

## Members of the Group Carbon Steering Committee

### Group Carbon Steering Committee Meeting Agenda 13<sup>th</sup> December, 15:00 – 17:00

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The following sets out the agenda for discussion, draft agendas for future sessions and list of attachments.

#### Agenda

1. Introduction (5 mins) – Gardiner H
2. Context update (15 mins) – Gardiner H / Dominic E
  - a. Investor engagement
  - b. Flexibility and resilience
  - c. CCUS
3. RIC performance updates
  - a. Upstream (15 mins) – Dave K
  - b. Downstream (15 mins) – Andrea A
4. ALC accreditation shortlisting (20 mins) – Katrina M
5. Project Silva (20 mins) – Paul J
6. Risk Management framework (15 mins) – Steve W
7. Comms & engagement (10 mins) – Omayma K / Gardiner H
8. A.O.B (5mins)

#### Attachments:

- **RIC:** performance updates from Upstream & Downstream
- **ALC:** Programme update & spreadsheet for review
- **Risk:** Risk management framework for climate related risks
- **Comms:** 2019 Strategy

Gardiner Hill  
December 2018

## Carbon Steering Committee – Overview of draft calendar and draft agendas

Feb -19	23 April-19 (Strategy day)	Jun-19
<ul style="list-style-type: none"> <li>• Context</li> <li>• 2018 year-end <ul style="list-style-type: none"> <li>➢ Actual RIC performance</li> <li>➢ Offset retirements</li> <li>➢ ALC accreditation sign-off</li> <li>➢ Carbon disclosures</li> </ul> </li> <li>• Agility and flexibility report update</li> <li>• Carbon lifecycle &amp; defining low carbon methodology</li> <li>• Update on severe weather events work and Project Sawyer</li> </ul>	<ul style="list-style-type: none"> <li>• Carbon strategy going forwards</li> <li>• Taking stock - a year living with RIC</li> <li>• Targets evolution / what next / long term targets?</li> <li>• Building confidence and a track record in BP's Carbon Management</li> <li>• Transparency: How do we tell our story (internally and externally)?</li> <li>• Advocacy</li> </ul>	<ul style="list-style-type: none"> <li>• Context</li> <li>• Deep-dive into 'Improving' products progress and approach</li> </ul>
Sep-19	Dec-19	
<ul style="list-style-type: none"> <li>• Context</li> <li>• RIC performance updates</li> <li>• ALC update</li> </ul>	<ul style="list-style-type: none"> <li>• Context</li> <li>• RIC performance updates</li> <li>• Carbon disclosure</li> </ul>	

## Members of the Group Carbon Steering Committee

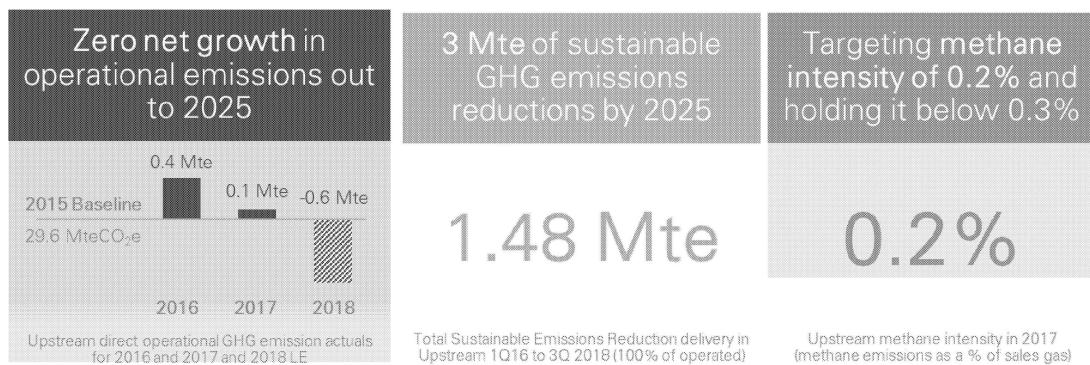
### RIC Performance - Upstream

This brief provides an update on Upstream progress against all elements of the 'RIC' frame, with a focus on relevant initiatives in the 'I' and the 'C' categories

#### Reduce Our Emissions

The 'Reduce' part of the framework is where Upstream can make the biggest impact for BP and where we have the greatest focus.

Our performance against the 3 targets is currently **on track**:



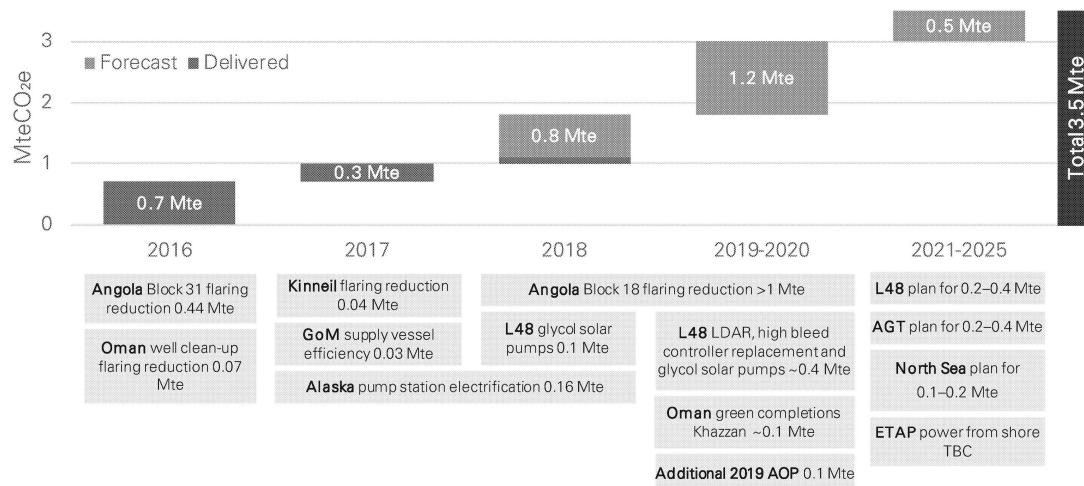
#### **Zero net growth**

- 2018 Upstream operated GHG emissions are expected to be ~0.6 Mte **below** the adjusted 2015 baseline of 29.6 Mte.
- The BHP acquisition is expected to be balanced out by planned divestments in the medium term and may open-up future SER opportunities.
- An approach to managing zero net growth is being developed to prioritise operational reductions and project design choices over offsets.
- A **\$100M carbon abatement fund** will be put in place for 2019 and 2020 to underpin the Upstream GHG reductions. An FM and governance process are being prepared to underpin this. Operational emission reductions will be prioritized over the purchase of offsets.

#### **Sustainable emission reductions**

- Upstream has now delivered 1.48 Mte of SERs (to the end of 3Q) close to half of the 3 Mte Upstream commitment by 2025.

- An additional 0.41 Mte of SERs are planned by year-end, taking us to 1.89 Mte. This includes a significant SER from Greater Plutonio, which in total is anticipated to yield an SER >1Mte spread over 2018-2019.
- We have **risk-based** plans for upstream to deliver a total of ~3.5 Mte by 2025.
- The Carbon Abatement Fund will facilitate delivery of future SERs.
- **Regional Carbon Workshops** have been completed in AGT, Angola, Trinidad, Oman, GoM AsPac and Egypt. These have identified **over 100** potential SER opportunities. Further workshops planned for North Sea, M&S and Alaska. SER opportunities from completed and planned workshops will be quantified and built into the forecast to 2025, giving significant **potential upside** to the current 3.5 MteCO<sub>2</sub>e Upstream forecast.



### Methane intensity

- Upstream methane intensity in 2018 is anticipated to be **lower** than 2017 due to low intensity gas start-ups (e.g. Khazzan, SD2, WND) and reductions, particularly from Angola flaring. GOO Methane intensity YTD is ~20% lower than in 2017.
- The BHP acquisition and planned divestments will improve our overall methane intensity.
- Technology program pilots are ongoing to improve the quantification of methane emissions (direct quantification and continuous monitoring).

### Improving our Products

Upstream is growing its **natural gas portfolio**. Gas produces around half the CO<sub>2</sub> emissions of coal when burned to generate power. Gas is also the ideal complement to renewables.

We are **divesting** high carbon intensity assets in the Lower 48 (e.g. Wamsutter) and purchasing lower carbon intensity assets through the BHP deal with the addition of Permian basin assets and expanding our acreage in the premium Eagle Ford and Haynesville basins.

Our **future projects** are being designed with lower GHG intensity than equivalent existing assets, with the Cypre Project in Trinidad being an example.

Cypre's reference case of utilizing existing power at the Cassia hub is an inherently lower carbon option compared to the traditional energy supply via new microturbines. Traditional NUI designs would have generated approx. 1300 tonnes CO<sub>2</sub>e/yr from microturbines on the facility. The proposed Cypre design imports power from existing excess power generation capacity at adjacent facilities using an umbilical. This is estimated to result in negligible increase in emissions. The annual emissions are therefore estimated to be approx. 70 tonnes CO<sub>2</sub>e/yr from emergency venting during blowdown events. **Emission reduction is therefore approx. 1,200 tonnes CO<sub>2</sub>e/y.** Use of renewables is also being investigated as an alternative to the umbilical.

### Creating low carbon businesses

BP Ventures have invested in **Xpansiv**, a collaboration of industry leaders and experts focused on improving the way commodities are produced, managed and traded. By extracting and refining real-time production data, Xpansiv can differentiate commodities based on their carbon impact and unlock new insights and opportunities.

Work is ongoing to secure NEF Funding for ~\$1M Revex in 2019. This funding will be used to carry out a Proof of Concept (PoC).

Upstream is planning to trial Xpansiv initially in BPX Energy (formerly L48) and potentially Oman in 2019. The objective will be to test the digitization of energy-production data into digital feedstock on Xpansiv's platform.

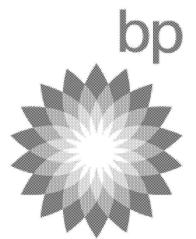
If the business value is demonstrated, further pilots will be carried out during 2019 to securely track source data and ultimately sell a differentiated commodity in the market. Currently the US market is the most advanced for trading differentiated commodities. Dependent upon the market for differentiated natural gas, the implementation of Xpansiv could be scaled up to cover other regions (e.g. SD2, North Sea, Tangguh).

Current thinking on **CCUS** and the role that Upstream can play includes **3 projects**. Two are in the very conceptual stages (L48 Storage Company and transporting Tangguh CO<sub>2</sub> to Abu Dhabi for EoR). The third project, **OGCI Clean Gas project**, is more advanced.

OGCI-Cl will provide funding for the Clean Gas Project pre-feed stage. BP has offered to act as the Operator during this stage. Upstream GPO will provide resources (PGM and Engineers). The aim is to deliver a cost effective CCUS cluster through a CO<sub>2</sub> gathering network. BP will lead on transport and storage; another company will lead on CCS.



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## Downstream - Advancing Energy Transition

Group Carbon Steering Meeting, 13 December 2018

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## Target Neutral Annual Event



### ATTENDED BY OVER 100 STAFF FROM ACROSS BP'S CARBON COMMUNITY



Hassan Sachedina, CEO, Biocarbon Partners

"BP has helped to catalyse one of the largest biodiversity corridors in Africa, currently under verification, en route to be largest REDD (forest protection) project in the world."



Jennifer Morris, President Conservation International, "If we could afford to go fully renewable tomorrow then we still wouldn't achieve the Paris Agreement because of deforestation which accounts for 11% of human-caused GHG emissions and only attracts 2% of global climate investment."



Paul Lantero, Global Commodity Head of Environmental Products, IST "Transparent pricing strategy is the most important factor that allows for market mechanisms, particularly to BP, as it allows for fundamental supply and demand laws to kick in."



**Heathrow**  
Making every journey better  
Matt Gorman, Sustainability & Environment Director



**Microsoft**  
Eve Joseph, CSR & Sustainability Manager



**M&S**  
Mike Barry, Director Plan A



**Conservation International**  
Jennifer Morris, President



**Livelihoods Funds**  
Guillaume Boucoulat, Chief Operating Officer



**BCP**  
Hassan Sachedina, CEO

## **BP's role in the climate challenge, how the private sector can drive action and what are the limitations** **- Lamar McKay, Deputy Group Chief Executive**



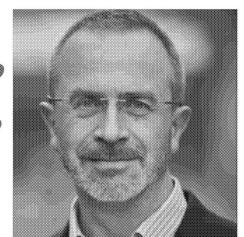
"The Target Neutral team are doing a fantastic job. When it started out Target Neutral really was a first of its kind. In 12 years it has helped customers to offset 4 million tonnes of carbon. That's like taking half the cars in London off the road for a whole year - some 2 million cars."

Unleashing  
the full  
potential of  
carbon  
offsetting

*"There is a huge potential to make a difference with offsetting - both in the selection of best-in-class offset projects that also support UN Sustainable Development Goals and in the calibre of our carbon traders. The message to customers here is that if you choose BP over our competitors you are contributing a lower carbon footprint. And we are looking to create a new approach to supporting land-based carbon. The preservation and enhancement of forests – or natural carbon solutions – is recognised as having an essential role to play in reducing emissions."*

*"let me finish by challenging all of you in this room to think about how what you can do... How you can help our customers reduce their emissions. And how you can support BP to take carbon out of our operations and drive efficiencies."*

***In response to Lamar's talk - From an NGO point of point of view we couldn't have wished the deputy CEO of BP to have said more. We share the view that Natural Climate Solutions are going to be essential to reduce emissions. This was a great rallying cry for the rest of the business - Peter Wheeler, Director, The Nature Conservancy***

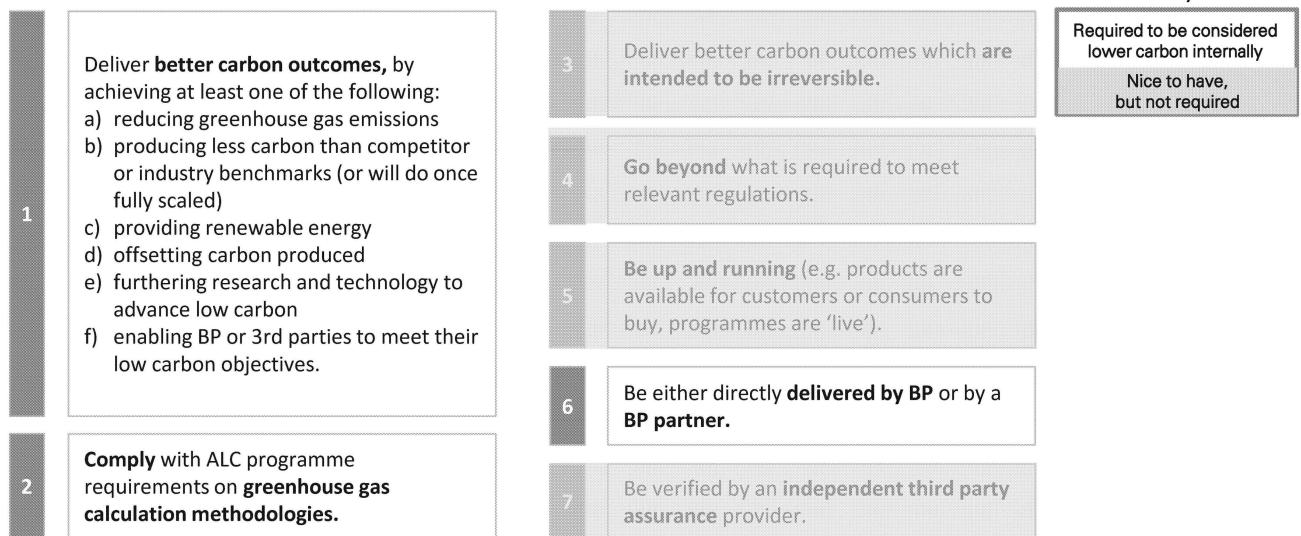


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## Workstream update: Low Carbon Products

To be considered LOWER CARBON internally, activities must...



Currently 116 downstream activities qualify as lower carbon based on these three criteria



## Workstream update: Low Carbon Products

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### **Next steps**

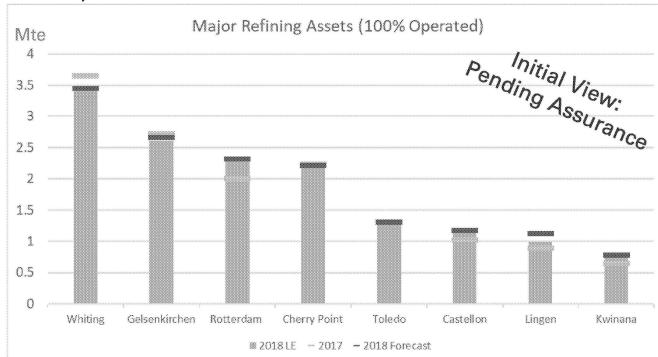
- Definition agreed by D-AET steerco, now needs alignment with Group
- Inventory – good progress made, qualitative inventory to be finalized for Downstream January ready for use in SR/AET reporting in 1Q.
- Improve strategy work with consultancy support:
  - a) Scope:
    - What are potential Group targets for “improving products”
    - What do shareholders want to see; How does this stack up relative to competitors
    - What targets (or measures) tells the best story for BP
  - b) Next step - Andrea to draft request for quotations
  - c) Seek funding – Group and Downstream



## Latest Estimates of 2018 GHG and SER Performance

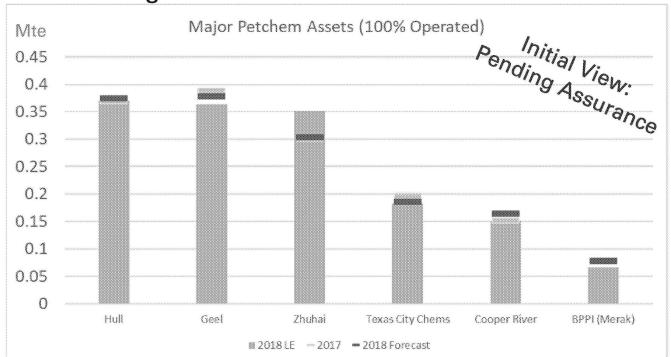
### Refining

Refining appears to be slightly above 2017 emission levels, but still below 2018 forecasts



### Petchems

Petchems appears to have flat emissions YoY, and on target for 2018 forecasts



Zero Net Growth

500Kte SERs

- At least 4 major SERs delivered this year, appearing on track for 90Kte reduction expected in 2018
- GSK steam power project in 2020 expected to deliver most of remaining downstream SERs
- Intention to create 'room to maneuver' by growing existing SER pipeline through 2025

- At least 2 major SERs delivered this year, closer review indicates more may be available
- 25KT reduction ambition through 2025 strongly underpinned



## AET digital engagement underway across segment

BP: GBP 521.1 (+9.0) USD 40.34 (+0.01) \* OneBP Site finder

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Our strategy > Energy transition

Performance Safety Energy transition Customer focus

+ Advancing the energy transition in the Downstream

Downstream in action as One Team

Advancing the Energy Transition is key to the Downstream Strategy. Teams across Downstream have formed into seven workstreams to lead the business on delivering our low carbon ambitions to Reduce, Improve, and Create:

- Operational Efficiency
- Low Carbon Products
- Offsets
- Advanced Mobility
- Advanced Bio
- Carbon Capture Use and Storage
- BP Beta

### Q4 Delivery:

- Website launched 4 November
- Video already shown at Group Top 120, Downstream Top 30, and Target Neutral 3C event

### Next steps for 2019:

- Materials being rolled out through 2019 Downstream comms plans; potential for Downstream webcast series on AET
- Request for Group to create and maintain Carbon focused Yammer community, to which Downstream will contribute

Link to site and video here:

[https://intranet.bp.com/en\\_gb/segments/downstream/our-strategy-new/energy-transition.html](https://intranet.bp.com/en_gb/segments/downstream/our-strategy-new/energy-transition.html)

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# BP Carbon Advisory Panel – Products & BPTN



- **Advice and Guidance:** To contribute, review and monitor low carbon customer propositions with a focus on environmental rigour, marketing, messaging and alignment with BP's broader 'Energy Transition' strategy and ambition
- **Scope** of advice is aligned to BP's carbon framework "Reducing emissions, Improving low carbon products and Creating new low carbon businesses", and more specifically, advising on BP Downstream's role in this framework including:
  - 1) BP Target Neutral; 2) Low carbon products & services portfolio; 3) Advanced Bio-Products; 4) Advanced Mobility Unit, 5) BP Beta and 6) Advancing Low Carbon accreditation programme
- **Reporting:** Annual meeting with SET to provide feedback in 3Q, ahead of SR.
- **Panel members:** 4-5 – 2 news members to be appointed
- **BP Panel Representatives:** 2019 - Richard Harding, Peter Mather, Duncan Blake and SET member TBC. Andrea Abrahams - convenor.

bp targetneutral

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## A look back on 2018 Objectives and Delivery

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- **Strategy:** Supported development of AET strategy, launch and Inputs into ALC Accreditation Program Launch
- **Programme Management:** Developed a governance process, framework and programme management process to drive AET activity in the Downstream.
- **Targets:** Clarified commitment to deliver Group Target - set a downstream specific SER target, underpinned by the BIPS
- **Reporting:** Stress tested SER reporting to ensure fit-for-purpose for Group reporting
- **GHG Forecasting:** Embedded reporting and forecasting of operational emissions and SERS into the Strategy Refresh and Annual Plan processes
- **Enabling Capex for SER projects:** Created new 'low carbon' strategic pillar in capex investment template for refining to ensure visibility on future SER projects
- **RIC-Improving Products:** Created qualitative definition and initial database of all low carbon products in the downstream
- **RIC/Net Zero:** Contributed to discussions of offsetting options for the business, as well as Zero Net Growth baseline calculations
- **Communications:** Developed communication materials (video and intranet site) to explain consistently how the downstream is delivering the ambitions set out by the RIC framework – live November
- **External Advisory Board:** Expanded role of Target Neutral advisory panel to low carbon customer offers

## Activities: D-AET Carbon Unit 2019 focus

<b>Reduce</b>	<ol style="list-style-type: none"> <li>1. SER reporting: Agree reporting process and implement</li> <li>2. SER Pipeline: Develop pipeline of new SER projects and include in Capex allocation process</li> <li>3. GHG Outlook: Implement with Finance/Strat Managers process to develop 5 year GHG outlook</li> <li>4. Net Zero: Work with Group to land new methodology and relevance for Segments.</li> </ol>
<b>Improve</b>	<ol style="list-style-type: none"> <li>1. Low Carbon Products work stream (X-Downstream): Lead for Group. Resource, scope, stock take, set ambition, definitions, measurements. Propose consultancy project to define Group targets.</li> <li>2. Lower Carbon Customer Offers (offsets work stream): Lead for Group a large scale offsetting opportunity for consumers. Apply to NEF for funding</li> <li>3. Determine priority for measuring carbon impact of all D-AET workstreams for 2019</li> </ol>
<b>Drive D-AET agenda</b>	<ol style="list-style-type: none"> <li>1. People: 1 new FTE – GHG Product accountant</li> <li>2. Staff D-AET Programme: Work with HR and Group to develop and implement for Downstream</li> <li>3. Reporting &amp; tracking processes: standardise reporting and milestone tracking across all 7 D-AET workstreams.</li> </ol>
<b>Governance &amp; Engagement</b>	<ol style="list-style-type: none"> <li>1. D-AET Steering Committee – run steerco</li> <li>2. Group AET Steerco – report on Downstream progress; support Group strategy evolution</li> <li>3. D-AET Working Group – monthly alignment calls with each workstream, organize quarterly group calls</li> <li>4. Downstream Communication Plan – Leverage Video and Website, Develop Webcast Series</li> <li>5. SET – keep informed on progress</li> <li>6. External Advisory Board: set up processes for newly constituted BP Carbon Advisory Panel</li> <li>7. Knowledge Management: Set up SharePoint/ Teams to improve ways-of-working</li> <li>8. Support Group Carbon Flexibility and Agility Agenda</li> </ol>

# Advancing Low Carbon accreditation programme 2019

Update | December 2019



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## ALC programme update

- Update since October
- Final shortlist of ALC 2019 activities to go through to external assurance
- Timelines & next steps

### Request for the Carbon Steering Group

Review and agree final shortlist of ALC 2019 activities to go through to external assurance:

- Selected examples to note in slides 6 & 7
- Full list of submissions available in the attached Excel spreadsheet – please raise by exception any which require further discussion at the meeting



## ALC 2019: December update on progress

- Feedback from October carbon steering group review has been reflected
- External review of programme carried out by Target Neutral Panel. Key points raised:
  - Overall feedback very positive – didn't recommend any significant changes.
  - Impact of programme on driving action with BP seen as more important than emissions saved at this stage. Interested in metrics on staff engagement/business uptake.
  - Support for early stage low carbon technologies and ventures being included within the programme
- Internal review process of all 2019 ALC applications now complete.
- **All existing 34\*** ALC accredited activities will be put forward to Deloitte on 15 December for external assurance.
- **19 new** activities are also recommended to go through to Deloitte stage.
- External assurance will take place until end February.
- Launch of year 2 will align with publication of the Sustainability Report (currently 10 April).

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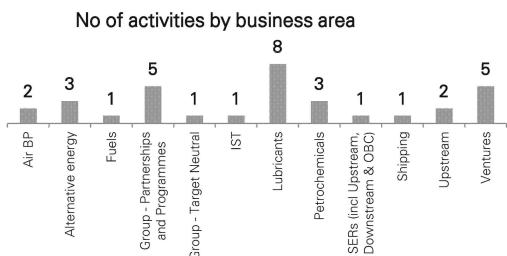
\*Biopower and Biofuels are being split into 2 accreditations this year – hence number has gone up from 33 to 34

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2018

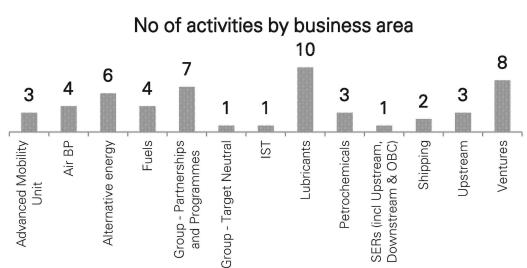
33 accredited activities



>50% increase in accreditations

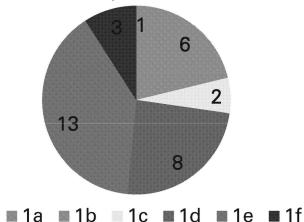
2019

~53 accredited activities  
(incl. 19 "new")



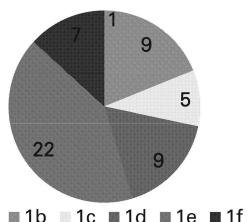
Business area coverage continues to grow

No of activities per carbon outcome



Similar spread across carbon outcomes in 2018-19

No of activities per carbon outcome



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1a - reducing greenhouse gas emissions  
1b - producing less carbon than competitor/industry benchmarks  
1c - providing renewable energy

1d - offsetting carbon produced  
1e - furthering research and technology to advance low carbon  
1f - enabling BP or 3rd parties to meet their low carbon objectives

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## Recommended 2019 ALC activities\*

### Reduce

Princeton CMI  
Harvard Partnership  
Tufts Partnership  
CO<sub>2</sub> Capture Project  
New oil tankers  
Sustainable Emission Reduction Programme  
Climate and Clean Air Coalition  
World Bank's GGFR and Zero Routine Flaring by 2030

### Improve

2018 accredited activities – to be re-accredited in 2019

BP Biojet  
Intra plane fuelling services  
Butamax  
BP and Aral fuel card (fleet)  
Castrol Professional  
Castrol Vecton  
Castrol GTX Eco  
Castrol Optigear  
Target Neutral Programme  
Castrol Edge Biosynthetic & Magnatec  
Castrol Low Viscosity  
Lubricants  
Nexcel  
PTAir (Geel)  
PTAir Neutral  
Anyhydride

Wind energy  
Biofuels  
Biopower  
Tricoya Technologies  
Solidia Technologies  
Onyx InSights  
Carbonfree  
EKO Carbon Fund  
Global Environmental Products Programme  
Oil and Gas Climate Initiative

### Create

Texas CCUS Academic Partnership  
LNG ships  
Oz Harvest Partnership  
Methane Guiding Principles

Carbon Neutral Franchised Workshop offer  
Low carbon offers for customers from AirBP  
Castrol Passenger Car Oil carbon neutral products  
ACTIVE technology  
Cherry Point renewable diesel  
BPMe app offsetting offer

BP Chargemaster  
Lightsource BP  
Titan/BattRE  
Fulcrum Bioenergy  
Peloton  
Lightning Systems  
Freewire  
Storedot  
Voltaware

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\* List to go through to Deloitte assurance.  
Please see spreadsheet for detail on each activity

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## 2019 ALC activities\*: selected examples

ALC activity(ies)	Summary description	Areas to note	Recommended approach
BP's Global Environmental Products (GEP) business – accredited in 2018	GEP is accredited based on investments in forestry and biogas projects which generate carbon credits. Was accredited last year.	<ul style="list-style-type: none"> <li>By far the largest BP delivered ALC activity in terms of CO2eq impact.</li> <li>Numbers will vary widely over the next few years.</li> <li>Numbers will change from 12Mte last year to ~30-Mte CO2eq this year before going down to a low 'maintenance level' from 2019 onwards (~1-5 Mte CO2eq)</li> <li>This is due to the nature of the carbon credit market where the majority of offsets are realised at the beginning of a project's investment cycle.</li> <li>This wide fluctuation in numbers from one year to the next will impact the annual ALC overall number which we report in the SR and on the ALC website.</li> </ul>	<ul style="list-style-type: none"> <li>Explain the variation from year to year in the GEP case study</li> <li>Communicate the ALC overall numbers on a cumulative rather than annual basis, i.e. <i>Since the ALC programme was launched in 2018, approx. x tonnes of CO2eq have been saved or offset by activities within the programme over the last x years.</i></li> </ul>
Active Technology - new for 2019	BP fuels with Active technology work to restore and improve the efficiency of engines (therefore less CO2 emissions). Active Technology is being considered for accreditation this year.	<ul style="list-style-type: none"> <li>BP Ultimate subject to an ongoing ASA challenge</li> <li>Methodology and which ALC category (1b or 1e) under discussion within Downstream.</li> </ul>	<ul style="list-style-type: none"> <li>Downstream internal review of methodology being completed</li> <li>If included, any communications relating to Active Technology accreditation need to be rigorously reviewed by legal.</li> </ul>
Methane guiding principles (MGP) - new for 2019	BP has played a leading role in the MGP, a set of principles drawn up by a coalition of producers, international gas bodies, NGOs and academics to develop best practices on methane emission reduction.	<ul style="list-style-type: none"> <li>The MGPs have made significant progress in many ways, doubling the membership, establishing a temporary secretariat and drafting best practices and a methane policy framework (not yet agreed). They also helped inform BP's Methane Leadership Plan.</li> <li>On the other hand, the permanent secretariat is not yet established and there is no current mechanism to assess whether the MGPs are driving action amongst members. MGP's relationship with OGCI still under discussion.</li> </ul>	<ul style="list-style-type: none"> <li>Seek steering group members advice on whether it's too early to accredit the MGPs.</li> </ul>

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\*Please see spreadsheet for detail on each activity  
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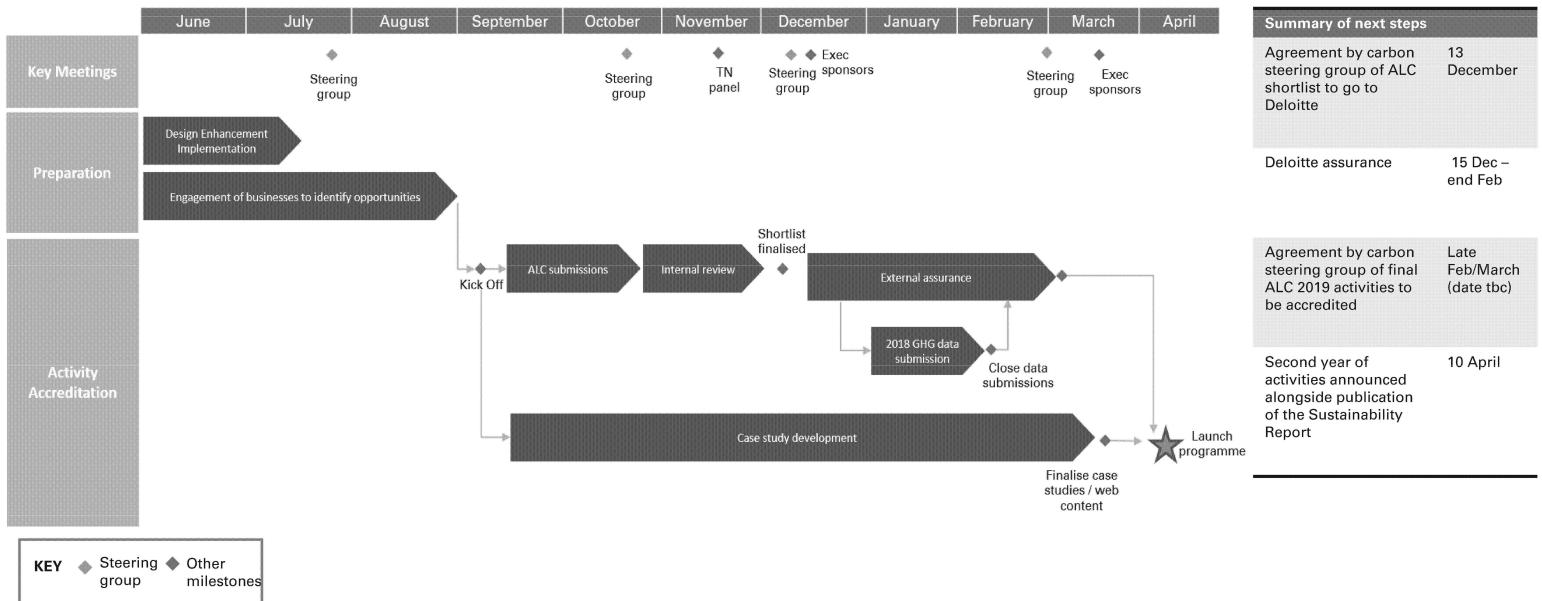


## 2019 ALC activities\*: selected examples

ALC activity(ies)	Summary description	Areas to note	Recommended approach
BPMe app carbon offsetting offer - new for 2019	This provides the users an opportunity to offset emissions through BP Target Neutral using the BPMe app (an app customers can use to pay for fuel).	<ul style="list-style-type: none"> <li>This year, there won't be any actual offset data, as it's done on an annual basis and the first year's data won't be available until next year.</li> <li>Therefore, the accreditation would be based only on the technology having been developed for customers to use to make low carbon choices.</li> </ul>	<ul style="list-style-type: none"> <li>Accredit under our 'furthering low carbon research and technology' category in 2019 and move to a quantitative category from 2020 onwards.</li> </ul>
Number of low carbon ventures continue to grow	Several new low carbon ventures to be accredited this year - in addition to the existing 5 low carbon ventures from last year. Most of these are accredited under our 'furthering low carbon research and technology' category.	<ul style="list-style-type: none"> <li>A number of low carbon ventures included without quantitative savings yet.</li> <li>These are all up and running businesses that are operational, working on research, developing technology, delivering pilots, furthering the understanding of low carbon etc.</li> <li>In time as they grow we will report a number against these accreditations.</li> <li>Target Neutral Panel strongly support inclusion of early stage technology ventures</li> </ul>	<ul style="list-style-type: none"> <li>Continue to seek to accredit these ventures under the 'furthering low carbon research and technology' category, provided they can produce evidence of how their activity advances low carbon.</li> <li>Seek to move them into one of the quantitative categories as they develop further – this is already the case for Carbonfree, EKO and Onyx Insights.</li> </ul>



# ALC 2019 cycle timescales



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# Climate-related risks

Carbon Steering Group

Draft for discussion

13 December 2018

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## Objectives

One of the proposed roles of the Group Carbon Steering meeting is to review and endorse the Group carbon and climate-related risk framework

The purpose of this pre-read is to:

- Summarise the BP's Risk Management System and three lines of defence model
- Seek input on the approach outlined and discuss next steps

**"Climate change and the transition to a lower carbon economy** – policy, legal, regulatory, technology and market change related to the issue of climate change could increase costs, reduce demand for our products, reduce revenue and limit certain growth opportunities.

Changes in laws, regulations, policies, obligations, social attitudes and customer preferences relating to the transition to a lower carbon economy could have a cost impact on our business, including increasing compliance and litigation costs, and could impact our strategy. Such changes could lead to constraints on production and supply and access to new reserves. Technological improvements or innovations that support the transition to a lower carbon economy, and customer preferences or regulatory incentives related to such changes that alter fuel or power choices, such as towards low emission energy sources, could impact demand for oil and gas. Depending on the nature and speed of any such changes and our response, this could adversely affect the demand for our products, investor sentiment, our financial performance and our competitiveness"

*Source: 2017 Annual Report and Accounts – Risk Factors*

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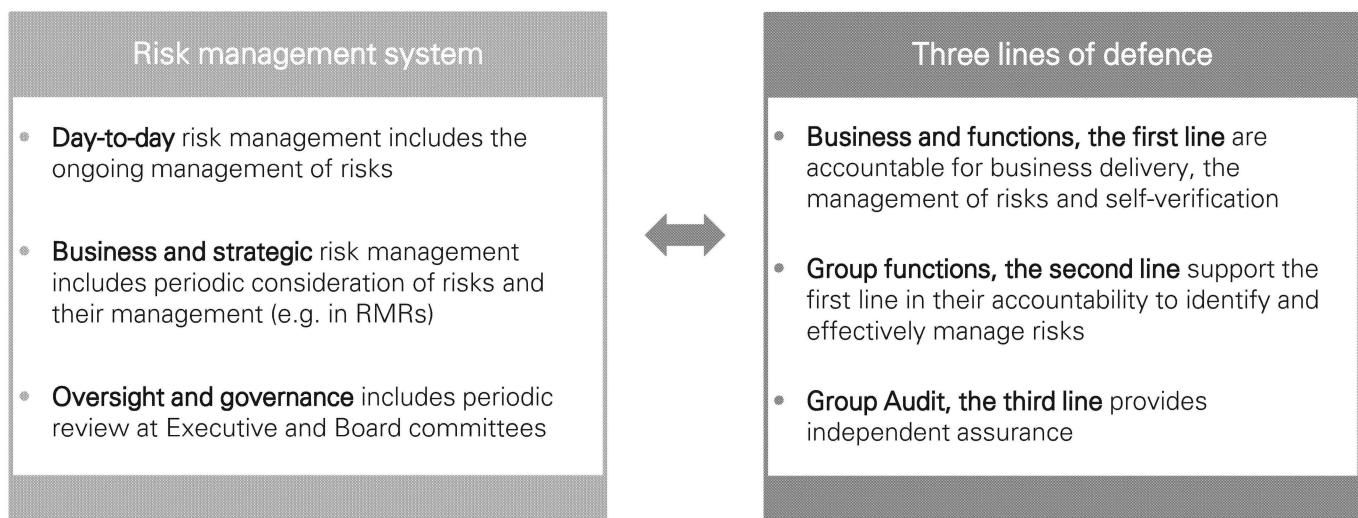
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## Climate-related risk management

Climate-related risks are managed as part of BP's risk management system



The first line of defence is accountable for managing climate-related risks

For particular areas of expertise, the first line of defence receives second line of defence support (e.g. S&OR)

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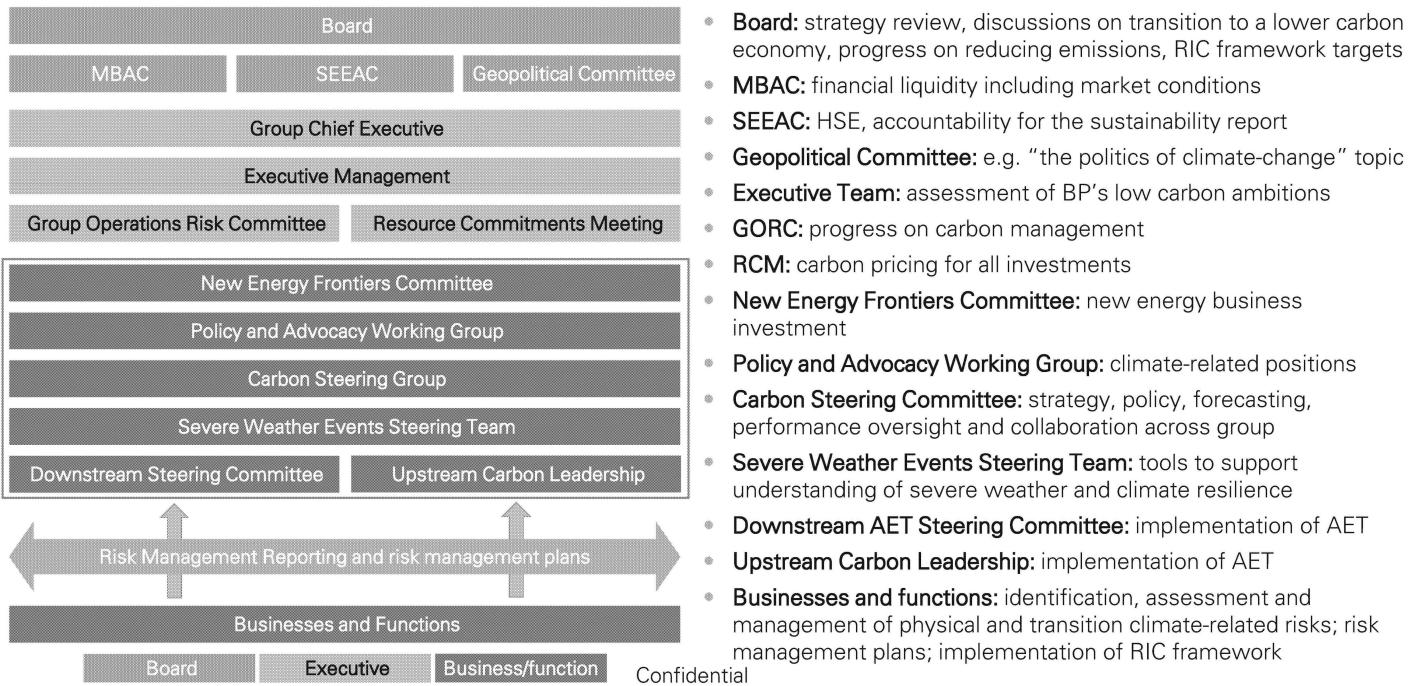
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## Governance structures – illustrative

Structures and example activities to help support review of climate-related risks and opportunities:



Board      Executive      Business/function      Confidential

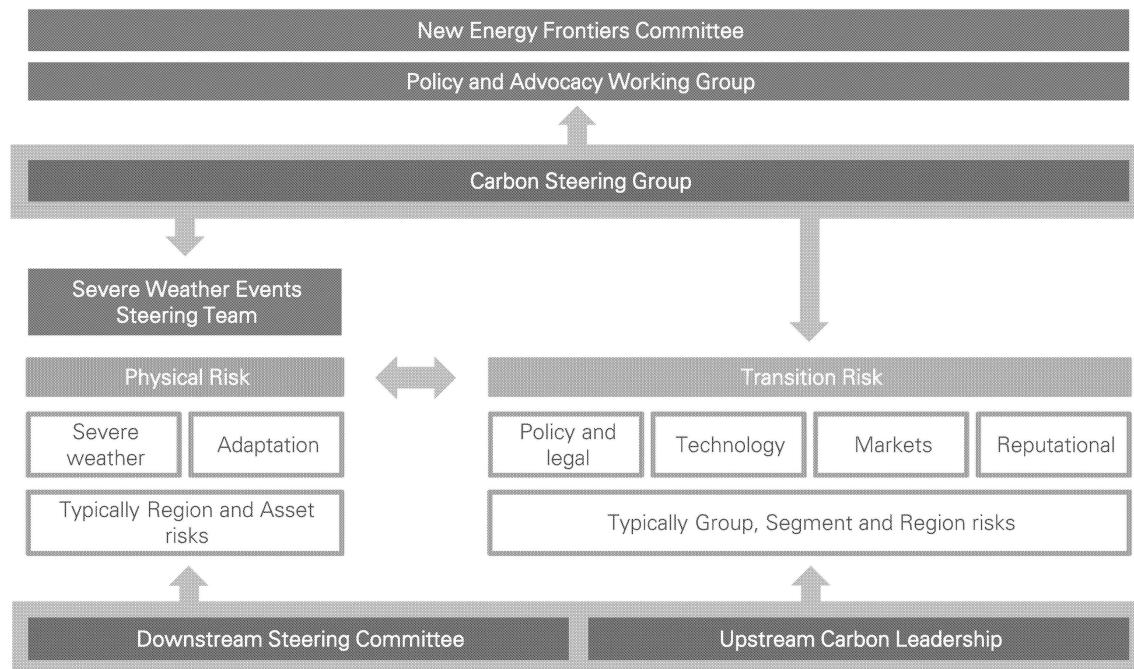
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## Business/function governance structures – illustrative

What are the key roles and interfaces for the management and oversight of climate-related risks?



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## Management of physical and transition risks

- **Physical risks** – typically managed within region or at an asset level
- **Transition risks** – typically managed at Segment or Group level, unless certain risks are specific to regions or assets

✓ generally applies  
⊕ applies where significant/relevant

Climate-related risk types	Examples				Group	Segment	Region	Asset
Timing	<b>Physical risks</b>							
	Severe weather	“event driven” risks such as “cyclones, hurricanes and floods and potential changes to the frequency and severity of those events”	⊕	⊕	✓	✓		
	Adaptation	“longer-term shifts in climate patterns” that may result in changes to physical parameters such as “elevated temperatures or sea level rise”	⊕	⊕	✓	✓		
	<b>Transition risks</b>							
	Policy and legal	exposure to litigation; and enhanced emissions reporting obligations	✓	✓	✓	✓		
	Technology	unsuccessful investment in new technologies; and substitution of existing products and services with lower emissions options	✓	✓	✓	⊕		
	Markets	changing customer behaviour	✓	✓	⊕	⊕		
	Reputational	shift in consumer preferences; and negative stakeholder feedback	✓	✓	⊕	⊕		
	Internal and external							
	Pace							

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## Transition risks reported in 2018 RMRs

Group Risk	Upstream	Downstream	Functions
Access, renewal and reserves	1	-	-
Competitor action	-	-	1
Geopolitical	-	-	1
Regulatory/legislative change	-	5	3
Technology developments (internal/external)	-	1	3

### Key themes\*

- **Upstream:** failure to meet low carbon expectations of shareholders
- **Downstream:** market erosion due to technology developments and changes in societal expectations; regulation and legislation
- **Other businesses and functions:** sustainability of BP's businesses; strategic alignment of businesses and technology; disruptive technology breakthrough; pace of policy reforms; regulation and legislation

\* A further 15 Key Risks included severe weather as potential causes of the risk event

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## Three lines of defence and climate-related risks – examples

### Third line

(Group Audit)

- *Independent audit*

Group Audit

---

### Second line

(Group functions)

- *Define requirements*
- *Provide expertise*
- *Build capability*
- *Conduct monitoring*

S&OR

Group  
Technology

Group Strategic  
Planning

Investor relations

Group  
Communications

Legal

---

### First line

(Businesses and  
functions)

- *Business delivery*
- *Manage risks*
- *Self-verification*

Upstream

*e.g. GOO, GWO, GPO*

Downstream

*e.g. North America  
Fuels, Air BP, Lubricants*

Alternative Energy

*e.g. Biofuels, Solar,  
Wind*

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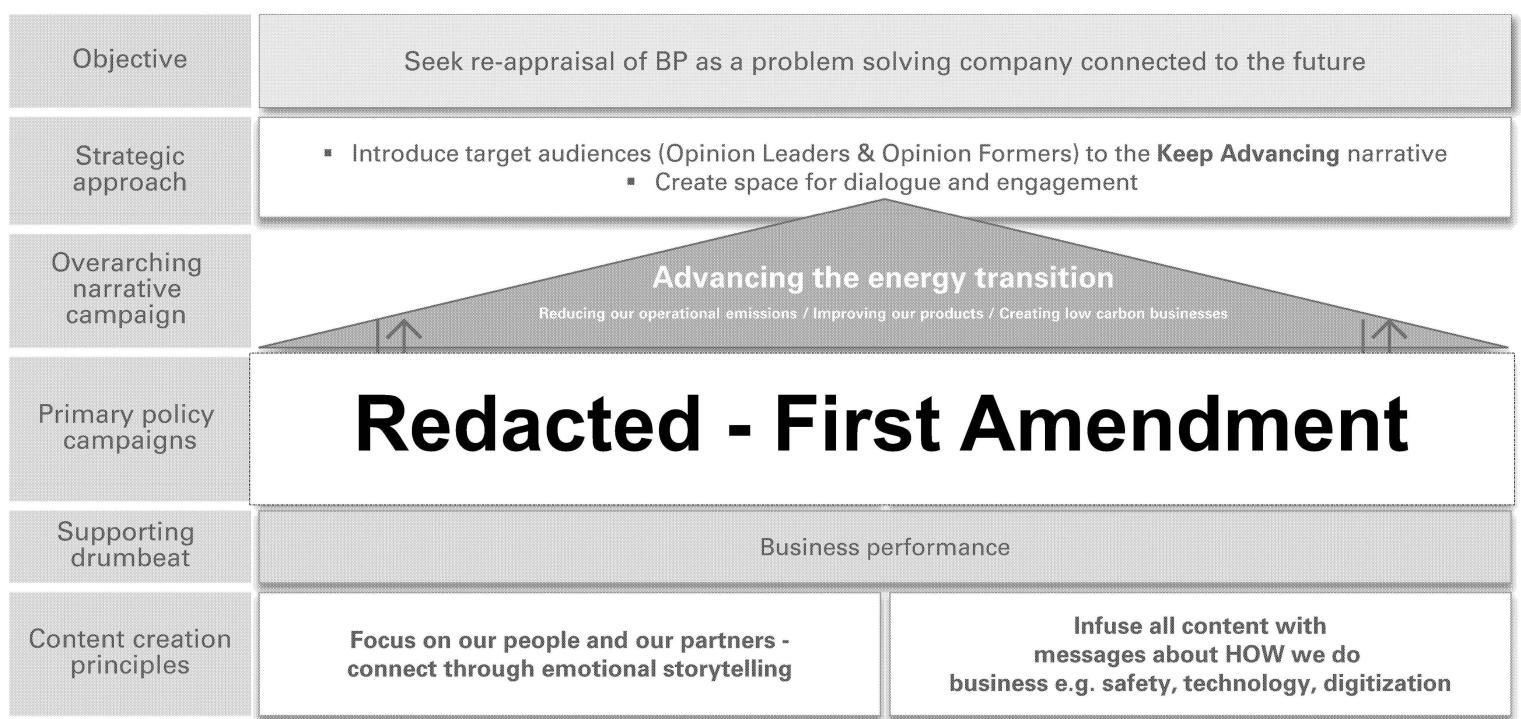
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Group C&EA  
2019 strategic planning

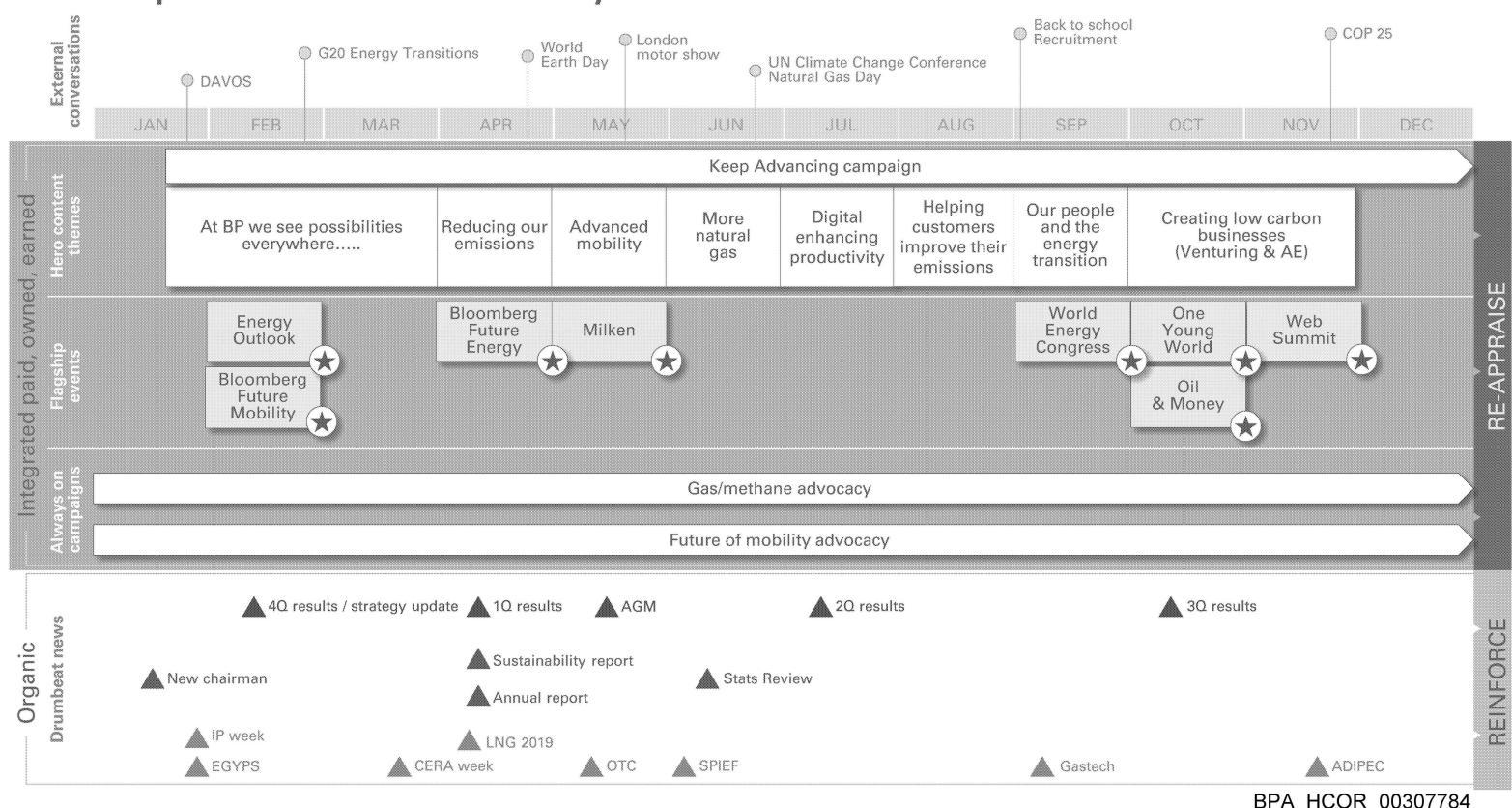


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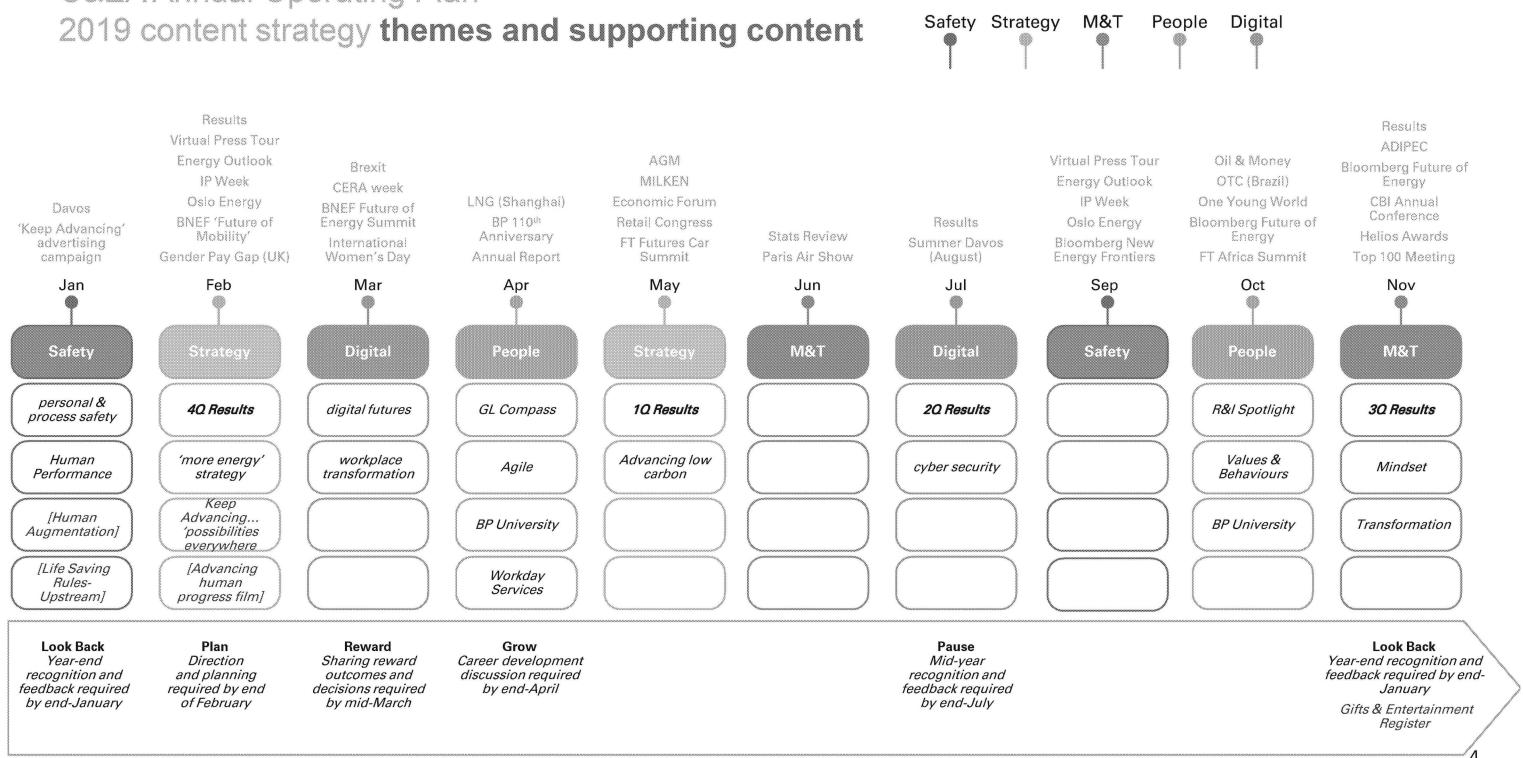
## 2019 – strategy on a page



## 2019 plan – indicative only



## C&EA Annual Operating Plan 2019 content strategy **themes and supporting content**



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## Keep Advancing campaign update

- New 'possibilities everywhere' global advertising campaign on track for January launch
- Goal – seek re-appraisal of BP as a company connected to the future
- Idea – show how we are working across the firm, often with innovative companies, to help the world grow and progress
- Multiple television adverts to bring stories to life
- Warm and human tone of voice
- Targeting opinion leaders

