

The Global Warming and Heat-Island of Big Cities :Urban Design of Tokyo Metropolitan City on going

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The big problem related to the global warming is big city design and planning related to the advancement of effect of the areal heating, so-called the Heat Island. This is fundamentally caused by the convergence and resultant increase of population, which is come from local cities and increase a hundred thousand persons per year, almost equal to the population of average small local city of Japan. As well known, the 1/2 world population is in big cities, London, New York, Paris, Shanghai and Tokyo cities as such. In such areas, the scientific debate to involve the global warming is out of problem, and the increase of average temperature is more than ten times to the inferred increase of the global warming from past 140 years.

These mean we are needed to establish plans in long term to make gradual decrease of average temperature of such cities, because the cause of the increase is related to the problem of conversion of the city population. If do nothing, the human society, economy and politics over the cities are confused and finally collapsed, inevitably. Also the population increase causes the vast chemical pollution becoming serious and keen, with the effect of island heating. Scientifically this matter has been solved.

So that, we proposed herein the 2 proposals to provide the solution of such problems; the first is to make the authorized organization as a section of integrated environmental urban planning and design, within the Metropolitan. The second is composed of planning a long term scenario of 50 to 100 years. The scenario includes the total positioning plan of large buildings for the current pattern of sea and mountain winds, filling-up pattern plan of the Tokyo bay, afforestation plan, plan related to reuse and impoundment of rain water, plan to construct more than 100 isolated power plants including biomass plants with heated water circulation for making low-carbon city, infrastructural plan of ITC and governmental support to develop new artificial materials.

The plan also include the local city reactivation. The importance of such low-economy areas is the concentration of all the properties to limited area and cut-off the expense. The new concept of city with oil-free energy sources is also fundamental. So, Japanese all local cities should achieve to make a balance system of oil-free, clean energy supply and demand, such as with no use private car cities.