

Energy Transition and Sustainability

Peter Stallinga¹

Abstract

Introduction: The agenda of energy transition and sustainability is discussed. On basis of the idea that energy is the only currency in the economy it is shown that creating a sustainable economy cannot be achieved by governmental interventions in the economy, neither taxing, nor subsidizing. Those will merely cause inflation. Moreover, subsidizing opens the door to unfair transfer of wealth. Eventually, in the extreme case, a sustainable agenda may even lead to the elimination of the human race.

Aim: The purpose of this research was to work out the implications of the conclusion of earlier works that the only currency in the economic system is energy. As an example, whereas it is common practice to express the GDP in terms of dollars, that then constantly have to be adjusted (as in “2019-equivalent-dollars”, etc) which shows its inadequacy, this should rather be expressed in joule per second (watt). Based on the scientific principle of Lavoisier, that nothing is gained or lost, we can reason from there. Therefore, since no atoms are changed, created, or lost in any real-world activity (including economic endeavor), these processes must be merely a usage of energy to produce entropy, as viewed by Boltzmann, with atoms the matrix it works on.

Method: The application of logic and mathematics. Using the method of Thomas Aquinas, that truths are either self-evident or are based on such self-evident truths.

Findings: Economy is energy and thus limiting the use of energy will cause an economic crisis. Moreover, since nature seeks a way to maximize the entropy production (MEP), done by spending free Gibbs energy, we can expect a natural drive towards energy efficiency; any interference (subsidizing or taxing) will lower the efficiency, and will create less wealth. Moreover, other societies that do not have the taxing/subsidizing-system will eventually overtake the ones that do. Thus, the energy-transition agenda is a massive shoot-in-own-foot.

Originality and value: The idea of seeing economy as energy consumption is not new. Marx, Smith and Ricardo already mentioned it: “The price of a product is the toll and labor to bring it to the market”. Neither is the idea that the world, including all biological lifeforms, is striving for MEP. Nor is the idea that complex organizations can produce entropy faster (Prigogine). The idea of combining it and applying it to the economy is new, and the outcome goes against all modern common knowledge of making a “sustainable economy”, which is a physical impossibility; only zero economy is sustainable, and thus the agenda aims at the elimination of the human race, by its own doing. In Marxist words: What the political elite foremost educates is its own grave diggers.

Key Words: Energy transition, Sustainability, Macro economy, Climate Change

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¹ PhD, University of the Algarve, Faculty of Science and Technology, Department of Electronic Engineering and Informatics, CEOT, Portugal.