

# Today's Webinar Will Begin Shortly:

## How to Avoid a Climate Tech Disaster

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### QUESTIONS?

Use the questions box on your screen

### AUDIO ISSUES?

Use the global dial-in number in your confirmation email



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# How to Avoid to a Climate Tech Disaster



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# Today's conversation...



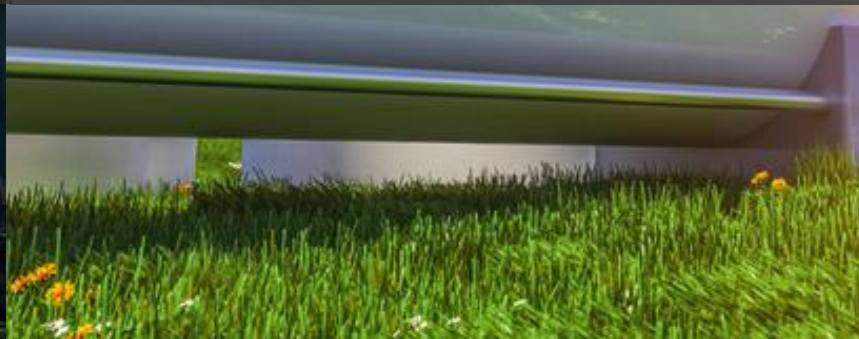
**What is climate tech?**



**Hype or hope?**



**Why now?**





Climate tech is expressly concerned with mitigation of greenhouse gas emissions, a major driver of climate change.

– Clean Energy Ventures

Climate tech encompasses a broad set of sectors which tackle the challenge of decarbonizing the global economy.

– PwC



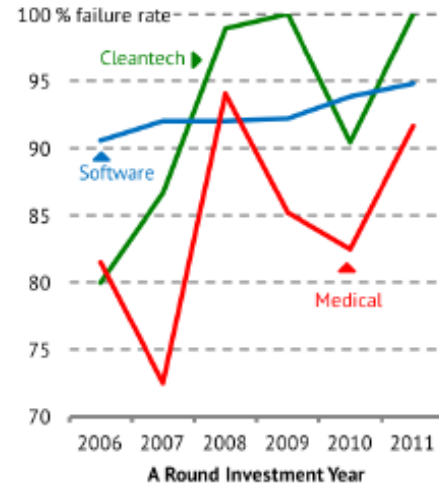


**Figure 2. Risk and reward for cleantech investors compared to software and medical technologies**

The risk and return profile of all reported A-round investments in cleantech, medical technologies, and software technologies, shown by year of A-round 2006-2011.

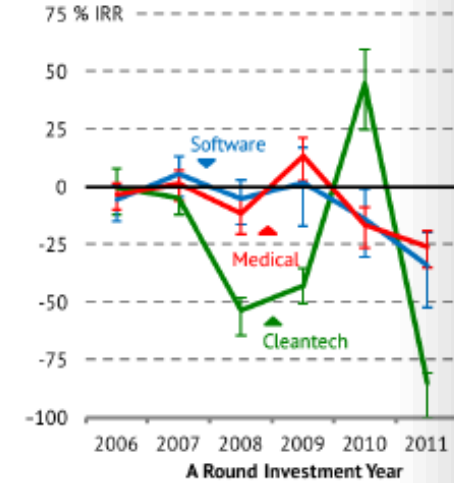
**a) Cleantech companies were more likely to fail...**

After 2007, over 90% of cleantech investments failed to return capital to investors.



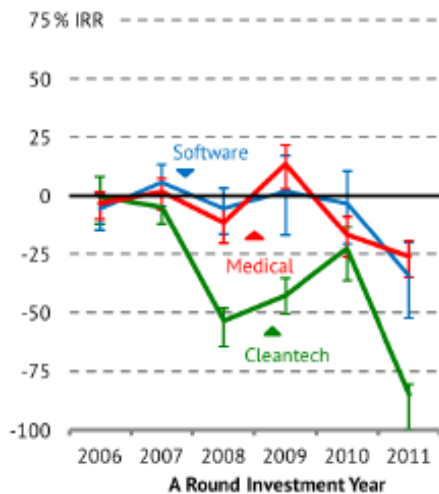
**b) ...and yielded lower returns.**

After 2006, cleantech investments underperformed the other sectors, with the exception of 2010, the year of Nest's A-Round.



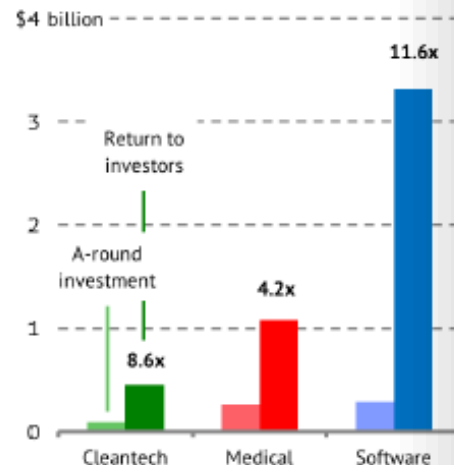
**c) Without Nest, cleantech IRR plunges.**

Reclassifying Nest as a software company brings the 2010 cleantech IRR down from almost 50% to -25%, and puts that cleantech under the other two sectors after 2006.



**d) The clairvoyant investor would choose software**

An investor who could pick the perfect portfolio of the ten biggest exits in each sector would choose to invest in software technology.



“Cleantech companies were more likely to fail... over 90% of cleantech investments failed to return capital to investors.”

**Venture Capital and Cleantech:**  
The Wrong Model for Clean Energy Innovation  
An MIT Energy Initiative Working Paper  
July 2016  
Dr. Benjamin Gaddy<sup>1</sup>  
Dr. Varun Sivaram<sup>2</sup>  
Dr. Francis O'Sullivan<sup>3</sup>

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<sup>2</sup> Douglas Dillon Fellow, Council on Foreign Relations; vsivaram@cftr.org  
<sup>3</sup> Director of Research and Analysis, MIT Energy Initiative; Senior Lecturer, MIT Sloan School of Management; frankie@mit.edu

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MIT Energy Initiative  
MITEL-WP-2016-06

“No exit for cleantech. Cleantech companies saw fewer exits overall, and few acquisitions compared to other sectors.”

“The biggest money loser for VC was the segment of cleantech companies commercializing fundamentally new materials and processes.”

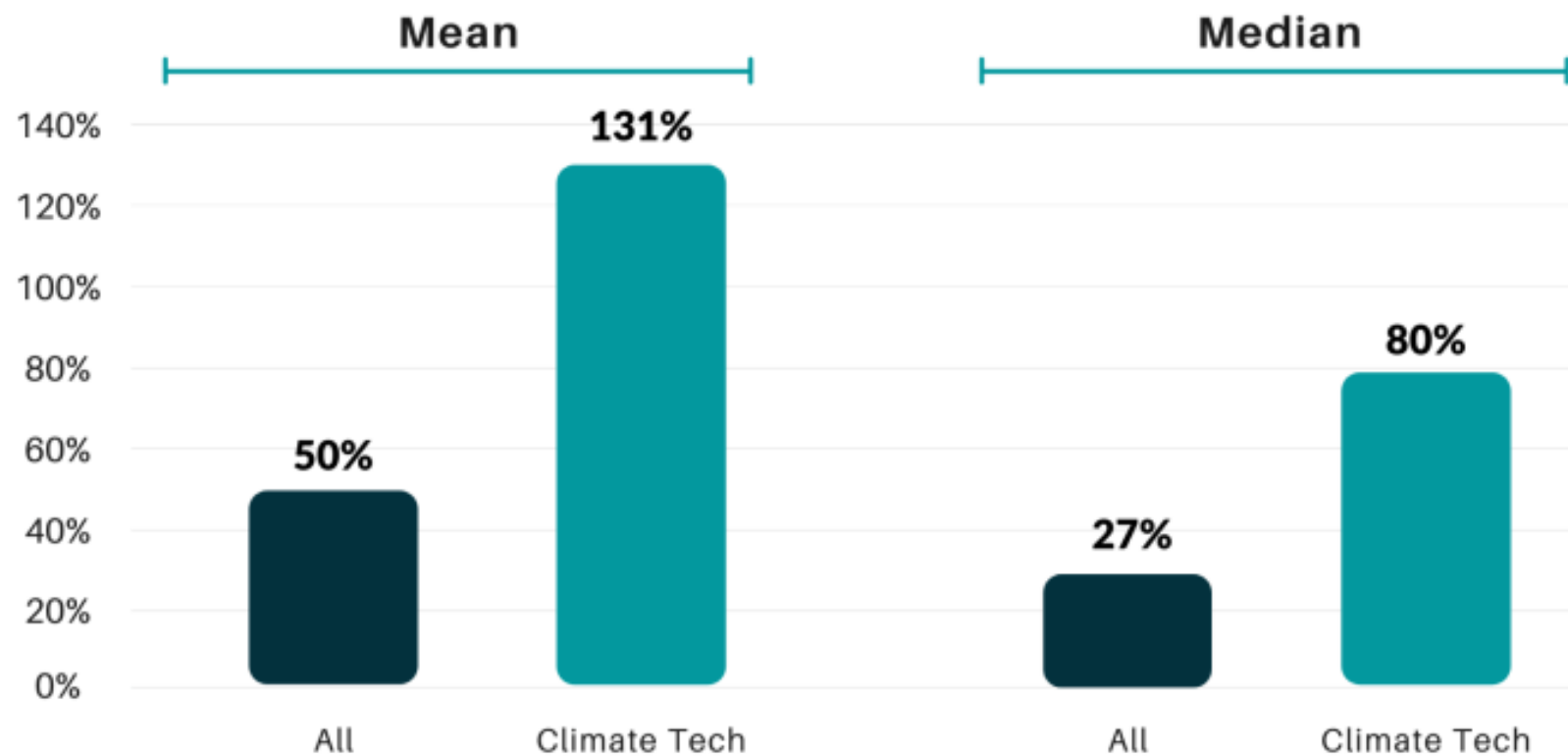
“This year has witnessed a wild west of public market activity, with a surprising concentration of growth coming from **renewable energy, EV, and fuel cell companies**. It’s still not clear what fueled this climate tech market frenzy.”

- Climate Tech VC



## 2020 SPAC Post-Merger Performance

All Post-Merger vs Climate Tech SPACs



Share prices as of 12/11/20



## Technologies needed

Hydrogen produced without emitting carbon

Grid-scale electricity storage that can last a full season

Electrofuels

Advanced biofuels

Zero-carbon cement

Zero-carbon steel

Plant- and cell-based meat and dairy

Zero-carbon fertilizer

Next-generation nuclear fission

Nuclear fusion

Carbon capture (both direct and point capture)

Underground electricity transmission

Zero-carbon plastics

Geothermal energy

Pumped hydro

Thermal storage

Drought- and flood-tolerant food crops

Zero-carbon alternatives to palm oil

Coolants that don't contain F-gases

# BILL GATES HOW TO AVOID A CLIMATE DISASTER

THE SOLUTIONS WE HAVE AND THE  
BREAKTHROUGHS WE NEED



# Reactions to the latest climate tech headlines...







Photographer:

Net Zero

# Bill Gates-Led Fund Raises Another \$1 Billion to Invest in Clean Tech

Breakthrough Energy Ventures is doubling the size of its fund and investing in at least another 40 startups

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By [Akshat Rathi](#)

January 19, 2021, 8:00 AM GMT+1 *Corrected January 19, 2021, 12:49 PM GMT+1*



## Tweet



**bryan schreier**

@schreier



We [@Sequoia](#) are actively investing in Climate Tech and Sustainability (more to come). Why? Because it is both our responsibility and a huge business opportunity (h/t [@karaswisher](#)). We'd love to hear from more Climate Tech entrepreneurs:

[climate@sequoiacap.com](mailto:climate@sequoiacap.com)

1:58 PM · Jan 23, 2020 · [Twitter Web App](#)

**154** Retweets   **1.1K** Likes



# Decarbonization Partners

BlackRock and Temasek are partnering to establish Decarbonization Partners, which will focus on investments that advance decarbonization solutions. It's part of our commitment to support the goal of net zero carbon emissions by 2050 and help clients participate in this historic investment opportunity.



**BlackRock** | **TEMASEK**

Decarbonization Partners

Together, BlackRock and Temasek have committed US\$600 million to invest in companies and proven technologies that will reduce and potentially eliminate carbon emissions.



A photograph of a construction site. In the foreground, a concrete barrier with alternating yellow and black diagonal stripes runs across the frame. Behind the barrier, a dense network of red and silver metal scaffolding is visible. A yellow triangular sign with a black border and the text "SLOW DOWN" is mounted on a post in front of the scaffolding. The background shows a dark, possibly covered, construction area.

**SLOW DOWN**



# Nikola Corporation Common Stock (NKLA)

Nasdaq Listed

+ ADD TO WATCHLIST + ADD TO PORTFOLIO

\$13.00

+0.68 (+5.52%)

CLOSED AT 4:00 PM ET ON MAY 26, 2021

\$12.98

-0.02 (-0.15%)

DATA AS OF MAY 26, 2021 5:31 PM ET - AFTER HOURS

## QUOTES

Summary

Real-Time

After-Hours **LIVE**

Pre-Market

Charts

## NEWS & ANALYSIS

News

Press Releases

Analyst Research

**TC** TechCrunch

### Nikola's stock crashes after announcing cancelation of contract with Republic Services for 2,500 garbage trucks

Earnings

P/E & PEG Ratios

Option Chain

Short Interest

Institutional Holdings

Insider Activity

SEC Filings

Revenue EPS

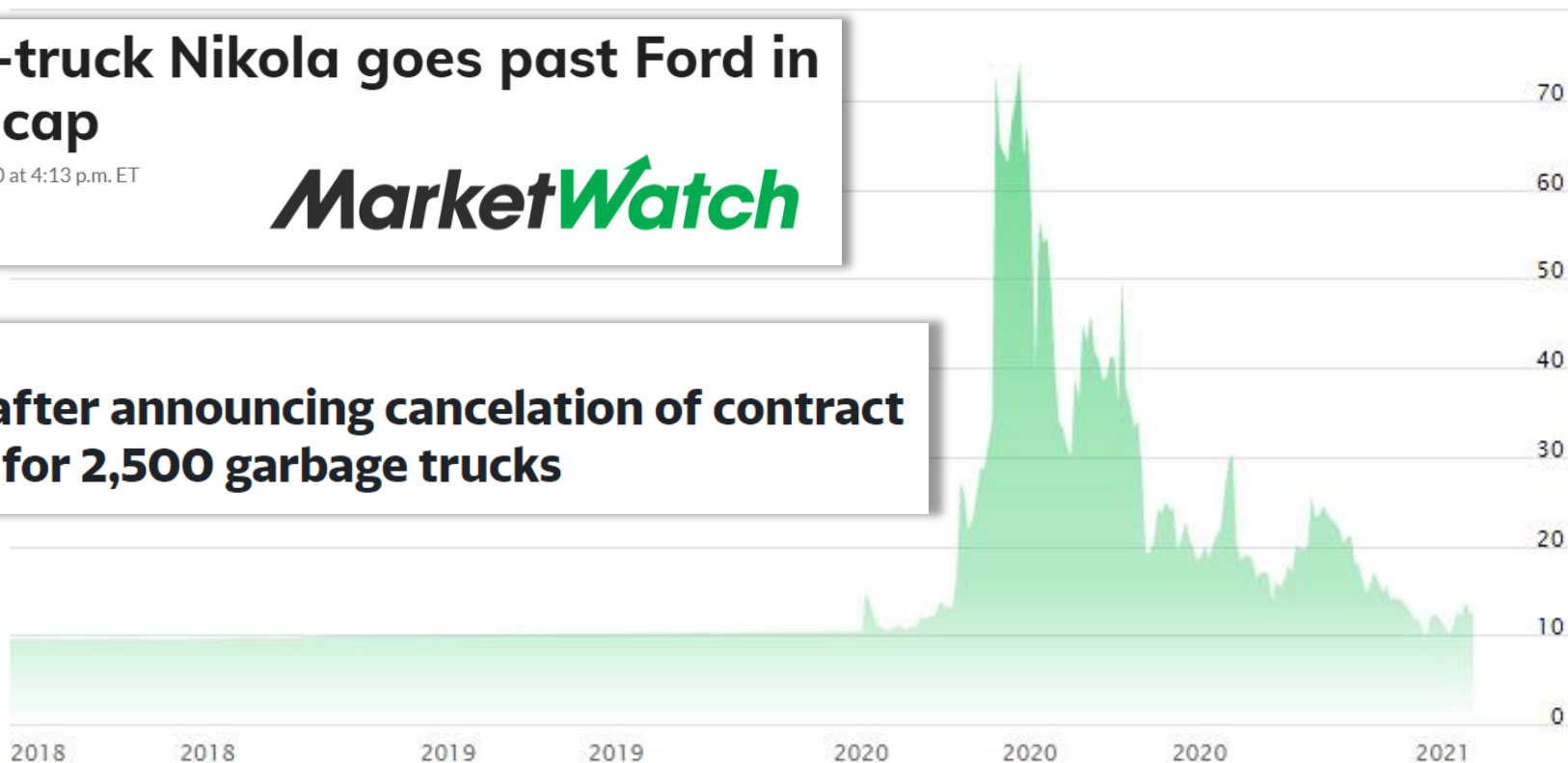
May 25, 2021

1D 5D 1M 6M YTD 1Y **5Y** MAX

## Electric-truck Nikola goes past Ford in market cap

Published: June 9, 2020 at 4:13 p.m. ET

**MarketWatch**



## Tesla rival Nikola Motors secures "order" for 800 trucks from Anheuser-Busch, with deliveries starting in 2019



by Christopher Robinson

Low importance

Following Anheuser-Busch's order of 40 Tesla Semis last year, its order of 800 fuel cell trucks from competitor Nikola is seen as a complementary technology. While the battery electric Tesla would haul goods from distribution centers to retailers, the fuel cell-powered Nikola would haul goods from breweries to distribution centers – longer trips that require refueling. However, there are a few reasons to doubt this order will ever be filled. The company has built no hydrogen fueling stations and has yet to start field testing of its truck – making a 2019 delivery of test vehicles to the brewer unlikely. Lastly, as Nikola charges no deposit for orders, it came at nearly zero risk to Anheuser-Busch.

## Nikola Motor launches its seventh vehicle but hasn't delivered the first six



by Christopher Robinson

Ignore

Nikola has launched three semitrucks, two all-terrain vehicles, and a jet ski since its founding in 2014. However, a visit to its website confirms that all of those products are still limited to reservations only, indicating it has not delivered any of its products outside of at least [one truck to Anheuser-Busch](#). Nikola's rapid expansion of its product portfolio is a concerning distraction, as we've noted from the outset it would be very capital-intensive to build both trucks and refueling infrastructure. Clients are encouraged to ignore this announcement, as it is merely a rendering and slick marketing demonstration, while recognizing that the poor use of funding could impact the company's ability to meet timelines for its core products.





# How to avoid a climate tech disaster

## What is climate tech?

Focus on eliminating emissions at the source – but remember it will take time.

## Hype or hope?

Lots of hype – but hype isn't a bad thing if you navigate it correctly.

## Why now?

Never been a more exciting time – but avoid the pitfalls of your predecessors.

# Thank you

A link to the webinar recording will be emailed within 24-48 hours

## UPCOMING WEBINARS

- **June 22nd:** How to Get and Keep Your Piece of the Energy Pie
- **July 27th:** Technology Trends Decarbonizing the Chemicals Industry
- **August 24th:** Top Technology Innovations Driving Growth in the Food and Beverage Industry
- **September 21st:** The Hospital of the Future

## KEEP IN TOUCH

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