The 4th Michael Nobel Sustainable Technology Symposium

May 21, 2015, Shibuya Campus, Japan University of Economics

The 4th Michael Nobel Sustainable Technology Symposium (former Energy Technology Symposium) took place covering the agenda "How can environment-friendly cars contribute to a reduction in the CO2 level". Dr. Nobel presented a keynote speech followed by lectures on Electric vehicles, High-efficient combustion engine vehicles, Hydrogen infrastructure for FCVs, Bio-fuels and bio-chemicals. A panel discussed on advantages and disadvantages of each environment-friendly vehicle, and how it can be developed in the Asian countries. A MoU (Memorandum of understanding) on collaboration for the development of those vehicles was agreed by the panelists on the individual basis.

MEMORANDUM OF UNDERSTANDING

This Memorandum of Understanding (MoU) is entered into by those who have signed on individual basis.

We, individually, look very positively to the Technology Forum for the Future Asia (hereinafter referred as TeFFA) Project visions, from the view point of engineers, scientists, business practitioners or public officers. As a part of TeFFA visions we feel particularly positive about the following:

1. The transportation sector uses one fourth of the total energy consumption and vehicle technology occupies a very important role from the standpoint of environment preservation.
2. CO2 emission from vehicles should be improved based on the concept of "Well-to-Wheel".
3. The emission control should be covered by various technologies including electric vehicles, fuel cell vehicles, improvement of the internal combustion engine, etc., according to the circumstance of each country.
4. A reduction of CO2 emission from vehicles greatly depends on energy sources and on how electricity or hydrogen is produced.
5. In Asian countries, we could expect reduction of CO2 emission from vehicles by ① improving efficiency of combustion engines, ② improving efficiency of power stations for EVs , mostly by ③ EVs powered by electricity from renewable sources in the future.

In summary, we would be willing to assist on an individual basis, the TeFFA Project in technology, promotion, networking, fund-raising, collaboration or governmental negotiation as far as such assistance is within our capacity.

Our signatures are given below.

Date: 21.05.2015	Date: 21.05.2015	Date: 5/21/15
Signature: [signature]	Signature: [signature]	Signature: [signature]
Name: Michael Dabelstein	Name: Mitsuo Hitotsuyanagi	Name: Naoyuki Takano
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