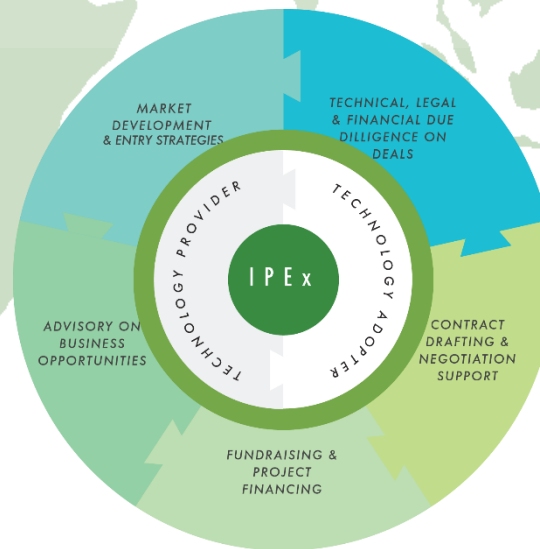
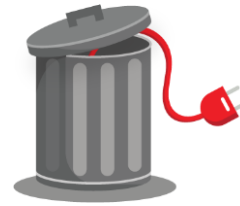


Accelerating the Deployment of Clean Technologies in Asia

IPEX Cleantech Asia





ONE – STOP – SHOP FOR CLEAN TECHNOLOGIES

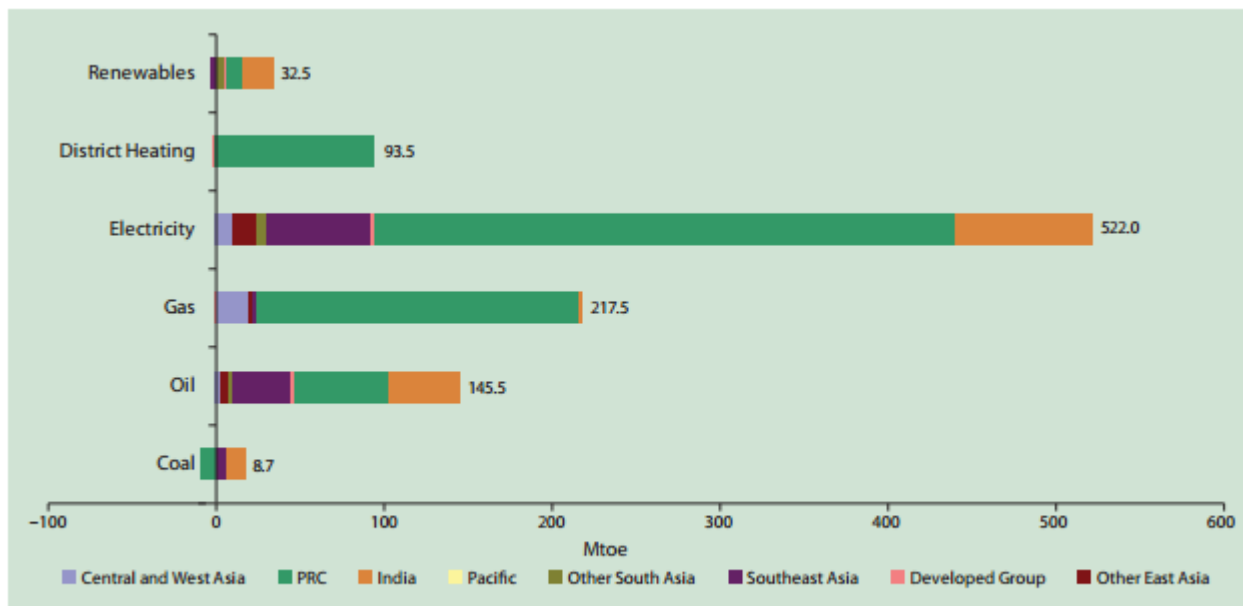
MATCHING

ADVISORY

DEAL FACILITATION

‘IPEX Cleantech Asia advises and facilitates Cleantech deals between technology owners worldwide, and technology users or project developers in Asia, with the aim of der-risking, lowering costs and accelerating associated commercial, regulatory and legal processes’

Energy Outlook for Asia to 2035



Mtoe = million tons of oil equivalent, PRC = People's Republic of China.

Asia Region's electricity demand is set to more than double – PRC and India alone will account for 70% of total electricity generated by 2035 (Source: ADB "Energy Outlook for Asia and the Pacific, Oct 2013")

Projected Energy Demand Growth Rate (Yearly Through to 2035)

WORLD **1.5%**

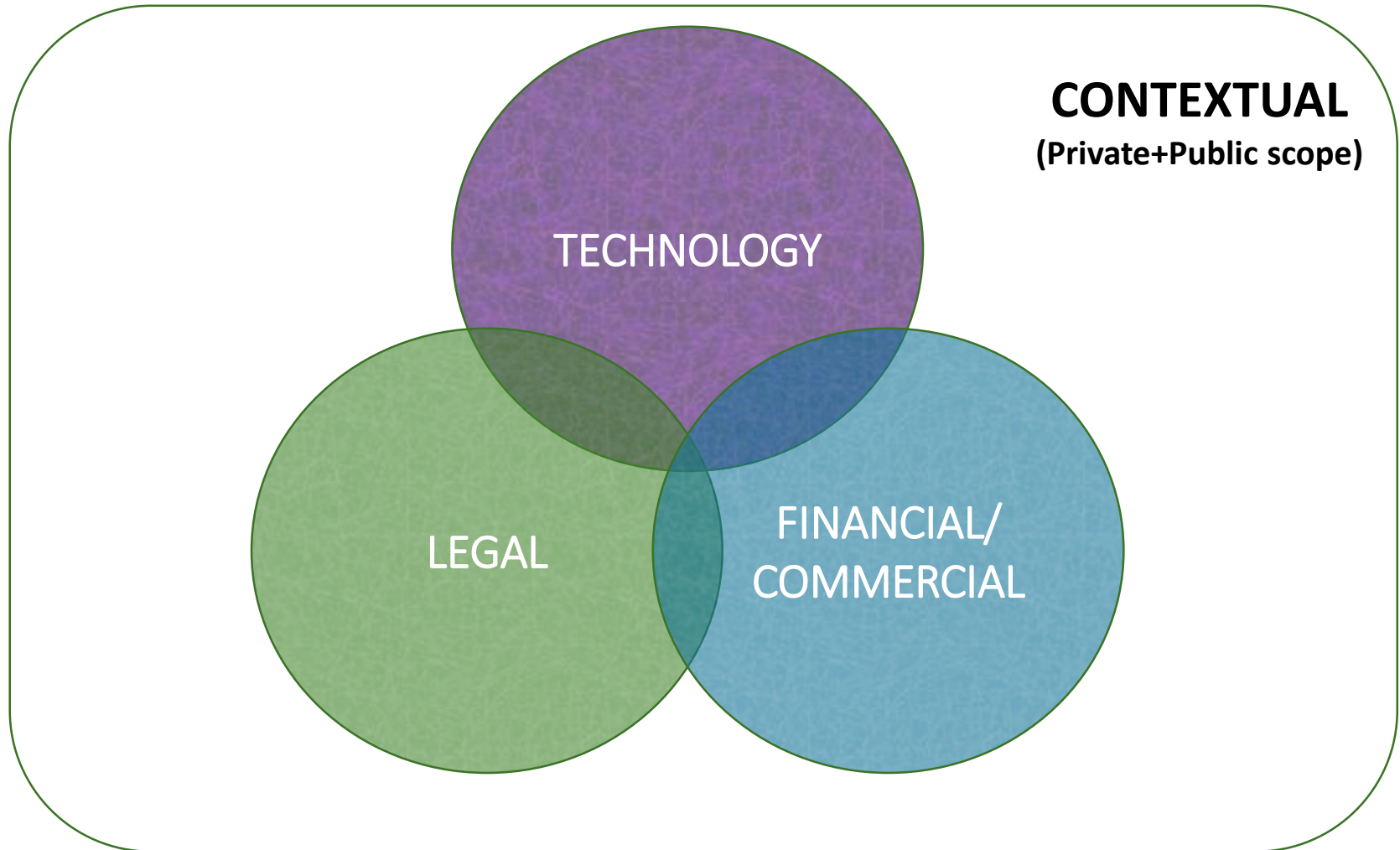
ASIA-PACIFIC **2.1%**

	Business as Usual	Alternative Approach via Scaling up of LCT & Efficiencies
Growth Rate of Energy Demand	2.1% per year	1.4% per year
Production of Fossil Fuels Share	83%	74%

Key Opportunities and Challenges

- Industrialization, population growth and needs
- Opportunities for 'leapfrogging'
- Need for network / access to partners
- Transaction costs: cross-border sales and transaction structuring requirement and visibility
- Assessment of counter-party risk and perceived country risk
- IP & legal framework / protection vs. absorption capacity
- Demand / need identification

Challenges of Low Carbon Technologies Transfer into Developing APAC



IPEX ASIA

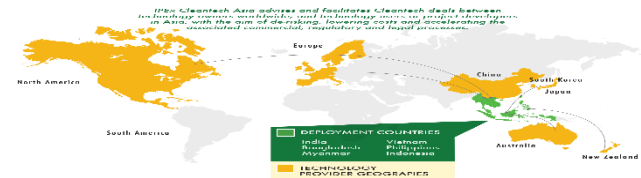


IPEX Cleantech Asia
Technology Transfer Marketplace

Launched in December 2014, IPEX is a technology market place and brokerage platform...formed by a consortium of **ReEx Capital Asia** and **DNV GL** with the support of **ADB**



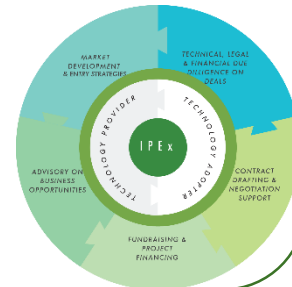
Designed to facilitate the **transfer** and **deployment** of new **low carbon technologies** in developing Asia



Resulting into – **technology monetized** (from around the globe) + new and validated **Cleantech technologies/ solutions** deployed into developing Asia + solid and **Bankable project**



Providing range of **brokerage, advisory, entry strategy** and **market development services** to all the stakeholders



Organisational Support

IPEX Cleantech Asia is supported by the Asian Development Bank (ADB) and was set up by ReEx Capital Asia together with DNV GL Clean Technology Centre based in Singapore.



Asian Development Bank (ADB), based in Manila, Philippines, is dedicated to reducing poverty in Asia and the Pacific through inclusive economic growth, environmentally sustainable growth, and regional integration. For more information visit: <http://www.adb.org/news/new-service-aims-speed-flow-low-carbon-technologies-asia>



ReEx Capital Asia is a leading Clean Energy Investment Banking and Consulting company specializing in LCT within the Asia Pacific region with headquarters in Singapore and representation in Europe, USA, Australia, New Zealand, Indonesia and the Philippines. For more information visit: <http://www.reexasia.com/>



DNV GL - Driven by its purpose of safeguarding life, property and the environment, DNV GL enables organisations to advance the safety and sustainability of their business. DNV GL provides classification and technical assurance along with software and independent expert advisory services to the maritime, oil & gas and energy industries. For more information visit: <http://www.dnvgl.com>

Technologies and Geographies



IPEx Cleantech Asia
Technology Transfer Marketplace



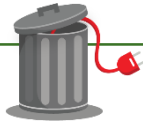
SOLAR



ENERGY
STORAGE



ENERGY
EFFICIENCY



WASTE TO
ENERGY



WATER
TREATMENT



POLLUTION
CONTROL

Presence and partnerships in ...

- China
- India
- Indonesia
- Philippines
- Myanmar
- Cambodia
- Vietnam
- Thailand
- Malaysia
- Singapore



IPEX process overview – one stop shop



IPEX Cleantech Asia
Technology Transfer Marketplace

1

Preliminary Screening

2

Matchmaking

3

Brokerage

4

Partner
Services

Legal

IP/ Patent
Rights
Analysis

Technical

Technology
vetting and
req'mnts
analysis

Commercial
& Financial

Business
Model &
Track
record

Matching

Tech Advice

Business
Advice

Legal Advice

*Advisory if
required

Contract
Drafting/
Nego
Support

Technical
matching/
Feasibility
analysis

Deal
(licensing,
JV, sale)
structuring

Success
fee

Extended
Due
Diligence

Detailed
feasibility
study

Capital
raising

D
E
A
L
C
L
O
S
E

Technology transfer and brokerage platform



Core team in Singapore
+
network of experts

Local, regional,
international partners
(e.g. WIPO)

IPEX

ADB

For Technology providers

- ✓ Advisory services
 - Market entry
 - Business
- ✓ Solicitation of adopters/buyers/commercialization partners
- ✓ DD on adopters
- ✓ Transaction structuring
- ✓ Transaction facilitation and negotiation support

Database of tech
suppliers and adopters

**Brokerage
services**



Additional services by
ReEx Capital Asia, DNV GL

**Access to financing
Capital raising, TDD**

For Technology adopters

- ✓ Sourcing, screening and matching of technologies
- ✓ Technology verification (DD)
- ✓ Due Diligence on technology supplier (IP/legal, financial)
- ✓ Transaction structuring
- ✓ Transaction facilitation and negotiation support

- ① One-stop shop for technology transfer
 - Financial / commercial / technical / legal / regulatory / brokerage
 - Add-on services if required: detailed technical DD, capital raising
- ② Dedicated platform to Clean Technologies
- ③ Dedicated to deployment in Asia
- ④ Support from ADB
- ⑤ Backed by strong partners with long track-record in the field
 - Cross-border transactions
 - Deal structuring & closing, raising private capital
- ⑥ Partnerships across Asia and beyond

IPEX Cleantech: SERVED INDUSTRIES



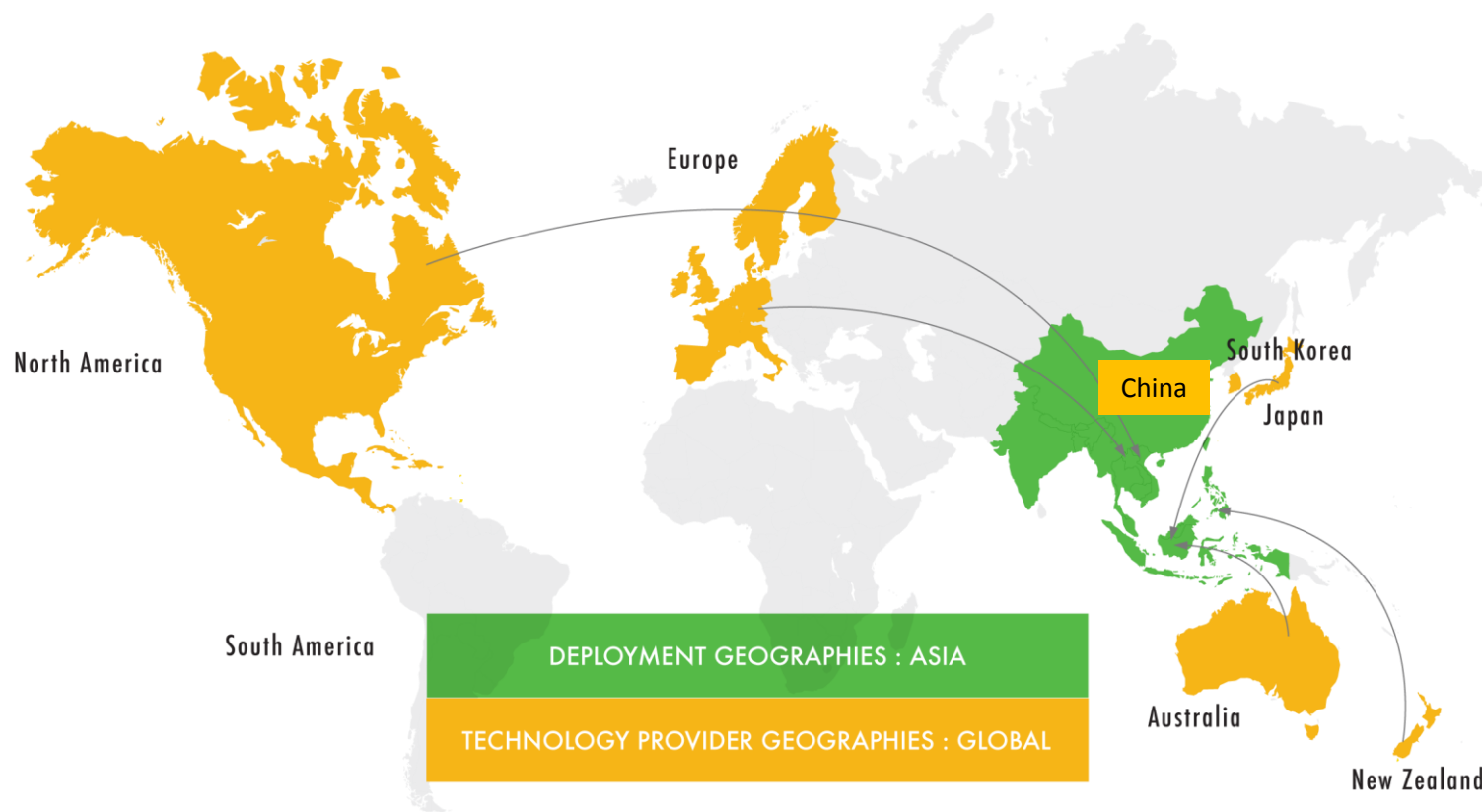
IPEX Cleantech Asia
Technology Transfer Marketplace



IPEX Cleantech: SERVED GEOGRAPHIES



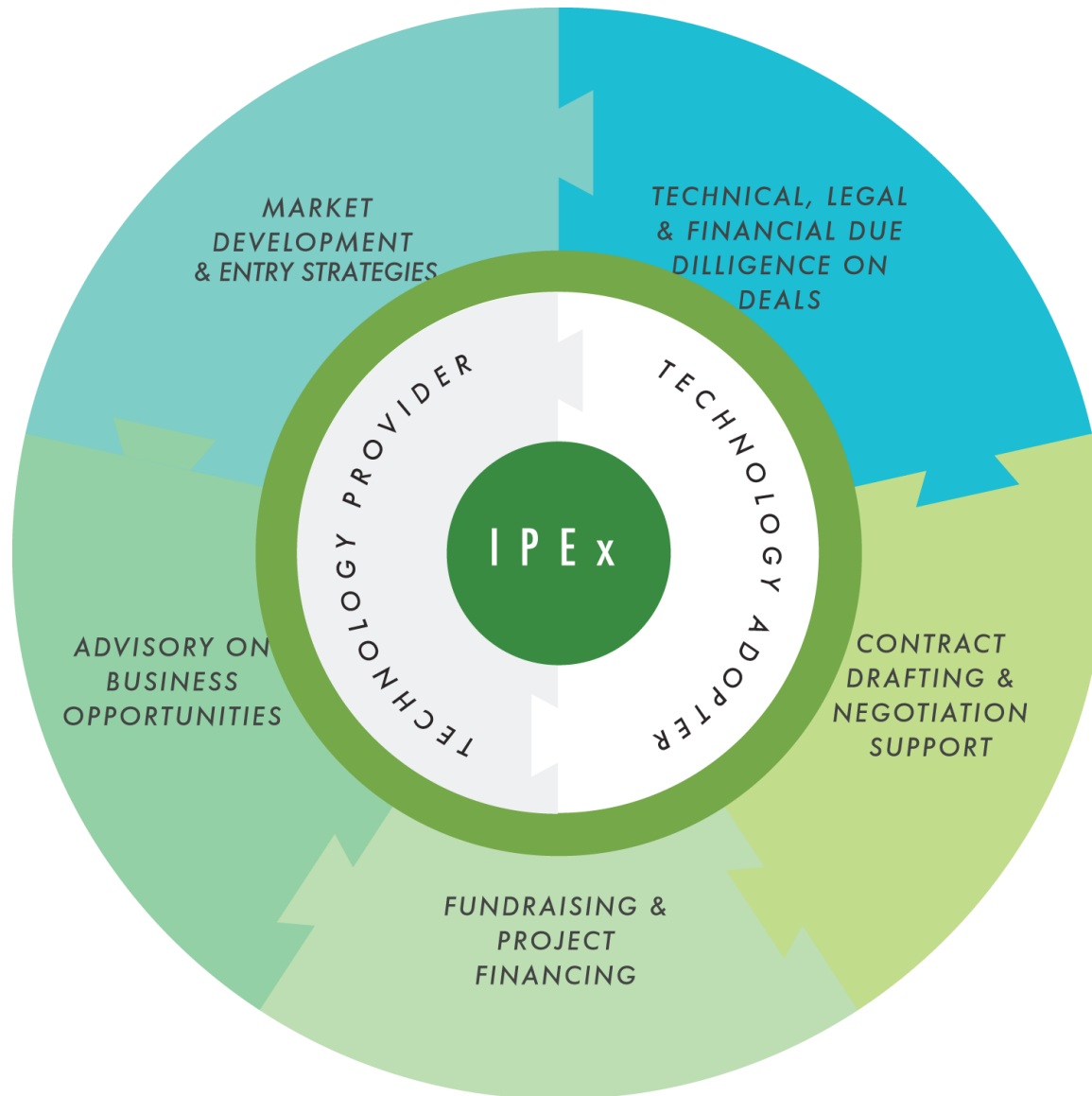
IPEX Cleantech Asia
Technology Transfer Marketplace



IPEX Cleantech: DELIVERY



IPEX Cleantech Asia
Technology Transfer Marketplace



Contact an IPEX Specialist

+65 6408 0742

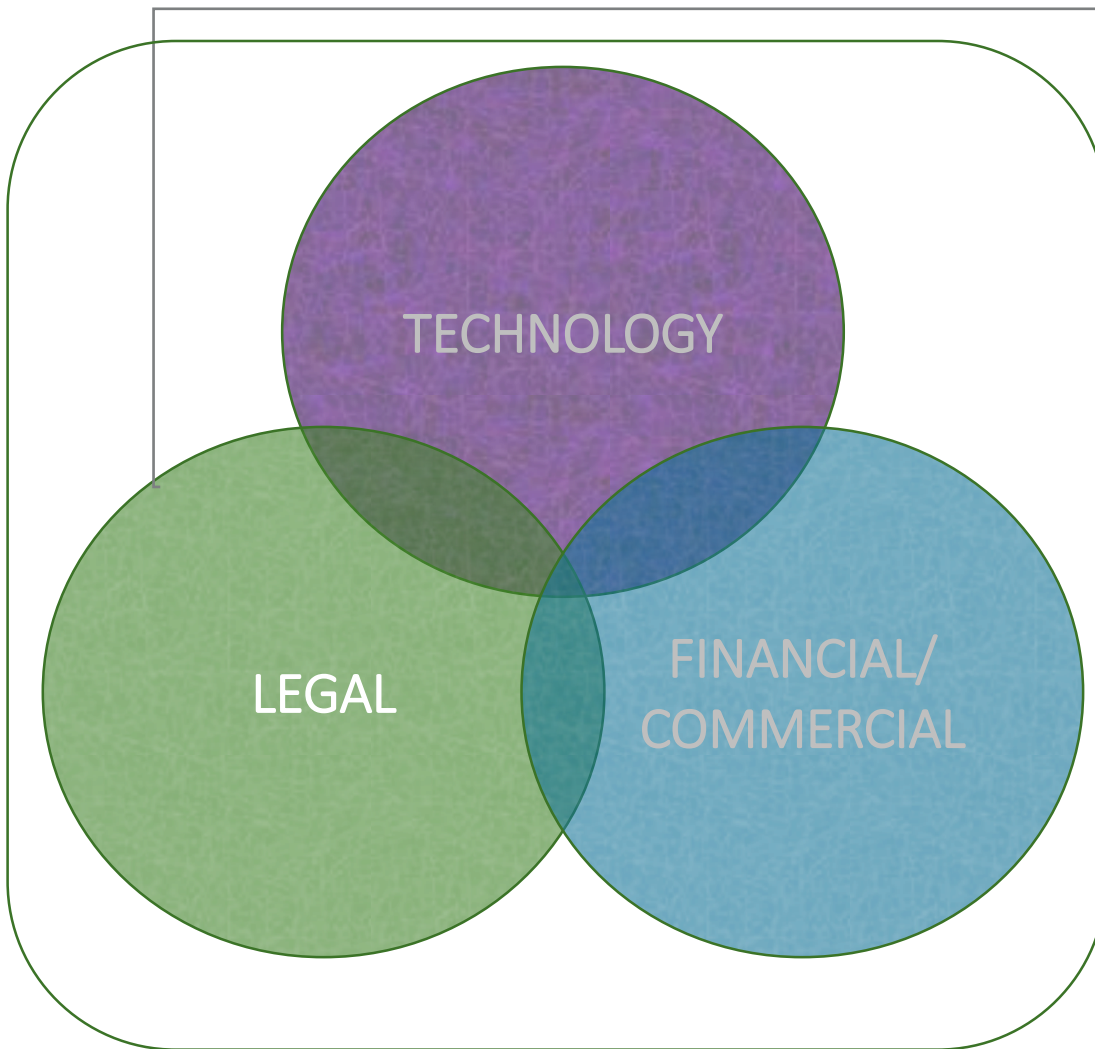
inquiries@ipexcleantech.com

Or visit:

<http://ipexcleantech.com/>

THANK YOU

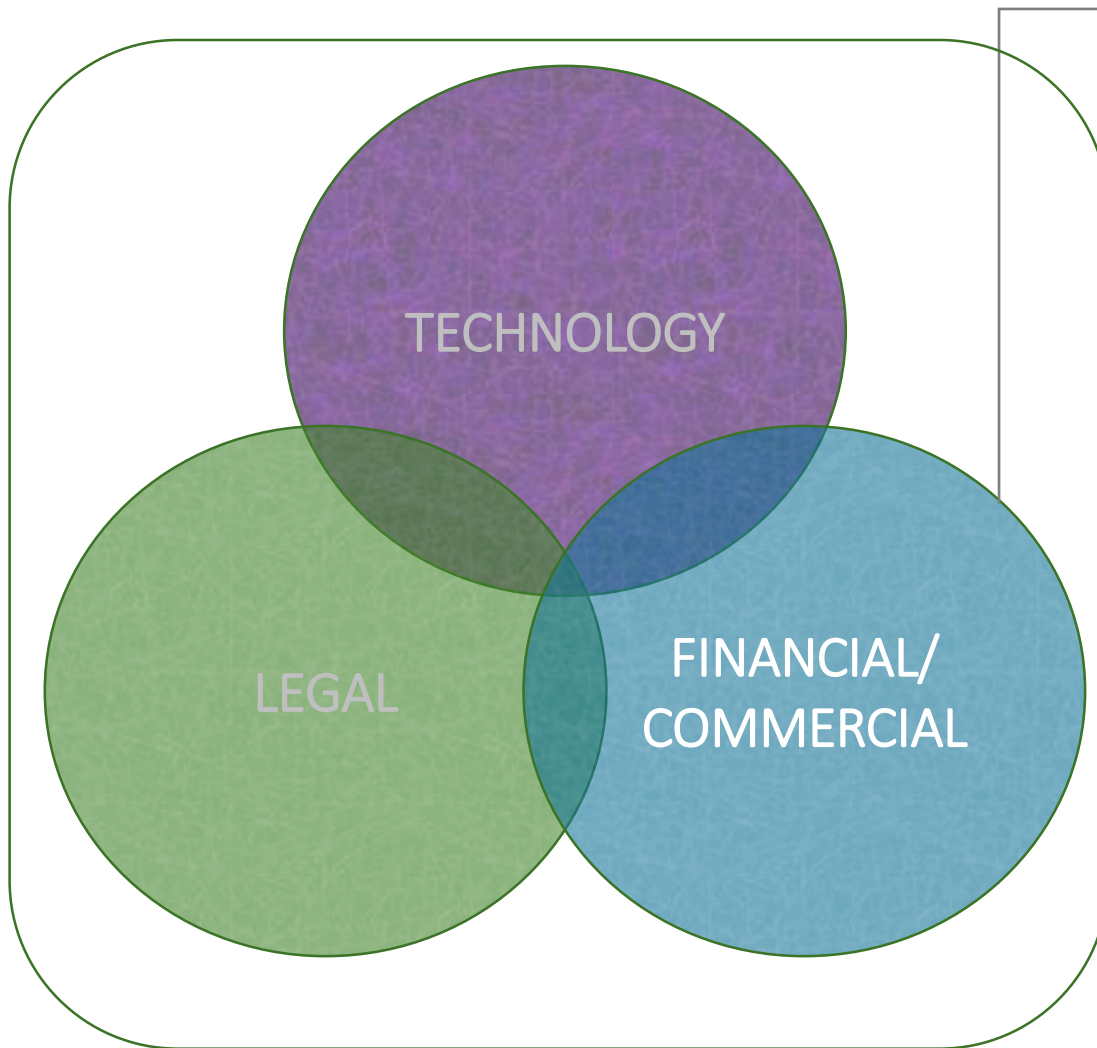
Challenges of Low Carbon Technologies Transfer @ Developing APAC



Challenges in Legal

- **Know-how protection**
 - E.g. Intellectual Property rights
- **Local policies and regulations**
 - Varying soft and hard legal rules in developing countries
- **Lack of transaction structuring and framework**

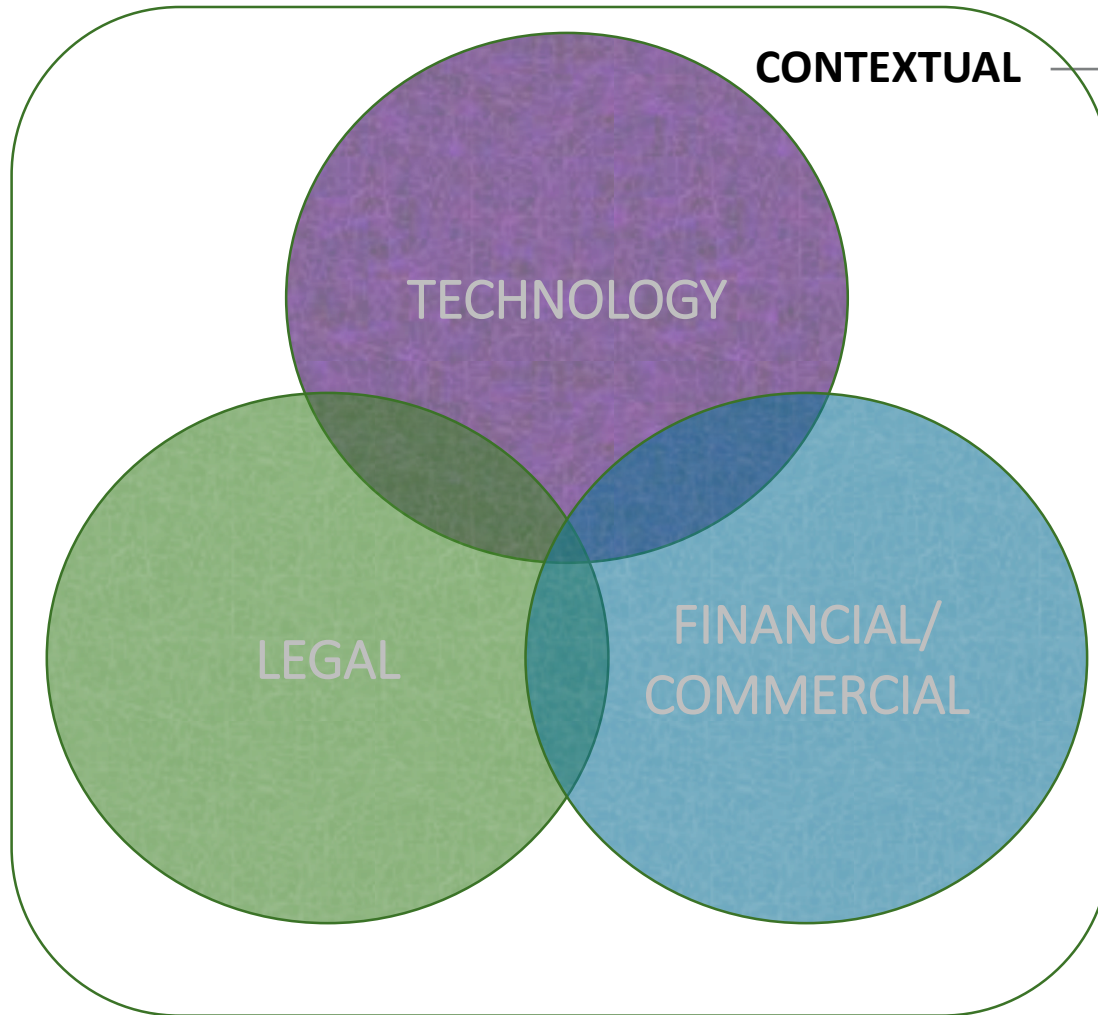
Challenges of Low Carbon Technologies Transfer @ Developing APAC



Challenges in Financial

- **Investor preference for later stage financing**
 - Small appetite for early-stage technologies
- **More than a marriage of two with different risk aptitudes**
 - E.g. Solution Providers, Adopters/End-users and System Integrators
- **Fear of inability to recover capital**
- **Investor unfamiliarity with cleantech**
- **Lack of good quality cleantech deals**

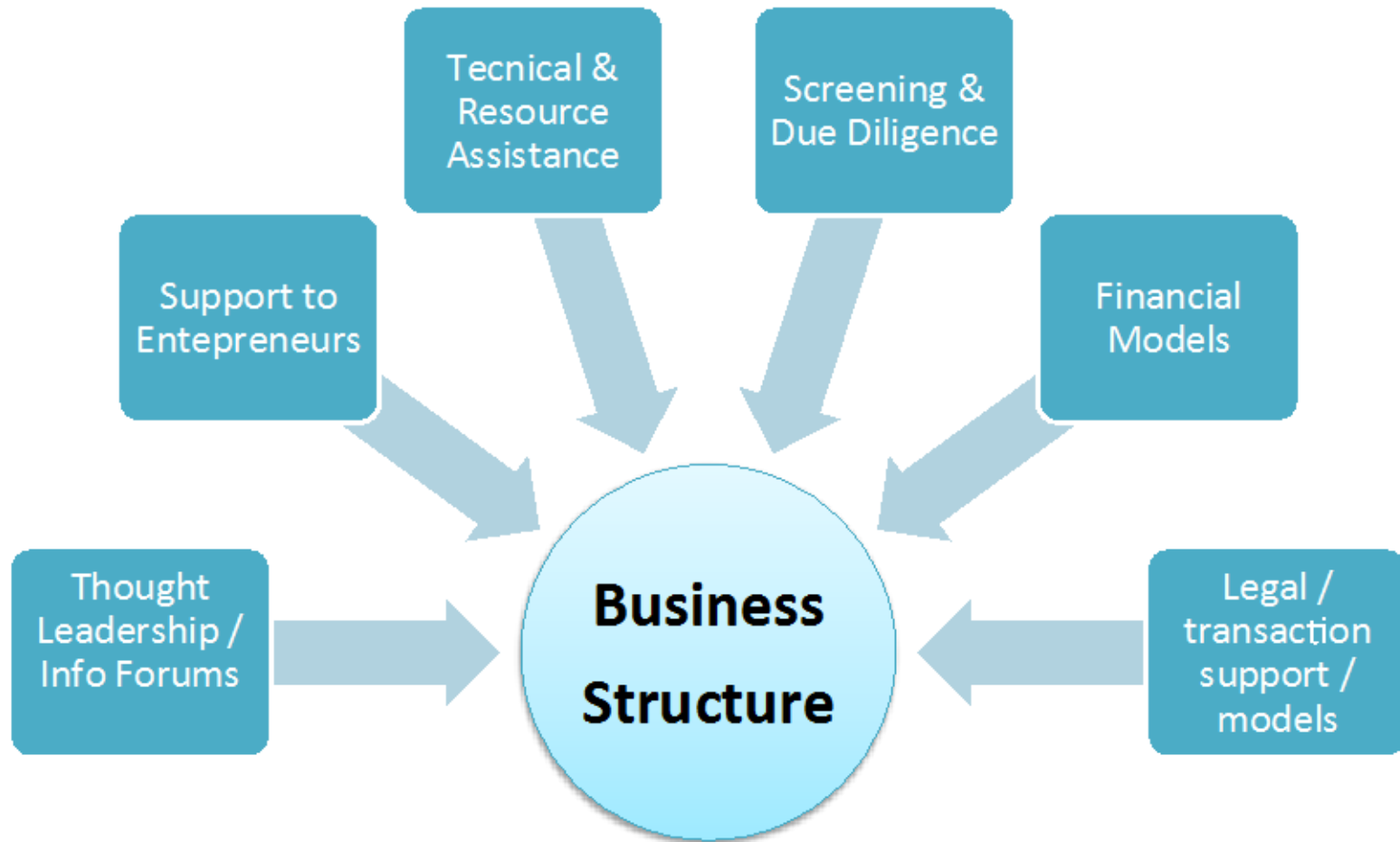
Challenges of Low Carbon Technologies Transfer @ Developing APAC



Contextual Challenges

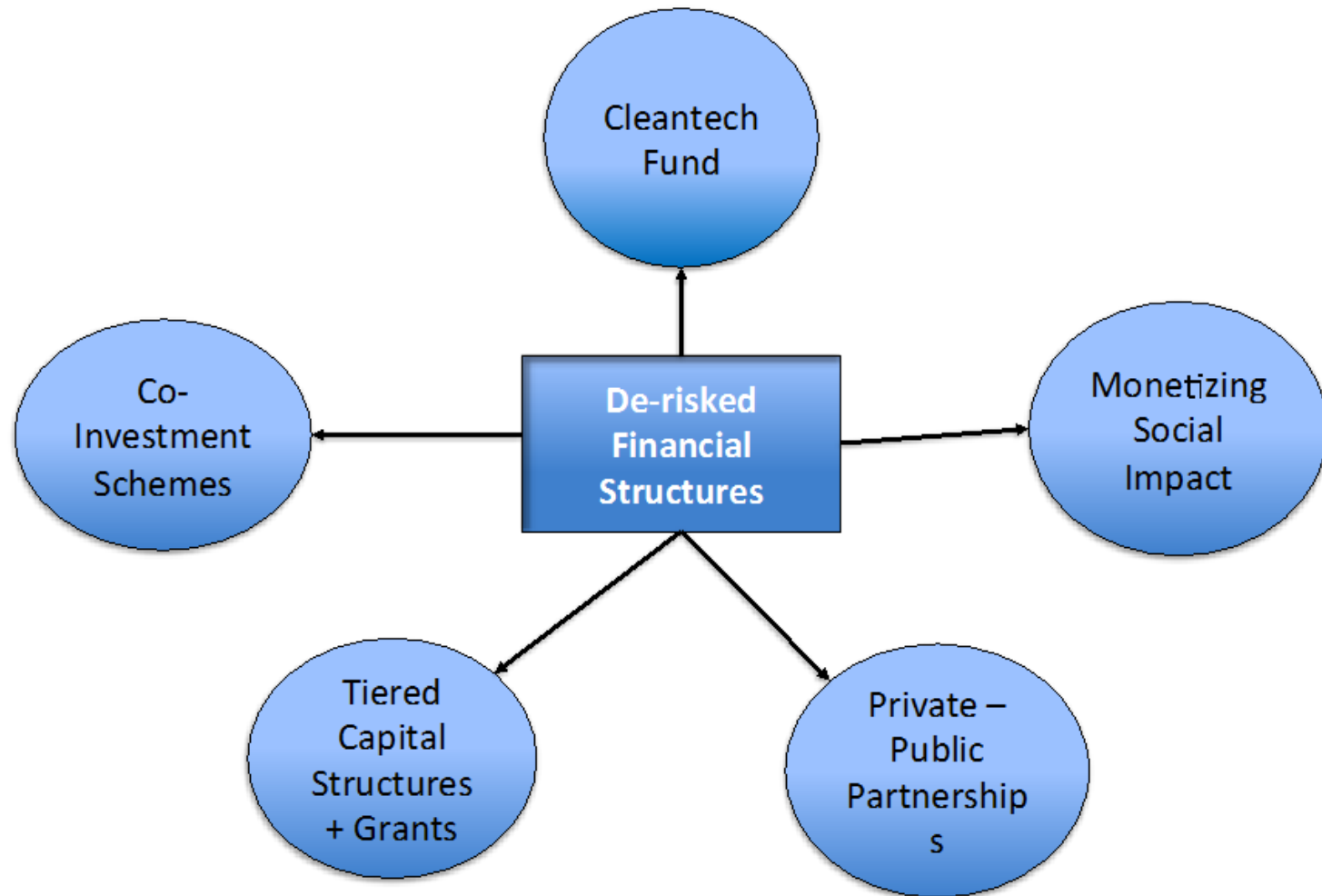
- **Cultural differences**
 - More willingness to pay for a physical product versus an informed opinion
- **Actual and perceived risks of foreign technologies**
- **Expectation to quality**
- **Climate change/ energy is NOT an issue on its own without effective regulation**
- **Energy issue is also a social, developmental, economic and political issue**

Possible Business Structure Components



Possible Financial Model Components

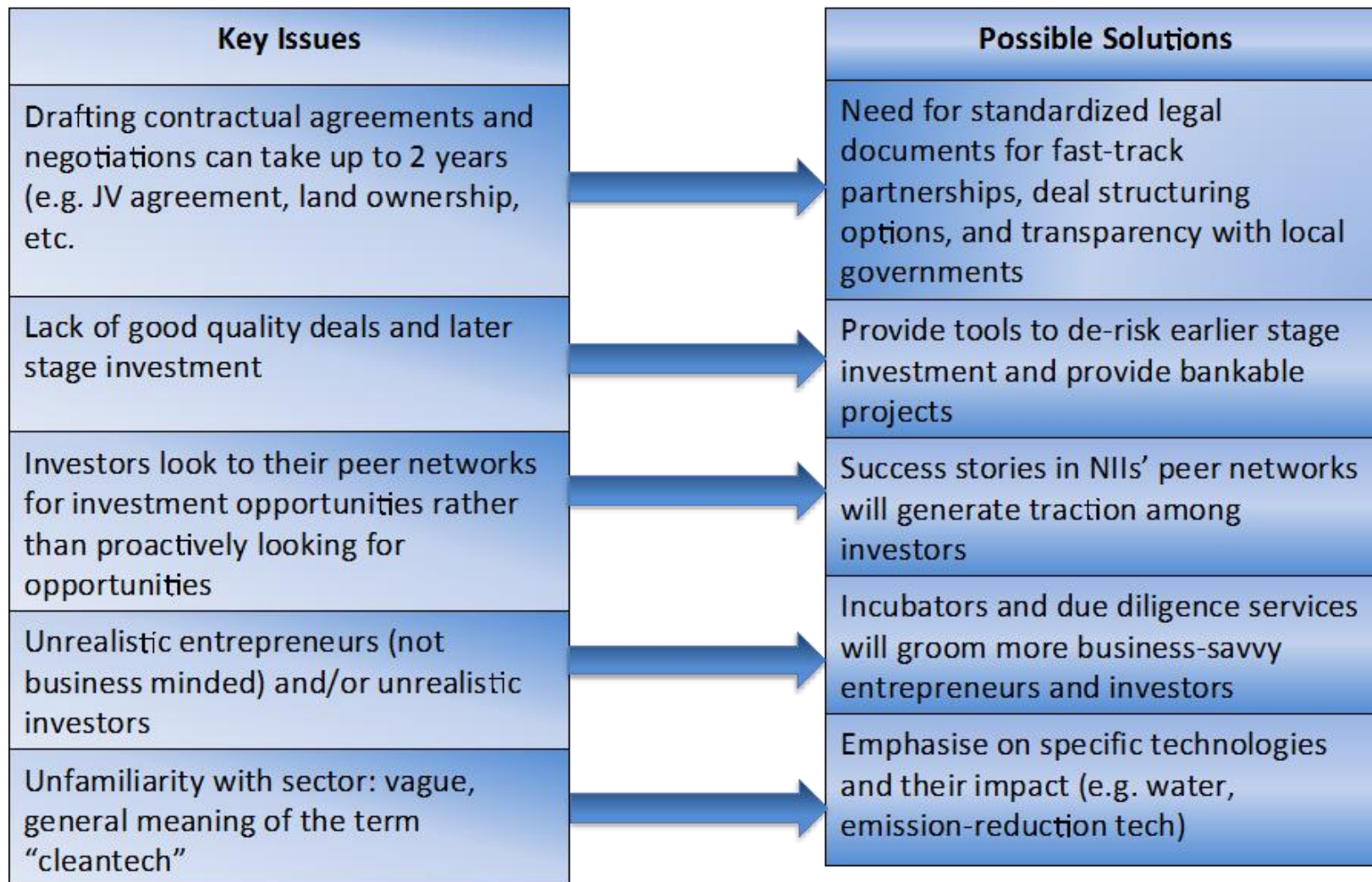
Create more “High Quality Deals”



Key Barriers and Possible Solutions



IPEx Cleantech Asia
Technology Transfer Marketplace



- ✓ Provide buyers and sellers visibility into “who and what are out there”
- ✓ Lower information barriers and transaction costs: the transaction costs of assembling a network of buyers and sellers
- ✓ Mitigate counter-party risk through pre-qualification process → lower risk to approach the market
- ✓ Matches the right cleantech solution with demand/need
- ✓ Deal structuring and negotiation support including technical and financial advisory
- ✓ Provide IP advisory support: advice to buyers and sellers on best practices depending on geographies