

APEC

Advanced Biohydrogen and Green Growth

Newsletter

APEC Meetings and Events

§ The 2013 APEC Steering Committee Meeting on Green Growth and Short-Term Training Course on Green Energy Technology §

April 29 – May 2, 2013

Chinese Taipei

The 2013 APEC Steering Committee Meeting on Green Growth was held on May 1, 2013 at Feng Chia University, Taichung, Chinese Taipei. A total of 13 participants from 6 APEC members attended the meeting. We were privileged to have 4 distinguished keynote speakers and 2 invited speakers from China, Chinese Taipei, Japan, USA, Thailand and Vietnam. Keynote speakers and invited speakers delivered presentation on the green growth in his/ her country. In the plenary discussion, there were a lot of significant and interesting discussions.



2013 APEC Steering Committee Meeting on Green Growth

The 2013 APEC Short-term Training Course on Green Energy Technology was held at Feng Chia University, Taichung, Chinese Taipei on April 29- May 2. A total of 25 students from Chinese Taipei, India, Thailand and Vietnam participated in the course. On April 29- May 2, we invited outstanding lecturers to deliver different lectures in green energy field. The last day was the technical tour in Sun Moon Lake. All participants gained significant ideas and knowledge in the area of green energy technology.

The food security, climate change, energy security, interlinked challenges, and green growth for the APEC region.

Contents

- ◎ APEC Meetings and Events Announcement
- ◎ Research News
- ◎ Special Column

➤ **Publisher: Office of APEC Research Center for Advanced Biohydrogen Technology**

➤ **Editor: Chiu-Yue Lin, Professor**

➤ **Address: 100 Wenhwa Road, Seatwen, Taichung, Taiwan**

➤ **TEL:+886-4-24517250 Ext. 6230**

➤ **FAX:+886-4-35072114**

➤ **Financially supported by National Science Council (Grant no. NSC 101-2911-I-035-001)**



2013 APEC Short-term Training Course on Green Energy Technology

Research News

§ Green Energy Initiation and Investments in APEC Countries- Indonesian Prospective § Cargill Palm Plantation Certification for Sustainable Biofuels

INDONESIA – Cargill’s palm oil plantation in West Kalimantan, Indonesia, PT Harapan Sawit Lestari (HSL), has received international recognition for its sustainable palm oil practices.

HSL was awarded the certification for sustainable palm oil supply for biofuels according to the International Sustainability and Carbon Certification (ISCC) standards in the European Union (EU). This certification covers HSL’s entire operations, including smallholder plantations managed by Cargill under the KKPA (Kredit Koperasi Primer Anggota) scheme, mill, and warehousing operations.

ISCC is a certification scheme that promotes responsible farming by allowing sustainable products to be differentiated from non-sustainable ones, including greenhouse gas emissions at different stages of the value chain. It is approved by the EU to cover the EU Renewable Energy Directive (RED), which means that Cargill is able to provide palm oil intended for energy applications to customers who are working towards compliance with the RED.

“We have always believed that responsible and sustainable production of palm oil is the way forward for

this industry and we have been working hard to make our operations in Indonesia increasingly sustainable. The ISCC-EU certification covers the entire supply chain at all of HSL’s locations which produce about 130,000 metric tons of sustainable palm oil annually,” said by John Hartmann, Chief Operating Officer, Cargill Tropical Palm Holdings Pte Ltd. “This represents a major milestone in our sustainable palm oil strategy and we are proud to continue our efforts to promote the palm oil sustainability agenda across the relevant sectors related to the palm oil industry.”

As part of its corporate responsibility initiative, Cargill helps local farmers adopt sustainable agricultural practices, improve land use, increase the quality and quantity of their crops, and promote safe and efficient working practices. In rural areas where education and literacy levels are typically lower than urban cities, such initiatives can help increase the quality of life and incomes of the local community.

“We will continue to work with our small holder farmers, stakeholders and the local government to improve the living standards and livelihood of the local communities through multi-year corporate responsibility

programs,” said Ong Kee Chau, President Director of PT Harapan Sawit Lestari.

“The ISCC-EU certification puts us and our host location, Ketapang district in West Kalimantan Indonesia, on the biofuels map. As originators of ISCC-EU certified palm oil, we are now able to help meet growing demand for sustainable energy applications through the use of biofuels. “This globally-recognised stamp of approval serves as a credible endorsement of our sustainable practices to the international market.”

Cargill’s other palm oil plantation in Indonesia, PT Hindoli in South Sumatra, saw one of its first smallholders’

Adapted from:

<http://www.thebioenergysite.com/news/13255/cargill-palm-plantation-certification-for-sustainable-biofuels>

§ Green energy initiation and investments in APEC countries- Canadian Prospective § Bioenergy Could Fuel Future of Atlantic Canada

CANADA - A new report shows a biofuels production industry in Atlantic Canada could generate C\$1.5 billion in GDP, C\$273 million in combined tax revenues and close to 10,000 jobs, after just five years of operation.

The findings come as the result of a comprehensive project to explore Atlantic Canada’s bioenergy opportunities, led by the Atlantic Council for Bioenergy Co-operative (ACBC) in partnership with BioAtlantech New Brunswick. ACBC released the project report – “Fueling the Future: Atlantic Canada’s Bioenergy Opportunities Project”

The report reveals the region’s asset capacity, presenting a business case for developing a biofuels industry – with calculated proof of its economic impact – and making key public policy recommendations necessary to move forward. Research confirms a region rich in natural resources with abundant crop acreage for a variety of feedstock – corn, wheat, barley, soybean, canola and sugar/energy beets – that can be used to produce biofuels,

cooperatives, KUD Mukti Jaya, received ISCC-EU certification in June 2012. This latest smallholder ISCC-EU certification comes on the heels of PT Hindoli’s own certification upgrade from ISCC-Germany to ISCC-EU, further demonstrating Cargill’s commitment to producing palm oil in an environmentally sustainable and socially responsible manner. HSL was awarded with the ISCC-EU certification after an independent audit by SGS Germany GmbH.

as well as the academic research capacity to capitalize on new technologies.

That, combined with the demand created by Renewable Fuels Standards recently introduced across North America, paints a promising picture for Atlantic Canada.

To meet the mandated requirements for blending renewable fuels, producers in this region need to supply 325 ML of product – 250 ML ethanol and 75 ML biodiesel – a capacity which is currently not being met through domestic production, resulting in a significant loss to environmental benefit and economic impact. This was validated through the analytical work of Gardner Pinfold Consultants Inc., who were contracted to assess the feasibility and quantify the direct and spin-off impacts of developing and operating a biofuels industry in the region.

The analysis showed that construction and operation of just one plant would create 700 jobs, over C\$40 million in GDP and close to C\$10 million in federal and provincial tax revenue. Using the 325 ML production volume

required to meet the national mandate for renewable fuels would mean construction and operation of up to 13 plants across Atlantic Canada, totalling annual economic impacts of up to C\$244 million in GDP, nearly 5,000 full time jobs and C\$125 million in labour income, and close to C\$50 million in combined tax revenues.

To truly realise the positive impact a biofuels industry holds for Atlantic Canada, the report proposes four recommendations – key public policy instruments critical for this industry to advance:

- (a) Implement renewable fuels regulations and accompanying legislation;
- (b) Develop national and provincial capital assistance programming;
- (c) Create production incentives; and,

- (d) Establish a regional working group of industry, government and academia to act as catalyst for implementing the recommendations and push the biofuels industry to the next level.

As Atlantic Canada’s lead bioenergy association, ACBC is the voice for the development and advancement of sustainable bioenergy industry in this region.

The “Fueling the Future” project spanned 14 months of research and stakeholder engagement and represents the first collaborative effort of an organised and established pan-Atlantic industry group to illustrate the realistic potential of this region’s bioenergy industry and provide clear recommendations which, when implemented, will create the right circumstances for positive change and opportunities in this region.

Adapted from: <http://www.thebioenergysite.com/news/13244/bioenergy-could-fuel-future-of-atlantic-canada>

Special Column

§ The Multi-Stage Green Energy Demonstration (MSGED) System of Biological Technology for APEC Member: Viet Nam §

In order to promote the technology exchange among APEC members and support the green growth issues, the project overseer Prof. Chiu-Yue Lin, and Dr. Hoang-Jyh Leu, Feng Chia University presented a MSGED to Dr. NGUYEN DUONG TAM ANH, Department of Biochemistry, Faculty of Biology, University of Natural Sciences, Viet Nam National University - Ho Chi Minh City, Viet Nam on May 1, 2013. This system is designed and built by Green Energy Development Center, Feng Chia University.

Both sides discussed the further cooperation and moved ahead with practical plans for developing green technology and academic exchange. Green Energy Development Center, Feng Chia University has designed some successful demonstration systems, such as the multi-stage green energy demonstration (MSGED) system of Biological technology and Bio-H₂ Gas Station.

Dr. Hoang-Jyh Leu shared the operation of the MSGED system of Biological Technology.

Through this meeting, it will integrate international educational resources, and collaborate on research and development and sustainable management, among other fields.



Presenting the Multi-Stage Green Energy Demonstration (MSGED) System of Biological Technology