



**TOTAL  
ACCESS**



# **ENERGY TECH: A NEW WAVE OF INVESTMENT AND INNOVATION**

March 2, 2023



# Speakers

Presenter



**Zac Padgett**

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M&A and Private Equity

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**Zac** co-leads the firm's EnergyTech Team. He helps clients navigate investments, acquisitions and exits, with a focus on companies in the energy tech, sustainability and life sciences sectors. He advises clients in growth equity transactions, corporate venture capital investments, mergers, buyout acquisitions, SPAC business combinations, take-private transactions, management takeovers, joint ventures, private placements and preferred stock financings.

Moderator



**Yuko Inui**

**Partner**

Tokyo Office

Energy and Infrastructure  
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**Yuko** is a member of the Energy and Infrastructure Group. Her practice mainly focuses on the development, project financing and secondary transaction of renewable energy projects, including offshore and onshore wind, and solar projects, as well as related permits and real estate work. She also has experience with environmental and fintech matters.

# Other Orrick Participants



**Minako Wakabayashi**

***Partner***

Tokyo Office

Energy and Infrastructure Group

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**Minako** is a member of the Energy and Infrastructure Group. She plays a vital role in the rise of Japan's renewable energy market, being involved in the development of onshore/offshore wind and solar projects, lobbying for policy proposals and PPA (including corporate PPA). She has significant experience advising international and domestic sponsors and developers on complex and innovative projects.



**Hiroki Sugita**

***Partner***

Tokyo Office

M&A and Private Equity

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**Hiroki** is a partner in Orrick's Tokyo Office and a member of the M&A and Private Equity group. He works on a wide range of cross-border transactions, including mergers and acquisitions, joint ventures, emerging companies and venture capital transactions, and private equity investment especially in Japan, the United States, Europe and Asia.

## 補足事項 / Additional Information

当ウェビナーは録画されます。This webinar will be recorded.

当プログラム中は原則スピーカー以外の音声は消音にしております。

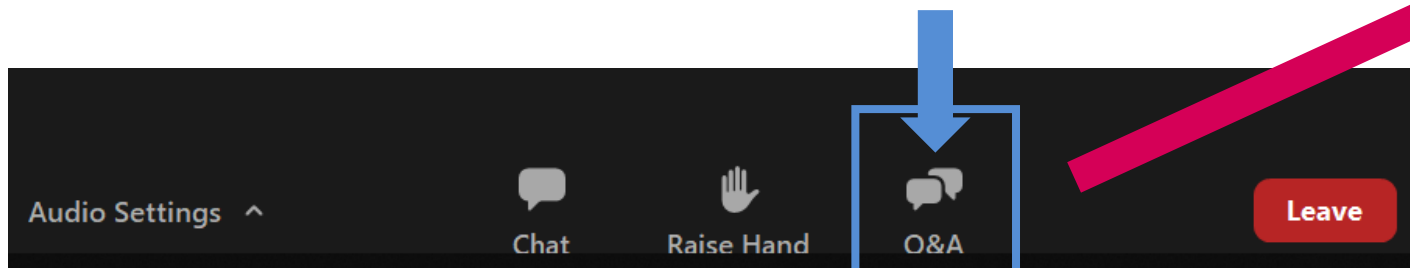
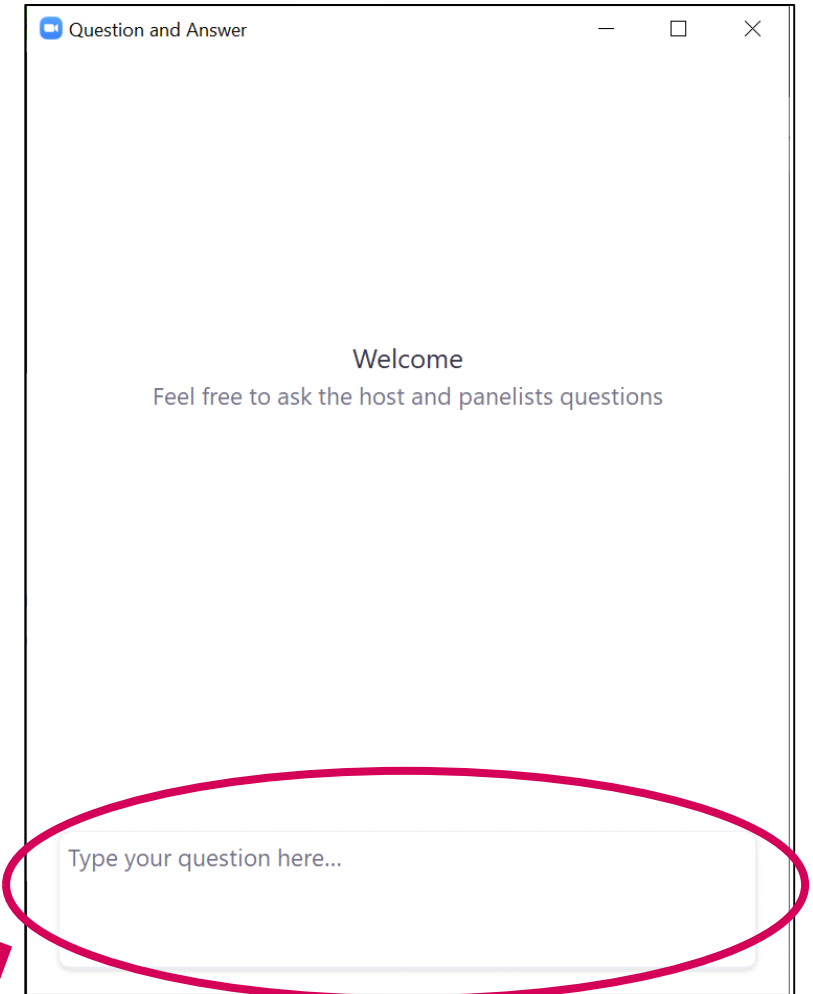
Participants other than the speakers are muted during this session.

途中ご質問などございましたら、画面下に表示されている以下Control BarのQ&Aボタンを押し、表示される入力欄へご質問内容をご入力ください。

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# CLE Credits

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Orrick, Herrington & Sutcliffe LLP is an accredited MCLE provider in the States of New York and California.

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Course: Compliance in the Era of Remote Work  
Format: Webconference  
Instructor(s): Sugita, Hiroki  
Yakura, Shinsuke  
CA CLE Credits: 1 General - Participatory  
NY CLE Credits: 1 PP

Date: 06/11/2020  
Time: 12:30-1:30PM JST  
Location: Tokyo (Tokyo, Japan)

Name	Sign In	Time In	Sign Out	Time Out	License State	Bar Number	Email
Taro Yamada		12:30 PM		13:30 PM	NY	XXXXXXXX	t.yamada@orrick.com

必要事項を入力

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# ENERGYTECH CAPITAL INVESTMENT STRUCTURES

WHAT YOU NEED TO KNOW

2023



# INTRODUCTION





# About Orrick

## We Focus on Three Sectors Driving the Economy – With Particular Emphasis on Opportunities at the Seams

### TECH & INNOVATION

#### Our Clients

5 of Forbes' "Top 10 Digital Companies"

3,000+ venture-backed companies and  
50+ unicorns

#### Our Practice

**Top 10** for M&A globally

– *Bloomberg*

**Top 5** for Venture Capital globally

– *Pitchbook*

**Band 1** for Privacy & Data Security

– *Chambers Global*

**Top 5** for Tech Litigation

– *Bloomberg*

#1 Enabling Business Growth and Transformation  
*Financial Times North America Innovative Lawyers*

### ENERGY & INFRASTRUCTURE

#### Our Clients

4 of the top 10 largest public renewable energy  
companies globally

8 of the top 10 renewables sponsors

50% of the top 50 infrastructure  
investors globally

#### Our Practice

**Band 1** for Renewable Energy

– *Chambers Global*

**Band 1** for Power & Renewables

– *Chambers Global*

**Band 1** for PPP (Infrastructure)

– *Chambers Global*

Project Finance Group of the Year

– *Law360*, 2020 & 6 other years

### FINANCE

#### Our Clients

16 of the top 20 global banks

3 of the top 5 private debt funds

5 of the top 10 fintech unicorns

#### Our Practice

**No. 1** Bond Counsel

– *The Bond Buyer*

**Top 10** in Securitization

– *Asset Backed & Commercial Mortgage Backed  
Alerts*

**Band 1** for Securitization: CMBS

– *Chambers USA*

**Band 1** for Securitization: PACE

– *Chambers USA*

# A Global Platform

## Recognized for Quality and Innovation



**1,100**  
lawyers in 25+ markets

**Top 3 for Innovation**  
7 Years in a Row  
*2016 – 2022*

**#1 in Reinventing  
Legal Practice**  
*2022 - Financial Times*

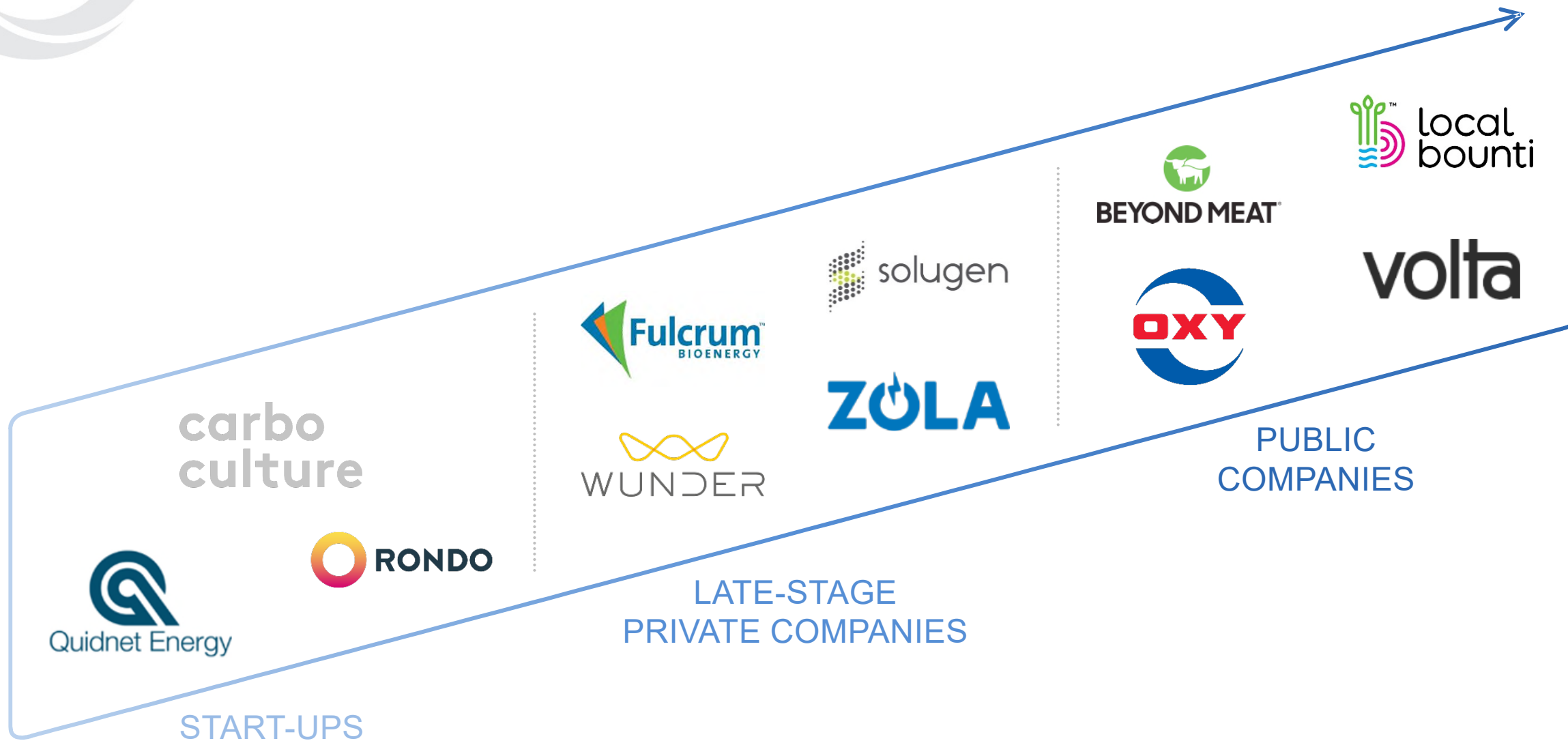
**Mansfield Certified Plus**  
4 years

**50% Diverse Senior  
Leadership Team**

**Vault Top 5  
for Diversity**

# At Home in the Sustainability & Energytech Universe

Advising Clients Across the Corporate Life Cycle

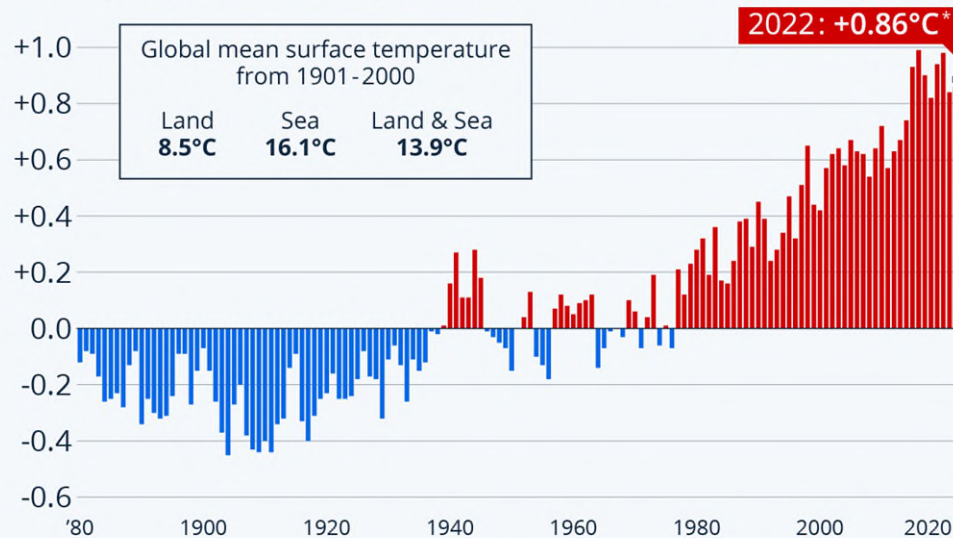


# OVERVIEW

# More than an Inconvenience

## The Last 8 Years Have Been the Warmest on Record

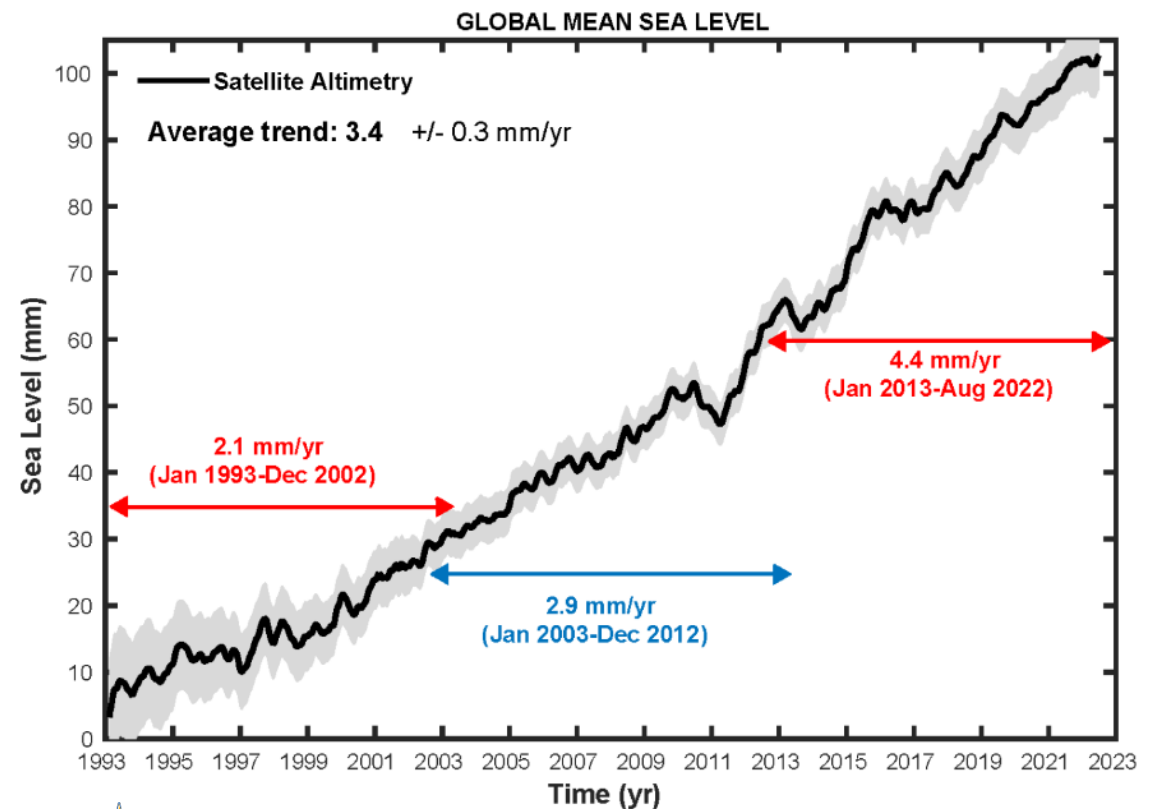
Global land and ocean surface temperature anomalies (degrees Celsius compared to the 20th century average)



\* 2022 figure refers to the temperature anomaly for January through September  
Source: NOAA



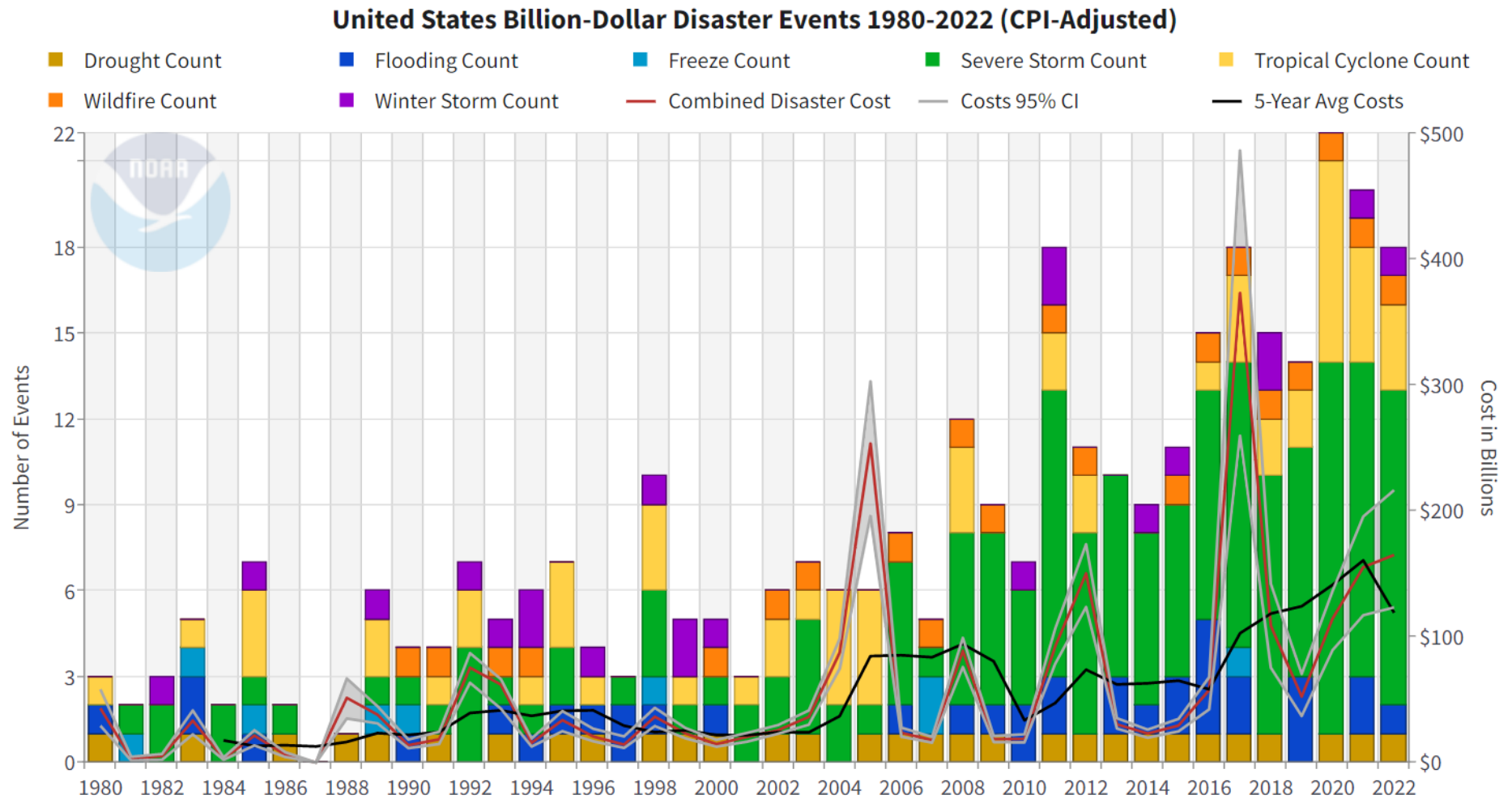
statista



WORLD  
METEOROLOGICAL  
ORGANIZATION

Provisional State of the Climate 2022

# More than an Inconvenience



NOAA National Centers for Environmental Information (NCEI) U.S. Billion-Dollar Weather and Climate Disasters (2023). <https://www.ncei.noaa.gov/access/billions/>, DOI: [10.25921/stkw-7w73](https://doi.org/10.25921/stkw-7w73)



# Record Setting Investment

*The Atlantic*

The Climate Economy Is About To Explode

*The New York Times*

'Recession Resilient' Climate Start-Ups Shine in Tech Downturn

**Forbes**

Current Climate: Funding For Carbon-Reduction Tech Hits \$4.2 Billion

**FORTUNE**

The world needs to spend \$3.5 trillion a year to fight climate change. Meet the biggest reallocation of capital in history





# Topics

- Capital Intensive Startups
  - U.S. startups seeking Japanese investors
  - Japanese startups looking to deploy technology in U.S. projects
- Equity Instruments
  - Common Stock, Preferred Stock and Convertibles Notes and Safes
- Debt Financing
  - Venture, Mezzanine, Senior and Asset-backed Debt
- Project Financing
  - Joint Ventures and Tax Equity
- Debt-Like Preferred Equity
- M&A



# CAPITAL INTENSIVE STARTUPS



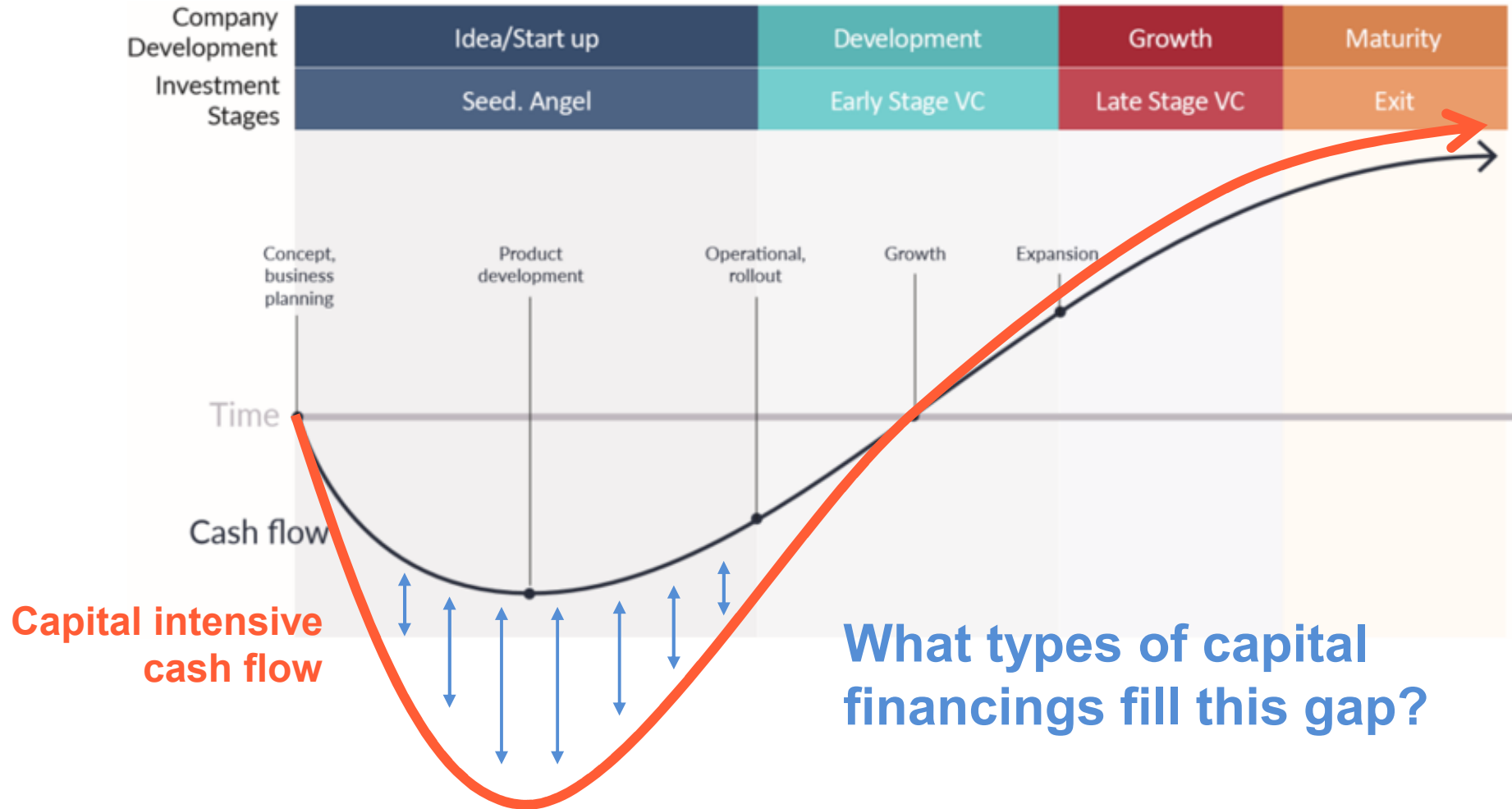


# What are "Energytech" Startups?

- Developing new technology to facilitate the energy transition, for example:
  - Carbon capture and sequestration, agriculture tech and hydrogen
  - Smart cities, infrastructure and energy management software
  - Cutting-edge energy storage and renewable power generation tech
- Significant IP
- Heavy up-front costs to prove out technology for usage in the energy grid
- Mission-driven team
- More regulatory compliance needs

# Capital Intensive Startups

## Funding Lifecycle

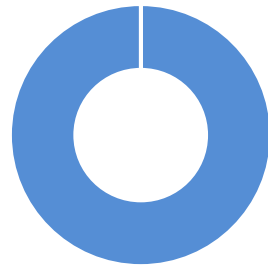


# Capital Intensive Startups

## Equity Dilution

Typical tech startup

Pre-seed  
Valuation: <\$1M



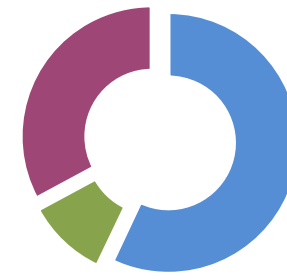
■ Founders

Seed Investment: \$1M  
Valuation: \$5M



■ Founders ■ Seed

Series A Investment: \$8M  
Valuation: \$25M

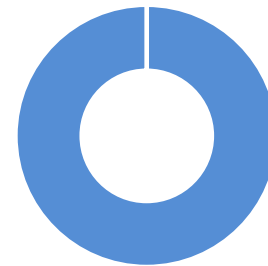


■ Founders ■ Seed ■ Series A

**Founders  
hold  
majority**

Hypothetical climate  
tech startup with 2x  
seed capital needs

Pre-seed  
Valuation: <\$1M



■ Founders

Seed Investment: \$2M  
Valuation: \$5M



■ Founders ■ Pilot

Series A Investment: \$8M  
Valuation: \$25M

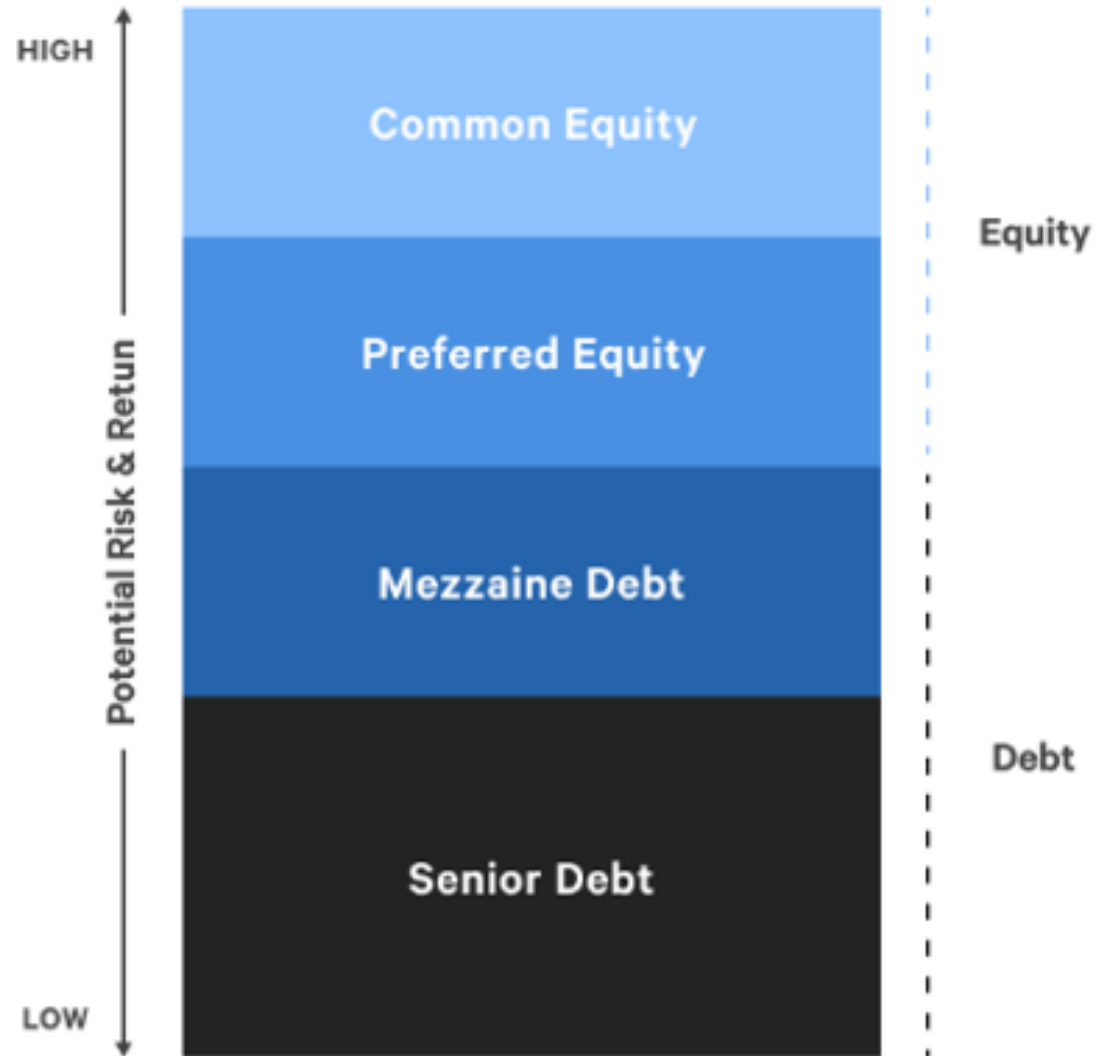


■ Founders ■ Seed ■ Series A

**Founders  
do not hold  
majority**

# Capital Intensive Startups

## Risk and Return



# EQUITY INSTRUMENTS








# Equity Investments

- Types
  - Convertible Notes and Safes
  - Preferred Stock
  - Warrants
- Features
  - High-risk, high-reward
  - Dilutive
  - Investor rights
  - Subordinate to debt



# What are Convertible Notes and Safes ("Simple Agreement for Future Equity")?

- Convertible instruments sold by companies (often startups) to investors for capital raising purposes in lieu of a traditional round of preferred stock financing (e.g., Series A, Series B etc.).
- Give investors the right to receive shares of preferred stock upon a future preferred stock financing or other triggering event (e.g., sale of the company) without payment of additional consideration.
- The price of the preferred stock received by investors upon conversion of the notes or Safes is usually lower than the cash price paid by new investors in the future financing. The discounted price is usually determined based upon a specified company valuation (determined at the time of original sale) and/or percentage discount to the future cash price that is paid.
- Notes and Safes generally serve the same purpose and have similar terms/mechanics, with the key difference being that notes are technically debt and have certain debt-like features.
- The offer and sale of notes and Safes are subject to securities laws (only sold to accredited investors).



# Why use Notes or Safes?

- What are advantages of using Notes or Safes to raise capital?
  - Quicker, cheaper and easier than a traditional preferred stock financing.
  - Defer on company valuation until a future time/financing.
  - Companies: avoid giving new investor rights typical in preferred stock financings rounds.
  - Investors: lock in the right to participate in a future financing round at in a future in a discount.
- When are Notes or Safes used in lieu of a traditional round of preferred stock financing?
  - A startup's seed round of financing.
  - Off cycle capital raises – e.g., opportunistic investment opportunity; extend runway to raise at a higher valuation; to fund unusual expenditures such as M&A.
  - Bridge financings – provide short-term capital needed to bridge the company to a contemplated financing or liquidity event.
  - Insider-led rounds where investor rights are not changing.



# What is a Preferred Stock Financing?

- Priced round
- Venture or growth equity investors
- Risk vs. reward: 1x liquidation preference
- Investor rights: preemptive, anti-dilution, ROFR, board seats, drag-along
- Dilution to common holders
- Typically, on NVCA-based forms (Charter, Voting Agreement, Right of First Refusal and Co-Sale Agreement, Investors' Rights Agreement)
- An investor who first acquires a minority interest usually only has the one-time obligation to fund, but can come in later through preemptive right and ROFR if it wanted



# What is a Warrant?

- A security that grants a right to acquire shares at a certain price
- Can be for common stock or preferred stock
- Exercise price varies (fair market value, last valuation, or \$0.01)
- Expires in 5-10 years, but can be subject to extension



# Why are Warrants Issued?

- Warrants are a way to sweeten the deal.
- Warrants give fixed-income investors the possibility of getting a higher return over a longer term.
  - Structured debt-like preferred may seek warrant
  - Project-level investor may seek warrant in the parent entity
- Can be used with commercial partners and venture investors.
- Other examples:
  - SPAC "units" are comprised of 1 share and  $\frac{1}{4}$  or  $\frac{1}{2}$  warrant
  - Investors in blockchain companies seek "token warrants"



# Are Equity Instruments Enough?

- Traditional progression is best suited for low-overhead startups.
- Careful balance between bringing in new investment and preserving founder control.
- Equity investments are high-risk/high-return investments, investor appetite for risk may be limited.
- May need to look at other financing options that are lower risk for investors and less dilutive to founders.



# DEBT FINANCINGS



# Debt Features

- Low risk, lower return, non-dilutive
- Principal Amount
- Interest Rate (and PIK interest)
- Maturity Date
- Security Interest
- Events of Default
- Operational Covenants
- Senior to equity and unsecured third-party claims

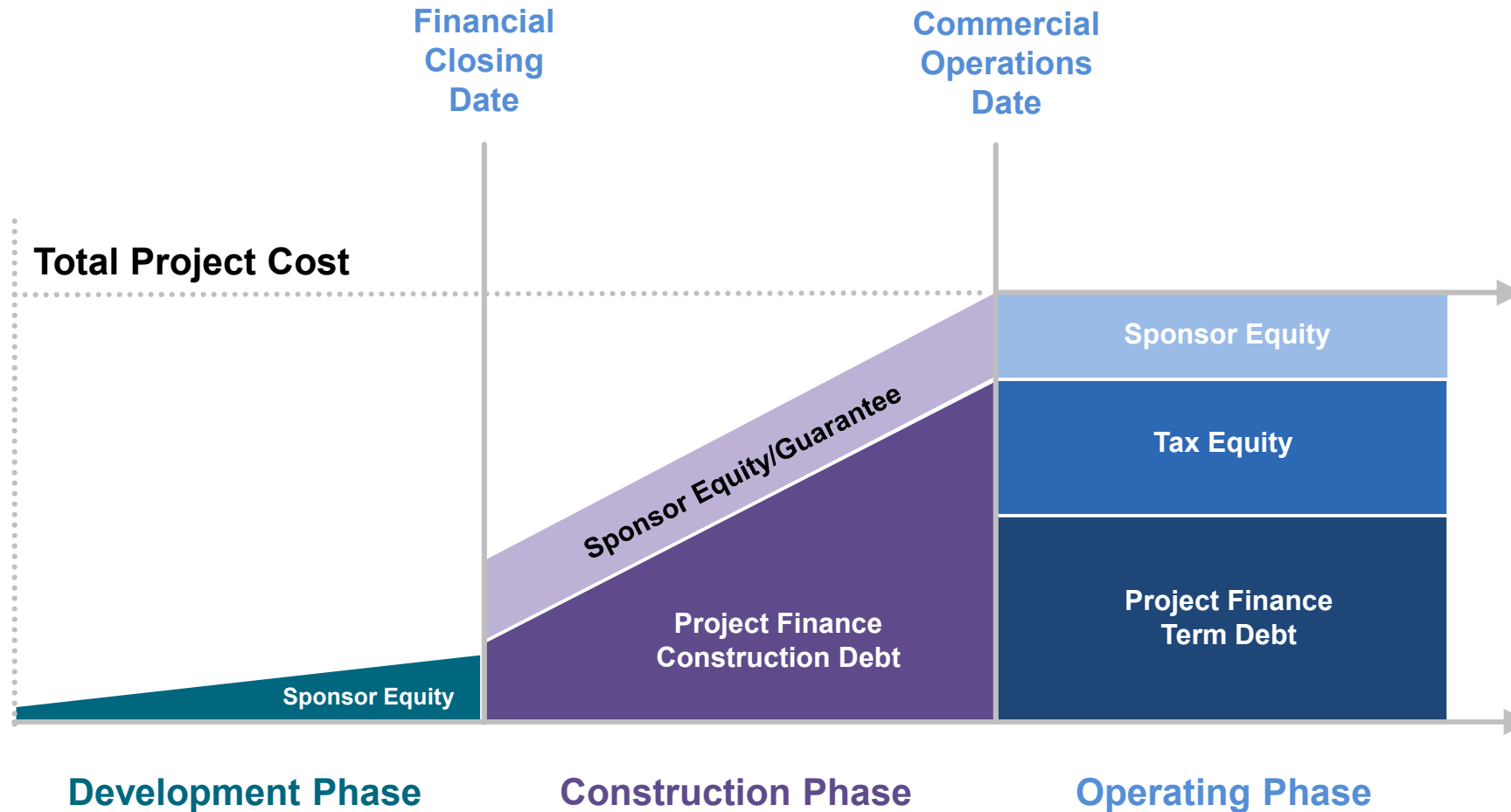


# Types of Debt Financings

- Venture Debt
  - Early-stage runway extension, secured or unsecured
  - Higher interest rate: 10-15%
- Mezzanine Debt
  - Mid-stage financing alternative, secured (second priority) or unsecured
  - Higher interest rate: 10-20%
- Senior Debt
  - Standard debt facility, revolver or term loan, secured (first priority all-assets lien)
  - Lower interest rate: 5-10%
- Asset-backed Debt
  - Like senior debt but secured by a specific assets, used in project finance
  - Lower interest rate: 4-8%

# PROJECT FINANCE

# Financing Lifecycle and Capital Stack





# Joint Ventures

- Creating a special purpose vehicle (SPV)
- Key concepts
  - Governance
  - Capital contributions and distributions
  - Transferability
  - Exclusivity



# Debt Finance

- Premise:
  - Lenders loan money for the development of a project solely based on the project's risks and future cash flows.
  - Lenders have either no recourse (or limited recourse) to the developer or sponsor of the project (*i.e.*, can't go after other assets).
  - Gives sponsors a way to finance projects that might be too expensive or speculative to be carried on a corporate balance sheet.
- Types of Loans: construction loans, term loans, back-leverage, working capital loans, and letters of credit (for the benefit of 3rd parties under Project Agreements)
- Documents: Loan/Credit Agreements, Security Documents, Project Documents and Direct Agreements (*e.g.*, PPA, Turbine Supply Agreement, O&M Agreement, EPC Contract)





# Tax Equity Financing Overview

- Tax benefits for renewables projects are generally not transferable or refundable and are typically only available to "equity" owners of an asset.
- Tax Equity effectively allows developers to trade the projected federal income tax benefit stream that a project will produce to an investor in exchange for capital to build the project.
- Tax Equity typically accounts for approximately 30-55% of the capital stack. This largely depends on the asset class and financing structure. Balance comes from a combination of sponsor equity and debt.
- Many project have a combination of both debt and Tax Equity financings (which includes back leverage debt financing once Tax Equity financings are involved).
- Choice of tax structure is largely dictated by a combination of investor preference and efficient allocation of federal income tax benefits.

# STRUCTURED PREFERRED

DEBT-LIKE EQUITY





# Why Debt-Like Equity?

- Flexible hybrid with equity and debt features, everything is customizable
- For investors:
  - Equity for regulatory and ratings purposes (lower financing costs)
  - More investor rights than other debt
  - High rate of return
- For companies:
  - Non-dilutive (unless convertible)
  - No security interest/pledge of assets
  - Subordinate to other debt



# What are Features of Structured Preferred?

- Typically, non-convertible preferred equity with no voting rights
- Yield rate (same as an interest rate) with cash or PIK repayment
- No maturity date, but escalating return rate and/or redemption rights substitute for a maturity date
  - Failure to redeem can result in right to sell company
- Protective Provisions
  - Debt-like affirmative and negative operational covenants
  - Investor rights with consent over key corporate actions and board seats
- Upside through warrants



# M&A





# "If you can't beat them, join them!"

- Capital intensive tech startups can make a good target for certain buyers.
  - Strategic vs. financial buyers
- Structures
  - Equity purchase
  - Asset purchase
  - "Acqui-hire" exclusive license
- Locking down intellectual property is key.
- Third party consents and investor approvals may play a role.
- Working with an investment bank to run a process.

# COMPARISON CHART





# Comparison Chart

	Who holds?	When	What Level	Dilutive of Voting Rights	Operational Covenants	Investor Rights	Fixed Return
<b>Equity</b>							
Common Equity	Sponsors, founders, employees, joint venture partners	Early	Topco	Yes	No	No	-
Preferred Equity	Venture and growth equity investors	Mid and late	Topco	Yes	No	Yes	-
Convertible Notes and Safes	Early-stage investors, bridge investors	Early or bridge	Topco	When converted	No	No	-
Warrants	All types of investors	Early, mid and late	Topco	When converted	No	No	-
Structured Preferred (Debt-like Equity)	Private equity, direct lenders	Mid and late	Topco	If convertible, when converted	Yes	Yes	10-20%
<b>Debt</b>							
Venture Debt	Venture investors	Early	Topco	No	Yes	No	10-15%
Mezzanine Debt	Private equity, direct lenders	Mid and late	Midco	No	Yes	No	10-20%
Senior Debt	Traditional banks, direct lenders	Mid and late	Opco	No	Yes	No	5-10%
Asset-backed Debt	Traditional banks, direct lenders	Early, mid and late	Opco	No	Yes	No	4-8%





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