

Please note that this presentation was given during the United Nations Climate Change Conference (COP-15) in Copenhagen, December 7-18, 2009 for more information please visit

http://www.cop15.state.gov/.





Mobilizing Private Sector Financing for Mitigating Climate Change and Promoting Development using CTI PFAN

UNFCCC Climate Change Negotiations

Side Event at the US Center, COP 15, Copenhagen 9th December 2009

CTI PFAN'S FUNDING PARTNERS











renewable energy & energy efficiency partnership

CTI PFAN NETWORK MEMBERS















FE CLEAN ENERGY GROUP























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INTRODUCTION

- ☐ This event will highlight the work of the Private Financing Advisory Network, and generate discussion around clean energy financing and scale-up opportunities.
- □ CTI PFAN is a Multi-Lateral Initiative:
 - Initiated by the Climate Technology Initiative (CTI)
 - Asia Pacific Partnership (APP)
 - Renewable Energy & Energy Efficiency Partnership (REEEP)
 - International Center for Environmental Technology Transfer (ICETT)
 - U.S. Agency for International Development (USAID)
- □ USAID has been involved with the scale up of PFAN from pilot to a full scale program
 - Global Climate Change Program
 - Regional Development Mission in Asia



INTRODUCTION (2)

☐ CTI PFAN goals:

- to accelerate technology transfer and diffusion under the UNFCCC,
- to reduce greenhouse gas emissions,
- to promote low-carbon, sustainable economic development,
- to help facilitate the transition to a low-carbon economy,
- to increase financing opportunities for promising clean energy projects
- CTI PFAN builds a network of investors, entrepreneurs, technical experts and government representatives with a common goal of increasing the viability of clean and renewable energy.
- ☐ Triple bottom line investing: investments that support "people, planet, and profit". CTI PFAN not only promotes GHG mitigation and sound business development, but also sustainable economic growth and development.



OVERVIEW OF CTI

- ☐ Implementing Agreement under the IEA in support of UNFCCC
- ☐ Currently 11 Member Countries:
 - Austria, Australia, Canada, Finland, Germany, Japan, Norway, South Korea, Sweden, UK & US (Chair)
- ☐ To promote more rapid development and diffusion of climate friendly and environmentally sound technologies through multilateral and international cooperation between the public and private sectors and between OECD Countries and Non-OECD Countries
- ☐ CTI works with
 - Governments
 - IEA & UNFCCC Secretariats
 - Export Group on Technology Transfer (EGTT / UNFCCC)
 - International Organisations (WB / UNDP / UNEP / UNIDO)
 - Business & Financial Sectors



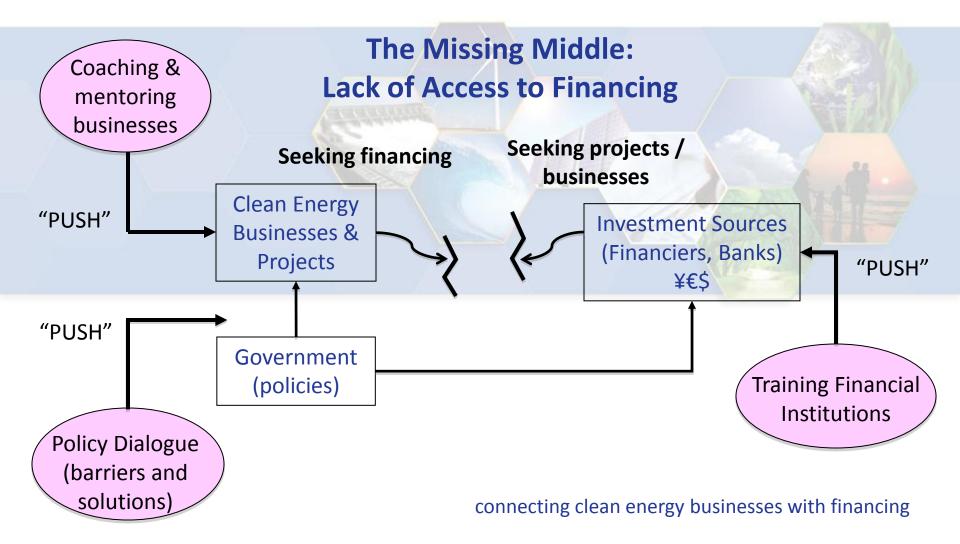
RATIONALE FOR CTI PFAN

- ☐ Lack of sufficient Public Funds to make an impact on Technology Transfer for Climate Change
 - Need for the Private Sector
- ☐ Workshops in Montreal (2004) & Bonn (2005)
 - To develop an innovative solution to finance TT
 - Inclusion of Private Sector
- ☐ Missing Middle
 - Lots of Projects / Lots of Investment
 - Little & insufficient interaction & communication between the 2 sides
- □ PFAN seeks to bridge that Investment Gap
 - Acts as a broker between the money and the projects
 - Strengthens the capacity of the project developers to present their projects in a way that investors and financiers can readily understand



CTI PFAN - INTEGRATED PROGRAM DESIGN

How a multi-pronged approach can scale up clean energy deployment





WHAT IS CTI PFAN?

- Informal Network of Financing Professionals
 - Private Sector Companies / Individuals
 - Investors & Financiers: Philanthropic, Institutional, Industrial & Strategic,
 Private Equity, Venture Funds, Hedge Funds, Banks etc
 - Financing Consultants & Technical Advisors
 - Organised under Umberella of CTI
- ☐ Commmon interest in providing finance & financing services to climate friendly projects to support technology transfer
 - Developing Country Experience & Appetite
- □ CTI PFAN connects these businesses with clean energy projects in developing countries
- □ Private Sector Driven & Focussed



WHAT SERVICES DOES CTI PFAN OFFER?

- □ CTI PFAN provides support & advice to selected projects to help them meet the criteria of the Investment Community
- ☐ <u>Free</u> coaching service to project sponsors & developers to help them raise pivate sector finance
 - Project Development / Commercial & Financing Structure
 - Marketing / Technical Issues / Growth Strategy
 - Sourcing Equity & Debt
 - Preparation of Business Plans, Investment & Financing Proposals
- □ Technical Assistance
 - Contributions to the cost of technical studies etc
- Matchmaking Service: Contact Broking & Introductions
- □ Investment / Financing directly from PFAN Members & their Networks



HOW DOES IT WORK?

- □ 2 Project Identification & Selection Streams
- Mainstream Devlopment Pipeline
 - Unsolicited Submission at any time (via UNFCCC / CTI / Network)
 - Induction review: rigourous but non-bureaucratic
 - PFAN Member assigned to project as dedicated Coach
 - 3 Further Reviews to guide project to Bankability & Financial Close
 - Report at the end of each Phase
 - PFAN support can be terminated if financing thought unachievable
- ☐ Regional & Country based CE Financing Forums
 - RFP project selection
 - Intensive Coaching on Business Plan & Investor Pitch
 - Showcasing in front of Investors at Forum
 - Projects inducted into Mainstream Development Pipeline



COSTS

- PFAN Services are provided free to the project developer / sponsor
 - Subject to selection
- Cost of providing the PFAN Services is absorbed by the Funding Partners (CTI / USAID / APP / ICETT / REEEP etc).
- Provision of services subsidised by the PFAN Members
 - Trade-off: access to the project pipeline for business development
 - Right of First Offer to provide services / financing (non-binding & fully competitive terms)
- □ Success Fee on Financial Closing
 - Shared between PFAN and the involved PFAN Consultant according to an agreed schedule



PROJECT CRITERIA

- □ Target Project Size: USD 1 50 million total investment volume
 - Smaller & larger projects possible
 - Ca 15% of portfolio for Micro-Projects (< USD 1 million)
- □ Typical Project Type: CE / RE mitigation projects for generation of power or production of biofuels
 - Wind, Solar, Geothermal, Biomass, Biofuels, Small Hydro
 - PFAN is technology neutral
 - Open for EE, Adaptation & Upstream Technology Dvpt Projects.
- □ Commercial & Technical Viability
 - Adequate return on investment
- □ GHG reduction / abatement potential
- □ Other developmental benefits
 - Agricultural development, poverty reduction, health, education, female econonic participation etc



EVOLUTION OF CTI PFAN

- ☐ Apr 2006 Sep 2008: Small Scale Pilot Program
 - Ca 65 projects analysed
 - 12 Projects inducted
 - 2 Financial Closures raising USD 35 million
 - 5 projects carried into main programme
- □ Dec 2007: recognition / endorsement by COP 13 decisions
 - (4 / CP.13)
- 2008: further Financial Closures in South Africa
 - USD 5 million
- ☐ Oct 2008: Start of Major Scale Up Programme
 - Funding from CTI / USAID / APP / REEEP / ICETT
 - Just been extended to Dec 2012
 - Establishment of 4 regional networks: Latin America, Africa, Asia, CIS



ACTIVITY HIGHLIGHTS- Latin America & Caribbean

- ☐ Active since 2006
- ☐ Dedicated coverage in Brazil, Chile, Columbia, Mexico
 - Other countries in the region eligible
 - Caribbean SIDs in preparation for 2010
 - La Guardia Foundation as regional Co-ordinator
- □ Development Pipeline Highlights
 - 2 projects closed / USD 35 million leveraged
 - 8 projects in Development Pipeline / USD 132 million investment
 - Transfer Project from Brazil to Mozambique
 - Handling Capacity: 30 40 projects over 3 yrs to 2012
 - Target Leverage: USD 100 150 million
- ☐ CE Financing Forum planned for Q2 2010 in Brazil



ACTIVITY HIGHLIGHTS - Africa

- ☐ Active since May 2009 (low level operations during 2008)
- □ Regional Network Coverage
 - All countries in the Region eligible
 - PPL International as Regional Coordinator
- Dedicated Country Networks in Mozambique & Uganda
- Development Pipeline Highlights
 - 1 project closed / USD 1 5 million leveraged
 - Transfer Projects from Brazil to Mozambique / Laos to Uganda
 - 2 projects in development pipeline / 10 projects under review
 - Handling Capacity: 30 40 projects over 3 yrs to 2012
 - Leverage Target: USD 40 100 million
- ☐ CE Financing Forum planned for Q2 2010 in South Africa



ACTIVITY HIGHLIGHTS- CIS & Eastern Europe

- ☐ Formal Launch planned in 2010 (current low level activity)
- □ Regional Network
 - All countries in the Region eligible
 - MSW Unternehmensberatung as Regional Coordinator
- □ Development Pipeline Highlights
 - 1 project currently in pipeline / USD 5 million
 - Handling Capacity: 20 30 projects over 3 yrs to 2012
 - Target Leverage: USD 50 100 million



ACTIVITY HIGHLIGHTS

- Asia Regional

- ☐ Active since 2009 (low level activities in 2008)
- □ ECO Asia CDCP as Regional Manager
 - ReEx Capital Asia as private Sector Coordinator
- □ Dedicated Country Networks in Indonesia & Philippines
 - Other countries in the region eligible
- □ Development Pipeline Highlights
 - 25 projects in Development Pipeline / USD 1,2 billion investment
 - Handling Capacity: 50 60 projects over 3 yrs to 2012
 - Target Leverage: USD 200 300 million
- ☐ CE Financing Forums
 - Regional Forum (AFCEF) March 2009 & planned for 2010
 - Philippines Country Forum June 2009 & planned for 2010
 - Indonesia Country Forum June 2009 & planned for 2010



ACTIVITY HIGHLIGHTS

- China & India

- □ Dedicated Country Networks in China & India
 - China active since March 2009 (low level activities in 2008)
 - India to launch in 2010 (low level activities thru 2009)
- □ Development Pipeline Highlights
 - 11 projects in Development Pipeline / USD 300 400 million investment
 - Handling Capacity: 20 30 projects over 3 yrs to 2012
 - Target Leverage: USD 100 150 million
- □ CE Financing Forums
 - China in Oct 2009 and planned for 2010
 - India planned for 2010



CLEAN ENERGY FINANCING FORUMS

- ☐ Typical CE Financing Forum Format
 - Call for Proposals project selection & shortlisting
 - Intensive 1-on-1 coaching
 - Project Development & Financing Workshops
 - Investor Workshop to target projects at investors
 - Showcasing of projects thru an "Investor Pitch"
 - Business Plan Competition
 - CTI PFAN CE Financing Awards for best projects
- ☐ Successful Tool for Project Identification & Network Expansion
 - Over 60 projects applied to initial Forum in Singapore / 20 shortlisted
 - Philippines & Indonesian Fora identified ca 20 projects / 12 shortlisted
 - China Forum identified 32 projects / 21 were shortlisted
 - Over 500 people, many of them investors, have attended the 4 Asian CE Financing Forums
 - Asian Network now numbers 10 Investor Members
 - Have led directly to Financial Closures

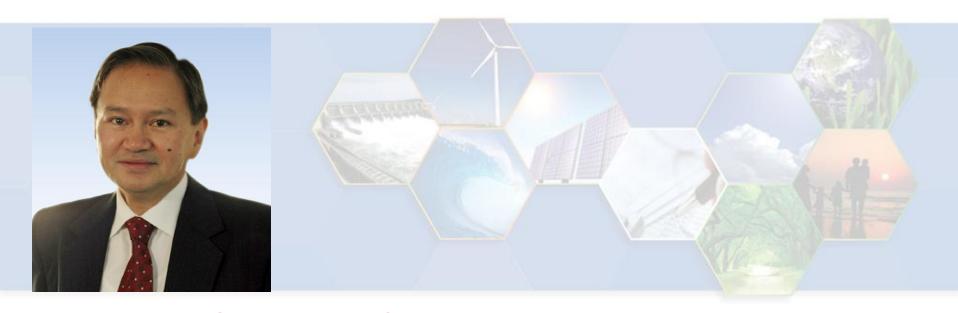


CTI PFAN ASIA Recent Successes

- □ USD 30 Million raised for a 12 MW Biomass Powerplant in Banga,
 Aklan in the Philippines
 - Innovative project structure to participate local farmers in the financial returns of the project thereby guaranteeing biomass feedstock
 - PPA with 12 local energy cooperatives
 - Phase 1 of a 4 phase 246 MW total project
 - Annual GHG Reduction of Phase 1 = 40.000 t CO²e
 - The Project Developer was an AFCEF and Philippines Forum Finalist
 - CTI PFAN helped ASEA One develop its business plan, introduced the investor and facilitated deal negotiations
- ☐ SURE Inc, Philippines USD 1,1 million under negotiation
 - 1 MW Biomass to Power
 - Pepsico Philippines as Captive Off-taker
 - Scalable



Video Contribution (1)

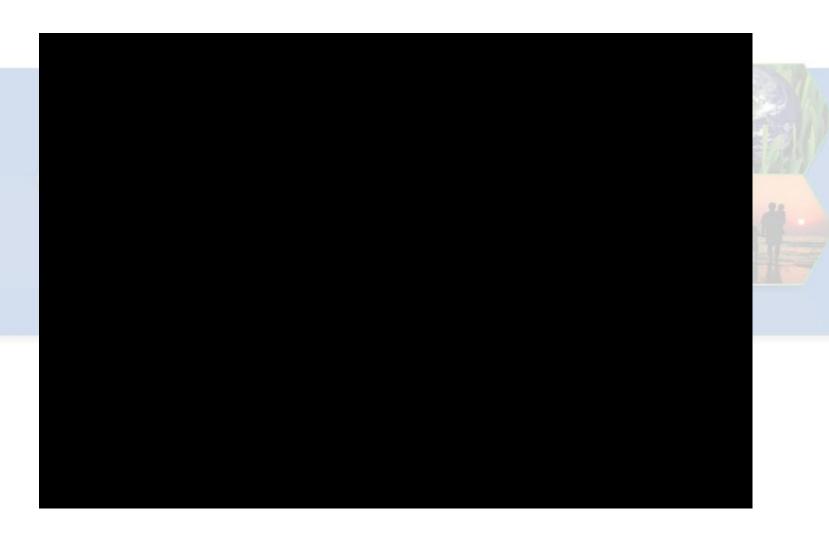


Ernesto V. Tan, ASEA One Power Corporation

Ernesto Tan is the Senior Vice President and Chief Operating Officer of ASEA One Power Corporation. He is an economist with a Master of Management Science from the Stevens Institute of Technology. Ernie has been aggressively involved in developing the largest biomass power plant in the Philippines. In the 1st CTI PFAN Philippines Clean Energy Investor Forum, he presented the winning business plan on their 30MW biomass power project.



Ernesto Tan ASEA One Power Corp





Video Contribution (2)

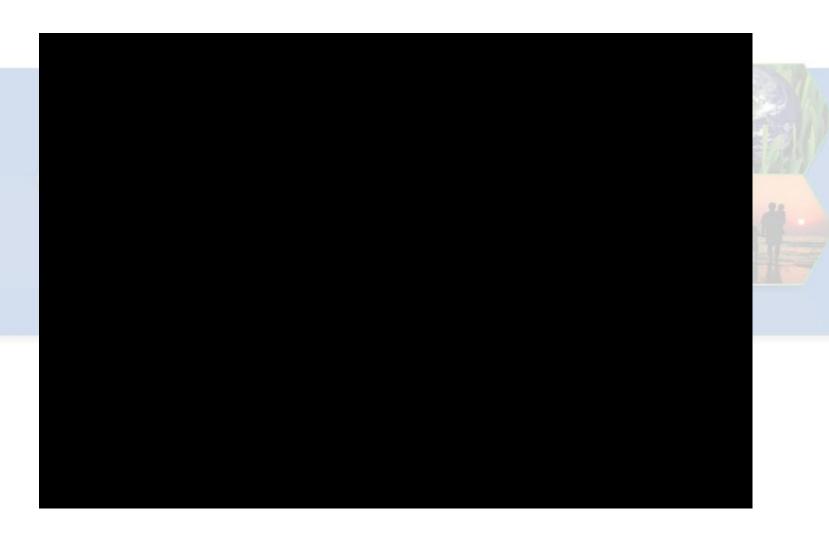


Mario C. Marasigan, Philippines Department of Energy

Mario is the Officer-in-Charge of the Office of the Assistant Secretary of the Philippines
Department of Energy and concurrently the Director of the Energy Utilization
Management Bureau, which is tasked to oversee and promote renewable energy
development. Mario was the focal person in the drafting of the Philippines' Biofuels Act of
2006, and Renewable Energy Law and its Implementing Rules and Regulations. Further
to this, he now heads the Technical Secretariat for the National Renewable Energy
Board.



Mario Marasigan Philippines DoE





Video Contribution (3)





Mr. Joseph Hwang is the Production Manager Director of PT. Gikoko Kogyo Indonesia, a company that focuses on sustainable solutions for waste management. He obtained his Masters Degree in Industrial Engineering and Production Management from UK's Cranfield University, where he studied Industrial Engineering and Production Management. His work has earned many accolades from the private sector, including an award for entrepreneurship from Ernst and Young in Indonesia.

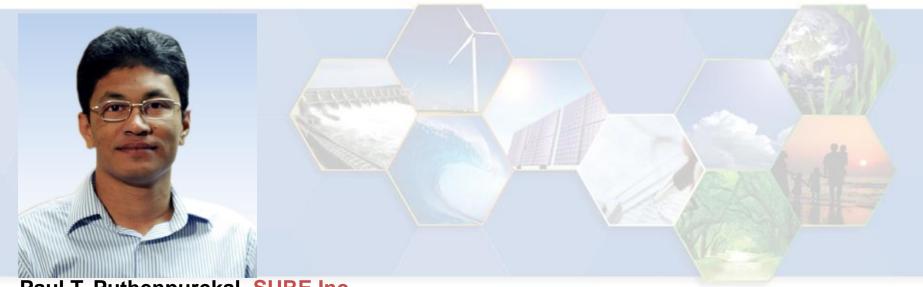


Joseph Hwang PT Gikoko Kogyo





Video Contribution (4)



Paul T. Puthenpurekal, SURE Inc.

Paul is the President and COO of Solutions Using Renewable Energy (SURE), a renewable energy company in the Philippines with expertise in biomass, solar, mini-hydro & small wind power technologies. He has over 10 years of environmental management experience in India, Germany & the Philippines. He has worked on a diverse range of projects including a 345 MW hydropower project, landfill development, Shell Malampaya Natural Gas Project and solar lantern distribution project for rural electrification. He has a MBA, Post Graduate Diploma in Engineering Geology and a Master of Science in Geology.



Paul Puthenpurekal SURE Inc.





ADDED VALUE OF CTI PFAN

| Early stage development tools like PFAN are scarce and important |
|--|
| Resource Optimisation • Filters the good projects to enables Developers & Investors to concentrate on projects with investment potential |
| Access to Deal Pipeline for Investors |
| Direct Access to Investors for Developers |
| Promotion of alliances & relationships between developers, investors, advisers & policy makers • Exchange of Projects & Project Development Ideas |
| Risk Reduction through targeting of key risk points |
| Accelerated Development Progress |
| connecting clean energy businesses with financing |



CLOSING SUMMARY

- ☐ PFAN is proving to be a successful & worthwhile / valuable tool
 - Recognised as effective in achieving Technology Transfer
 - Considerable Financial Leverage: small input ⇒ big result
- ☐ PFAN is open for business:
 - Scale Up Programme will continue until end 2012
 - Looking to expand Membership & Project Pipeline across all Regions
- □ PFAN looks forward to working with UNFCCC Parties to help build its Project Pipeline of viable investible / bankable projects.
- ☐ Please send us your project proposals and enquiries
 - See contacts



CONTACTS

- ☐ General Enquiries / Membership etc
 - Peter Storey, Global Co-ordinator (peter.storey@ppl-int.com)
 - Taiki Kuroda, Head of CTI Secretariat (kuroda@icett.or.jp)
- □ Asia
 - Suneel Parasnis, Regional Manager (<u>suneel@cleanenergyasia.net</u>)
- ☐ Latin American & Caribbean
 - Patrick D'Addario, Regional Coordinator (pdaddario@laguardiafoundation.org)
- ☐ Africa, CIS & Eastern Europe
 - Peter Storey, Global Co-ordinator (peter.storey@ppl-int.com)

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