

Abstract “Ecomodernism”

The term and concept of "ecomodernism" was coined in 2015 by scientists from the Breakthrough Institute in Oakland, CA, USA. A well-known name in this field is Michael Shellenberger, for example.

Ecomodernism sees itself as an alternative to the classic ecological approach, which is mainly advocated by the Greens. Its goal is to effectively protect the climate and the environment by means other than by renouncing consumption and productive economic growth. The key lies in the use of energy sources of high energy density as a motor for prosperity and progress and the resulting basic principle that man should withdraw from the land and decouple himself from nature instead of exploiting it in a relationship of dependence. This applies to agriculture, raw materials and energy.

In agriculture, modern, gentle land management on as little land as possible with the help of green genetic engineering, targeted plant protection and vertical farming in the cities are mentioned as possible solutions. The primary aim here is to withdraw from the land and create more space for nature conservation.

Raw materials cannot be consumed, which is why ecomodernism speaks of raw material use. The aim is to achieve a raw material cycle that is as automated and complete as possible, also using technical methods such as plasma recycling and pyrochemical partitioning of the elements of the periodic table, which are preserved on our planet in constant quantities for scientific reasons. In this way, the new extraction of raw materials from the earth's crust is reduced and waste is avoided.

Raw material recycling, progress and prosperity need a lot of useful energy, which is physically conditioned and primarily only nuclear energy (modern nuclear fission Generation-4 and nuclear fusion) can provide. Renewable energies are additive to supplement this. One idea would be the use of nuclear power plants in hybrid operation, which can run thermally and thus economically in base load operation and use their process heat, depending on the electricity demand in the grid, in a controllable proportion for the generation of electricity or for the thermochemical production of hydrogen and synfuel, and can thus be ideally supplemented with renewable energies (decentralised photovoltaics, hydropower and waste biomass as a carbon supplier for synfuel). Wind energy would be largely superfluous.

A political advantage of ecomodernism is that, due to its supply and progress concept, it can be implemented in a controlled manner by means of liberal principles of democracy and is not based on prohibitions and calls for renunciation, which would establish rather autocratic and even dictatorial political systems.

I see my task as presenting and explaining this methodology and contributing to its dissemination.

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