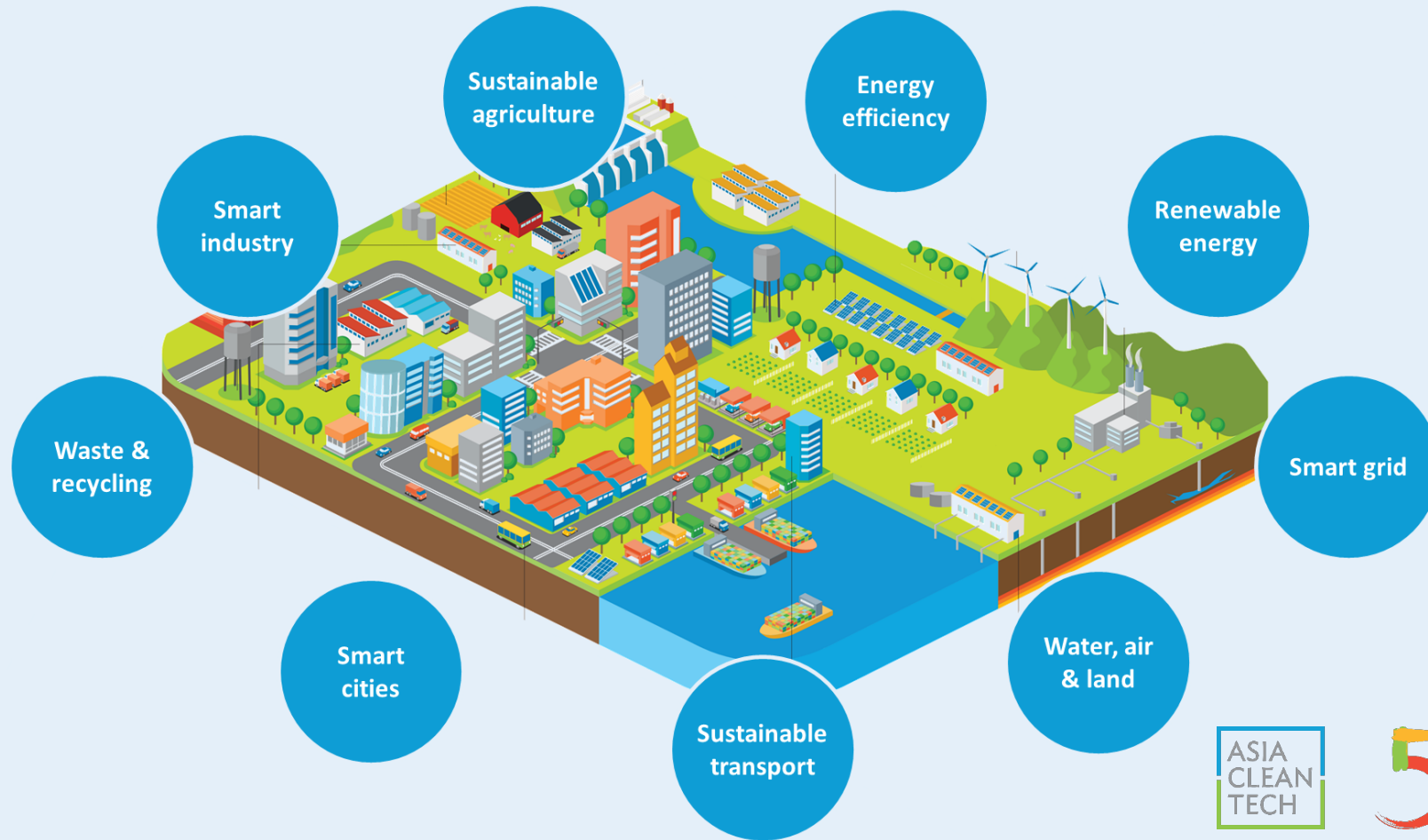


SCALING CLEANTECH IN ASIA

Daniel Hershon, Team Leader (Consultant) Cleantech VC/PE Project, ADB Climate Technology Finance Centre
APN Technology Transfer Scoping Workshop, Kobe, 6-7 December 2016



WHAT IS CLEANTECH?

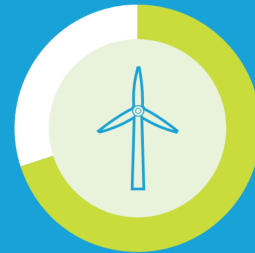


STARTUPS

develop and prove the new technologies, business models, products and services required to deploy and finance climate-friendly solutions cost-effectively at scale

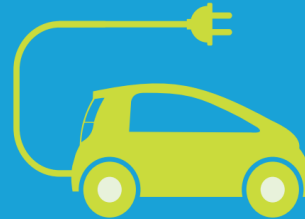


STARTUPS
ARE DOMINATING
THE CLEANTECH
INDUSTRY



70%

of Chinese renewable energy companies were founded after 2010



4 of top 10

global electric car manufacturers are less than 15 years old



STARTUPS
ARE DOMINATING
THE CLEANTECH
INDUSTRY



8 of top 10
global solar PV
manufacturers are
less than 20 years old



75%
of India's solar PV
capacity installed by
young entrepreneurs



SCALING CLEANTECH IN ASIA IS CHALLENGING

LACK OF ENTREPRENEURS



of all start-ups in
Asia are in the
cleantech sector



1. Lack of strong and experienced cleantech entrepreneurs
2. Best entrepreneurs not interested in cleantech
3. Significantly increases execution and investment risks



SCALING CLEANTECH IN ASIA IS CHALLENGING

LACK OF EARLY-STAGE RISK CAPITAL



LESS
THAN
7%

global cleantech
venture capital is
invested in Asia



1. No shortage of private or public capital in Asia
2. Cleantech generally viewed as unattractive by most investors
3. Lack of understanding of cleantech as an asset class by non-traditional investors



SCALING CLEANTECH IN ASIA IS CHALLENGING

WEAK ECOSYSTEM



LESS
THAN
10

cleantech
incubators and
accelerators in Asia



1. Lack of accessible support for cleantech entrepreneurs
2. Poor linkages between start-ups, larger companies, academia, government & investors
3. Significantly increases costs, risks, and time to market



ADB IS BUILDING A CLEANTECH ECOSYSTEM IN ASIA



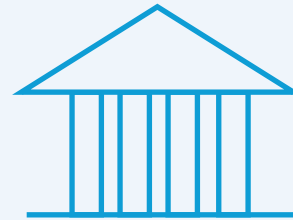
1

**support
accelerators
& incubators**



2

**support new
cleantech
investors**



3

**support
cleantech
marketplaces**



4

**support
networking &
collaboration**



ADB IS BUILDING A CLEANTECH ECOSYSTEM IN ASIA



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1

SUPPORTING ASIAN CLEANTECH ACCELERATORS

SEVEN

accelerators supported

1000+

startups evaluated

100+

startups accelerated

20+

startups seed-financed



clje



INFUSE
VENTURES



道和环境与发展研究所
Institute for Environment and Development



1

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2

SUPPORTING NEW CLEANTECH INVESTORS



India's first and only early-stage cleantech venture capital fund (\$25m) hosted by CIIE at IIM Ahmedabad

Supporting pipeline development, deal-sourcing and portfolio management

EXAMPLE OF INVESTMENTS



Provides energy intelligence to 400+ commercial, industrial and utility clients



No 1. retail brand for solar pumps in India



Industry-leading zero-capex green building specialist



Fastest growing innovative cold chain product company in India



2

SUPPORTING ASIAN CLEANTECH INVESTORS



Recently launched low-carbon private equity fund (\$400m) based in Hong Kong and co-managed by ADB, Orix and Robeco

Supporting fund-raising, deal-sourcing, due diligence and portfolio management

EXAMPLE OF INVESTMENTS



India's leading cold-chain logistics company



World-leading zinc-air energy storage technology

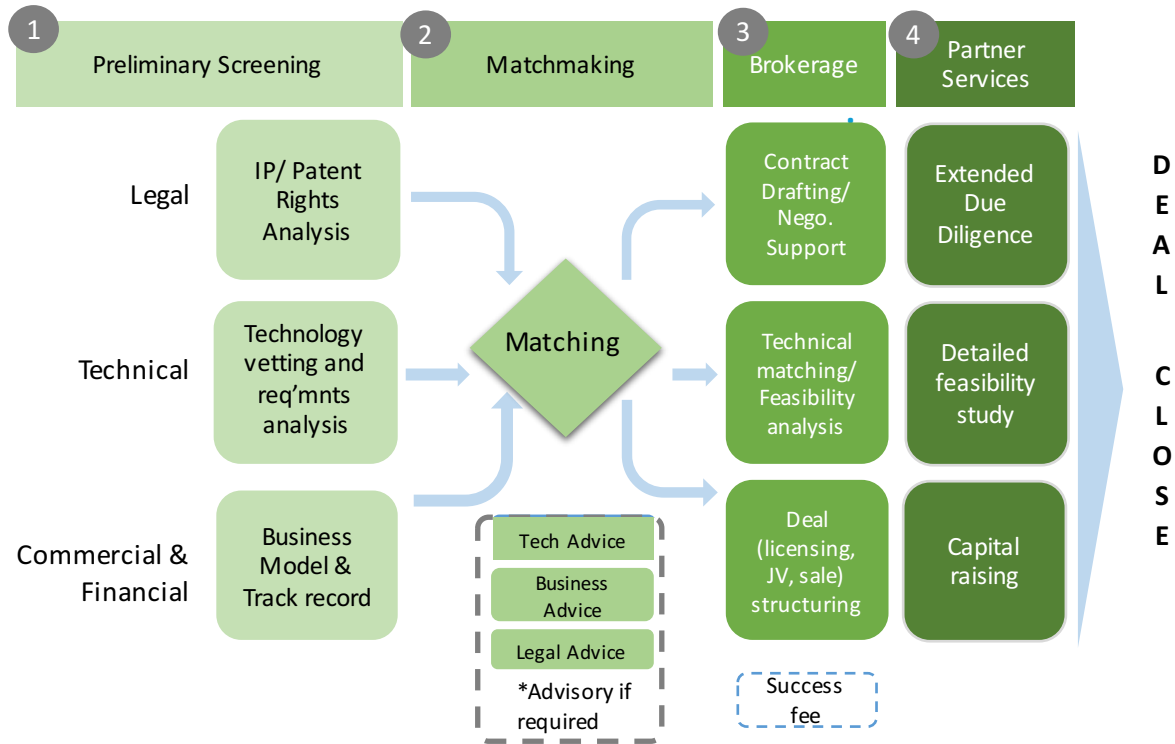


3

SUPPORTING CLEANTECH MARKETPLACES



- One-stop shop for clean technologies
- Facilitates deals between cleantech owners worldwide, and adopters project developers in Emerging Asia.
- Backed by ReEx Capital, DNV and Asian Development Bank



3

SUPPORTING CLEANTECH MARKETPLACES

BEC-TAD

Technology Assessment & Dissemination

- “Pop-idol” for next gen cleantech
- Selected cleantech companies assessed in public (around 100+ participants)
- Senior-level international jury from industry, academia, finance, government.
- Assessed according to technology attractiveness, market potential, regulatory & policy environment, and environmental& social impact
- Detailed recommendations to founder, policy-makers, industry, & investors



4

BUILDING A CLEANTECH COMMUNITY



NEW ENERGY NEXUS

- First global network of cleantech accelerators
- 30+ members that has supported 1000+ start-ups and helped raise \$2+ bn
- Co-founded by California Clean Energy Fund and Asian Development Bank

NEW ENERGY
NEXUS



4

BUILDING A CLEANTECH COMMUNITY



ASIA-PACIFIC LOW CARBON SUMMIT

- 19-21 October 2016 in Changsha, Hunan, PRC
- Jointly held by Government of Hunan and ADB
- Showcase of successes and experiences in promoting development & deployment of LCT
- 280+ delegates from 31 countries.
- 48 companies exhibited. Nearly 10,000 visitors



KEY TAKE-AWAYS

#1. Tech transfer happens bottom-up: scaling cleantech in Asia requires strong local entrepreneurs

#2. We need a stronger ecosystem to support cleantech entrepreneurs and start-ups in Asia

- Attract more and stronger entrepreneurs
- Attract new early-stage and non-traditional investors
- Create a collaborative cross-sector community
- Active local and cross-border match-making



THANK YOU

