THE DIVESTMENT CAMPAIGN, ESG RATINGS, AND CCUS

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Outline

• Review and assessment of the impact of the Fossil Fuel Divestment Campaign
  • History
  • Status
  • Impact
• Summary of recent GCCSI research on the link between CCS and ESG ratings
• Rising Risk of Climate Litigation
• Conclusions.
2009: Meinshausen et al,
Carbon budget = 886Gt CO2
(80% probability)
Total proven reserves of fossil fuels = 2800Gt
Divestment Campaign Evolution

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2011: Carbon Tracker
Updated Meinshausen’s calculation
Introduced “Carbon Bubble”
Divestment Campaign Evolution

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2011: Carbon Tracker Updated Meinshausen’s calculation Introduced “Carbon Bubble”

2012: Bill McKibben, ‘Global warming’s terrifying new math’, Rolling Stone magazine Declares fossil fuel industry “Public Enemy Number One”
In 2012, 350.org and Bill McKibben launched the Fossil Free campaign calling on investors to “immediately freeze any new investment in fossil fuel companies, and divest from direct ownership and any commingled funds that include fossil fuel public equities and corporate bonds within 5 years.”
Potential Impacts of a Divestment Campaign

Direct Impacts
- Reduced demand for shares
- Reduced availability of debt
- Increased cost of debt/equity

Indirect Impacts
- Stigmatisation
- Erosion of political capital and social license to operate
- Adverse policy and regulatory environment
- Increased difficulty recruiting/retaining talent
- Increased risk perception & Price/Earnings ratio compression
- Increased uncertainty, reduced expectation of future profits
- Increased difficulty accessing resources/land
- Demand destruction for product

• Decline in share price
• Reduced ability to finance new capital expenditure due to lack or cost of debt finance or high discount rate
• Inability to continue as a going concern due to lack of working capital

Source: Adapted from Ansar, A. Caldecott, B. & Tilbury, J, 2013, Stranded assets and the fossil fuel divestment campaign: what does divestment mean for the valuation of fossil fuel assets?, Smith School of Enterprise and the Environment, Stranded Assets Program, University of Oxford
As of 28 August 2019, 1116 institutions have committed to divesting (full or partial) fossil fuel assets.

Source: https://gofossilfree.org/divestment/commitments/
Value of Divestments: approximately $40 billion

A detailed analysis of the divestment commitments using data from March 2018:

• 796 institutions with a total of $6.5 trillion in assets under management have made full or partial divestment commitments
• Total value of divestment commitments is $36.1 billion which is approximately
  • 0.6% of the value of their assets under management
  • 0.7% of the value of all fossil fuel companies

Econometric Analysis of the 12 largest Coal Divestment Events (78% of total value of divestments) to assess the impact of specific divestment events on coal share prices

Results for coal:
• Individual divestment events produce a mixture of statistically significant negative and positive impacts on coal share prices.

Conclusion of Hansen et al.:
• There is weak evidence that divestment events have contributed to lowering some coal share prices.
• Note that the study focused on US coal equities, that have been significantly impacted by loss of market share due to low gas prices, and have less access to Asian markets.

No apparent impact on Whitehaven coal share price

Individual divestment events

December 2008 to December 2018

Source: Indexmundi.com; Yahoo.finance.com

Coal is the primary target of divestment

A detailed analysis of the divestment commitments using data from March 2018:

• Only $11.5 billion of the total of $36.1 billion in divestment commitments are for full divestment from *all fossil assets* (*i.e.* coal, oil and gas)

• *All* divestment commitments include coal

Debt finance for coal projects is being restricted

OECD Export Credit Policy on Coal fired power stations
November 2015

<table>
<thead>
<tr>
<th>PLAN UNIT SIZE (gross installed capacity)</th>
<th>Unit &gt; 500 MW</th>
<th>Unit ≥300 to 500 MW</th>
<th>Unit &lt; 300 MW</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ultra-supercritical (i.e., with a steam pressure &gt;240 bar and ≥593°C steam temperature), OR Emissions &lt; 750 g CO₂/kWh</td>
<td>12 years¹</td>
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<td>12 years¹</td>
</tr>
<tr>
<td>Supercritical (i.e., with a steam pressure &gt;221 bar and &gt;550°C steam temperature), OR Emissions between 750 and 850 g CO₂/kWh</td>
<td>Ineligible</td>
<td>10 years, and only in IDA-eligible countries¹,²,³</td>
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</tbody>
</table>

Decreasing thermal efficiency

Countries with < 90% electrification rate (e.g. India, African nations, ASEAN)

Source: OECD 2015, Sector Understanding on Export Credits For Coal-Fired Electricity Generation Projects, 27 November 2015
Debt finance for coal projects is being restricted

<table>
<thead>
<tr>
<th>Organization</th>
<th>Requirements and Actions</th>
</tr>
</thead>
<tbody>
<tr>
<td>World Bank</td>
<td>Will only support coal power projects in rare circumstances where there is no viable alternative</td>
</tr>
</tbody>
</table>
| European Bank for Reconstruction and Development  | Coal plant must:  
• Be the least carbon-intensive of the realistically available options  
• use best available techniques (BAT)…. in order to ensure that it achieves the lowest feasible carbon intensity  
• comply with the IED (EU Industrial Emissions Directive, (2010/75/EU) requirements in relation to carbon capture and storage readiness. |
| Société Générale, Crédit Agricole, BNP Paribas, Barclays, Morgan Stanley, Credit Suisse, Deutsch Bank, HSBC… | Will not lend to Abbot Point coal terminal expansion |
| Citigroup, Goldman Sachs, JPMorgan Chase…        | Will not finance Adani Carmichael project |

Société Générale, Crédit Agricole, BNP Paribas, Barclays, Morgan Stanley, Credit Suisse, Deutsch Bank, HSBC…

Citigroup, Goldman Sachs, JPMorgan Chase…
In 2018, Australian big banks total exposure
- Coal: AUD4.9B
- Renewables: AUD11.6B
Stigmatisation is the objective of the Divestment Campaign

Our theory of change is two fold:

1. Create an opportunity for millions of people to get directly involved in challenging the drivers of climate breakdown

2. Stigmatise the fossil fuel industry and reduce its power over politicians and climate policy.

Source: https://gofossilfree.org/divestment/commitments/
Divestment Campaign Conclusions:

• The divestment campaign has had no material impact on the value of fossil fuel equities since it was launched in 2012.
• The divestment campaign has not yet peaked – it is still growing.
• There are some restrictions on debt finance for coal fired power stations and coal mine developments. Renewables are attracting a growing proportion of debt finance.
• Significant indirect impacts
  • Stigmatisation of the fossil fuel industry
  • Adverse policy development/more difficult approvals & conditions
  • Upwards pressure on cost of production (offset by activity to reduce costs)
  • Increase difficulty accessing resources (land, people)
Question:

Is support for CCS part of an effective risk mitigation strategy for companies with a large carbon dioxide footprint?
Investigation of link between CCS, ESG & financial performance

- Environment Social Governance (ESG) Risk
- Ratings agencies now publishing ESG Ratings of Companies
- Use ESG to explore the business case for investing in or supporting CCS
Investigation of link between CCS, ESG & financial performance

Underlying Hypothesis

Investment in CCS → ESG Risk/Performance

Credit Ratings

WACC\(^1\)

Financial Performance

ESG Ratings

1. Weighted Average Cost of Capital
Method

• Phase One: Literature Review
• Phase Two: Interviews
  • Two Ratings Agencies
  • One Bank
  • One company with a large CO₂ footprint
Summary of Findings

• Demand for information on ESG risk and performance is growing strongly, driven by:
  • Advocacy by environmental NGOs
  • Investors concerned about ESG risks affecting return on investment
Summary of Findings

• ESG performance or risk assessment is now mainstream, and impacts credit ratings and the cost of capital.
  • Poor performance or high risk increases cost of capital
• ESG Ratings are not yet validated, or sufficiently granular to be broadly accepted as reliable predictors of the cost of capital or of future financial performance.
  • Lack of standardisation
Summary of Findings

• The underlying hypothesis was incorrect

- Investment in CCS
- Credit Ratings
- WACC$^1$
- Financial Performance
- ESG Risk/Performance
- ESG Ratings
Summary of Findings

• The impact of CO$_2$ exposure and climate risk on assessments of ESG risk is rising. Ratings agencies consider:
  • CO$_2$ footprint in upstream or downstream value chain
  • Effectiveness of climate risk mitigation strategy and governance
Summary of Findings

• Current investment in CCS is similar to investments in renewable technologies a decade ago; immaterial in financial terms and thus of no significant direct consequence to ESG Ratings. However, the expectation is that as investment in CCS grows and becomes material, its impact will follow a similar path to investments in renewable technologies, delivering a clear positive impact on ESG ratings.
Summary of Findings

• CCS investments will positively influence ESG ratings, where they are;
  • material to revenues and/or
  • deliver a material reduction in carbon dioxide emissions to which the company is exposed and/or
  • are perceived to materially mitigate the company’s long term climate risk or transition risk
Summary of Findings

• ESG investments must meet expectations of financial return.
  • Material investments in CCS must be NPV positive at the appropriate discount rate.
• Government policy and regulation play a critical role in determining the financial return for climate related ESG investments, and thus also play a critical role in how those investments are considered by ratings agencies.
## Climate Litigation is Rising

<table>
<thead>
<tr>
<th>Country</th>
<th>Number of cases since 1990</th>
</tr>
</thead>
<tbody>
<tr>
<td>USA</td>
<td>1023</td>
</tr>
<tr>
<td>Australia</td>
<td>94</td>
</tr>
<tr>
<td>European Union</td>
<td>55</td>
</tr>
<tr>
<td>United Kingdom</td>
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<tr>
<td>New Zealand</td>
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<tr>
<td>Canada</td>
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</tr>
<tr>
<td>Spain</td>
<td>13</td>
</tr>
<tr>
<td>India</td>
<td>10</td>
</tr>
<tr>
<td>France</td>
<td>6</td>
</tr>
<tr>
<td>Brazil &amp; Germany</td>
<td>5 each</td>
</tr>
<tr>
<td>Rest of the World</td>
<td>31</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>1328</strong></td>
</tr>
</tbody>
</table>

### All Case Outcomes

<table>
<thead>
<tr>
<th>Support Climate Action</th>
<th>Oppose Climate Action</th>
</tr>
</thead>
<tbody>
<tr>
<td>355</td>
<td>391</td>
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### New USA Cases Filed in 2017 & 2018

<table>
<thead>
<tr>
<th>Support Climate Action</th>
<th>Oppose Climate Action</th>
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<tr>
<td>129</td>
<td>25</td>
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<tr>
<th>Support Climate Action</th>
<th>Oppose Climate Action</th>
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<tbody>
<tr>
<td>38</td>
<td>3</td>
</tr>
</tbody>
</table>

Litigation May Impact Government Policy

Urgenda Foundation v The Netherlands
• Court of Appeal upheld a 2015 decision that the State has a duty of care to reduce greenhouse gas emissions by at least 25% relative to 1990.
• Currently being appealed in the Supreme Court

Juliana v United States
• Lawsuit asserts that the US government violated the youths' rights by encouraging and allowing activities that significantly harmed their right to life and liberty, and sought the government to adopt methods for reducing greenhouse gas emissions.
• Court is determining whether the case should be allowed to proceed to trial.
Revenue Growth Driver for Legal Sector

“...the climate mitigation bonanza. You just have to find the right plaintiff.”
Overall Conclusions

- Expectations of civil society for action to mitigate climate change are rising. Climate related risk for fossil fuel industries is expected to continue to rise.
- Direct financial impacts of the divestment campaign are currently insignificant.
- Indirect impacts of the stigmatization of fossil fuel related industries are rising, and are influencing ESG assessments and ratings by credit rating agencies.
- Perceived ESG performance/risk does impact the cost of capital and availability of debt.
- Climate litigation is growing, increasing risk to emissions intense developments.
- CCS is one of the options available to mitigate climate risk for coal.
THANK YOU

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