

# Networked Early Stage Cleantech Investment Fund

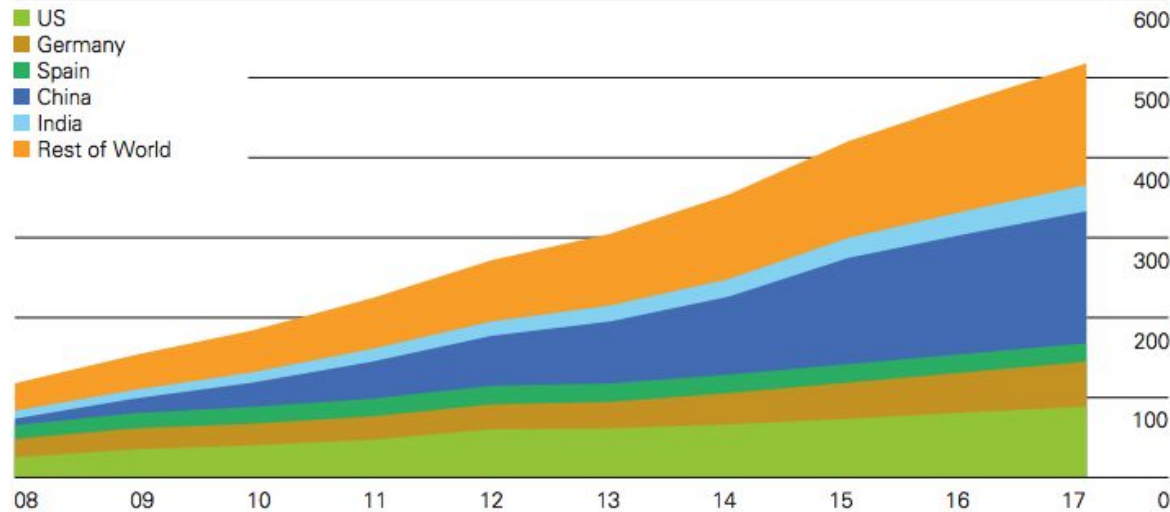
A New Model for Cleantech Investing  
December 2018

**- Material For Discussion -**

# Worldwide cleantech market has grown strongly during the last decade\*

## Wind generation capacity

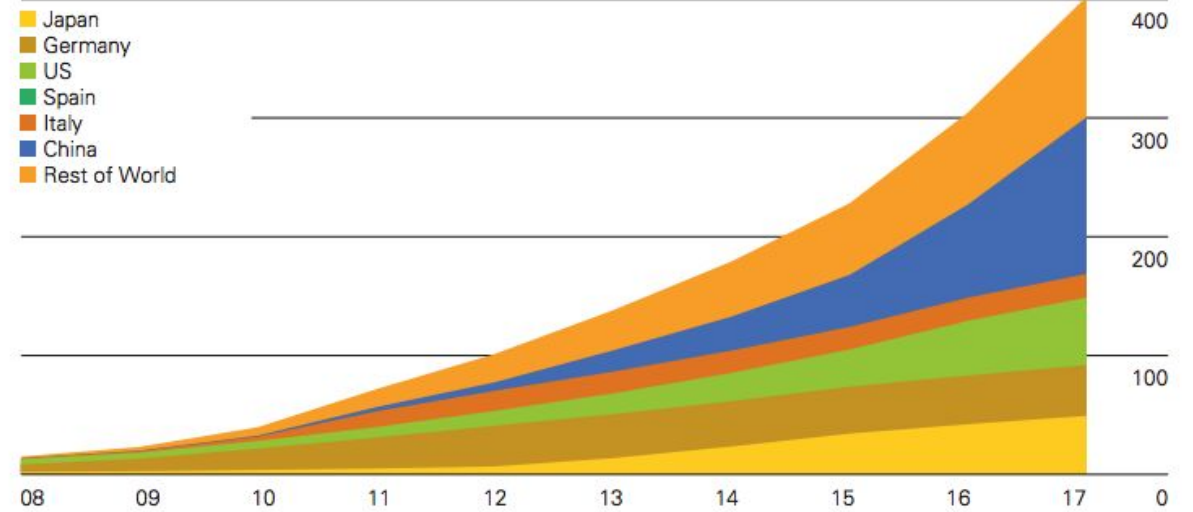
Gigawatts, cumulative installed capacity



Source: includes data from Navigant Consulting, Global Wind Energy Council, and IRENA.

## Solar PV generation capacity

Gigawatts, cumulative installed capacity

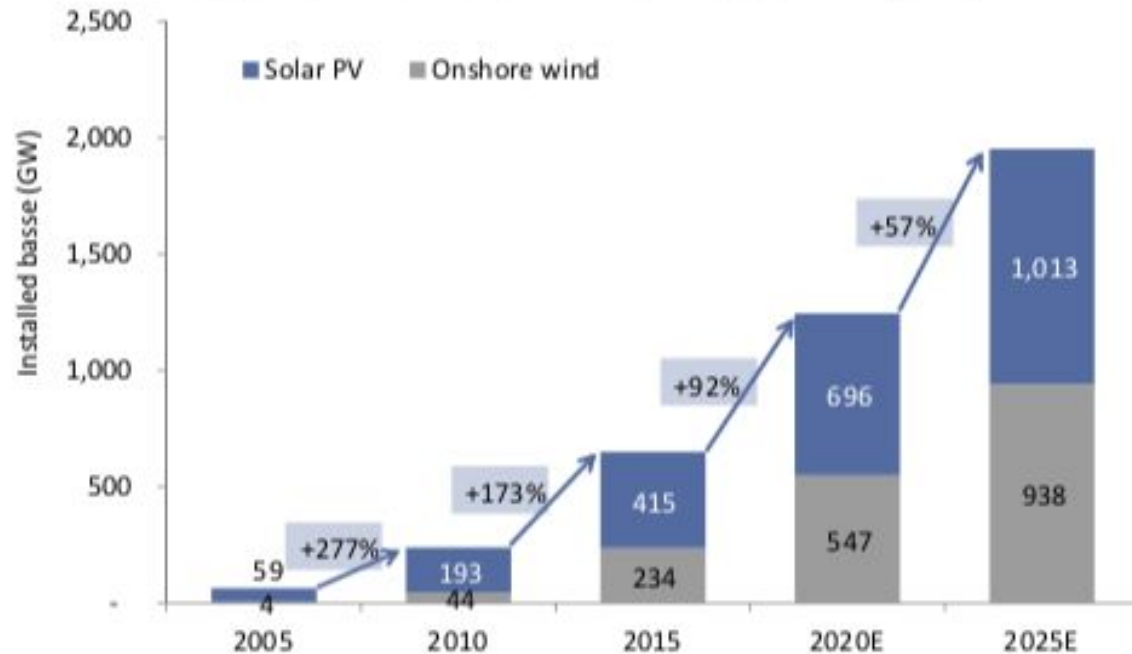


Source: includes data from IEA PV Power Systems Programme, Solar Power Europe, EurObserver, and IRENA.

*\*Wind and solar are used as proxies for the entire market's growth as there is no good data on the overall market because of its diversity*

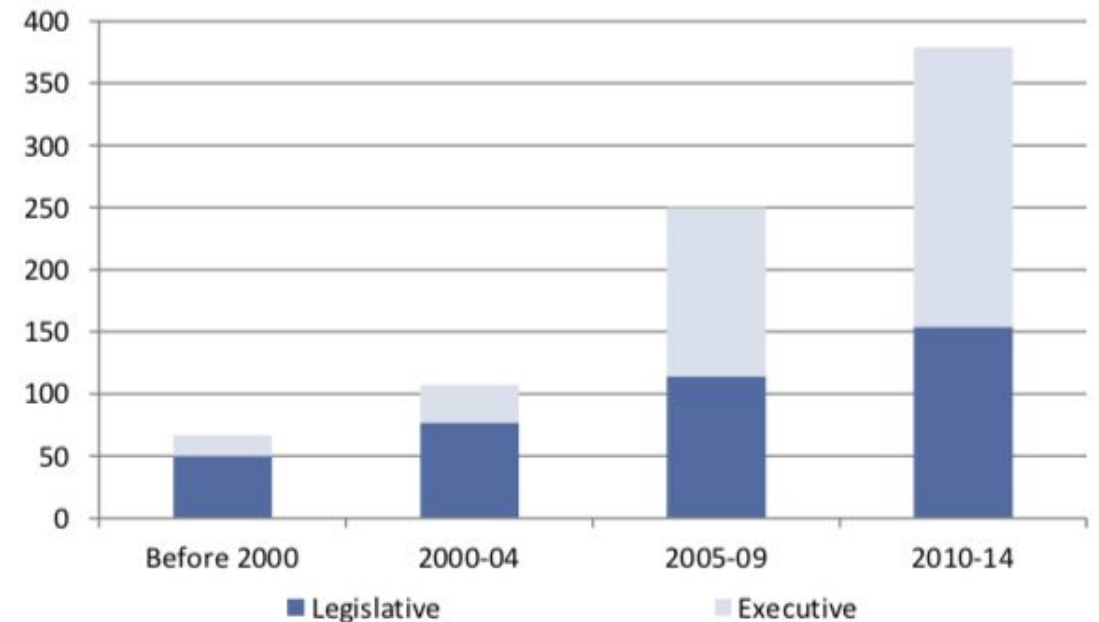
...and is expected to continue to grow supported by innovation and national climate change legislation

Installed base for onshore wind and solar PV (GW)



Source: IEA, IRENA BP, Goldman Sachs Global Investment Research.

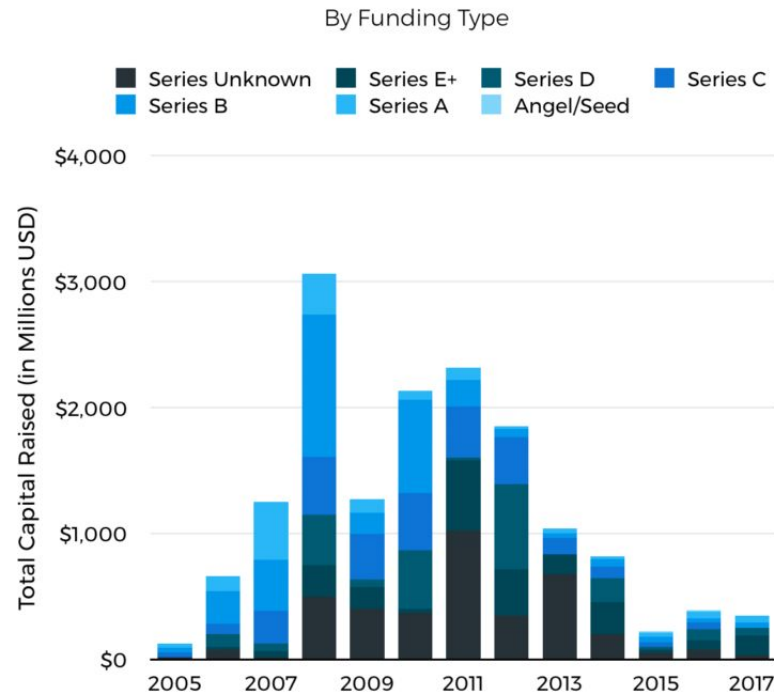
Number of national laws enacted on climate change mitigation and low carbon technologies



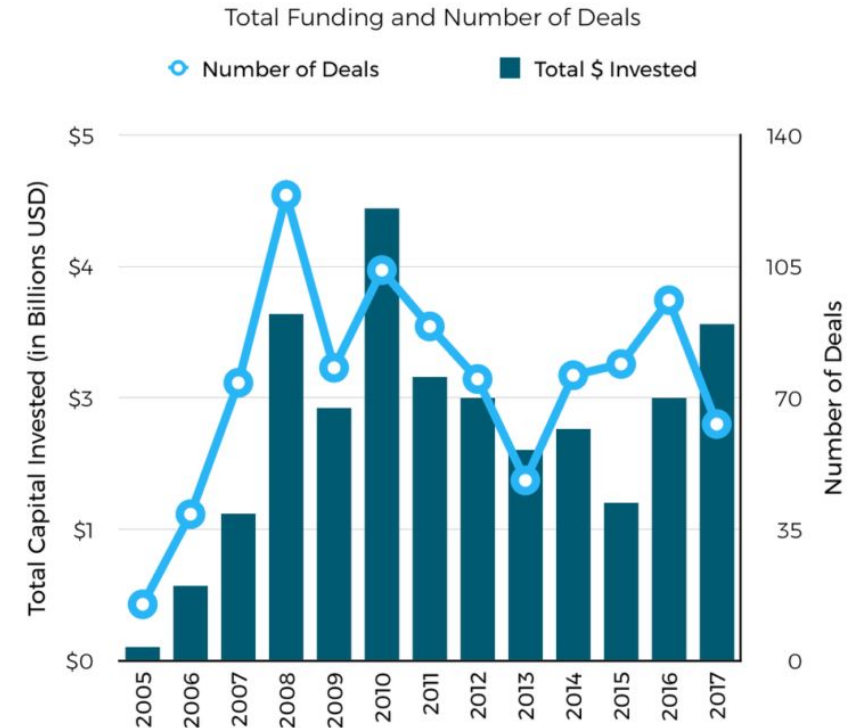
Source: LSE, Goldman Sachs Global Investment Research.

# The Problem: Lack of venture capital dollars creates an investment gap in cleantech

## VC Funding Into U.S. Cleantech Startups



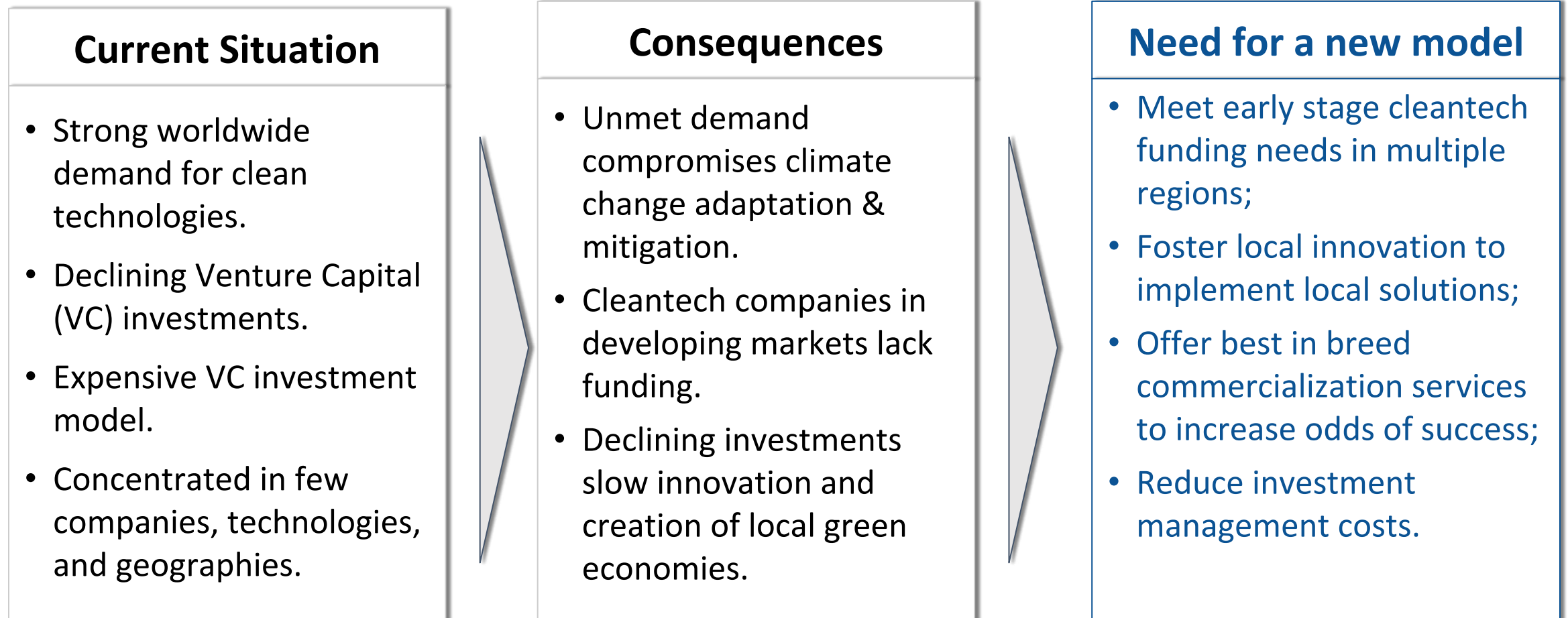
## Investments Into U.S. Cleantech Startups



### Declining VC Funding May Slow Innovation

Over time, VCs are retreating from cleantech. And if they invest in any cleantech firms at all, they tend to participate in later rounds. The high-risk and low-return nature of cleantech startups could account for this phenomenon. *Source: Crunchbase News.*

# Existing investment model will not meet challenges of climate change adaptation and mitigation



# NGIN - Introduction

NGIN is a global ecosystem for cleantech entrepreneurs that accelerates commercialization of impact technologies, thus creating green economies and slowing the devastating effects of climate change.

NGIN does 3 things:

1. Connects entrepreneurs to new markets, globally;
2. Helps innovation ecosystems get better;
3. Connects entrepreneurs, customers, investors, scientists, policy makers, governments and philanthropists to accelerate impact technologies.

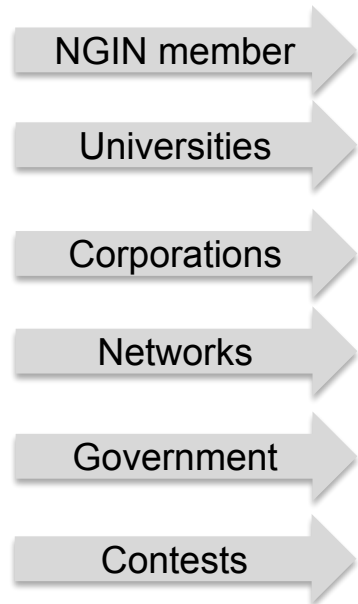
NGIN already has 24\* members in 10 countries (U.S., Canada, Mexico, Germany, Italy, Finland, India, China, Japan, and Brazil) representing a network of 1000+ vetted technology companies.

(\*) List of NGIN Members: <http://ngin.org/network/>

# Networked Fund: Building Pipeline & Making Investments

## Fund Investment Process

### Pipeline of cleantech companies



Initial Evaluation Process

### Network Member

1. Network Member selects companies based on **NGIN Selection Process Criteria**
2. Companies participate in the **Incubation Program** provided by local Network Member

3. All companies that graduate from incubation program receive \$15K convertible note.
4. Recommended companies are coached by local Network member in writing an Investment Memorandum

### Networked Early Stage Cleantech Investment Fund

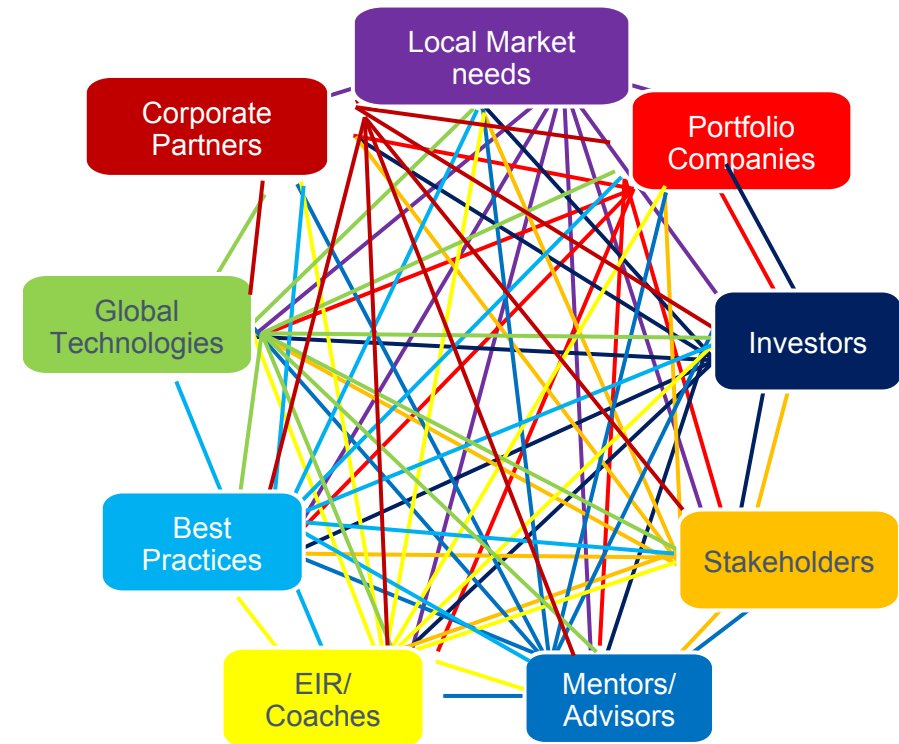
5. Companies receive an **initial \$150K investment** from the fund.
6. Fund reserves **up to \$800K for follow-on investment** in a company.
7. Fund provides intros to customers, partners, investors, governments, etc.

Fund Investment Committee  
decides on investments

# The Fund Network Multiplies Market Opportunities

**Applying NGIN know-how, network members accelerate interactions within the ecosystem through activities, such as:**

- Digital Network Platform
- Global EIR Program
- International Access Programs
- Incubation & Acceleration Programs
- Market & Policy Intelligence
- Opportunity to Solution Matching



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**Accelerating Commercialization and lowering investment risk.**

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# The Fund Network Facilitates working with Corporate Partners

## The Network, the NGIN Platform and the Fund will attract and engage Corporate Partners

- Access to global pipeline
- Ability to use the networks to solve strategic technology problems
- Brand enhancement among influential community
- Provides market intelligence about future trends and technologies



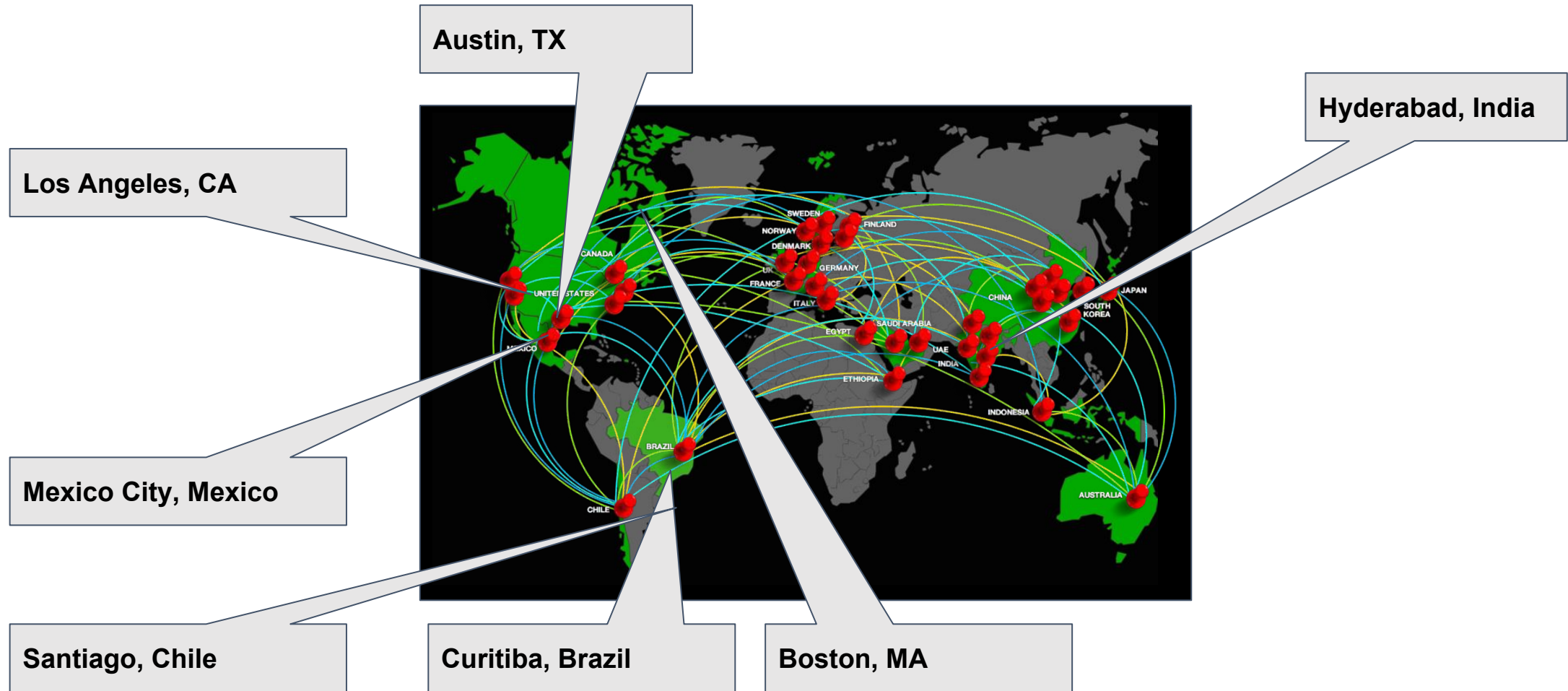
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**Accelerating Commercialization and lowering investment risk.**

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# The Fund Network includes NGIN members and independent incubators worldwide

Illustrative  
purposes only



# Networked Early Stage Cleantech Investment Fund: Profile

<b>Sector Focus</b>	<ul style="list-style-type: none"> <li>• Biodiversity, Climate Change, Land Degradation, Chemicals &amp; Waste, International Waters</li> <li>• Companies with positive impact on climate change adaptation and mitigation</li> </ul>
<b>Investment Strategy</b>	<ul style="list-style-type: none"> <li>• Place multiple small bets across a wide range of sustainable technologies by leveraging a global network of cleantech entrepreneurs.</li> <li>• Target portfolio 60/65 companies, sourced from 5 to 6 incubators (NGIN members and non-members from Brazil, Chile, India, Mexico, USA)</li> </ul>
<b>Stage</b>	<ul style="list-style-type: none"> <li>• Seed capital: initial \$150K / follow-on \$800K (total \$950K)</li> </ul>
<b>Fund Size</b>	Fund: \$40 (first close at \$20million)
<b>Term</b>	12 years (plus extensions approved by LPs)
<b>Fees &amp; Carry</b>	Management fee: 1.5% a.a. of committed capital   Carry: 15% (no hurdle)
<b>Target LPs</b>	Impact focused investors: Foundations, Family Offices, Economic Development Institutions, Corporations.
<b>Impact Metrics</b>	Impact of portfolio companies will be measured with a predefined set of IRIS generally-accepted performance metrics.

Note: Typical VC, cleantech, and impact investing returns:

- Cambridge Associates PE/VC Impact Investing Index & Benchmark Dec. 2017: 10-yr return 5.27%; 15-yr return 6.26%.
- Cambridge Associates Clean Tech Company Performance Statistics 2010-2016 IRR: US 3.3% | ex-US 10.3% | Global 5.6%.
- Cambridge Associates US VC Index and Selected Benchmark Statistics March 2018: US VC Early Stage 10-yr 10.01%.

# Value Proposition to Stakeholders

Role	Responsibilities	Strategic Benefit	Financial Benefit*
<b>Fund Network Member</b>	<ul style="list-style-type: none"> <li>- Local pipeline management</li> <li>- Provide the Incubation Program according to NGIN methodology</li> <li>- Identify prospects eligible to receive investment</li> <li>- Select and vet companies</li> <li>- Prepare Investment Memorandum</li> <li>- Provide entrepreneurial support</li> </ul>	<ul style="list-style-type: none"> <li>- Increase pipeline;</li> <li>- Stronger value proposition to potential portfolio companies (\$15K Convertible Note and access to seed and follow-on capital);</li> <li>- Increase likelihood of portfolio company success (each company receives up to \$965K);</li> <li>- incremental cost of the program is offset by the financial benefits.</li> </ul>	<p>20% of Fund's Management Fees 45% of Fund's carry</p> <p><b>Estimated total of \$1,300K per member over life of the fund</b></p>
<b>Portfolio Company</b>	<ul style="list-style-type: none"> <li>- Fit investment criteria</li> <li>- Demonstrate potential positive impact of the business</li> <li>- Grow to become successful investment for the fund</li> </ul>	<ul style="list-style-type: none"> <li>- Receive investment capital</li> <li>- Synergies derived from the network (intl. customers, partnerships)</li> <li>- Local and Global business development assistance from NGIN member and Fund Network</li> </ul>	<p>Receive \$15K convertible note upon graduating incubator program + \$150K seed and up to \$800K follow-on</p> <p><b>Total of up to \$965K per company over life of the fund</b></p>
<b>Investors</b>	<ul style="list-style-type: none"> <li>- Provide funds</li> <li>- Participate in Investment Committee when required</li> </ul>	<ul style="list-style-type: none"> <li>- Accomplish impact mission</li> </ul>	<p>Target Net IRR 8.1% *</p>

(\*) Based on a \$40 Million Fund and 5 NGIN Members. See slides [18](#) for details.

# Value Proposition to Stakeholders

Role	Responsibilities	Strategic Benefit	Financial Benefit*
<b>Investment Committee Members</b>	<ul style="list-style-type: none"> <li>- Meets twice a year to decide on investments;</li> <li>- Approval requires 4 votes (local member + 3 affirmative votes).</li> </ul> <p>Composition:</p> <ul style="list-style-type: none"> <li>(1) Local LP (local to the investment)</li> <li>(1) Local Fund Network member</li> <li>(1) Global LP (all regions)</li> <li>(2) NGIN representatives</li> </ul>	<ul style="list-style-type: none"> <li>- Access to global deal flow</li> <li>- Low time commitment</li> <li>- Opportunity to co-invest (side-car deals)</li> </ul>	<p>10% of Fund's carry</p> <p><b>Estimated total of \$1,100K for all combined Investment Committee members over life of the fund</b></p>
<b>NGIN</b>	<ul style="list-style-type: none"> <li>- Overall coordination of network members</li> <li>- Provide Incubation process know-how to network members</li> <li>- Overall responsibility of fundraising and fund management</li> <li>- Fund operations, coordination and payment of fund service providers</li> </ul>	<ul style="list-style-type: none"> <li>- Fund strengthens the NGIN network by providing critical service to NGIN members and portfolio companies</li> </ul>	<p>80% of Fund's Management Fees</p> <p><b>Estimated at \$5,800K before service providers costs over life of the fund</b></p> <p>+</p> <p>45% of Fund's carry</p> <p><b>Estimated total of \$4,900K over life of the fund</b></p>

(\*) Based on a \$40 Million Fund and 5 NGIN Members. See slides [18](#) for details.

**Paulo De Rezende**  
**Founder, NPB Ventures**  
**Vice-President Impact Investment | NGIN**



Mr. de Rezende has over fifteen years of Venture Capital and Private Equity investment experience, having sourced, negotiated and managed deals in both United States and Brazil. In 2010 Mr. de Rezende founded and led the growth equity investments at Valora Investimentos (São Paulo, Brazil), where he raised and managed a US\$ 225 million equity fund targeted at the Brazilian energy sector. Between 2000 and 2007, he was a partner at Zone Ventures/DFJ, an early stage Venture Capital fund in Los Angeles.

**Fred Walti**  
**President & CEO | NGIN**  
**Co-Founder, Los Angeles Cleantech Incubator**



Mr. Walti is an expert in creating innovation ecosystems that drive economic development. Previously, Mr. Walti was the Co-Founder and Founding CEO of the Los Angeles Cleantech Incubator (LACI), combining experience as an entrepreneur with his passion for clean technology. Mr. Walti built LACI from a start-up in a bus repair garage into a statewide commercialization ecosystem with an international footprint.

# Networked Early Stage Cleantech Investment Fund

- **Experienced team** in building successful commercialization programs and investment funds.
- **Addresses funding gap** for early stage cleantech entrepreneurs worldwide.
- **Aligns incentives** by sharing financial returns with fund network members.
- **Reduces investment risks** by combining technology commercialization services from a network of incubators and accelerators.
- **Reduces investment costs** by partnering with NGIN network members.
- **Increases likelihood of success and impact** of portfolio companies with:
  - Entrepreneurial assistance and commercialization services by proven NGIN incubation programs.
  - Commercialization services provided with support of NGIN members.

# Paulo de Rezende

VP Impact Investment at NGIN

Founder, NPB Ventures

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# Appendix

# Benefits to Stakeholders of a \$40M Fund

Illustrative  
purposes only

Pay-outs & Distributions at Target Net IRR to Investors = 8.1%		
Management Fees distribution	% of fees	\$ Million
all 5 participating NGIN Members	20%	\$ 1.4
NGIN Member individually		\$ 0.3
Invest Committee members	0%	\$ -
NGIN	80%	\$ 5.8
<b>Total</b>	<b>100%</b>	<b>\$ 7.2</b>
Carry distribution	% of carry	\$ Million
all 5 participating NGIN Members	45%	\$ 4.9
NGIN Member individually		\$ 1.0
Invest Committee members	10%	\$ 1.1
NGIN	45%	\$ 4.9
<b>Total</b>	<b>100%</b>	<b>\$ 10.9</b>

Pay-outs & Distributions at Target Net IRR to Investors = 8.1% (Gross IRR = 9% a.a.)	
Total payout (management fees + carry)	\$ Million
all 5 participating NGIN Members	\$ 6.3
NGIN Member individually	\$ 1.3
Invest Committee members	\$ 1.1
NGIN	\$ 10.7
<b>Total</b>	<b>\$ 18.1</b>

Source: NGIN analysis.

Assumptions:

- \$40 million fund;
- 5 NGIN Members participating in the fund;
- 12 years term;
- 1.5% p.a. management fee (\$600K/year), over 12 years amounts to \$7.2 million;
- Target Gross IRR 9% and 15% of carried interest ("carry") over 12 years pays total carry of \$10.9 million.