



# Unlocking Capital for Sustainability- Oriented Ventures: 7 Key Lessons for Entrepreneurs

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# ABOUT THIS GUIDE

Entrepreneurs could play a key role in solving some of the largest environmental and social challenges facing society today. However, to do so, they must unlock the capital necessary to help them achieve meaningful scale and therefore impact.

Entrepreneurship is challenging in all cases. Raising capital, in particular, can be a make or break endeavor for startups. For sustainability-oriented entrepreneurs who aspire to realize a positive environmental or social impact through the success of their for-profit business, the challenge of raising capital is even greater. Yet, given the myriad issues facing society today—from climate change to natural resource constraints to unethical employment practices—equipping sustainability-oriented entrepreneurs with the resources they need to unlock capital is critical.

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**KEY QUESTION: How can sustainability-oriented entrepreneurs attract the necessary capital required to grow their business and ultimately realize their social or environmental impact?**

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In this toolkit, derived from various research efforts looking at sustainability-oriented innovation, we provide seven actionable lessons to help entrepreneurs

raise the capital they need to successfully accelerate their sustainability-oriented innovations.

This guide is based on a review of academic research on sustainability and entrepreneurship, combined with the insights gained from interviews with over 75 entrepreneurs and investors in the cleantech, foodtech, and agtech industries.

Throughout the research process, our team engaged with impact investors, venture capitalists, and corporate strategic investors, as well as established and aspiring sustainability-oriented entrepreneurs, to bring you this set of tips for navigating the challenges of sustainability-oriented entrepreneurship.

The seven insights we share in this guide will help current and aspiring sustainability-oriented entrepreneurs to attract the capital they need to realize their social and/or environmental impact. For each of the seven lessons, we provide quotes and/or examples to ground the insight in reality and make it actionable for you and your team.

Further, we have included supplementary checklists to guide sustainability-oriented entrepreneurs in implementing these lessons within their own businesses.

## 7 LESSONS FOR SUSTAINABILITY-ORIENTED ENTREPRENEURS



Build a balanced team to avoid a technology-push approach



Pitch sustainability as a side dish, not the main course



Benefit from government subsidies but don't depend on them



Tell product stories centered on customer needs



Reduce the capital-intensity and risk of your technologies



Get involved in the ecosystem



Beware of macroeconomic factors

# SEVEN LESSONS FOR SUSTAINABILITY-ORIENTED ENTREPRENEURS

How can sustainability-oriented entrepreneurs attract the necessary capital required to grow their business and ultimately realize their social or environmental impact?



1

BUILD A BALANCED TEAM  
TO AVOID A TECHNOLOGY-  
PUSH APPROACH



2

TELL PRODUCT STORIES  
CENTERED ON CUSTOMER  
NEEDS



3

PITCH SUSTAINABILITY  
AS A SIDE DISH,  
NOT THE MAIN COURSE



4

REDUCE THE CAPITAL-  
INTENSITY AND RISK OF  
YOUR TECHNOLOGIES



5

BEWARE OF  
MACROECONOMIC  
FACTORS



6

BENEFIT FROM  
GOVERNMENT SUBSIDIES  
BUT DON'T DEPEND ON THEM



7

GET INVOLVED IN  
THE ECOSYSTEM



## BUILD A BALANCED TEAM TO AVOID A TECHNOLOGY PUSH APPROACH

Sustainability-oriented entrepreneurs need to adopt a commercial orientation to succeed in the marketplace. Passion for your vision and technological expertise are indeed critically important; however, to investors, it is critical that a startup have a balanced team. Too much of a technical orientation can scare investors off, as they fear you

**Get a team. Investors are looking for companies with leaders who understand exactly what will bring value, and what the real industry problems are. The team needs someone with credibility who can advise them about what customers will want.**

**—ACCELERATOR MANAGING DIRECTOR**

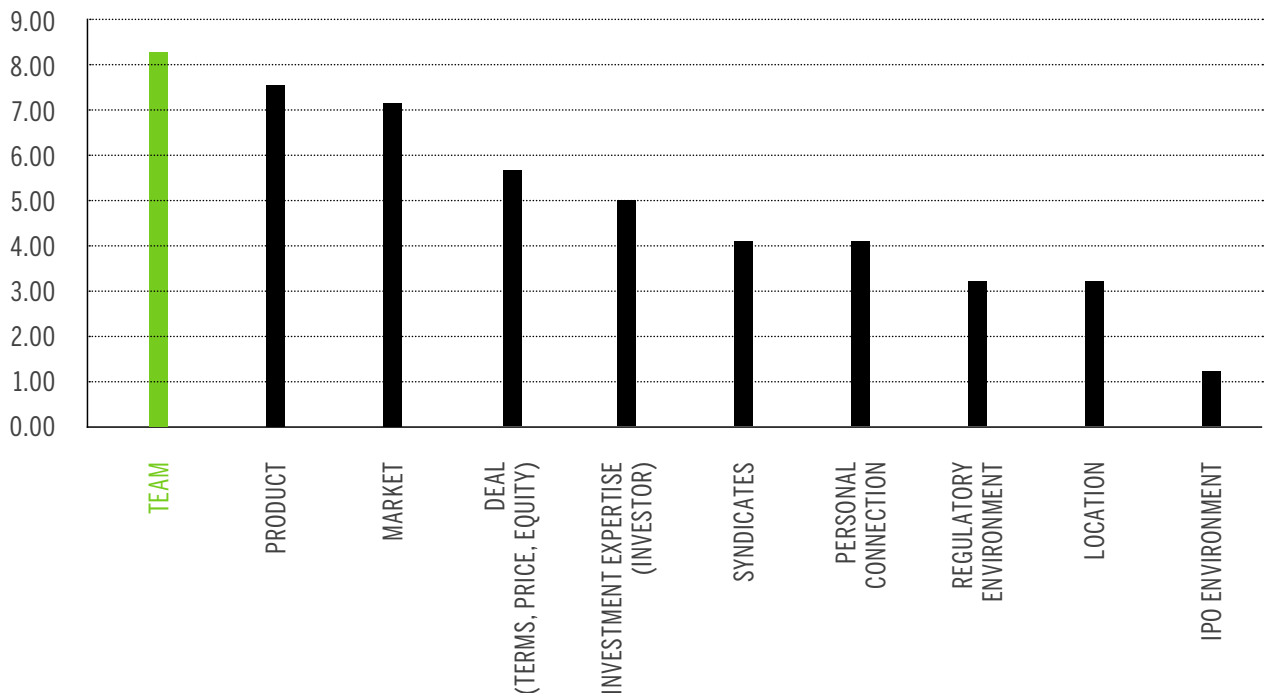
are pushing a technology, rather than using a technology to solve a real problem.

When asked to rank priorities for early-stage investment criteria, “team” often ranks first across cleantech and food/agtech investors above other factors like product, market, and deal economics.

According to investors, a strong team is one that has relevant experience in industry, a track record of running or managing businesses, and expertise in certain focus areas like the specific technology or market.

Just as non-technical founders need knowledge of the basic physics, biology, and/or chemistry

### INVESTOR RANKINGS OF ‘MAIN DETERMINANT FOR INVESTMENT’ (N=28)





behind the technology, technical founders must develop business acumen and/or bring on experienced business people to fill this gap. Investors are looking for a clearly articulated strategy and plan of attack, not just a cool technology, no matter how defensible or innovative. Investors want to

be assured that the management team is capable of pivoting when necessary, and will not act haphazardly when times get tough. If hiring this type of expertise is not possible, cultivating an expert set of advisors can be a good stop-gap, especially in the early stages.

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**I've walked away from a lot of investments with superstar CEOs who didn't know enough to bring in an experienced person who knew the customers or look after the nuts and bolts of growing a business while they worked on product roadmap.**  
**—ANGEL INVESTOR**

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**We've found that investors are looking for companies who have more than marketing validation. They have a strong IP strategy, and have built capacity in key parts of business. Investors like companies that are really well prepared for future, not just focused on raising capital.**  
**—ACCELERATOR MANAGING DIRECTOR**

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**People are increasingly investing and starting companies in food and agriculture because they want to make a difference in the world. That makes the space more interesting. But everyone has an opinion about food, and if they don't do their research to understand the technologies and the context in which they will operate they will bust. And similarly they can't lose focus on creating a financially stable business. We're already seeing it—some will go big, some will go home, and the smart ones will be left to pick up the pieces.**  
**—SERIAL ENTREPRENEUR AND VC INVESTOR**

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## CASE STUDY: GOOD EGGS

**Good Eggs** began in 2011 in San Francisco with a mission to promote the growth and sustainability of local food systems around the world. Their product is an online grocery service that partners with local farmers and producers to bring their products directly to consumers. After 18 months of operation, Good Eggs successfully raised \$21 million and expanded to Los Angeles, New Orleans and New York, partnering with over 600 producers.

In 2015, Good Eggs faced significant challenges due to a lack of domain expertise around operations and logistics. As a result, they had to

shut operations in three of their four markets. Though their team's strengths in technology and branding kick-started the business, Good Eggs struggled to successfully and sustainably scale without logistics and operational expertise.

At the end of 2015, Good Eggs brought on CEO Bentley Hall to fill this gap. In just under twelve months, Hall increased customers' annual spend by 50 percent, improved order rates, and turned the losses on each order into profits. Now, Good Eggs is back on the right track and has successfully raised an additional \$15 million of venture funding.



# BUILD A BALANCED TEAM TO AVOID A TECHNOLOGY PUSH APPROACH CHECKLIST

Are you talking about your “product” instead of your “technology”? The former is much more investor-friendly, and allows you to quickly talk about benefits and users.

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Does your current core team have defensible expertise in business, relevant technologies, and the domain(s)?

- *Can you demonstrate this expertise to investors? e.g., through previous entrepreneurial successes or credible employers.*
- 

If your team is missing core capabilities, can you attract advisors who are able to fill these gaps, at least in the short term?

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Is there a demand for your product? From whom? How do you know?

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Have you articulated a business model in which customers are willing to pay sufficiently for your solution?

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Do you have an exit strategy?

- *And a roadmap to get there?*
- 

Do you know your users?

- *Can you demonstrate this to investors?*
- 

Do you have IP? Is it defensible?

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## TELL PRODUCT STORIES CENTERED ON CUSTOMER NEEDS

All for-profit companies need to acquire paying customers, and demonstrate to investors that they can indeed acquire customers. For sustainability-oriented innovators this is especially important, because there can be a tendency to focus on the broader social or environmental problem, without addressing the specific needs felt by paying customers.

Product stories can be especially effective in reaching potential customers by speaking to their aspirations and pain points. A product story that resonates with customers will not focus on the intricacies of a new technology, but rather on the ultimate impact that the technology is capable of achieving. Stories need to be specific and tangible to give the audience a feel for the uses and benefits of the product or service. Case studies, quotes, and images can go a long way to explaining how your product or service specifically addresses a real need. Such stories also demonstrate to investors that the entrepreneurial team really understands their customers.

.....  
**Having a customer involved in the development process gives investors confidence that the team will be capable of building the product.**

**—ACCELERATOR MANAGING DIRECTOR**  
.....

Crafting an effective product story requires getting feedback from your customer early, and often. This may be achieved through trials or focus groups, or by building a network of advisors who can provide feedback from a customer perspective.

.....  
**Everyone wants signs of traction. Investors want to know product market fit, number of customers, etc.**

**... Investors are not comfortable to go on just a cool technology.**

**—ENTREPRENEUR**  
.....

To complement good storytelling, quantitative data about customer behavior gives investors further confidence. The story for investors must also include a compelling business model for delivering the customer benefits in a profitable way.

### CASE STUDY: SENSE LABS

**Sense Labs** was founded in Cambridge, Massachusetts by Mike Phillips, Christopher Micali, and Ryan Houlette with a vision of helping people to save energy and improve their lives through the use of data. The Sense home energy monitor is a sustainability-oriented innovation that helps reduce energy usage by monitoring all the devices in a home. However, rather than tell their customers about reducing their carbon footprint, Sense Labs paints a picture of a “smart” home that makes life more convenient

and comfortable. When they do talk about energy savings, Sense Labs translates this benefit into something consumers care about: cost savings. The marketing around the Sense product is highly targeted to their customer persona: the dad who values family, convenience, technology, efficiency, and, when cost-effective, doing his part to reduce their carbon footprint. Their storytelling is working: Sense Labs has over 400 million users and has launched over 50 products.





## TELL PRODUCT STORIES CENTERED ON CUSTOMER NEEDS CHECKLIST

What signs of user traction do you currently have, and what is your plan to increase traction?

- *Can you provide data-driven insights, either qualitative or quantitative, from this data to show you know your customers? (e.g., newsletter or blog subscribers; number of users in a trial)*

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Have you run focus groups with actual users?

- *Are the outputs documented in a way that you can show potential investors? (e.g., quotes, pictures, or videos)*
- *Can you capture a piece of personal information (e.g., a phone number or email address) to indicate to investors that you have actual people interested in your product, and to demonstrate your willingness to get to know your customers*
- *Can you tell a specific story about a particular customer or potential user?*

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Do you know what your customer values, and what they're willing to actually pay for? Your marketing strategy (and how you talk about it to investors) needs to match this data. Don't assume they see the world as you do!

- *In what ways and for whom does sustainability innovation in your business create value?*
  - *What motivates them?*
  - *What do they fear most?*
  - *What is the reason they are buying this product? Savings? Image? Peer pressure?*

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In profiling your customer segment, know their take on sustainability and speak to their top priorities (cost, risk, benefit, etc.)

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## TELL PRODUCT STORIES CENTERED ON CUSTOMER NEEDS CHECKLIST

Are there customer segments who will pay more, or at least value, the externalities you provide? How can you validate that these buyers exist?

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Do you have testimonials from customers?

- *Are they specific and relevant?*
  - *Can you attribute them to real people or real companies?*
- 

Can you summarize your knowledge of your customers in a case study that illustrates—in words and with images—the value of your venture?

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Who can you involve in the development process (e.g., as an advisor, board member, discounted or free user, etc.) to give you credible and honest feedback?

- *How will you leverage this person's reputation and credibility?*
- 

Who will you eventually need to win over, and how can you get them involved early on in an iterative development process?

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## PITCH SUSTAINABILITY AS A SIDE DISH, NOT THE MAIN COURSE

Pushing sustainability can be a turn-off for investors who fear impact may come at the expense of financial returns. For typical investors, sustainability is simply not one of the high-ranking factors on their list of priorities.

**Our objective is return on investment—foremost there has to be an opportunity for high return. It just so happens that [investments in the food system have] a sustainability focus—but it’s not on the top of our diligence list.**

**—VC INVESTOR**

**Sustainability can be a tiebreaker, but it is not driving our investment decisions.**

**—STRATEGIC INVESTOR**

Even for impact investors, financial returns are often just as important as sustainability considerations, or impact.

**We do diligence for both financial and impact in parallel.**

**—IMPACT INVESTOR**

Yes, we are impact investors, but we’re also very clear about achieving market-rate returns. We have a minimum “floor” for impact and returns. We’re still looking for technologies that enable competitive advantage, as that helps promote the sustainability angle, whether transparency, or efficiency, etc. Successful [sustainability-oriented] companies need a differentiator, and it must be really integral to the business model. This is different from having sustainability for sustainability’s sake, like a foundation. Sustainability has to be tied to the business model.

**—IMPACT INVESTOR**

Successful sustainability-oriented entrepreneurs must therefore emphasize the economic value of their business in order to attract private sector capital. Even in domains that are highly relevant to sustainability, such as cleantech and foodtech/agtech, sustainability does not drive investment decisions. It remains a “nice to have,” and entrepreneurs need to make a business case and have market validation to attract capital.

Sustainability-oriented entrepreneurs need to know which sustainability metrics are relevant to their business, and be well versed in how to quantify their environmental and/or social impact at scale. For example, impact could be GHG emissions avoided, meals served, or gallons of water saved. Entrepreneurs need to translate these impact metrics into financial dollars-and vice versa.

**Within agriculture, all deals have a sustainability aspect because of resource intensity...we don’t look at sustainability metrics specifically, but sustainability benefits might align with growth opportunities such as using fewer chemicals, which is what people want, so there’s a business case here.**

**—CORPORATE STRATEGIC INVESTOR**



## CASE STUDY: BEYOND MEAT

**Beyond Meat** is a US producer of plant-protein based meat substitutes. The company's strong branding, clear vision and ability to rally their customers behind them has already led to commercial success. Since their conception in 2009, Beyond Meat has raised over \$183 million over four rounds, including investments by Bill Gates, Tyson Foods, The Humane Society of the United States, and Obvious Corporation.

Though Beyond Meat is clearly a sustainability-oriented company, the team has not emphasized the sustainability benefits with all their investors. In a **letter penned by CEO Ethan Brown**, Beyond Meat addresses why they

welcome Tyson Foods as an investor, despite the fact that Tyson's main revenue stream comes from selling meat. The two companies may appear to be at odds in terms of their ideals; however, they are able to find common ground in the fact that there is a growing demand for alternative protein.

Beyond Meat successfully pitched themselves as a compelling commercial opportunity for Tyson Foods. Now, as Beyond Meat continues to expand to hundreds of stores across the U.S., they are able to realize their impact goals because of the support from investors.



## PITCH SUSTAINABILITY AS A SIDE DISH, NOT THE MAIN COURSE CHECKLIST

Does your elevator pitch work without mentioning the sustainability benefits of your venture?

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How will the sustainability benefits of your business help increase profitability? Can you clearly articulate this to investors?

- *How can sustainability enhance your value proposition and/or product design?*
  - *Can sustainability increase word-of-mouth advertising or influence the decision making process?*
  - *Will being sustainability-oriented help you to attract more, or better, talent than your competitors?*
- 

What metrics can you provide to help convince investors that “sustainability” is a concrete notion to you and your business?

- *Can you quantify your value proposition in terms your customer actually cares about?*
  - *How can you create a story that they can share with their network to get you free marketing?*
- 

Can you provide validation that your customers will pay (more) for your product because of the sustainability orientation? Consider:

- *Scientific peer reviews of your product’s superiority over existing options*
  - *Blog posts, news stories, or Twitter posts recognizing the value you create for the public*
  - *Conducting your own market research among your customer base, such as surveys, focus groups, or A/B tests.*
  - *Accolades or certification from NGOs or public entities that support the work you do*
-



## PITCH SUSTAINABILITY AS A SIDE DISH, NOT THE MAIN COURSE CHECKLIST

Are there aspects of your product that have intrinsic value that will withstand volatile conditions and trends?

- *Consider security, whether cyber, energy, or food security, investors value this aspect highly because its remains valuable in all macroeconomic conditions*

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Look at the investment thesis of potential investors to get a sense of their sustainability-orientation. Do they mention sustainability-related concerns?

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Look at the portfolio companies of a potential investor. Do these companies have sustainability benefits? How do they talk about these benefits?

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Does sustainability help to differentiate you against your competition?

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## REDUCE THE CAPITAL-INTENSITY AND RISK OF YOUR VENTURE

Managing costs is critical to the success of any business. Costs in the sustainability-oriented domains, such as cleantech and even agriculture, can often be higher, even if they pay back over time through resource efficiency and risk mitigation. Therefore, the best entrepreneurs find ways to reduce the capital intensity of their ventures. For example, some entrepreneurs use already proven parts and infrastructure to make their technology solution a much more attractive proposition to investors.

**In the early-days of the technology valley of death, you need to figure out what you're going to do in-house versus what you're going to outsource. A startup can't do it all in-house, you would have to raise hundreds of millions, so you have to find the right partners and leverage existing infrastructure where possible, and be selective about partners, suppliers, and what you do in-house.**  
—ENTREPRENEUR/CEO

Getting early user feedback, for example through pilots or trials with farmers, or partnerships with existing technology providers, like equipment

manufacturers or input providers, can also be effective in reducing risk and ensuring user needs are met.

**We weren't sure about [a new application of a technology], so we used our network to do a pilot with farmers and measure their sign up rates. We ended up with 200% [retention (i.e., all the farmers signed up, as well as told their friends to sign up)]. This makes financial investors excited. And we held a workshop to determine what farmers want on a larger scale, and [began exploring how we could] integrate [the existing capabilities of the startup] with our capabilities to deliver this value. It was a win-win for everyone.**  
—CORPORATE STRATEGIC INVESTOR

A complementary strategy is to seek non-dilutive capital sources, such as grants from foundations or government, to reduce the capital intensity associated with piloting and prototyping. Then, once a capital investment is necessary, the entrepreneur is equipped to convince investors that their money will be put to good use, as the initial capital went to de-risking the business.

### USE CASE: XL HYBRIDS

Boston-based cleantech company **XL Hybrids** makes hybrid powertrains and other hybrid electric solutions for commercial vehicles. In 2014 they were recognized by Fast Company as one of the 50 most innovative companies of the year. To reduce their capital costs in the early days of the company, XL Hybrids leveraged a network of established manufacturers, like Knapheide, to get their equipment pre-approved for mass installation on new and existing commercial vehicle fleets. This strategy gave XL Hybrids two key advantages.

First, they did not have to build out a network of facilities with expensive technicians and equipment to do the uplifting, so they realized massive gains in capital costs. Second, because XL Hybrids did not invest time or money into building new facilities, they were not locked into a single geography and were immediately able to begin sales and gain instantaneous reach to customers through various channels. As a result, XL Hybrids quickly got sales rolling and gained more time (and money) to improve their product and grow their company.



## REDUCE THE CAPITAL-INTENSITY AND RISK OF YOUR VENTURE CHECKLIST

What kinds of off-the-shelf technologies or infrastructure can you use to decrease risk?

- *Note: off-the-shelf technologies can be especially helpful in the early stages of development to decrease risk during prototyping. You can always build your own custom solution later once you've proven the model.*
- *Are there contract manufacturing companies or labs that have already invested in expensive equipment, and sell as-a-service usage?*

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Can you partner with a proven (hardware) technology provider and focus on a smart software solution to overlay on the hardware?

- *Examples of this approach include Stem and SonnenBatterie.*

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How can you implement low-cost trials to get customer feedback and reduce technical and market risk of your product?

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Have you identified specific early users? How can you incentivize these users to work with your product and give you feedback?

- *Consider publicity, sustainability, and economic benefits.*

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What partnerships can you explore that will help you reduce perceived risk of investors?

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What types of non-dilutive capital can you seek out?

- *Government grants?*
- *Foundations?*

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Does your product have a high upfront cost, but a significantly higher lifetime value? How can you leverage this to lower upfront costs?

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Can you leverage sustainability benefits to decrease costs? (e.g., use waste as inputs; benefit from another company's need for positive PR)

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## BEWARE OF MACROECONOMIC FACTORS

There are numerous macroeconomic factors, such as commodity cycles, federal interest rates, international trade deals or agreements, and private company valuations, which play a significant role in determining the amount of private dollars available for venture investing. Investors in particular are dependent upon macroeconomic conditions to raise capital. Virtually all types of private capital, from venture capital, to family offices, to corporates, and even angel investors, are subject to federal interest rates, commodity cycles, and predominate private company valuations. Further, macroeconomic factors can impact industry dynamics, and therefore customer willingness to adopt and pay for, new technologies. It is critical for entrepreneurs to understand how these macroeconomic factors impact the pool of investors and customers relevant to their ventures. Timing is everything.

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**With agriculture it's more conservative and there's slower market adoption. To get traction [upstream], you have to spend most of your time understanding market adoption. What do farmers want to buy, and at what price. Also, commodity prices impact things—farmers are more or less likely to invest depending on market prices for corn and beans. People don't understand this.**

**—VENTURE CAPITALIST**

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In particular, many sustainability-oriented innovations involve alternatives to mainstream commodities such as corn, oil, soy, and natural gas, or they help drive efficiencies in the use of these commodities. Therefore, the competitiveness of business models can be highly dependent on commodity prices. Though price can be a differentiator in some cases, it may not be possible in verticals that are heavily subsidized such as fossil fuels and agriculture. Venture Capital investors, in particular, are likely to pull their funds from subsectors with falling commodity prices, as they perceive these areas to be highly risky.

Beyond the impact on investors, macroeconomic factors can also limit customer adoption. For example, farmers are extremely reliant on commodity prices. AgTech entrepreneurs who hope to acquire farmer customers therefore need to recognize the fundamental relationship between their customers and industry pricing. Trying to sell a new technology to a wheat farmer when the price of wheat is down, for whatever macroeconomic reason, can be a losing proposition.

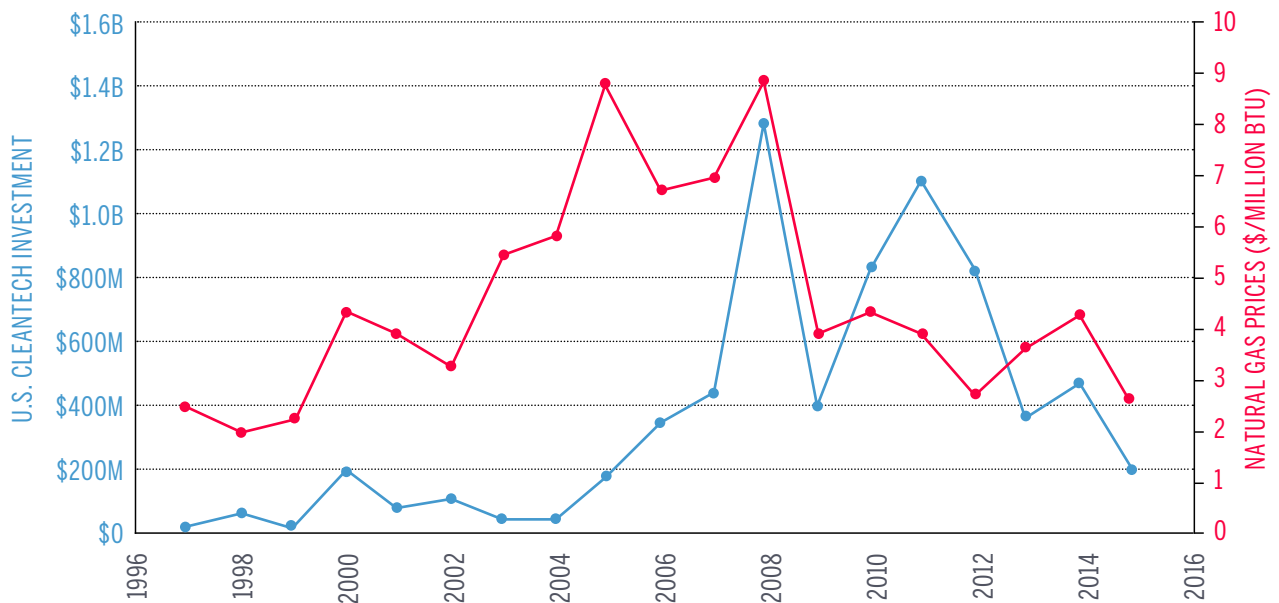


## CASE STUDY: THE RISE AND FALL OF VENTURE CAPITAL IN CLEANTECH

Venture capitalists invested billions of dollars into cleantech in the early 2000's. Cleantech during this time period illustrates how investors, and especially VCs, are sensitive to macro-economic trends. As natural gas supplies ramped up in the early 2000s, VCs began to pull their investments from cleantech. Then, as prices dropped between 2008 and 2012, and the recession hit, VC investments in cleantech plummeted. Similarly, VC investment in solar power technologies dropped significantly after Chinese government-backed companies flooded the market with excess supply.

After the spectacular crashes of startups in this space, such as Solyndra, Auto Fisker, and KiOR, very few venture capital dollars continued to flow into the cleantech sector. The idea of a startup successfully scaling to become a massive solar panel, electric vehicle, or bio-fuel manufacturer seemed attractive at first, but international macroeconomic factors and unexpectedly massive capital requirements made VCs think otherwise, and come to question the potential of cleantech.

### TOTAL U.S. CLEANTECH VC INVESTMENT AND NATURAL GAS PRICES



**Sources**

- Investment Data: Thomson Reuters, PwC, and Natural Venture Capital Association, 2015
- Natural Gas Data: U.S. Energy Information Administration [www.eia.gov/dnav/ng/hist/rngwhhdM.htm](http://www.eia.gov/dnav/ng/hist/rngwhhdM.htm)



## BEWARE OF MACROECONOMIC FACTORS CHECKLIST

Have you identified and documented relevant macroeconomic trends? How will you measure these factors, and their positive and/or negative impacts on your venture?

- *Consider commodity cycles and prices, federal interest rates, and private company valuations*
- *Consider natural systems, such as weather and climate change*
- *Consider trending technologies*
- *Consider pending regulations and controversial policies and initiatives*
- *Consider themes in mass media and shifts in consumer behavior*
- *Consider international trade deals, macro-policies (e.g., Clean Power Plan or a tax on Carbon), and global action plans (e.g., Cop21)*

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Can you leverage any of these trends to your advantage?

- *Consider technologies you could incorporate into your business*

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Are there ways to get free PR because of these trends?

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What sources do you have that can provide “boots on the ground” information?

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Which industry experts (or categories of experts) are most relevant to follow or connect with?

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How can you get domain experts involved with your venture?

- *Consider the potential to bring on experts as investors, board members, team members, technical advisors, or consultants*

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Do you have risk mitigation plans for cases where macroeconomic trends shift?

- *Consider changes in prices for inputs and derivatives*
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## BENEFIT FROM GOVERNMENT SUBSIDIES BUT DON'T DEPEND ON THEM

Government incentives can be like drugs: they stimulate and elevate, yet can come with unknown side effects and addiction issues. In energy and agriculture, they have created behemoth “fat cows” that struggle to adapt quickly to changing external pressures. New startups attempting to compete against these fat cows must be wary of taking similar “drugs” themselves. Yes, subsidies can help accelerate business development; however, when depended upon, subsidies become major sources of risk in the eyes of investors. Entrepreneurs must be aware of how all types of regulations will impact their business, including customer perceptions and ability to raise capital from investors.

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**We built our business from the beginning to not rely on incentives or subsidies, which is a big difference from our competitors who almost all are heavily subsidized by the government.**

**—ENTREPRENEUR/CEO**

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Command-and-control regulation, like mandated improvements in efficiency, performance, transparency, and emissions, can also advantage a sustainability-oriented entrepreneur. Fuel economy and renewable portfolio standards are prime examples in cleantech, and ingredient labeling (e.g., GMO) and sustainable sourcing commitments are examples in the food system. These forcing functions can create new opportunities for entrepreneurs, but they have to be captured at the right time. And, no matter how attractive or likely a subsidy or pending policy may be, the best entrepreneurs retain their independence from policy to avoid “stroke of the pen” risk to their business model from a policy change.

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**What is often critical is not so much the subsidies but their certainty. If you're trying to grow a company that takes 10 years and subsidies are only for two years it's detrimental. Certainty is all-important and still is.**

**—SERIAL ENTREPRENEUR AND INVESTOR**

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## CASE STUDY EXAMPLES

COMPANY	POLICY	COMPANY ACTION AND PROFIT/LOSS
<b>Indigo Ag</b> (Cambridge, MA)	GMO Labeling	Indigo Ag's timing was impeccable. Just as the GMO debate around state and federal labeling was picking up, they were able to raise millions to fund the development of bio-based alternative inputs.
<b>Ambri</b> (Cambridge, MA)	Energy Investment Tax Credits (ITCs), Storage Mandates	Ambri tried to go to market with grid-scale storage solutions before ITCs or Storage Mandates came out. The economics were not favorable and they ran into trouble. However, now, Massachusetts might pass a storage mandate and Ambri is well poised to take immediate advantage of this policy.
<b>Spoiler Alert</b> (Cambridge, MA)	Massachusetts Food Waste Ban	Spoiler Alert's B2B app provides a marketplace for companies who have, or want, excess food. They were able to take advantage of this policy and run a pilot of their technology with businesses in Massachusetts.
<b>OPower</b> (Arlington, TX)	Texas and Minnesota State Energy Standards c. 2007	OPower successfully lobbied for behavior-based energy efficiency standards. The new legislation gave them a seat at the table with utilities and regulators, and helped them acquire customers and set up pilots.



## BENEFIT FROM GOVERNMENT SUBSIDIES BUT DON'T DEPEND ON THEM CHECKLIST

What types of grants or funding can you apply for to help you post-pone the need to dilute your company?

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Do your 5-year financial cash flows look solid with and without government subsidies?

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What changing regulatory dynamics will have an impact on your business?

- *Do you have contingency plans in place?*
  - *Consider impacts on your suppliers, potential investors, customers*
- 

What changing regulatory dynamics will create opportunities for your venture?

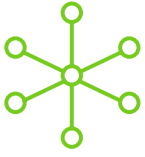
- *Consider challenges that may occur for your competition*
- 

What changing regulatory dynamics will create challenges for your venture?

- *Are regulations in place, coming soon, or likely to pass that will impact your customers? Your suppliers?*
  - *What regulations will you need to meet to offer a viable solution?*
  - *Will regulations create new incentives or markets, or force customers to change habits?*
  - *What is the timeframe of the relevant regulations that may impact your market?*
- 

Are there ways that you, or your extended team, can get involved in influencing macro-economic factors?

- *Are there lobbying initiatives you should support?*
  - *Are there petitions or campaigns you can support?*
  - *Are there controversial issues for which you can offer a solution?*
-



## GET INVOLVED IN THE ECOSYSTEM

Sustainability-oriented entrepreneurs must get involved with the ecosystem to connect with potential employees, board members, and investors. Proactive entrepreneurs attend conferences, workshops, and industry events to meet and connect with the key enablers of their space well ahead of the time they need their services or money. Sustainability-oriented ventures can enjoy the help and support of groups aligned with their social mission, but only if they are in touch with them. Accelerators, incubators, and co-working spaces can also help entrepreneurs build their professional networks and connect with other entrepreneurs who may be experiencing similar challenges. This type of pro-activity in the ecosystem helps entrepreneurs to obtain champion supporters in investment firms, corporate companies, and most importantly, with customer bases that are essential to securing funding and boosting sales.

They say it's all about being in the right place at the right time... well you have to be there.

—ENTREPRENEUR/CEO

I try to be a real resource to entrepreneurs. This helps me build lots of relationships...For example, I mentor a lot of entrepreneurs that I'm not currently investing in. Then, when it comes time for a raise, we're already comfortable with each other. We already trust each other.

—VENTURE CAPITALIST

Entrepreneurship is a team sport: it takes a lot of people. The entrepreneur needs to be part of the network and play in the ecosystem. They need to be nice people. If somebody writes to them they should write back and say thank you. If they are looking to hire somebody, they have to know whom to call. If they are raising money, they will want someone who knows them beforehand since that means a lot. If they want an introduction to a customer, they will want to know someone beforehand. If they want the right lawyer or accountant, they have to know the ecosystem and engage early. Getting to know people through events, competitions, mentor networks and incubators is important.

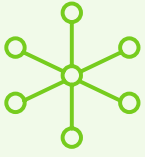
—ANGEL INVESTOR

### CASE STUDY: SPOILER ALERT

**Spoiler Alert**, founded by Emily Malina and Ricky Ashenfelter in 2015, is tackling the global food waste problem through their software platform that helps businesses manage excess food. The Spoiler Alert team has taken full advantage of both the entrepreneurship ecosystem at MIT, where the founders met and started the company, as well as in the greater Boston area. Here are a few examples:

- Gained leading experts in food waste from the Harvard Food Law and Policy Clinic as mentors

- Pitched at the MIT VC and Innovation Conference
- Utilized co-working space and legal counsel through the Martin Trust Center for Entrepreneurship
- Built out pilot members through participation in the Hack Urban Food Hackathon and the Startup Showcase at Slow Money Boston
- Won MassChallenge competition in 2015
- Joined Spring 2016 cohort of accelerator Techstars (Boston)



## GET INVOLVED IN THE ECOSYSTEM CHECKLIST

What conferences are potential investors going to?

- *Can you demo or pitch at these conferences to get in for free?*
- *Consider the location of the conference, and what other networking opportunities you may be able to leverage in that location (e.g., other startups, corporates, or events)*

Have you identified potential investors, and done your background research on them?

- *What topics are of mutual interest to you and them?*
- *How can you talk to them about relevant subjects unrelated to raising capital?*

When do you think you'll need to raise money? How can you talk to 5 (or 10) potential investors before then?

Who do you know (e.g., on LinkedIn) that can get you a warm intro to a potential investor?

Is there an accelerator or incubator with relevant expertise and connections?

- *Consider location, operating team's expertise, previous companies, funding terms, and investors involved*

How can you strategically leverage advisory board positions to build your network of advisors? Customers? Investors? Partners? Industry experts?

What sustainability-oriented events can you attend? Publications can you advertise in? News can you leverage?

Is there an accelerator, incubator, or co-working space you can join to enhance your network?

- *Consider location, reputation of the program, caliber of the advisors and other entrepreneurs involved, and investment terms and time commitments (especially with accelerators)*



## ABOUT THE SUSTAINABILITY INITIATIVE AT MIT SLOAN

The mission of the Sustainability Initiative at MIT Sloan is to build a community of innovators for sustainability with MIT students and alumni, faculty and researchers, and allies in business, government, nonprofit, and hybrid organizations. Together, we encourage innovation in products and services, management practices, business models, and supporting market infrastructures that make effective, sustainable use of natural resources and that advance human welfare.

The Sustainability Initiative at MIT Sloan started in 2006 with the creation of the Laboratory for Sustainable Business action learning course (S-Lab). Today the Initiative comprises a broad portfolio of people, programs, and research projects, with four strategic objectives:

- Engage students with rigorous courses and programming related to sustainability and an in-depth Sustainability Certificate for those who wish to become leaders in the field
- Fuel alumni innovation by offering professional development and lifelong learning opportunities, including networking, mentoring, and executive education
- Change the conversation in industry and policy by amplifying the impact of our faculty's research on sustainability, and by putting research-based management tools in practitioners' hands
- Build an institution with an international reputation for bringing value to business and society across organizations, markets, and communities

The Sustainability Initiative underscores MIT's commitment to action that has meaningful global impact, and advances MIT Sloan's mission: to develop principled, innovative leaders who improve the world and to generate ideas that advance management practice.

To learn more, visit our website: [mitsloan.mit.edu/sustainability](https://mitsloan.mit.edu/sustainability)

## ABOUT THE AUTHORS



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Sarah Nolet is the founder and CEO of **AgThentic**, a boutique consultancy focused on food system innovation. AgThentic provides business development support for startups, investors, and established companies, with the goal of building a robust food and agriculture innovation ecosystem. Sarah holds a Masters in System Design and Management from MIT, where she was President of the **MIT Food and Agriculture Club**, launched the MIT-Rabobank Food and Agribusiness Innovation Prize, and was Managing Director of the **MIT Sustainability Summit** in 2016. Prior to this, Sarah was a Product Manager and Systems Engineer at Charles River Analytics in Boston. Sarah received a B.S. in both Computer Science and Human Factors Engineering from Tufts University, where she was a three-sport varsity athlete and All-American soccer player.



### **JASON JAY**

Jason Jay is a Senior Lecturer at the MIT Sloan School of Management and Director of the **Sustainability Initiative at MIT Sloan**. He teaches courses on leadership, strategy, and innovation for sustainable business. Jason's own research focuses on how people navigate the tensions inherent in the quest for sustainability, as they simultaneously pursue their own self-interest and the flourishing of human and other life. With Gabriel Grant, he is the author of the forthcoming book, *Breaking Through Gridlock: The Power of Conversation in a Polarized World*. Prior to MIT, Jay ran an Internet startup, traveled around the world, taught kindergarten in a progressive preschool, and worked as a consultant with Dialogos International, where he consulted on leadership development and organizational change for major international corporations and NGOs including BP, the World Bank, and the Instituto Libertad y Democracia. Jay holds an AB in psychology and a Master's in education from Harvard University, and a PhD in Organization Studies from the MIT Sloan School of Management.



### **SERGIO GONZALEZ**

Sergio is a corporate strategy associate at Flex, a global sketch-to-scale supply chain solutions company. He supports the Flex energy business with growth strategy and corporate development. He graduated from Loyola Marymount University with a bachelors degree in Civil Engineering and from MIT with a masters degree in Technology and Policy. His masters thesis identified the importance of “cleantech confluences” – intersecting best practices among entrepreneurs, investors, and policy makers.

## ADDITIONAL RESOURCES

The research that informed this guide is part of an ongoing stream of work on the topic of Sustainability-Oriented Innovation (SOI). Check out the following resources for more work by our team on SOI:

[Accelerating the Theory and Practice of Sustainability-Oriented Innovation](#)  
Concept Paper

[4 blog-post Sloan Management Review blog series](#)

[How Agribusiness Can Avoid the Mistakes of Cleantech](#)  
Stanford Social Innovation Review

[Accelerating Sustainability-Oriented Innovations in Agribusiness: A Set of Proposed Best Practices for Corporations, Investors, and Entrepreneurs](#)

[On Creating Cleantech Confluences: Best Practices and Partnerships to Mobilize Multiple Sources of Private Capital into Early-Stage Clean Technologies](#)

[Email Sarah](#) to request a copy of this master's thesis

[Email Sergio](#) to request a copy of this master's thesis



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