Financing Clean Energy Deployment

SETTING THE AGENDA FOR THE NEXT U.S. PRESIDENT

DBL PARTNERS
DOUBLE BOTTOM LINE VENTURE CAPITAL

Nancy E. Pfund
Stanford University
May 6, 2016
Debunking the myth:
Support is growing for Clean Energy globally

New investment in Clean Energy ($bn) by region

Source: Bloomberg New Energy Finance
Market Opportunities are Increasing

- Developing Worlds
- Climate Change
- Urbanization
- Population Growth
- Energy Security
- Water Scarcity
- Resource Scarcity
- Pollution

1980s  1990s  2000s

- Recycling
- Solar, Wind
- Waste 2Energy
- Biofuels
- Electric Vehicles
- Home Energy
- Batteries
- Mobility Tech
- Energy Prosumers

- Water Tech
- Internet of things
- Functional materials
- Solar 2.0
- Circular economy
- Off Grid Population
- Graphene
- Industrial IoT
- Smart Grid
- Big Data/Efficiency
- Smart Cities
- The sharing economy
- Distributed energy
- Financing 2.0
- Agriculture
- Space tools

- Electric Vehicles
- 3D Printing
- Off Grid
- Temporal materials
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Advanced Microgrid Solutions
Clean Tech is in its Third Phase:
Right-Sized Ecosystem of Companies that is Under-Invested

Phase 1: 2006 - mid 2008: Over-inflation: too many VCs funding too many companies at overheated valuations

Phase 2: mid 2008 - Dec 2012: Over-contraction: consolidation (companies and VCs) and valuation reduction

Phase 3: Dec 2012 - Present: Right-sized ecosystem with some innovative, high-growth companies, huge markets, under-investment by fewer VCs, valuations lag value of companies = investment opportunity

Dec 2012 IPO
Q1:2013 high volume production of Model S

Dec 2013
On deck:

Company X
Acquired by Flex in Sept 2015 for double digit return

NASDAQ Index
Wilder Hill Clean Energy Index

7%
69%
139%
775%

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DBL has Fueled the Evolution of Impact Investing since 2004

- 2004: Pre-2004
- 2006: Inception of $75M Fund I
- 2008: Revolution Foods founded with DBL’s seed investment
- 2010: Inception of $150M Fund II
- 2011: Tesla IPO
- 2013: DBL partners
- 2014: Inception of $400M Fund III
- 2016: NEXTracker acquired by Flextronics
- 2017: DBL on Ford Foundation & White House “National Advisory Board On Impact Investing 2.0,” now the “Alliance”

Key Events:
- 2004: DBL Investors spins out from JPMorgan
- 2006: Morgan Stanley & Goldman Sachs create impact funds
- 2008: President Obama Announces Mission Innovation
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- 2011: White House convenes investors on $50B impact investing industry
- 2012: Morgan Stanley & Goldman Sachs create impact funds
- 2013: DBL & Federal Reserve workshop on “The New Family Philanthropy”
- 2014: President Obama Announces Mission Innovation
- 2015: Morgan Stanley & Goldman Sachs create impact funds
- 2016: Ford Foundation to align its $12B in impact investing

Inception of Fund I
Inception of Fund II
Inception of Fund III
SolarCity IPO
Pandora IPO
DBL & Federal Reserve workshop on “The New Family Philanthropy”
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Sustainability is ‘Return Candy’ for Impact Investors

- 775%\textsuperscript{1} return since IPO
- Carbon avoidance
- Job creation: 13,000 jobs
- Policy engagement:
  - DOE, Fuel standards, State Laws
- Manufacturing, Regional benefits, 21\textsuperscript{st} Century Innovation
  - Fremont: NV GigaFactory
- “Trojan Horse” value to energy literacy
- Democratizing access to clean energy
  - Model 3 and beyond...

- >100% return since IPO
- Carbon avoidance
- Job creation: 15,000 jobs
- Policy engagement:
  - ITC, NEM, RPS, States
- Manufacturing, Regional benefits, 21\textsuperscript{st} Century Innovation
  - Buffalo: High efficiency panel factory
- Diversity: 40% of CA installer base non-white; 28% are Latino
- Democratizing access to clean energy
  - AND choice
  - Financing
  - Distributed Model with Personalization

\textsuperscript{1} As of 12/31/15
2015 State Per Capita Solar PV Capacity

**PV Capacity in Watts,**
Data Source:
EIA February 2016
Electric Power Monthly
To Do’s:

• Convening Function / Giving a Voice to the 21st Century Clean Energy Economy
  – Profile Products, Services, Entrepreneurs, Utility / Industry Collaborations
  – 2° Club Awards

• Coal to Green
  – Turn the Downward Death Spiral into Upward Wealth Spiral
  – Coal Miners / Solar Jobs Alliance
  – Distributed Renewable Development Programs Targeted to Coal Belt

• Tax Code: Leveling the Playing Field Between Old and New Energy

• Investment Incentives
  – Storage Tax Credits (following ITC/PTC/EV Credits)
  – Push for a CRA Extended to Green Finance
  – Price for Carbon
    – If this remains elusive
    – Deconstruct Capital Gains Tax to include a Carbonless Gains Tax