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Development for Sustainable Wellbeing

The New Development Paradigm (NDP) is based on fundamental premises that do not currently serve as the foundation of our political and economic institutions. These new premises are:

1. The purpose of the economy is not to maximize material throughput but to augment “an immaterial flux, the enjoyment of life.”¹
2. Production of economic value, like production of life itself, comes from energy shaping matter according to some form of design intelligence.²
3. The planet is finite, which means it offers a finite amount of useful matter and energy to the economic process.
4. Use of non-renewable energy sources, such as fossil fuel and fissionable uranium, is not sustainable.
5. The first and second laws of thermodynamics dictate that any use of matter and energy must entail emission of degraded matter and energy.
6. The capacity of planetary ecosystems to absorb degraded matter and energy is finite.
7. Production of degraded matter and energy in excess of the capacity of planetary sink services to absorb them is possible but not sustainable.
8. If the human economy has achieved maximum sustainable throughput of matter and energy, any further improvements in output must come from different use of design intelligence (usually to achieve efficiencies in use of matter and energy).
9. Design intelligence can be substituted for matter and energy at the margin, but the substitution is not perfect (i.e., design intelligence cannot make economic value without matter and energy).
10. Because infinite growth in throughput of matter and energy is not possible, perpetual economic growth is not possible; therefore, the prospect of future economic growth cannot be used to resolve problems of social and economic inequity and injustice in the present.
11. Therefore, the study of economics cannot be divorced from the traditional concerns of political theory (justice, fairness, equity); the NDP is therefore a call for the reintegration of economics and politics into a contemporary discipline of political economy.

The economic practices and policies that need to be changed to implement these new premises are many and varied. But two primary mechanisms promise to have amplified effect, since they address key leverage points for change.

One: acknowledgement that *delivered sustainable wellbeing* is the fundamental purpose of the economy, and the development and use of an indicator set that measures this accurately.

¹ Nicholas Georgescu-Roegen, *The Entropy Law and the Economic Process*, Harvard, 1976.

² Genes refined by the trial-and-error experimentation of evolution are the manifestation of practical design intelligence in nature. This set of categories of factors of production is strongly implied by the work of Nicholas Georgescu-Roegen, though antecedents can be found. See for instance James H. Keeling, *Quaero [Some Questions in Matter, Energy, Intelligence, and Evolution]*, (London: Taylor and Francis, 1898), pp. 7-9.

Two: acknowledgement that debt-based money has historically been the driver of growth in matter-and-energy throughput, which has reached its ecological limits and no longer serves the interests of humanity. What is needed is a concerted effort to bring an end to the era of debt-based money through implementation of 100% reserve requirements for bank deposits and other controls on the issuance of monetized debt.

Together these two mechanisms deal with the outputs and inputs of the unsustainable economy. An effective alternative indicator will measure bads and deduct their presence as costs to be charged against the production of goods. Ending fractional reserve banking will eliminate the financial spur that demands the increasingly rapacious use of landscape and resources in order to attempt to pay back the debt that a debt-based monetary system has wagered against it.