Annual Review 2017/18

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About Carbon Tracker

Carbon Tracker Initiative Ltd. is a mission-driven non-profit financial think tank and research house.

Established in 2011, our mission is to enable a 2°C-aligned global energy system, by reframing climate risk in the financial markets.

We produce and disseminate research that seeks to rebalance the perceived exposure of the energy sector to climate-related financial risk, examining the implications of the wind-down of the fossil fuel sector in line with a transition to 2°C.

By conceiving and popularising concepts such as the carbon bubble, unburnable carbon and the stranded assets thesis, we have helped to bridge the gap between climate science and policy and the financial markets.
Timeline

2007

The concept of ‘unburnable carbon’ is published for the first time by Mark Campanale, Founder of Carbon Tracker, and Nick Robins, now Special Adviser on Sustainable Finance with UN Environment, on the UK Quality of Life Commission’s website.

2011

Carbon Tracker Initiative is launched.

The ‘Unburnable Carbon’ report is published, asking whether the world’s financial markets are carrying a carbon bubble.

Bill Mckibben’s article, ‘Global Warming’s Terrifying New Math’, in Rolling Stone, brings Carbon Tracker’s thinking to a wider audience.

2013

The ‘Wasted capital and stranded assets’ report is published by Carbon Tracker, crystallising growing interest in financial circles about capital expenditure in a 2°C world.

2014

Carbon Tracker publishes its first in-depth analysis of oil supply and demand, shifting its analysis to the project level.

2015

Carbon Tracker contributes to the 2°C scenario analysis workstream of the Financial Stability Board.

Working with Ceres and a number of investors, Carbon Tracker provides support for shareholder resolutions calling for analysis of 2°C scenarios.

Carbon Tracker presents the unburnable carbon thesis to central bankers at the Financial Stability Board (FSB), informing the creation of the Task Force on Climate-related Financial Disclosures (TCFD).

2016

Carbon Tracker launches 2°C scenario analysis tool on Bloomberg terminals.

2017

EU carbon prices could rocket as the market responds to Paris, warns Carbon Tracker in its first analysis of the EU ETS.

The ‘2 degrees of separation’ report, produced with the PRI, examines the transition risk faced the 69 biggest oil and gas companies, translating Carbon Tracker’s macro-level analysis to the company level.

Carbon Tracker works with the Grantham Institute to examine the potential for electric vehicles and solar PV to undermine fossil fuel economics.

2018

The ‘2 degrees of separation’ report, produced with the PRI, examines the transition risk faced the 69 biggest oil and gas companies, translating Carbon Tracker’s macro-level analysis to the company level.
This review offers an introduction to Carbon Tracker and an overview of our work during our 2017-18 financial year. Since our launch, we have worked to deploy the power of the financial sector and its regulators to make climate risk and the role of the fossil fuel industry the focus of investor debate.

Recent years have seen an increasing number of shareholder resolutions on the subject, a burgeoning divestment movement, and the mobilisation of regulators in response to growing climate risk. Carbon Tracker, alongside many groups and individuals, has helped catalyse this progress.

However, as with the dramatic transformation we are seeing in the energy sector, this is only the beginning. As we see fossil fuel commodity prices firming up, there is talk of new investments in fossil fuel supply. There is still a new-build coal power juggernaut to stop in Asia and uneconomic coal plants to shut down. The oil and gas sector still needs to properly internalise the implications of falling demand in a 2°C world.

As a movement, we have achieved much but there is much more to do. We have created firm foundations – now we must build on them. Specifically, we need to apply our macro research on the financial impact to the energy sector at company level, developing analytical resources to help investors understand the value at risk from a disorderly energy transition.

To take us to this next level, we not only need the philanthropic community’s continued support, we need increased support to build the analytical firepower that this will require.
## Dashboard 2017-18

<table>
<thead>
<tr>
<th>6</th>
<th>Carbon Tracker research reports</th>
</tr>
</thead>
<tbody>
<tr>
<td>14</td>
<td>Blog posts and analyst notes</td>
</tr>
<tr>
<td>12</td>
<td>Report reviews and staff quotes in the Financial Times</td>
</tr>
<tr>
<td>76</td>
<td>Presentation and speaking engagements</td>
</tr>
<tr>
<td>2,000+</td>
<td>Top-tier and specialist press stories worldwide referencing Carbon Tracker</td>
</tr>
<tr>
<td>1,384</td>
<td>Average monthly retweets</td>
</tr>
<tr>
<td>22,622</td>
<td>Followers on Twitter, an increase of 15% from the previous year</td>
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</tbody>
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Highlights

Significant events during the year demonstrate the impact and significance of Carbon Tracker’s work. Highlights include:

• **Climate shareholder resolutions** with, for the first time, shareholders of oil and gas companies (Occidental Petroleum and ExxonMobil) defying management and passing resolutions calling for analysis of a 2°C scenario

• These were often **supported by Carbon Tracker’s company-level analysis**, which was used in more than 20 climate shareholder resolutions calling on companies to explain how their business models align with a 2°C world

• Advice, from Norway’s central bank, for the **Norwegian Government Pension Fund** to sell billions of dollars’ worth of oil and gas shares. Carbon Tracker’s work was credited by those involved in preparing this advice

• The **growth of the divestment movement**, which often uses Carbon Tracker’s analysis (although we don’t advocate blanket divestment)

• Citation of Carbon Tracker research in reports and speeches from **central banks and capital markets regulators**, particularly on the risks of stranded assets and the role of enhanced disclosure

• Growing use of Carbon Tracker analysis by **financial institutions**, with citations from Kelper Cheuvreux, Deutsche Asset Management and AXA among others

“Carbon Tracker’s simple narrative neatly summed up climate risk exposure for investors that helped AXA to frame the issues and to begin to methodically quantify and mitigate that growing risk.”

AXA, 2017
Insights

Reports and papers

Carbon Clampdown – Closing the gap to a Paris-compliant EU-ETS (Apr 2018)
Mind the Gap – The $1.6 trillion energy transition risk (Mar 2018)
Lignite of the living dead (Dec 2017)
Margin Call: Refining Capacity in a 2°C world (Nov 2017)
No country for coal gen (Sep 2017)
2 Degrees of separation – Transition risk for oil and gas in a low carbon world (Jul 2017)

Blogs

Well cooked? EOG Resources drops resolution on GHG emissions (April 2018)
Trial and error – Occidental’s first stab at climate-related risks (Mar 2018)
Chevron takes tentative steps on asset-level climate risk (Mar 2018)
Exxon nudges in right direction on climate risk (Feb 2018)
Carbon budgets explained (Feb 2018)
A time machine for climate risk: bringing the future forward with 2°C scenario analysis (Nov 2017)
State of the transition: The roulette wheels of Las Vegas land on green (Sep 2017)
Statoil: U-turn on EVs? (Jun 2017)

Analyst notes

Understanding the operating costs of coal power: US example (Feb 2018)
Colorado’s renewables revolution gathers steam (Jan 2018)
PPL’s climate disclosure – misguided at best (Jan 2018)
Facts still matter: FERC saves US energy consumer $1.4b pa by rejecting NOPR (Jan 2018)
Electric Vehicle Tracker (Dec 2017)
Perry’s proposal to reregulate US power markets – $1.4b pa subsidy to uncompetitive coal power (Oct 2017)

Online tools

Bloomberg App Portal (Feb 2018)
EV Tracker (Nov 2017)
Research

During 2017 and 2018, Carbon Tracker continued to develop and disseminate a strong pipeline of research and analysis. We are increasingly focused on reframing the macro-level debate on the energy transition and carbon risks into micro, company-level analysis, to help our target audiences better understand their exposures and engage with individual fossil fuel companies.

Key research outputs included:

• **2 Degrees of separation**: transition risk for oil and gas in a low carbon world was our first micro-level analysis of oil and gas companies, starting with 69 of the biggest companies in the sector.

• **No country for coal gen**: the study analysed the 20 largest US coal asset owners as a first step towards assessing the economics of the world’s 5,500+ coal-fired power plants.

• **Lignite of the living dead**: the report extended this analysis to EU coal plants, to understand the implications for their investors in a 2°C world.

• **Mind the Gap**: the $1.6 trillion energy transition risk continued our work around peak demand and demand destruction for fossil fuels, and the implications for energy sector business models.

• **Carbon Clampdown**: closing the gap to a Paris compliant EU-ETS marked our first dedicated work on carbon pricing, looking at the implications of bringing Europe’s carbon market in line with Paris.
Regulation

We have long recognised the important role played by financial regulators in ensuring investors have access to the information they need regarding climate risk. Our work helped support the creation of the Financial Stability Board’s Task Force on Climate-Related Financial Disclosures (TCFD), and we remain focused on encouraging and scrutinising corporate climate disclosure.

Our work in 2017-18 in this area included:

- Assessment of 2°C scenario analyses produced by nine of the world’s largest oil and gas companies, summarised in a report *Under the Microscope: Are companies’ climate scenario analyses meeting investors’ requirements?*

- Direct support to investors to help them understand *companies’ disclosures around transition risk* and prepare for bilateral meetings with leading fossil companies.

- Beginning to examine the *role of global accounting standards* in highlighting climate risk, with the hire of an ACA-certified accountant, and engagement with key accounting bodies.

- Continuing *engagement with regulators, central banks and policy makers*, including scoping out a new policy and regulation work stream.

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*Historically, divestment decisions have been based on the environmental and social harm caused by the extraction and use of fossil fuels. But strong financial arguments are now being made, inspired largely by the Carbon Tracker Initiative’s influential series of reports, based on the concept of a global carbon budget.*

Victoria Hoskins,
Investment Director,
Rathbone Greenbank Investments
on the FT Adviser, Oct 2017
Outreach

A core aspect of our work is to ensure that our research outputs flow through to investment decision-makers. In early 2017, we established our Outreach team. It has met with multiple in-house energy investment and ESG teams of institutional investment management companies across Europe and North America, presenting Carbon Tracker’s work and seeking feedback on how to increase the usability of our analysis and concepts by investors in their own investment analysis.

To further strengthen the awareness of Carbon Tracker’s work among key investors, we have increased our activities and collaboration with major investor networks such as Ceres, PRI and IIGCC.

We also collaborated closely with mainstream financial investment organisations such as the Chartered Financial Analyst (CFA) Institute and several local CFA societies in North America.

‘Carbon Tracker Revolutionises the Language of Finance and Climate’
Carbon Tracker speaks the language of finance, and its particularly innovative approach has been heard by investors. It is noteworthy that it also resonated in other circles: from NGOs specialising in climate to the Bank of England, Carbon Tracker was taken seriously.

Extract from the volume: ‘Climate – The Financial Challenge’ by Pierre Ducret, Maria Scolan, preface by Pascal Canfin, Nov 2017
Education

We are also developing a pilot educational seminar program for North American investment professionals on the financial risk of carbon-intensive investments in the fossil fuel sector – a Carbon Tracker 101. The objective is to train institutional investors on carbon risk and the true cost of capital to the fossil fuel sector.

We are currently exploring ways to offer the training as part of professional development programmes. We have been successful in including the stranded asset concept within the CFA syllabus, detailing its definition and implications for investors of energy companies.

“
A specific concern among investors of energy companies is also the existence of “stranded assets,” i.e., carbon-intensive assets that are at risk of no longer being economically viable because of changes in regulation or investor sentiment. Analysts may find it difficult to assess potentially significant financial risks of energy companies because of limited information on the existence of these companies’ carbon assets, as well as the difficulty in determining political and regulatory risks.

CFA Syllabus
Visibility

We place a high priority on effectively communicating our thesis and our analytical findings, to both specialist financial audiences and the wider public.

Over the past year, Carbon Tracker has been:

In the headlines
Our work was referenced and featured in over 2,000 articles worldwide, in top-tier newspapers and specialist financial and energy publications.

On the web
We launched a new public website to disseminate our messages, as well as two private investor-focussed online portals.

Using multimedia
To present our analysis to broader audiences, we produced impactful infographics, videos and animations, as well as developing innovative tools to improve the usability of our data.

At the lectern
We took part in over 110 events, of which 76 were speaking engagements by Carbon Tracker staff.

On the podium
In June 2017, Carbon Tracker was awarded the “Best NGO of the Year” category in the Business Green Leaders Awards, and we won joint second place in the 2017 Extel and SRI-Connect Independent Research in Responsible Investment Survey.
Operations

Carbon Tracker has grown significantly over the past two years, from 13 staff in 2016-17 to 19 in 2017/18, with three additional staff working from the USA.

Carbon Tracker Initiative Limited is a non-profit U.K. company limited by guarantee. The sole member of Carbon Tracker is its parent company, Investor Watch. In the United States, a wholly owned subsidiary has been established as Carbon Tracker Initiative Inc., which operates as a 501c3 (non-profit) entity.

Carbon Tracker benefits from the support of several key funders, mostly philanthropic institutions, foundations and trusts.

In the financial year 2017-18, our income increased by 24% to £2.8m, and our expenditures increased by 55% to £3.4m.

For the year ending 30 April 2018, we have once again prepared our financial statements in line with the Charity SORP, providing increased transparency for our key stakeholders.
Next steps

As we develop our work highlighting the financial risks posed by climate change, it is important that we recognise and respond to needs of different groups of investors, with their different investment approaches. There is no one-size-fits-all solution.

To influence various actors, we must develop multi-pronged engagement pathways, keeping our focus on an inside game while working with allies, building coalitions, and considering all available tools: influencing global policy-makers and regulators; creating a map of the macro energy transition; and supporting investor and activist NGO actions towards specific companies and projects.

With the support of our funders and partners, we envisage that within three to five years, management of fossil-fuel companies will be severely constrained when sanctioning hydrocarbon project capital expenditure, and this will be reflected in market disclosures and in energy transition planning.

For Carbon Tracker, we will continue to develop the research and outreach programme underway, emphasising the micro-level implications of climate risk and the energy transition. We will also develop our governance and back office capacity to reflect the growth we have undergone as an organisation, and to position Carbon Tracker for sustainable growth in the future.

“Carbon Tracker brings together a diverse pool of expertise to challenge and inform the financial community on the risks and opportunities associated with a low-carbon transition. It is really exciting to have the opportunity to be part of a team of such passionate and experienced people, working together to pave the way for a cleaner growth path.”

Aurore Le Galiot, Intern, Policy & Regulatory Research Team, Carbon Tracker
Leadership

Senior Management
Mark Campanale – Founder and Director
Anthony Hobley – Chief Executive Officer
Mark Lewis - Managing Director & Global Head of Research
Jon Grayson - Director General & Chief Operating Officer
Robert Schuwerk - Director North America

Board of directors
Saker Nusseibeh – Non-Executive Chairman, Former CEO of Hermes Investment
Mark Campanale – Founder and Executive Director
Anthony Hobley – Chief Executive Officer
Alice Chapple – Non-Executive Director, Founder of Impact Value
Cary Krosinsky – Co-Founder & Non-Executive Director
Paul Bodnar – Non-Executive Director, Former Special Assistant to President Barack Obama
Meg Brown – Non-Executive Director, Director, Impax Asset Management
Emma Hunt – Non-Executive Director, Former Co-Head of EOS, Hermes Investment

Advisors
Mark Fulton – Former Head of Research at Citi Group U.S. & Australia, founding partner of Energy Transition Advisors
Paul Spedding – Former Global Co-Head of Oil and Gas Research at HSBC

Advisory panel
James Cameron – Former Chairman of Climate Change Capital and the Overseas Development Institute
Stanislas Dupré – Founder & Director at 2° Investing Initiative
Jemma Green – Previously VP of Sustainable Finance at JP Morgan
Lois Guthrie – CEO of the Carbon Disclosure Standards Board
Catherine Howarth – CEO at ShareAction
Bevis Longstreth – Former Commissioner of the United States Securities and Exchange Commission
Neil Morisetti – Director of Strategy at UCL Science, Technology, Engineering and Public Policy Department
Nick Robins – Professor in Practice for Sustainable Finance at Grantham Research Institute on Climate Change & the Environment and Former Co-Director UNEP Inquiry
Laura Sandys – Chair of the European Movement and CEO of Challenging Ideas
James Stacey – Partner at ERM
Tessa Tennant (Deceased) – Founder and Board Member, Association for Sustainable and Responsible Investment in Asia
Helen Wildsmith – Head of Ethical & Responsible Investments, CCLA
Carbon Tracker is a unique organization in the climate space, as we focus on the overlap between climate change and financial markets. From the start, the work of Carbon Tracker has focused on the idea of “Unburnable Carbon” and the need to raise awareness within capital markets of the financial risks of ignoring the need to keep the world within the global carbon budget consistent with 2DC of warming. As such we have pioneered the idea of stranded assets and helped force this concept into the conversation between investors and fossil-fuel companies.

Today, as the economics of clean energy continue to improve at an astonishing rate the risk of stranded assets for the fossil-fuel industry will become ever more central to mainstream investor thinking. There is now not only a climate-driven policy constraint on the burning of fossil fuels, but also increasingly a technology-driven economic constraint.

Mark Lewis,
Managing Director &
Global Head of Research,
Carbon Tracker
Published: September 2018

This Annual Review aligns with Carbon Tracker’s financial year which runs 1 May to 30 April. This is the third volume of the review published.