



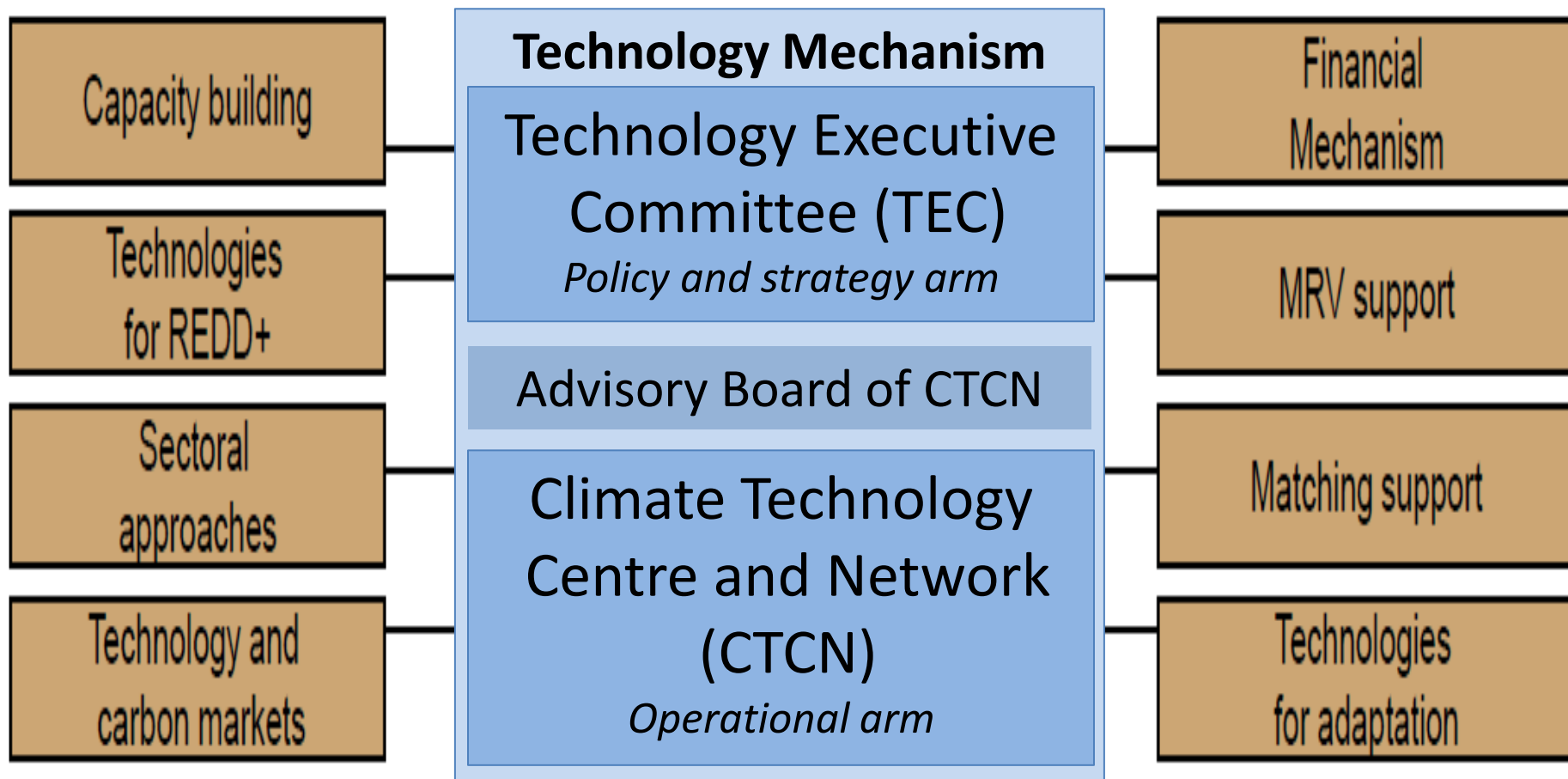
Barriers and Gaps to Mobilising Investment in Low Carbon Energy Technology

**Eric Usher, Manager
Seed Capital Programmes, Energy Branch
United Nations Environment Programme**



***IEA Workshop on Forging Intl Finance Collaboration
Stockholm, June 21, 2012***

UNFCCC Technology Mechanism (TM)



Establishment of the CTCN

- COP17 (Durban) in 2011: guidelines to select the host of the CTC
- 16 January 2012: call for proposals for host of CTC
- 16 March-April 2012: evaluation of proposals
- SBI 36 (Bonn) in May 2012: UNEP consortium ranked first

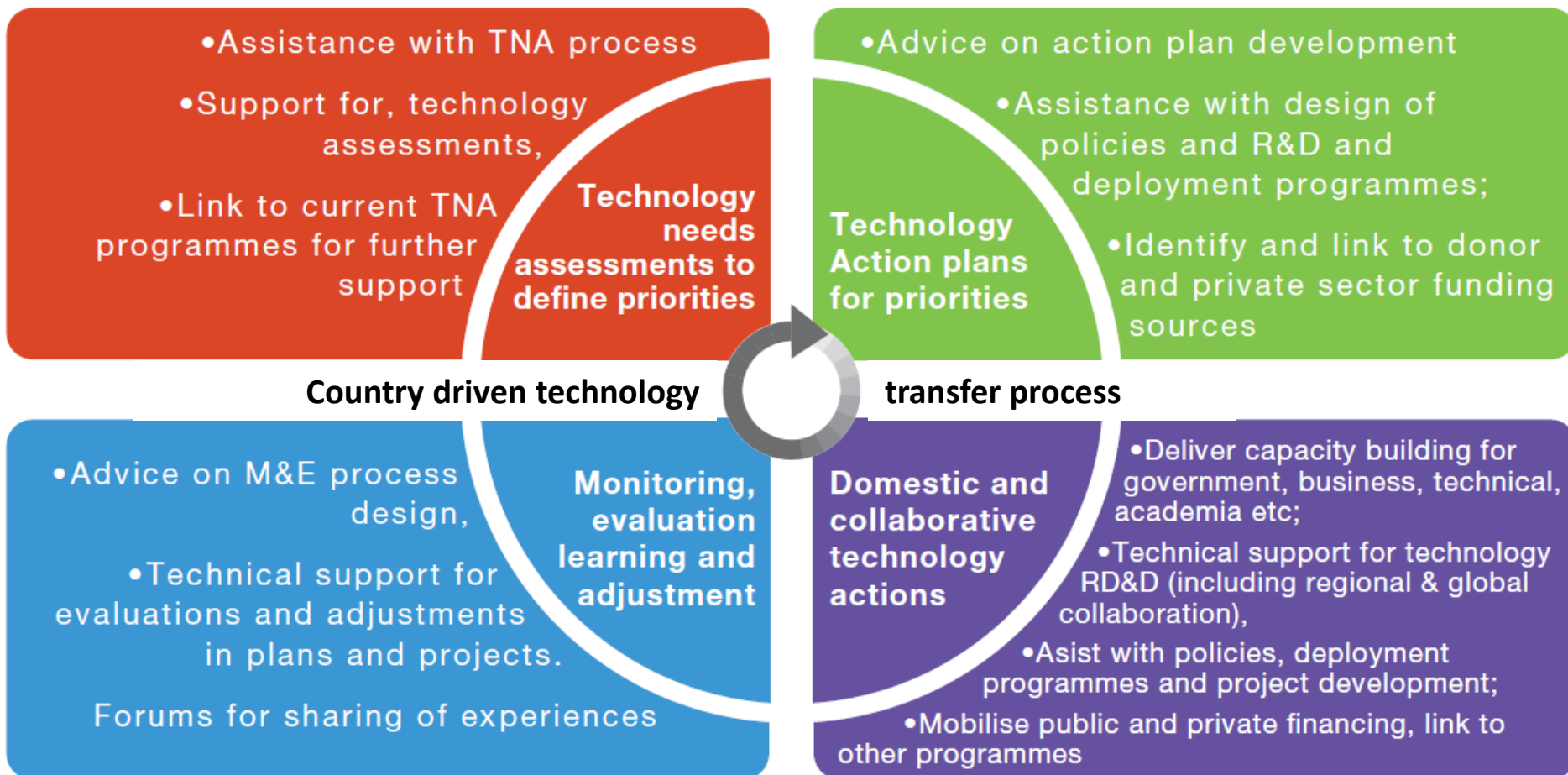
Next steps

- UNFCCC Secretariat in discussion with UNEP on host agreement
- COP 18 (Doha): agreement on CTC host and CTCN advisory board

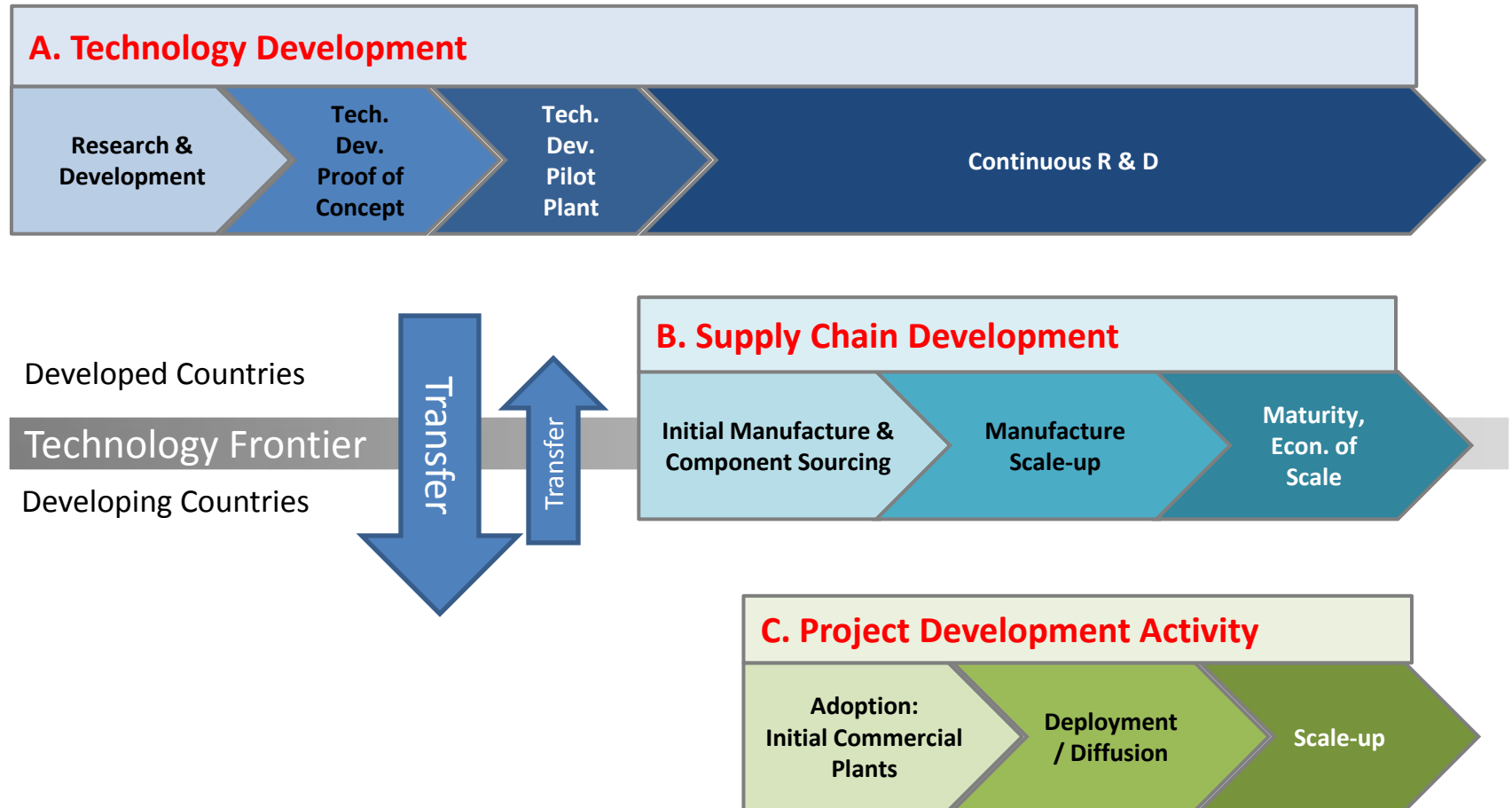


CTCN responses to NDE requests

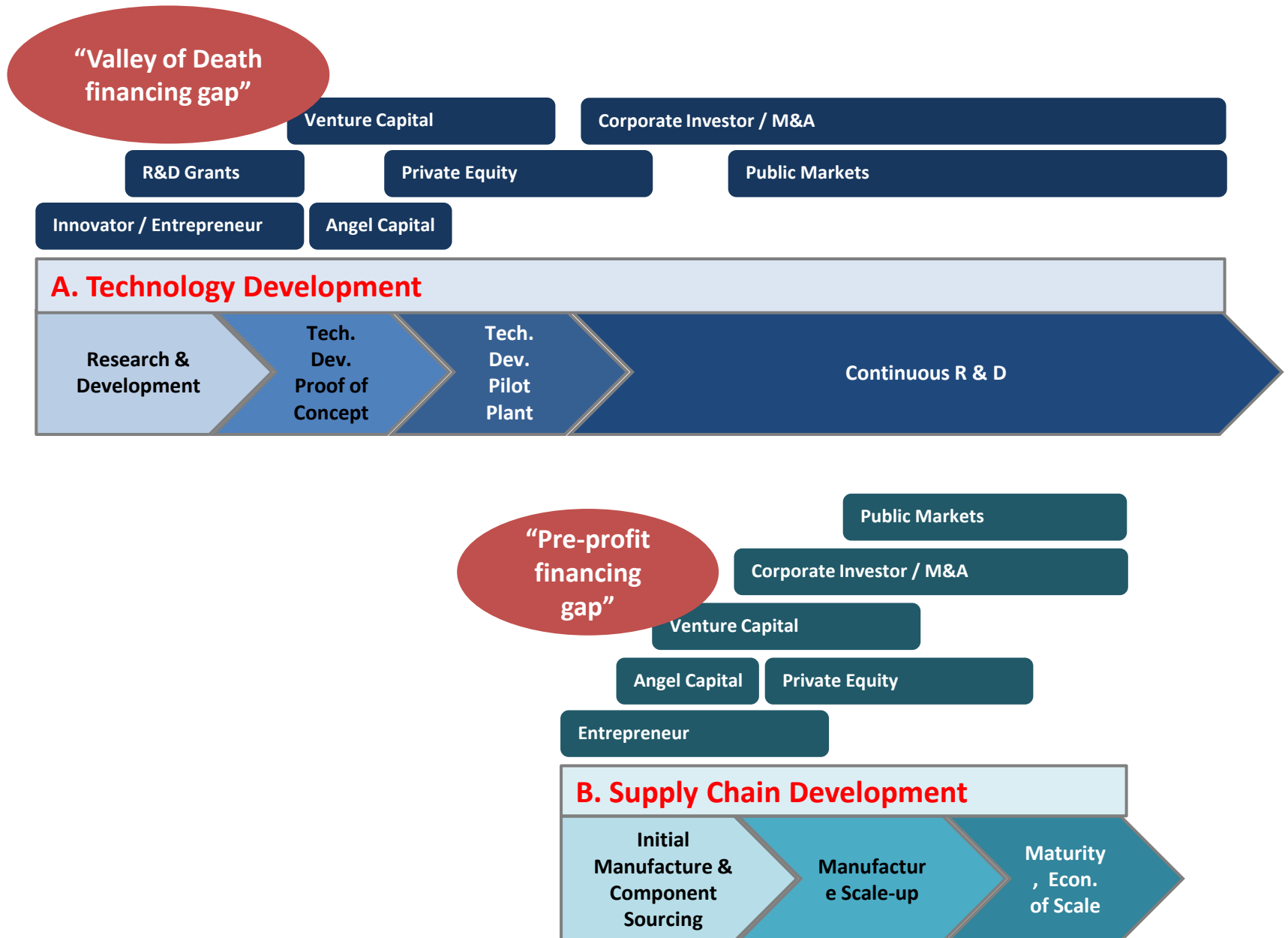
NDE Requests & CTCN Responses



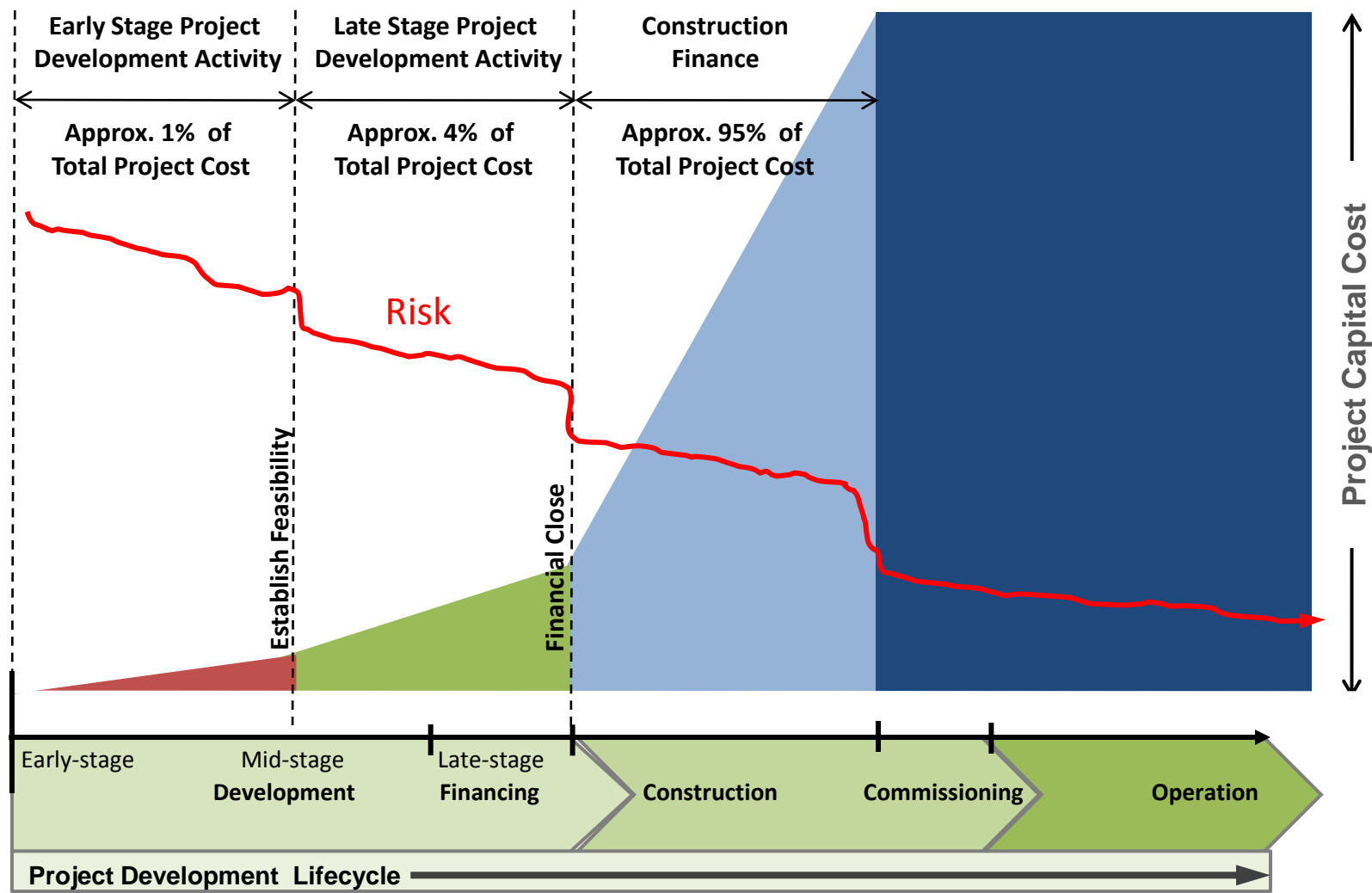
Technology Development, Manufacture & Deployment Processes



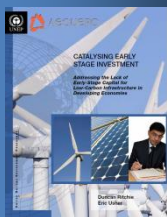
Financial Actors and the Gaps



Project Development and Allocation of Project Capital Spend

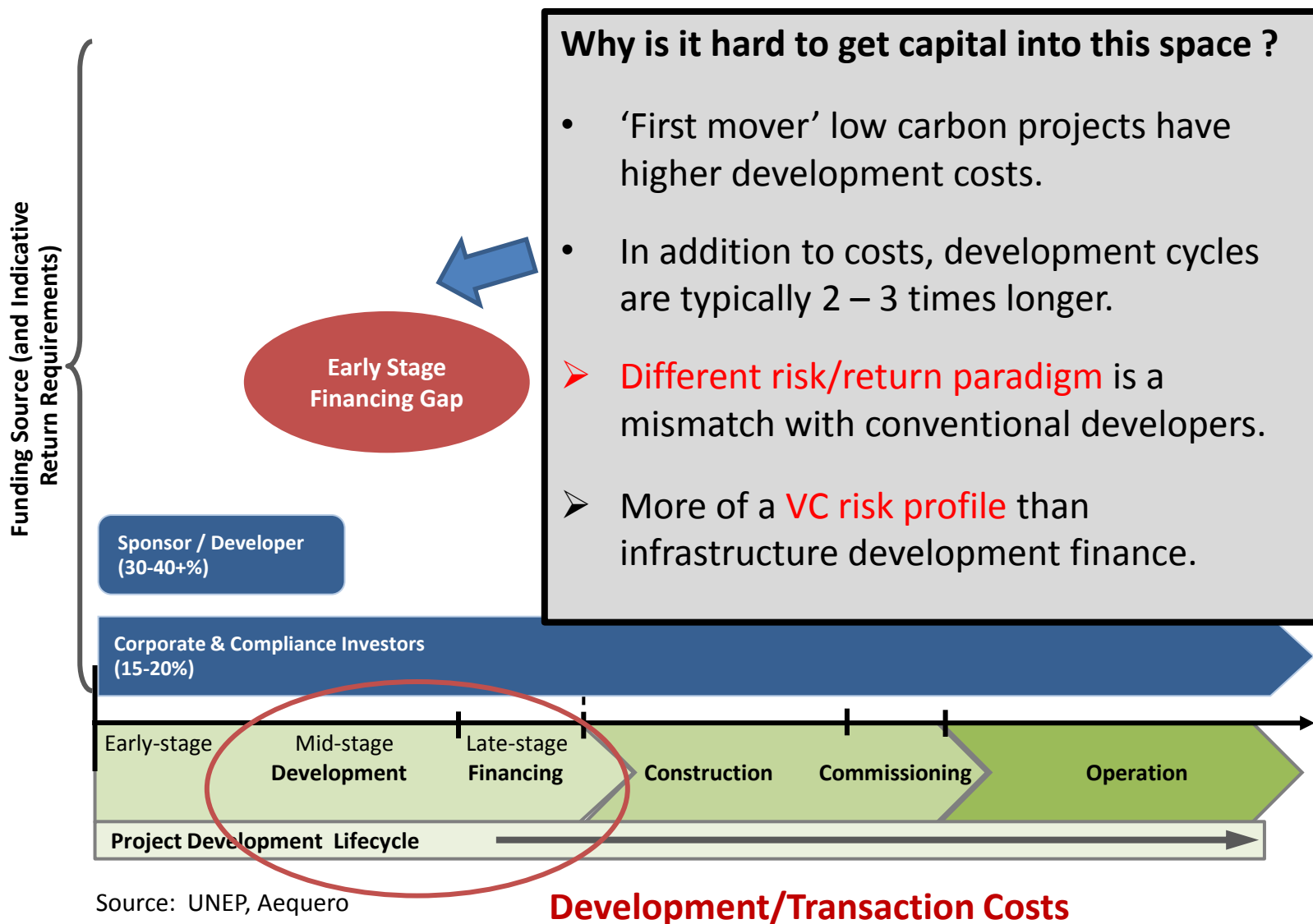


Source: Aequero, UNEP



Catalysing Early Stage Investment

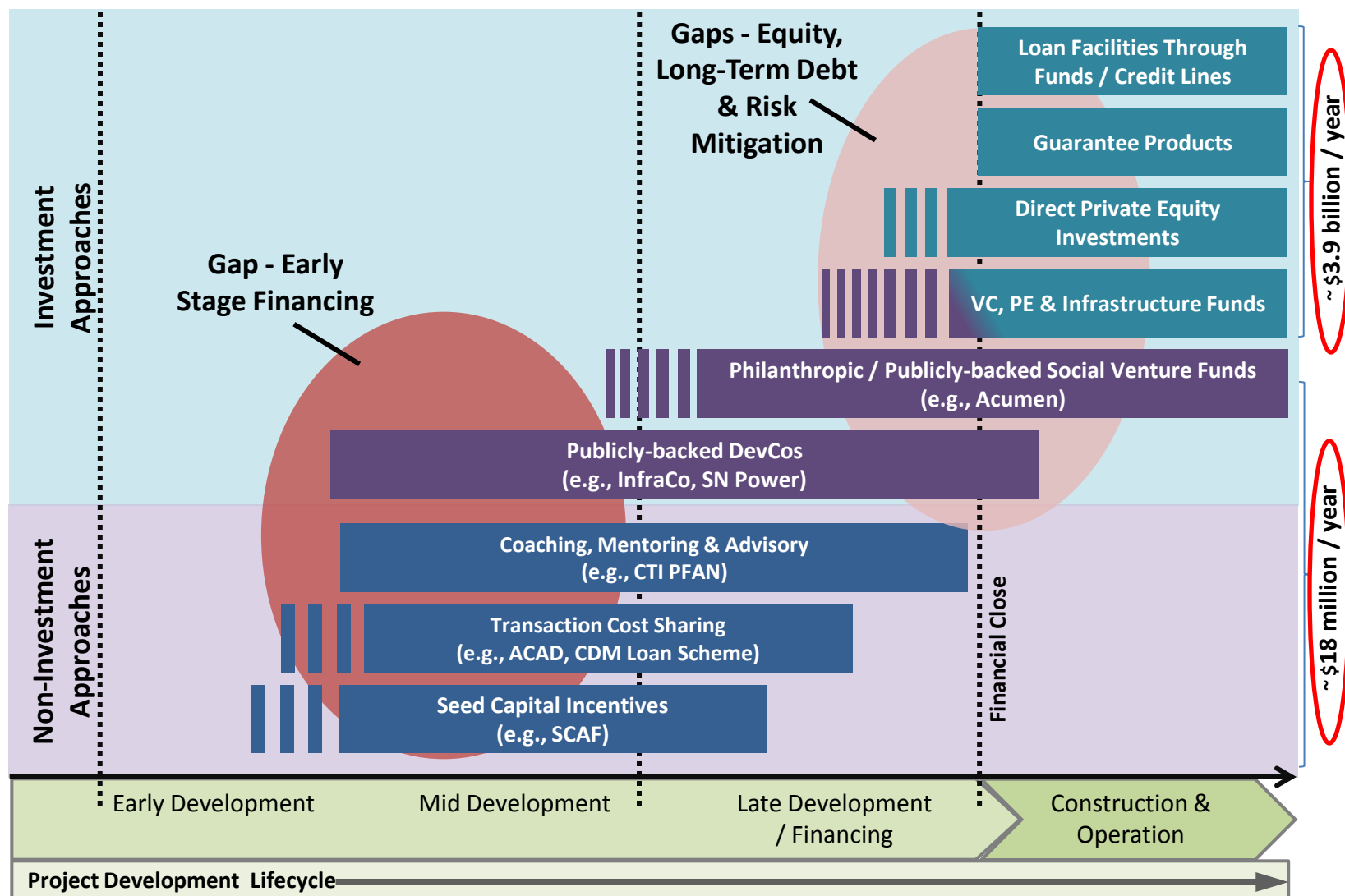
Where are the financiers along the project cycle ?





Lesson 1 – Grant and Non-Grant Approaches are Needed to Address All Gaps

Challenging to Address Early Stage Financing Gap with Only Non-Grant Approaches



Source: UNEP, Aequero

- Early-stage Public Non-Investment Interventions
- Late-stage Public Interventions
- Early-stage Public Investment Interventions



Catalysing Early Stage Investment



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ABOUT US

PROPOSALS

FAQ's

RESOURCES

CONTACT



*Mobilising early stage investment
for clean energy project
and enterprise developments.*

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www.scaf-energy.org

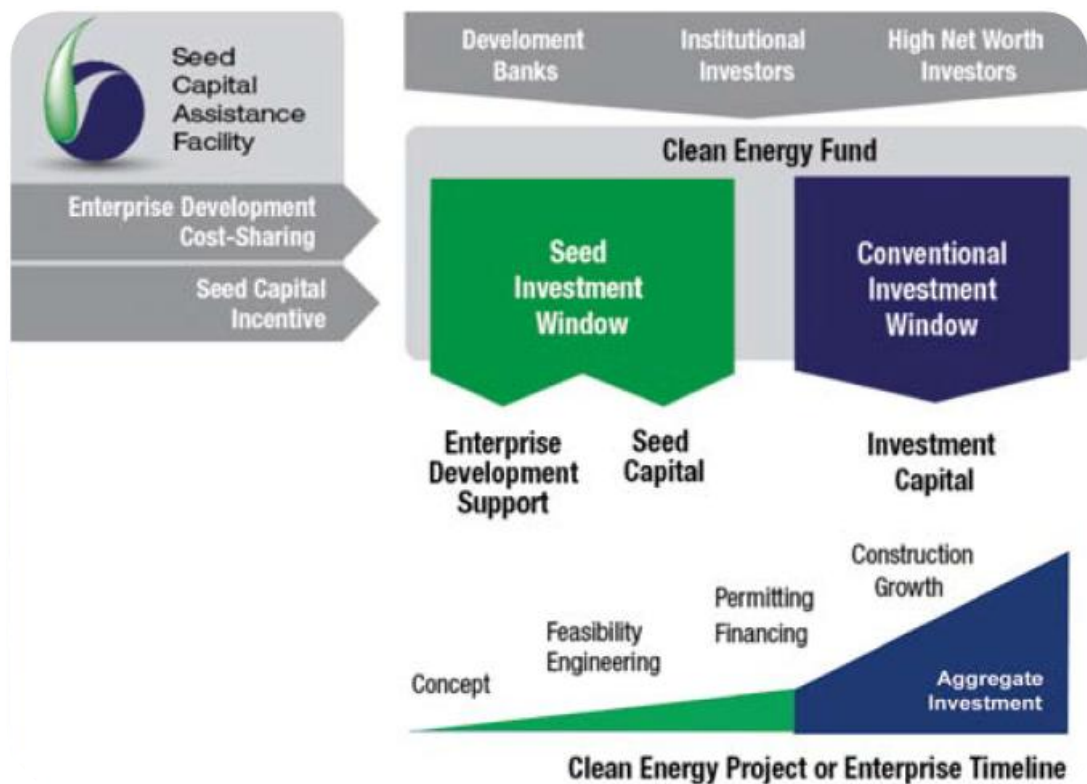


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CONCEPT



SCAF Cooperating Fund Agreement (CFA)





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FUNDS



Asia

Contracted Fund Managers

Africa

PE Funds

Support Line 1 – Enterprise development

Support Line 2 – Seed Capital Cost Sharing

Berkeley Energy

Renewable Energy Asia Fund

- Fund size of € 86,4 million
- Targets renewable energy projects and project developers to create sizeable operating portfolios
- Focus on wind and small hydro (in particular India and the Philippines)

- Deal sourcing and Identification of early stage opportunities
- Coaching and support for early stage projects and development teams
- 50/50 co-financing arrangement

- Financing of pre-financial close activities including feasibility studies, design engineering, legal reviews, permitting, ESG analysis
- SCAF support provided pro rata, €1 for every €5 of seed capital invested by the fund

Aloe Private Equity

Aloe Environment Funds / Green Investment Asia Sustainability Fund I

- Aggregate size of € 174 million
- Targets environmentally and socially sustainable companies, located or expanding in Asia
- Focus includes India, People's Republic of China (PRC) and Southeast Asia.

- Deal sourcing through business plan competitions, Enterprise Building with Indian Institutes of Technology
- Qualified deals supported in 3 ways: Team strengthening, Business skills development, Feasibility studies
- 50/50 co-financing arrangement

- Financing of technical assessments, feasibility studies, risk analysis, regulatory compliance, cost reviews or environmental analysis
- SCAF support provided pro rata, €1 for every €7 of seed capital invested by the fund

Armstrong Asset Management*

Armstrong S.E. Asian Clean Energy Fund

- Targets equity and equity-like investments in renewable energy and resource efficiency projects and supply chain in Southeast Asia.
- Fund size of \$60 million, of which 20% in early stage or greenfield projects.

- Eligible activities: deal sourcing; business development workshops / coaching; and feasibility studies
- 50/50 co-financing arrangement

- Support the development of 4 to 5 early stage projects/ventures
- SCAF support provided pro rata, €1 for every €5 of seed capital invested by the fund

VC/PE Hybrid Funds

Support Line 1 – Enterprise development

Support Line 2 – Seed Capital Cost Sharing

Frontier Investment Management ApS (Ltd)

DI Frontier Market Energy and Carbon Fund

- Targets equity and quasi-equity placement in renewable energy and carbon credit generating assets in Sub-Saharan Africa.
- Fund size of € 60 million with a € 5.25 million seed capital window

- Eligible Activities: Classroom training and seminars; On the job training
- Co-financing of pre-investment feasibility studies
- 50/50 co-financing arrangement

- Support the development of minimum 7 early stage projects/ventures
- SCAF support provided pro rata, €1 for every €7 of seed capital invested by the fund.

Inspired Evolution Investment Management Pty (Ltd)

Evolution One Funds

- Targets equity and debt placement in clean energy projects in SADC countries
- Fund size of USD 90 million, of which USD 20 million outside South Africa including a USD 5 million seed capital window

- Eligible activities: sourcing transactions; regulatory, policy, governance monitoring; and project developers mentoring & guidance
- 50/50 co-financing arrangement

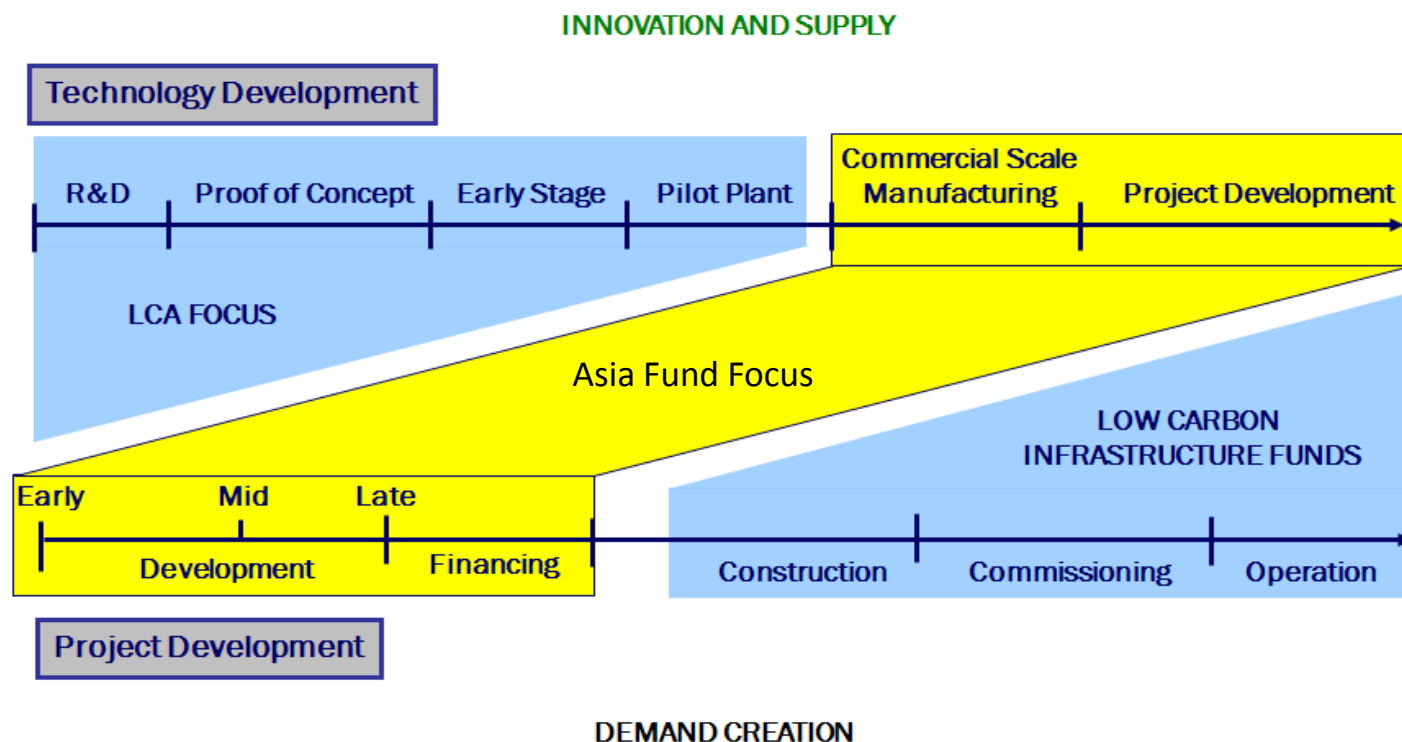
- Support the development of 4-5 early stage projects/ventures
- SCAF support provided pro rata, €1 for every €5 of seed capital invested by the fund



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Armstrong Asset Management Investment Strategy





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PROJECTS



Africa

	Name, Country	Tech.	Size (MW)	Stage
SL2	Kouga South Africa	Wind	80	Financial closing
	Mapembasi Tanzania	Small hydro	10	Financial closing
	Kinangop Kenya	Wind	50	Financial closing
SL1	Akiira Kenya	Geo.	35	Feasibility
	Baringo Kenya	Biomass	12	Feasibility
	DSI Rwanda	PV	20	Feasibility
	Lubilia Uganda	Small hydro	5.4	Feasibility
	SITI I/II Uganda	Small hydro	22	Feasibility
	KVTC Tanzania	Biomass	4	Pre-feasibility

Asia

	Name, Country	Tech.	Size (MW)	Stage
SL2	Philippines	Wind	48	Financial closing
	Philippines	Small hydro	25	Financial closing
	Philippines	Biomass	30	Feasibility
SL1	Philippines	Small hydro	24	Feasibility
	India	Small hydro	13	Feasibility
	India	Small hydro	48	Feasibility
	India	Wind farm	230	Feasibility



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PROJECTS



Example Seed Financed Projects

Name, Country	Tech.	Size (MW)	Stage	Financing	Co-finance Ratio; Leverage Ratio	CO ₂ (MT)
Kouga South Africa	Wind	80	Financial closing	Seed Financed Development Loan - soft quasi equity investment, interest free and convertible to equity at financial close 600mn debt equity	4x co-finance 50x fund; 600x total	6.1
Mapembasi Tanzania	Small hydro	10	Financial closing	Total: \$100mn dev.; \$8mn equity; \$19mn debt Fund: \$350K dev.(20%SCAF); \$3.5mn equity	4x co-finance 55x fund; 400x total	0.6

* Figures in italics are still to be realised

\$70K of SCAF Support For:

- EIA and technical verification studies.
- covers max 50% of any activity



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Thank You!

