1. The carbon majors and climate pledges
2. Credible commitments vs greenwashing
3. Making a credible commitment
4. Justifying a credible commitment
5. Conclusion
THE CARBON MAJORS & CLIMATE PLEDGES
The ‘Carbon Majors’

Over half of global industrial emissions since human-induced climate change was officially recognized can be traced to just 25 corporate and state producing entities.

Source: Climate Accountability Institute, 
Companies are increasingly making climate-related commitments

Responding to increased shareholder interest

In 2019 the board recommended that shareholders support a special resolution requisitioned by Climate Action 100+ (CA100+) on climate change disclosures. The CA100+ resolution, which requires BP to respond to a number of different elements, passed with more than 99% of the vote. These responses are contained throughout this annual report.

The CA100+ resolution, which includes safeguards such as for commercially confidential and competitively sensitive information, is on page 337. Key terms related to this resolution response are indicated with ★ and defined in the glossary on page 337. These should be reviewed with the following information.

<table>
<thead>
<tr>
<th>Element of the CA100+ resolution</th>
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</tr>
</tbody>
</table>

Our ambition is to be a net zero company by 2050 or sooner and to help the world get to net zero.
But how real are these commitments?

Big fossil fuel groups all failing climate goals, study shows

No major oil, gas or coal company aligned with Paris accord target of limiting temperature rise to below 2C.

The problem with zero carbon pledges

Appraisals of such pledges are opaque in almost every company's recent releases and annual reports — thus some are a lot more real than others.

BP faces ‘greenwashing’ complaint over advertising

Lawyers begin case against potentially misleading impression on low-carbon credentials.
Companies have made far-reaching "commitments" to lower emissions

We can evaluate these commitments along two dimensions:

- Ambition: how comprehensively does the firm envisage transitioning to low-carbon operations? (Commonly discussed; important)
- Credibility: how credible are the firm’s commitments? (Rarely considered; key)

Why does the “credibility” of climate commitments matter?

- Investors and competitors rely on them (e.g. feedback effects in transition)
- Public policy relies (should rely) on them (e.g. ‘green’ conditions for COVID bailouts)
- Meaningless commitments paper over a reality of inaction or worse (‘greenwashing’)

Climate commitments
Figure 1.4 Sectoral activity of large energy-related companies with announced pledges to reach net-zero emissions by 2050

[Graph showing sectoral activity with bars for Heating and cooling, Cement, Road vehicles, Power, Technology, Steel, Passenger airlines, Aircraft, Shipping operations, Oil and gas, Transport logistics, Construction.]

CREDIBLE COMMITMENTS VS GREENWASHING?
Why make a climate pledge?

1. Business Case
   - As cost of carbon emissions rises, demand for fossil fuel products ↓. Transition is costly: anticipate change in carbon emissions cost.
   - BUT: short-run profits from carbon can be reinvested in transition.
   - Key factor: expected rate of change of carbon price.

2. Investor Pressure
   - Changing investor profile: support for pledges even if diverge from clear business case.
   - ESG funds – nonfinancial preferences; Big Three—systemic externalities; “Halo investors”?
   - Key factor: makeup of shareholder body
Why make a climate pledge?

3. Greenwashing
   - Pledge seeks to create appearance of change > reality
   - Not incompatible with reasons 1. and 2.
Firm announces climate pledge at $t = 0$.

At $t = 1, 2, ..., n$, must decide between ‘brown’ profits $b$ (carbon non-reduction) and ‘green’ profits $g$ (carbon reduction)

Time inconsistency of support for climate pledges:

1. Business case: contingent on change in carbon price, which is volatile (plausible that $b > g$ at $t = n$).
2. Investor pressure: contingent on makeup of shareholder meeting, which is volatile (if $b > g$ at $t = n$, cannot count on shareholders to push managers to stick to $g$)
3. [Greenwashing: not time inconsistent – rather, firm never really intended to follow through, even at $t = 0$.]
The credibility problem

Standard corporate governance mechanisms
- Executive compensation tied to stock price: pushes for profit maximisation

Shareholder activism
- Share ownership structure may change over time
- ESG investors themselves may face agency problems / engage in greenwashing

⇒ Key question: could firms make **stronger** commitments? (How? Why?)
MAKING CLIMATE COMMITMENTS CREDIBLE: FIRM-LEVEL MEASURES
1. Executive compensation

- To what extent does firm build meeting climate goals into executive compensation arrangements?
  - So far: it's rare – but increasingly less so (a 'trend' of the 2020 proxy season)
- Not so much issue of time horizon (cf European Commission Sustainability Report, 2020); rather one of KPIs.
Exxon
- CEO compensation is 10% salary, 10% in-year bonus, 80% long-term incentives
- Long-term incentives are restricted stock with 10-year vesting period
- Performance criteria are all financial

BP
- CEO compensation is 20% salary & pension, 20% in-year bonus, 60% long-term incentives
- Long-term incentives are 3-year program of performance-based restricted stock awards
- Bonus/LTIP KPIs
  - 2017-20: ~ 10% carbon reduction; 70-80% financial
  - 2020-23: 20-30% carbon reduction, 50-70% financial
2. Governance

- Board-level Committee overseeing delivery of, and reporting on, climate commitments
- Akin to role of Compliance Committee (Armour et al, 2020)
  - Reporting channel *independent of CEO*
  - Staffed by independent directors with relevant environmental expertise / reputations
    - Staking credibility on delivery of climate commitments
- Power?
  - Input to executive nomination? Compensation? Assessment of carbon-related KPIs?
  - Investor report (disclosures)
  - Decisions relating to evolution/change in carbon commitments ('flex mechanism')
Climate governance: management of climate-related matters in 2019

Chief executive and the executive team

Senior leadership

Carbon steering group
Focuses on strategy, policy, performance oversight and collaboration relating to carbon management activities across the group. Chaired by our vice president of carbon management.

Upstream carbon steering committee
Focuses on the delivery of lower carbon plans in the Upstream. Chaired by our chief operating officer of production, transformation and carbon, Upstream.

Downstream advancing the energy transition committee
Develops and drives the implementation of advancing the energy transition in the Downstream. Chaired by our head of technology, Downstream and chief scientist.

Underpinned by systems, processes and risk management.

A purely executive function
BP board

Audit committee
HPGR* monitored
- Financial liquidity.
- Cyber security.
- Compliance with business regulations.
- Trading compliance and control.
Responsibilities
- Reviewing financial disclosures.
- Monitoring compliance.
- Reviewing audit effectiveness, including internal controls and risk management.
- Advice on external auditor.
See page 91.

Safety, environment and security assurance committee
HPGR monitored
- Monitor marine, well and pipeline incidents.
- Oversee effective controls around releases at facilities and/or explosion.
- Review and advise on major security incident.
- Cyber security.
Responsibilities
- Review safety and operational risk.
- Monitor security developments.
- Review environmental matters.
See page 96.

Geopolitical committee
HPGR monitored
- Geopolitical.
Responsibilities
- Monitor social, economic and political events around the world.
- Identify major and correlated geopolitical risks.
- Consider broader political policy developments.
See page 98.

Remuneration committee
Responsibilities
- Recommend remuneration principles and policy.
- Maintain dialogue with shareholders and workforce on remuneration issues.
- Monitor alignment of remuneration and incentives for all employees.
- Report on implementation of remuneration policy.
See page 101.

Nomination and governance committee
Responsibilities
- Review composition of board.
- Review outside commitments of the NEDs.
- Maintain strong pipeline.
- Review developments in corporate governance, law and ESG.
See page 90.

Chairman’s committee
Responsibilities
- Evaluate performance and effectiveness of chief executive officer.
- Review the structure and effectiveness of the business organization.
- Review system of executive development and succession.
See page 99.
During 2019 the committee has continued to focus on working with executive management to drive safe and reliable operations. As part of the committee’s review of the executives’ management of the highest priority non-financial group risks assigned to SESAC we provide constructive challenge and oversight. The risks under our remit remained the same as for 2018: marine, wells, pipelines, explosion or release at facilities, major security incidents and cyber security in the process control network. The committee receives reports on each of these risks and monitors their management and mitigation.

In 2019 the committee reviewed the BP Sustainability Report 2018. It also reviewed work practices in BP in relation to and following publication of the company’s Modern Slavery Act (MSA) statement in 2019. The committee will continue to review progress in developing and embedding practices to mitigate the risk of modern slavery and related human rights.

In March, members of the committee visited the shipping function as one of the new LNG vessels went into service from the building yard in Busan, South Korea. This afforded the committee time with the crew on board the vessel, employees in the office and with contractors in the shipyard. See page 89 for more details. The level of access into the operations on such visits gives the directors first-hand, direct insight. This framework provides an opportunity for meaningful and open dialogue with the local site teams, allowing the committee to better fulfil its obligations.
3. Capital structure

Recall problem of heterogeneous shareholder preferences regarding green actions by the firm (ESG vs classical $$)

- Can the firm *endogenise* a change of preference by classical $$ shareholders?

- Eg. a promise to take action harmful to the firm, conditional on failure to meet a specified climate target.

⇒ A “green pill”
‘Green Pills’ – *ex ante* effects

- Green Pill: bonding mechanism to climate commitment
  - Firm must make a payment if reneges on commitment
  - Makes it financially unappealing *ex post* for firm to renege on commitment
- Aligns investors’ interests around meeting commitment
  - ESG investors want firm to meet commitment anyway
  - Non-ESG investors want firm to meet commitment so as to avoid penalty payout
- Lowers coordination costs of shareholder action
- Mis-disclosure relevant to meeting commitments likely now material
Green Pill Example

- At $t = 0$, firm commits to green outcomes by $t = 2$
- At $t = 1$, firm must choose either
  - Deliver on green commitment ("Green") : NPV = $g$
  - Renege on green commitment ("Brown") : NPV = $b$
  - If adopted Pill at $t = 0$, must also make payment $p$ if pursues Brown
- At $t = 1$
  - If $g > b$ : no commitment problem
  - If $g < b$ : Green Pill will harden commitment
  - Firm will pursue Green if $g < (b - p)$
“Green Bonds” are not Green Pills

Most “Green Bonds” are funding raised to finance sustainability-related projects

May or may not contain covenants related to project completion

If no completion covenants – no commitment
Enel successfully launches a 500 million pounds sterling “Sustainability-Linked bond”, the first of its kind on the sterling market

In line with the Framework, the bond is linked to the Key Performance Indicator (KPI) of “Renewable Installed Capacity Percentage” (i.e., the percentage of consolidated renewable installed capacity on total consolidated installed capacity) and to the related achievement of a Sustainability Performance Target (“SPT”) equal to or greater than 60% by December 31st, 2022 (as of June 30th, 2020, the figure was equal to 51.9%). To ensure the transparency of the results, the achievement of the target will be certified by a specific assurance report issued by an auditor engaged for this purpose.

The interest rate will remain unchanged to maturity subject to achievement of the SPT indicated above as of December 31st, 2022. If the target is not achieved, a step-up mechanism will be applied, increasing the rate by 25 bps as of the first interest period subsequent to the publication of the assurance report of the auditor.
Who gets the payment?

- If Pill payment goes to investors, could undermine commitment ex post
  - Investor strategic behaviour: could organise activist campaign to push for “Brown” strategy in order to receive payday
- Whether this is a risk depends on costs of activism relative to size of payout (not a problem for ENEL)
### Green Pill: *ex post* investor incentives

<table>
<thead>
<tr>
<th>Version #1: Pill pays out to Investors</th>
<th>Version #2: Pill pays out to Third Party</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Investors’ Actions</strong></td>
<td><strong>Investors’ Actions</strong></td>
</tr>
<tr>
<td>Manager’s Decision</td>
<td>Passive</td>
</tr>
<tr>
<td></td>
<td>Activist</td>
</tr>
<tr>
<td>Green</td>
<td>(2, 2)</td>
</tr>
<tr>
<td></td>
<td>(-6, 4)</td>
</tr>
<tr>
<td>Brown</td>
<td>(-5, 5)</td>
</tr>
<tr>
<td></td>
<td>(-6, 4)</td>
</tr>
<tr>
<td><strong>Manager’s Decision</strong></td>
<td>Passive</td>
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</tr>
<tr>
<td></td>
<td>(-6, -6)</td>
</tr>
<tr>
<td>Brown</td>
<td>(-5, -5)</td>
</tr>
<tr>
<td></td>
<td>(-6, -6)</td>
</tr>
</tbody>
</table>

Assume: Green NPV = 2, Brown NPV = 5, Pill = 10
Costs of shareholder activism = 1
Payoffs (Firm, Investors)
Green Pills – *ex post* effects

- **Who can receive payment?**
  - If it is investors, then problems of empty voting may emerge (payday if firm fails to deliver green promises)
  - Payment to third party *without* voting influence on firm e.g.
    - Environmental charity
    - Non-voting securities (with eligibility condition of not holding voting shares—hard to enforce)

- **How will trigger be certified?**
  - Mechanism must be set out *ex ante* to avoid *ex post* dispute
How would a firm put a Green Pill in place?

- Fiduciary duties?
  - Unlawful fettering of fiduciary discretion? NB size of Pill calibrates degree of commitment – option for *ex post* “efficient breach”
  - Could add in a “fiduciary out” (perhaps via Climate Committee)-- although this weakens commitment
  - Board *bona fide* belief in interests of company aligned with commitment
  - Goodwill among investors and consumers
  - *Feedback effects* of commitment

- Shareholder activism?
  - Aligned activist coalition – seize moment to “lock in” commitment
Delivering a commitment package

- Firm should reflect on interaction b/w commitment mechanisms
- At the core: a well-defined climate commitment with KPIs
- Link CEO pay and green pill to meeting KPIs
  - Thereby also tying CEO pay contingencies to green pill contingencies
  - Embed these within Climate Committee’s jurisdiction
- Use Climate Committee as a “flex” solution for *in extremis* problems?
  - Green pill contingencies (fiduciary outs etc)
  - Evolution of CEO pay structures
  => addressing incomplete contracting problem
JUSTIFYING A CREDIBLE COMMITMENT
Feedback effects: carbon pricing

**Exxon**
- History of lobbying against carbon-related regulation
- No commitment to stop doing so
- Delayed raising price of carbon

**BP**
- Undertaking “to work with policymakers around the world to deliver low-carbon regulation”
- Would speed up raising price of carbon
Firms decide whether they will pursue “Green” or “Brown”. Firms lobby in support of chosen strategy (high or low carbon price, respectively). Coordinated lobbying is profitable. Conflicting lobbying reduces expected profits; effect is asymmetrically hard on Green because of switching costs.
Lobbying coordination game

$t = 0$
Firms announce strategies
Cheap talk or binding commitment?

$t = 1$
Firms implement strategies
Stick or switch?

$t = 2$
Payoffs realised
Lobbying coordination game (with credible commitment by Firm 2)

<table>
<thead>
<tr>
<th>Firm 1</th>
<th>Firm 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Brown</td>
<td>Brown</td>
</tr>
<tr>
<td></td>
<td>(0.5, 0.5)</td>
</tr>
<tr>
<td>Green</td>
<td>(-1, -1)</td>
</tr>
</tbody>
</table>
Summary of main conclusions and implications

- Corporate climate commitments should be ambitious but also credible
  - Lack of credible commitments imperils transition, risks greenwashing
- Traditional governance approaches do not create sufficient credibility
  - Standard corporate governance is climate-agnostic at best
  - Some investors may support climate commitments (e.g. universal owners, ESG investors, 'halo investors'), BUT investor base may be fluid
- Commitments can be made more credible through appropriate mechanisms
  - E.g. climate committee, climate targets included in executive compensation
  - Endogenise interest in climate commitments through capital structure: green (sustainability linked) bonds, “green pills”
- Credible climate commitments can help to push competitors to switch
  - A justification consistent with fiduciary duties