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A Report of Sustainable Energy Trip in Nagano Prefecture From 5th December to 6th December 2011

By

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With the development of economy and the progress of the society, the demands of energy is become bigger and bigger. Traditional fossil energies are facing the problems of depletion and environment pollution and it is imperative to develop some new sustainable energy sources to meet the needs of human development. For the above backgrounds, the FOLENS of TUAT organized Sustainable Energy Trip in Nagano Prefecture from 5th December to 6th December 2011 whose objective is to visit some local new energies companies and learned the new ideas for sustainable energies strategies.

In this trip, we visited Ohisama Sinpo Energy Corporation, Nanshin biomass Cooperative, Mibugawa Small-Scale Hydro Power Stations and Hasenakayama Community Micro Hydro Power Station and learned many sustainable energy development examples, such as, wood wastes utilization, using of mushroom bed wastes for heat generation for the farm, heat pump utilizing over flowed hot spring water, solar energy development, Micro Hydro Power Station and so on.

This trip providing for us the good opportunity to familiar and understand the concepts and strategies of sustainable energy development. I learned lots of advanced ideas and technologies and also got some points we need to study and improve further. Fowling are main highlights should be promoted in my opinion:

- 1) Local energy generation for local consumption. This strategy not only improves local people's participation but also saves transportation cost.
- 2) Small-Scale energy utilization technology. Look from economic and regional angle, Small-Scale energy utilization is more feasible.
- Positive publicity, education and calling for public participation New sustainable energy is still in its infancy, it needs more people to understand and participate.

Fowling are some points we should improve further:

- 1) More economical processes and technologies. Compared to traditional energy, there is no economic advantage for new sustainable energy currently.
- 2) More government supports. Because new sustainable energy is still in its infancy, it needs more government supports. Such as increasing the tax of fossil energy to subsidize new sustainable energy
- 3) Not concept but real feasible projects. Due to the current level of technology and economic factors, the feasibility of some projects should be studies further before start.