# Q4 results: Webcast Q&A transcript

Tuesday, 6th February 2018

This transcript contains minor modifications from the original for accuracy or clarification, none of which change the substance of the original. Please refer to the cautionary statement included in the 4Q17 webcast slides.

## Q&A Transcript

**Theepan Jothilingam (Exane BNP):** Good morning, a few questions please. Just one point of clarity on – I think, the prize in slide 23 and the free cash flow per share. I just wanted to clarify for 2018, is there any working capital contribution or move there?

Secondly, coming back to Macondo and the cash outflows, perhaps we could just talk about the line of sight, the confidence. I know we have had revisions, the update in January. Could you talk about where we are in terms of the business economic losses and where you see the court settlement process? Can we see line of sight in terms of closing?

Then just on the Upstream, it is great to actually see the data on unit costs and operational efficiency for 2017 and we see the progress on projects. I want to know what the prize is in terms of the unit cost for 2018 and where operational efficiency can be 2018 vis-à-vis 2017. Thank you.

**Brian Gilvary:** Actually, for the plans for this year we have got a slight working capital build, so it goes in the opposite direction. That number is pretty well underpinned. There are no issues around that. On Macondo CSSP I can go through it in great detail, but I do not plan to now. I think it was all in detailed the press release that we put out this year. I think the way to hold it around business economic loss claims is we have taken a further provision increase this quarter. It is based on what happened in the fourth quarter, which we have been over before, where all the claims that came through were ten times the average of the whole life of the facility. We had a particularly negative court ruling effect where about $0.5bn of claims that had previously calculated to zero came back into the facility as a result of the 495 ruling by the 5th Circuit. Take those things in the round, BEL claims have gone from 149,000, where we started, to less than 600 claims now to be processed. I think in terms of materiality that gives you a flavour of what is there. We have given our best estimate again based on all the information we have and we have fully provided for that. However, we cannot give you any further certainty other than to say there are 600 claims of the 1,000 still left to process. We have taken a provision against what we think those 600 claims will be, so we are not completely unprovided. There is a provision across what we expect the final litigation portfolio looks like, as well, and we are provided for that.

Bob Dudley: I think Brian – just to remind everyone the frame so we make it easier for you to try to model this. We always keep the Gulf of Mexico separately and we will meet those obligations using divestments proceeds rather than the rest of the frame that we describe, organically so you can actually see our response specifically.

Bernard Looney: Theepan, thank you. On operating efficiency and on unit costs, I think our plan through to 2021 has continued unit cost reduction in that plan, as it does have continued operating efficiency improvement. Remember we define operating efficiency across four chokes, not just the plant but the wells, the export system and the reservoir. We are actually ahead of plan on our operating efficiency metric in 2017 versus our internal target and over the next several years on both unit costs and on operating efficiency we expect to see further improvement. Without giving a specific target for 2018, 2018 will be no exception.

Jason Kenney (Santander): Thanks very much for taking my question. Two on the Downstream if I may? First, I just wondered if you could give us an update on Australia and the Woolworths deal and any implications, financial or otherwise, of a delay there.

Secondly, what kind of EBIT should we be thinking about in terms of new regional retail positions such as Mexico or China over maybe the next three or four years? Then, separately, can I get a bit more information on Senegal and Mauritania? When do you think that could be productive or supportive for cash over the next five years? Thanks.

Tufan Erginbilgic: On the Australia question, Jason, first of all - we do not actually agree with the Australian regulator's position that this is deal is going to lessen the competition in the market significantly. We are revaluating our options for the next steps. Secondly, in terms of impact you should not expect any impact on our 2021 numbers because we have other options that obviously we are working on. I would not expect any impact on our external targets.

On the new markets, I do not want to give any EBITDA at this point but those markets, like Mexico is a good example, some of them may be inorganic entries and they will have their own profile on it. However, I think something like Mexico frankly, to start with last year, we were in the negative, as you may expect. Now we are scaling up and with scale profitability will improve gradually. That is how you may want to think about those markets. I think the further we go, in the Downstream Analyst Day last year I actually gave you a view of a how much of the fuels marketing improvement will come from there. It is not necessarily one of the biggest contributions in this frame, but contribution will be much bigger beyond 2021 obviously.

**Bernard Looney:** Regarding Mauritania and Senegal, I think in Mauritania and Senegal we've had two exploration phases now. Phase two has just completed. From those two phases of exploration we have the potential for two LNG developments at scale. The first and most immediate being Tortue. The second being from a combination of the Tauranga and the most recent discovery, Yakaar in Senegal, a giant resource base. We have submitted an appraisal plan for the second part. That will take some time.

With regards to Tortue, Jason, the two governments are working together on the inter-governmental cooperation agreement, a key milestone. We need to get that done soon to maintain momentum. There are promising signs on that so that is good. We have completed pre-FEED engineering. We have got Tortue down in our project list here as starting up towards the back end of 2021 and we could see an FID for Tortue probably over the next 12 months or so.

**Jason Gammel (Jefferies):** Thanks. I have got two for Bernard actually, please. First of all, on base declines, significantly better than expectations on results there and I think you even mentioned growth in the base of 0.6%. Can you talk about what, from a process standpoint, is leading to this outperformance and perhaps even identify some of the assets that would be accounting for the outperformance?

Second, great result in terms of reserve replacement. I was hoping that you could perhaps identify the areas that had the largest contribution to the reserve adds. Then also perhaps identify any of the reserve add that was just related to the price effect and the year-over-year improvement in process.

**Bernard Looney:** Very good, so thank you Jason. On base decline, I think in our business we do tend to look at the big new shiny things and of course small changes in the existing base business, as you point out, bring about enormous value. Growth of the base in 2017, and it was growth, I think has come from a number of dimensions. I think focus in the mindset is a very important contributor here. In Alaska the team have held the Prudhoe Bay Unit essentially flat for three years in a row at about 280,000 gross barrels per day while we have actually removed drilling rigs. As the capital program was in many ways taking away the focus of the team to optimise what they do, there has been intense focus on simply managing the gas, managing the optimisation of the fuels, a fantastic example.

Performance improvement in the Gulf of Mexico in 2015 - the cost of an Atlantis well was about $100 million. Today it is about $62 million, that is at the same rig rate, Jason. So, actually, what has been reduced there is the amount of time dramatically to drill these deep-water wells, allowing us to do more activity. And obviously, there is technology. We capture a billion data records a day into our proprietary data lake in the cloud where people have access to that data and using the digital trend that is APEX allowing them to optimise production. In Trinidad, we thought we had a problem in the start-up at Juniper that we thought might shut a part of the system down for about two weeks. We ran a simulation in APEX in 15 minutes that told us that the challenge that we had was actually not a problem and we were able to eliminate that deferred two weeks of production.

Growing the base, I think is a fundamental source of value and an area that I think we continue to see momentum in the years ahead. In terms of a reserves replacement ratio; it is 127% organic in the Upstream segment in 2017, a good year, a great performance by the team. We have had reserves included or added from places with drilling programmes that we see ahead of us - in Abu Dhabi. We have reasonable certainty on the next phase of Khazzan, so train three in Khazzan is in there.

But there are also things in there like the Gulf of Mexico where we actually added material barrels in 2017 on the back of the seismic and algorithm breakthroughs that we had with the high performance computing centre that we have talked about, where we added a billion barrels of STOIP to the Thunder Horse in Atlantis fields, maybe 200 million barrels or so of resources at Atlantis and real proved reserves being added at Thunder Horse, purely from our ability to use that high performance computing centre to crunch an algorithm, which was proprietary and put it together with some cool seismic acquisition technology. It had a number of things in there, and yes there was some price impacts in there. But it was not material when you look at the overall 1.2 billion barrels of reserves that were added. It was probably less than 10%.

**Christyan Malek (J.P. Morgan):** Hi, good morning gentlemen, it's Christyan Malek from J.P. Morgan. Three questions on capital framework and then one on strategy.

First, on gearing, how important is it for you to lower your gearing to the bottom of the range? You talked about 20% to 30%. And if you found an interesting opportunity, would you be prepared to move back up the ranges or is there at a certain level you would want to achieve first.

And then on Capex, I know you would have gone from $15 billion to $16 billion for this year. To what extent is that delta towards the lower end of the range, a function of the Capex efficiency that you have talked about or refraining from the necessary sanctioning of projects you wanted to. I just want to understand what has driven that move to the lower end of the range in percentage terms, if you can?

Three, on cash flow, so in Q3, your income was $1.87 billion. Your cash flow ex-Macondo less working capital is $5.2 billion. In Q4, your income went up to $2.1 billion a year. You delivered exactly the same cash flow. What exactly is the drag on that cash conversion because it feels to me that given you had better upstream, better pricing, downstream and so underperformed, understanding that mix in the conversion.

And finally, should from a strategic perspective, this energy mandate, this transition you are talking about, are you willing to spend dollars in terms of moving into this transition. So would you scale up through solar? Is there a cap you would spend on M&A or it is just all going to be organic? Thank you.

**Brian Gilvary**: So gearing is 20% to 30%, been with us for a long time apart from a period during Macondo post-2010, it went to 10% to 20% because the fairway narrowed a little bit and we had liabilities that were significantly beyond the capacity of the balance sheet potentially before we had the big settlements.

Now we are back into 20% to 30%. That is a huge amount of flexibility and 30% to be clear has never been a ceiling as we move towards it last year, as we laid out to you that we would in the second and third quarter. And as the proceeds came in the fourth quarter that has come back down again and gearing has come down. Actually, gearing is a helpful part of the frame. The more important thing is the amount of funds you are generating over the extended debt book because that is what drives your rating.

In that respect, there is a lot of flexibility within our gearing frame. So it is not something which really comes into a particular focus. And as I said net debt came down through that back end of the year. Capital frame, it is $15 billion to $17 billion is what we have said between now and 2021. $17 billion is the ceiling. $15 billion may not be a floor depending where the environment is.

This year happens to be with the projects that we have lined up and that is where the capital is. If we spend a little bit more capital inside in downstream, Bernard has got a little bit more capital efficiency coming through so the range of $15 to $16 billion feels pretty good. We do know that when we put a range out, you will typically take the high end of the range in your spreadsheet. So - we just thought it would help you with the high end of that range rather than you putting in $17 billion. It is not going to exceed $16 billion. So we might just give that to you now.

{*The paragraph which follows has been edited for clarity*.}

On operating cash flow, you almost need to take about $1.6 billion out of the fourth quarter and add it back to the first quarter because those of you do not know the history of inside Europe and what Germany did to achieve at the request of EMU. We have a $1.6 billion to $1.8 billion cash payment goes out early as German mineral tax at the end of every year. And then it reappears in the first six weeks of the next quarter. So if you shuffle that $1.6 billion backwards and you strip out the working capital, I think you will see the cash flow underlying is on a positive trend year on year. And more importantly, if you look at the full year versus 2016, the rules of thumb would say it should increase by about $2.5 billion, and operating cash flow excluding all working capital actually increased by $7 billion. So, I think all that says is everything you see coming through in the way the major projects and in downstream is driving underlying operating cash.

**Lamar McKay**: Let me just touch the strategy question. I think it will be a combination of organic and inorganic, but it will feel more organic. And the reason I say it is that what we are trying to do is most of the ideas we are working on right this minute have high connectivity to the existing businesses. Yes, it may take some small investment so we are making these types of investments now, like Lightsource. But if you take a Lightsource, then that potential grows organically in potential concert with Bernard's business and possibly even down the road in the downstream businesses. So they are high adjacency, high connectivity, but we will have to make some selective inorganic spend.

I think the feel that we are trying to give right now is a wide aperture approach, high connectivity to what we think our DNA is - in organic moves that are small in scale versus large in scale then we can control throttle and brake pedal as these ideas develop over years, decades possible.

**Bob Dudley**: The objective is that they will have economic value to the shareholders. That is the guiding star through all this. We might make some investments, but they have got to have that potential and tying it in with trading too.

**Lamar McKay**: Yes, I mean we do want competitive investments in the energy transition space that compete for capital straight-up with upstream-downstream; conventionally, that may take a little bit of time. But those things could come in the years to come.

**Lydia Rainforth (Barclays):** Two questions if I could and both of them related, but the first one on discipline of Capex and the investment decisions. Has that process changed in the last two, three years in terms of actually making sure that the changes that have been made actually stick and that we do not just go about the oil prices a bit higher; we could spend a little bit more.

And then related to that, and I appreciate you are only one year into a five-year plan. But given the growth in free cash flow you expect given where oil prices are, at what point, what do you actually need to see to trigger that idea of growing cash returns to shareholders?

**Bob Dudley:** It is become a habit in the company. Capital discipline cost control is now a habit in the company and actually this whole team allocates the capital. It is not like the downstream gets some. The upstream gets some. Actually, we all debate it ourselves together which is I think now become a habit as well and that is an important one because allocating capital in a company like ours is so important. And we need to keep that discipline and that framework that Brian described. Uppermost and foremost not only with just this team, but our teams that work in all parts of the business.

Brian Gilvary: In terms of distribution to shareholder, I think they have been very clear right through the oil price correction. As the oil prices came down for the last three years, the first priority was scrip offset, which we have now done in the fourth quarter. And there is no question this year, as we see the environments improve and given it we have got things back into balance of $50 a barrel.

But we do not want to get a little bit ahead of ourselves at this point in the cycle, given, if you look at the outlook, and as you see Spencer's World Energy Outlook that he will lay out for you, and we look at the back end of this year, we could see, potentially, a softening in oil prices, probably still above $50 a barrel. But there is no question this year that there will be a conversation around distributions and how best do we get those back to shareholders.

Bertrand Hodee (Kepler Cheuvreux): First in upstream, you gave a production guidance of underlying growth of 5% to 7%, but Bernard also mentioned some potential offsetting factors like ADMA-OPCO, Pan America in Argentina, ACG. So what could be the reported production outcome if, especially, ADMA-OPCO, were not renewed? And the second question is around the potential list of FIDs that BP expect to take in 2018. What could be those?

Bernard Looney: On your question around 2018 production guidance, as we said 5% to 7% underlying growth expected this year. As Brian said in his slide, reported production will be slightly higher than 2017, so we will trend to that. I would note, in our plan ADMA expires on the 8th March, and we have, as you said, reduced interests in Magnus, PAE, and ACG. The combination of those is probably in the range of 120,000 to 140,000 barrels per day in 2018 versus 2017. So you will see headline growth, you will see strong underlying growth, and I hope that that gives you a little bit of a sense of the difference.

In terms of the FIDs that we expect to see in the year ahead, we expect to FID Khazzan train three, the extension of our Khazzan business, which has been very, very successful. We expect to FID a large compression project in Trinidad, two subsea tiebacks in the North Sea and the next two projects in our series of developments in India, and there may be more beyond that.

Bertrand Hodee: Okay, thank you. Just one follow-up, if I may? About the potential expansion of ADMA-OPCO, what are your plan here?

Bob Dudley: Well, the ADMA-OPCO, the concession times out in early 2018. We have been in discussions like many, many companies that have been in Abu Dhabi. We would like to work there and ultimately it will be a decision by Abu Dhabi itself on which companies they want to join that. We are in the ADCO concession, of course, and that goes out for another 40 years, but we will wait and see, Bertrand.

John Rigby (UBS): Can I ask two questions? The first, I guess people have asked this question round and round, and maybe the answer ends up being the same, but I notice you frame your outlook at a $55 real price, which seems like a reasonable outcome or out-turn. But you talk about your business working at $35 to $40 by 2021. So if I was the board of directors and the executive I would be thinking about what options and things I should be doing with that implied free cash flow generation, which is pretty enormous by 2021. So rather than talk about what you do this year or next year, can you just talk about what you are thinking about in 2021, if indeed you get to that point and both those things happen?

The second question is – I am not sure if I am drawing two dots together and jumping to a conclusion – but it seems to me you have been, in the upstream, very successful in being quite innovative with partnerships. So either way where you have got opportunity but not the skills, or you have got the skills but not the opportunity; you, sort of, marry those two together with a partner that fits. When I look at your US Lower 48 business, it seems to me you have done a huge amount of work, from an operational point of view, to get it right up top tier, but because of its very high gas exposure – and I take the point that the gas wells can generate high IRRs – but the real prize, it seems to me, is liquids. So is there any opportunity, strategically, around that position that you have to move that business on materially over the next few years if you could? Thank you.

Bob Dudley: Well, John, if we are in a world where our break-evens are down to $35 to $40 and we are in a $55 world, we will generate huge amounts of free cash flow. I think what we need to do is get your confidence about the discipline and the direction we are on, and then we will have all kinds of options that the company can do. Among many things gearing could come down, further distributions to shareholders; all kinds of strategic options are out there for us. So I am not actually worried about that; I think that will be a good world for us to be in and that is the direction we are heading in. But rather than saying we are going to do this or that with that extra free cash flow, it is probably too much or too early, but the Board does, with the management team, constantly talk about that future.

Then Lower 48, I think it is a great team and we have got all kinds of options there too.

Bernard Looney: Yes. I think, John, much is made, obviously, of the Permian and the oil and the liquids, as you said. But I think there is some reality, also, in what the returns are, potentially, in that business, and we will, of course, look at all of the opportunities, and we do, we screen all of the new opportunities there today. But I would just, maybe, give one small example, just to give you a sense of how you do not have to be in a liquids basin to generate enormous value. In 2015, we had very little acreage in an area called the Bossier or Haynesville shale. We identified this opportunity called SoHa, short for South of Haynesville. Over the last two years we have quadrupled our acreage position in this play, which is independently assessed as being possibly the most lucrative gas play in the United States. We have gone from zero rigs to six rigs drilling in the play. The 2017 drilling programme generated in excess of 40% rate of return at $3 Henry Hub. We went from zero to about 35,000 barrels a day of production in the space of 18 months, and can see that production growing to over 100,000 to 150,000 barrels a day in the next four or five years. Four hundred drilling locations have been identified and, probably John, more than half of the capital in the Lower 48 business going into that play alone because it is so lucrative.

So, yes, much is made of liquids and certainly we look at liquids all the time and look at those opportunities. But just to give you an example how the model that, when we separated the business, was intended to work, which is the more independent mindset of go, capture acreage, appraise, develop quickly and create enormous value, is working in south of Haynesville.

We will continue to look at liquids as opportunities; they feel expensive when they come on the market, and when we can do the sorts of things that we can do. I will not give you an access cost per acre, but I can tell you it is miniscule compared to some of the numbers that are created for other values, and 40% rate of return is 40% rate of return. It is just another bit of colour on the Lower 48 programme.

Thomas Adolff (Credit Suisse): Thank you. I have got a few questions. Firstly, just on your resource base, you have got a big resource base; in fact, the world is resource abundant. Some of it is stranded because of fiscal terms, because of technology. I wondered, as far as fiscal terms are concerned, be it in Angola or other parts of the world, what sort of discussions are you having to, kind of, really unlock these barrels?

Also, if you can comment on 20K psi technology, does it work now or does it not work? Given that you are resource-rich, so is the world, is your disposal plan of $2 to $3 billion biased to upstream resources in the context of a resource-rich world?

Then, I guess, finally, my question is if there is one key takeaway from 2017, where you went 'wow,' the wow factor, for each one of you, what would it be? Thank you.

Bob Dudley: That is a lot of questions. Maybe a comment on stranded assets, our stranded reserves. One, you said resources, which is right. Reserves are not stranded, they are economic and they are determined by the definition of being reserves because they are economic. Reserves and resources are moving in and out of categories all the time. Resources is not only going to be fiscal terms, it will be technology that will unlock a lot of these reserves and resources, and one of our strategic foundations is advantage resources. So for us, that means low-cost resources. So our intention with these resources is to make sure they are low cost and they will be economic, otherwise we will not actually call them reserves.

Bernard Looney: I think you are absolutely right, Bob. I think one of the things that we spoke about in the presentation there was that it is not just as we interrogate each barrel in that 48 billion barrels, but the functional performance improvement each day that we get better at drilling wells, building projects, managing base reservoirs turns a barrel that is uneconomic into an economic barrel. So, be the best at what we do where we work is our key element of our strategy.

In terms of fiscal, I think the new president in Angola is sending some very positive signals about the changes that he is trying to make in that country. I think they are needed and I think we will look at opportunities differently going forward, so that is great. I think, Bob, in Alaska the fiscal changes potentially around what has been achieved with the Trump administration around gas, which many people might have thought of as a big stranded asset, may actually come to light in terms of commerciality.

So I think governments are understanding. Certainly in Egypt we have a lot of support in helping make projects economic that can replace imported LNG. The same is actually happening in Libya. So we are seeing changes, but probably the biggest change is within our own hands, as Bob says.

Brendan Warn (BMO Capital): I guess back on the Lower 48 in the US tax change, and you have touched on it, but now that we have sort of rolled forward to 2021 numbers, where does that business still fit within the portfolio and when do you start to see it actually generating free cash flow back to the parents? And how are you thinking of it in terms of positioning?

Then just further on that point of fiscal change, since obviously the US tax reduction, where does that country now rank? Has it moved up in the positioning? How much more attractive has it made investing into the US?

Bernard Looney: Maybe I will let Bob comment on the US investment climate, but in terms of the Lower 48, Brendan, I think it is a great question. The US Lower 48 business generated cash for the parent in 2017 for the first time in many years, and that is a testament to the leadership of Dave Lawler and his team in the Lower 48 business.

We talked about this in Baku. We have a continual debate, and I think it is an appropriate debate in the company, about the right balance between growth in a volume sense, growth in a return sense and cash flow growth. And in many ways we were having that conversation rather early. I think the entire industry has moved to that conversation, which I think is the right conversation.

Lamar and I debate this a lot. When you have opportunities ahead of you, 1,300 wells that generate economic return at $3 (Henry Hub) greater than 20%, you would have to argue that is a good business proposition. At the same time, we want to ensure that it does not become a cash sink for a decade, much as it had for many years in the past. So that is a debate that we have ongoing all of the time. The good news is that the team continue to bring forward options which are making that in some ways easier and in some ways harder, because they are actually bringing more and more opportunities, whether it being the San Juan – or where we recently accessed some very cheap liquids in the SCOOP area.

So that is the debate, Brendan, that goes on continually, but for the first time in 2017 we actually generated a dividend, so to speak.

Bob Dudley: And you asked about the American business system now with lower taxes – what does it mean? This is important for BP because we have been, over the last decade, America's largest energy investor – $90 billion of capital over the last decade. That is separate and aside from the $65 billion of obligations with Macondo.

So if you take what was one of the highest tax rates in the OECD at 35%, take it down to 21%, this is of course of enormous value to business in many ways. Net present value to BP is affected by this, despite these short-term charges and things that everyone is trying to sort out. So it is important for us. There is no doubt we will increase investments. I imagine I can speak for – because I am around a lot of the US business community, the regulatory system of the United States is suddenly so much easier. It was becoming an avalanche of regulations in every direction, so permitting required sequential federal and state, and now they are in parallel. Decisions are going to be made faster, and if they are not made faster, then, the infrastructure programmes they are talking about will not happen.

So from a business community standpoint it is quite transformation. There will be a lot of capital attracted to the US because of it in my opinion, and not just speaking from a BP perspective.

Oswald Clint (Bernstein): I would like to go back to the upstream, please, with Bernard mentioning the growth platform materially ahead of schedule here. Maybe talk about what is delivering that? Is it just excess service capacity that is helping you, that might stop in the future? But ultimately with APEX coming in below your target with base decline rates better with US delivering a bit more, it feels like you should be maybe increasing your 2021 free cash flow estimates at this point. Is there something stopping you from pushing towards a higher end of that number, or potentially increasing it?

And then second question was, Bob you mentioned this last year, I think, about $8 billion into solar over the last decade and not much really coming out of it so far, so we are going back into solar. Maybe talk about the KPIs or the milestones you are putting in place with these joint ventures and investment opportunities to ensure there is profit coming. I do not know if you can get out in time before we end up with such large numbers again. Thank you.

Bernard Looney: On the first one around the improvements that we are seeing in the discipline and the environment and the whole conversation about inflation coming back into the system and what happens at $70 oil, we just keep going back, Oswald, to a very fundamental place, which is that we believe that there is an enormous amount of waste and therefore an enormous amount of opportunity in the upstream oil and gas sector as a whole. We believe that 75% of the savings that we have made to date are sustainable, and that about 25% are due to what you would call unit rate deflation. But we do not see that 75% stopping there. We see more and more opportunity.

I will give you an example. The cost of a subsea well, the equipment, is down by 56% since 2012. It used to cost about $97 million a well. Subsea equipment now costs about $47 million a well. Now, is that because there is excess capacity in the system and suppliers are having to reduce their prices? There will be an element of that, but it would be, I think, misleading to think that is why that cost is down so dramatically. The cost is down so dramatically because we are taking a very different approach to what we are doing. We are using industry-led solutions, which is a fundamental part of the strategy which is taking equipment that is available on the shelf rather than building bespoke equipment. We have reduced the cost of our inspections in that equipment by 60%. Simplifying an umbilical scope in Shah Deniz 2 reduced the cost by 42%. We have moved to global competitive sourcing, which is simply expanding our supplier base – maybe outside the oil and gas sector, maybe outside of countries that we normally go to, heading to China for flanges for piping – 65% reduction in the cost per metre of flanges and supplies.

So I think there is enormous potential. I think the savings that we have made are largely sustainable and we are not stopping there, and we have more to do. That is why you will see us continually pushing, particularly on the capital angle.

In terms of the target and whether we are ready to change that target, I think it is too early. We are early days. There are many years ahead of us. We will probably give an update on the upstream towards the end of the year, and we might provide a further update at that stage when we have more of a year under our belt, but probably too early. But I would rather be in the position we are in today than the alternative.

**Bob Dudley:** On the solar point, you will recall back in the 2000s the company made big bets and developed over time businesses in biofuels and wind, and solar was also one of them, and in fact around 2000 BP was the third largest solar company in the world behind Sharp and Hitachi. Gosh, has the world changed! So we manufactured; we started in the US, we moved to Spain, we moved to India, we moved to China and just then solar cells became commoditised in panels.

That is not what we are doing today. We learned that lesson really well. We are working where really inexpensive solar panels can be combined with project developers, who develop these projects very carefully, and Dev's team had been working on this, where there is a margin, you sign power contracts; you can then combine that with places around the world where we are working with natural gas. So I can see Lightsource BP developing solar projects now in Oman, in Egypt, in India, in combination with natural gas operations. And our IST trading, electricity trading and optimising around the different fuels; is the model we have. It is a pretty capital-light model, and I think it can be expanded greatly. So, that is our direction in solar, and we have committed $200 million to it. That is very different than building those big plants that we learned a lot from.

**Irene Himona (Société Générale):** My first question is to Brian. As you progress in the clear delivery of the five-year plan, how should we think about the group's sensitivity – earnings or cash flow – to the external environment, the oil price refining margin? Is that change, not necessarily today, but as you deliver the new barrels with a 35% higher margin, is that sensitivity changing?

My second question concerns the focus you all highlighted on modernising BP: employing new technologies, digitalisation, predictive maintenance, et cetera. I have two related questions. One is: I do not have a clear picture as to whether that effort is systematically implemented through a process that aims to actually deliver that modernisation across your assets over the next *n* years, or whether it is more of a fragmented opportunistic approach.

And the second related question, from a risk management perspective, these are new technologies – how should we think about the risk? Are we adding a new layer of perhaps unknown or less well understood risks on top of the traditional risks related to those new technologies? Thank you.

Brian Gilvary: On rules of thumb, we will be updating those this quarter. But you can still use something along the range of, and it is going to be a range, $3–3.5 billion pre-tax set against $10 barrel movements for oil.

On a post-tax basis, we do not normally give you guidance, but again $2–2.5 billion. It is a broad range, and you may as well use the numbers we are using, but $2–2.5 billion on a post-tax basis. The reason why we do not do it is because of course, as you have seen this year, the tax can move around a huge amount intra-quarter, but on a run year-over-the-year, they are probably good numbers to use for now.

Bob Dudley: On your technology question, it is a really interesting question and I do not think anybody has ever asked that before. It is a combination of both, Irene, which is systematic programmes, but we actually studied a lot of how other companies have done this, and how they do not do it very well is to suddenly mandate a modernisation programme. What we have done is we have created pockets. Maybe it sounds like it is fragmented but people who have shown what they can do, piloted and shown amazing results, then the uptake starts occurring all across the company; nobody wants to be left behind. It disrupts your existing IT systems.

We have tried to think about this both in a human nature way, avoiding the Big Company 'Here is how you must do it,' and let it organically grow and spread. That is one of my big 'ahas', by the way, for 2016 and 2017: how this has spread, and the amazing enthusiasm of people when they see tools, and young people in the company love these tools. It is a big 'aha' for a big oil company. Of course we have to systematise it, as we are doing upstream and downstream, but I think letting it spread on its own sometimes is remarkable, with standards and with reliability forecasts.

Brian Gilvary: I was just going to say, Bob, just to add on that because actually my 'aha' or 'wow' for this year is the quality of the people that we are now hiring. They come in and they just assume that this thing (pointing to a cell phone), whatever their thing is, will tap into all of your systems, and they can simply develop apps themselves and they will disrupt and innovate. We learned about six years ago that we would have to have an IT frame that would enable them to still be able to do that but keep the company safe, if you think about the cyber threats that sit out there and what we do around data. I think we are all in the same place actually. The quality of the people we are now bringing in is a 'wow' to the positive and it is also a 'wow' to the 'wow' because it is quite extraordinary.

Christopher Kuplent (Bank of America Merrill Lynch): I have two quick ones for you, Brian, and then one for Bernard, if I may. It looks like 2018, Brian, will be the first year in a long time when depreciation will run ahead of Capex. Is that going to track each other as we go and look forward into 2021?

Then, secondly, I hear you do not want to commit on explicit language regarding shareholder returns, but if you were to prioritise, what is going to happen first: the cancellation of the scrip or the buy-back running ahead of the quarterly scrip rates, or a DPS increase?

The question for Bernard is: one of my favourite projects seems to have made a return onto your slides, so I just wanted to hear how Pike has made it onto advantaged oil.

Brian Gilvary: DD&A is going to tick up a little bit through 2018, and it will probably flatten off in 2019/2020. The tick up is of course the new production is coming onstream: the new reserve ads is obviously increasing DD&A, so there will be a marginal uptake into 2018/2019, flattening off in 2021.

We have had this conversation in the board, and we have had a lot of conversation with our shareholders about the scrip. I think the first test for us, Chris – and it is great that people are now asking, 'What are you going to do with the surplus cash?' because two quarters ago, they were saying you could not pay the dividend. So, now people seem to think we can pay the dividend, and not only have done that, we have offset the scrip. Clearly people would now like to know what we are likely to do with any surplus cash beyond that. We have had extensive conversation with the Board every quarter around the dividend, which we have done this whole oil price correction and with the delivery of the ten-point plan in 2014. We will continue to do that, but I think it is important that we offset the scrip.

It varies by quarter, but about 45% of our shareholders will take a scrip uptake at any given quarter, so right now there is no intent to cancel. We do understand, though, that there is a friction cost associated with issuing shares and those shares then being repurchased. We think that is worth it given our shareholders want it and, even in a benign quarter – like 4Q, we had a 15% scrip uptake – there are tax advantages for ordinary shareholders, so we want to make sure we maintain that. The key is that we then offset it. I think having the financial flexibility as to how we self-set that buyback through the year – and you will find that today we will be back in the market buying. I know people said, 'Well, you stopped on a certain day in December.' Well, yes, because we had bought back all the scrip, so we had offset the dilution, which is what we said we would do.

Today we are back in an open period and we will be back in the market again. So, it will be managed over the year and it creates some financial flexibility for the corporation, but there has been no conversation around cancelling it, given the feedback we get from shareholders is that they like it but they want it offset going forward.

**Bernard Looney:** On Pike, it is a project that is out there that is on the possible list out to 2025. I would say a couple of things about it. The first is, I think that the reason that it is on the slide is a testament to the great work that Devon, the operator, has done in driving the break-even of that project down, I think towards the lower 40s. It is actually a quality resource that probably has further optimisation to be done on it. The first thing I would say is that, given the quality of the resource and the fantastic work that Devon have done, the labour costs in Canada have fallen dramatically over the last several years. I think it starts to enter into the competitive frame in terms of a break-even basis.

The second thing I would say is that it is part of the 6 billion barrels that I referred to, but not every project in that 6 billion barrels is required. We said we would need about 4 billion barrels if we chose to grow at 1% out to 2025 and we have about 6 billion, so there will be choices within that and Pike may indeed be one of those choices, but I think that Devon have done a great job in driving that break-even down and I think we are not yet at the stage of saying whether or not that is in the base plan for the business.

**Martijn Rats (Morgan Stanley):** I want to ask about one of my favourite projects, which is Zohr, in the sense that I do remember that when you announced the transaction there was an option to buy more of it, which I think has probably expired and I have not seen an announcement saying that you have taken it up. Therefore, I wanted to ask why you decided not to take up the option of buying more.

Secondly, I wanted to ask about the ROACE target of more than 10% by 2021, in the spirit of slightly more transparency on tax. I believe this ROACE target is pre-tax?

**Brian Gilvary:** It is post-tax.

**Bob Dudley:** With Zohr, there was another chance to take up an option of another 5%. We debated and debated it and looked at it in our capital frame. We still think it is a really good project. There was a deeper well drilled and we just said, do you know what? We have this set of projects that we are investing in this year. It would have taken on a good healthy capital obligation from past costs, as well, and so we have stepped back from it. I am sure ENI will have someone take that up, no question about it.

**Robert West (Redburn):** Thank you. I am going to move from questions about projects on your chart to a project which is not on your chart, which I do not actually know is a real project or not. It is Kirkuk in Iraq, where I have seen in the press that there is an MOU for you to double production. I do not know if it is real and I do not know if you can comment on it, but could you in principle and what is holding you back?

The second one is on the incredible reliability metrics. I am not sure whether to be excited by it or a little bit afraid of it, because once a number gets to the 95% sort of level you start wondering if it can keep going up. If that improvement in reliability has been driving the decline rate down, where are you seeing the decline rate for this year? Is there a bit of bounce-back there?

And then finally, just quickly on solar, I love the answer you gave about integrating it with the gas business and freeing up those molecules in Algeria to send them down a pipe to Europe, but the thing I was going to ask you is how much of this move back into solar is about cost? Because when you see the costs of wind, which is where I have always thought of BP as being more traditionally focused, we are at $0.05 or $0.06 per kilowatt-hour and in some of these sunny countries you are getting solar out for $0.02 to $0.03 per kilowatt-hour. Is that part of what has tempted you back in there over wind, where you are more traditionally focused?

**Bob Dudley:** Let me take the last one because we were just talking about solar. You are right; solar costs are coming down. The ability to generate electrons in a country and then put the natural gas to power plants, which is often where it is needed, is part of this. On wind, we have a big wind business in the United States, a very big wind business across 14 wind farms. We have been cautious about getting involved in offshore wind because there is salt in the gearboxes and working over those big turbines. But that technology is changing so we are getting more interested in offshore wind. Give us some time – we want to get that right. I think we have been right so far to wait.

On Kirkuk, Bernard and I talked about this the other day. We have a long history in Iraq. We work in the Rumaila field, which probably puts 40% of the treasury into the country of Iraq. They have re-stabilised things up north. We have had an agreement to study the Kirkuk field since 2013. They have asked us to come back in. We will see. We know a lot about that. We are certainly not going to jump in with commitments until we fully understand it, but I would take it as a signal that Iraq as a country is getting its feet back on the ground again and pulling it together, with the idea that it can offer new and different investment opportunities, so we will see. We will see. It would be great if Iraq could do that and if we played a role in that, if it was economic and careful. That would be a good thing.

Bernard Looney: On reliability and base decline, it is a good point. Theory says there is five percentage points of opportunity and we are unlikely to get to 100% reliability. We do see further opportunity in plant reliability, but you are absolutely right, it is not going to be significant, although it will be important. However, when one door closes you need to open another door and the door that we are opening in the space is around operating efficiency. We look at four separate chokes in our production system: the plant, the number that we just referred to, is one, but there is also the export system and we saw what happened in Forties in 4Q. There is also the wells and the reliability of the wells system, and there is also the reservoir itself as to whether it is producing at its capacity.

We define operating efficiency very rigorously, across all four chokes. 95% times four gives you an 80% type number, so we are actually focused very heavily now on driving our operating efficiency up, which obviously expands our scope much more broadly, particularly, I think, into wells and into export. We have internal ambitions to grow that operating efficiency number over the next several years. Like everything, it has its challenges but that is where the opportunity lies, so maintaining plant reliability at 95% and maybe growing it hopefully to 96%, importantly in our key assets, and shifting the conversation into all four chokes and measuring the reliability of the entire system, which is what operating efficiency is, is the next opportunity to impact base decline.

Bob Dudley: And in the downstream, we should not forget the availability of the refining system at 95%. It is benchmarkable using the Solomon index. That is a great, great set of results from the team - and there are cases in refining, if you maintain them and operate them well, that you can maintain 95% reliability for years, done right and with the right turnarounds. That is an industry standard, if you get the right assets, that we will strive for.

Ladies and gentlemen, let me say again to everyone on the line from all over the world – and there are quite a few on the line, I see hundreds, in fact – thank you very much for your time.