

Financing The Transitions – Key Messages Document

Top-line messages

Finance is a key enabler in the energy transition. Two conceptually different categories of financial flow will be required for the transition – investment and concessional/grant payments.

With the right government policies in place, investment will come primarily from business, whilst concessional/grant payments will need funding through voluntary carbon markets, philanthropy and governments

There is enough money globally to finance the energy transition but we need to make sure that the business case is clear. Rapidly falling costs in renewable energy provides clear opportunities and returns for investors, and benefits for consumers in terms of lower cost energy and energy security.

To finance the transition, investment needs to average around \$3.5 trillion a year between now and 2050. After accounting for the expected decline in investment in fossil fuels, this figure falls to \$3 trillion a year, or around 1.3% of annual global GDP over the next three decades.

Investment will need to grow from \$1trn today to \$2trn by 2025, \$3trn by 2030. This requires a doubling of investment in high-income countries and China by 2030, but a four-fold increase in middle- and low-income countries.

The cost of financing the energy transition is ambitious but feasible with strong government policies and financial contributions from corporates via voluntary carbon markets, philanthropists and high-income governments.

Global investment

There is enough capital globally to finance the energy transition:

1. Geo-politics and macroeconomic context have changed but this has also created incentives to invest in clean energy. For example, against a backdrop of higher interest rates (cost of capital) renewables are cheaper and there is an increased focus on energy security and energy efficiency due to the cost-of-living crisis.
2. 70% of the capital investment required is to build a clean power system; this will enable other sectors to decarbonise and reduce the demand for fossil fuels. Investment in low-carbon building is the next biggest area where capital is needed - 15% of the total
3. The energy transition is capital intensive with money needed to build the energy system of the future but the majority of this investment is needed up front, with a peak in investments before 2050. After this investment will fall to a more stable rate once many existing (fossil fuel) assets have been replaced.
4. Investment will be offset through a) less capital investment in fossil fuels and b) reduced spending on consuming fossil fuels, which could realise savings of around \$400-800bn a year on average to 2050, freeing up finance for low-carbon investments.

Emerging markets – big gap but big opportunities

1. Big, big gap in middle- and low-income countries. Scale-up and opportunities in investment are greatest in middle- and low-income countries - but

challenges are also greatest, including higher cost of capital and weak domestic savings and capital markets.

2. The role of multi-lateral development banks (MDBs) is critical to provide more external finance, catalyse private sector capital to a greater extent, more project creation and more policy engagement.

Government policy is critical to financing the transition

1. Well-designed real economy policy is critical to mobilising private finance – especially in today's challenging macroeconomic context where there may be short-term disincentives such as high interest rates and gas prices.
2. Government policy will need to lead the way by creating incentives for private investment to flow. Policies that will make the difference are
 - a. Clear, medium-term targets for power system decarbonisation
 - b. Banning sales of fossil fuels assets such as petrol cars and gas boilers
 - c. Power market design so investors are clear on future revenues
 - d. Financial support to overcome green premiums in the early stages of clean technology deployment
3. Although governments can, and are, putting in place these policies, there are cases where policy alone may not be enough:
 - a. Remaining financing challenges can be overcome by support from public investment banks for some first of a kind (FOAK) technologies, public finance for shared infrastructure (e.g., power grids and charging networks), and subsidies to support households invest in residential buildings retrofits.
 - b. Additional action by the private sector and development finance institutions required in middle- and low-income countries to provide access to lower-cost capital, de-risk investments and build investment capacity
4. Supporting action by financial institutions and financial regulation can accelerate capital reallocation
 - a. Financial institutions should develop net-zero transition plans, which can play a role in capital mobilisation and reallocation into low-carbon assets and technologies
 - b. Financial regulation should ensure the transparent disclosure and management of climate-related risks and strategies

Vital role for concessional/grant payments

1. Concessional/grants payments will be required for activities which do not generate economic returns.
2. Beyond capital investment, there will be costs to end the most harmful activities specifically - phase out coal early where it remains competitive with renewables, avoid deforestation and scale up carbon dioxide removals.
3. Concessional/grant payments of at least \$0.3 trillion a year could be required in middle- and low-income countries (excluding China) by 2030
4. This money can come from corporates via voluntary carbon markets, philanthropy, and intergovernmental transfers.
5. The challenges of delivering sufficient finance – especially of intergovernmental transfers in today's current economic and political climate –underscores the critical importance of policy and regulatory action to ensure that financial mechanisms are a backstop solution.

What's different about ETC's Financing the Transition report

- It sets out the ETC's detailed estimates of investment need by sector and country income group, including sector-specific policy and financial sector action toolkits.
- It seeks to define the relative importance of real economy policies and specific financial sector action in mobilising finance, and how this differs between high-income and middle- and low-income economies.
- And it distinguishes between two conceptually different categories of financial flow:
 - Capital investment in the technologies and assets required to create a zero-carbon economy. In some cases, these investments will not occur without changes in policy which reduce risks and the cost of capital. But in principle, these investments deliver a positive return to investors and lenders.
 - Concessional/grant payments to pay for decarbonisation actions which will not occur fast enough without payments to economic actors to phase out (or phase down of load factors) exiting coal plants earlier than is economic, end deforestation, and remove carbon dioxide from the atmosphere.

Supplementary report on the cost of avoiding deforestation

This *Supplementary Report on the Costs of Avoiding Deforestation* accompanies the *Financing the Transition* report. It presents new analysis of how much it could cost to overcome the economic incentive to cut down trees, exploring the role that concessional/grant payments can play in avoiding tropical deforestation by 2030.

1. Halting deforestation can, in principle, be achieved through four key levers:
 - A reduction in consumer demand for the main products which make deforestation profitable (in particular, animal meat and palm oil).
 - The development of alternative businesses which can profit from standing forests (e.g., eco-tourism and various forms of sustainable agroforestry).
 - Government actions to make deforestation illegal, if combined with effective enforcement.
 - Concessional/grant payments which compensate land owners for the lost profit opportunity of cutting down tropical forest (e.g., to raise cattle or grow commodities).
2. However, the first three of these levers will either take time to develop (e.g., consumer demand change), provide only a partial solution (e.g., new business opportunities), or are unlikely to be wholly effective in the short-term (e.g., making deforestation illegal).
3. This report explores the potential for concessional/grant payments to avoid deforestation. Many reports have estimated the cost per tonne of CO₂ saved

from avoiding deforestation but few have attempted to estimate what it would cost to put a total end to deforestation. The report's high level analysis illustrates that even the lower ends of these ranges are massively higher than the flows of finance currently available to help end deforestation (currently ~\$2-3bn a year).

4. The report concludes that the cost of protecting *all* forest at high risk of deforestation by 2030 would be so large (potentially reaching \$900bn a year, depending on the opportunity cost of cutting down forest) that it is not credible to assume that concessional/grant payments on this scale (paid for by corporates via voluntary carbon markets, philanthropy, and high-income countries) would ever be forthcoming.
5. The report recommends that concessional/grant payments of ~\$130bn a year between now and 2030 can – and should - play an important role in protecting at risk tropical forest, but crucially, this must be delivered alongside by action from policymakers to make deforestation illegal and reduce consumer demand for the products which make deforestation profitable.