

## **The Feasibility for Future Cooperation between ACABT/PPSTI and EGNRET**

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# About APEC PPSTI

## Policy Partnership on Science, Technology and Innovation

### Establishment

- In 2012, Transformed from APEC **Industrial Science and Technology Working Group (ISTWG)** to include issues of innovation policy development. Now established as the primary fora for **science, technology and innovation (STI)** under APEC framework

# PPSTI Mission & Vision

## Mission

- To support the development of S&T cooperation as well as effective STI policy recommendations through collaboration between government, academia, private sector and other APEC fora

## Vision

- By 2025, APEC will have achieved innovative economic growth through PPSTI's efforts.

# Operations of PPSTI

- Chair

**Ms Christin Kjelland**

U.S. Department of State

Bureau of Oceans and International Environmental and  
Scientific Affairs (OES)

- Vice Chair

**Mr Chen Linhao**

Department of International Cooperation

Ministry of Science and Technology, People's Republic of China

- Program Director

**Ms LIU Zhongzhen**

# PPSTI Subgroups(3)&Centers(8)

<b>Subgroup A</b>	Building Science Capacity (Chair: Malaysia, Vice-Chair: China)
<b>Subgroup B</b>	Promoting Enabling Environment for Innovation (Chair: the Philippines, Vice-Chair: Peru)
<b>Subgroup C</b>	Enhancing Regional Science and Technology Connectivity (Chair: Chinese Taipei, Vice-Chair: United States)

<b>APCTP</b>	Asia Pacific Center for Theoretical Physics (est. 1996) (Korea)
<b>APECCTF</b>	APEC Center for Technology Foresight (est. 1998) (Thailand)
<b>ACES</b>	APEC Cooperation for Earthquake Simulation (est. 1999) (Australia)
<b>APECTT</b>	APEC Center for Technology Transfer (est. 2002) (China)
<b>APCC</b>	APEC Climate Center (est. 2005) (Korea)
<b>AMGS</b>	APEC Mentoring Center for the Gifted in Science (est. 2006) (Korea)
<b>ACABT</b>	<b>APEC Research Center for Advanced Biohydrogen Technology (est. 2010) (Chinese Taipei)</b>
<b>ACTS</b>	APEC Research Center for Typhoon and Society est. 2010) (Chinese Taipei)

# Recent PPSTI Projects (2014-2017)

Status	Projects	Note
Completed	2014: 6 2015: 15 2016: 2	APEC funded: 6 * Self-funded: 17
On-going	2015: 2 2016: 5 2017: 6	APEC funded: 5 Self-funded: 8

\* 3 projects funded by Energy Efficiency and Low Carbon Measures Sub-Fund

# Completed Projects (2014-2016)

## APEC Funded (6)

	Fund Resources	Project Title	No.	Proposing Economy(ies)
1	ASF: Energy Efficiency	<a href="#"><u>Regional Workshop on Measurement Challenges in Renewable Energy and Climate Science</u></a>	PPSTI 02 2015A	China; United States
2	ASF: Energy Efficiency	<a href="#"><u>Improving Micro, Small and Medium Enterprises (MSMEs) Competitiveness through Low Carbon Economy</u></a>	PPSTI 03 2015A	Philippines
3	ASF: Energy Efficiency	<a href="#"><u>Internet of Vehicles — IoV Project Phase 2: A Global Exhibition with a Symposium in the Asia-Pacific Region</u></a>	PPSTI 01 2015A	China; Chinese Taipei; United States
4	ASF: Connectivity	<a href="#"><u>Young Scientists Workshop for the APEC Roadmap of Science Communication in the 21st Century</u></a>	PPSTI 01 2014A	Malaysia
5	ASF: Science & Technology Development	<a href="#"><u>Innovation Futures in APEC - Competitiveness and Grand Challenges</u></a>	PPSTI 05 2014S	Russia; Thailand
6	ASF: Science & Technology Development	<a href="#"><u>Policy Investigation on the Last Mile Solution of Smart Transportation and Its Application on SME Value Chain Development</u></a>	PPSTI 13 2015S	Chinese Taipei



# Completed Projects (2014-2016)

## Self-Funded (17)

Fund Resources	Project Title	No.	Proposing Economy(ies)
Self-Funded	<a href="#">APEC Typhoon Symposium</a>	PPSTI 04 2014S	Chinese Taipei
Self-Funded	<a href="#">APEC Green Video Festival</a>	PPSTI 03 2014S	Chinese Taipei
Self-Funded	<a href="#">APEC Workshop on Strategies to Address Non-Communicable Diseases (NCDs) through Science, Technology and Innovation - Nutrigenomics Approach</a>	PPSTI 01 2014S	Philippines
Self-Funded	<a href="#">APEC Technology Commercialization Program</a>	PPSTI 02 2014S	China
Self-Funded	<a href="#">Improving Micro, Small and Medium Enterprises (MSMEs) Competitiveness through Low Carbon Economy</a>	PPSTI 03 2015A	Philippines
Self-Funded	<a href="#">Workshop on Impact Assessment and Monitoring of Science, Technology and Innovation Policies</a>	PPSTI 12 2015S	Peru
Self-Funded	<a href="#">APEC Training Programs for Seismic Design of Structures 2015</a>	PPSTI 10 2015S	Chinese Taipei
Self-Funded	<a href="#">Establishment of Regional Database on Herbal Medicine</a>	PPSTI 09 2015S	Philippines
Self-Funded	<a href="#">The Co-establishment of an Online Service Platform for Collaborative Innovation of SMEs in APEC Member Economies</a>	PPSTI 08 2015S	China
Self-Funded	<a href="#">From Science to Action: The Use of Weather and Climate Information for Efficient Disaster Risk Management</a>	PPSTI 06 2015S	Korea
Self-Funded	<a href="#">APEC Smart City Forum and Exhibition on Information Technology</a>	PPSTI 04 2015S	China
Self-Funded	<a href="#">Building Regional Ocean and Land Observation Systems to Safeguard APEC Resources and Communities</a>	PPSTI 03 2015S	Australia
Self-Funded	<a href="#">APEC Workshop on Commercialization and Popularization of Research and Market-based Innovations through Policy Translation</a>	PPSTI 02 2015S	Philippines
Self-Funded	<a href="#">APEC Workshop on Strategies to Address Non-communicable Diseases (NCDs) through Science, Technology and Innovation: Nutrigenomics Approach</a>	PPSTI 01 2015S	Philippines
Self-Funded	<a href="#">Training and Nurturing Young Scientists (Theoretical Physicists) in the Asia-Pacific Area (APEC Young Scientist Training)</a>	PPSTI 05 2015S	Korea
Self-Funded	<a href="#">Smart Climate Information and Accountable Actions: Achieving Sustainable Food Security in a Changing World</a>	PPSTI 01 2016	Korea
Self-Funded	<a href="#">2016 APEC Typhoon Symposium</a>	PPSTI 01 2016S	Chinese Taipei

# On-going Projects (13)

Fund Resources	Project Title	No.	Proposing Economy(ies)
ASF: Connectivity	<a href="#">9th APEC Cooperation for Earthquake Simulation (ACES) International Workshop</a>	PPSTI 07 2015S	China
ASF: Innovative Development, Economic Reform and Growth (IERG)	<a href="#">APEC Internet of Vehicles (IOV), Phase 3 - Training Program in the Asia-Pacific Region based on APEC Connectivity Blueprint and Strategic Blueprint on Global Value Chains</a>	PPSTI 02 2016A	China
ASF: Innovative Development, Economic Reform and Growth (IERG)	<a href="#">Knowledge Transfer Best Practices between APEC Economies</a>	PPSTI 05 2016A	Mexico; Peru
ASF: Micro, Small and Medium Enterprises (MSME)	<a href="#">APEC Symposium on Policy and System for Promoting Micro, Small and Medium Enterprises (MSMEs) Modernization toward Industry 4.0</a>	PPSTI 04 2016A	China
General Project Account	<a href="#">SMEs Cluster Development through STI and Supplier Value Chain Integration</a>	PPSTI 03 2016A	Chinese Taipei

Fund Resources	Project Title	No.	Proposing Economy(ies)
Self-Funded	<a href="#">Promoting Commercialization and Investments for Science and Technology Products and Developing Potential Technology in the APEC Region</a>	PPSTI 11 2015S	Viet Nam
Self-Funded	<a href="#">Simple Human Resources to Symbiotic Green Makers - An Education Platform for STI to SMEs</a>	PPSTI 02 2016S	Chinese Taipei
Self-Funded	<a href="#">Foster International Technology Transfer (ITT) Professionals for the APEC STI Cooperation and Connectivity</a>	PPSTI 01 2017A	China
Self-Funded	<a href="#">APEC Workshop on Cross Border Mobility of Entrepreneurial Mentors to Promote Capacity Building of STI MSMEs</a>	PPSTI 05 2017S	China
Self-Funded	<a href="#">Workshop on Vocational Education Linkage with Labour Market</a>	PPSTI 04 2017S	Indonesia
Self-Funded	<a href="#">Industrial Innovation Outlook</a>	PPSTI 03 2017S	Thailand
Self-Funded	<a href="#">APEC Training on Health and Medical Big Data Innovation</a>	PPSTI 02 2017S	China
Self-Funded	<a href="#">Building Asia-Pacific Standards Dosimetry Laboratories Capabilities toward Regional Sustainable Network</a>	PPSTI 06 2017S	Thailand

# ABOUT ACABT

To build a platform for APEC economies using bio-waste in bio-refinery concept for bio-hydrogen and bio-based products and to promote the development of the community economy and drive the bio-economy in APEC region.

## GOAL AND MISSION

# ACABT Chapters and Branches

2016.04

## Malaysia Chapter

CHAIR -Prof. Dr. Jamaliah Md Jahim  
UKM, Malaysia



2017.08

## Chongqing China Branch

CHAIR-Prof. Dr. Qiang LIAO  
Chongqing University, China



2016.07

## Indonesia Chapter

CHAIR-Prof. Dr. Eng. Eniya Listiani Dewi  
BPPT, Indonesia



2017.08

## North Vietnam Branch

CHAIR-Prof. Dr. Le Ha QUAN  
Hanoi University of Science and Technology,  
Vietnam



2016.07

## Thailand Branch

CHAIR-Prof. Dr. Alissara Reungsang  
KKU, Thailand



2016.07

## Indonesia Branch

CHAIR-Prof. Dr. Enny Sudarmonowati  
LIPI, Indonesia





# Activities

## ■ Short-term Training Courses (2010-2017)



2016/7/1 -16  
Promoting Community  
Empowerment in  
APEC's Rural Area

2017/8/14 -31  
Green Economy and  
Social Innovation



# Activities

## ■ ACABT Workshops (2010-2017)

2016/7/13-15

- 146 participants from 14 economies
- Invited speakers from 6 economies (Japan, Thailand, Vietnam, Indonesia, Philippines, Malaysia)



2017/8/27-31

- 120 participants from 14 economies
- 11 speakers from 8 economies (China, India, Indonesia, Japan, Malaysia, Philippines, Thailand, Vietnam)



# Activities

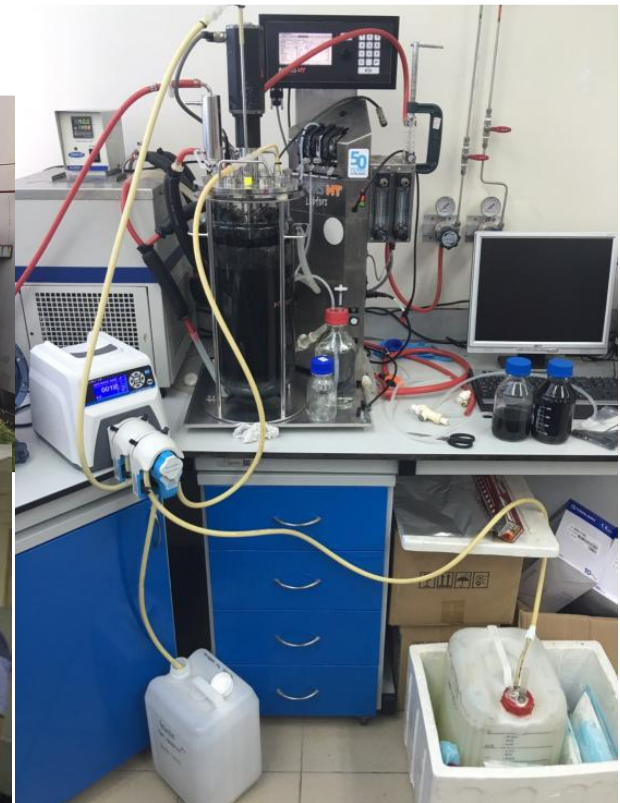
## ■ APEC Yes Challenge (2017/8/27 -31)



Next Year  
2018 Yes-Challenge will be  
in Bangkok, Thailand

# Regional Science and Technology Connectivity

- **UKM, Malaysia -1000L Biological Hydrogen Production**  
2016/7/25~2016/8/15
- **BPPT, Indonesia -1000L Biological Hydrogen Production**  
2016/10/11~2016/11/11





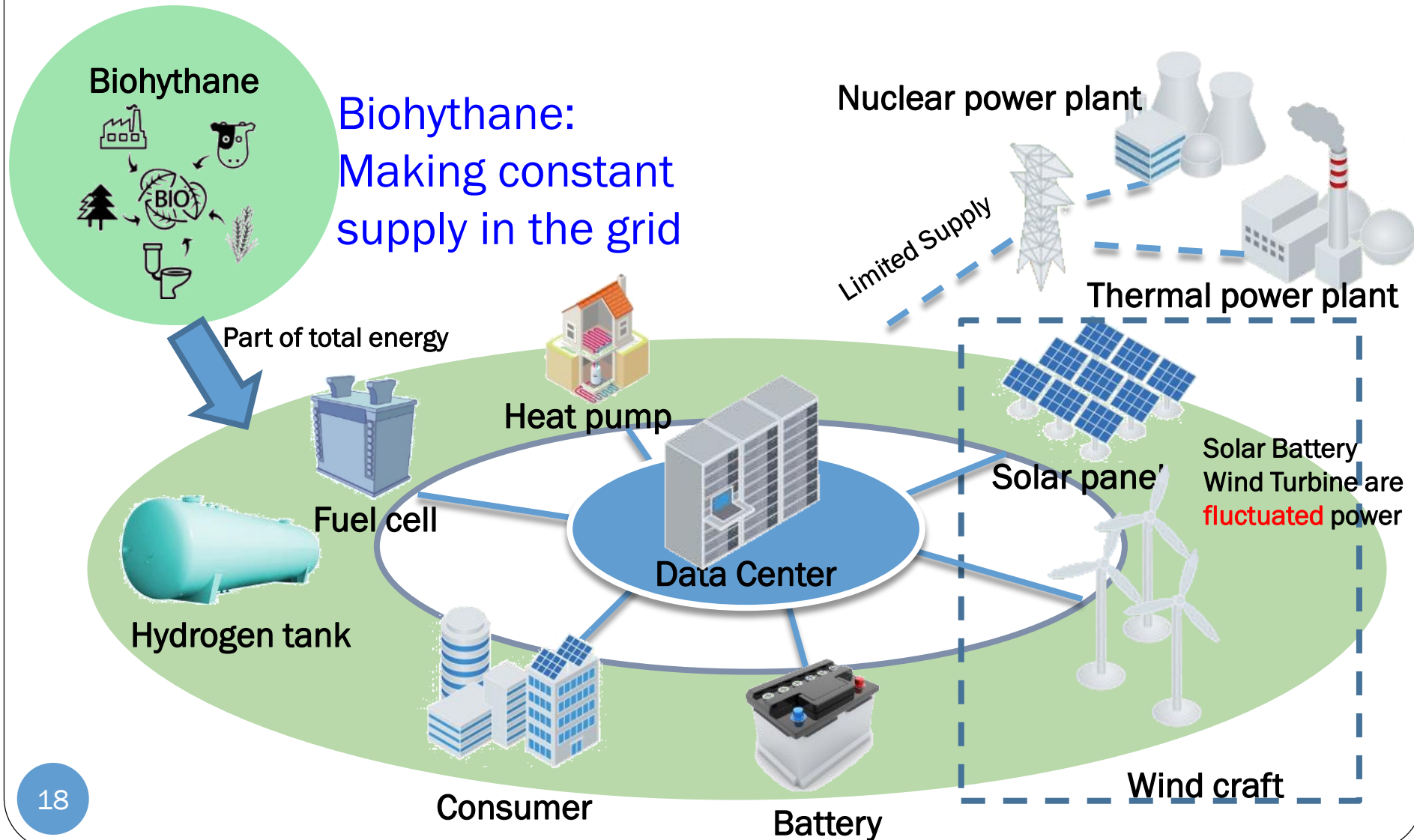
# ACABT New Proposal Funded by Energy Efficiency Sub-Fund

(Session 2, 2017)

ACABT –  
Smart Power  
Management for  
Self-Sustained  
Green Community  
in APEC Region

- **Proposing APEC economy**  
Chinese Taipei
- **Co-sponsoring economies:**  
China, Indonesia, Thailand, Viet Nam
- **Goal:**  
To provide practices on how to transfer organic wastes to bioelectricity and to the smart power grid; and eventually, to build up a collaboration model in APEC region.

# Biohythane Smart Power and Green Cycle Managements



# Benefit for APEC Region

To build R&D capability

To promote cross-border  
education

The Connectivity Framework:

Demo Plant

Forum & Meeting

Training Course

Newsletter & Website

To extend the value chain of  
scientific research

To improve green policies



From biomass to bioenergy to bioeconomy

# Upcoming Activities

## 2018 YES Challenge

<http://yes.apec-acabt.org/2018>

2018 YES Challenge will be moved to Bangkok, Thailand for the offline final pitch in the end of August.

The topic focus on Smart Power Management for Self-Sustained Green Community in APEC Region.

The preliminary round is now open and extended to March 30, 2018.

- **3/30 Registration & Preliminary Round** Each team registers online with two A4 pages preliminary plan.
- **4/7 Announcement of Semi-Pitch** The teams that enter Semi-pitch need to register on a MOOCs platform before Semi-pitch round starts.
- **4/10-5/10 Start Semi-pitch Round 1** Module 1 online for participatory learning
- **5/11-6/10 Start Semi-pitch Round 2** Module 2 online for participatory learning
- **6/20 Announcement of the Finalists**

# Suggestion for Preliminary Cross-fora Collaboration between EGNRET & ACABT/PPSTI

Attending fora and sub-fora meetings mutually for sharing ideas and experiences

## Cross-fora Joint Projects

- Low Carbon Economy and Energy Deployment
- Renewable Energy Technology Development
- Green Transportation Promotion
- Others

## APEC Research Center for Advanced Biohydrogen Technology (APEC-ACABT)

# Thank You for Your Attention



- **Contact**

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- **ACABT website**

<https://apec-acabt.org/>