



## Carbon irreversible sequestration dangerous mistake

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C sequestration into the subsoil in the form of biochar mostly not digestible to microorganisms, or in the lithosphere, cryosphere, and under the ocean in the liquid form with subsequent CO<sub>2</sub> trapping by ice and minerals, as well as other tricks of the similar origin for the sake of climate stability, is a dangerous mistake. On current geological stage, the most Earth's C is presented in a lithosphere form. So the further reduction of C content in atmosphere leads to avalanche-like biosphere degradation. The current land-use industrial environment technology is helpless to prevent the shrinking of biosphere.

For the Earth's biogeochemical cycle driver's correction, the Biogeosystem Technique (BGT\*) transcendental (not a direct imitation of nature) methodology is developed.

The BGT\* pedosphere, water, waste management and plant growth approach is capable to make the Earth's biogeochemical cycle more abundant.

Soil illuvial horizon of 20–50 (30–70) cm milling helps to overcome the soil compaction. New technology provides long-term (more than 40 years after single intra-soil milling) soil amelioration, reduces dead-end porosity, good soil structure is obtained for plant's growth.

Intra-soil pulse continuous-discrete plant's watering distributes the water into the soil without disadvantages of standard irrigation. Small discrete dose of water is injected to the vertical soil cylinder of 1.5–2.5 cm diameter at a depth from 10 to 35 cm. In a 5–10 min the water redistributes by capillary, film and vapor transfer. The soil carcass is not over-moistened and remains mechanically stable. Soil solution concentration is optimal for nutrition. Stomatal apparatus operates in a regulation mode. Transpiration will be not excessive. This will reduce emission of the most dangerous green-house gas – water vapor.

Waste recycling is provided while soil illuvial horizon milling and intra-soil pulse continuous-discrete watering by simultaneous applying into the soil of nutrients and soil-structuring substances including dispersed industrial, agricultural, biological waste, biochar, gasification product. The first biogeochemical barrier on the “soil – root” border will be high because of the waste disperse dilution into the soil aggregate system at a low soil humidity, and heavy metal passivation is affective in result of the calcium-carbonate equilibrium.

Instead of C irreversible sequestration, the BGT\* method provides a long-term highly productive soil evolution, freshwater conservation, environmentally safe waste recycling. It is promising for agriculture, horticulture, viticulture, forestry, food, raw material and renewable bio-fuel production. This will provide the high C, N, P turnover rate, extended soil-biological C pool, biosphere spread and stability.

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