

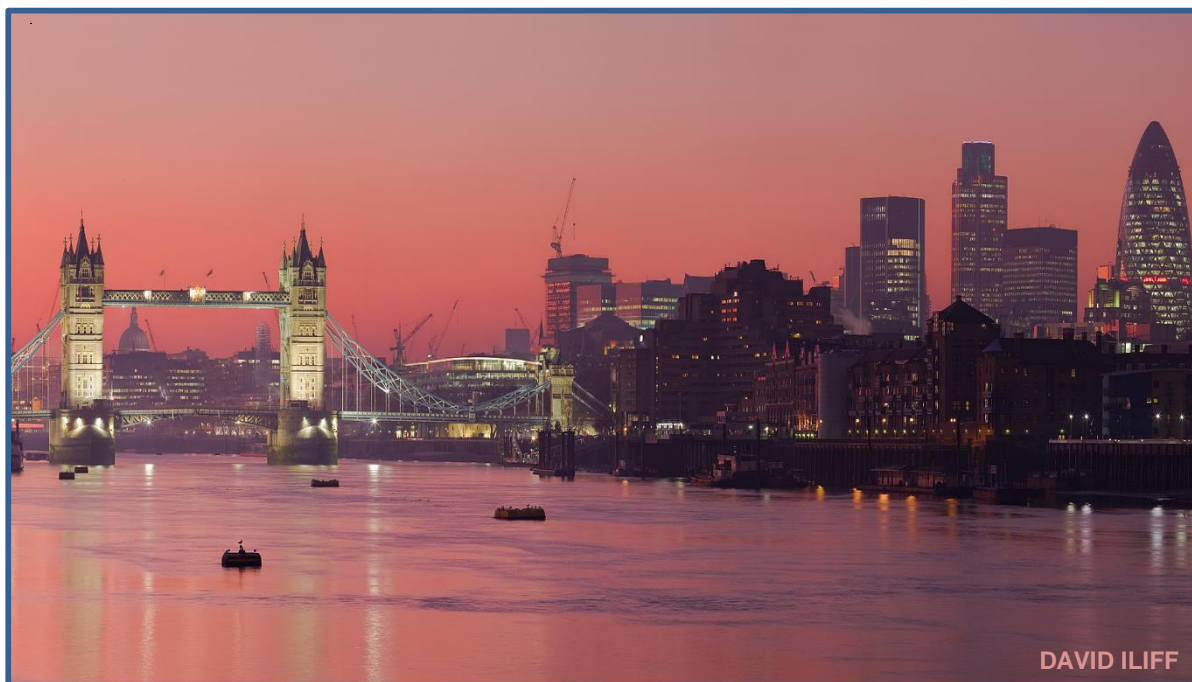


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UK financial investment and action on climate change consistent with 1.5 degrees Celsius

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SUMMARY

The most recent findings in climate science indicate that new fossil investments are incompatible with achieving a 1.5 degree target in the absence of negative emission technologies. The UK financial sector is playing a big role in international finance and investment; UK financial institutional investment needs to change accordingly. This involves the abatement of any public support for global fossil fuel investment. Moreover, all forms of climate-related risk, including physical, transition and systemic risks, need to be assessed, disclosed and managed. Regulatory and other measures need to be put in place to ensure compatibility of investments with the 1.5 degree target as well as Sustainable Development Goals. Achieving the kind of rapid and orderly change that is required to address the global challenge of climate change in a socially just manner must involve the reshaping of UK finance.

Key Messages

1. **Continued fossil investments are incompatible with achieving a 1.5 degree target**
2. **Public investment support for global fossil fuel must be eliminated**
3. **UK financial investments must be made climate-compatible, requiring climate-related risk assessment, disclosure and management**
4. **Regulation and other measures must be used to ensure compliance with climate targets and SDGs/ESG factors**

In this brief, we set out to answer two questions based on the latest available literature: (1) are investments in fossil-fuel industries compatible with strong mitigation objectives? And (2) what measures can lead to climate-compatible finance?

Question 1: Are investments in fossil-fuel industries compatible with the UK's mitigation objectives, international agreements and/or a "net-zero carbon economy"?

Fossil-fuel industries here include: existing extractive activities, exploration and new infrastructure, as well as fossil-using industries (automotive, aviation) and their relevant infrastructure. More broadly, investments related to deforestation and agricultural emissions should also be considered.

Answer elements from scientific literature & reports:

➤ **The IPCC Special Report on 1.5 degrees states that global carbon emissions must decrease rapidly in order to achieve the 1.5 degree target:** by 45% by 2030 compared to 2010 (which corresponds to a 50% decrease compared to 2017 levels (Le Quéré et al 2018)), and down to zero by 2050. The report does not specify the level of fossil fuel related investment compatible with 1.5 or 2 degrees, although it does discuss energy sector investment for decarbonisation.

➤ **No new fossil investment is compatible with 1.5 degrees** at current utilisation levels, given the expected lifetimes, and unless carbon capture and storage (CCS) is added at scale (Smith et al 2019).

➤ **Negative emissions technologies do not yet exist in a usable form** (Fuss et al 2015), **and severe doubts exist as to their potential scale** (Smith et al 2016). As necessary emissions reductions have to be immediate, it is our opinion that it would be extremely imprudent to take the future existence of negative emissions technologies as a given.

➤ **Existing (in 2018) fossil fuelled power plants would take up more than the emissions budget for 1.5 degrees, and currently planned fossil-fuelled power plant would take us far beyond this level** (Pfeiffer et al. 2018). At current utilisation levels, given the expected lifetimes, and unless CCS is added at scale, no new fossil investment is compatible with 1.5 degrees according to their results. Retiring existing (in 2018) fossil-fuel using infrastructure (transport and industry, in addition to power generation) at the end of its lifetime is mostly (64% probability) compatible with achieving the 1.5 degree target (Smith et al. 2019).

➤ 1.5 degree scenarios, even including considerable negative emissions, show **global fossil energy investments more than halved after 2016** compared to business-as-usual (“current policies”), and halved compared to the Paris Agreement Nationally Determined Contributions (McCullum et al 2018). They do not state what this level would be in the absence of negative emissions. In contrast, they estimate **increased renewable and demand-side investment would almost triple at 1.5 degrees** compared to business-as-usual, and dominate energy-related investment. Scenarios include estimations of energy investment, globally and by region, for different levels of curbing climate change.

Conclusions: The most recent findings indicate that **new fossil investments are incompatible with achieving a 1.5 degree target in the absence of negative emission technologies. Existing infrastructure and assets should be retired at the end of their physical lifetimes, if not sooner.** These conclusions could be revisited in the event that negative emission technologies become widely available, tested,

and proven at scale (as suggested by Allen et al in 2009), but not before.

(2) Question: What measures can the UK lead or participate in to contribute to international climate-compatible finance?

Answer elements from scientific literature & reports:

To start with positive aspects, the UK is already considered as a front-runner in some aspects, in terms of raising the profile of the issue head-on (UNEP Inquiry 2016). Notable examples include recent parliamentary hearings on UK export finance (UK Environmental Audit Committee, Feb 5 2019) or the statement of the head of the Bank of England (Carney, 2015) warning of a vast majority of “unburnable” fossil reserves and stranded assets if a 2 degree target is to be met in the absence of CCS. Much emphasis has been placed on issues of risk & stability (see for example the Bank of England’s Prudential Regulation Authority report 2015, UNEP’s 2016 inquiry).

Beyond the public debate, however, practical measures are needed to guide the UK’s financial sector to act in accordance with the Paris Agreement goals of remaining below 2 degrees, and aiming for 1.5 degrees, especially given the urgency of the recent IPCC Special Report on 1.5 degrees. Specifically, this guidance should aim for the **elimination of new fossil fuel investments, the rapid phasing out of existing investments, the shift to new energy infrastructure investments, including on the demand side (Wilson et al 2012), and the development of climate-compatible finance.**

Areas of concrete action which should be pursued include the following.

➤ **Taxonomy & Classification.** The UK should participate fully in the development and implementation of a legislative taxonomy & classification system of economic activities for climate change mitigation ongoing in the EU (2018 Action Plan Financing Sustainable Growth), thus establishing common carbon

benchmarks and fostering transparency and clarity in the financial sector. This is a necessary precondition for many other measures listed below, for investment decisions and for the continued stability and reputability of the UK financial sector.

➤ **Transparency & Disclosure.** The UK should make clear its commitment to leadership in transparency of financial investments, both in private and public institutions. It should comply with and go beyond the requirements of the Task Force on Climate-related Financial Disclosures (TCFD), by defining standards for disclosure guided by ESG (environmental-social-governance) factors and climate targets. This is a necessary component of avoiding risk and future crises, e.g. caused by stranded assets and “carbon bubbles.”

➤ **Data.** Government, investors and financial institutions are in need of data for decision-making, including on climate mitigation goals and timescales, and their consequences for unburnable reserves, stranded assets and obsolete technologies. The government can make clear its assumptions regarding climate pathways and goals (see G20 2017 Green Finance Synthesis Report for context), while demanding increased transparency & disclosure from the financial sector (see above).

➤ **Risk assessment and management.** All institutional investors must assess their risk and manage their investments accordingly. To start with, prudential regulation should be changed to include climate risk (Campiglio et al 2018). Climate-related risks include specifically (i) physical risk, (ii) liability risk and (iii) transition risk (the Bank of England has worked in this area, see Carney 2015, Batten 2018). Beyond these, aspects of systemic risks representing the existential threat of climate change to major societal and ecological/ecosystem functions would be important (food supply, health, migration, political & social crises). These are partially considered under “cascading effects” in Campiglio et al (2018). The 'most prudential 1.5 degrees pathway' should be taken as

guiding line (Rainforest Action Network et al. 2019: 21). The WWF guidance for best practice to the Swiss government includes recommending that all institutional investors regularly measure, disclose and reduce these multiple risks imposed on the financial and economic as well as social and ecological sphere (WWF 2017). The G20 discusses a categorisation of risk analysis tools, including market, credit, underwriting risks, at systemic, portfolio and individual asset levels (G20 2017). The issue of volatility of capital and investment must be accounted for. Climate stress-testing institutional investors is an important component of risk assessment for the stability of the UK economy. Compliance with regulation should be enforced, making use of all means available (PRA 2019). Adequate support must be given to low- and middle-income climate-vulnerable countries to deal with their multifaceted risk exposure (see below).

➤ **Role of the Bank of England.** The mandate of the Bank of England has already been broadened to include climate-related aspects, but this needs to be put into practice through legislation, including a long term understanding of stability, security, risk, exposure and so on. This would facilitate climate-compliant finance within existing structures (Campiglio et al 2018). The UK is part of the Central Banks and Supervisors Network for Greening the Financial System (NGFS). Their first progress report (NGFS 2018) states that ‘Members acknowledge that climate-related risks are a source of financial risk. It is therefore within the mandates of Central Banks and Supervisors to ensure the financial system is resilient to these risks’. In October 2018, the Bank of England’s Prudential Regulation Authority put forward an approach on enhancing climate risk management for consultation (BoE, Consultation Paper 23/18). This direction includes guidance on embedding climate considerations in bank & insurers’ governance, risk management & assessment (including long-term) and disclosure. In our view, the only good insurance against climate risks is their avoidance. The financial and public sector have to play a crucial role in doing so.

➤ **Limit public support for global fossil fuel investment, domestic and abroad.** In order to comply with Paris climate targets, the government should set clear public guidance for public investment domestically and overseas. In particular, UK Export Finance should consider ending all support for fossil fuels, including gas and oil (see Feb 5 2018 Environmental Audit Committee Parliament Hearing + supporting evidence; Oil Change, FOE & WWF report 2017), with similar guidance for ODA & DFID activities. Carbon-based resource dependent countries such as oil exporters must be supported through adequate measures to avoid knock-on effects, such as foreign exchange shortages, financial instability and lack of funds for climate mitigation and adaptation. The more extensive use of Special Drawing Rights to set up a fund for such purposes should be considered (cf. Ocampo 2010.)

➤ **Investment policy and regulation.** Given the importance of the financial sector, several proposals exist for enhancing the ability of governments and investors to comply with climate targets (EU 2018, UNEP 2016, WWF 2017, Dafermos et al 2018, Fontana & Sawyer 2014, Vercelli et al 2016). Key instruments could include “reserve, liquidity and capital requirements, caps on loan-to-value ratios and ceilings on credit growth, in some cases aimed at specific sectors” (Campiglio et al 2018) as well as revolving funds (Vercelli et al 2016). Long-term orientation for investment should be fostered (EU 2018). Moreover, prudential regulation should be modified to encompass climate-related risks, see above. Many other instruments exist in this arena, and are the matter of specific policy and legislation which could be recommended (Green bonds, CO2 levies, divestment policies ...).

➤ **Compliance of investment with sustainable development targets needs to be ensured.** The UNCTAD Investment Policy Framework for Sustainable Development (2015) provides guidance for designing and negotiating international investment agreements in line with sustainability targets

and host countries' development strategies. The UK needs to meet its international responsibility and help prevent carbon lock-ins of low- and middle income countries. Comprehensive measures need to be taken in order to facilitate a just transition to a low-carbon economy in these countries, making use of a variety of measures, such as financial and technical support, Green Bond purchases, etc.

➤ **Rapid and orderly timetables for change.** In order to avoid abrupt changes leading to crises (which could be caused in the near future by growing climate damage and awareness), it is crucial that governments set explicit timetables for rapid and orderly transitions (Campiglio et al 2018).

➤ **International leadership, collaboration and compliance.** It is crucial that the UK maintains its close collaboration with the EU on sustainable finance developments, and comply with these for the reputation and stability of its financial sector. Moreover, by demonstrating leadership in this important arena, the UK can shape international developments, standards, agreements on climate-compatible finance and exert an important international influence in mitigating climate change.

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