or 27% of capex, while the rest was organic capex.

The book value of Equinor's US investments (non-current assets) was 17.8 billion USD at the end of 2019.

Total net income for the US in the period 2007 – 2019 was negative 21.5 billion USD. The main elements that make up this loss are:

Net impairments US onshore	-9.2 billion USD
Net impairments US offshore	-4.0 billion USD
Net impairments MMP segment	-0.5 billion USD
Unsuccessful exploration activity	-4.0 billion USD
Losses on commercial contracts	-1.3 billion USD
Internal financing costs	-2.4 billion USD
Contribution from operating activities	-0.1 billion USD
Total (Net income)	-21.5 billion USD

Converted to Norwegian kroner (NOK) using the exchange rate at the time the losses were recorded, the corresponding amount is 161 billion NOK.

Of the losses, around 15 billion USD are considered realised losses for accounting purposes. Equinor's accounts are prepared in accordance with IFRS (International Financial Reporting Standards), which requires that an impairment loss is recognised if the booked value of an asset exceeds the recoverable amount (as defined in IFRS). If the circumstances that cause an impairment loss are favourably resolved, the impairment loss must be reversed, however it cannot be reversed to more than original book value less depreciation. Equinor assesses that there is an accounting reversal potential of around 6 billion USD in the US.

At year end 2019, Equinor had a deferred tax asset in the US of around 3.8 billion USD, which was not recognised on the balance sheet.

Of the total impairments, around 90% were due to significantly lower oil and gas prices compared to the assumptions on which the investments were based. The remaining impairments mainly relate to reservoir performance issues and project development challenges.

#### Financial impact of business support problems

Direct impacts identified from the problems in US onshore business support functions are currently estimated to be around 100 million USD. This includes items such as cost of external consultants, write-offs and provisions for expected losses from overpaid royalties or receivables not collected.

Although it is difficult to quantify the impact, the company has also had indirect costs relating to the control problems. The situation required extensive management attention and resources that could otherwise have been used on developing the business.

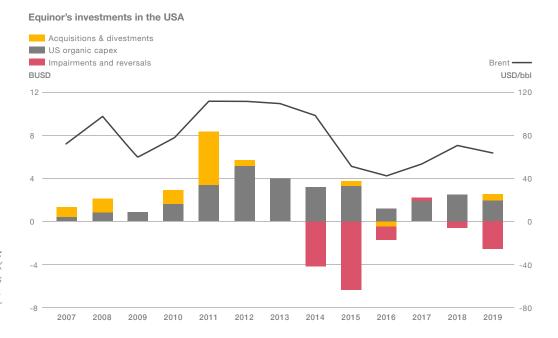


Figure 10: Organic and inorganic CAPEX and net impairments in Equinor's US business 2007-19. Source: Equinor

#### 4.2 Financial disclosure

The overall development of Equinor's US investments has been available through the annual and quarterly reports issued by the company. Analysts, investors and regulators have, however, requested more detailed and compiled information and reporting on the US activities. Equinor has decided to report Exploration and Production USA as a separate operating segment from the second quarter of 2020. The review team supports this decision, which will provide additional transparency and further details.

The following are examples of financial data disclosed by Equinor on the company's US activities as part of the annual report:

- Revenues, exploration expenses, production costs, depreciations, amortisations and net impairment losses as well as the result from US upstream operations.
- Total annual investments in US, as well as the book values of non-current assets and their development.
- · The size of Equinor's deferred tax asset in the US.
- · Accumulated retained earnings for Equinor's US entities.

Information about impairments and reversals in the US has been available as part of the quarterly reporting from the company. Total net impairments from the US onshore business was at year end 2019 at 9.2 billion USD. This number was disclosed in connection with the third quarter results in 2019.

Equinor presents its financial information in accordance with IFRS, which includes impairments. In addition, Equinor provides adjusted earnings. Adjusted earnings is a non GAAP financial measure meant to adjust for certain items that management considers may not be well correlated to Equinor's underlying operational performance in the individual reporting period. Information about how these two numbers are reconciled is provided as part of all company disclosure.

#### Media and analyst coverage of impairments

When deciding the level of financial reporting and which data on its business to provide, companies must consider applicable laws, regulations and industry standards, as well as investor and stakeholder expectations. These are all constantly evolving.

The review team notes that the issue of financial disclosure was addressed in a recent report by Arctic Securities to the Norwegian Ministry of Petroleum and Energy, which concluded that "company disclosure on impairments as such has been reasonably clear", "no less detailed on the asset-specificity than other US companies (...) reported", and that "the company has presented its aggregated retained losses for its US business in the supplementary material since 2017".

The Norwegian Society of Financial Analysts also recently issued a report covering Equinor's US financial reporting. This report was generally critical to the level of detail in Equinor's reporting. One of their conclusions was that the losses were partially known "if carefully reading company reports". They also welcome the new segment reporting.

Equinor's onshore impairments have also been covered by media as they were reported by Equinor and accumulated over time. The development of Equinor's share price following the latest round of media reporting in 2020, suggests that the value loss has already been discounted in the market's assessment of Equinor.

4.3 Ownership dialogue with the Norwegian Ministry of Petroleum and Energy

With a holding of 67%, the Government of Norway is the largest shareholder in Equinor. This ownership interest is managed by the Norwegian Ministry of Petroleum and Energy (MPE), in accordance with the Norwegian State's principles for good corporate governance. The main elements of this framework have remained unchanged since the early 2000s.

#### Dialogue based on good corporate governance

An important principle in the dialogue between Equinor and the MPE is the division of roles between the MPE as majority owner and the company's management. Responsibility for managing the company rests with the company's board and management. Information provided by Equinor to MPE should therefore be of a nature that can be shared with any investor. This approach is also consistent with globally recognised principles for good corporate governance.

#### Systematic and regular contact

The dialogue with the MPE is structured through high level meetings twice a year between the Minister of Petroleum and Energy and the chair of the board and CEO of Equinor, quarterly meetings in connection with the publication of the company's quarterly results, as well as ad hoc meetings on specific topics, either as requested by the MPE or offered by Equinor.

There is also frequent contact with the MPE outside of these meeting forums, typically relating to requests for clarifications and information from the MPE. Representatives from the ministry also regularly attend Equinor's capital market updates and presentations.

Equinor's exploration activities in the GoM, including exploration charges and impairments, have been discussed with the MPE since Equinor initiated its drilling activities in this basin. The Macondo accident prompted a dialogue on the implications of the drilling moratorium in the GoM following the accident, as well as questions to Equinor's safety and operational robustness against a similar accident.

#### Onshore business featured on the agenda

Following announcement of the deals that provided access to Marcellus, Eagle Ford and the Bakken play, the transactions and the entry into the US onshore were topics for discussion in the meetings with the MPE. This included questions relating to Equinor's forward looking views on oil and gas prices and the potential for value creation.

Impairments in the US were discussed in meetings following the publication of quarterly results and in high level meetings with the CEO and chair of the board. As part of these discussions, Equinor explained why impairments were being made, as well as status, progress and profitability for its US assets and international investments in general.

# Learnings for the future

### Main findings

The first part of this report described how Equinor built its US business. This chapter discusses what the company can learn from the challenges it faced.

In preparing the main findings from Equinor's US onshore business, the review team has had to make several choices when it comes to what topics to cover, and how in depth to deal with them.

Given the mandate's strong emphasis on learning "for Equinor's future business decisions and operations", the review team has prioritised topics and learning that has a broader relevance to Equinor, also outside the specifics of US onshore.

Successfully developing and growing a profitable business in new and unknown areas through acquisitions is among the most difficult things a management team can do. It requires the right strategy, rigorous execution and clear leadership.

The main findings and learnings can be categorised into three areas:

- 1. **Strategy and business development,** which considers the impacts of Equinor's growth strategy and approach to the US onshore acquisitions.
- Governance, risk management and internal control, which deals with the identification of risks and how the governance model was set up to manage the new US onshore business.
- 3. **Leadership and culture,** which addresses how well leaders in Equinor were able to set direction, to enable their teams to succeed and to execute on key priorities.

#### 5.1 US onshore

The losses in the US onshore business were mainly caused by impairments triggered by lower than expected oil and gas prices. The oil price is, of course, not a factor Equinor can control. The review team has no reason to question that the company's price assumptions reflected its best judgement. It was also broadly in line with industry and analysts' views at the time. Only with the benefit of hindsight is it possible to say how overly optimistic those predictions turned out to be. What management can control is how robust it requires a business case to be before investing, and how quickly activity should grow following an acquisition.

The control problems in the business support functions were primarily caused by ramping up operational activity to a level which overwhelmed supporting systems and processes. These are factors within management's control, and management has the option to reduce activity when control problems are identified.

While the direct causes of impairments and control problems are possible to identify, the underlying root causes are more complex. The issues outlined in this report are not the result of a single error or action of any individual. Rather, they deal with: how strategy is developed and implemented; the design of systems to govern a business and manage risk; and how leadership and culture enable the performance of an organisation. These are important considerations for the board of directors and executive management of a company.

#### 5.1.1 Strategy and business development

Equinor's growth strategy came at the expense of value and control. The business case for acquiring Brigham was marginal and relied on upsides that were not realised. After acquisitions worth almost 10 billion USD, the company grew its activities and investments quickly.

#### Growth targets and aggressive M&A

When building the US onshore business, Equinor followed a volume growth strategy. Given the relative high oil price at the time, investments in new volumes were also expected to be highly valuable. In 2011, an ambition was set, to increase production by 30%, to above 2.5 million barrels per day in 2020. This proved to be a powerful goal that drove behaviour at all levels in the company, especially in terms of investment levels and speed. It came at the expense of value creation and control in the US onshore business.

#### A marginal business case

Acquisitions and investments were made based on an expectation that the oil price would increase for the foreseeable future. However, in a volatile and cyclical industry, investments should stand the test of both good and bad times. Equinor did not sufficiently test transactions for robustness at a low-price scenario. Key assumptions and risks were not sufficiently understood and challenged by decision makers.

Equinor's valuation of Brigham showed a base value well below the acquisition price of 4.7 billion USD. When acquiring a listed company at a premium, it is generally difficult to create value without a very clear and actionable plan to do so. Equinor's plan to bridge the value gap relied on several upsides which the company ultimately was unable to realise.

The combination of high oil price assumptions and the strong reliance on realising upsides meant the business case for acquiring Brigham was marginal. Any drop in price, or even a small setback in developing the asset would potentially expose the company to impairments. This was clear, also at the time the decision was made. However, while the internal valuation struggled to justify the premium paid, the price was in line with relevant market metrics at the time.

Open, unbiased and challenging discussions on the value drivers and risks of a business case are characteristics of a robust business development process. In the Brigham transaction, the strategic value of operatorship and the future impact of technology development were considered significant. Executive management pushed for the deal to go through, and a mindset of "what does it take to win?" developed. Such an approach encourages more aggressive assumptions to be made in the evaluation and carries with it a higher risk of bias in decision-making.

A growth-driven strategy, a heated market, an aggressive M&A strategy and a strategic belief that prices would continue to rise were the forces that combined to drive Equinor's US investments. They are also what ultimately led to the impairments that were to follow.

#### Upside values not realised

The business case relied on several strategic upsides which Equinor was ultimately not able to realise. The rationale for using the Brigham organisation as a strategic platform to grow the onshore activities was not actively pursued.

Establishing a holistic and shared view on value and risk in the onshore assets has been a challenge. This has negatively impacted management's ability to make the right strategic decisions on how to develop the business, such as deciding on how

quickly activity should increase. A better understanding of the underlying value drivers and their impact on long-term value creation may have resulted in different choices being made earlier.

#### 5.1.2 Governance, risk management and internal control

Equinor underestimated the complexity of operating in the US onshore. Rapid growth overwhelmed critical business support systems. The integration approach for Brigham limited collaboration and transparency. Corporate oversight and follow-up should have been stronger and did not sufficiently reflect the underlying risks of the business.

#### **Underestimating complexity**

Fully understanding the risks in a business is necessary in order to manage them successfully. Equinor underestimated the complexity of operating US onshore and overestimated its capabilities.

An assessment of the company's capabilities in the spring of 2011 concluded: "Taking on a large shale operatorship in the US today is a relatively less complex and smaller challenge than many tasks Statoil has taken on as a company before. The systematic and rapid build-up of competence and experience since acquisition of Marcellus has given us a solid understanding of the value chain, and significantly lowered the gap we need to manage if taking on a large operatorship." Knowing what happened later, this self-assessment can be said to have been overly optimistic.

The first time Equinor was exposed to the complexities of onshore business support systems was through the marketing of its equity volumes from Marcellus, which were taken in-kind. This experience is well documented and should have been a strong signal of the importance of verifying the quality of these systems as part of taking over Brigham's operations.

Brigham's legacy systems were not scalable and came with a substantial backlog of data. Equinor was unprepared to close the gap. When activity grew quickly, it ultimately overwhelmed the systems on which it relied.

#### Integration approach created unclarity

How Brigham and its roughly 100 employees should be integrated into the larger Equinor organisation was an important decision. The stated objectives for the integration were primarily to "win hearts and minds" of the new employees and to not "overwhelm" the organisation with Equinor processes. Retention of key personnel was the most important performance indicator.

To achieve this, a partial ringfencing of the new business unit was introduced. Intentionally or not, this sent a strong signal that the organisation was to be left alone and given considerable leeway in how to operate. While successful in delivering on the stated objectives, the integration approach also reduced collaboration with the other onshore assets, limited internal transparency and learning, and created unclarity on roles and accountabilities.

#### Varying corporate oversight and follow-up

Equinor's management did not address the control problems in a timely manner. Corporate oversight and follow-up of the US onshore activities would have benefitted

from a more holistic and coordinated approach. In addition, Equinor's standard controls and procedures were not suited to the onshore ways of working and did not reflect the underlying risks that were specific to these operations.

Several interviewed executives expressed that they were surprised to learn about the extent of the internal control problems in the US organisation. This prompts the question as to why they were not detected earlier. This can partly be explained by assurances from the onshore organisation that issues were being handled; by management not "connecting the dots" and reacting to signals; and by senior management not knowing the business well enough to ask the right questions. There is also reason to question whether some of the progress and status reporting from the US onshore organisation fully appreciated and reflected the underlying realities.

#### 5.1.3 Leadership and culture

Limited onshore-specific expertise in senior leadership teams, and a lack of continuity in important roles negatively impacted the performance and follow-up of the US onshore business.

#### Limited onshore competence

Without the necessary industry specific expertise among senior leaders, it is difficult to set direction and to manage the risks of a business.

Few of the senior leaders tasked with overseeing and running Equinor's US onshore business had previous experience from this specific part of the industry. The company deployed several experienced and talented leaders to the US onshore business. However, faced with a new and rapidly growing business, personal qualities could not compensate for limited experience in managing this type of business.

#### Lack of continuity and competing priorities

There were sometimes gaps between ambitions, plans and strategies as presented for the onshore business and Equinor's ability to execute on them.

Equinor's business in the US has been subject to several reorganisations and changes in key personnel at different levels of the organisation. The cumulative impact of these changes has been a lack of continuity, which has negatively impacted its operations and organisation.

Furthermore, three onshore units ended up competing for the same resources, as they were preparing for operatorship in parallel. As Equinor's corporate functions did not sufficiently understand and prioritise the US onshore business needs, it was sometimes difficult to get the right resources.

#### Leadership challenges with culture and trust

Leadership and culture are too often seen as soft issues. They have hard impacts on the ability to execute strategies and plans.

Equinor experienced low trust between teams and leaders and cultural fault lines emerged: between the Norwegian headquarters and the US business area; between an offshore and onshore mindset; and between Equinor as a large and mature company and Brigham as a small, entrepreneurial company. These issues were further amplified by the long integration period of Brigham.

## 5.2 US offshore exploration

Of the total net negative income in the US portfolio from 2007, 4 billion USD is related to unsuccessful exploration activity. After a disappointing drilling campaign, Equinor concluded that it had been too driven by growth ambitions. It had also underestimated the complexity of drilling in this basin and overestimated its capabilities. This resulted in a change of strategy and different approach to exploration in the GoM.

The review team has not considered the offshore activity in depth, but notes that these learnings have some common characteristics with the findings from the US onshore business.

## 5.3 Other findings

#### 5.3.1 Cost culture in the US business

The review team has been made aware of examples of business practices in the US that have not been in accordance with Equinor's corporate requirements. These include an adjustment of the reward system, instances of expense reimbursement without supporting documentation and examples of participation in hospitality events in conflict with Equinor's Code of Conduct.

In addition, there are also examples of spending that, in hindsight, appear to have been based on overly optimistic views for how the business would develop. This includes office rental and corporate profiling activities. There are other examples of practices that may have been considered justified at the time but were later discontinued, such as the use of chartered flights for business travel.

According to the majority of interviewees, these examples do not reflect the general culture of the US organisation or its focus on cost. The review team has also noted that the US organisation recognised cost challenges already in 2012 and that it initiated improvements to capex, operational and administrative costs. New improvement initiatives were developed in 2015, 2018 and 2020.

It has been reported in newspaper articles that Equinor purchased a turkey for 115 000 USD at the Houston Rodeo. This is a well-established charity auction in Houston, where local businesses have a history of participating. A share of the money goes directly to the winner, while the rest contributes towards funding scholarships and educational programmes for young people in Texas.

It is, however, not correct that Equinor paid 115 000 USD for the 2014 turkey. In fact, the winning bid was shared among several bidders, with Equinor's share being 30 000 USD (roughly 180 000 NOK). Equinor participated in the turkey auction yearly between 2007 and 2015, spending a total of 173 250 USD.

## 5.3.2 Conflicts between Corporate Audit and the US business area

There was a certain tension between Corporate Audit (COA) and the business line, especially from 2014 and onwards. To some extent this is not unusual, and is a result of the different roles and perspectives of an internal audit function and the business line. The relationship between COA and the US business area, however, deteriorated to a level that was counterproductive. The conflicts were not mainly related to the underlying facts and issues, but instead centred on questions concerning who had first discovered the problems, how findings were presented and to which extent existing progress was sufficiently acknowledged.

## 5.4 Other transactions reviewed

The review team looked at several other transactions that have taken place internationally since the acquisition of Brigham, including some transaction opportunities that did not materialise.

These transactions have not been assessed to the same level of depth as the Brigham transaction, however, collectively they have served to inform the review team on the topics addressed below.

The other transactions were selected based on materiality, risk and relevance to the topics of the review. They are:

- 1. The 475 million USD corporate acquisition of the Danish energy trading company Danske Commodities, announced in July 2018.
- 2. The 2 billion USD acquisition of a 25% interest in the Roncador oil field offshore Brazil from Petrobras, announced in December 2017.
- 3. The 25 million USD acquisition of a 40% share in the Apodi solar farm in Brazil from Scatec Solar, announced in October 2017.
- 4. The exercise of Equinor's preferential right to acquire Shell's 22.45% interest in the Caesar Tonga oil field in the Gulf of Mexico for 956 million USD, announced in May 2019.

The review team has noted that the experience from the Brigham and other onshore acquisitions has impacted choices made in later transactions. It should, however, be noted that these four transactions have all been closed within the last three years. It is therefore premature to conclude on their long-term success.

All transactions were focused on strategic fit, balancing growth and value creation. Learnings from the Brigham acquisition have, to a large degree, been incorporated when establishing governance structures and operating models. This is especially reflected in one of the transactions, where significant thought and effort have been invested in establishing a governance structure with clear roles and responsibilities, tailored to the specific risks and success factors of the business.

The review of the other transactions has also shown that there is further improvement potential. This is reflected in the recommendations provided in Chapter 6.

## 5.5 Current status

As described in more detail in Part I of the report, several changes and improvements have taken place in Equinor since the Brigham transaction and the control problems in the US occurred.

As part of its mandate, the review team has been asked to assess "if there is a need for further strengthening of internal control and other procedures or practices based on findings from the review".

Due to an evolving business and industry environment, as well as regulatory and stakeholder expectations, there is a general need to continuously improve and strengthen internal control. In addition, the review has identified some areas in Equinor that would benefit from being addressed and further improved. The recommendations in Chapter 6 will address these in more detail.

## Recommendations

This chapter sets out the review team's recommendations to Equinor.

As described earlier in the report, many changes and considerable improvements have already been implemented in the onshore business, the US organisation and across Equinor over the last years.

The specific control issues experienced in US onshore have been addressed or are in the process of being addressed, as detailed more in Chapter 7.

The story in this report mainly relates to Equinor's US onshore business. The dynamics, dilemmas and decisions that confronted the company are, however, not unique. They will likely be experienced again, in different contexts and settings, given Equinor's strategy to develop into a broader energy company.

Equinor has a strong home base, as well as mature processes and ways of working. However, experience and expertise in one domain can lead to bias and blind spots in others. The capabilities that have made a company great may be different from what it needs in the future. Succeeding in new environments requires a culture that values curiosity, humility and the ability to learn and adapt.

The recommendations in this chapter are meant to help Equinor improve its approach to transactions and integration of new business. The recommendations are also relevant for business decisions and operations in other Equinor activities.

The recommendations are based on learnings from the US onshore activities and supplemented with the information from other transactions, audit reports and over 120 interviews. They follow the structure from Chapter 5 and address strategy and business development; governance risk and internal control; and leadership and culture. These topics are all closely interlinked and should be addressed as a totality to ensure they support and reinforce each other.

# 6.1 Recommendations

## 6.1.1 Strategy and business development

Improve decision-making for new business investments and strengthen learning

New business activities often have different value drivers and risks than Equinor's traditional business. The decision-making process should be adapted accordingly, with earlier in-depth involvement of senior management. More attention should be given to governance, leadership capabilities and culture at all stages from decision to implementation.

A more systematic approach to learning from investments should be developed and integrated into future decision-making and performance management, to ensure continuous improvement across Equinor.

## 6.1.2 Governance, risk management and internal control

Strengthen governance of new business activities and risk management across corporate functions

In order to create value from new and more diverse business activities, more fit for purpose governance and operating models should continue to be developed. These should reflect specific risks and business needs, and ensure strong leadership accountability.

To strengthen corporate oversight and to ensure that these governance and operating models are working as intended, increased use of independent reviews and verifications should be implemented.

Collaboration across corporate functions should be strengthened to provide executive management and the board with a more holistic and strategic risk understanding. In order to achieve this, verification and monitoring activities towards the business line must be more coordinated.

## 6.1.3 Leadership and culture

Further develop leadership capabilities and ensure continuity in key roles

As Equinor's business continues to diversify, broader leadership capabilities will be required. Equinor should ensure that leaders in new businesses have the relevant experience, expertise and cultural awareness needed to set direction, manage risk and deliver results.

To strengthen performance, Equinor should ensure more continuity in key roles.

This should be reflected in the company's approach to leadership development, team composition and recruitment.

## PART III

# Assurance of audit reports

# Assurance of internal audit reports

The review team has been asked to provide an evaluation that adequate actions have been taken following red internal audit reports related to internal control issues in the US and other relevant international activities.

## 7.1 Corporate audit in Equinor

Corporate Audit (COA) is Equinor's independent internal control body with the responsibility to monitor the business to assure that it is subject to adequate management and control. Internal audit is a tool for the board and management to get a second opinion and advise on how the organisation is performing. COA follows best practice for internal audit functions as described by the Institute of Internal Auditors, including having an external quality assessment performed on a regular basis.

Audit reports and detailed audit observations are classified as either green, yellow or red based on an assessment of risk. A green audit has not revealed any new significant risk, a yellow audit indicates that key risks are not sufficiently managed, and a red audit signals that key risks are not sufficiently managed and that immediate actions are required.

For all red and yellow audit observations, an action plan is agreed. It is the responsibility of the business line to develop the actions in dialogue with COA. The implementation of these actions must be followed up and documented by the business line before the actions can be closed. Since 2017, all red audit reports are followed up by COA. Separate audits are conducted to verify that actions have been closed and risks mitigated.

All audits and investigations performed by COA are reported on a quarterly basis to the executive management and to the board's audit committee. COA further provides the audit committee with an annual self-assessment and an annual overall opinion on the status of internal control in Equinor. The audit committee reports on a regular basis to the board. The board's committee on safety, sustainability and ethics reviews the results of significant audits and investigations within its areas of responsibility.

While internal audit reports in Equinor are not public, they are actively shared and applied across the company, in accordance with global best practices for internal audit.

## 7.2 Scope and verification methodology

In total, 122 internal audits from 2012 to 2020 covering the US and Equinor's other international activities have been assessed for inclusion in this review.

- 44 internal audits related to activities in the US were conducted in the period 2012 - 2020. Of these, 17 are considered within the scope of the review, having either an overall red classification or containing red findings relating to internal control issues.
- 78 internal audits related to international activities were conducted in the period 2012 - 2020. Of these, 12 are considered within the scope of the review, having either an overall red classification or containing red findings relating to internal control issues.

The review team has reviewed the audit reports and findings in scope to verify that findings have been followed up and closed.

Findings are considered to be "followed up/addressed", if management is in the process of developing or implementing appropriate actions to reduce risk to an acceptable level. Findings are considered to be "closed" when the corresponding actions have been implemented and risk has been reduced to an acceptable level.

To arrive at its assessments, the review team has:

- Reviewed documentation following each of the audits where actions are tracked and documented in Equinor's internal system. This includes relevant memorandums, minutes and presentations to the board of directors, corporate executive committee and other management teams, which document the internal audit discussions, management response and follow-up.
- Conducted interviews and workshops with current and previous internal auditors located both in the US and in Norway. The interviews have addressed how the internal audits were executed, reported, and how the Equinor organisation responded to improve on the audit findings.
- Conducted interviews with management and key employees in audited units.
   Focus has been on their view of the audit findings, background and the organisational response.
- Conducted interviews with senior management, corporate executive officers, and members of the board to get their assessment of audits, organisational follow-up and effectiveness of actions taken to reduce risk to an acceptable level.
- Reviewed results from management's testing of controls related to internal control over financial reporting per the first and second quarter of 2020.
- Reviewed documentation and reporting from Equinor's current external auditor EY and previous external auditor KPMG.

## 7.3 COA follow up

COA reports on a quarterly basis the status on the closing of agreed management actions from issues raised in audit reports. The review indicates that the status for US onshore has been reported to the board's audit committee for all quarters from 2014 until today.

In 2014, COA performed two follow-up audits based on the findings from the first audit of internal control over financial reporting. A separate follow-up audit of the whole DPUSA improvement agenda was performed in 2017. An audit focused on learnings from previous serious incidents was performed in 2018.

In COA's annual overall internal control status report to the board, issues in US onshore were addressed in the reports for 2015 and 2016.

# 7.4 Conclusion

In the opinion of the review team, findings in the US internal audit reports from 2012 to 2020 have been addressed and closed, except for certain specific issues. The open items are related to segregation of duties issues within certain IT systems and in parts of the procurement process. In addition, further strengthening of barriers against fraud in the US onshore procurement process is needed. The company has initiated actions to mitigate the identified risks, and improvement projects are ongoing. The segregation of duties issues within IT systems are being addressed by a group-wide initiative.

Some of the issues took too long to close. The root causes behind the late closing coincide with the issues addressed in Chapter 5.

The review team has also evaluated the closing of findings from internal audit reports related to other international activities. In the opinion of the review team, findings in these audits have also been addressed and closed. The scale and seriousness of issues seen in the US have not been observed elsewhere.

## APPENDICES

Appendix A: Equinor's acquisitions and divestments, over 200 million USD, in the USA 2005-2020.

2005	2006	Merger with Norsk Hydro Oil and Gas	2008	2009	2010	2011	2012
Brent prices		GoM Lease total winning bids for 0.2 BUSD	GoM Lease total winning bids for 0.3 BUSD  Marcellus Assets from Chesapeake 3.4 BUSD  GoM Sold assets to Mariner for 0.2 BUSD		Eagle Ford Assets with Talisman 0.8 BUSD	Brigham Acquired for 4.7 BUSD	GoM Lease total winning bids for 0.3 BUSD  Marcellus Acquired assets for 0.6 BUSD
GoM Assets from EnCana and Spinnaker for 4.5 BUSD	GoM Assets from PXP and Andarko for 1.6 BUSD				Marcellus Assets from Chesapeake 0.3 BUSD	/ <b>^</b>	$\wedge$
	$\mathcal{N}_{\mathcal{A}}$						V

2013	2014	2015	2016	2017	2018	2019	2020
	-4.1 BUSD	-6.3 BUSD	-1.3 BUSD	0.3 BUSD	-0.5 BUSD	-2.5 BUSD	-1.0 BUSD
	Marcellus Divested assets for 0.4 BUSD	Eagle Ford Increased interests by 13%		Marcellus Acquired an additional 14%		Tota  Eagle Ford Sold all assets	I US investments BUSD 9
\			Marcellus Sold assets for 0.4 BUSD			for <b>0.4</b> BUSD	6
							3

## Appendix B:

### Review of certain aspects related to

### Equinor's US and international activities

### Scope, team, process and reporting

## 1. Background

The Board of Directors of Equinor ASA ("Board") has decided to initiate a review ("the Review") related to Equinor's US and other international activities as further described herein.

The Board is initiating the Review as a follow up of the challenges described internally and externally in connection with Equinor's US activities.

### 2. Purpose

The main objectives of the Review are to;

- Provide a timeline of events for Equinor's history in the US (since 2005).
- Provide assurance that adequate actions have been taken following red audit findings related to internal control pertaining to the US and other relevant international activities.
- Extract learnings from the acquisition and integration processes of the US onshore activities with focus on governance, internal control and culture.

The main purpose of the Review is to extract learnings for Equinor's future business decisions and operations.

#### 3. Scope

## A. Assurance following audit reports

- i. Review all relevant audit reports that have an overall red (critical condition) classification or include red findings pertaining to US and Equinor's international activities in the period 2012 2020 and verify that findings related to internal control have been followed up and closed.
- ii. Review if key learnings have been addressed and implemented across relevant parts of the company and assess if there is a need for further strengthening of internal control and other procedures or practices based on findings from the review described in item 3 A (i).

### B. Learning for future transactions

Review the Brigham transaction and relevant international transactions (since 2012) for learning purposes. Focus of the review should be to extract learning relevant for future transactions and business decisions, including (1) the approach to capture value from the transaction, as well as (2) the organizational and operating model chosen (governance, internal control, people and culture). Learnings related to ensure successful integration and maximum value creation in connection with future transactions shall be the main focus.

#### C. Factual description and timeline

As background for the review the Review Team shall also provide a factual
description, including the timeline, for Equinor's history in the US (since 2005) with
focus on building of positions offshore Gulf of Mexico and onshore. Further the
factual description shall include a description of the follow up from the Board and
the Board's Audit Committee (BAC) in relation to Equinor's US activities, including
internal control issues identified in the relevant audit report's classified as red
(critical condition).

#### 4. Review Team

The Review Team will be chaired by Eli Moe-Helgesen, partner PWC.

(Helgesen is a State Authorized Public Accountant with more than 25 years of experience from leading project related to corporate governance, board evaluations, internal controls and risk management, including extensive experience in delivering evaluations, verifications and improvement projects for companies and boards like Telenor, Norsk Hydro, Yara, KLP, Statkraft and Tine.)

In addition, the Review Team will consist of the following members:

- Aase Lindahl, (partner PWC)
  - (Master of economics and business administration from the Norwegian School of economics (NHH). Lindahl is the leader of the GRC team within PWC's Risk Advisory Services department. She has more than 24 years of experience from advising large global companies on governance, compliance and internal control over both financial reporting and operational processes.)
- Hanna D. Opsahl-Ben Ammar (manager PWC)
   (PhD in Strategy management from Toulouse School of Management. Opsahl-Ben Ammar has worked with PWC since 2018 and is working within the Risk Advisory Services department)
- Jon Arnt Jacobsen (senior vice president Corporate Audit (SVP COA))
   (MBA, University of Wisconsin. Jacobsen has been with Statoil/Equinor since 1998 in various positions including Finance Director, EVP Marketing & Manufacturing, Chief Procurement Officer and head of COA the last 3 years. Prior to Statoil/Equinor Jacobsen worked 12 years with DnB including General Manager of their Singapore office.)
- Ann-Elisabeth Serck-Hanssen (senior vice president Marketing, Midstream & Processing, Asset management)
  - (Master of economics and business administration from the Norwegian School of Economics (NHH). Serck-Hanssen has been with Statoil/Equinor since 1993 in various SVP positions across Corporate Strategy, New Energy, Global Business Services, Marketing and Trading global operations, and since 2018 in MMP Asset Management. Serck-Hanssen has also experience from the shipping company Navion and former Chairman of Skanem ASA.)

In addition, the Review Team will draw upon resources from PWC and Equinor as reasonably required. The Review Team can also commission work from advisors outside of PWC as further agreed between the chair of the Review Team and SVP COA.

A secretariat is established to support the Review Team with assistance in all relevant areas. The secretariat will work under the direction and instructions of the Review Team.

The chair of the Review Team will keep the chair of the Board's Audit Committee (BAC) informed about key findings and progress during the review. Further the chair of the Review Team will inform the chair of BAC about relevant adjustments to the approach and coverage made by the Review Team in order to deliver on the scope of the review.

#### 5. Limitations

Evaluation of previous strategic decisions, including investment decisions, as well as audited accounts and audit statements, is outside the scope of the review. Further the overall corporate and legal structure is outside the scope of the review. US legal structure is addressed separately by BAC. The review shall not assess but extract learnings for Equinor's future international or commercial strategy or current performance.

### 6. Reporting and final report

The Review Team will conclude its work with a final report, describing the work of the Review Team, its main findings and recommendations, and present it to the BAC prior to 1 October 2020.

A draft of the final report will be subject to hearing with relevant personnel within Equinor prior to finalization.

The Review Team will provide the final report to the Board within 1 October 2020.

The final report will be made public by Equinor ASA. Information that cannot be made public due to commercial reasons, confidentiality obligations or applicable laws will not be included in the final report. Such information will be conveyed to the Board and management in a suitable manner to the extent relevant for the scope of work.

\*\*\*

Any major changes in the scope of the review shall be in writing and subject to agreement between the Board and the chair of the Review Team.

Oslo 9 June 2020

Jon Erik Reinhardsen Chair of the Board of Directors Equinor ASA

## Disclaimer

This report has been prepared solely for Equinor's use with the purpose set out in the engagement letter dated 9 June 2020.

PricewaterhouseCoopers (PwC) has assisted Equinor with a review of certain aspects related to Equinor's US and international activities. The review has been conducted exclusively in accordance with the scope specified in the mandate provided by Equinor's Board of Directors. Any other aspects relevant to Equinor's US and international activities not specified in the mandate have not been subject to this review. The review team has been chaired by PwC and has included resources from PwC and Equinor.

Our assessment is based on interviews in addition to documentation supplied by Equinor. External publicly available analyses and information have also been used. We have verified information relevant to the review in accordance with the approach outlined in chapter 2.4 of this report. PwC has not performed any quality assurance or controls of Equinor's business and the report does not contain a verification or assurance statement of Equinor's business. The report does not contain information confidential to Equinor and/or PwC.

Equinor is entitled to use information from this report in accordance with the engagement letter under the terms and conditions of the global framework agreement. PwC does not accept any responsibility for losses suffered by Equinor or other parties as a result of the distribution, reproduction or use of this report in contradiction to the engagement letter.

PwC holds the property right to pre-existing intellectual property used and modified in connection with this review.

