

ISETS COMMENTARY

Are we ready for the world without crude oil?

by Dayong Zhang, Qiang Ji and Xunpeng Shi

Dayong Zhang is a professor of economics at Research School of Economics and Management, Southwestern University of Finance and Economics; Qiang Ji is a professor at Institutes of Science and Development, Chinese Academy of Sciences; and Xunpeng Shi is a principle fellow at Australia-China Relations Institute, University of Technology Sydney.



A global consensus on climate change will eventually lead to a certain and steady transition from fossil fuels to renewable energy. IEA (2021) predicts that the demand for crude oil would fall by 75% when the world achieves carbon neutrality in 2050. The number may trigger further debates but we believe that the future of oil is doomed. Then the question is whether we are ready to face a world without crude oil.

The first issue of ‘disappearing oil’ would be trillions dollar value of stranded assets, which include reserves, exploration capital, valuation and revaluation of physical and natural capital (van der Ploeg and Rezai, 2020). Whether or not to invest in oil has also become a dilemma. For example, Wang and Diamond (2021) argue that further investment in fossil fuel projects can bring

enormous long-term costs to countries in Africa.

Things are even more complicated if we look beyond the energy sector. The Petrodollar system, for example, was established as a result of the 1970s’ oil crisis. It has become a pillar of the international financial system in the post-Bretton Woods era. Denominating oil revenues in US dollars greatly elevates the status of dollar and strengthens its role as the world’s reserve currency. Although some nations have considered shifting away from this system, dollar remains the most popular way in the international settlements, which enables the US a great power in the world.

When the world is eventually free from crude oil, the petrodollar will disappear, which may undermine the dollar’s reserve currency role and fundamentally reshape the international financial system. The world needs to start getting prepared for these changes and uncertainties.

Reference:

IEA (2021), Net Zero by 2050, IEA, Paris <https://www.iea.org/reports/net-zero-by-2050>.

Wang, Z., Diamond, M. (2021). Africa: renewables infrastructure avoids stranded assets. *Nature*, 595(7867), 353.

van der Ploeg, F., Rezai, A. (2020). The risk of policy tipping and stranded carbon assets. *Journal of Environmental Economics and Management*, 100, 102258.