



A Truly Clean Global Energy Transition

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ABSTRACT

The energy dialog varies widely. The economically developed world led by western Europe and the United States want clean energy, myopically focused on low carbon emissions. Some propose to eliminate coal, oil, natural gas and nuclear altogether and replace them with solar, wind and batteries. By contrast, developing economies like Central and South America, and parts of Asia have a growing energy appetite that requires reliable and accessible energy. Coal and oil are still prominent but natural gas, hydro and nuclear will play a greater role. Finally, emerging economies like Africa and parts of SE Asia need energy to be cheap. They are building with coal and oil, just as the developed world did. Although the environmental concerns of the emerging and developing world include climate, they are more broadly focused on reducing impacts on water, soil, and air, all of which effect the health and safety of billions of citizens today. These global economic and political differences underpin the reality of the complex array of regional energy transitions underway globally. It is against this backdrop that carbon reduction and broader environmental strategies must be realistically set. Environmental improvement options include natural gas replacing coal, efficiency, hydro, nuclear, CCUS, hydrogen, and geothermal. The subsurface oil and gas industry, and geoscientists in particular, are well positioned technologically and geopolitically to accelerate many of these technologies.

Tinker, S. W., 2021, A truly clean global energy transition: GeoGulf Transactions, v. 71, p. 535.

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