Beyond transparency: the realities of shifting capital towards low-carbon assets

Nadia Ameli, UCL ISR, n.ameli@ucl.ac.uk
Sumit Kothari, UCL ISR, sumit.kothari.16@ucl.ac.uk
Michael Grubb, UCL ISR, m.grubb@ucl.ac.uk

Overview
Aligning private sector finance with the Paris goals is crucial to achieving deep decarbonisation. The international effort spearheaded by Mark Carney has focused on disclosure initiatives as the main route to influence private capital allocation towards low-carbon assets (Carney 2015).

The implicit assumption behind disclosure is that exposing climate-related risks and opportunities to global scrutiny for all the main financial actors will cause investors (i) to move away from carbon-intensive assets to reduce risks and (ii) to re-direct capital to low-carbon opportunities to benefit from the enhanced market. Whether made explicit or not, this assumption is rooted in the ‘efficient markets hypothesis’ (Fama 1970, 1991) applied to climate finance (Ameli et al 2020). The expectation that transparency can move large volumes of climate finance “from brown to green” resides in the belief that market participants will respond ‘rationally’ (in the way that most economists expect) to information – climate related-financial disclosure – and will change investment outlays.

Our analysis examines three dimensions of the expectations behind transparency and current disclosure initiatives: the belief that disinvestment to date has been driven by disclosure; the idea that investment ‘switches’ from high to low carbon assets’; and the need for broader efforts.

Our analysis advances the current debate on efforts to redirect more capital towards low-carbon assets by probing some of the disclosure assumptions and proposing new dimensions of climate finance research beyond transparency. Indeed, a singular policy focus on disclosure and its expectations may divert the attention from the key drivers of low-carbon investments and the reform of financial markets to enable the achievement of climate goals. In the Covid context, it also risks giving false hopes that current divestment reflects climate concerns and will lead to low-carbon recovery. Given the limited research in this space, we hope it will offer a new perspective on the investment system behind low-carbon assets and stimulate discussions about the future direction of climate finance efforts.

Methods
We use qualitative methods to show:
- Declining fossil fuel investment has been driven by market conditions and not transparency. We take the case of the Standard and Poor (S&P) 500 Index, which tracks the performance of the 500 large-capitalization U.S. publicly traded companies, to show the declining importance of the fossil fuel industry over the last four decades. In the early 1980s, fossil fuel companies accounted for seven of the top 10 companies in the S&P 500, representing roughly 30% of the index composition and ensuring annual returns averaging 25-30%. Today they account for just 2.5% of the index composition and their returns are underperforming compared to other market sectors (Bloomberg 2020). These trends show how the US sectors’ returns have changed over the last few decades. Most sectors in the S&P 500 have surpassed the oil and gas industry based on companies’ performance and future growth potential. Currently, the better market performances are driven by the rapid development and evolution of the health care and information technology sectors (Bloomberg 2020).
- There is little apparent link between disclosure initiatives and more investments in low-carbon assets. We compare the different market capitalization and revenue levels of renewable players and fossil fuel companies to show that different market structures of two industries lead to different kinds of finance that both assets may attract. The crucial differences between the structure of the two industries and the current channels of raising finances suggest that as far as financial markets are concerned these assets are quite different in the eyes of most investors, and are not substitutes.
**Results**

First, we show that transparency does not seem to be the main driver behind current divestment and alone is unlikely to move large volumes of finance “from brown to green”. More transparency may reduce the attractiveness of fossil fuel investments, but market returns and future outlook better explain current investment trends in the sector. Second, there is no reason to believe that transparency on its own will be sufficient to encourage capital into low-carbon technologies, as brown and low-carbon investment are diverse asset classes and there is not an "energy investment system" where capital moves easily from one technology towards the other. An implicit assumption of disclosure is to treat fossil fuels and low-carbon investments as similar assets, hence as long as transparency enables markets to appropriately value energy assets, capital will naturally switch towards the less risky assets within the same investment category. We argue that most low-carbon assets in reality form very different asset classes with their own set of characteristics. Third, in absence of broader efforts to target the specific aspects of the low-carbon assets, capital is unlikely to flow towards them. We highlight some specific aspects of low-carbon investment relevant to reallocate more capital towards such assets, namely geography-specific dimensions of the financing of low-carbon assets, role of different market participants, climate policy design and financial market reforms.

**Conclusions**

In this analysis we show why disclosure is an insufficient response to the challenge of redirecting capital to low-carbon assets by probing some limitations of its assumptions. Overall, we argue that even if enhanced transparency on the holding of risky assets may reduce the attractiveness of fossil fuels investment, there seems to be little apparent link between disclosure initiatives and capital flows from brown to low-carbon investment. The investment system behind low-carbon assets is tailored around specific characteristics of these assets and a true understanding of its key components and dynamics is essential to re-allocate more capital towards them. In particular, more in-depth analyses of the patterns underlying the emergence of low-carbon investment systems are needed; and more research should focus on the complex interactions between financial market participants and their expectations, local context and policy elements to accelerate the pace and scale of climate investment. Other sectoral aspects (e.g. market structure and the capacity to attract mainstream finance) remain a challenge for the green industry. They will largely be contingent on the development of the industry and whether renewable players will be able to leverage economies of scale and expertise globally across several low-carbon technologies. Long-term climate policy signals and specific energy policy designs will determine the path of this development and whether the green industry can generate persistent cost reductions, market returns and attract broader financial market investment.

**References**


