

HERA
INTERNATIONAL

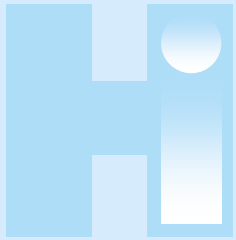


Mobilising Private Investment for Technology Transfer in Developing & Transition Countries

**Progress Report To
CTI / ICETT Side Event at COP 12
- PFAN ACTIVITIES & EXPERIENCES -**

Peter Storey

Nairobi, 9 November 2006



CONTENTS

Introduction to HERA International

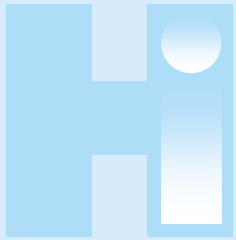
Background to PFAN

- **How it came about**
- **What it is**
- **How it works**

Project Analysis

- **Examples & Experiences of Projects to date**

Initial Conclusions



INTRODUCTION TO HERA

Project Developer & Financing Arranger:

- Holding Co & HQ in Vienna
- Operating Co's / Offices in Cyprus, Moscow and Johannesburg

We develop, structure, finance & implement Infrastructure Projects for Governments and / or Companies

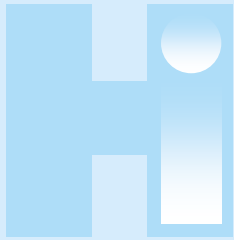
- Power & Energy
- Transportation & Communications

Exclusively for Developing Countries & Transition Economies

Privately Owned / Independent

Involvement in CTI since 2004

- Founder Member & Global Coordinator of PFAN initiative



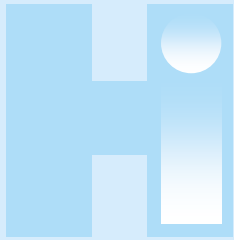
BACKGROUND TO PFAN?

Private Finance Advisory Network

Product of the Montreal (Sep 2004) & Bonn (Oct 2005) Workshops on Innovative Financing of Technology Transfer

Lessons Learned (Defining Premise for PFAN)

- There is not a shortage of money: finance is available
- While some projects are not suitable for private sector finance, generally there is not a shortage of good projects that could access financing ***with the right guidance & structuring***
- There is a shortage of good financing / project proposals that meet the standards and criteria of the international private financing communities



WHAT IS PFAN?

Private Finance Advisory Network

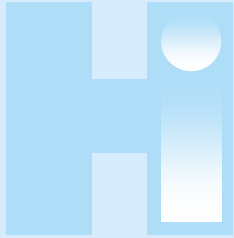
Informal Network of Private Sector Companies / Individuals

- under CTI Umbrella in support of the UNFCCC
- Common interest / involvement in providing finance and financing services to climate friendly projects

Offers a “free” consulting service to project sponsors & developers to help them raise international private finance

Aims:

- Knowledge & know how transfer (Practitioners' Guide)
- Technical Assistance
- Provide an interface between public sector policy goals and private sector commercial reality
- Increase the number of bankable renewable energy projects and help get them to financial close



WHAT SERVICES DOES PFAN OFFER?

Trial Phase: Learning as we go along

- How & where can we add value?

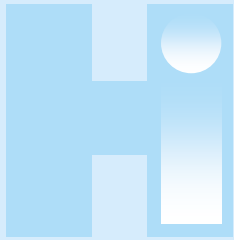
Advice & Guidance:

- Overall Project & Commercial Structure & Design
- Financing Structure
- Sourcing & Procurement of Financing
- Technical & Engineering Advice

Contact Broking & Introductions

- Knowing the right people and who to talk to when is half the battle

Money / Financing – directly from members



WHO IS INVOLVED?

Specialist Investment Funds / Institutional Investors

- FE Clean Energy Group
- Fiorella H. La Guardia Foundation
- New Energy Capital

Consultants / Advisors

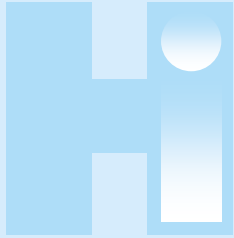
- HERA International Group
- E & Co

Other Private Sector Companies to be included in future

- Contractors / OEMs ?
- Banks ?
- Developers / Industry Investors / Operators ?

CTI / UNFCCC

Network Effect = Leverage



HOW DOES IT WORK?

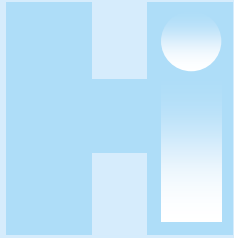
(Basic Framework / Process)

Initial Review / Vetting of Project Proposal

- Underlying economic feasibility. Strengths & Weaknesses
- Selection / Rejection: formal acceptance into pipeline
- Management of sponsor's expectations and commitment
- PFAN Member assigned to project as dedicated adviser / mentor

3 Phase Review Programme to guide project to bankability

1. Follow up to 1st review. Commercial & financing structure. Cash flows
2. Engineering / technical review / certification / equipment supply
3. Fine tuning (cash flows etc). Achievement of CPs.
 - Financial Close



HOW DOES IT WORK? (Conditions)

Support & Commitment from sponsor is Pre-Condition

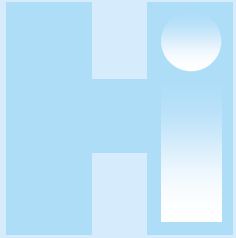
- Information supply
- Willingness to act on advice / input

Financing Proposals from PFAN Members

- Right of first refusal for interested PFAN members (if appropriate)
- Offered terms should be fully commercial and competitive

Formal Review provided at end of each phase

- Exchange & review of information & development status
- Critical feedback, advice for continued development & structuring
- Decision to proceed to next phase / terminate at each Review:
PFAN may “terminate” involvement if sponsor commitment is lacking and / or financing thought unlikely
- **Control Function:** enables CTI to manage & allocate resources



HOW DOES IT WORK?

(Terms / Approach)

Service is provided “free” to the project developer / sponsor

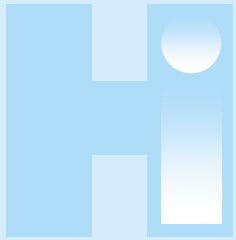
- Subject to acceptance into the project pipeline

Cost of providing the PFAN Service is absorbed by CTI

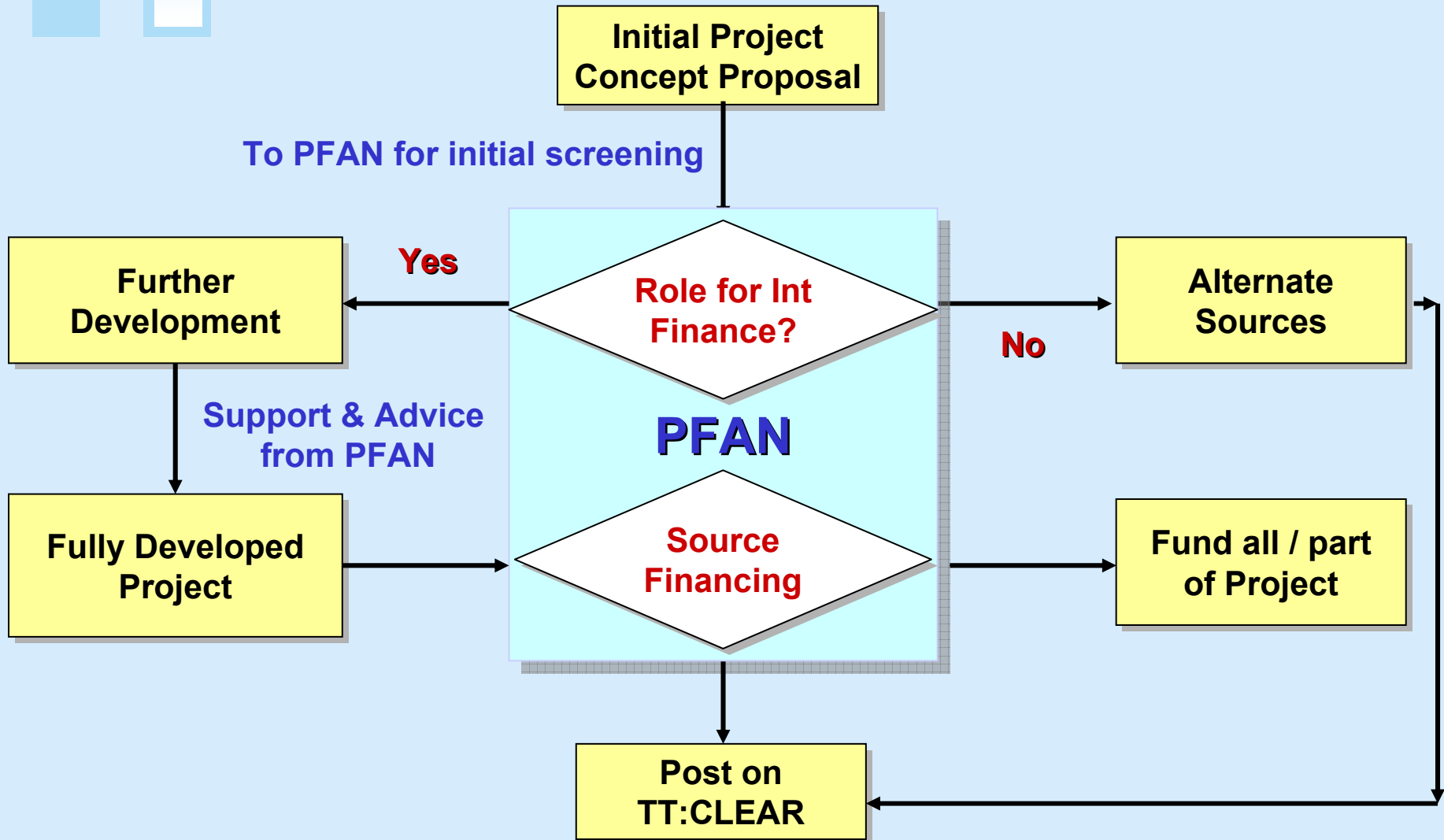
- partially subsidised by PFAN Members

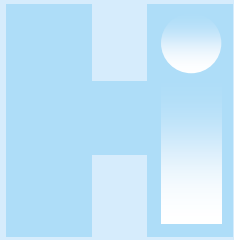
Desk top, hands-off approach

- Policy of non-interference / No hidden agendas
- Supplemental source of advice and funds:
- Fills *advice gap* for smaller / less experienced developers whose projects are nonetheless good
- Some hands on ability in Phase 4



PFAN – FLOW CHART





KEY SELECTION FACTORS

Consistent regulatory, legal and commercial framework

- Ability to quantify, manage & price risk

Commercially & technically experienced Project Sponsors

- Financially committed / Equity stake

Proven Technology (can still be new / state of art)

Risk Sharing / Diversification

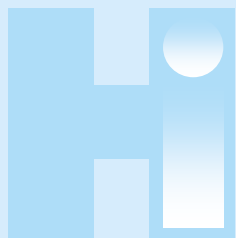
- Consortia (suppliers & contractors)
- Integrated project approaches & Linkage

Repayment Ability / Security

- Strong Cash Flows & Cover Ratios under worst case conditions

Adequate Return

- In consideration of all hard & soft factors / Triple Bottom Line
- Different for each individual project case



CURRENT SAMPLE PROJECTS

3rd – 4th Review Phase

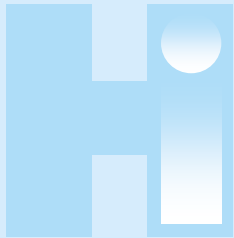
- Small Hydroelectric Power Station in Mexico (8,5 MW / USD 17 mio)
- Bio Diesel Refinery in Brazil (66.000 tpa / USD 18 mio)

2nd Review under way

- Small Hydro in Chile (5,6 MW / USD 5 mio) **
- Biomass in Chile (8 MW / USD 14 mio)
- Wind Farm in Chile (20 MW / USD 30 mio)

Initial (1st) Review Phase / Pipeline Induction Pending

- Photovoltaic Power Station / South Africa (10 - 20 MW)
- Upgrade and Expansion of existing power station in Botswana; adaptation for clean coal technology (400 MW / USD 600 mio)



PROJECT ANALYSIS (1)

“Escalona” / Small Hydro, Mexico

- 8,5 MW / USD 17 mio (including transmission connection)
- 25 yr concession
- Supply of captive off-taker (major industrial) under 15 yr PPA
- 75 % FLACES (FE Clean Energy) / 25% JAC Group & Delgado

Financing

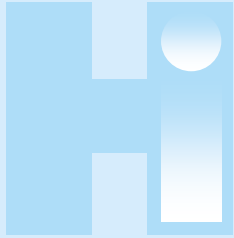
- Development Financing: USD 220.000
- Equity: USD 6,25 mio (FLACES)
- Debt Financing: USD 10,4 mio 10 year loan g'teed by OPIC

PFAN Role / Involvement

- Review & control of technical studies: triggers Equity
- Support & advice in negotiating and closing debt financing.
- Support during achievement of CPs

Status / Timing Expectations

- Technical studies due End Oct / November
- Development Financing Close December
- Financial Close Q1 2007



PROJECT ANALYSIS (2)

Construction & Operation of Bio Diesel Refinery, Brazil

- 66.000 tpa / USD 18 million
- Mandatory requirements for contribution of BD in energy mix
- FLACES (FE Clean Energy) / Brazilian Entrepreneur

Financing

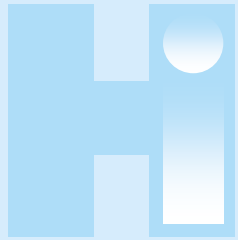
- Equity: USD 5,4 mm (30 %) cash & contribution in kind (land)
- Debt Financing: USD 12,6 mm (70%) long term project finance

PFAN Role / Involvement

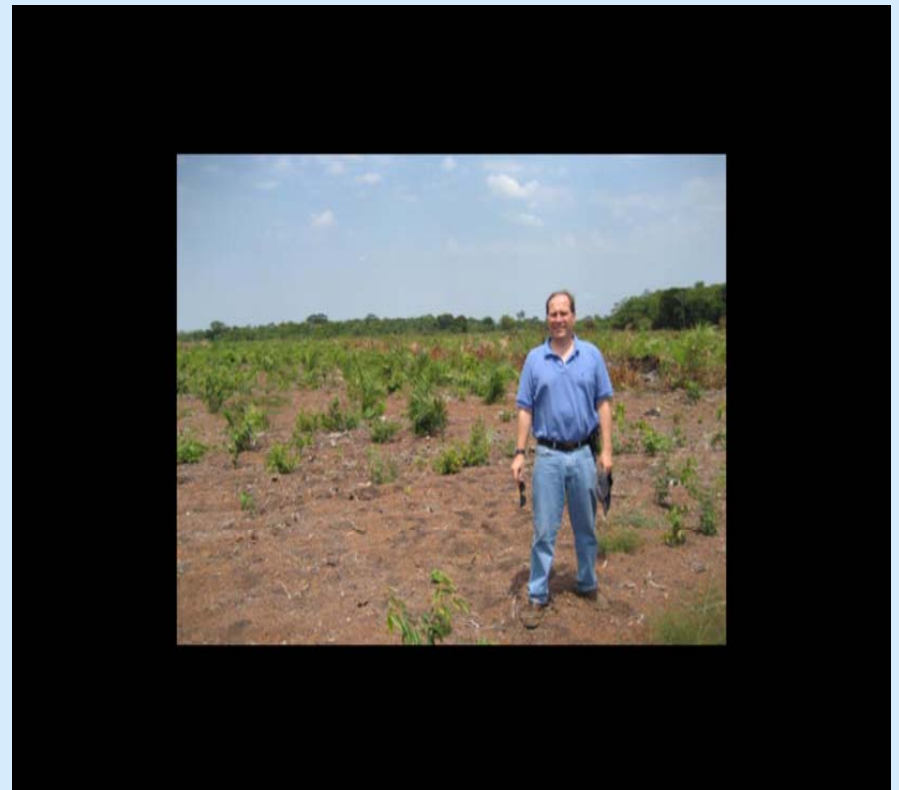
- Advice & support in structuring project finance & making proposals
- Review & control of technical studies (equipment / raw material supply / marketability of product in Europe)

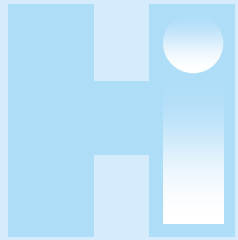
Status / Timing Expectations

- Technical studies due End November / December
- Financial Close Q1 2007



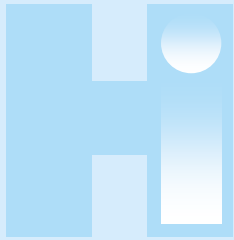
Brazil Bio-Diesel ⁽¹⁾ (Feed Stock Seedlings)





Brazil Bio-Diesel (2) (Construction)





PROJECT ANALYSIS (3)

“Chanco” / Windfarm, Chile

- 20 MW / USD 30 million (including transmission interconnection)
- Sale to captive off-takers & grid (regulatory framework)
- Chilean Clean Energy Entrepreneur (8 yrs exp) / (CORFO)

Financing

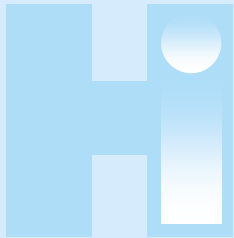
- 30 % Equity: 5% from sponsor / 25 % from investment partner
- 70 % Long Term Project Financing

PFAN Role / Involvement

- Advice & support on overall structure & technical elements
- Support in preparation of investment & financing Proposals
- Introduction of investment partners & financing sources

Status / Timing Expectations

- Wind Audit in Process
- Progression to Phase 2 / 3 during mid 2007



PROJECT ANALYSIS (4)

“Puclaro” / Small Run of River Hydro, Chile

- 5,6 MW / USD 5 million (including transmission interconnection)
- Sale to grid & local off-takers (regulatory framework)
- Gestión de Proyectos Eléctricos SA / (CORFO)
- Possible combination with other projects by same developer

Financing

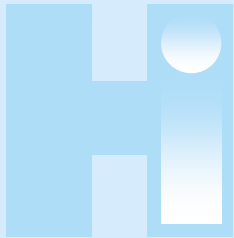
- 25 % Equity: from developer & from investment partner (tba)
- 75 % Long Term Project Financing

PFAN Role / Involvement

- Support in preparation of investment & financing Proposals
- Introduction of investment partners & financing sources

Status / Timing Expectations

- All studies complete; detailed engineering in progress
- Equipment supply subject to financing
- Progression to phase 3-4 Q4 06 subject to agreement with dv/pr.
- Financial Close early 2007



PROJECT ANALYSIS (5)

“Marchigue” / Bio-Mass Power Plant, Chile

- 8 MW / USD 14 million (including supply interconnection)
- Sale to captive off-taker – Group company of Developer
- Fuel: wood waste from group owned sawmill / gasification
- GAFONAC SA (diversified Chilean agricultural group) / (CORFO)

Financing

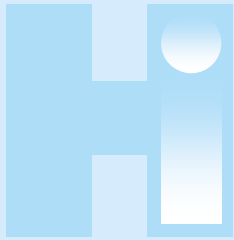
- 20 % Equity: 50 % from developer & 50 % from investment partner
- 80 % Long Term Project Financing

PFAN Role / Involvement

- Support in preparation of investment & financing proposals
- Introduction of investment partners & financing sources

Status / Timing Expectations

- EIA, Engineering & Financing in progress
- Progression to Phase 2 Q4 06 subject to agreement with developer
- Financial Close mid - late 2007



PROJECT ANALYSIS (6)

Photo-Voltaic Power Plant, South Africa

- 10 - 20 MW
- In combination with a clean coal power station for the Goldfields mines in Matjhabeng
- Impending power crisis in SA
- 3 Goldfields Mine Operators / Matjhabeng Municipality

Financing

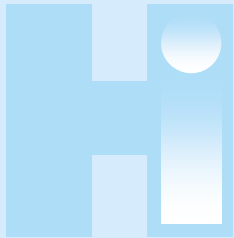
- Subject to development
- Investment Partner for contribution to equity stake & operations

PFAN Role / Involvement

- Advice & support on complete project structure
- Support & advice in preparation of investment & financing proposals
- Introduction of investment partners & financing sources

Status / Timing Expectations

- Conceptual Pre-Development Phase



PROJECT ANALYSIS (7)

“Moruple” / Clean Coal Power Station, Botswana (from Bonn)

- 400 MW / USD 600 million
- Expansion of existing facility & conversion to clean coal technology
- Impending power crisis in SA
- Botswana Power Corporation

Financing

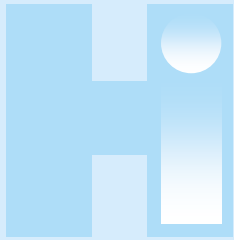
- Equity: ca 20 %
- Project Financing: ca. 80 % (combined with soft loans & grants)

PFAN Role / Involvement (subject to agreement with BPC)

- Advice & support on project financing structure
- Support & advice in preparation of financing proposals
- Introduction of financing sources

Status / Timing Expectations

- Detailed technical specification & engineering in progress
- Financial advisor appointed
- Progression to Phase 2/3 during 2007



ISSUES & OBSTACLES

Lack of good / reliable data

Response time of the developers

Language Barriers

- Requirement for local language skills (eg Spanish in Chile) and / or translation services

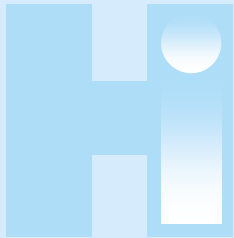
Multiple Players

- co-ordination of a large number of project participants
- Problems of geography and time

Initial Project Selection

- There are more projects than we can handle

Overall lack of Resources



EXPECTATIONS FOR THE FUTURE OF PFAN

Completion of Trial Phase by mid 2007

- Based on existing set up capacity for 3 more projects

2 – 3 financial closures on the back of PFAN work and advice within the next 4 – 6 months.

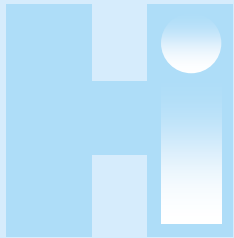
Ideally secure “permanent funding” for PFAN during 2007

- Expand PFAN Network membership
- Formalise network
- Expand processing capacity

Identify further projects for PFAN pipeline induction.

Target:

- Dependent on ultimate financial resource allocation
- At least: closure of 10 – 20 medium sized projects p.a. (>)



INITIAL CONCLUSIONS

There are a lot more “good” / “valid” projects out there that could access private sector international financing

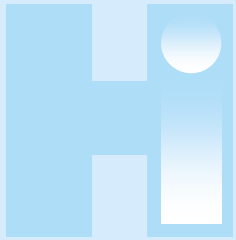
Integrated early stage project & financing development is crucial

- Financing is not a bolt-on extra but an integral project element

PFAN can be a useful gateway to international finance especially for smaller / medium sized projects

Key Areas of Added Value

- Supplementary / additional tool
- Access to Networks - leverage
- Advice on presentation of project proposal for int. consumption
- Direct experience of what works
 - Knowledge of risk - return requirements / terms & conditions
 - Technical & operational levels



INITIAL CONCLUSIONS

PFAN is a worthwhile & valuable tool

Positive reception / feedback from both private & public sectors

Potential for integration / coordination with other UNFCCC programmes / initiatives