Energy Advancement: A new Energy Transition Redefinition

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Abstract

Since the beginning of the industrial revolution, the global energy demand has been rising proportionally to the micro and macro-economic growth and human prosperity, dominated by fossil fuel, currently representing more than 83 percent of the global energy mix, with oil and gas reaching almost 53-55 percent. With it, Methane and Carbon Dioxide emissions have been rising, inducing global environmental and health challenges. Today's definition of Energy Transition is calling to stop investment in oil and gas exploration & development without offering any reliable and sustainable energy alternatives, imposing a huge economic, geopolitical and social threats, putting the unprecedented economic, human prosperity and life style improvement witnessed in the 20th and 21st centuries at high risk. Adding to this, the world needs more energy to support its population growth and the must-to-grow global economy, social development and global energy access, especially in poor high populated geographical areas such as Africa and South East Asia.

Today's Energy Transition concept, driven mainly by environmental agenda, combined with some energy forecasts studies projecting unrealistic oil-demand peak, can result into future energy crises as the one witnessed currently in Europe.

Hence, promoting the change of the current Energy Transition's narrative to a new definition such as Energy Advancement or Energy Enhancement is important. The new definition calls for all energy sources, with no exception, to grow and reduce their environmental footprint, where reaching net-zero Methane & CO2 emissions become a must. The world must develop and implement a road map to implement this new Energy Advancement strategy using practical and just policies, technology, best practices, and effective energy-conservative social behavior. Through this new definition, a new global Energy Security and Energy Sustainability models need to be developed and implemented.

The road map must be supported by significant emission reduction investment and multi large-scale initiatives including Carbon Capture, Gas in Power, Renewables in Power, Hydrogen, Energy Efficiency, Carbon Circular Economy, Carbon Conversion, Crude to Chemicals, Energy Conservation, Social Behavior, Afforestation and Deforestation-Control. There is also a need to promote more constructive global energy dialogue between current energy producers and consumers to collaborate to reach these challenging Energy Sustainability goals. Other emitting industries that currently contribute to the global Carbon and Methane emissions must be included in the dialogue and accountability. Last, promoting more international R&D and technology-development collaboration is evident.

Can the world collaborate to reach a more balanced Energy Sustainability model that can address the Economic, Social Development and Environmental Challenges? Yes, it can.