



SHELL UK UPSTREAM: Our contribution to the UK economy



FOREWORD

Shell has been operating in the North Sea for more than 50 years.

It is our significant presence here that has put us in a strong position to help the UK meet energy needs and enable us to contribute to the wider economy.

Today, we continue to build on this through investments in oil and gas fields and in technology to make our operations safer and more productive and by helping to maximise economic recovery of oil and gas from beneath UK waters.

For example, we recently announced plans to redevelop the Penguins field with an investment that will create hundreds of jobs.

In 2018, Shell was a partner in seven of the 13 final investment decisions announced in the UK Continental Shelf. We also invested £40 million in technology across our operations in this basin.

We produce around 10% of the UK's oil and gas and provide the processing infrastructure that enables around 20% of the UK's gas supply to reach homes and businesses.

With this in mind, it is worth looking at the results of analysis we commissioned that outlines the contribution our Upstream business made on supply chains and the wider economy.

The analysis was carried out by two independent bodies, the University of Strathclyde's Fraser of Allander Institute and Aberdeen & Grampian Chamber of Commerce. It shows that while Shell's Upstream business is delivering energy for the UK's needs, it also delivers economic benefits which support national economies and local communities.

The analysis focuses solely on our supply chain spending, so does not include our direct employee wages or taxation.

The results show that in 2018 the amount we spent to operate our UK upstream facilities and projects - our direct spend - was around £1.5 billion, but through our supply chain and additional spending we added a further £2 billion in gross value to the UK.

Our Upstream business directly employed around 1,000 people. But when you take into account our supply chains and the economic benefits of people spending their wages, our activities supported more than 28,000 jobs. That means 28 jobs in the economy for every person we directly employed.

The findings also show our significant investment in Scotland. For example, more than half our UK upstream direct spend was focused on Scotland and we paid around £9.5 million in business rates here.

All of this goes hand-in-hand with our work to build a healthy, inclusive and safety-focused culture within Shell. For example, our Girls in Energy programme, which in partnership with local colleges works with young women to challenge preconceptions and attract diverse workers to the industry.

I lead an organisation that for 50 years has clearly made a sizeable contribution to people in the UK. As the UK's energy needs change in future, we will work hard with our partners and suppliers to continue to make this contribution.

Here's to another 50 years.



STEVE PHIMISTER

Vice President Upstream and Director,
Shell UK

OUR BROADER CONTRIBUTION TO THE UK

Shell has played a vital role in powering the UK's industry, transport systems and homes since Shell Transport and Trading was founded more than 120 years ago. We began as a small trading company in London, importing seashells to cater for the growing trend of using shells for interior design. Today, we are one of the world's largest independent energy companies, operating in more than 70 countries.

In the North Sea, we have explored for and produced oil and gas for more than 50 years.

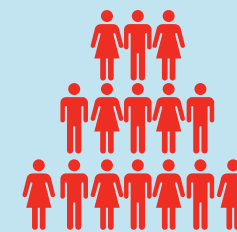
We are now one of the region's biggest producers and supply around 10% of the UK's total oil and gas needs.

We have restructured our North Sea portfolio

to extend its profitability for years to come. We own, or part own, more than 50 North Sea fields and operate 30 oil and gas installations. At the same time, we continue to invest in oil and gas production. Our projects include the redevelopment of the Penguins field, which will see us build our first manned installation in the Northern North Sea for almost 30 years.

Shell is not only a substantial energy producer in the UK. We also contribute to energy security by importing oil and gas. Our gas plants, pipeline systems and import terminals deliver more than 20% of the UK's gas supply, including substantial volumes piped from Norway to our St Fergus terminal in Scotland.

50 2018 marked 50 years since our first oil and gas production in the UK



Our UK Upstream business directly employs more than,

1,000
PEOPLE

with the majority based in Scotland



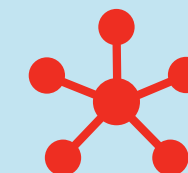
We provide
10%
of the UK's total oil and gas



In 2018 we invested

£40 million

in deploying technology, around 18% of the technology investment in our industry, making us one of the largest technology investors in the UK basin



20%

of the UK's gas supply is processed through our infrastructure

OUR CONTRIBUTION TO THE UK ECONOMY

In 2018, our UK Upstream business spent around £1.5 billion with suppliers in order to operate our North Sea facilities and projects, with around 90% of our spending made directly in the UK. These are figures from research carried out by the University of Strathclyde's Fraser of Allander Institute and Aberdeen & Grampian Chamber of Commerce.

The analysis found that this direct spending supports more than £2.35 billion in additional economic output across the UK, resulting in a total effect on UK output of £3.86 billion.

As outlined below, analysis of our spending found that for every £1 generated in direct gross value added (a measure commonly used by economists that assesses the value of goods and services produced minus the costs), a further £1.40 of activity is supported in the wider economy through indirect and induced activity.

With our Upstream business in the UK employing around 1,000 people, our activity supports a further 28 jobs in the economy for each direct employee.

£2 billion

Gross value added to the UK economy in 2018, generated by our economic activity and the activity of our supply chain.



Over **28,000**

Full time employee roles supported by our activity across our supply chain and the wider UK Economy

£825 million
direct impact

+

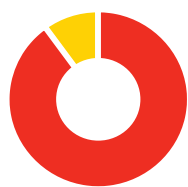
£450 million
indirect impact

+

£700 million
induced impact



£1.5 billion
in direct spending with UK based suppliers



More than **90%**
of direct spend is within the UK

OUR CONTRIBUTION TO THE SCOTTISH ECONOMY

Scotland is home to our UK upstream operations. We spend approximately £880 million with direct suppliers in Scotland. With this direct spending and taking into account supply chains and wages, this activity supports around 11,700 full-time equivalent jobs and £775 million gross value add across the Scottish economy.

The spending of wages across the supply chains linked to our activity supports more than 3,000 jobs in the Scottish services sector alone.

Although not included in this analysis, we support local communities by contributing around £10 million in business rates at a national level, with £9.5 million of this paid in Scotland.

£775 million

Our activity generates £775 million in gross value added to the Scottish Economy.



11,700

Full time employee roles supported by our activity across our supply chain and the wider Scottish Economy

£400 million
direct impact

+

£150 million
indirect impact

+

£225 million
induced impact



£880 million
in direct spending in Scotland



58%
of our UK based spend is focused in Scotland

CASE STUDIES

Girls in Energy

Shell is focused on helping to solve one of the biggest challenges facing the world today: bringing the benefits of energy to everyone on the planet, while tackling climate change. To address this we need to attract and develop the brightest minds, and make sure that every voice is heard.

We are also taking steps to diversify our future workforce to ensure they can help the energy sector in the UK continue to be a valuable contributor to the economy.

In North East Scotland, one of the ways we seek to build a more balanced workforce is through our Girls in Energy programme. This is a one-year course for young women to raise awareness of the energy industry's wealth of career opportunities. Delivered through partnerships with North East Scotland College and Fife College, the programme offers weekly lessons, workshops and field visits for young women in secondary education aged 14 to 16.

We know that visible role models make a real difference in encouraging young people into science, technology, engineering and maths careers. Through our industry experience programme, students meet

dozens of experts from the oil and gas sector. They can hear first-hand about the various roles which support our exploration, development and production activities. Since it launched in 2010, the programme has grown to reach more than 1,000 young women, with plans underway to expand it further.

The programme has made a positive contribution to the career decisions of our alumni, with graduates taking on engineering roles not only within Shell UK, but across a range of engineering and energy supply companies in the country.



Fife Natural Gas Liquids Plant

The Shell Fife Natural Gas Liquids plant is critical to the UK's energy supply. It is a key part of Shell's infrastructure that enables up to 20% of the UK's gas supply to come ashore from the North Sea and Norway, after which it is distributed and processed.

Natural gas is critical for current energy needs, with 80% of the UK's 25 million homes powered by gas. The facility also enables gas-fired power plants to meet 25% of the UK's electricity demand. This helps support the transition to renewables by providing flexibility within the power grid. Natural gas will continue to have a crucial role in the transition to a low carbon energy system, acting as a source of hydrogen to fuel our future energy needs.

Our plant at Mossmorran employs around 250 people, with about two-thirds living locally. The plant supports local supply chains through a significant operational spend, and pays business rates of around

£4 million, which is about 2.5% of all rates collected in the Fife area.

The plant has an active community engagement programme. Our UK Upstream business supports a popular show in the area called Fife Art, and Shell buys the winning artwork and donates it to the local NHS authority.



UNDERSTANDING THE RESULTS

Analysis presented here considers the economic impact of Shell's UK Upstream business on the UK and Scottish economies.

Economic impact is quantified in terms of the full-time equivalent number of people employed and gross value added.

Gross value added measures the contribution of a company to an economy. This contribution is the value the company creates through producing its goods and services. It is the key component of gross domestic product, a widely used indicator of the economic health of a country.

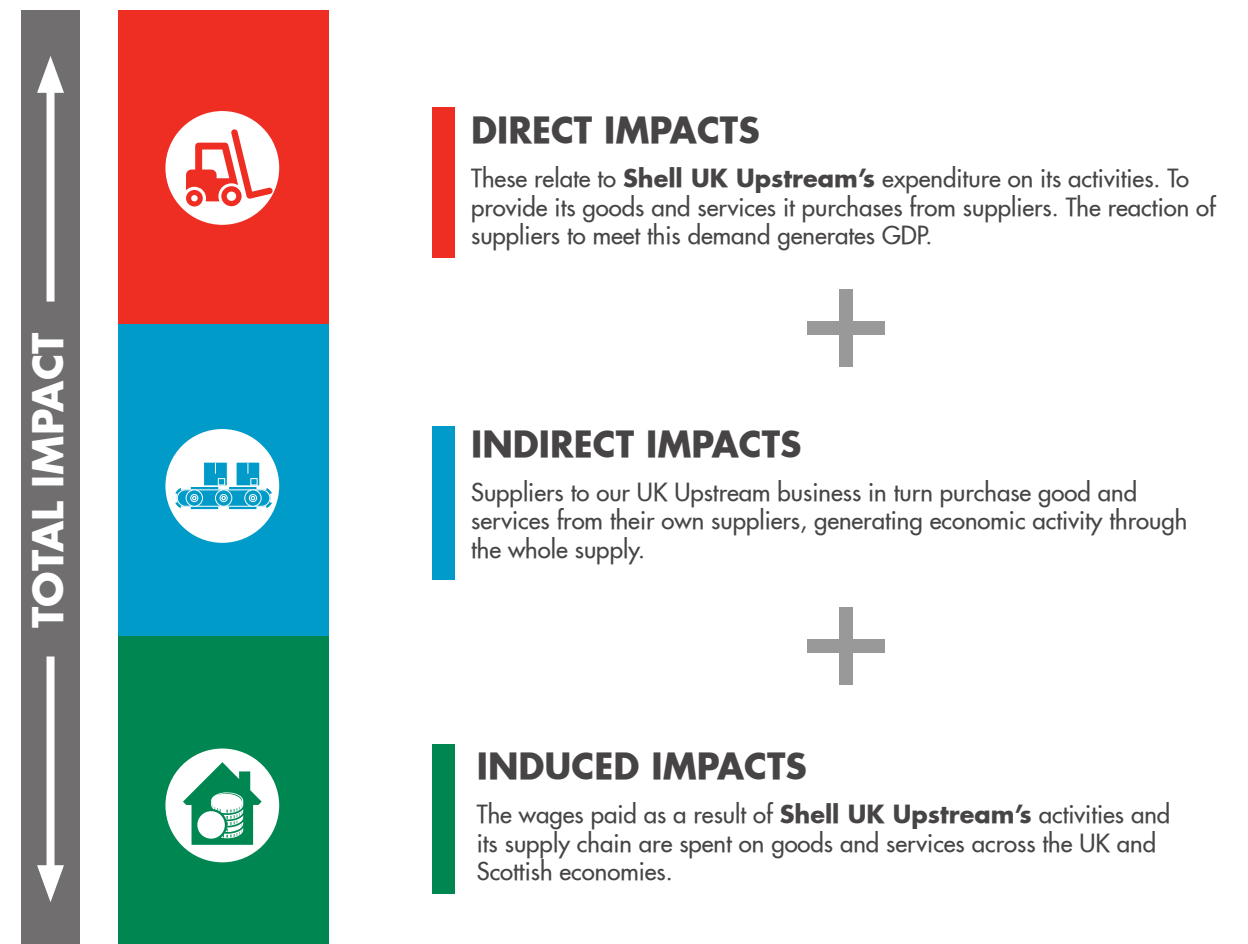
The economic impact analysis does not include Shell UK Upstream's direct wages or taxation paid to the UK or Scottish Governments. Analysis is based on

total expenditure in the UK of £1,511 million and £883 million in Scotland in 2018. This is the total amount spent on behalf of Shell and our partners to operate our UK upstream facilities and projects.

This expenditure was coded by standard industrial classifications and used alongside input-output tables for the UK and Scottish economies in order to model the total economic impact. Modelling was conducted by the University of Strathclyde's Fraser of Allander Institute using information provided by Shell UK Upstream. Figures in graphics may differ slightly due to rounding.

The economic impact analysis focuses on three channels of activity: direct, indirect and induced impacts.

Diagram 1: Direct, indirect and induced impacts explained



Source: Fraser of Allander Institute, University of Strathclyde

OUR PARTNERS:

Shell commissioned Aberdeen & Grampian Chamber of Commerce and the University of Strathclyde's Fraser of Allander Institute to carry out the research and analysis presented here.



**Aberdeen &
Grampian
Chamber of
Commerce**

About Aberdeen & Grampian Chamber of Commerce

Aberdeen & Grampian Chamber of Commerce is North East Scotland's leading business membership organisation and the country's largest chamber. It represents more than 1,200 organisations that collectively employ around 125,000 people across all sectors. The chamber's research unit sources research and intelligence on members' operating environment and delivers independent economic analysis and evaluation studies.



**UNIVERSITY of STRATHCLYDE
FRASER OF ALLANDER
INSTITUTE**

About the Fraser of Allander Institute

The Fraser of Allander Institute at the University of Strathclyde entered Scottish public life in 1975. It is a leading independent economic research institute focused on the Scottish economy.

Disclaimer

This document has been prepared in good faith on the basis of information available at the date of publication and is intended solely to provide an overview and summary of Shell UK Upstream's contribution to the U.K. economy in 2018. It is not intended to be relied upon by any person or used for any particular purpose. Neither Aberdeen & Grampian Chamber of Commerce, the Fraser of Allander Institute nor Shell U.K. Limited (or any organisation within the Royal Dutch / Shell Group of Companies) guarantees or warrants the accuracy, reliability or completeness of the information in this document nor will any of them be liable for any loss, damage, cost or expense incurred or arising by reason of any person using or relying on information contained in it.