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HOW TO CONVERT FOSSIL FUEL STRANDED ASSETS INTO RENEWABLE ENERGY INVESTMENTS

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Introduction

It is estimated that more than 80% of the known deposits of coal, 50% of gas and one third of the oil reserves cannot be used for energy production if global warming is to be kept below 2°C.[1]
To comply with the 1.5°C limit agreed in Paris, these estimates become significantly higher. This would mean that a large part of the raw material reserves in the balance sheets of energy companies become worthless. The "fossil" part of the business model of energy companies is obsolete and their shares will depreciate accordingly. Many institutional investors who have invested "conservatively" in energy stocks are threatened with significant value adjustments, which will cause considerable uncertainty and instability on the financial markets.

At the same time, energy companies must invest in the construction of renewable energy generation and storage systems in order to participate in an energy supply business model compatible with the 1.5°C target. This unavoidable transformation will be even harder when they are weakened by the accelerated depreciation of their fossil fuel assets.

A new financial instrument is required to enable energy companies to convert their de facto “stranded” fossil fuel reserves into renewable energy (RE) assets. Since assets already threatened by "stranding" can only be sold in the private financial markets at a minimum residual value, private actors can be excluded as feasible buyers. Passing on the losses to taxpayers would be neither politically nor financially realistic. The

[1] http://www.nature.com/nature/journal/v517/n7533/full/nature14016.html

only institutions that have the economic potential to implement a "climate bailout" are Central Banks, just as they have done in the banking crisis since 2008.

Double systemic relevance justifies Central Bank intervention

The abrupt end of the diverse fossil business models of energy companies will have a similar systemic impact on the economic stability of the entire economy as the banking crisis. A targeted climate bailout is therefore covered by the mandate of Central Banks. Equally important for the financial system is averting a climate catastrophe by a greatly accelerated shift to renewable energies. The consequences of a global warming of more than 2°C would not only ruin the insurance industry, but also lead to incalculable loan defaults in the banking sector.

The conversion of stranded fossil assets into renewable energy investments by Central Banks

In order to initiate the conversion, energy companies must disclose their threatened fossil assets and move them into a separate asset class. Central Banks must then allow papers securitizing these assets as a tool for refinancing at their current value, so that the energy companies can sell these new papers without major losses. Central Banks can decide to either buy these securities directly or through the banking system. Central Banks must not insist on a repurchase obligation in order to guarantee the energy companies a secure planning horizon.

However, Central Bank purchases should be limited to the extent that the new liquidity generated is used to finance investments in new additional renewable energies. Already existing or planned renewable energy units financed by other investors would be excluded. A detailed and transparent documentation by companies investing in RE with this new liquidity is required.

Stranded fossil assets can thus gradually be replaced by sustainable assets in renewable energy units. High-risk assets become highly liquid assets because the threatened assets can be used to obtain refinancing by Central Banks. Energy companies have an incentive to convert their threatened assets as soon as possible, to prevent their value falling further.

If Central Banks allow this type of refinancing without a repurchase obligation, they would obtain ownership of great quantities of unused fossil raw materials which cannot be incinerated. Therefore, their value for energy use is zero. Nevertheless, the commodities bundled in these securities have a monetary value. Even after a 100% conversion to renewable energies, fossil raw materials still need to be mined for the non-energy needs of basic industries (e.g. the petrochemical industry). Even in a highly advanced material recycling economy, new fossil raw materials will still be needed.

This non-energy use will continue to create a market-based demand. As a result, fossil resources in the balance sheets of Central Banks will retain a long-term value.

No distortion of competition due to a "climate bailout"

The aim of this "climate bailout" is to relieve energy companies of their stranded fossil assets, in order to be able to invest on a vast scale in the construction of new and additional renewable energy units. This bailout only needs to guarantee the financial stability of energy companies to the extent that they can borrow in the private financial markets at sustainable interest rates to finance the transformation to the renewable energy economy.

This bailout must be designed so that companies with stranded fossil fuel stranded assets would not become financially better off than those investing in renewables, but have no fossil legacy in their balance sheets. Competition distorting results must be prevented. As a compensatory measure, Central Banks may therefore, to a certain extent, declare securities (green bonds) of RE investors eligible for Central Bank financing who do not have fossil assets on their balance sheets. Again, this would require renouncing repurchase commitments, or very long maturities (for example a hundred years) with a very low interest rate, in order to maximize the number of RE investments.

The World Future Council

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