



INTERVIEW

CO2 INTENSITY TARGETS' FLAWS ON A PLANET THAT WORKS ON ABSOLUTES



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Andrew Grant joined Carbon Tracker in 2014 as a Senior Analyst, leading research on oil & gas and coal mining, and has authored a number of Carbon Tracker's major reports on these sectors. Prior to joining Carbon Tracker, Andrew formerly worked at Barclays Natural Resources Investments, a private equity department of Barclays that committed capital across a range of commodities and related industries. Andrew has previous experience in remuneration and corporate governance at Barclays Capital and New Bridge Street LLP. He is also a Senior Advisor to Critical Resource, a management consultancy specialising in political, stakeholder and sustainability challenges in the energy and mining sectors. Andrew has a degree in Chemistry & Law from Bristol University.

Carbon Tracker is a team of financial, energy and legal experts with a groundbreaking approach to limiting future greenhouse gas emissions. We have the technical knowledge, connections and reach to get inside the mind-set of the global financial community and effect change on a global scale.

Q1. How would you define the concept of transition for oil and gas companies?

Carbon Tracker's view of the transition is framed by the concept of the "carbon budget" – a product of the science which tells us that there is a finite amount of CO2 that can be released for any given temperature outcome. The planet will therefore need to reach a state of net zero in order to stabilize warming at any level, because if we are still releasing GHGs on a net positive basis, the amount of GHGs in the atmosphere is still going up, so the temperature is still going up. As this cannot happen indefinitely, this means that the transition is a matter of "when" rather than "if", and reductions on the use of fossil fuels and indeed other sources of GHGs are inevitable. The timing and eventual climate outcome continues to be a subject of debate, but certainly achieving the Paris goals will require a significant shift away from using oil, gas and coal in the relatively near term. While many scenarios show gas use increasing even in low carbon scenarios, it is at a much slower rate and peaking earlier than most BAU forecasts assume.

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Q2. What should we expect from oil & gas companies in terms of transition scale, pace and drivers?

Having established the limits on fossil fuel use to meet Paris, we can compare that to the amount of fossil fuels available. The bad news is that there is much more available to us than we can burn for a relatively good climate outcome.

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At current rates, the carbon budgets for 1.5°C and 1.75°C would be exhausted in 13 and 24 years. However, proved reserves of coal amount to 130 years, and oil and gas 50 years each at current levels of production.

We take an economic view point and assume that in a world of more than enough supply, and limitations on demand, the oil and gas projects that are successful and go ahead will be those with the lowest production costs, i.e. those that are most competitive in the market. Higher cost projects may either not go ahead (forcing a change of business model), go ahead and destroy value when the world decarbonises (becoming “stranded assets”), or go ahead and take the world past its climate goals if not. Therefore, we see oil and gas companies as differentiated by the economic attributes of the projects they have in their portfolios. If a company wants to be seen as “Paris-compliant”, this means only going ahead with the lowest cost projects in its portfolio that fit within a Paris-aligned level of demand. The good news is that these projects are by definition the lowest risk and highest return, so such a company will generate industry leading returns for investors under any scenario, even if it gets smaller in terms of production. At the moment, no companies seem to be willing to face the reality of needing to lower oil and gas use overall – they all assume that they will be the last ones standing, running the risk of overinvesting in projects that don't work financially in a low carbon world.

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Q3. When does the diversification of O&G companies towards renewables stop being trivial or anecdotal?

The first step towards maximising returns and minimising risk in the energy transition, and to be seen as Paris-aligned, is to limit new projects exceeding a Paris-aligned budget and prefer those that fit within the agreement. Once this is done, the company may have excess cash generated from its existing assets, which would not be reinvested into higher cost growth assets. What the company chooses to do with this cash is a matter for discussion between management and shareholders – if they think that they have the skills to make a success of moving into another industry, that is up to them. If not, they can always take the harvest approach and return capital to shareholders via dividends and buybacks so that investors can redeploy capital as preferred. So, while diversification is an option, it won't be suitable for all, and should be considered on a case by case basis.

Q4. Is it credible to make 2°C or rather Paris-aligned claims (always expressed in terms of carbon intensity), while these companies continue exploration activities beyond renewal needs and grow capacities? What is your view on the Scopes 1 to 3 indicators used by Repsol, Total, Shell , what other KPI(s) would you suggest monitoring?

CO2 intensity targets have a major flaw – they work on a relative basis, whereas our planet works on absolutes. A company can meet relative intensity targets while maintaining or even increasing emissions on an absolute basis, for example by buying up renewable capacity in addition. Hence, a company may increase fossil fuel production while the world sails to 2 degrees and beyond, all the while claiming to support Paris. We do not think this is a terribly satisfactory approach. In order to truly be seen as aligned with the goals of Paris, company investment behaviour must recognise the limits that the climate system imposes on fossil fuel use.

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Accordingly, we think that fulfilling this will mean a corporate commitment to not sanctioning projects that don't fit in a Paris-aligned world, laying out how this is to be measured/achieved, and demonstrating through their investments that they are following this approach. A recent (supported by management and successfully passed) shareholder resolution at BP took this approach, although the devil will be in the detail when it comes to how the company defines whether its own capex investments pass this test. Carbon Tracker's research shows that, using industry supply data and International Energy Agency demand scenarios, all of the major oil and gas companies continue to invest in projects that would fail to make money in a Paris-aligned world (see <https://www.carbontracker.org/reports/breaking-the-habit/>).

Q5. While reducing upstream oil and gas methane accounts for 8% of emissions reductions necessary in the IEA's Sustainable Development (in synch with CCUS and efficiency), how do we avoid the energy efficiency trap which leads to rebound effects and/or carbon lock-in?

Reducing upstream emissions of methane, CO2 and other pollutants is certainly a worthwhile and important thing to do from an environmental perspective, and will help companies improve their credentials as good corporate citizens. That said, the large majority of emissions related to oil and gas use are incurred when the products are used (e.g. gasoline burned in a car engine), so we can't tackle climate change without lowering our use of fossil fuels overall. Lowering demand for fossil fuels will presumably weaken prices all else equal, creating the risk of wasting capital on investments made on the assumption of higher demand. However, this lower pricing then improves the relative competitiveness of fossil fuels when we are trying to lower their use. Fortunately, alternatives to fossil fuels continue to get cheaper all the time, helping

offset this effect, and policymakers will also have an important role to play as will investors. These stakeholders can try and prevent such oversupply of fossil fuels by challenging the investment plans of companies that hold these assets.

Q6. What are the opportunities and limits of offsetting (CCS and afforestation) for the fossil fuel industry and more broadly to the economy considering net-zero emissions targets?

CCS and/or other means of mitigating and offsetting emissions will most likely need to be part of the solution. If the planet needs to get to net zero emissions globally, and there are some sectors which we cannot fully decarbonise (maybe some industrial processes, for example), then we will need to offset these elsewhere. The challenges to CCS remain the economics and scalability; furthermore, adding an additional cost to fossil fuels when alternatives are already increasingly competitive in many applications/geographies is not necessarily a solution for sustaining the industry. Moreover, there is a risk that the prospect of CCS is used by the fossil fuel industry to wish away its problems – even in scenarios that assume a truly daunting deployment of CCS, there is no getting away from the need to lower fossil fuel use which will inevitably entail big changes in business models.

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