ASIA CLEAN ENERGY FORUM

Strengthening the ecosystem for cleantech start-ups and venture capital in Asia
CLEANTECH IS MUCH MORE THAN JUST RENEWABLES

**Renewable Energy**
- Solar PV and thermal
- Wind, geothermal
- Biomass, biofuels

**Resource efficiency**
- Energy efficiency
- Green material
- Smart grid

**Environmental protection**
- Air quality
- Water management
- Soil, forestry and land

**Internet of things & smart cleantech**
- smart cities, smart mobility, smart agriculture, smart buildings, smart industry
WHY DO WE CARE ABOUT CLEANTECH VENTURE CAPITAL?

GLOBAL TRANSACTIONS IN GLOBAL RENEWABLE ENERGY 2014 ($bn)

Unique source of financing for high-risk start-ups that are developing new solutions that are commercially unproven but has potential for exponential growth.

VC + PE 0.7%
EXAMPLE: VC-BACKED SOLAR PV COMPANIES

Clean Power Finance

SUNPOWER

vivint.

tigo energy

geeostellar

First Solar

SUNGEVITY

SUNRUN

Surya PowerMagic Pvt. Ltd.

simpa networks

OFF-GRID: ELECTRIC

APPLIED SOLAR TECHNOLOGIES

US Solar PV financing ($bn)

Source: Navigant Research
CLEANTECH VC IN ASIA IS STRUGGLING

8% of global cleantech VC investment
5% of total VC investment in Asia

Source: Cleantech Group, CB Insight

* Excludes transport
CLEANTECH VC IN ASIA IS STRUGGLING

CLEANTECH IS TOO RISKY
“Cleantech is a noble way of losing money”
Large pension fund

LACK OF STRONG CLEANTECH ENTREPRENEURS
“99% of cleantech start-ups are not investable”
Indian cleantech vc

LACK OF EARLY-STAGE CLEANTECH INVESTORS
“We don’t do cleantech”
Global VC fund

LACK OF CLEANTECH VC & START-UP COMMUNITY
“Who shall I talk to?”
Indian cleantech entrepreneur
## BIG HOPE #1: EMERGENCE OF “SMART CLEANTECH”

<table>
<thead>
<tr>
<th>Cost of Sensors</th>
<th>Cost of Bandwidth</th>
<th>Cost of Processing</th>
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<tbody>
<tr>
<td>40% vs 10 years ago</td>
<td>1/40 vs 10 years ago</td>
<td>1/60 vs 10 years ago</td>
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Source: Goldman Sachs
BIG HOPE #1: EMERGENCE OF “SMART CLEANTECH”

Connect, monitor, analyse and control anything, anywhere at anytime.

New big market opportunity: $3-7 trillion by 2020

Better fit with VC model:
- Lower risk
- Capital-lite
- Shorter-time to market
- Easier exits

40% vs 10 years ago
1/40 vs 10 years ago
1/60 vs 10 years ago

Source: Goldman Sachs
**BIG HOPE #2: ASIA TECH START-UP BOOM**

**INDIA’S TECH START-UP BOOM**

- **VC investments (deals)**
  - 2010: 8+
  - 2014: 90+

- **VC investments ($)**
  - 2010: 30X+
  - 2014: 30X+

- **VC funds**
  - 2010: 14X+
  - 2014: 11X+

- **Local Angels**
  - 2010: 30X+
  - 2014: 11X+

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**Attracting big pool of Asian entrepreneurs**

**Attracting new types of investors**

**Creating new start-up support ecosystem (accelerators, events/hubs, policies)**

Source: NASSCOM
BIG HOPE #3: NEW SOURCE OF CAPITAL

Private wealth
‘000s of HNWI in Asia

<table>
<thead>
<tr>
<th>Year</th>
<th>Count</th>
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<tbody>
<tr>
<td>2013</td>
<td>4320</td>
</tr>
<tr>
<td>2014</td>
<td>4689</td>
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Asian Family offices
% allocation in VC/PE

<table>
<thead>
<tr>
<th>Year</th>
<th>Allocation</th>
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<tbody>
<tr>
<td>2012</td>
<td>4%</td>
</tr>
<tr>
<td>2013</td>
<td>15%</td>
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Corporate investors
# of VC deals in Asia

<table>
<thead>
<tr>
<th>Year</th>
<th>Count</th>
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<tbody>
<tr>
<td>2014</td>
<td>384</td>
</tr>
<tr>
<td>2014</td>
<td>600</td>
</tr>
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</table>

Source: UBS, CB Insight, Cap Gemini
ADB is building a regional platform to support Asia’s clean tech VC & start-up ecosystem.

- Support start-up accelerators
- Support new investors
- Share clean tech knowledge
- Regional clean tech network

- Deeper pipeline of investable companies
- Deeper pool of early-stage risk capital
- Accelerated learning and sharing
- New partnerships and more collaboration

Accelerate clean tech investment and entrepreneurship in Asia Pacific.
1. SUPPORT START-UP ACCELERATORS

- Organised by top-ranked start-up incubator CIIE and Infuse Ventures
- 3 month programme for 12 start-ups
- Targeted at start-ups at intersection of IT/IoT and cleantech
- Backed by leading IT companies, e.g. IBM, Google, Cisco, AWS
2. SUPPORT NEW CLEANTECH INVESTORS

EXAMPLE: HUNAN (CHINA)

Supporting first-time fund manager to set-up and launch new public-private 300M RMB early stage cleantech VC fund

HUNAN, CHINA
3. SHARE CLEANTECH KNOWLEDGE

CLEANTECH ACCELERATORS: KEY SUCCESS FACTORS

Based on our experiences with different clean tech startup accelerators and bootcamps around the world, we have identified a number of key common success factors.

1. Be highly selective
2. Collaborative environment
3. Industry connections
4. Practical training
5. 1-on-1 mentoring

Critical ingredients for a successful clean tech accelerator programme

ADB CLEANTECH NETWORK
CLEANTECH BOOTCAMP TRAINING MATERIAL
4. REGIONAL CLEANTECH NETWORK

150 participants

Manila tech start-up community: VCs, angels, start-ups and accelerators

Existing and aspiring cleantech entrepreneurs

Sector experts from industry, academia, ADB

Showcase of cleantech start-ups

Accelerators/investors and VCs from China and India
• YOUR IDEAS & FEEDBACK

• YOUR EXPERIENCES

• HELP US BUILD THE ECOSYSTEM
THANK YOU!
dhersson.consultant@adb.org