## Technology & Capital

Unlocking New Sources of Finance



## Curriculum

- Overview of Initial Capital Options
- Moving on From "Start-up"
- Myths
- "Project" Financing
- SPACs
- Leveraging ESG & Trading Credits



## Why Are We Here Today?



### What Keeps You Awake at Night?



## **Early-Stage Finance**

- Initial Capital
- Angels & Crowdfunding
- Incubators & Accelerators
- Venture Capital
- Industry Sector Myths



## Review of "Early Stage"

- Friends and Family (F&F)
- Angel Investors (Fools?)
- Incubators/Accelerators
- Venture Capital
- Strategic Investors
- Venture Debt/Commercial Banks
- Government Grants



## **Initial Capital**

- "Sweat" Equity & Bootstrapped
  - Founders/Initial employees—shares of common stock in exchange for assignment of IP
  - They fund the company until investment (i.e. bootstrapped)
- Friends & Family (F&F)
  - Accredited Investors?
    - Net worth of \$1M (excluding residence) income of \$200K for past two years & this year
  - Non-Accredited but are they "Sophisticated Investors"?
- Vendor discounts & payment terms

## **Angels & Crowdfunding**

## Traditional Angels

- High net worth individuals with personal funds
- Large groups can be difficult to manage . . .

## Crowdfunding

- Selling small amounts of equity to many investors
- Jobs Act has loosened regulations limiting investments by non-accredited investors
- Many risks and high administrative costs

## Incubators/Accelerators

- Incubators Initial Investment
  - \$15-\$150,000
  - Common or preferred stock (1-10% of company)
  - Investment terms and amount are standardized
  - Access to advisors, VCs, strategics and super angels
- Arrange Discounts & Credits
   Towards Services
  - Many are funded by VC firms and "super" angels

## **Venture Capital**

## VC's are Long-term Investors

- Take a very active role in their investments
- Don't expect a return for 7-10 years on average
- Most are structured as limited partnerships with a managing general partner
- Investors in VC funds (limited partners) are pension funds, insurance companies, endowments, foundations and high net worth individuals
- Investments are \$25M and go way up
- Most focus on a particular stage of a company and industry
- VCs bring managerial and technical expertise
- Great help in finding key personnel



## **Venture Capitalists**

## What are They Looking For?

- Team, product/technology & market potential
- First investment is in preferred stock
- Some will do SAFEs\*/convertible notes, but not many
- Will insist on one or more seats on the Board, separate voting rights, and often restrictive operational pre-approval rights
- Expect to make follow-on investments in portfolio companies—in the form of convertible loans between equity financings or in subsequent equity financings
- Make money when company is sold or they can sell stock in public markets through an IPO



<sup>\*</sup>Simple Agreement for Future Equity

## VC Due Diligence Factors

CEO & Management Team

**Market Opportunity** 

Technology Data

Competition

IP

Capital Structure, Valuation & Exit Analysis

## VCs Most Important Factors

Team: 50%

Product: 13%

Business Model: 9%

Market: 8%

• Fit: 8%

Industry: 7%

Valuation/Ability to Add Value: 2%

#### **VC Facts on Executive Summaries**

- Each receives an average of 200 submittals per month
- Less than 5% invited to meet with partners
- 2% will reach due diligence phase
- 1% will be offered a term sheet
- 0.3% will obtain VC funding



# Successful Commercialization Post-VC

- Historical common perception: 1/3, 1/3, 1/3
- Recent analysis:
  - ➤ 65-75% fail/lose investors' money or do not produce expected returns
  - > 11% go public (IPO)
  - > 25% M&A (different valuations)



## **Typical Pre-financing Equity**

Position	Range %
Founding CEO	30 - 60%
Active Founding Scientist	20 - 25%
Passive Founding Scientist	1 - 5%
CEO	10 - 20%
C-Level	4 - 10%
Director	1 - 2.5%
Lead Engineer	1 -2%
Engineer (5+ years)	0.66 - 1.25%
Engineer (Junior)	0.2 - 0.66%
Industry Board Member/Advisor	1%



# Strategic Partners Corporate Venture Capital

- Generally larger companies—often in same industry
- Have a strategic interest in your business so that it may complement their own growth
- Purchase equity on terms similar to VCs
- Interested in:
  - √ License agreement
  - ✓ Marketing or distribution arrangement
  - ✓ Collaborative development agreement
  - ✓ Preferred pricing arrangements
  - ✓ Right to negotiate to acquire the company



## Strategic Partners Sources

https://cleanedge.com/indexes/overview



### So . . .



#### Incubators:

✓ Want a kick-start and exposure, and willing to give away a
relatively large piece of company

#### Angels:

✓ Only need a smaller amount of capital and do not want to give away control—but willing to herd cats

#### VCs

✓ Need significant capital and want guidance and expertise of VC—harder to attain

#### • Strategics:

✓ Need cash <u>and</u> desire to form a relationship with a larger player in the industry

## Myths





Where there is conflict between an available clean technology and an entrenched dirty one, the challenge is politics and the need for legislative action, not technology . . . We can do it, we just have to want to.

David Suzuki, Canadian scientist, environmentalist and broadcaster.

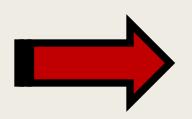
- Myth 1: The Technical Myth
  - The price of renewable energy & sustainable buildings will be reduced by technical breakthroughs
- Chicken & Egg: as long as demand is small, production will remain small scale and expensive—as long as production is small-scale and expensive, the price will remain high and the demand small.

Catch 22

- No shortages in the supply
- New technology will be brought to commercialization quickly
- Rest of the world doesn't use \_\_\_\_\_ more than we do

Typical behavior—doubling in installed capacity has an accompanying 20% decline in the commodity's price.

- Myth 2: The Myth of the Righteous
  - A good idea will always succeed and intervention is unnecessary
- Most societal changes have been identified and fast-tracked by governments—the "judge" is <u>price</u>.



Pointed and well-conceived government intervention is required. Most often in the form of legislation.

- Myth 3: Renewable energy and sustainability is too expensive and can never compete.
  - 1980 cost of solar = \$50 per watt
     Less than \$2 per watt today!
  - Payback has dropped for 30+ years to <u>less than</u> 8 <u>years</u> after incentives, tax credits, material costs, etc.!
  - Useful life is greater 40 years!
  - Longest warranty in all equipment industries!

Myth 4: Renewable energy & sustainable building costs are more expensive than conventional energy and buildings.

#### Only if "externalities" are not considered:

- Environmental cost
- Societal cost
- Security cost
- Productivity life
- Rebates & incentives don't exist or work

## **Moving On From Start-up**

- Stages of Project Finance
- Finance Components
- Reducing "Risk"
- Leverage
- Structures

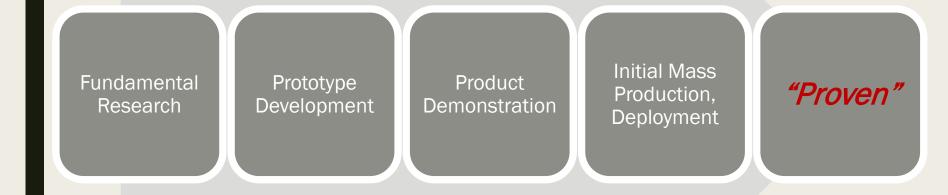


## **Stages of Project Finance**

"The Chasm of Death"



## "Crossing over" into project finance requires reductions in risk and large capital outlays



## Typical Funding Sources

Fundamental Research

Prototype Development Product Demonstration

Initial Mass Production, Deployment

"Proven"

Governments/Foundations/Industry

**Angel Investors** 

**Venture Capital** 

Traditional Project
Finance
(Debt & Equity)



## **Funding Sources**

Fundamental Research Prototype Development Product Demonstration

Initial Mass Production, Deployment

"Proven"

"Cross-over"





Returns 20%+

Risk High

Capital Tens of

Millions

Equity 12-20%; Debt

5-11%

Moderate/Low

Hundreds of millions

to billions

## **Project Finance**

- Industry Needs
- Project Scope
- Tax Attributes
- Choice of Transactions
- Documentation
- Funding Requirements
- Three C's of Credit

## **Big Question:**

Is your product/service part of another solution or does it stand on its own????

Does it have a serial number?



## Your Industry/Technology Needs

- Large Capital Costs
- Extended Payment Terms to Buyers
  - Vendor
  - ✓ End User (consumer vs business)
- Low Payments to End User's—3 types of buyers . . .
  - ✓ Lower principal
  - ✓ Low interest rates
  - ✓ Long term (payment)—residual/purchase options
- Monetize tax and "green" credits
- Large Business vs Small Business
- Down Payments
- Funding Sources

## Industry Needs cont'd

- Soft costs
- Technology understanding
- Repayment sources—revenue vs savings
- Timing of funding
- Mixed collateral



## Myths



## Project "Scope" Myths

- Myth 1: A single technology will solve all problems
- Myth 2: All energy & building technologies are equal
- Myth 3: All technologies require same type of financing
- Myth 4: All job sites are equal
- Myth 5: All permitting agencies have the same permitting requirements



## Tax Attribute Myths

- Myth 1: Tax credits are received in a cash payment like rebates
- Myth 2: Everyone can use the tax credits
- Myth 3: Tax credits are received immediately
- Myth 4: All consultants analyze tax attributes on equipment or for buyers equally
- Myth 5: Depreciation deductions help pay for the equipment
- Myth 6: No one pays the AMT

# Financing Myths

- Myth 1: All types of financing structures have similar terms
- Myth 2: All lenders offer the same structures to all borrowers
- Myth 3: All lenders require the same collateral
- Myth 4: All lenders charge the same rates and take the same risks
- Myth 5: Qualifying is simple
- Myth 6: Documentation is simple

# Financing Myths cont'd.

- Myth 7: No personal guaranties are needed
- Myth 8: Borrower gets to choose terms and conditions of the contract
- Myth 9: Lender will share your risks
- Myth 10: Vendor doesn't need funding as project is built
- Myth 11: Vendor will wait to get paid while other vendors complete their jobs
- Myth 12: Vendor will help with financing

# Other Myths



- Utility rates will increase 7%+ per year
- Systems can be sold without financing
- Small business get same deals as big business
- Consumer & business financing are equal
- Most lenders finance renewable energy & sustainable buildings
- Your distributors/suppliers will finance the product/service you sell
- Funding sources will be comfortable with the sources of repayments
- Funding sources like mixed collateral

#### Three "C's" of Credit

- Credit
- Collateral
- Capacity

Myth: Risk for all credits are equal

## **Ultimate Challenges:**



- 1. Your customer doesn't want to pay cash for the product/service—or at the least, <u>not now</u>
- 2. You want to sell LARGE quantities . . .
- 3. You need to finance the sales of your product/service
- 4. You don't have the cash to "carry" the sale for any length of time
- 5. Banks, distributors and traditional lending sources are not willing to finance the sales

## What do you do???

#### Find a Partner!



- Strategic partner from industry
- Financial partner
- Tax partner
- Don't forget possible distributors and wholesalers
- Include individuals or VCs

#### What Do You Offer?



- Access to IP
- Exclusive distribution rights or licensing agreement
- Exclusive financing rights
- Share in revenue or net profits
- Deferred income from sale of products
- Create a special purpose entity and offer the above plus tax attributes inherent in the product

#### **Define Each Parties Needs**

#### Yours:

- Need for money
- Access to markets
- Knowledge of industry markets

#### Theirs:

- New products for customers
- Revenue—both now & deferred
- Beat the competition
- Set new product/service standards



#### **SPAC Overview**

IS A SPAC IN YOUR FUTURE?

# Agenda

- What they are
- How they work
- Facts
- •The "Good" & the "Bad"



#### What Are They?





Think: Getting a mortgage "preapproved" before you buy a home



- They look for companies that are private, which they can acquire & take public
- Run by experienced management teams
- Focus on certain market segments







#### **How Many are There?**

- (2009 -2020) 380 companies
- 2021 *over 300 already*!

#### **How Do They Work?**

- They register with SEC and raise capital that they use to acquire a target company
- 2. Do a roadshows to investors such as pension funds, mutual funds, hedge fund managers, etc.
- Money raised is held in trust until target company is identified (you?)
- 4. Money goes into *target company*
- Old IPO method, 3-7% of money goes to bankers—SPACs only charge 2% of capital raised.



#### How Does a SPAC Work?



# Pre-IPO

- SPAC registers with SEC
- Prepare for IPO, road show,
   & administrative details
- File final prospectus
- Detailed info on structure, price, fees, listing, trust account, warrant purchases by founders

# **IPO**

- IPO proceeds are collected
- Trading with units starts immediately
- Proceeds are deposited in trust account
- Trading of stocks & warrants start
- Underwrites collect total or partial fee if a part of compensation is deferred.

# Pre-Merger

- Merger seeking process starts after the IPO
- Announcement of the merger intent
- Preparation for shareholders vote on merger outcome
- Legal procedure with SEC on approval
- Voting on the merger
- Merger or liquidation as an outcome
- If liquidation, cash is distributed back to shareholders

# Post-Merger

- SPAC continues as a public company in U.S. market
- SPAC continues as a public company outside the U.S.
- SPAC continues as a private company
- Warrants exercise deadline five years after SPACs' IPO

#### Life Cycle of a SPAC

**SPAC IPO** 

**Search for Target** 

**Announce Target** 

Complete Business Combination Units list at IPO. Common shares and warrants begin trading around 30-50 days later.

Average SPAC took 15 months to search for a target.

Average SPAC took 5 months to complete business combo.

Target company now has new listing on stock exchange.









Source: Nasdaq Economic Research

#### **NRG**

#### More details . . .





#### NRG







- 250 SPAC IPOs in 2020
- Over 300 already in 2021
- Total over \$97 billion
- 385% increase over 2019
- 28 SPAC-acquired entities involved in energy transition

Proterra—electric vehicles Eos Energy Storage—battery manufacturer

Stem—behind-the-meter battery ChargePoint—EV charging network provider

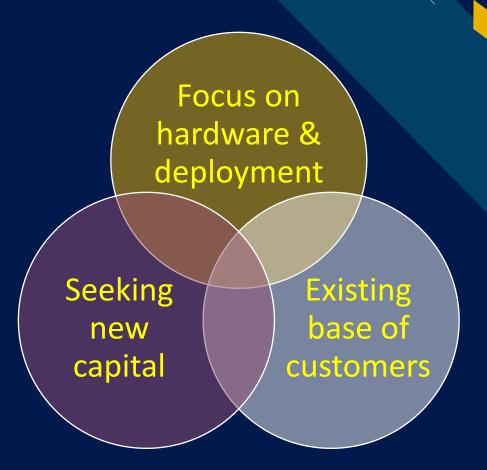
• \$1.1 Billion median market capitalization





#### Commonality

Most activity has been in clean technology, not with renewable energy developers.



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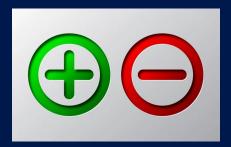




#### **SPAC Sponsors**

- Specialized financial, operational or other capabilities
- Often former industry executives
- Institutional investors
- Private equity firms
- Industry corporations
- Even political figures, celebrities and NPO's





- Access to capital, even when market volatility & other conditions limit liquidity
- Having to meet an accelerated public company readiness timeline
- Lower transaction fees & expedite timeline to become a public company
- Complex accounting & financial reporting/registration requirements
- SPAC focuses on a specific sector and geography
- Your company will need to focus on being ready to operate as a public company within three to five months of signing a letter of intent
- Management of SPAC provides huge support to find talent and perform administrative assistance to go public
- Costs the target company a large portion of equity, which could make the deal more expensive than a traditional IPO
- Investor has opportunity to get 100% of their money back (\$ is in trust)



SPACs already have investors—no need to find investors with an IPO roadshow!



#### Requirements for the SPAC:

- They don't have any operating assets—only cash
- Have only 24 months to acquire a "target company"
- Not allowed to know the target company in advance
- Acquired company must be worth at least 80% of the cash raised in the SPAC IPO



#### **ADVANTAGES OF A SPAC OVER PRIVATE EQUITY OR AN IPO**

Valuation	Public companies trade at higher multiples than private companies, so SPACs offer an opportunity for higher valuation
Control	While business owners lose some control when taking on private equity, SPACs allow you to maintain a significant state in the company
Liquidity	SPACs offer security in liquidity through the cash raised in the IPO
Time	Traditional IPOs can take up to 2-3 years to finalize, but SPACs are typically completed ion 2-3 months
Cost:	Unlike traditional IPOs that are very expensive to execute, SPACs typically pay for most of the costs, saving a significant amount of money for the company
Certainty	SPAC deals are identified ahead of time, and the valuation is agreed upon by both parties. Rather than "hoping the window is open," you can be certain that the transaction will occur and the it will be for a value you are on board with



# Exciting & Disruptive !



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### **ESG Drivers**

Carbon & Emission Credits





Climate change strategy,
Biodiversity,
Water efficiency,
Energy efficiency,
Carbon intensity,
Enviromental
management system



#### **SOCIAL**

Equal opportunities,
Freedom of association,
Health and safety,
Human rights,
Customer &
products resposibility,
Child labour



#### **GOVERNANCE**

Business ethics, Compliance, Board independence, Executive compensation, Shareholder democracy

#### Drivers of ESG Around the World



















# Hidden Gems

- The "E" in ESG . . .









# The Money in the Credits . . .



Carbon Credits
-CO<sub>2</sub>-



Emission Credits
-NO<sub>x</sub>, VOC-



Other -REC, RPS-



# All credits:



- Quantifiable—many are priced at /ton
- Verifiable by a 3<sup>rd</sup> party—"regional in nature"
- Tradeable (e.g., REC, NO<sub>x</sub> RECLAIM, ERC)
- Set by government—required vs "excess"
- Must be fungible—might be "bankable"
- Usually created by "technology" acquisitions

#### There are two key types:

- Voluntary
- Mandatory

It is the "mandatory" credits that delivery money!





### Examples of "mandatory" credits

- Air:
  - NO<sub>x</sub>, SO<sub>x</sub>, VOC, RGGI, ERC
- Water (reduction/rights)
- Solid waste reduction (methane, landfill, etc.)
- RPS (renewable portfolio standards)
- Usually created by a rule/regulation—"cap & trade"
  - "region" limit
  - Reductions beyond mandated limit is excess = tradeable
- AB32 in California—massive income to the state in auctions
- Pricing will vary—e.g. by length, when created, season
- Most measured in \$ per ton of emission reductions
- Many are traded on public stock exchanges





# Pricing Examples (regional solar values)

Credit Type	<b>Current Price</b>	
CA-RPS	2.95	
CT-Class I REC	44.38	
DC-Solar REC	458.75	
MA-Solar 1	399.25	
MD-Solar	76.67	
ME-Class 1	0.66	
NJ-Solar REC	231.00	
TX-REC	0.87	





#### 3 Years Carbon Futures Pricing in UK







# 49 U.S. SPAC DEALS INVOLVING ESG FIRST HALF OF 2021





#### Handout: 109 SPACs Listing Spreadsheet

#### SPCX Holdings | SPCX ETF (www.spcxetf.com)

Ticker Company Name		CUSIP	% of Fund	Constituent Market Value	Shares Held of
					Constituent
AAQC US	ACCELERATE ACQUISITION CO	00439D102	5%	5,046,862.08	520,832
SVAC	STARBOARD VALUE ACQUISITI	85521J109	3%	3,818,064.25	381,425
APSG	APOLLO STRATEGIC GROWTH C	G0411R106	3%	3,780,627.00	383,820
PRPB	CC NEUBERGER PRINCIPAL HO	G3166T103	3%	3,750,308.10	378,819
CRHC	COHN ROBBINS HOLDINGS COR	G23726105	3%	3,024,069.30	306,390
ETAC	E.MERGE TECHNOLOGY ACQUIS	26873Y104	2%	2,364,115.29	241,977
CCAC	CITIC CAPITAL ACQUISITION	G21513109	2%	2,268,645.96	228,234
AVAN	AVANTI ACQUISITION CORP	G0682V109	2%	2,144,851.94	219,086
KSMT	KISMET ACQUISITION ONE CO	G52753103	2%	2,074,149.00 \$	209,510





500 N State College Ste 1100 Orange, CA 92868 (888) 565-5632

www.greennrg.us.com

Gene Beck, CEM, CLP
Executive Director
gbeck@greennrg.us.com