

Executive Summary

Objectives

- The Scottish Government has long been calling for fiscal reforms – including the introduction of an investment allowance.
- The Scottish Government believes that a fiscal regime must be underpinned by principles of simplicity, neutrality, stability and flexibility, as highlighted in the work by the Fiscal Commission Working Group (2013)¹. By contrast, the current oil and gas fiscal regime is perceived by stakeholders as overly complex, and increasingly unfit for the changing nature of the basin.
- The introduction of an investment allowance must therefore, above all, simplify the existing regime, making it more transparent for investors.
- The Scottish Government believes that a well-designed Investment Allowance also has the potential to address many of the longer-term challenges in the North Sea. In particular, it should be designed in a way that assists with the challenges around:
 - exploration;
 - production efficiency; and
 - asset life extension and the impact of a maturing basin.
- By addressing these challenges, the UK Government has the opportunity to partially offset short term decreases in investment that will negatively impact production. However, in order to maintain production at current levels, or to increase it, a step change in companies' investment plans is required to ensure that sufficient new production comes on stream. This should protect future tax receipts and ensure a fair return to the nation.
- Targeted tax relief could add 1 to 1.5 billion barrels of oil equivalent to total production². Therefore, it is essential that in considering the design of this allowance, the UK Government considers the full economic benefits (i.e. the Total Value Added (TVA)) of this additional activity. The framework for such an approach was recommended by Scotland's Independent Expert Commission on Oil and Gas.³

Scope of Allowance

- An investment allowance must simplify the existing regime, which has been perceived as overly complex. In order to do so, the Scottish Government believes that it is important that a single rate of allowance is used across the basin.
- Given current headline tax rates, there would be merit in setting the allowance at 62.5% with a commitment to review the rate – in full consultation with industry – ahead of the following Budget should the economic challenges persist.
- Drawing on the Expert Commission's recommendations, the Scottish Government believes that the definition of qualifying expenditure should to be sufficiently broad so as to properly address the changing nature of the maturing North Sea basin.

¹ <http://www.scotland.gov.uk/resource/0043/00434977.pdf>

² Alex Kemp (2014), https://www.abdn.ac.uk/research/acreef/documents/Working_papers/nsp-128.pdf

³ <http://www.scotland.gov.uk/Publications/2014/07/6560>

- The Scottish Government believes that the allowance should include infrastructure expenditure and spending on works that will unlock new reserves, extend the economic life of an asset or sustain production levels. This will encourage the type of expenditure critical to improving production efficiency and extending the life of assets.
- The Scottish Government also strongly supports the inclusion of exploration and appraisal expenditure within the scope of the allowance, and believes that additional steps should be taken to support exploration activity across the basin.

Requirement for urgent action

- The UK Government should use this consultation to listen to feedback from industry and stakeholders about the design and implementation of an investment allowance.
- The UK Government should consider these proposals alongside those from industry and bring forward an investment allowance at the March Budget that reflects these objectives.
- Action from Government is necessary to ensure the survival of a healthy industry, but must be complemented by action from the industry itself. Collaboration between operators, the Oil and Gas Authority (OGA) and the UK and Scottish Government must continue to take place to ensure that the above discussed longer term challenges that the industry faces are successfully addressed.
- While the investment allowance will send an important signal to investors, the Scottish Government urges the UK Government not to allow this consultation and the introduction of an investment allowance to be positioned as an alternative to the substantial action that is needed across a number of areas.
- Considerable oil and gas reserves remain in the North Sea, however, production in 2013 accounted for less than 0.1% of global oil production in that year.⁴ With declining prospectivity and pressure to tackle the high costs in the basin, the UK Government must not lose sight of the wider fiscal and regulatory reform that is required to maximise economic recovery, TVA and extend the longevity of North Sea activity.

⁴ BP's Statistical Review of World Energy 2014, <http://www.bp.com/content/dam/bp/pdf/Energy-economics/statistical-review-2014/BP-statistical-review-of-world-energy-2014-full-report.pdf>

Introduction

1. The North Sea oil and gas industry makes a significant contribution to the economies of both Scotland and the UK. It acts as a major source of employment, investment and tax revenue, and supplies the majority of the UK's oil and gas needs.
2. The industry currently faces a number of challenges that urgently need to be addressed. Some of these challenges are not new; production efficiency fell to an average of 60% across the basin in 2013 and remained flat during 2014, and exploration rates remained low during 2014.
3. In addition, one of the most significant challenges that the industry has been facing has been increasing costs, a trend that has the potential to make the UKCS globally uncompetitive. This increase in costs has been driven by both operational and capital expenditure; with Oil and Gas UK estimating that average unit operating costs reached £17/boe in 2013, 62% higher than in 2011; and average unit development costs reaching £13.5/boe in 2014, more than three times what they were in 2004.⁵
4. The Brent crude oil price however recently fell to a six year low, and is currently over 40 per cent lower than its price in June 2014. This represents a new substantial short term challenge to the industry, and a number of oil and gas companies have announced cuts in their investment plans.
5. The North Sea oil and gas sector invests more than any other industry in the UK. Oil and gas projects require significant upfront investment and have a long payback period over which the investment is recouped. This investment supports jobs and economic activity across the supply chain. It is essential that the fiscal regime supports investment in activity that will generate value, maintain base production levels and unlock new oil and gas resources and support jobs.
6. The increase in investment and production arising from targeted tax incentives such as a well-designed investment allowance would have significant knock-on benefits to the wider Scottish economy and public finances. For example, a well-designed Investment Allowance is likely to have a cumulative net positive impact on tax receipts, due to the additional discoveries and production it encourages.

The case for change

7. The oil and gas sector exhibits characteristics that require special consideration in terms of economic policy and taxation. These characteristics include: revenue streams which are inherently uncertain and are secured over the long-term; significant up-front investment and decommissioning costs; and a range of technical and financial risks. The efficient collection of economic rents in practice has to reflect these complexities.
8. Translating this into a practical tax system has proved difficult, resulting in the current system, which is now very complex in its operation and has been subject to frequent changes.

⁵ All figures in 2013 prices.

From Oil & Gas UK, Economic Report 2014, <http://www.oilandgasuk.co.uk/publications/viewpub.cfm?frmPubID=835>

9. The field allowances introduced in recent years reduce the profits on which the Supplementary Charge is levied and have allowed some marginal developments to become commercially viable. However, field allowances have also added complexity to the fiscal regime. There are currently around 10 different allowances offering different levels of fiscal support based on particular physical characteristics or geographical location of fields. The design of the allowances also means that some marginal fields are not eligible for support as they do not conform to these specific physical characteristics.
10. In addition, the allowances are designed to help fields which are relatively high in cost (per boe). The physical features are essentially proxies for costs. However, by their nature they do not accurately and sufficiently reflect the actual expenditure being incurred.
11. Furthermore, under the current system investors will often not know whether they will be entitled to a field allowance or not when appraising discoveries. This has resulted in the eligibility for a field allowance lacking appropriate transparency and predictability. This increases uncertainty and increases the risk investors apply to North Sea projects.
12. As a result of our recognition of these challenges and complexities, the Scottish Government has long been calling for fiscal reforms to adapt to the changing nature of the basin.
 - As far back as 2011, the Scottish Government published proposals, including the introduction of an investment allowance, to help mitigate the impact of the UK Government's decision to unexpectedly increase by 12% the Supplementary Charge to 32%.⁶
 - In 2013 the Scottish Government report 'Maximising the Returns for Oil and Gas in an Independent Scotland' outlined a framework for how fiscal policy could be improved in the North Sea, with a focus on stability and predictability. A key recommendation was that policy development requires more effective engagement with industry.⁷
 - The Scottish Government also commissioned an Independent Expert Commission, led by Melfort Campbell to analyse the challenges facing the sector. This report concluded that the industry was at a crossroads, and urgent action was required by Government to address the fiscal and regulatory challenges. A key recommendation from the Commission's report was the need for a single cost based investment allowance to be introduced across the basin.⁸
 - More recently, the Scottish Government published a Discussion Paper (8 January) and a Fiscal Proposals paper (22 January) outlining what action the Scottish Government is taking to support the sector and setting out the key proposals for fiscal reform that the Scottish Government believe to be of urgent importance.⁹
13. Appropriate fiscal reform could improve the economics of the basin, protecting the future of the sector, which will have significant impacts on jobs and future tax receipts. It is essential that the UK Government uses this consultation on the Investment Allowance to take on board the

⁶ www.scotland.gov.uk/Resource/Doc/919/0121778.pdf

⁷ www.scotland.gov.uk/Resource/0042/00428074.pdf

⁸ www.scotland.gov.uk/Publications/2014/07/6560

⁹ <http://www.gov.scot/Resource/0046/00468834.pdf>

feedback from industry and stakeholders about the most effective design and implementation of an allowance mechanism.

14. This paper sets out the Scottish Government's recommendation and proposals for the design and introduction of an investment allowance.
15. It is now important that the UK Government considers these recommendations alongside those from industry and brings forward an investment allowance that builds on these proposals at the March Budget.
16. In doing so, the Scottish Government believes that the Investment Allowance should be effective as soon as possible after the Budget – potentially from 1 April 2015 – to safeguard future investment and jobs, and signal agents that the Government is aware of the urgency for action.

Objectives and Design of the Investment Allowance

17. Drawing on the recommendations of the Expert Commission report, the Scottish Government believe that an investment allowance above all, must simplify the existing regime, making it more transparent for investors.
18. In doing so, the Scottish Government believes that an appropriately designed Investment Allowance also has the potential to address many of the longer term challenges that the North Sea currently faces. In particular, it should be designed in a way that assists with the challenges around:
 - Exploration
 - Production Efficiency (PE)
 - Maturing Basin / Asset Integrity
19. These are overarching challenges that cannot be addressed by fiscal reform alone and focused action is required from industry, government and the Oil and Gas Authority to develop solutions. However, fiscal policy can play an important role.

Encouraging Investment and Simplifying the Regime

20. An investment allowance must simplify the existing regime, which the industry perceives as overly complex. In order to do so, the Scottish Government believes that it is important that a single rate of allowance is used across the basin.
21. A single rate would have the benefit of making investments in new fields and existing fields equally valuable, reducing government intervention in signalling where investment should be directed. This should potentially increase efficiency.
22. In order to avoid distortions with the existing cluster area uHPHT allowance and brown field allowance, the rate must be set sufficiently high. The Scottish Government believes that there would be merit in setting the rate at 62.5%, with a commitment to review the rate – in full consultation with industry – ahead of the next Budget should economic challenges persist.

23. Furthermore, reflecting the Expert Commission's recommendation that TVA should be recognised as a component of the fiscal framework, the UK Government must ensure that due consideration is given to the full economic impact from any additional activity generated as a result of the investment allowance.
24. Drawing on the framework for TVA set out in the Expert Commission's report it is clear that policy interventions do not simply impact on the number of fields developed and the associated production and tax revenue. The investment in these developments generates a range of indirect and induced activity within the industry and its supply chain. As part of the decision making process for the design of the investment allowance, it is important that the UK Government gives appropriate consideration to the impact on the supply chain and employment. With declining prospectivity and a high cost base, action is required to prevent the UK from losing any of its capability and technology leadership. A strong domestic industry focused on extending its longevity is an essential component for a successful supply chain that can generate value and grow exports.
25. Professor Alex Kemp has published analysis that assesses the potential impact an investment allowance could have on activity in the sector.¹⁰ This analysis suggests that at a \$90 price, an investment uplift allowance could have a positive impact on field development, production and investment over the period to 2050. It is estimated that an allowance of 62.5% would result in an additional 26 new field developments, almost 1.6 billion boe of additional production and almost £27 billion of investment over the period to 2050.¹¹
26. The increase in investment and production arising from an investment allowance would have significant knock-on benefits to the wider Scottish economy, and public finances. Scottish Government analysis based on industry data suggests that this additional activity could support around 20,000 jobs per year across the UK, with a substantial proportion being based in Scotland¹².
27. In 2013 investment in the UKCS reached a record high of £14 billion, however if new developments are not brought forward and ageing assets are not invested in, this figure is set to decline substantially with some industry estimates suggesting that it could halve by 2020. In order to maintain production at current levels, or to increase it, a step change in companies investment plans is required to ensure that sufficient new production comes on stream.
28. At current oil-prices, the proposed investment allowance in isolation will have a more limited impact on value or activity levels. In the current high cost environment, oil prices would need to rebound to \$70-80 per barrel for the investment allowance to have a significant effect on projects currently subject to delay or cancellation. Recent analysis by Professor Kemp suggests that the allowance is less effective at \$70, and results in approximately 40 per cent less investment over the period to 2050 than a \$90 price scenario. However, this highlights the importance of the actions currently being taken by industry to reduce costs – something that will put the operators and supply chain companies in a longer-term sustainable position. If

¹⁰ https://www.abdn.ac.uk/research/acreef/documents/Working_papers/nsp-128.pdf

¹¹ The author assumes a long term price of \$90 in real terms and an investment hurdle assumed to be NPV/I>0.3

¹² Calculations based on the economic multipliers for capital and operating expenditure published in Oil and Gas (2013), UK Economic Report 2013, Page 58.

implemented in conjunction with a vision for the supply chain, this could enable both the maximum recovery and value generation from the North Sea reserves and also increase competitiveness globally for exports and internationalisation.

29. The introduction of an investment allowance would however be a first step in ensuring that a more transparent, simple and efficient fiscal regime is in place when the price recovers from its current levels.
30. While the investment allowance will send an important signal to investors, the Scottish Government emphasises that the other aspects of fiscal and regulatory reform must be brought forward with urgency. Given the number of challenges above discussed, this consultation and the introduction of an investment allowance must not be positioned as an alternative to the substantial action that is needed across a number of areas.

Scope of the Allowance

31. In relation to the scope of the allowance, a significant issue that needs to be addressed is defining what is considered qualifying expenditure. The consultation argues that qualifying expenditure would include capital expenditure but exclude decommissioning costs. The Scottish Government agrees with this view.
32. Drawing on the principles set out in the Expert Commission report, the Scottish Government believes that the definition of qualifying expenditure should to be sufficiently broad so as to properly address the changing nature of the basin.
33. Given the maturity of the basin, regular expenditure on maintaining assets and infrastructure is needed to maintain production levels and potentially unlock additional reserves.
34. It is therefore important, in order to incentivise such works, that capital expenditure on infrastructure is included within the definition of qualifying expenditure. This will encourage the types of expenditure that are needed to extend the life of North Sea assets and could also encourage investment directed at maintaining infrastructure within prominent hubs. Investment in existing infrastructure can contribute to the extension of the life of assets prior to decommissioning. As a result, this can support field development and exploration through the use of that existing infrastructure, which would have otherwise been decommissioned.
35. The Scottish Government also believes that the qualifying expenditure should incorporate specific and carefully defined expenditure on works that are aimed at sustaining current levels of production or unlocking new production. This could potentially capture certain types of non-routine maintenance expenditure that would not be considered to be best practice.
36. Production efficiency remains a key challenge that is costing industry and government billions in lost revenue and negatively impacting on the long-term sustainability of the basin. Some estimates suggest that the deterioration in asset production efficiency has cost the North Sea upstream industry over 900 million boe of production and \$60 billion in revenues since 2005.¹³

¹³ <http://www.mckinseyenergyinsights.com/media/61944/Future-of-North-Sea-Production-Efficiency-Challenge-McKinsey.pdf>

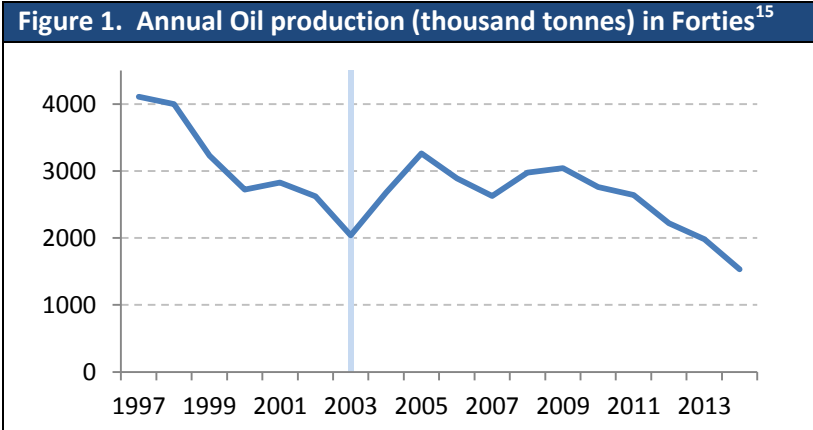
37. Tackling the problem therefore presents a substantial opportunity for industry and government. Once a field is developed, it is in the interest of all stakeholders that its oil and gas resources are produced efficiently - by minimising downtime and maximising flow rates.

38. However, the solution to ensuring that resources are produced efficiently is multifaceted. It requires companies to demonstrate that they are effective stewards of the assets they operate – See Box 1 for an example of the impact that this can have. In addition, and as highlighted by the Wood Review, it also requires action from the regulator (the Oil and Gas Authority) to set out clear expectations for asset performance that are backed up by adequate monitoring and powers to take appropriate action to remedy activity that falls short of expectations.

Box 1. Production Efficiency Challenge

The potential impact of a focused approach on production efficiency is highlighted below.

When Apache bought Forties from BP in 2003, the field produced approximately two million tonnes of oil that year. Thanks to engaging in a redeveloping programme, consisting of repairs and upgrades to existing infrastructure, production increased by 41% by 2008, and remained higher than 2003 levels for a decade. In addition, production efficiency in Forties in 2003 was 65%. By 2012, in part due to continued investment, it had increased to more than 85%¹⁴.



The problem of production efficiency cannot be overstated. In order to achieve the 80% target by 2016 set at the PILOT forum, operators committed to engage in asset-specific improvement targets and plans. Based on industry data, 44% of losses from the top 51 asset clusters between 2010-2012 in the North Sea were due to plant equipment failure and unplanned shutdowns.

Continued expenditure throughout the life of a field is therefore an absolute necessity to increase production, extend the life of a field, and improve production efficiency.

¹⁴“The Challenge of Production Efficiency across the UKCS, Apache North Sea <http://cdal.com/downloadabledocs/1583/2.%20Jim%20House,%20Apache%20North%20Sea.pdf>
¹⁵ Source: DECC (2015), UK Annual Oil Production (Thousand Tonnes)

39. Within the above context, a well-designed investment allowance could help target investment to address low production efficiency of the basin. The Scottish Government therefore recommends that qualifying expenditure includes appropriate maintenance expenditure on assets that can be demonstrated by tangible evidence to unlock new reserves, extend the economic life of an asset or sustain production levels.
40. The Scottish Government recognises that the distinction between capital and operating expenditures in the oil production sector is not always clear and this can present a challenge. For example in some cases the repair or replacing of broken wells or compressors could be argued to be either capital or operating expenditure. Several options could be considered to overcome such complexities, (i.e. an overarching test for the purpose of expenditure; or agreement on a specific list of qualifying expenditures items) all of which would have advantages and disadvantages. The Scottish Government believes that industry, experts and government should aim to seek agreement on a methodology for including such expenditures.

Exploration activity

41. Exploration is key to ensuring that future oil and gas discoveries are made, and that in turn new production can come on stream.
42. Exploration rates in the North Sea are at historically low levels. While lower exploration can in part be expected in a maturing basin such as the North Sea, there are also frontier regions, such as West of Shetland, which offer huge prospectivity. These present a diverse range of opportunities in Scottish waters, which in many cases are both technically difficult and more expensive to develop. The current fiscal regime is a barrier to this – and has been for some considerable time.
43. The Scottish Government has called for the introduction of an exploration tax credit proposal akin to the cashable tax credit that was introduced in Norway in 2005. Such a tax credit would equalise the treatment of companies in a tax paying and non-paying position and could significantly boost exploration activity in the North Sea.¹⁶
44. The Scottish Government believes that if properly designed, the Investment Allowance could complement the proposed exploration tax credit by boosting exploration activity from existing operators in the basin.
45. The UK Government consultation proposal implies that it will reward successful exploration, as pre-development expenditure will generate allowance, and the amount of investment allowance activated (i.e. made available to set off against profits) in any accounting period will be no more than the amount of the company's share of production and tariff income from the field in connection with which it incurred the expenditure.
46. The Scottish Government strongly supports the inclusion of pre-development expenditure (i.e. exploration and appraisal expenditure) within the scope of the allowance.

¹⁶ <http://www.scotland.gov.uk/Resource/0046/00467339.pdf>

47. However, we recommend that the UK Government gives strong consideration about the merits of introducing a system where the allowance generated from exploration spend is pooled. This could allow companies to transfer the generated allowance between different fields. At a time when exploration in the North Sea is at record low levels and full cycle returns to this activity remain low, this would reduce basin wide exploration risks for operators as all expenditure (i.e. on successful and unsuccessful) on exploration activity would qualify for tax relief.
48. To put in context, E&A expenditure was equivalent to only 10% of capital expenditure in the North Sea in 2013-14. This is forecast to fall to 9% in 2014-15.¹⁷ This is a relatively small component of overall capital expenditure. However, this would be a substantive step towards putting the correct fiscal regime in place to encourage exploration activity in the North Sea.
49. Denmark operates an investment uplift, and while the fiscal regime is notably different from the UK's, it does provide an example of a system whereby exploration expenditure is pooled, as proposed above. Box 2 provides a brief description.
50. Qualifying expenditure for investment uplift includes capital expenditure and covers exploration costs. The investment uplift is transferrable across fields. Critically, this encourages exploration by allowing operators to relieve costs on a basis which does not solely depend on exploration success from specific projects.

Box 2 – International Perspective - Denmark

Licence holders in Denmark are subject to the hydrocarbon tax, which is levied at a rate of 52%. This can generally be offset against the hydrocarbon tax relief, which operates in a manner similar to investment uplift.

The hydrocarbon tax relief entitles operators in a tax paying position to offset 30% of capital expenditure against the hydrocarbon tax. This uplift provides a deduction of 5% per year over a 6 year period, in addition to the ordinary tax depreciation of plant and machinery afforded by the fiscal regime.

Qualifying expenditure covered by the uplift includes capital expenditure and exploration cost. According to EY, the uplift available on exploration expenditure is available outside the ring fence and may be relieved against hydrocarbon income from other fields.¹⁸ However, the uplift available on investments in drilling rigs and pipelines is inside the ring fence for a producing field and cannot be transferred.

¹⁷ OBR Economic & Fiscal Outlook, Table 2.12, <http://budgetresponsibility.org.uk/economic-fiscal-outlook-december-2014/>

¹⁸ EY Global Oil and Gas Tax Guide, [http://www.ey.com/Publication/vwLUAssets/EY-Global-oil-and-gas-tax-guide-2014/\\$FILE/EY-Global-oil-and-gas-tax-guide-2014.pdf](http://www.ey.com/Publication/vwLUAssets/EY-Global-oil-and-gas-tax-guide-2014/$FILE/EY-Global-oil-and-gas-tax-guide-2014.pdf)

Conclusion

51. A well-designed and substantive investment allowance must be announced at the March Budget. This must achieve the principle goals of incentivising investment and simplifying the fiscal regime.
52. As set out in this paper, the Scottish Government believes that this measure has the potential to address several of the key longer term challenges in the North Sea. The UK Government must therefore use this opportunity to introduce a fiscal change that will help to ensure that the maturing North Sea oil and gas sector has a long-term sustainable future.
53. While a well-designed investment allowance will send an important signal to investors, this measure is only part of the solution. Tackling the high cost base in the North Sea will have a significant impact on the competitiveness of developments, and wider fiscal and regulatory reform is required to maximise economic recovery and TVA.