

Science-based or scenario-based? Corporate investment for a stable climate

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The Oxford Martin Principles for Climate-Conscious Investment [1] were developed in response to the student-led fossil fuel divestment movement to provide a framework for robust, credible and effective engagement between investors and companies on the issue of climate change. They set out the following requirements for companies to be considered appropriate recipients of climate-conscious investment:

- 1. Commitment to net-zero emissions.** Net emissions from all economic activities must fall to zero to stabilise global temperatures. Companies should develop and publish a net-zero emission plan spanning the emissions associated with both their own activities and the products they sell, and commit to a date or temperature increase by which to achieve this goal. Achieving the long-term temperature goals of the Paris Agreement potentially requires global net-zero emissions to be reached around mid-century [2].
- 2. Profitable net-zero business model and investment strategy.** Companies cannot be expected to disclose full details of their long-term strategy, but they must convince investors that the transition to net-zero emissions will not place capital assets at risk, or create incentives for future executives or asset owners to lobby for a dilution of climate ambition.
- 3. Quantitative medium-term targets.** Mid-term targets (for example, for 2030) should be provided that can be easily monitored and are directly relevant to achieving a net-zero business model on a time-scale consistent with Principle 1, to ensure transparency.

The Oxford Martin Principles were not intended as a mechanism for assessing individual companies or investment portfolios, but as an “assessment of assessment methodologies”: providing a simple and transparent way of evaluating proliferating approaches to benchmarking corporate performance on the issue of climate change.

Assessing the assessors: evaluating one approach to assessing corporate transition plans

The recent publications of the Transition Pathway Initiative (TPI), *‘Carbon Performance Assessment in oil and gas’* [3] and *‘The state of transition in the coal mining, electricity and oil and gas sectors: TPI’s latest assessment’* [4], provide an opportunity to apply the Oxford Martin Principles to an operational assessment of corporate transition plans. The Sectoral Decarbonization Approach (SDA) used by the TPI (also proposed by the Science Based Targets Initiative [5]) compares a company’s planned emission pathway against the evolution of emissions in the appropriate sector under one or more ‘low-carbon benchmark’ scenarios.

The specific performance metric adopted by TPI is the evolution of emissions intensity (carbon dioxide emissions per unit of output, which in the energy sector is equated with energy delivered to the consumer) over the next couple of decades (‘ideally to at least 2030 or 2035’), comparing company emissions intensities with a sector-specific benchmark [3]. This recognises that some sectors will decarbonise faster than others and avoids penalising potentially high-performing specialists relative to multi-sector conglomerates. Net overall emissions intensity of all economic activities must decline (crucially, to zero) to stabilise global temperatures [6].

Trends in emissions intensity over the next 20 years do not, however, indicate whether a company has made a commitment to net zero emissions at all, still less at what global temperature net zero will be achieved. First, a company could easily commit to a 60% reduction in the emissions intensity of its activities while still investing in assets such as new fossil fuel reserves or production platforms that increase the overall stock of committed cumulative future emissions [7]. The total cumulative emissions associated with a company’s activities until its emissions reach net zero determines its contribution to future warming, not their emissions intensity.

Second, the focus on emissions intensity makes the climate implications of a company's plans strongly dependent on the evolution of demand for its products. The IEA 2DS scenario against which the TPI assesses the performance of oil and gas companies predicated, very optimistically, final energy demand growing by only slightly over 25% from 2011 to 2050 [3]. In contrast, the Shell Sky scenario anticipates a much larger increase in final energy demand over this period, but may also be compatible with limiting temperature rise to 2°C because of more optimistic assumptions about improvements in emissions intensity than the 2DS scenario [8]. So firms could all achieve the SDA emissions intensity benchmarks but still allow a warming of over 2°C if energy demand tracks the Sky scenario. Recognising these concerns, the authors of the SDA itself suggest companies should report both intensity and absolute emission targets, while also setting longer-term targets to avoid technology lock-in and stranded assets [9], consistent with the Oxford Martin Principles.

It is not unreasonable for today's investors to consider the implications of some companies' investments into the second half of this century: investments made today in the energy sector in particular contribute to committed cumulative carbon dioxide emissions for many decades to come [7]. The concern with the TPI's near-to-medium-term emission intensity trajectories is that they do not address the need for companies to disclose whether their long-term business strategy is compatible with a world of net zero carbon dioxide emissions [5].

We are not advising the disclosure of more information, or even necessarily more ambitious medium-term plans. But, given limited calls on investors' and companies' attention, it is essential that the most important questions are asked at the outset. To have confidence that the companies they own are neither imperilling long-term climate goals nor placing assets at unnecessary risk, investors need a succinct board-level vision statement which commits to reduce net CO₂ emissions to zero by the time global temperatures reach an agreed level, such as well below 2°C above pre-industrial. Companies themselves need a strategy for the transition to net zero, and investors need to know it is viable. Firms will still need medium-term targets aligned with this long-term goal, but to be effective and credible, these must be seen as a means to an end, not an end in themselves.

References

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