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SUSTAINABLE DEVELOPMENT PROBLEMS

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Abstract. *One presents the methods to combat the negative effects of any natural and renewable energy sources, which by their inexhaustibility are one self-capable to assure the sustainable development of the humanity.*
In this aim one considers for the fortuitous energies: solar with waste and axial rotor twisted blades, wave with wind and river energies the possibilities to satisfy the consume requirements by their combine exploitation, as well as the river Dorin Pavel's complex uses solutions to take away against the floods and also the drought, like the Black Sea deep-water naturalization with energy recoveries.

Keywords: Sustainable development, Renewable energy sources, Combined and complex uses of renewable energies

1. The characteristics of any renewable energy sources

It is better known the inexhaustibility quality of the natural energy sources, which are able to assure the sustainable development of the human society [1-3], but any of these sources present two disadvantages, as to bee fortuitous and worse to have sometimes catastrophic intensities.

For this reason the solar, wind, wave and river energy must be considered as energy alternative sources, requiring other auxiliary energy sources in absence of a national electric network to balancing the energy requirements with its production, to assume the energy peaks being proper the hydraulic power stations with bigger accumulation lakes and also with two lakes for accumulation by pumping units.

Against the floods and also against the drought [4] we shall present the best environmental friendly solutions.

The best method to solve both these problems is so called the **complex uses method** of our famous professor and renowned hydropower master Dorin Pavel [5-7], formerly among the firsts members of the Romanian Scientists Academy in 1934, after which we must have in view not only the energy production, but also the water for drinking and irrigations, as well as the environment friendly works as tourism, sport, recreation, etc.

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