

ROYAL DUTCH SHELL PLC 2017 NOVEMBER MANAGEMENT DAY

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2017 NOVEMBER MANAGEMENT DAY WEBCAST TO ANALYSTS

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Ladies and gentlemen. Thank you very much for joining us today. I am looking forward to updating you on Shell's performance, progress against strategic goals, and plans for the future in some detail.

Before we start, let me highlight the disclaimer statement.

So, as said, we are going to update you on the company in some detail. After these presentations, we'll do a plenary Q&A followed by a short break before the business break-out panels. Jessica will join me for the plenary Q&A, and I hope we can keep the plenary Q&A at a reasonably high level. There will be plenty of opportunities for detailed business-specific questions in the panel sessions after the breaks.



We have made significant progress and there is a lot to tell you. I want to start by outlining the three key messages I want you to take away from today. The first is that our cash flow momentum, the line of sight to 20% gearing, and our confidence in our strategy, all support the Board's decision to cancel the scrip dividend programme with effect from the fourth quarter 2017 dividend. The company is confirming the plans for share buybacks of at least \$25 billion in the period 2017-2020, subject to progress with debt reduction and recovery in oil prices. This is consistent with the intention stated at the time of the BG acquisition. The second key message is that we are increasing our organic free cash flow outlook for 2020. We now expect to deliver around \$25 to \$30 billion per year by 2020 at \$60 per barrel real terms 2016, and we intend to continue to grow free cash flow per share between 2020 and 2025. The third main message is to convey our confidence in the differentiation, the financial resilience, and the long-term business relevance of our portfolio, through the ups and downs of oil price cycle, but also through the energy transition. We plan to step up our activities in new energies and set our ambition to reduce the net carbon footprint of our energy products in step with society's drive to align with the Paris Agreement goals. So that is it, increased organic free cash flow outlook, more distributions to shareholders, and long-term confidence in our portfolio. Those are the main points of today's presentation.

Now, let me start with financial and operational delivery and outlook – which I believe are key elements of a world class investment case. We have been on a transformational journey since 2014. And with the BG acquisition our journey gathered pace in 2016. It strengthened the 4 levers we could pull for our transformation: operating cost reduction, capital discipline, portfolio restructuring and accelerating growth. I believe we have been delivering on an ambitious agenda. We have delivered 11 major projects starting production since early '16, adding an average of 500,000 barrels of oil equivalent per day of peak production. We have completed \$23 billion in divestments at headline level,



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large divestments such as oil sands, our share in Woodside, the Motiva split, and the exit from Showa Shell, just to name a few. And, our 4-quarters rolling free cash flow at Q3 2017 was \$27 billion, at an average \$51 per barrel. Over the last few years we have established tremendous clarity of purpose – inside the company and I trust also for our stakeholders. We have developed a differentiated strategy that gives us competitive advantage, and we are re-shaping the portfolio profoundly to align to that strategy.

And I clearly see it is working, over the last 2 years we have transformed the financial metrics of our business. Higher returns. Our current return on average capital employed at around \$50 per barrel is around 5%, which is expected to grow to around 10% at \$60 per barrel by 2020. More cash. We are now delivering more free cash flow than when the oil price was close to \$100 per barrel, more than any other IOC. And note that we are doing so while still implementing the largest capital investment program among our peers. As I said, by 2020 we expect to deliver around \$25 to \$30 billion of organic free cash flow at \$60 per barrel real terms, this is a material upgrade compared to our previous outlook of \$20 to 25 billion and clearly speaks for our confidence in our delivery. Less debt. We have focused on strengthening our balance sheet. Over the last 12 months we have reduced net debt by more than \$10 billion, and gearing now stands at around 25%. That is down from some 29% a year ago. So we have pulled the four levers that I mentioned earlier with great effect. However, equally important is that underpinning all of that there is a deep transformation of our ways of working.

Let me offer some proof points of this. We have reset and streamlined our organisation. Since early 2016, we have reduced the number of FTEs by a further 13,000 nett, reduced our office footprint and reduced our expatriate base. In addition we have continued to expand our Shell business operation centres by another 1,000 to approximately 12,800 FTEs offshore by the middle 2017. The related people decisions have not been easy and we have executed these reductions respectfully and transparently and with strong and active involvement from all our leaders. Consequently, despite these restructurings, our people engagement – which we manage actively – has remained stable in 2017 according to our Shell People Survey. Moreover, our people believe in, and are strongly supportive of our direction. And we do continue to recruit and develop graduates and experienced hires to grow and build our leadership cadre for the longer term. So, we run a larger business with less staff, less cost, a simpler and nimbler delivery model and a stronger focus and direction. The performance management culture that we established since 2014 has also firmly taken hold. I now see more attention to detail, greater focus on competitiveness, and clearer accountabilities throughout Shell. Performance is now defined in terms of financial outcome, not functional excellence, an important change in the culture of our company. We have also fundamentally changed the way we conceptualise new projects, focusing on competitiveness and financial resilience, rather than engineering wonders. Andy and Maarten will further illustrate this point. These are only a few examples of the deep changes that have occurred in the company over the last 4 years.

But let's go back to the 4 transformation levers that I mentioned earlier. And let's start with operating costs. We have now been reducing underlying operating costs continuously for 11 quarters, and have achieved a spend rate of less than \$38 billion, well below the \$40 billion indicated in our previous outlook. Even with the growth of our business over the next few years, we are confident that we can hold costs below current levels, as we have, over the years, established a sophisticated way to managing costs at the right levels, Jessica will say more about that shortly. Discipline, focus and capital efficiency have allowed us to



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maintain our investment levels at or below the bottom of the \$25-30 billion range that we indicated in 2016. I want to maintain this range, with a hard ceiling and a soft floor. I see it drives discipline and competition within the portfolio, but it also allows sufficient flexibility to continue to invest for the future. At current oil prices, you can expect capital investment to be at the bottom-end of this range. We have significantly high graded the portfolio. We are close to completing our 2016-18 \$30 billion divestment program, but you should expect us to continue to high-grade and re-shape our portfolio in a dynamic manner that adds value. So expect divestments to continue beyond 2018, at a rate of at least \$5 billion a year. And finally, I can say we remain on track to deliver a wave of new projects which have a targeted delivery of 1 million barrels of oil equivalent a day or \$10 billion by 2018, at \$60 per barrel. Most of these projects are either already on-stream and ramping-up, or are close to completion. These projects will continue to ramp-up over 2019 and 2020. In fact, by 2020 we expect an additional \$5 billion of operating cash flow from these projects and some new ones, all at \$60 per barrel.

I believe, these four levers have served us well to transform the company over the last few years. So, we will continue to use them for the foreseeable future. We will continue to show discipline and determination. Of course financial performance is key, but we can only take credit for it if it is delivered without compromising on safety. On top of the solid financial performance, Shell has also maintained and improved its HSSE performance. You can see the company is broadly stable in terms of injuries, process safety incidents and operational spills. But Goal Zero is the goal, so I will not be happy until these figures improve further. Upstream flaring is back down to the level we last saw in 2013, despite growth in the footprint of our business. I have talked a lot about how we have improved operational and financial outcomes in absolute terms. But delivering a world class investment case takes more than just that, it also takes an improvement in the competitive positioning of the company on these metrics.

So we will have to remain relentless in our efforts to continuously improve our competitive position. And I believe the charts highlight significant progress, but I cannot declare victory yet. In particular I want to see further improvement in our return on average capital employed and free cash flow per share. And I believe that discipline and consistency in capital allocation, combined with strong operational performance and consistent delivery will take us there. So let's now have a look at how we are shaping up for the future. As you know, today Shell has three cash engines – Oil Products, Integrated Gas and conventional oil and gas. Two growth priorities – Chemicals and deep water. And two strategic themes which are emerging opportunities – new energies and shales. The purpose of cash engines is to fund growth and distributions to shareholders, while the purpose of growth priorities is to become additional cash engines. By 2020 I expect deep water to have become a cash engine, delivering significant free cash flow, and still some moderate growth. I see our Chemicals business remaining a growth priority until the early 20's while we are completing our current growth projects. By then, we will decide whether we want to continue to grow this business at an accelerated pace or whether we want to turn it into yet another cash engine. I expect our Shales business to have become a growth priority by the end of the decade as we high-grade opportunities. Andy will talk to you about our growth and competitiveness in this area, and how we expect to reach free cash flow neutrality over the next couple of years. But ultimately we want to grow this business in the 2020's to be a material cash engine by the mid/late 2020s, so that we can maximise investment optionality between short and long-cycle upstream investments. The main emerging



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opportunity by 2020 will be our new energies business. In the next few years I want to strengthen this business so that it can become a growth priority in the 2020s. This will be a game of managing our exposure to this new business while establishing scale, essentially building a platform for potential material future value.

Our capital allocation choices are consistent with this strategy. As I have already mentioned, our capital investment guidance until 2020 remains unchanged - \$25 to \$30 billion, with a hard ceiling and a soft floor. But within this range you will notice a few shifts. In deep water and conventional oil and gas, we are reducing capital investment guidance to reflect the significant capital efficiency improvements achieved in these businesses. Capital allocation to Integrated Gas and Chemicals remain unchanged. But we have decided to allocate a little more capital to our Oil Products business, to add materiality to this very differentiated and high-returns part of our portfolio, particularly in marketing. And we are increasing capital allocation to new energies as we believe the time will come for these businesses to emerge as the growth priorities of the future. So altogether, these capital allocation choices mean that by 2020 cash engines will represent approximately 80% of our total capital employed, versus around 65% in 2016. A significant change. And let me re-emphasise: cash engines are not cash cows, they generate free cash, but we still see sufficient attractive investment opportunities in them to sustain moderate growth. Chemicals and shales generate material operational cash flow which in aggregate we allow to be re-invested in these businesses.

Now, many of you have had questions about the level of our capital investment. Is it adequate? Is it too high? Is there sufficient flexibility in it? So let me offer a different lens on our capital investment. On this slide you also see a breakdown by degree of discretion of our spend. A portion of our capital programme is essentially non-discretionary, which reflects spend on asset integrity for example, or maintenance and turnarounds, and spend on onstream assets. Then there is spend which has little discretion, to maintain position – such as tie-backs, acceleration wells, well reservoir and facility management, but also retail network maintenance and assets under construction, not spending here means eroding the earning capacity of assets. The total of these two spend categories is between \$15 and \$20 billion, depending among others on the level of assets under construction. Then there is growth, which can be split into two types of investment. Small-scale value growth, typically high double digits IRRs, for instance expansion of existing assets or commercial positions. Here I would only scale back if we were with our backs against the wall. The last segment covers the large, more discretionary, value growth options. Choices here are driven by long term value for shareholders. Spend is determined by near term affordability within the overall financial framework. Most of the near-term capital flexibility comes from flexing the large value growth options.

So, let's talk about these large value growth options in a bit more detail. First of all I want to point out that they are delivering free cash flow growth now, and not just barrels. Multiple projects in Brazil and others like Stones, Malikai, Schiehallion and Kashagan have already come on-stream and are delivering. In Downstream we recently entered the Mexico retail market. Some projects are due to start production in the coming years, like Pennsylvania, the Nanhai expansion, Prelude and Appomattox. And there are a number of potential FIDs coming, such as Vito, Libra post 1st FPSO, in Brazil deep water, Bonga South West, LNG Canada and Lake Charles. And if I look at all of this, it adds up to a company that is on-track to meet, and exceed, the commitments we made to you in June last year at our capital markets day. What I see is a company that is moving forward



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across the range of measures, that is becoming a world-class investment, with ultimately a number one position in the industry in terms of enterprise value. A company that is optimising its ability to generate cash and returns for shareholders. A company that is ready to cancel the scrip dividend programme, and at the right time to start a share buyback programme, which will be another driving force for improving per share financial metrics. Now, it may all be well and good that we are on our way to be a world class investment, number one in our sector. But we have to plan to stay there. For that we must not only have a portfolio that is resilient and relevant for today, but for the long-term as well.

So let me explain why I believe Shell plans to be financially resilient and a relevant business for the generations to come. We can only remain a leading company if we evolve Shell in line with societal expectations. And today we will set out our ambitions for the future as well as the business levers we will pull to thrive in the Energy Transition of the twenty first century. Let me be absolutely clear and categorical: Shell supports the Paris Agreement and its goal of keeping the rise in global temperatures below 2 degrees C. Scenarios analysis suggests that goal means society must get to a state of net zero emissions by 2070 – which means that, over time, we as society must stop adding to the stock of greenhouse gases in the atmosphere. But, as society, we must also realise that the rising living standards of a growing population means that energy demand could double over the course of the century. This HAS to be accommodated. So, the world needs more energy and falling CO2 emissions at the same time. This means that, on average, each unit of energy consumed has to come with a lower amount of CO2 emissions in its production, distribution and use, or in other words, a lower carbon footprint. Ultimately the 2 degrees C pathway means society needs to get to a net zero carbon footprint.

This is a challenge for the whole planet, for ALL of society, for customers, for governments and indeed for businesses. It can only be achieved by a multi-faceted approach to which we all contribute, around which we all collaborate. We have carefully listened to our critics, our supporters, and our shareholders, what they expect from a company that aspires to be leading in industry and that wants to be a responsible member of society. And as a result of that we have set ourselves a clear ambition, it is a long-term ambition, it is aspirational, and we believe it demonstrates leadership, it is a first in our industry.

Let me share it with you. And let's start with our existing assets. Right now we are working to improve their greenhouse gas efficiency. For 2017 we changed the company's bonus scorecard so that 10% was dependent on greenhouse gas management. In 2017, this was based on emissions performance across 60% of the company portfolio. Next year we will increase that to 90% of the portfolio. But we also have to focus on the medium term, say to 2030. Over that period, and beyond, oil and gas will remain an important part of the energy system. No credible forecast says otherwise. But in that same period we expect the energy transition will start to gather pace. So we will have to choose our oil and gas investments with that reality in mind. This means only proceeding with those investments that are climate-competitive. And it means shaping our oil and gas asset portfolio further to ensure financial resilience and compatibility with the 2 degrees C roadmap. While no one can see the future, we believe our detailed modelling means we can reasonably predict the range of how energy demand patterns will evolve in the next decade, how fast the electrification of transport and the residential sector will go, how new policy measures by governments will shape the mix of energy demand. We can also reasonably foresee what our portfolio of assets will look like in 10 years' time, given certain investment



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strategies, and a certain degree of portfolio high-grading. So we can assess, reasonably well, the probabilities that parts of our portfolio may become stranded in the medium term. The Taskforce for Climate-Related Financial Disclosures is providing a framework for this assessment. So that is one reason why Shell is a supporter of the Taskforce. Shell is working hard to ensure this framework provides the information investors need, and developing our TCFD-based disclosure. And we believe we can demonstrate that our portfolio will be resilient in this regard. A lot is happening already in the energy transition but it will really start to accelerate in the 2030s. So how do we prepare for the long-term?

As I said earlier, tackling climate change is a cross-generational, global and multi-faceted effort. It needs plans that meet increasing energy demand with an ever-lower carbon footprint. And it is critical that any plan covers the full energy lifecycle, from production to consumption – where around 85% of the emissions associated with our energy products occur. I cannot stress this enough. According to credible scenarios, to meet the Paris goal, society will need to reduce its carbon footprint – the amount of CO₂ produced per unit of energy consumed – by around half by 2050. You will not be surprised if I tell you that Shell's product portfolio with the full life-cycle of emissions – including the emissions associated with the use of our products - has a higher starting point than society's average. Okay, we don't have coal in our product mix anymore, but we also don't have the large quantities of nuclear, hydro, modern renewables and large-scale primary biomass that the global energy system has. But even though our starting point is higher, we will aim to bring down the net carbon footprint of our energy products by around half by 2050, expressed in grams of CO₂ per Megajoule consumed. And as an interim goal, by 2035 we aim to reduce it by around 20%. And just to be completely clear on this, this approach includes scope one, scope two and scope three emissions. And it goes further: it includes emissions from the energy products that we buy from third parties and eventually sell on to our customers. When I said this was a first for the industry, THIS is what I meant. By including the full range of emissions, including those produced by using Shell's energy products, we aim to help customers with their own emissions through the solutions we offer. We believe this is the right way to evaluate our performance and our contribution to society.

So how will we do this? Well, we have a variety of tools to achieve this over time. Providing lower-carbon fuels to customers: like biofuels and hydrogen. But also providing renewable power from solar and wind, as well as pulling through demand by growing the number of charging points for battery electric cars. Developing gas markets for power, and transport is a powerful tool. And of course, we will continue to pursue further operational efficiencies in our assets and will seek to develop carbon capture and storage. And increasingly we will work with nature, forests and wetlands, to help compensate for those emissions which are hard to avoid. At this point, so early in the transition, it would be unwise to commit to an exact mix of measures to get to our ambition, there is still too much uncertainty around future policies and what technological change may bring. But I can tell you, we will use all these tools and, indeed, we are already active in all these areas. We can and we will adapt our business. Shell is a company that invests between \$25 to \$30 billion a year. Over the course of ten years that is equivalent to a whole new Shell. We expect the speed of transition to vary by country, industry and even customer, as society and governments balance the need for energy transition with the need to provide that vital energy to fuel their economies and lives. Accordingly, it is possible our ambition will evolve with society and governments' progress. Therefore, we will undertake every five years, aligned to the Paris INDC process, to review and report our progress to make sure



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we are in step with society, because, as a business, Shell cannot do this alone and we can't run too far ahead of society. Both consumers and Shell need to see the right conditions in which to take action. We will do what we can to bring those right conditions about. I am talking about well-targeted regulation to mandate things such as efficiency improvements, support for technological innovation, and backing for carbon capture usage and storage solutions. I am talking about government-led carbon pricing mechanisms which would drive different choices and behaviours across the economy. And I am talking about well-designed energy markets with policies and mechanisms that promote the decarbonisation of all sectors of the economy without unwanted side effects. All of these could enable both society and Shell, as part of that society, to advance towards the Paris goal. So we are committed to play our part. We will play our part with humility – we don't have all the answers. We will play our part with sound financial discipline – we cannot and will not meet this ambition by destroying value. And we will also play our part with strong conviction – we know our destination and we will find, or make, the path to get there.

In summary. We are confident our strategy is working. We have sufficient confidence in the future to cancel the scrip dividend programme with effect from the Q4 2017 dividend. The company is confirming the plans for share buybacks of at least \$25 billion in the period 2017-2020, subject to progress with debt reduction and recovery in oil prices. We will significantly grow organic free cash flow by 2020 – even more than we communicated before, and we intend to continue to grow free cash flow per share - but more modestly - from 2020 to 2025. At the same time we will prepare the company for the long future by investing in resilient projects, sectors and business models.

With that, let me hand over to Jessica.

Thank you Ben.

As Ben has just shown, we are making great progress with transforming the company. We have a differentiated strategy, clarity of purpose and are re-shaping the company to align the portfolio to our strategy.

Combined with increasingly strong performance we are pulling all levers to become a world class investment case. To be successful in our industry requires financial strength. And a disciplined approach to financial management is an integral part of the world class investment case. It is what enables us to grow free cash flow per share and returns which I believe will drive total shareholder returns. We have demonstrated the strength of our strategy and financial framework and it is not changing. Shell's strategy and financial framework, are designed to succeed through multi-year price-cycles and multi-decade investment programmes. A key element of this is that through-cycle we look to maintain a strong credit rating, by delivering AA equivalent cash flow, or 20% gearing as a proxy. We aim to generate sufficient free cash flow at the lower end of the price cycle to cover the entire dividend, and generate excess free cash flow above the dividend at the mid to high point of the price cycle.

The dividend policy remains to grow the US dollar dividend - per share - through time in line with our view of Shell's underlying earnings and cash flow. In the short to medium



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term, share buy backs will be the preferred means by which we grow shareholder distributions, consistent with our commitments to address recent share dilutions. This financial framework has served us well as it allowed us to use our financial strength to acquire BG when the opportunity arose. And we want to ensure we are well placed for the future.

To acquire BG in a challenging macro environment, we raised debt and as a result our gearing was at the high end of the 0-30% range. In line with our financial framework, we have consistently reduced debt over the last 4 quarters and rebuilt our financial strength. Driven by improving cash flow. We made our intentions clear to the market at the time of the acquisition, maintain the dividend at \$1.88 per Shell share for 2016, and, subject to oil price recovery and progress on debt reduction turn-off the scrip and start the share buy-back programme. We reduced our debt, through divestments, and grew the cash flow from operations, through performance improvements, cost reductions and bringing new projects on stream. We further strengthened our financial framework through our disciplined approach to capital investment – from what we choose to invest in to how we execute our projects. Our strategy is working. And we are delivering, and, as Ben just announced, the Board has decided that we are now in a position to cancel the scrip dividend. And, we also re-confirmed our intent to undertake a share buyback programme of at least \$25 billion in the period of 2017 to 2020, subject to progress with debt reduction and recovery in oil prices. Consistent with the communications made at the time of the BG acquisition.

I would like to talk you through the strength of our financial framework in a bit more detail. Strong cash flow generation is key to the strength of our financial framework. As a result of our strategy and delivery, our ability to generate organic cash flow has grown significantly and we have demonstrated resilience at lower prices. Our cash flow from operations at \$51 per barrel is in line with the CFFO we achieved at \$99 per barrel a few years ago. Our organic free cash flow on a 4-quarter rolling basis supports our level of declared dividend. And we are confident that we can continue to grow our organic free cash flow in the years to come, with revenues from new projects coming on stream and further operational and cost efficiencies to be realised. As Ben has outlined, we expect to generate free cash flow of some \$25-30 billion around the end of the decade at \$60 per barrel, real terms 2016. Towards the end of the decade, our free cash flow will increasingly come from CFFO growth and be less dependent on divestment proceeds. This free cash flow growth demonstrates the strength of our portfolio, underlying performance and the ability of our business to manage potential bumps along the road, and underpins the confidence in our decision to cancel the scrip dividend programme. In addition to growing organic cash flow, the proceeds from divestments have resulted in lower net debt and gearing. However, it is important to keep in mind that the main objective of the divestment program is not just to raise cash but to high grade and simplify our portfolio. At Q3, our gearing stood at some 25% and that did not yet reflect the proceeds from the completion of the Gabon, the North Sea and Woodside divestments. The completion of these deals means that, 2 years into our 3-year program, we now have some \$23 billion of transactions completed, on a headline basis. We have a further \$2 billion announced. And are well advanced on at least another \$5 billion.

We have high graded our portfolio and generated significant proceeds to reduce our net debt. I expect us to continue to optimize the portfolio, which will lead to divestments of at least \$5 billion in 2019 and 20. This means we have clear visibility on bringing gearing to



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20% and generating cash flow to support a AA credit rating. Over time, I expect gearing to move below 20% to ensure robustness of our financial framework. This builds resilience to a changing macro environment and provides balance sheet strength to prepare us for the future. I would like to highlight that the strengthening of our financial framework is not just a result of divestments. It is fundamentally about the strength of the underlying cash flows and a disciplined approach to capital investment. A large part of the cash flow growth can be attributed to bringing on-stream and ramping up new projects. We expect to generate an additional \$10 billion from new projects that come on line between 2014 and 2018, at \$60 per barrel. Approximately \$5 billion will have been delivered in 2017 with the remaining \$5 billion expected in 2018. This includes additional contributions from Brazil pre-salt, Kashagan, Gorgon, and others. Beyond 2018, in the 2019-2020 period I would expect another \$5 billion additional cash flow from operations. This would then include further start-ups in Brazil, the Gulf of Mexico and the ramp-up of Prelude and others. We would also start to see some contribution from Chemicals projects such as Geismar in the US, and Nanhai in China in this time frame. A lot of these cash flows are de-risked as most of the projects are on stream and ramping up. For the remaining projects, all are significantly advanced in their construction. Recent examples include the completion of the hook-up of Prelude's mooring system off the coast of Australia and the arrival of the Appomattox hull in Texas. It is worth noting that cash flow growth in Downstream from initiatives such as the recent launch of our latest generation of V-power across a range of key markets is not included here. We are generating significant growth today across our portfolio reflecting the quality and breadth of projects across our businesses. Another important element of the financial framework is a disciplined approach to cost, both operating and capital cost. We continue to see a downward trend with our operating costs. On a 4-quarter rolling basis, we are below \$38 billion and we see potential to reduce this further. An efficient cost structure remains our priority and will continue to have our undivided attention at all levels of Shell. Simplification, standardization and increasingly digitalization are tools we are deploying from the asset to the corporate level. In addition, we are applying a consistent cost management framework throughout the company. This is further enabling delivery and sustained cultural change. Simplification of our ways of working allows us to reduce cost, cut out waste and often improve safety. We have reduced overheads by standardisation of data, processes and IT solutions. We have deployed standard back office tools in contracts and procurement and expense management, for example, that have or will reduce operating cost while improving the employee experience. Further, we continue to offshore activities which leads to lower cost, enables further standardization and increasingly enables innovation as activities and know how are concentrated in business centers in India, Poland, the Philippines and Malaysia. Digitalisation is another key enabler for cost reductions and we have many projects running across the company to accelerate capturing these opportunities.

For example, in maritime and shipping through use of advanced analytics we are achieving operational efficiency improvements and significant cost reductions and in Upstream and Integrated Gas better monitoring and analytical tools are allowing us to plan maintenance better, reducing cost and down time while in the Gulf of Mexico advanced analytics is helping us to reduce inventories. So, you can see a lot is going on here, we have also shifted our thinking when it comes to costs. Throughout the company we are benchmarking our performance, internally, with peers but also with companies outside of our industry. This improves our understanding of the full potential of our



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business, identifies the gaps and allows us to set ambitious targets. This approach is embedded in our performance management systems. With a “lower for ever” mindset, we will continue to push this agenda to improve our competitiveness, regardless of the price environment. As I mentioned earlier, a disciplined approach to capital investment is key to our financial framework and to increasing returns over time. Today we re-confirmed our commitment to the \$25-30 billion range for capital investment to 2020. This is the level needed to grow our cash flows and increase shareholder distributions over time and for 2018 we intend to spend at the bottom of this range.

This range is consistent with the Free Cash Flow expectations for the end of the decade and will also allow for moderate free cash flow growth into the next decade. Even if oil prices continue to rise, we will not exceed the \$30 billion hard ceiling but use the additional cash flow to accelerate debt reduction and share buy backs. If oil prices would fall back again and stay depressed for a prolonged period, our track record in reducing capital investment and the flexibility in our capital program ensures that we can adjust our framework accordingly. With a capital investment level of some \$17- 20 billion we would be able to sustain today’s cash flow into the next decade. Our capital efficiency continues to increase. This means we can create more value for every dollar spent, compared to a few years ago. You will see a number of examples of that today. A disciplined approach means that we only sanction the most competitive projects. In our Upstream business, for new capital investment, break-even prices in the \$30s have become the norm and our wells and projects delivery capability is increasingly meeting or exceeding expectations and, in Downstream, we are very selective on how and where we choose to grow the business, building on proven strengths and capabilities. This will provide resilience to the portfolio and drive shareholder returns higher over time. So, we have made great progress on all fronts.

Given this progress, the Board has decided to cancel the scrip dividend programme for the payment of the fourth quarter 2017 dividend. The scrip was intended as a short-term measure. With our strong performance and delivery against our commitments, we are entering the next phase in delivering the world class investment case. With the removal of the scrip, we will maintain our financial framework, continue to grow the company and look to increase shareholder distributions over time. Our intention remains to undertake a share buyback programme of at least \$25 billion in the period 2017-2020, subject to debt reduction and recovery in oil prices to buy back at least \$25 billion to offset the shares issued under the Scrip Dividend Programme and over time, to significantly reduce the equity issued in connection with the BG deal and therefore grow distributions to shareholders.

We will also balance buyback levels with meeting our ambition to achieve AA equivalent credit metrics and funding growth. Let me reinforce again that as we move into this next phase, our financial framework remains unchanged. We are as committed today as we were before, to ensure we build our financial strength as our industry evolves. Even with the removal of the scrip, we are conscious that we are in a cyclical and evolving business. We will continue to strengthen our balance sheet, highgrade our portfolio and deliver performance in line with our strategy and purpose. With that, let me hand you over to Maarten



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Thank you, Jessica.

Shell continues to lead the industry in Integrated Gas. Shell is the largest independent producer, marketer and trader of liquefied natural gas and gas-to-liquids products. The acquisition of BG accelerated our growth strategy - by a decade - and Integrated Gas has become a cash engine for Shell, with a differentiated and resilient portfolio, that grows with the market and delivers free cash flow.



Today, I will point out the performance and potential of Integrated Gas, and share why I think the future is exciting for this business. Our financial performance over the last few years has demonstrated the financial resilience of Integrated Gas. Since 2015, even at oil prices below 50 dollars per barrel, earnings remained strong, at an average of around one billion dollars a quarter, and are now growing further, as the market normalizes and our growth delivers. Over the last 12 months Integrated Gas has delivered more than \$9 billion of cash flow from operations excluding working capital, at \$51/bbl. This substantial contribution to Shell's financial framework is delivered in parallel with continued significant investment in future growth, LNG liquefaction and sales volumes have increased by around 50% since 2015. Integrated Gas capital employed grew, also by close to 50%, to \$90 billion over the same period. Given this performance, by 2020 we now expect to deliver some \$8 to 10 billion of organic free cash flow, at an oil price of \$60 per barrel. Beyond price, the ramp-up of our existing portfolio in Australia, and increased margins from gas-to-liquids, are the main drivers of this growth in free cash flow. Over the same period, we want to increase our return on average capital employed to 10%. We will deliver this improved outlook, while investing sufficiently, to 'grow with the market', and remain a leading international company in LNG in the 2020s and beyond.

Shell has achieved a leading competitive position in gas-to-liquids, with uniquely differentiated premium products, that enable us to capture a strong margin uplift across Shell's end-to-end integrated value-chain. I think our edge lies in the fact that we are adding value at every turn. On the North Field, we have been setting new standards. We completed a well in 28 days, for example, whereas the industry considered 75 days good performance. Our offshore availability has increased as well. Gas is delivered and processed at the Pearl GTL plant, the largest gas-to-liquids plant in the world. For Shell, the start-up of Pearl was the culmination of more than three decades of research, the filing of around 3,500 patents and the development of some of the world's most advanced cobalt synthesis catalysts. As a result, Pearl GTL is a unique plant, using unique technology to manufacture unique products. The plant produces cleaner-burning diesel and aviation fuel, oils for advanced lubricants, naphtha to make plastics and paraffin for detergents. It makes enough diesel to fill over 160,000 cars a day, and enough synthetic oil to make lubricants for more than 225 million cars a year.

Now let us have a look at trends in Global Gas. Last year, for the first time in history, gas-fired power generation in the OECD passed coal fired generation. Last week, in Bonn, more than 25 countries, OECD and non-OECD, pledged to phase out coal completely by 2030. This makes sense. As the world is looking for opportunities to cut CO2 emissions from the energy system, gas should play an increasing role in power generation. We equally see a growing and lasting role for Gas in powering and decarbonizing the



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industrial sector. Gas is the cleanest-burning hydrocarbon, producing around half the greenhouse gas emissions that coal does when burned to generate electricity. And besides playing a critical role in decarbonisation, improving air quality is also an important growth driver for gas. Because gas also emits less than one-tenth of the air pollutants that coal does when burned for power.

Take Beijing for example. Switching from coal boilers to gas has helped reducing the annual output of fine particulate matter in the wider Beijing area by almost 40%. While the world transitions to a more sustainable energy system, the gas market, and LNG in particular, will continue to grow. Looking into the future, Shell expects global LNG demand to double by 2030 compared to 2015, assuming there is sufficient additional investment in supply. As for the nearer future, we see rapid growth in supply between 2015 and 2020, as around 160 million tonnes of new capacity are being brought on line. This represents a 50% growth in supply capacity over 5 years. Half of this new capacity is already in operation. So far, this year, supply has grown by 24 million tonnes, matched by increasing demand driven primarily by China and Southern Europe. This positive demand trend is also confirmed by another year of reduction in net imports in northwest Europe, the flexible outlet for surplus LNG. Current Asian spot prices close to 10 \$/mmbtu even indicate tightness. However, we also observe that while gas demand in general - and LNG demand in particular - continue to grow the flow of FIDs for new projects has almost stopped. A more complex competitive environment has developed, in which the strongest projects, sponsored by the strongest players are more likely to be developed. LNG projects generally take more than four years to start production. So, it will take well into the next decade for new supply to come to market. These two effects point to a plausible scenario of a supply shortage emerging in the early 2020s. Having covered the general market dynamics, I would now like to highlight the competitiveness of our position along the LNG integrated value chain, and the unique resilience of our portfolio. The development of our portfolio is driven by a market-led strategy. We are securing new demand - then building our supply portfolio for maximum reliability and flexibility - and we are optimizing how we link our supply position to the demand of our customers depending on market conditions.

Starting with how we are creating and securing new demand. We are the largest LNG marketer amongst all independent oil and gas companies, with competitive positions in Japan, Korea, Taiwan and China, but also in emerging LNG importing countries like Malta or Jordan. At the other end of the chain, we are managing our supply portfolio for reliability and cost of supply. Through our joint ventures, we have the largest LNG liquefaction capacity among IOCs - with 13 plants - in all major supply basins. We supplement this capacity with both long-term and short-term third-party offtake contracts for additional flexibility and cost optimization. In the middle of this value chain we continuously optimize how we deliver LNG to our customers depending on market conditions. To do so, we leverage the flexibility of our portfolio - our trading and optimisation capabilities - and our established position in shipping and regasification. Integration is not only a competitive advantage, but also a key resilience factor, as we can capture value as it shifts to different parts of the value chain. So, the outlook for LNG is good.

Let me now tell you more about how we are building our LNG sales portfolio, for flexibility and resilience. Let me start with some facts. We are buying almost as much LNG as we are producing. This balance creates a naturally resilient position for our cost of supply, across a wide range of market conditions and a unique diversity in supply points.



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At the sales end, some 80% of our sales are based on term contracts, with an average duration of 10 years. Our spot sales represent some 20% of our total sales and are mostly matched by spot purchases. This large portfolio of more than 50 MTPA of term business, delivers an attractive and rateable cash flow. Moreover, we leverage the inherent optionality of the portfolio, and tactical market opportunities, to add value through spot trading, currently some 20% of overall sales. Again, a balanced and resilient position. The same principle of diversification and resilience applies to our portfolio of customers and marketing activities. We are selling LNG to nearly 70 different customers, in more than 25 countries. Asia represents around 60% of our sales. In terms of concentration risk, our term sales are spread over more than 30 customers. In Japan, Korea and Taiwan we sell LNG to more than 20 customers. Lastly, our portfolio is also strong because of the credit strength of our customers. The majority of our customers have a credit rating of A or above. As we expand our footprint, we grow not only our customer base in existing LNG demand areas, but also unlock new country entries for LNG. We often unlock significant suppressed energy demand when we connect a new importing country to the global LNG supply system. In most cases it significantly improves prosperity and opportunity.

Our marketing reach extends beyond wholesale LNG, with for example gas and power trading activities in the USA, Europe, Singapore, Australia and Brazil. In the USA, we are the second largest marketer of gas and power. In an increasing number of markets, we are also developing the use of LNG as a transport fuel for trucks and ships, with potential economic and environmental benefits compared to diesel and fuel oil. The total market potential in shipping alone, is equivalent to 300 MTPA of LNG demand, more than total current global supply. Since October 2015, Shell has access to import and storage at the Dutch port of Rotterdam. From here, we can supply our own LNG to shipping customers in northwest Europe, and LNG fuel for trucks in the Netherlands. We have also ordered an LNG bunkering barge to service customers on the US East Coast, and have the bunkering license in Singapore. This is as a promising segment, where our leadership in both LNG and Downstream gives us a valuable edge.

Demand creation is not just about acquiring customers. Government Policy is a major driver for Gas demand, and we take an active role in advocating the case for Gas with general and special publics. This includes advising governments and policy makers on the role that gas can play in the energy transition. Having looked at our customer and marketing portfolio, I would also like to emphasise the competitiveness and opportunities of our supply portfolio. We participate in 13 plants around the world, in all key supply basins. This represents a capacity of more than 40 million metric tonnes of LNG per annum. That is almost twice as much as the nearest competitor from international oil and gas companies, which gives us the benefit of scale and geographic diversification.

On the cost side, including BG, we have reduced underlying operating expenses by 12% over the last 3 years, while increasing our sales volumes by 14%. Our LNG plants are also reliable, with a reliability percentage above 95% for the last 3 years. We also have areas where we see opportunity to further extend our advantages. Plant utilization is one of the areas in which we can further improve value delivery. The key here is to remove some of the bottlenecks in feed gas supply, like we did with the recent acquisition of Chevron's and Centrica's upstream interests in Trinidad & Tobago. Upstream projects such as these, meant to increase the utilisation of existing LNG plants, are affordable, attractive and actively chased by our teams. To sustain our competitive leadership in LNG, we continue to assess opportunities for selective growth, all over the world. Each project has distinctive



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characteristics that encompass abundant and economically attractive feed gas, proximity to key markets, and competitive construction costs. Our aspiration is to lower the all-in LNG supply unit costs of our new projects towards \$5/mmBtu. Some of these opportunities, like LNG Canada and Lake Charles, are post-FEED, and near-term investable if we choose to go ahead. Others, such as Abadi or Browse in Asia Pacific, or Tanzania in Eastern Africa, are pre-FEED and therefore medium-term investment options.

We also have expansion options in Sakhalin Energy and Nigeria LNG, where existing infrastructure helps drive the unit costs to very competitive levels. And we continuously assess competitive long-term purchase opportunities from third-parties. Whether we build, expand or buy, our objective remains the same: to have the most competitive cost of supply, and to capture new demand in the supply gap appearing in the early 2020s, to retain our position of strong competitive leadership. I know that to continue this success we must keep our plants full, and further take cost of supply down. This is increasingly important because of the advent of American LNG., with a deep gas resource base, and LNG at a transparent, Henry Hub-based price. We are looking at our portfolio of new supply opportunities through new competitiveness lenses.

Over the last few years, we have lowered all-in unit supply costs of our pre-FID options. We are now on a path to reaching a cost level competitive with marginal supply from the USA, through benchmarking, disciplined and innovative engineering and contracting, and through collaboration with our partners across the value chain. I think with this attitude we will stay competitive, and resilient. Shell is a world leader in liquefied natural gas and gas-to-liquids, with a differentiated and stable portfolio, growing with the market, and delivering material organic free cash flow, \$8 to 10 billion by 2020. We are strengthening this competitive leadership position, through active and innovative marketing to continue to create and secure demand, driving operational excellence across our supply portfolio, and continuing to develop new competitive supply growth options. These new marketing and supply developments will position Integrated Gas for an exciting future, as a profitable cash engine, with resilience, longevity and growth potential.

I will now hand over to Andy.

Good morning ladies and gentlemen. It's a pleasure to be here and give you an update on our Upstream business. As you know, Upstream spans all three of Shell's strategic theme time scales - cash engines, growth priorities and emerging opportunities.

Conventional oil and gas is one of Shell's cash engines. It's a portfolio that should deliver resilient and attractive returns and free cash flow. In this strategic theme we see opportunities for selective growth but we have also been high grading the portfolio through selective divestments.

We have been improving cash margins through operational excellence and unlocking value and resources through new deals with governments.

Deep water is one of our company's two growth priorities where we have been increasing production and lowering costs. Our strategy here is to develop a material, attractive and



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resilient business over the coming years so that it can become a cash engine by 2020, as Ben described to you earlier.

Finally, shales in the Americas is an emerging opportunity today we have restructured the business, reduced costs and improved our competitiveness. We are now accelerating some selective growth, within our capital constraints, and expect it will become a growth priority by 2020.

Our work to reduce costs, improve operational efficiency and upgrade our portfolio is starting to show in our financial results. Upstream's cash flow from operations on a 4 quarter rolling basis in Q317 was more than \$16 billion double the \$8 billion in 2016 at a time when the oil price rose by only 17%. Since 2015, the upgrade of our portfolio and improvements in operational excellence have resulted in a material increase in our CFFO per boe. At comparable oil prices, our CFFO per boe has increased by more than two and half times between 2015 and 2017. Our free cash flow is also improving, which means Upstream is contributing positive cash surplus to strengthen Shell's financial framework. Earnings from Upstream are following the same improvement trend but not as dramatically as cash flow because of high depreciation charges in deep water and shales.

The low oil price and combination with BG have been a significant catalyst for change in the Upstream business. Our improvement programme, called Fit for the Future, has helped reduce underlying Upstream costs by over 25% since 2015. At the same time, mainly due to the BG combination, we have increased production by 20%. Fit for the future is essentially continuous improvement on steroids. Each asset defines its ultimate potential and develops granular improvement plans to close the gap, driving improvements on a weekly cadence. Over 6000 improvement initiatives have been or are being actioned since the programme started.

Shell and BG Upstream businesses combined now have 25% less staff than Shell had pre-BG, but remember we are producing 20% more. The increase in production comes partially from improved operational excellence including reducing the production impact from scheduled maintenance, reducing unscheduled production downtime and optimising production through well, reservoir and facility management. For example, we have increased the intervals between planned shutdown maintenance activities, saving around \$200 million costs gross so far and reducing the deferment of volumes by around 20 million barrels of oil equivalent. We have focused intensively on optimising production through well, reservoir and facility management. For example, this year in the Gulf of Mexico we have unlocked 69 thousand boe per day of additional capacity delivering over \$500 million additional cash surplus for less than \$50 million investment.

Now let me give you some examples of our work to make our new projects more resilient in a lower oil price environment. We have fundamentally changed the way we conceptualise and execute projects. Whereas safety remains our number one priority. We are now putting lower break-even price as an absolute priority over engineering achievements or maximizing net present value. We have focused on the competitive scoping of our designs, our effectiveness in execution as well as leveraging the supply chain. An example is in Malaysia with the SK408 project where we are looking at three platform tiebacks with a standard wellhead platform design. Overall development costs are expected to be about 30% below best in class in the industry. Another example is the



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simplified development concept at our Vito project in the Gulf of Mexico, which has helped to reduce costs by 70% compared to our initial estimates. We started our new processing plant earlier this month in our Duvernay tight oil field near Fox Creek in Canada. This was full modular construction with no welding in the field, cutting man hours by 50% which not only reduced costs but also safety exposure.

As Ben and Jessica talked about earlier, Upstream projects are and will make an important contribution to Shell's cash flow. Since the beginning of last year we have started projects that will deliver at peak Shell share production greater than 400 thousand boe per day. Delivery of new projects has helped to more than offset reductions in cash flow and production from declining assets and divestments. Recent highlights include the arrival of the Appomattox hull to Texas in October, the start of production at Gbaran Ubie phase 2 in Nigeria and just yesterday the start-up of the Libra extended well test FPSO in Brazil. Including shales we have more than 600 thousand boe per day Shell share of peak production from new projects under construction still to start by the end of this decade - in 2018 we expect up to three new FPSOs in the Brazil pre-salt, continued growth in the Permian and Fox Creek as well as the start-up of Clair Phase 2, Tempa Rossa and Kaikias. But let me be clear - we are not driven by targets to grow production in Upstream. We are driven by our focus on cash flow and improving returns, and production is just one lever to achieve this.

Let's focus on the strategic themes now. As I mentioned at the start of my talk, conventional oil and gas is one of Shell's cash engines and we aim to improve the quality of this portfolio to offer higher returns and stronger free cash flow. The core long-term positions in our conventional oil and gas portfolio are in the UK, Norway, Nigeria and Kazakhstan. We are looking closely at how best to high-grade this portfolio, as you have seen, with a number of the divestments post-BG. We have reduced decommissioning and restoration liabilities by more than 20% through divestments and execution improvements and all of the divestments we have made so far in conventional oil and gas have been ROACE accretive. In combination we continue to look at selective growth to offset the production and cashflow reduction from these divestments. The UK is a good example of where we are divesting the more mature assets and growing the more attractive ones. It is an approach that has helped reduce unit operating costs in the UK by around 70%, helped by cost cutting and operational excellence including a 40% reduction in staff and an increase in production efficiency by 25%.

We have a robust pipeline of projects in conventional oil and gas - all projects with a planned final investment decision over the next two years have a breakeven price below \$40 per barrel. In addition to reducing costs we are working hard on commercial agreements. For example with host governments, such as in Denmark where new fiscals are helping the Tyra Future project to move towards an FID or in Nigeria where funding agreements with NNPC are not only addressing arrears but also opening the way for third-party funding. This opportunity to unlock more resources and value through proactive government engagement is yielding results across the conventional oil and gas portfolio. Our projects under construction in conventional oil and gas should add over 200 thousand Shell share boe per day of new production in the next few years and with pre-FID options and exploration, mainly low risk near field, we expect to maintain production into the next decade. The focus on operational excellence and competitive project delivery allows us to maintain conventional oil and gas as a powerful cash engine delivering \$5 to \$6 billion organic cash flow by the end of the decade.



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I'm especially pleased with Shell's strong portfolio and track record in deep water. We have an advantaged portfolio, options for competitive growth and a focus on production excellence. What do I mean by advantaged portfolio? I believe we have some of the best positions, in the best basins, and we have scale and expertise. Our new projects are resilient across the cycle, with competitive costs. The pre-FID average forward looking breakeven price is below \$30 per barrel providing us with competitive growth opportunities. On a unit development cost basis, the cost of a deep water project has come down on average by around 45% since 2014 but there are more opportunities to reduce costs and we are actively working this. Our production excellence comes from our work to reduce operating costs and make our projects more reliable.

Since 2014 we have almost doubled our deep water production to around 740 thousand boe per day setting us well on track to deliver our expectation of over 900 thousand boe per day in 2020 that we communicated at last year's Capital Markets Day. We expect we can maintain this level of production to the mid-2020s, by completing existing projects such as the FPSO programme in Brazil, the Appomattox project in the Gulf of Mexico and pre-FID projects such as Vito and Libra. With exploration we have upside which can potentially continue to grow deep water production through the middle of the next decade. As we continue to improve capital efficiency, we are lowering capital spending by around \$1 billion versus the guidance last year with no impact on our expected production. This year we expect to be around free cash flow neutral in deep water with a steady trend of improving organic free cash flow to our end of the decade expectation of between \$6 to \$7 billion. By the end of the decade, deep water will be a strong cash engine, delivering material free cash flow into the 2020s. We have worked extremely hard to improve the competitiveness of our shales business and we are seeing better results. In the Permian basin, for example, we have reduced direct field expenses by 33% in the last year and 60% since 2015. 97% of our water is now piped rather than trucked, which has cut water handling costs by two thirds as well as dramatically reduced safety risks by taking trucks off the roads. Through our integrated well, reservoir and facilities management process we have reduced our intervention costs by 25% and extended our production from existing wells. We are not only transforming our operating costs performance, our capital efficiency continues to improve thanks to better drilling and completion performance. We have maintained a consistent drilling programme and matured an inventory of drill ready locations over the past two years and this has allowed us to move to multi-pad drilling ahead of others, while benefiting from attractive locked in rates for rigs, frac spreads and wireline services. We believe we can now compete with the best E&P companies in shales but also feel we have expertise that is hard to replicate. In Argentina, for example, we are using our remote drilling centre in Canada, as well as our Duvernay well design, to significantly reduce drilling costs. It took us 11 wells in Argentina to achieve the same cost per well as we achieved after drilling 40 wells in the Duvernay field in Canada, transferring learnings quickly to a developing international play. We are investigating the use of digitalisation to improve results in shales, through our iShales programme, which is exploring changes in the way we design, configure, execute and operate onshore shales fields.

We aim to build shales into a material and sustainable growth business after 2020 but as I mentioned earlier we are already accelerating significantly development in the Permian Basin and Fox Creek Duvernay. Earlier this year, we said we could achieve around 140



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thousand boe of growth by 2020 from this acceleration and now we expect that figure to be around 200 thousand boe per day. This is without increasing our capital spending from the \$2 to \$3 billion per annum guidance we gave at CMD last year, just increasing the efficiency of that spend. This kind of selective growth is expected to accelerate our free cash flow breakeven for shales by one year to 2019 versus our expectation at last year's Capital Markets Day and in 2020 now has the potential to generate between \$1 to \$2 billion in organic free cash flow at \$60 per barrel.

In the last years we have unlocked significant value in deep water, particularly in the Gulf of Mexico. Since the BG combination we have reduced our spend in exploration and now aim to spend around \$2 billion per year through the next few years. With a more constrained budget we will focus on success in our heartlands to sustain future growth, putting a smaller proportion of our budget on higher risk frontier plays. In our heartlands program we are drilling an average of 40 wells per year - we have not slowed down despite the lower oil price or reduced spend, leveraging gains in capital efficiency. In addition to significant volume additions, we are creating value here by turning exploration success into production quickly, with a focus on near field discoveries. We have been commercially successful in about 60% of the wells drilled and 75% of near field discoveries were producing within less than one year. In 2017 we have also secured new acreage in a number of countries. In particular I am very pleased with the results of the latest bid round in Brazil. The deep water blocks we have acquired will add to our significant portfolio in Brazil, increase the number of fields we operate and improve our options over the next decade.

We have a strong development potential in Upstream with significant discovered resources which have not yet been booked as proved reserves. As you can see from this chart, we have good running room here and many possibilities with 2P + 2C development pending resources that could last between 20 to 25 years. At the same time, we have dramatically reduced our development costs - making more projects economic. We will continue to be disciplined about how we use capital but the bottom line is we can do much more for much less and we have the right portfolio and resources to do so.

Ben showed you earlier the key projects across Shell and this map shows those key projects for Upstream but also the next level of projects we are working on towards a final investment decision over the next five years. Today, these projects all appear to be very attractive and are expected to help to deliver growth well into the middle part of the next decade. As you can see from the map, we have significant opportunities across all our themes with the potential to add 750 thousand boe Shell share peak production.

I'd like to close by highlighting the great strides we have made in improving the financial performance of Upstream over the past two years, with the acquisition of BG, better project delivery and our cost reductions and operational excellence improvements through the Fit for the Future program. We will continue to focus on capital efficiency and profitable growth in Upstream and with a robust funnel of projects, dramatically lower development costs and significant discovered resources. I am confident we are on track to deliver on our 2020 expectations as well as continue to grow well into the next decade.

Thank you and let me hand over to John.



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Good morning ladies and gentlemen.

It's a pleasure to be here today at this Management Day and to provide you with an update on Downstream.

In Downstream the priority remains the continued improvement of our financial performance and ensuring future resilience - in what is an intensively competitive sector. We have been restructuring our portfolio and have made and announced some \$13 billion in divestments – excluding oil sands – over the last five years. That has been a lot of change but of course we continue to scrutinise and upgrade our portfolio. In Marketing, which forms part of the Oil Products cash engine, the businesses are delivering resilient and improving results.



This is due to three things: investment in our strong brands, our differentiated fuels offering and our premium lubes. To build on this, we plan on continuing to selectively grow our networks in rapidly-expanding economies - in Asia and beyond. And in Refining and Trading, the other part of the Oil Products cash engine, we have done a lot in the past couple of years to improve the performance of our refineries and through further integration of refining with trading, improved both on crude supply and on oil products.

In Chemicals, advantaged feedstocks, technology and first-class footprint have become a real competitive edge for us. Chemicals is a growth priority for Shell. It has strong market fundamentals: high growth rates, different end-market exposures, and attractive returns when projects are able to access advantaged feedstock. Overall, our strategy to develop and maintain hubs where trading, refining and chemicals can be fully integrated is proving to be correct. It has proved especially helpful in a period of highly volatile markets.

The improvements I have described have helped Downstream deliver: approximately \$9 billion of clean earnings over the last 12 months, some \$12 billion of cash flow from operations excluding working capital movements and 17% returns. Our Marketing activities are providing a resilient and increasing stream of earnings at high returns, Refining and Trading are working well together as an integrated business to enhance returns and cash flow. Given this performance we now expect Oil Products to deliver \$6 to \$7 billion organic free cash flow by 2020. And I will say a bit more about Chemicals performance and aspirations shortly.

We have been high-grading our refinery portfolio over a number of years. In the last decade, we have exited from 27% of our refining capacity: that is more than 1 million barrels per day in that period. And I would like to emphasise today how the ongoing push to fully integrate all elements of Downstream is creating value for Shell. Take refining for example. Across the globe, Shell has an interest in 18 refineries that supply Shell marketing businesses and local wholesalers. The fact that our manufacturing footprint extends across the planet means we are able use variations in margins between different regions. But it is the close integration of our refineries with Trading, Chemicals and Marketing that makes the biggest difference. Because our global trading and supply business operates in every major energy market.

Let me give two more examples of how this integration push is working. Firstly, Shell's operations clustered in the Rhine basin. This covers Europe's largest short market for oil products and many of the most important clusters of the petrochemicals industry in Europe.



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Its location also provides Shell with access to key European oil markets, as well as global trading options via the Port of Rotterdam. In 2016, we further strengthened our position in both refining and chemicals with the start-up of a new aromatics unit at the Pernis refinery. This is now supplying our own optimised aromatics feedstock to the Moerdijk plant, increasing value. Our Rheinland fuels business also benefits from integration. We have improved the crude oil flexibility of both the Pernis and Rheinland refineries which means that in periods of higher market volatility, sites can optimise their output of specific products to meet customer needs in the most efficient way for Shell. Pernis refinery's heavy oil upgrading will be further enhanced with the commissioning of the solvent de-asphalting unit in 2018.

My second example. The split of the Motiva joint venture with Saudi Aramco is enabling a similar integration story in the US, we have fully integrated the assets with Shell's downstream business in North America. We have a strong product portfolio with proprietary technology and focused growth into differentiated leading positions. The move has allowed Norco Refinery to optimise its operation to maximise value across its Refinery and Chemical plants, delivering significant value uplift to Shell. The Norco and Convent Refineries are now working together to optimise the hydrocarbon flows across both sites in collaboration with Trading. That enables both refineries to meet customer needs, while optimising the crude and products slates to maximise revenues. And, Shell Trading is now fine-tuning the ex-Motiva Northeast assets by blending and supplying products from other geographies where Shell has a presence. That is all about improving the assets we have, ensuring they work together to the benefit of Shell as a whole.

The company must also take advantage of the attractive growth opportunities before it. In relation to that I would like to focus on Marketing. With more than 43,000 sites, we are the largest branded fuels retailer in the world and we are the global leader in lubricants: recognised for the 11th year running as such. We are seeing strong returns and strong growth in Marketing, some 25% return on average capital employed in the last 12 months and more than \$5.5 billion of free cash flow. It is a good business to grow.

As part of our retail growth plans, we opened our first 20 service stations in Mexico this year with many more sites due to open. Mexico is the fifth-largest consumer of gasoline in the world, a growing market and over the next 10 years, if market conditions continue to develop at their current rates, Shell retail plans to invest around \$1 billion in the country. To give a very different example, in the UK we have launched Recharge a service on our retail sites that meets the refuelling needs of our customers with battery electric vehicles. These investments are capital-light activities compared to refining and chemicals and we plan to continue to grow around the world with a focus on emerging economies.

And retail, as the face of Shell, is also a good place to look to, to gain insight into progress through the Energy Transition. We have developed 5 ambitions to 2025 and they are clear and bold. We plan to reach a 50% margin-share from our retail offering - beyond fuels - especially by expanding our food and drink offerings. We plan to significantly increase the amount of low-emission fuels we offer and to reduce our carbon intensity. We plan to ensure every customer feels like a guest and to follow our Global Social Cause: reducing waste. And, having touched on the future of transport by mentioning Recharge earlier, I want to briefly mention some progress on digitalisation. Starting in the UK this year Shell launched a ground-breaking integrated app alongside Jaguar Land Rover. It allows customers to find a Shell retail site, pay for their fuel and manage their receipts



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from the comfort of their car. After a successful launch the app is being rolled out to other markets around the world. This follows the success of Shell's Fill Up and Go phone app which share similar functionality and is rolling out to 29 countries. In the USA, the FitCar app is available to drivers under a pilot project. The app syncs with an on-board device to provide vehicle maintenance alerts, trip information, the location of the parked vehicle, as well as service offers and details of the nearest Jiffy Lube service centre – a Shell brand.

Now, let me move to Chemicals. Some of you attended our Chemicals investor briefing early October and hopefully gained a better appreciation of the strength and potential of this business, let me again highlight this. Shell's Chemicals strategy focuses on activities with a clear competitive advantage. We reduced the number of sites from 133 to 15, and focused on Shell's core competences and the advantaged feedstocks I have already mentioned. The global portfolio now offers both a regional balance and a balanced feedstock exposure. As with Refining this ensures we can capture good margins in a range of volatile market environments. Now the business is entering a new period of growth. In 2016 we took three final investment decisions. To make our site in Geismar, Louisiana, the largest Alpha Olefins producer in the world. To expand Nanhai in China together with CNOOC. And recently we started the main construction phase of our petrochemicals project in Pennsylvania in the US. This site will use ethane from one of the lowest-cost shale gas basins in North America to produce polyethylene - that is what I mean by advantaged feedstock - it will generate 1.6 million tonnes of poly-ethylene capacity per year a world scale asset and the most cost competitive poly-ethylene producer in the US. In Chemicals, Shell has had a solid performance over the last 5 years - with a record quarter in Q1 2017 - and returns have averaged some 15% over the last 5 years and the business is on-track to provide strong returns in a growing market. Operational performance and current planned investments drive the aspiration for Chemicals by the mid-2020's - \$3.5 to \$4 billion earnings and cash flow from operations of \$5 to \$6 billion. We aspire to do this by delivering the already announced projects on time and within budget, maintaining our focus on operational performance to get the most from our assets and people and capturing additional value from the extension of our value chain in poly-ethylene and our focus on customers.

Let me wrap up. We have made good progress and that progress must continue. We will continue to focus on select investments with a competitive advantage, high grade our portfolio and harvest the fruits of ever-closer integration and with this effort I think Downstream will be a world-beater in terms of financial performance and scale. So, a lot has been achieved, but we recognise there is more to do. I have described what we have to do and I am personally - together with my team - determined to deliver it.

Thank you. With that, let me hand you over to Maarten again.



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Thanks John.

Our New Energies business is an emerging opportunity with two focus areas: New Fuels and Power. We intend to make investments that are disciplined and - importantly - commercially driven and financially sound. We will focus on integrated value chains adjacent to our existing Downstream, trading, and gas businesses. Simply, this is about making commercial investments, that leverage our strengths into new fast-growing segments of the energy industry. Equally important to note, we are also clear about what we will not do, and in particular we do not intend to become an equipment manufacturer. From previous experience we have learned to focus on businesses in which we have a distinctive and pre-existing competitive advantage.



Let me explain more. We expect that over this century, the energy system will become increasingly - but not fully - electrified. Around 20% of energy is currently consumed as electricity. And with a gradual transition towards a lower-carbon energy system, electricity's role in the energy mix could grow to more than 50% by the end of the century. The market shows that this is starting to happen, with battery electric cars probably the most visible example in Europe and America, but also China. However, the pace of this development will differ greatly around the world. Some countries are changing slowly. There are also places where electricity use is growing at twice the speed of the worldwide energy system. Local markets in Europe and the US are expected to shift significantly to more electrification in the next 15 to 30 years. And some of the larger developing economies, such as China, are adopting new energies as quickly as feasible, for strategic energy development and to improve air quality. Besides the large growth potential, the second reason for our focus on power and new fuels, is adjacency to our traditional businesses, and the existing expertise we bring to the table.

Shell already operates in more than 70 countries in the world, with a strong Brand that customers know and trust. We are used to working with different governments, regulators, and in different cultures. We have strong risk management, trading, and optimisation capabilities. We start from extensive experience in the power business. We rank within the top three wholesale power sellers in the USA, for example. But we are also one of the world's leading suppliers of liquified natural gas. And we power mobility across the world with our existing 43,000 retail stations. All together a starting point that any start-up would envy.

Let me first talk about our intent in new fuels. Our new fuels business will benefit from its adjacency to our existing downstream businesses. 30 million customers visit our retail sites every day. This widespread experience and familiarity with Shell, as well as our supply chain expertise, provide a compelling competitive advantage in bringing new fuels to market. These new fuels are biofuels and hydrogen. Shell is already one of the largest producers, blenders, and traders of low-carbon biofuels in the world. With this experience, and with the help of third-party technologies, we seek to produce and market second generation advanced biofuels at scale, bringing low-carbon options to our customers. We also see hydrogen playing a role in a low-carbon, low-emission future. Hydrogen-powered cars can drive up to 700 kilometres (around 430 miles) without refuelling. And their only exhaust is water. These cars can also refuel as quickly as those running on petrol and



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diesel, and the cost of filling a car with hydrogen is comparable to filling the tank of a conventional car. Currently, we have hydrogen filling stations in California and Europe. Close collaboration between governments, car manufacturers, and industrial gas producers will be critical in this business. Together with our partners we are looking to develop around 400 sites by 2023 in Germany. In addition to these two cleaner fuels that offer customers more choice to power their mobility, we are also active in the area of electric mobility – which includes developing smart charging, and installing charging posts at forecourts, homes, and work locations. NewMotion – our recent acquisition - is a leader in the European market and offers a platform for growth and integration.

Now let me talk to you about power. Shell sees opportunities in different parts of the power value chain, and additional value delivery through the integration of these parts. We will start developing this value chain from the customer-end, as we develop our power customer base, commercial, industrial and residential, in selected markets. In the UK for example we have been active in power trading and wholesale markets for several years, and we will start supplying power to industrial customers from early next year. In the USA, we are further down the track of establishing a large power demand position. We increasingly see opportunities for differentiated and branded customer offerings, a game that Shell has a proven track-record in. Demand will drive our investment in generation and storage from low carbon sources, like wind and solar, but also including gas. Equity supply will be complemented by third-party capacity. Capacity ownership will be selective, with the intent to create reliability and flexibility in our supply portfolio. In the middle, between increasingly intermittent demand and intermittent supply, we will drive extra value, through optimisation of a portfolio of positions with embedded optionality and flexibility. We will leverage our existing scale and expertise in this area, to deliver value and enhance returns. We also see an opportunity for Shell to be part of the response to energy poverty, one of the world's biggest energy challenges. We aim to define and scale up a commercial solution to the problem that so many of the world's citizens lack access to power. This is an emerging field, with many technologies and business models starting to deliver affordable off-grid solutions. We believe we can make a real difference in this area, and create shareholder value in the process.

Now let's talk about capital and returns. We will only invest in new energies where it makes sense, commercial sense. Capital investment in new energies will be between \$1 and \$2 billion a year, part of which is likely to be inorganic. We will be focused and selective with our investment. We want to build the base from which to turn this business into a growth priority in the 2020s. We expect the largest part of our investments in New Energies to go into power, where we will invest to gain customer access, and selectively pursue generation capacity ownership in solar, wind and gas. Returns will be a key decision criterion, already in this emerging phase. For new fuels, we will expect downstream-like returns, in the high teens. For power, we are seeking 8% to 12% equity returns, with stable and rateable cash flows. We are stepping up our efforts in new energies, an emerging opportunity that we target to turn into a growth opportunity in the 2020s. We will be selective, disciplined and commercial in our investment decisions, leveraging adjacencies with our existing businesses, and existing competitive advantages. We aim to build a new value chain for Shell, leveraging our current strengths, acquiring new capabilities, and building a business that will help Shell thrive in the energy transition.

Thank you. With that, let me hand over to Ben.



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Thank you Maarten. We have covered a lot of ground today, let me close. By the end of the decade we will have transformed the company. Throughout the 20's, at \$60 Brent, we expect to keep free cash flow where it is, or go up somewhat. As we continue to deliver moderate growth in the 2020s, our increased distribution to shareholders will continue to support a stronger growth in our "per share" metrics.

With that let's move to a short Q&A. Jessica will join me for this. Let's keep this at the high level, and there will be plenty of time for your more detailed questions and discussion in the break-out Q&A panels.



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