

How Companies Navigate from Idea to Mainstream

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# **BOULDER WIND POWER - WHAT WE DO**

- Generator and power converter designs provide radically better equipment for utility scale wind turbines
- Enables wind energy at 15% lower cost of energy, resulting in potential 300 bps gain in unlevered IRR
  - Less Capital Cost
  - Lower Operation and Maintenance Cost
  - More Energy Production
  - Scalable Platform Technology
- Technology supplier to wind turbine OEMs
- Backed by NEA and Molycorp (NYSE: MCP)
- Experienced executive team with over 100 years of leadership in wind energy





# **Funding Sources**



Source	Stage	Risk Profile	Portfolio Company Returns	Size of Investment					
Financial									
Grants	Early	High Research							
Angel Investors Friends and Family	Very Early	Very high		< \$1m					
Venture Capital	Early	High 7-10x Investment		\$1m – 20m					
Private Equity / Growth Capital	Medium	Medium	dium 3-7x Investment						
Strategic									
Internal Development	Early	Necessity? Cool side project?	Positive NPV Internal Hurdle Rate	Varies					
Strategic Investor	Medium	Post- Proof-of-Concept	Financial Returns + Fit	\$1m-20m+					



# **VC Portfolio**

Company	Α	В	С	D	E	Fund Total
Investment	\$40m	\$40m	\$40m	\$40m	\$40m	\$200m
Result	Fail	Fail	Return Capital	Return Capital	SUCCESS!	
Returns	\$0	\$0	\$40m	\$40m	\$400m	\$480m

### Portfolio Analysis

Year 0 – Invested \$200m in a wide variety of companies

Year 7 - Two failures, two returned capital, one homerun.

ROI = 140%

CAGR = 13.3% (7 years)

Same portfolio – all achieve 50% return (\$60m):

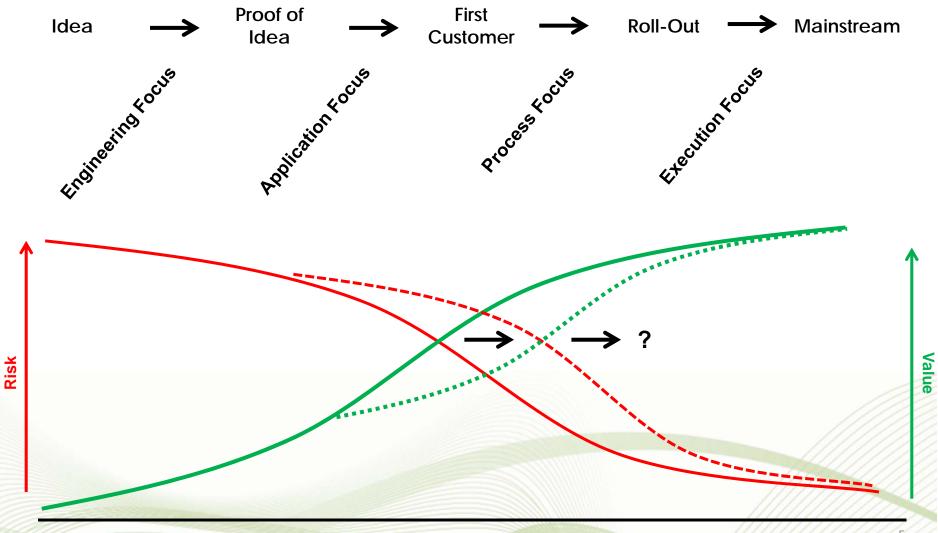
ROI = 50%

CAGR = 6% (7 years)

Long-term Market Returns ~ 7%



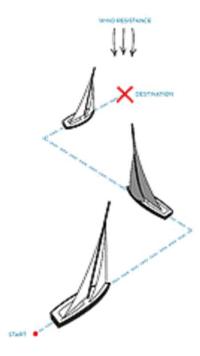
# **Hypothetical Product-Focused Company**





# 1: Idea -> Proof of Concept

- Does it Work?
- Product
  - Build a Team
    - Focus on engineering
  - Prove the Idea Works
    - Keep eye on cash spend with disciplined R&D
    - Decrease company risk
    - Develop intellectual property
- Market (Aiming for the Target)
  - LCOE
  - Customer feedback
  - Competitive analysis
- Investors
  - First round of funding (grants, angels, venture capital)
- Experiences
  - Boulder Wind Power
    - Shift from full WTG to Generator to focus on value







# 2: Proof of Concept -> First Customer

- Idea works! Do people care?
- Product
  - Expand the Team
  - Engineering turns to application
  - Customer prototype and demonstrations
- Market (Customer Feedback)
  - LCOE meets reality
  - Are price assumptions valid? Can cost decrease?
  - Need to stay agile to respond to market feedback
- Investors
  - 2<sup>nd</sup> Round of Funding
  - What does financial plan look like?
  - Did the sale meet metrics?
- Experiences
  - Previous
    - No first win...
    - Starting today, we focus on... turning the ship
  - Boulder Wind Power







Proof of Idea



First Customer



**Roll-Out** 



Mainstream



# 3: First Customer -> Roll Out

- We Made a Sale!
  - People like us! Champagne!
- Product
  - De-risk product from prototypes to standard article
    - Manufacturing, installation, operation
  - Customer requests, 3<sup>rd</sup> party review
- Market (Develop Sales Process)
  - First sale was expensive!
    - Global customers, prototype costs
  - How do we increase sales and decrease cost of sales
- Investors
  - Do we need a 3<sup>rd</sup> round of funding?
  - Are strategic investors available to aid growth?
  - How do we continue to fund innovation?

#### **Experiences**

- Developing Process
- Boulder Wind Power
  - 3<sup>rd</sup> Party Diligence





Idea 

Proof of Idea 

First 
Customer 

Roll-Out 

Mainstream



# 4: Roll Out -> Mainstream

### Things are clicking

Developing replicable processes

#### Product

- How does a company continue to evolve?
- Continued product refinement, new variants

### Market (What Next?)

- Continually aiming at where market will be

#### - Investors

- Last round of funding?
- How can company grow? IPO? Acquisition?
  - Returns to shareholders

### - Experiences

- There is no finish line



# Boulder WindPower

# Wrap-Up

# Types of Funding

Different periods of the business can require different types of funding

## - Balancing Act

- Market needs and staying responsive
- Continued innovation
- Customer wins
- Financial metrics

### - Team Building

- A good team consists of investors, employees (engineering and sales), management, customers, consultants

# **THANK YOU**

