



Biomass-Asia Workshop II

Panel Discussion 4: “R&D for Future Bio-Energy”

Chair by: Kinya Sakanishi (Director of BTRC, AIST, Japan)

Panelists:

Dr.Akira Yabe (Director General, AIST Chugoku, Japan)

Dr.Jie Chang (Director of Biomass Fuel Lab., GIEC, China)

Dr.Nuna Encarnacion Almanzor (Director of ITDI, Phillippines)

Dr.Unggul Priyanto (Director of Ener.Res.Dev.,BPPT,Indonesia)

Prof. Montri Chulavatnatol (Director, ARDA, Thailand)



Biomass-Asia Workshop II

Panel Discussion 4: R&D for Future Bio-Energy

Wrap up: ***Future Collaborative Projects on Biomass Utilization for Innovative R&D of;***

- 1) Bio-fuels such as bioethanol, BDF, & DME (new fuel)
- 2) Economically & environmentally-friendly total system evaluation of biomass conversion technologies
- 3) Design of sustainable production & consumption of biomass resources among Asian countries



Biomass-Asia Workshop II

Future Projects in Innovative R&D;

1) **Bio-Fuels;**

Bioethanol(gasohol) from agricultural wastes, Bio-diesel fuel(BDF), BTL(biomass to liquids) synthetic diesel fuels and DME from various raw biomass such as vegetable oils of palm, coconut, jatropha curcus, or indirectly from wastes by pyrolysis etc.

=> Advanced transportation fuels and energy



Biomass-Asia Workshop II

2) Total System Analysis by Simulation

Process optimization of various biomass resources in Asian countries from the viewpoints of economy, environment, and location for developing commercialization process through international collaboration

=> TLCC(Total Life Cycle Cost Evaluation) is important for the global evaluation.



Biomass-Asia Workshop II

3) Business Model on Sustainable Production and Consumption;

Feasible study of agro-factory productions of bio-fuels and other bio-energy in each country and among Asian countries

=> Needs for the common database of various biomass resources in Asian countries and establishing the Biomass-Asia Consortium through this Biomass-Asia Workshop

“Give&Take” Spirit is most important !