



CTI PFAN
(Private Financing Advisory Network)
Mobilizing Private Sector Financing
for Technology Transfer

CTI Side Event at COP 16 Cancun

Peter Storey
4th December

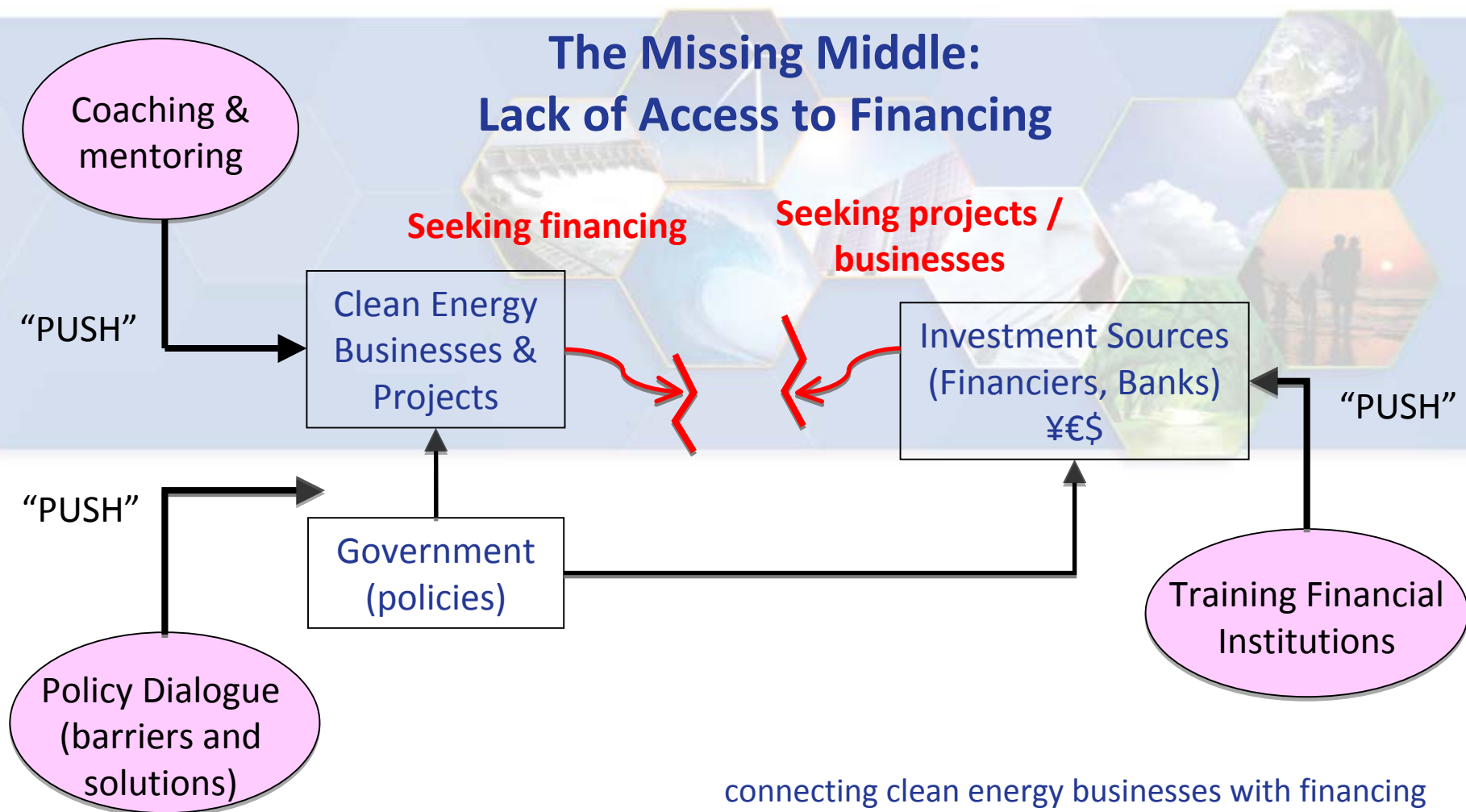
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 - Missing Middle
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CTI PFAN – Integrated Programme Design

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



WHAT IS CTI PFAN?

- ❑ CTI PFAN is a Multi-Lateral Public Private Partnership
 - CTI Countries / APP / ICETT / REEEP / USAID
- ❑ Network of Private Sector Professionals
 - Investors / Consultants
 - Developing Country experience & appetite
 - Over 40 full members & growing fast
 - Large database of investors > 100
- ❑ CTI PFAN goals:
 - to accelerate technology transfer and diffusion under the UNFCCC
 - to reduce GHG
 - to promote low-carbon, sustainable economic development
 - to increase financing opportunities for promising clean energy projects
- ❑ Connects CE projects with Investors / Financing
 - Real projects on the ground making a real impact
- ❑ Triple bottom line approach

CTI PFAN'S FUNDING PARTNERS



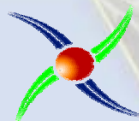
USAID
FROM THE AMERICAN PEOPLE



renewable
energy
& energy
efficiency
partnership



CTI PFAN NETWORK MEMBERS



PPL
INTERNATIONAL



Management
Consultant
Regulatory
Economics &
Finance



UGANDA CARBON BUREAU



FE CLEAN ENERGY GROUP
INC.



HCConsulting

S³IDF | Small-Scale Sustainable
Infrastructure Development Fund



華興資本
CHINA RENAISSANCE



firstclimate



JPIgroup
剑平国际投资

LGUCC
LGU GUARANTEE CORPORATION

WHAT SERVICES DOES CTI PFAN OFFER?

- ❑ CTI PFAN provides support & advice to selected projects to help them meet the criteria of the Investment Community
- ❑ **Free** coaching service to project sponsors & developers to help them raise private sector finance
 - Project Development / Commercial & Financing Structure
 - Marketing / Technical Issues / Growth Strategy
 - Preparation of Business Plans, Investment & Financing Proposals
 - Sourcing Equity & Debt
- ❑ 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 Entry Points

❑ Unsolicited Proposal Submission for Development Pipeline

- From any source
- Induction Review: rigorous but non-bureaucratic
- PFAN Member assigned to project as dedicated Coach
- 3 Phase Development Framework
 - Preparation of the BP
 - Introduction to Investors
 - Guidance to Investability & Financial Closing

❑ 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 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
 - EE / Adaptation / Forestry / Upstream Technology Dvpt Projects
- ❑ Commercial & Technical Viability
 - Adequate return on investment
- ❑ GHG reduction / abatement potential
- ❑ Other developmental benefits
 - MDGs: agricultural development, poverty reduction, health, education, female economic participation etc

EVOLUTION OF CTI PFAN

- ❑ Apr 2006 – Sep 2008: Small Scale Pilot Program
 - 3 Financial Closings raising USD 40 million
- ❑ Dec 2007: recognition / endorsement by COP 13 decisions
 - (4 / CP.13)
- ❑ Oct 2008: Start of Major Scale-Up Programme
 - Funding from CTI / USAID / APP / REEEP / ICETT
 - Multi-year programme to end of 2012 / now extended to end of 2013
- ❑ Global Coverage
 - 4 regional networks: Latin America, Africa, Asia, CIS

NETWORK OVERVIEW

❑ Latin America & Caribbean Regional Network

- Dedicated Coverage in Brazil, Chile, Columbia, Mexico
- All other countries in the region eligible
- 11 Projects in Pipeline / USD 132 million investment volume
- USD 35 million raised / 2 projects closed
- Brazil CE Financing Forum / Caribbean SIDs during 2011

❑ Africa Regional Network

- Dedicated Country Networks in Mozambique, Uganda and South Africa
- Transfer Project from Brazil to Mozambique: solar hydroponics
- 30 Projects in the Development Pipeline – \$ 127 million
- USD 8 million investment raised / 2 projects closed
- Africa Regional CE Financing Forum (Sep 2010)

NETWORK OVERVIEW

- Asia

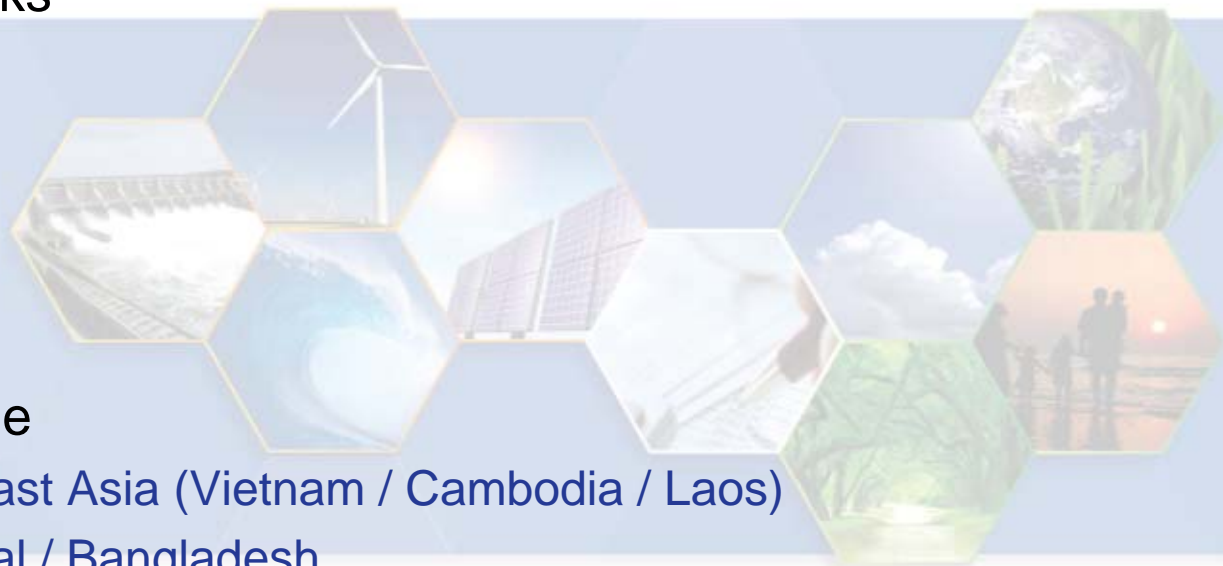
❑ Dedicated Networks

- China
- India
- Indonesia
- Philippines

❑ Regional Coverage

- Across South East Asia (Vietnam / Cambodia / Laos)
- Sri Lanka / Nepal / Bangladesh

❑ 69 Projects in Development Pipeline



Activity Highlights 2010

- ❑ Launch of India Network & Activities
- ❑ 7 CE Financing Fora
- ❑ Establishment of in-country Networks in Mozambique, Uganda & South Africa
 - Base for regional & sub regional African networks
- ❑ 15 New Projects reaching Financial Closure
 - USD 158 million of new investment raised / leveraged

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

Fora Summary

❑ 7 CE Fora in 2010

- AFCEF 2 / Philippines 2 / Indonesia 2 / China 2 / AFRICEF / India
- Mini-Forum in Brazil

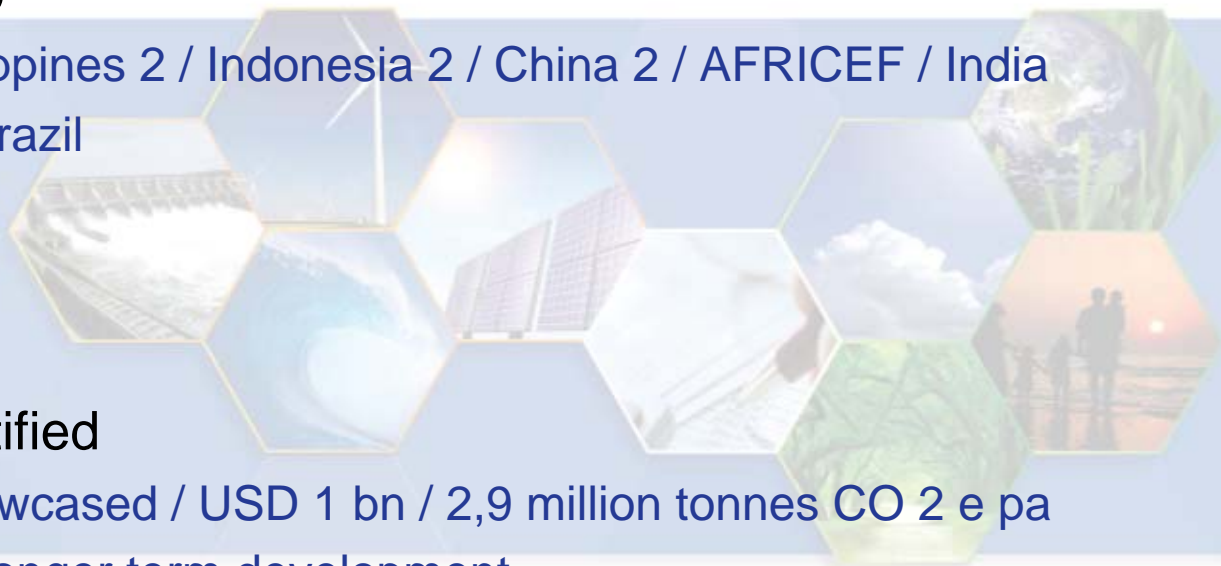
❑ 1100 Participants

❑ 264 Projects Identified

- 56 Projects Showcased / USD 1 bn / 2,9 million tonnes CO₂ e pa
- 42 Projects for longer term development

❑ 13 Projects Closed

- USD 168 Million Investment raised



Development Pipeline Summary

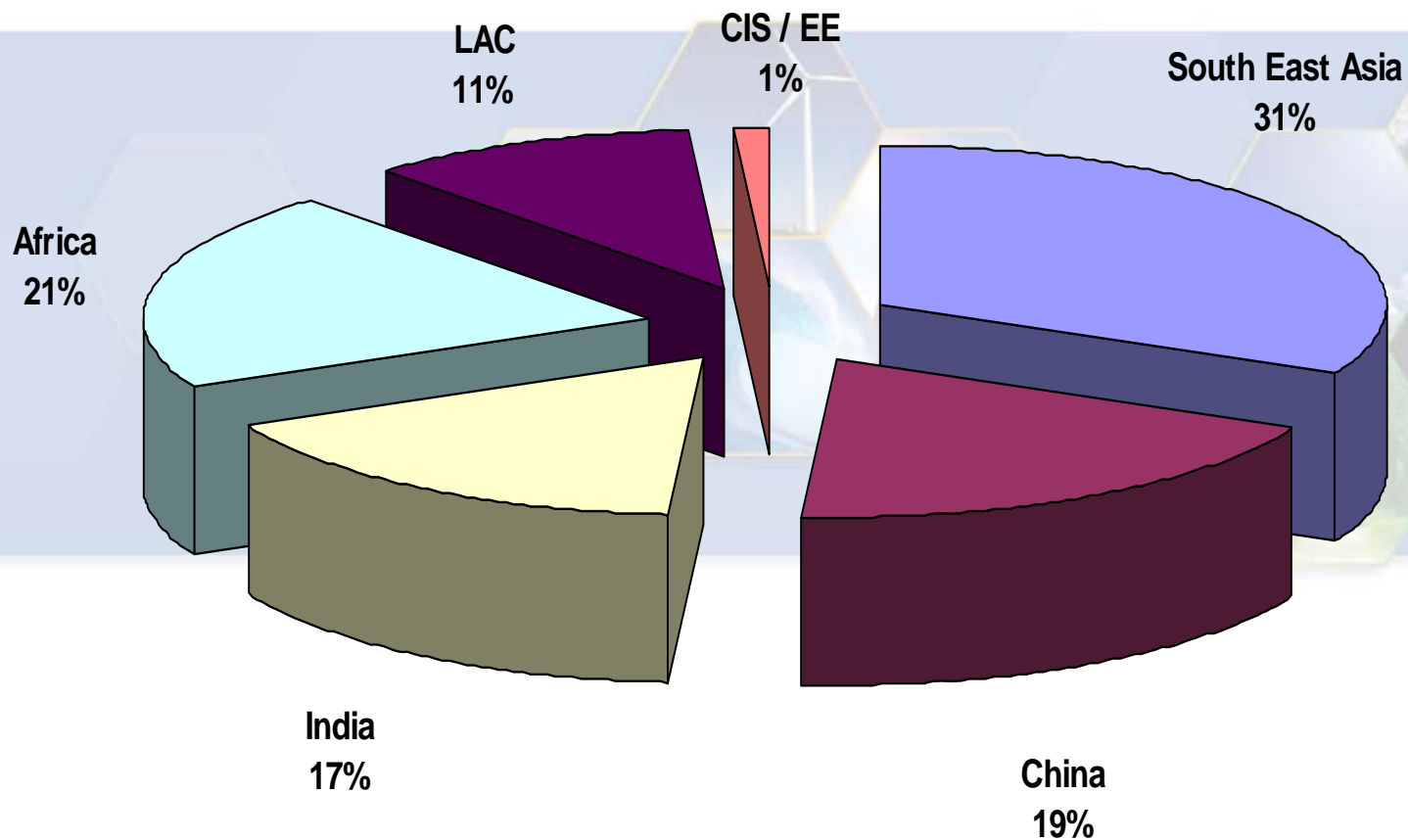
❑ 101 projects

- 63 projects in process of induction during Q4 2010
- 40 – 50 less mature projects undergoing longer term development for pipeline induction

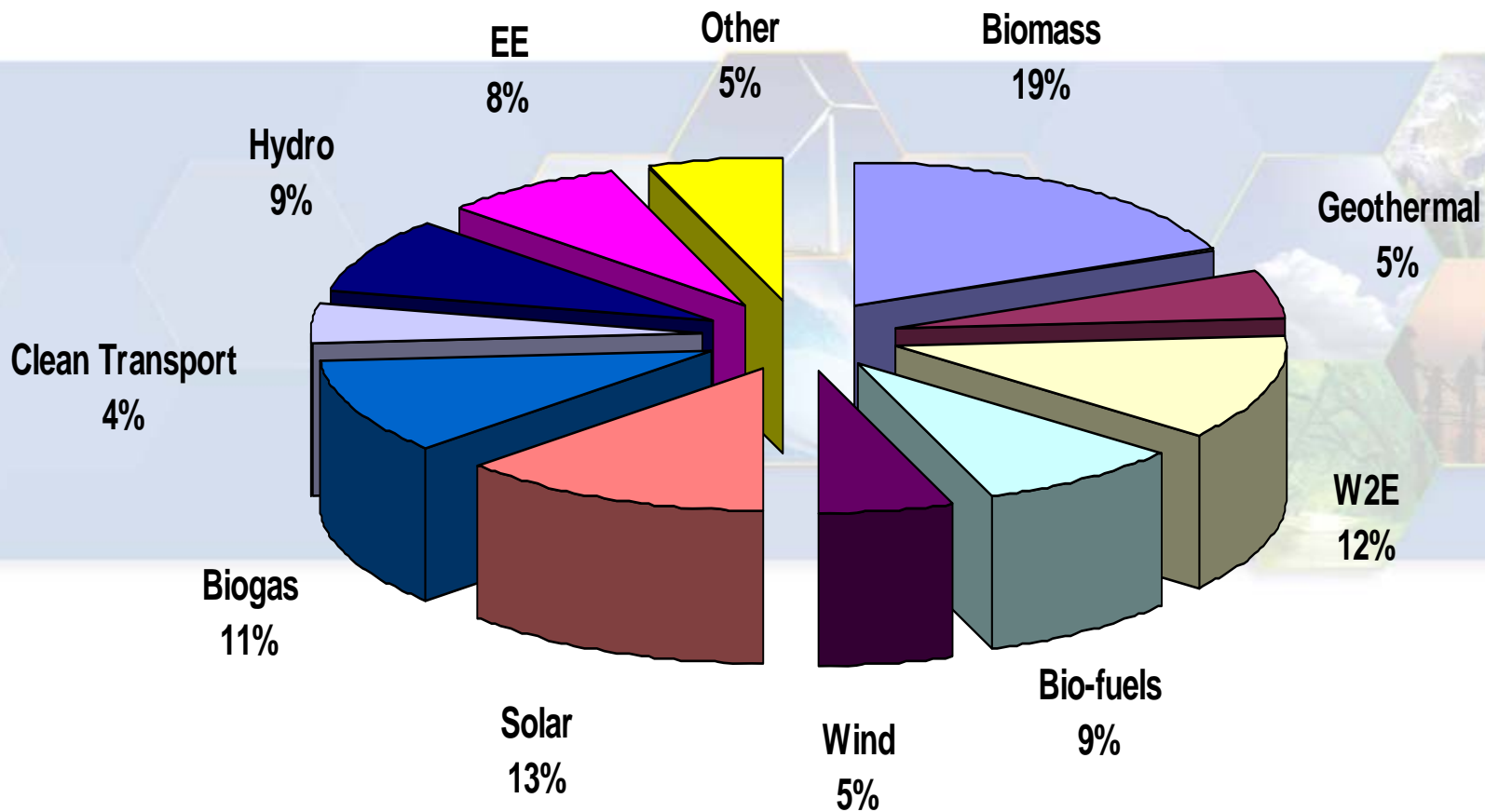
❑ USD 2,4 billion of total aggregate investment

❑ > 4,6 million tonnes CO₂ e reduction potential pa

Pipeline Analysis by Region



Pipeline Analysis by Technology



Closed Projects

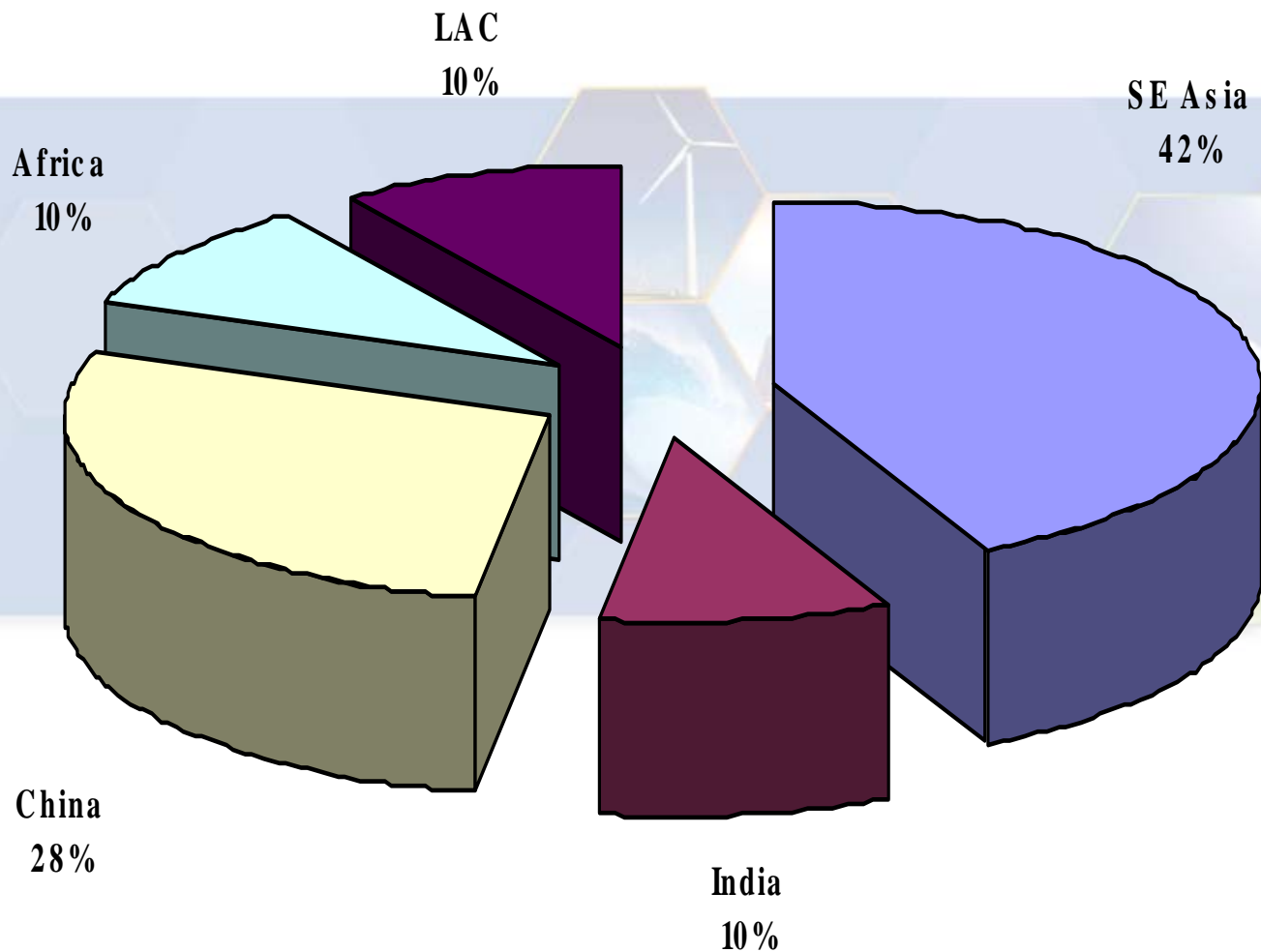
❑ 21 Projects Closed in Total

- USD 232 million of Investment in Total
- 240 MW of Clean Capacity Installed
- 1,26 million tonnes CO2 e reduction pa
- 61,3 GWhrs pa Energy Savings (4 EE projects in China)

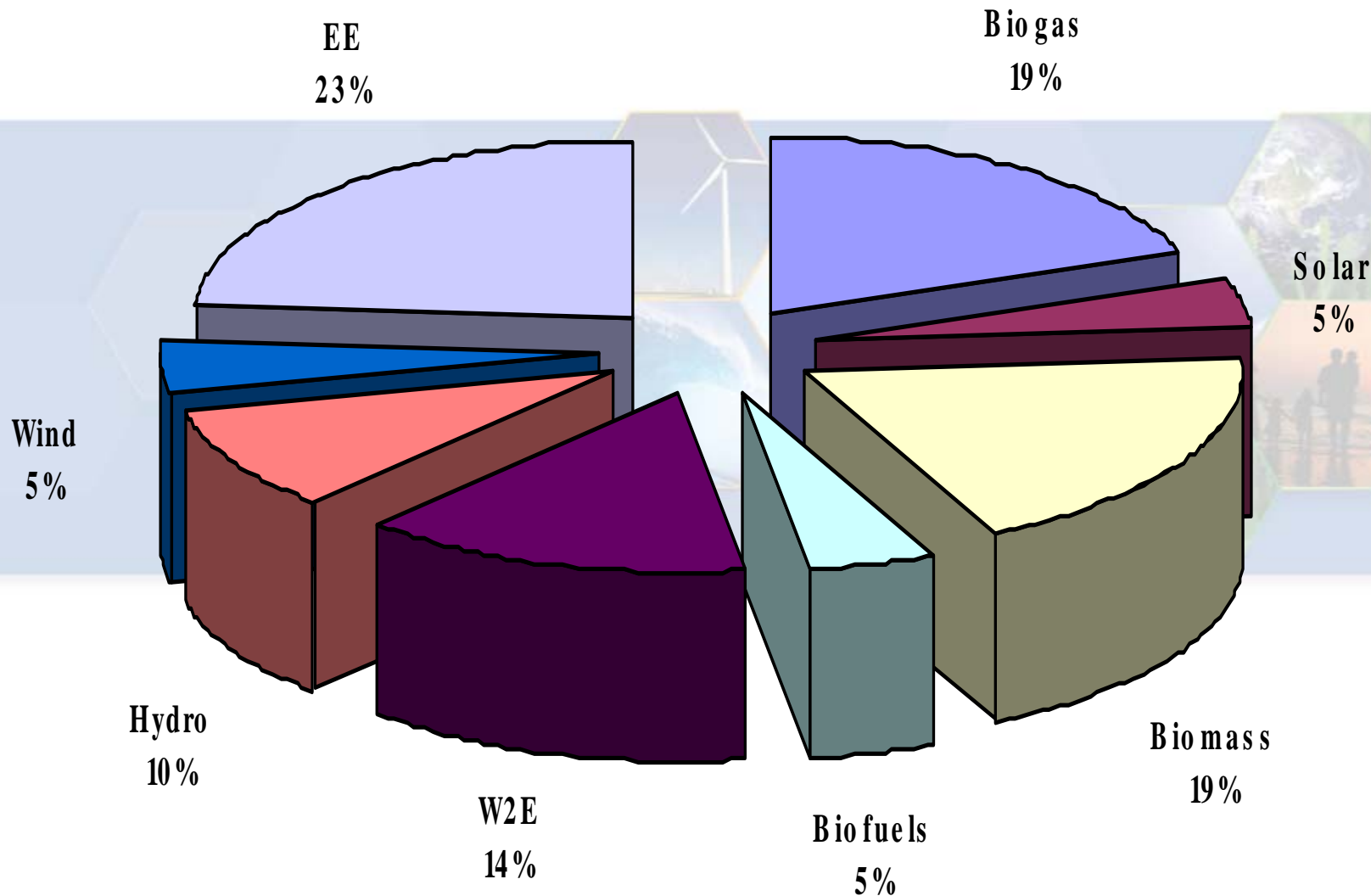
❑ Closure Rate is Accelerating

- 7 projects currently in investor negotiations

Closed Projects by Region



Closed Projects by Technology



Recent Successes in Asia

❑ W2E Project in Thailand / USD 5 million

- 80 tonnes MSW / day anaerobic digestion to biogas / 1 MW
- Scale up to 300 tonnes / day - ca 3,5 MW
- Introduction of gasification for solid waste / non organic component
- 4 Revenue Streams: Gate Fee / PPA / Sale of Fertiliser / Carbon
- Replication

❑ SURE Inc, Philippines – USD 2 million

- 1 MW Biomass to Power
- Pepsico Philippines as Captive Off-taker
- Scalable

Video Contribution (3)



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.

connecting clean energy businesses with financing

SAMPLE PROJECTS – Barefoot Power / Regional

❑ Rural Lighting Solution

- Commoditisation of Small Scale Household Solar Kits & Appliances
- 0,5 – 15 W solutions including solar panel, LED light, Cell Phone & Laptop Chargers
- Basic Kit including panel & light retails at ca USD 36

❑ Kerosene & Battery Replacement

- Global Market is estimated at USD 10 – 30 billion / 1,5 billion users
- Average annual spend on kerosene & batteries in Tanzania is USD 129
- Current Order Book of USD 1 Million: Monthly T/O approaching USD 500K

❑ USD 3 million Total Investment

- \$ 1 million equity / \$ 2 debt
- Consolidate & scale up existing operations in Uganda & Kenya
- Replicate in Mozambique, South Africa & other Sub-Saharan Countries

SAMPLE PROJECTS – Greenewus / Uganda

- ❑ 8 MW Run-of-River Small Hydro
 - River Kakaka, Rwenzori region Western Uganda
 - Good hydrology
 - Pre-feasibility completed
- ❑ Sale to the Grid under long term PPA
 - Helping meet the country's supply shortage estimated to peak at ca 400 MW.
- ❑ USD 17,5 million total investment
 - Ask: USD 6 million for ca 80 – 85 % of the project equity
 - Equity IRR: 25 %

Other Project Samples

❑ Productive Energy in Northern Mozambique

- Establishment of Cold & Logistics Chain to get fish to cash markets
- Gasification of Coconut Husks / Containerised Solution / Mini-grids
- 6 Village Pilot (USD 1 million)
- 200 village target / 800 village potential @ 12.000 kg / village pa

❑ South - South Technology Transfer

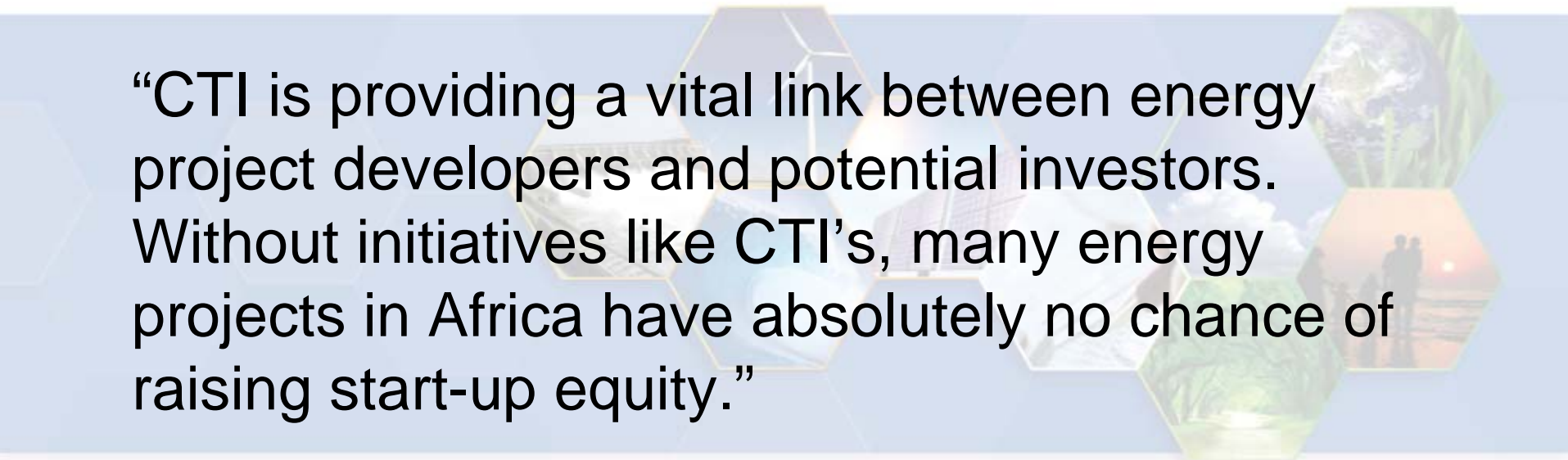
- Brazil – Mozambique: Solar Powered Hydroponic Farming
- India – Philippines: Battery technology for E-Trikes

Testimonial

“ From application to final presentation, there is not one webpage and no business school text book that could improve on the the CTI PFAN process and its formula of bridging the gap between entrepreneurs and investors. The concept of a business plan competition certainly worked out well —the guidelines, the templates, the timetable and then of course the workshop and coaching was a very constructive and encouraging experience. ”

Representative of DalinYebo, project developer and runner-up at the CTI PFAN Africa Forum for Clean Energy Financing, Johannesburg, September 15, 2010

Testimonial



“CTI is providing a vital link between energy project developers and potential investors. Without initiatives like CTI’s, many energy projects in Africa have absolutely no chance of raising start-up equity.”

Conrad Nkutu
Chief Executive/ Greenewus Energy (Uganda)

Added Value of CTI PFAN

- ❑ Early stage development tools like PFAN are important
- ❑ Resource Optimisation
- ❑ Access to Deal Pipeline for Investors
- ❑ Direct Access to Investors for Developers
- ❑ Symbiotic Network Effect
- ❑ Risk Reduction through targeting of key risk points
- ❑ Reduction of Transaction Costs for all parties
- ❑ Accelerated Development Progress

Planning for 2011

- ❑ Launch of Sub-regional Networks in Africa
 - Southern Africa / SADC: RSA, Mozambique, Tanzania, Botswana
 - EAC: Uganda, Kenya, Rwanda
 - West Africa: (Ghana, Togo, Cameroon)
- ❑ Capacity Building Workshops & Mini Investor Fora in each region with local institutions, banks and government agencies
- ❑ Launch of Adaptation Stream
 - 2 Workshops / Pilot Programme
- ❑ Mini CE Fora in Philippines & Indonesia leading into AFCEF 3 in September
- ❑ Launch of network in Eastern Europe & CIS
 - CE Financing Forum
- ❑ Consolidation and Expansion in LAC – Launch in Caribbean SIDs

Summary

- ❑ Strong Development Pipeline Growth & Activity
 - Broad Regional & In-Country Coverage
- ❑ High Levels of recognition in the Market
 - Especially Asia
 - Increasingly Africa & LAC
- ❑ Value Provided to Investors & Developers
 - Good Success Rates
 - Getting More Projects to Financial Close & facilitating Interaction between Developers & Investors
- ❑ High Financial Leverage Rate
- ❑ Potential for Scale Up and Positioning of CTI-PFAN post 2012

CONTACTS

❑ General Enquiries / Membership etc

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❑ www.cti-pfan.net / www.climatetech.net