



## Biogeosystem technique as a way to implement the principals of Geoethics in technologies of Biosphere

Valery Kalinichenko

Persianovka, Russian Federation (kalimitch@mail.ru)

The uncertainty and degradation of biosphere is a result of outdated industrial technologies. The incorrect principals of the paradigm of nature resources use are to be radically changed corresponding to principals of Geoethics. Technological dead-end is linked to Philosophy of Technology. The organprojektion and imitation of natural patterns are till now the theoretical base of technology. The technological and social determinism are proposed as the "inevitable" for humankind. One is forced to believe that the only way for humanity is to agree that the old way of technical development is the only possibility for humankind to survive. But rough imitation methods of outdated technological platform are fruitless now. Survival at any cost, which underlies practice of industrial technology platform, now has become extremely dangerous.

The challenge for humanity is to overcome the chain of environmental hazards of agronomy, irrigation, industry, and other human activities in biosphere, which awkwardly imitate the nature processes:

Plowing leads to degradation of soil and greenhouse gases emission.

Irrigation leads to excessive moistening and degradation of soil, landscape, greenhouse gases emission, loss of freshwater – the global deficit.

Waste utilization leads to greenhouse gases emission, loss of oxygen and other ecological hazards.

The lack of fundamentally new technologies generates instead of searching the ways for development of biosphere and producing of oxygen a false Geoethical problem – sequester of carbon what threatens the existence of life on the Earth.

Aristotle told that techne can go beyond nature and implement "what nature can't bring to a finish." To overcome fundamental shortcomings of industrial technologies, incorrect land use we propose the Biogeosystem Technique (BGT\*) for biosphere sustainability.

The BGT\* key point is transcendent approach (not imitating natural processes) – new technical solutions for soil processing, control of the fluxes of energy, matter, water and biological productivity of terrestrial systems of biosphere: intrasoil milling machining which provides synthesis the new dispersed system of soil, biological productivity of soil increases twice; intrasoil pulse discrete plants watering which permits to save the freshwater – global deficit – up to 20 times, protect the soil and landscape from excess of water; environmentally safe return of the substances into the active stage of biosphere during the synthesis of dispersed system of soil and (or) intrasoil pulse discrete plant watering to decide the task of proper waste recycling fundamentally.

BGT\* optimizes an anthropogenic carbon cycle on the Earth, reduces the greenhouse gases emission, implements the green economy, provides an extension of the active area of the biosphere on Earth, provides the long-term sustainable use of natural resources; gives the additional biological product, including food, raw materials and biofuels. BGT\* can be implemented on the basis of robotics providing cost savings compared to existing industrial technologies of agronomy and ecology. BGT\* is an implementation of Geoethics in ecologically safe, productive and low cost technologies of Biosphere at the stage of the Noosphere.