## Global Cooling System installed on the beach by means of Artificial Convection and Artificial Rain

## \*Murakami Hideyo<sup>1</sup>

## 1. li Ecology Development

In recent years the Earth is warming. The sun radiates sunlight energy and warms the Earth. The Earth reflects a part of sunlight energy to space and radiates infrared ray including latent heat energy to space. An amount of sunlight energy received by the earth is almost the same as an amount of energy sent out by the earth. The amount of sunlight energy is almost constant. On the other hand Greenhouse gas such as  $CO_2$  decreases a ratio of a heat enrgy which air sent out to space to a heat enrgy which air radiates. Then global mean temperature is increasing and many severe climate events due to mean temperature increase happen. In the world many people study to decrease  $CO_2$  accumulation in air and not to increase global mean temperature. However a useful system for decreasing  $CO_2$  accumulation cannot be developed.

This paper studies Global Cooling System. Global Cooling System is composed of Artificial Convection Equipment (type II) and a control center. Global Cooling System can cancel mean temperature increase and cools the Earth, even if air has a lot of greenhouse gas and mean temperature increase is 2°C.

Artificial Convection Equipment looks like a large greenhouse, which is composed of 1 roof, 1 wall, 1 air inlet, 1 air outlet and 1 heater. Artificial Convection Equipment is installed on a tropical beach where it is hot and humidity  $(35^{\circ}C, 26.2 \text{g kg}^{-1})$ , and a sea breeze during daytime. The roof and the wall are made of transparent plastic sheet and there are the heater (black sheet) under the roof. The heater receives sunlight energy under the roof and changes sunlight energy to heat energy, and warms air inputted from the inlet and sends out heated air from the outlet. Heated air is lighter than circumstance air and is lifted up to the troposphere. The lifted air, which includes a lot of vapor, is cooled in the troposphere. Then vapor is cooled and is changed to artificial rain or snow in the troposphere. The artificial rain or snow falls down to the land. As a result Artificial Convection Equipment artificially makes convection between the beach surface and the troposphere, by transporting warmed air from the beach surface to the troposphere upward and bringing down artificial rain or snow with high altitude air downward. The lifted air sends out latent heat and sensing heat energy of circumstance air including vapor on the beach surface to space, and the artificial rain or snow with the high altitude air absorbs sensing heat and dissolution heat from circumstance air on the land, and cools the land surface too. Furthermore in a region where it is hot and small rain, a half amount of artificial rain is absorbed by plants. Plants vaporize it and absorbs latent heat from circumstance air. Then the earth is cooled by plants too.

This paper analyses Global Cooling System by means of Artificial Convection and Artificial Rain, and shows that mean temperature increase can be stop by Global Cooling System. A large scale of experiment is required to reconfirm a characteristics of Global Cooling System.

Keywords: global cooling, artificial convection, latent heat, artificial rain