NEW ENERGY NEXUS PRESENTS

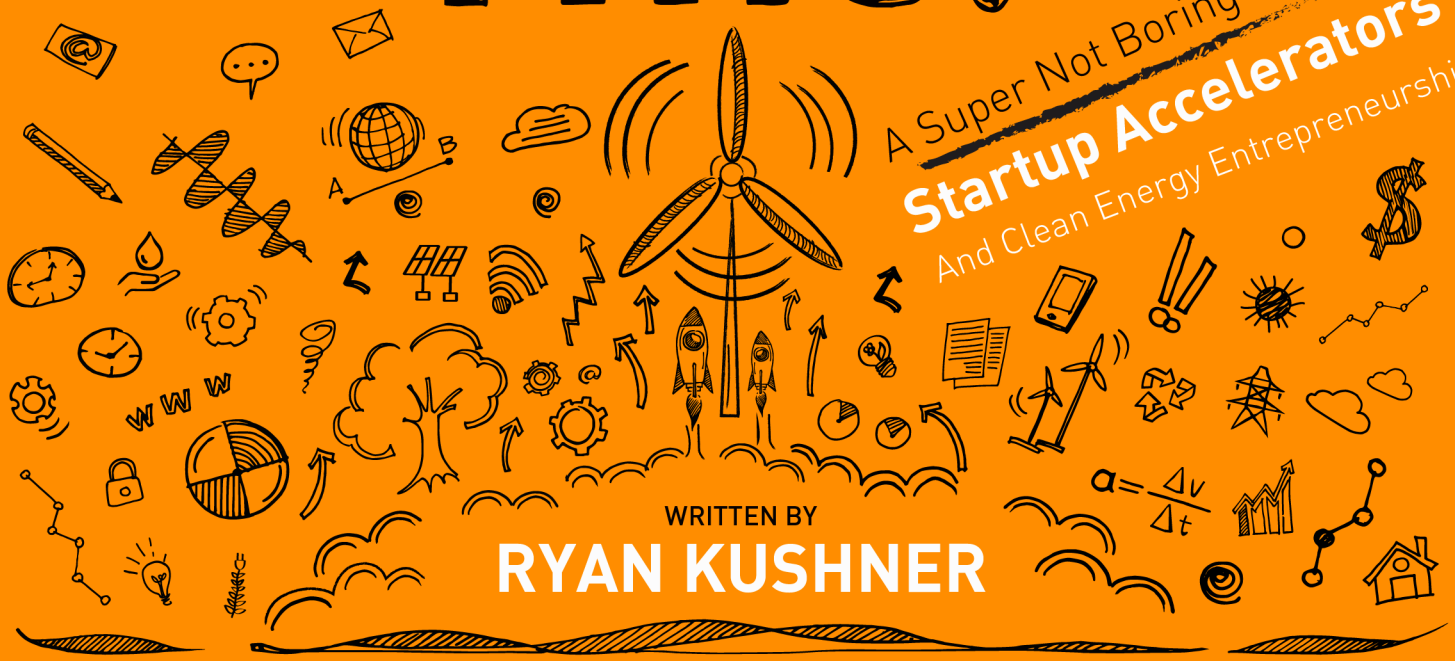
ACCELERATE THIS!

Foreword by Danny Kennedy

A Super Not Boring Guide To

Startup Accelerators

And Clean Energy Entrepreneurship



WRITTEN BY

RYAN KUSHNER

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Accelerate This!
A super Not Boring Guide to Startup Accelerators and Clean Energy Entrepreneurship

A New Energy Nexus Publication

Written by Ryan Kushner
Foreword by Danny Kennedy

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DEDICATION

To: Ken Saro-Wiwa Jr.

Dedicated to KSW Jr. – a man who spent his life in the shadow of a saint, Ken Saro-Wiwa Sr., and ended up dying of a broken heart. His father was killed because he dared to oppose the power of fossil fuel interests.

After a career of fighting, KSW Jr. spent his last couple of years trying to incubate entrepreneurs to bring clean energy to Nigeria. He strived to build resourceful accelerator spaces which could fast-track access to clean energy for all in the Niger Delta.

THANKS!

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FOREWORD BY DANNY KENNEDY

DANNY KENNEDY

Managing Director
@ the California Clean Energy Fund

Being an entrepreneur can be lonely. Sometimes you think you're crazy, trying to do something new. Something different. Something impossible. Something no one has ever done before. Getting to "no" on most days: No money. No takers. No understanding.

Being in an accelerator makes the work less lonely. It lets you see that someone else, maybe the person at the desk next to you, is crazier than you! It lets you see other people doing new, different, or "impossible" things. It gets you to "yes": people who believe in you and your idea. Maybe someone who will try it. Or partner with you. Or buy your product. Being in an accelerator doesn't solve every problem. And it doesn't work for everyone. But it can help by introducing entrepreneurs to resources, investors, mentors. To people who have ideas like yours. To programs that will train you on building a business. And most importantly, to friends with which to share the journey.

Being an energy entrepreneur is even harder than other spaces. We're insurgents competing for the commanding heights of the economy, against incumbents who have amassed more wealth and power than any companies in history. We aim to disrupt royal families, the oil industry, and Old King Coal... all in a few decades.

Rebels rarely succeed by going solo. The fight is too hard. The road too long. The friction too strong. Like little turtles hatching in the sand on a beach, there are too many gulls in the sky and too many sharks in the water. Our companies need to be incubated, iterated, and supported to emerge into the big blue ocean of energy markets.

That's why we're intent on building more accelerators and incubators: so that more entrepreneurs can succeed. So that more creative collisions can occur. So that more startups can find their first customer, their first investor, their first hire. That's what happens in the co-working spaces, labs, and innovation accelerators around the world.

This book helps to simplify and explain the accelerator process.

And it makes it fun. We are intent on saving the world by spreading clean energy companies everywhere. And we want to do it in a kinder, more inclusive, and more cooperative than competitive way. This is not dog-eat-dog. It is a happy pack of hackers finding a path for us and others to tread. Together we will all go further. Alone you might go faster. But it won't be as fun, nor as fruitful.

We know that we only have a decade or two at most to avert runaway climate change. To do that, we need hundreds of thousands of entrepreneurs creating the neo-retailers of the electricity sector, the shared, electric, autonomous and networked mobility service companies, the distributed service organizations to match the potential of the distributed renewable energy we can now build. Banding together. Pooling resources. Connecting to others to increase the rate of innovation. This is why we are building the world's largest network of energy incubators.

So please use this guide. We hope it will make the work of supporting entrepreneurs easier. Whether you are a seasoned pro or just starting up your own startup to start up startups, there's something in here to make the work better! Speedwell. Multiply. Build more safe spaces for all to shine on!

FOREWORD BY DANNY KENNEDY

NEW ENERGY NEXUS

HENDRIK TIESINGA

Co-Founder & Program Director
@ New Energy Nexus

More than a billion people around the world are without electricity. Fossil fuels for electricity, heat, and mobility are the main sources of CO2 emissions causing climate change. The battle for these fossil fuels is a leading source of geopolitical tensions and conflict around the world. Clean, distributed energy has the potential to solve these three wickedly intertwined challenges – all the while generating millions of jobs and trillions in wealth.

There are many ways to support the transition to a clean energy economy: protesting, campaigning, advocating for policy change, R&D programs – these are all incredibly valid and needed approaches. The approach New Energy Nexus focuses on is innovation. Creating a world that is 100% renewably powered for all humanity will require uncountable innovations on many levels, in various sectors, and across many countries. To deploy clean energy everywhere, we need new business models, new finance models, new technologies, and new international partnerships and joint ventures. In our view, entrepreneurs are one of the primary agents that produce this type of innovation. To transform the entire world's energy systems, we need an army of them.

Our question at New Energy Nexus is:

How can we do this at scale?

Entrepreneurs need a good ecosystem to thrive –

legal and institutional frameworks that enable them, education and skills that empower them, investors who believe in them, and customers that buy their products and services.

Accelerators are the spiders in the web of startup ecosystems,

moving around, connecting different strands of the web, and creating a cohesive and strong framework. This is why we founded New Energy Nexus: to accelerate the accelerators and to infuse energy, ideas, resources, connections, and collaboration into the global energy startup ecosystem.

THIS BOOK IS A COLLABORATION

HENDRIK TIESINGA

Co-Founder & Program Director
@ New Energy Nexus

New Energy Nexus started in 2016, with a kickoff at the first global summit of clean energy accelerators during the Asia Clean Energy Forum in Manila, with support from our partners at the Asian Development Bank. Quickly thereafter, we started collaborating with Incubate Energy in the US, the World Bank's Climate Innovation Centers, and the World Wide Fund for Nature's Climate Solver Network. Through these partnerships, Nexus has grown to include more than 70 accelerators, all over the world.

In 2017, we held the Accelerate Energy Summit in Shanghai, and one of our key goals was to create an engaging, useful capture of best practices from the accelerators. We organized this in a "book sprint" format, where we asked our accelerator members to interview each other, take notes, and become co-creators for the seed content for this book.

I asked one of our great allies and facilitators, Ryan Kushner, to come to Shanghai, facilitate the book sprint, add his experience and additional research, and then put this book together. Thus, the "we" in this book is the community of accelerators in New Energy Nexus, and the "I" is Ryan's voice, except where noted. You will also see data and charts based on information we collected. That data comprises 32 clean energy accelerators from the US, Asia, Africa, Middle East, Europe, India, and Australia.

We hope you enjoy the book and find it useful!

THIS BOOK IS A COLLABORATION

WHO AM I? (AKA, WHY LISTEN TO ME?)

Hi! I'm Ryan Kushner. Life takes you in weird directions. After doing everything from editing feature films to helping plan a base on the moon, I wound up in the craaaazy world of these things called startup accelerator programs. I've been lucky to experience all sides of accelerators: I was in one, I worked for several, and now I now have designed and created a whole bunch.

My journey began when a friend emailed me a job posting for Elemental Excelerator, an amazing, best-in-class cleantech accelerator program based in Honolulu and Palo Alto. It was a fabulous opportunity, so I did the most obvious thing: I threw it straight in the trash. Luckily, my brilliant other half also saw it, sat me down over dinner, and made me reconsider.

Three years later, my journey with Elemental Excelerator had taken me around the world, and I had done everything from learning about energy disaggregation while hiking across the majestic lava fields of Hawaii to leading a room full of executives through a tournament-style version of rock, paper, scissors inside a retired power plant in Portugal. I got to work with hundreds and hundreds of startups and founders, coach them on everything from business models to strategy and communications, structure deals with the world's largest and fastest-moving electrical utilities, and learn what makes a top-class accelerator program tick.

My last project at Elemental Excelerator was a collaboration with someone I met at Burning Man.

True story: he showed up to a workshop I was leading called "Architecting the Future: Ideas To Action." He was Hendrik Tiesinga, creator of New Energy Nexus, who has become a great partner, collaborator, and lifelong friend. His concept was to pair the world's sharpest cleantech startups with the world's fastest-moving electrical utilities in a unique **customer-driven accelerator**. That idea became Free Electrons, and we helped knit utilities from Japan, Singapore, Australia, Ireland, Germany, Ireland, and Portugal with 12 cleantech startups from around the globe, unlocking about $10M in investments and pilots. More about Free Electrons later in the book.

I had now been on all sides of the wacky world of accelerators. I was advising startups, consulting with amazing programs like the Center for Carbon Removal and Schmidt Marine Technology Partners, working on a blockchain renewable energy infrastructure fund, and I was wondering what was next.

How could I leverage my accelerator experience to create positive change?

Again, Hendrik comes in with the big idea: let's capture the insights from his global community of cleantech accelerators, throw in my experience, and share them with the world in a book. You're holding the result of that idea right now. Thanks, Hendrik!

But above all, I am one thing: a sustainability nut. While earning my MBA at Presidio Graduate School, I was shocked to learn that there is a giant, killer asteroid hurtling toward Earth, destined to cause massive destruction, disruption, and suffering. The odd thing is, we have the power to stop it, but we're kind of just chilling, watching it bear down on us while we eat corn nuts. Even stranger, doing so will create massive amounts of wealth and disempower many of the self-serving "oil-igarchies" on Earth. This particular asteroid is named "climate change." My career has been driven by finding what Buckminster Fuller calls trimtabs – points of leverage which produce outsized results. If you're going to work, why not use your 80,000 hours (the average length of a career) to help humanity in the process, you know? Climate change is my issue (it's yours too), cleantech is my leverage point, and accelerators are my trimtab. That's why I care, why I love accelerators, and why I'm honored to write this book and spend time with **YOU**!

HACK THIS BOOK

We recommend you read this book twice.

Flip through it once to get a general picture of what's in it. Then go through again, cut it up, hack it, and make it useful to you. Or just go right to the section that's relevant to your inquiry. You do you.

This book is about sharing best practices and demystifying some things:

- What are accelerators and incubators? We will define the terms, and tell you what makes them tick.
- Are they "worth it" for companies? We'll help you parse the issues to help you make an informed decision.
- Are they good, writ large, for society?
- If you're running an accelerator or thinking of starting a new one, what can you learn from other programs to be more effective and have more impact?
- How can you be more customer-driven for better results?

INTRODUCTION

Accelerator (noun) ik-ˈse-lə-ˌrā-tər:

One of those co-working places.

Oh, wait, actually it's a training program. They give you money. Or they don't. Well, sometimes, but they take some of your company. Or they don't. Wait, which one of these is the right answer?

Amazingly, these are all right answers. Accelerators can be confusing, intimidating, awesome... or not. I've personally experienced the entire roller coaster, and we're excited to cut through all the confusion for you, so you can:

1. Decide if you want to join a program, and
2. Create a program (or run yours more effectively).

No matter who you are, or what your starting point is, this book was written with YOU in mind.

You're going see a lot of examples from renewable energy/cleantech-focused accelerators from around the world in this book. Why is there is an emphasis on energy and cleantech? Cleantech broadly, and renewable energy specifically, is the focus of New Energy Nexus, a deep pool of experience for me, and is a great test case for what accelerators can, and can't, do. Having an industry focus will help to put some meat on the bones as we go into detail about programs, how they work, and what makes them tick. However, energy is a very small part – only about 3% – of the startup space. So, for this book, which is generally about sharing best practices and defining what an accelerator is, we've also made sure to include insights and examples from the world's top programs in all manner of fields and geographies.

Entrepreneurs

Maybe you're thinking about applying to an accelerator or incubator, or are just curious about them. Great! But what are they?! What's an accelerator versus an incubator? And, perhaps the most common question we get: Are they worth your time and equity? (Aka, Do they work?) We'll help you sort through these questions, and give you the whole shebang about accelerators so you can understand them from the inside out, top down, bottom up... and, most importantly, help you decide if you should take the leap.

Accelerators

Are you running a program right now, or thinking of starting one? What's the best way to do that?! What are the established best practices for outreach, due diligence, business models, etc.? We've culled and curated examples from some of the best programs in the world, in various industries and geographies, so you can optimize your program, serve your companies better, and, most importantly, create more positive impact.

Buckle up.
It's time to accelerate.

01

SO, WHAT *IS* AN ACCELERATOR ?!

Lest we get too carried away, let's say very clearly what accelerators are and why they exist. Accelerators are organizations (for-profit and nonprofit) that support companies through specialized programs designed to encourage growth. Like the name says, they accelerate companies, (theoretically) getting them further, faster.

WHAT'S AN ACCELERATOR VERSUS AN INCUBATOR?

Don't know the difference? Welcome to the club of pretty much everybody. Even people who run programs are still often unclear. Why? These are not legal definitions. They are the results of branding, convention, and whatever sounds snazzy at the time.

But for our purposes, and for the sake of the field, having some definition and taxonomy around these terms is helpful and functional. We think that Ian Hathaway's work and summary in the March 2016 *Harvard Business Review* article "What Startup Accelerators Really Do" has the clearest thinking on the matter, so we're going to follow his lead.

Parsing The Fluid Categories of Incubators, Angels/VCs, and Accelerators

	INCUBATORS	ANGELS AND VCs	ACCELERATORS
Duration	Until you outgrow, die or annoy	Ongoing	3 months to 1 year
Cohorts	No	No	Yes
Business Model	Rent; other service	Investment	Investment; fees; other outside funding
Selection	Non-competitive	Competitive; ongoing	Competitive; cyclical
Venture Stage	Early	Early or late	Early or late
Education	Ad hoc, optional classes	None	Intensive
Mentorship	Ad hoc	As needed; varies widely	Usually intensive
Venture Location	On-site	Off-site	Generally on-site for training weeks

Source: *I. Hathaway (2016),* "What Startup Accelerators Really Do," *© HBR.org, adapted from S. Cohen (2013),* "What Do Accelerators Do? Insights from Incubators and Angels."

So here are our working definitions:

An **accelerator** is a program that accepts companies (or ideas or people) in batches – usually called classes or cohorts. It traditionally culminates in a demo day where companies pitch themselves to potential customers, partners, investors, and employees. There is generally a cash-for-equity swap, but not all the time. The training is intensive, and the program invests a lot of time in the companies. Because of this and the need for there to be some "there there" in terms of an idea/prototype/project, companies tend to be later stage.

An **incubator** is generally for companies at an earlier stage, and it accepts them in a continuous flow, space/capacity allowing. Incubators act a lot like co-working spaces by charging for desk space (and not doing equity deals), but they are more invested in their companies' success. They offer things like skills training, connections to mentors and investors, and an aligned community. A lot of the value is just being in the space, learning from peers and dipping your toes into events and networks.

BLURRY DEFINITIONS, BUT THEY ARE ALL "PROGRAMS"

Are there exceptions and programs that blur the line? Oh, yes – and those can be some of the most interesting cases. Some incubators organize themselves into cohorts; some accelerators have no demo day, and so on. I'm personally guilty of blurring these lines by designing accelerator programs that have rolling admissions – whaaat?!

The accelerator space is ever evolving and innovates just as rapidly as the startups themselves do – and this is good: we want and need this experimentation. It does, however, make it hard to pin down strict definitions, but for the purposes of this book all of these fascinating entities will be referred to simply as "programs."

PRIZES

Accelerators and incubators aren't the only kinds of programs that help startups. Prize programs have a unique model, which generally awards one or a select group of companies some combination of money/investment, services, and a nice PR boost. Many prizes are dedicated to some kind of impact/mission, to create awareness, or kick-start an industry.

XPRIZE®

Perhaps the best known prize is XPrize, which runs a huge variety of prize competitions, each one sponsored by a company or foundation. Each competition is a challenge to solve a vexing issue. The Carbon XPrize, for example, will award $20M to convert CO2 emissions into products; the IBM Watson prize hopes to demonstrate how humans can collaborate with AI; the Global Learning prize aims to develop open source and scalable software that will enable children in developing countries to teach themselves basic math and literacy. The winning team gets a cash prize and a wonderful amount of attention.

BUCKMINSTER FULLER INSTITUTE

Another notable prize is the Buckminster Fuller Challenge. Called "socially-responsible design's highest award," it has been awarding $100K every year for the last decade to the most "comprehensive" solution it can find. It uses a systems-thinking lens to unearth and support Bucky-esque projects like the Savory Institute (alternative animal grazing that sequesters carbon), the Living Building Challenge (like a super-charged LEED, certifying buildings for sustainability), and Green Wave (vertical ocean farming systems).

Internal Acceleration. Three Fascinating Examples:
Idealab, OtherLab & Google/Alphabet's X

There's a whole other model out there that flips the traditional accelerator model on its head. Rather than looking for companies out in the world, ideas are sourced, vetted, and accelerated from inside the organization itself. This works well for highly open and creative teams, and not so well for others (I'm lookin' at you, large corporates). Here are three we find fascinating:

Idealab: Idealab is considered by some to be the original accelerator program. Many of the ideas come from Bill Gross, founder and chairman, then Idealab provides the first round of capital, recruits a CEO and team, and works with the company to ramp up the business. Does it work? Over a 20-year span, Idealab has started more than 150 companies, created more than 10,000 jobs, and has had more than 45 successful IPOs and acquisitions, including seven unicorns (companies valued at $1B or more).

Otherlab: Hidden away in an old pipe organ factory in San Francisco's Mission District is Saul Griffith's Willy Wonka-esque idea shop. The day I was shown around by Leila Madrone of Sunfolding (which was accelerated by both Otherlab and Y Combinator), I saw everything from alternative air conditioning systems to a robot that hangs drywall. Like Idealab, the team creates and vets ideas, then staffs them.

LEILA MADRONE

Founder
@ Sunfolding, Accelerated at Otherlab & Y Combinator

"The founder of Otherlab, Saul Griffith, has so much energy, and he's never afraid of telling the truth. That's the main thing you need in a startup: somebody who's never afraid of telling the truth. Why? You don't want to waste time. It takes a LONG time to build stuff. From beginning to end, it's going to take maybe 10 years of your life, so make sure you care enough about the solution.

Saul co-creates ideas and then he figures out how to get people and resources together to make change happen, and then he doesn't interfere with what we're doing, except for when we pull him in. You don't necessarily always want a person who's not involved in your company every day giving direction to your company, and he understands that really deeply."

X (part of Alphabet/Google): One day in fall 2017, I made my way past the super cute self-driving cars and multi-colored bikes of Google's Mountain View campus to get a look at "X, the Moonshot Factory." Much like the other two labs, it incubates companies internally.

At the beginning of the funnel are a large number of big, audacious ideas, from energy to transportation to health. Projects are then filtered for feasibility, impact and more. Once a project makes it through, it's staffed, prototyped, and evaluated. Those self-driving cars I saw on the way into the building? They came through the lab.

Some detractors point to failures, but the whole concept is to create black swans that have an outsized positive effect on society, and Alphabet. "X is perhaps the only enterprise on the planet where regular investigation into the absurd is not just permitted but encouraged, and even required," according to a great November 2017 article in the Atlantic, "Google X and the Science of Creativity."

YES, BUT WHY? (MONEY AND IMPACT, IN VARIOUS PROPORTIONS)

Accelerators have their own goals and drivers. Some accelerators exist to make money for the investors or sponsors of the program. Others exist purely for social value or to solve a problem, but most are a blend of the two in some proportion. Some of the purely profit-focused programs we know still emphasize their social value, while some impact-focused programs are nonetheless heavily economically driven. In short: money and impact, and it's usually a blend of the two.

Y Combinator, for example, is a for-profit accelerator that seeks maximum returns on their investments in companies. They take 7% of equity in a company (through a Simple Agreement for Future Equity [SAFE], which Y Combinator helped invent), in exchange for $120K cash for the company. Y Combinator has become the household, aspirational name in the space... and for good reason. Their training, network of mentors of investors, and, above all, track record are among the strongest in the world. They have been doing more or less the same thing since 2005, funding over 1,580 companies (see the full list on Y Combinator's website) and nearly 3,700 founders. Their graduates have gone on to raise more than $13B collectively with an overall valuation of $85B, with epic successes such as Airbnb and Dropbox. So, yes, YC is a massive, impressive economic engine – and they also accept nonprofits that tackle issues such as health care, education, and philanthropy.

Y COMBINATOR WINTER 2018

1,585	Startups
3,700	Founders
15	YC alum valued at over $1B
74	YC alum valued at over $100M

YC W18 CATEGORIES

32.3%	B2B	2.1%	Agriculture
26.8%	Consumer	2.1%	Government
18.3%	Bio/Healthcare	2.1%	Real Estate/ Construction
4.9%	Education		
4.9%	Fintech	1.4%	Aerospace
3.5%	Blockchain	1.4%	Industrial

Source: Courtesy of Y Combinator.

YC W18 STATS

141	Companies
23	Countries
35%	International
27%	Cos w/ Female Founder
13%	Cos w/ Black/Latinx Founder

SOME Y COMBINATOR COMPANIES:

airbnb, Dropbox, stripe, MachineZone, instacart, Zenefits, reddit, Quora, coinbase, DoorDash, docker, Ginkgo Bioworks (The Organism Company), Gusto, twitch, Cruise

Artwork by Shannon Hood

Other programs focus on impact. They design their programs to address social, economic, or ecological challenges. These programs are mostly nonprofits, but not exclusively. Many programs are funded by cities or governmental organizations, in order to spur economic growth. Some programs advance specific goals, such as Imagine H20, which uses its accelerators as a way to address water challenges, or Rock Health, which is dedicated to advancements in health care.

However, even if a program is a nonprofit and is impact-first, that certainly doesn't mean that it isn't financially driven. Elemental Excelerator, for example, the Honolulu and Palo Alto–based cleantech accelerator program is a nonprofit, but it is highly driven to find and invest in scalable, growth-oriented companies. It scours the world for companies, runs an epic due diligence process, and takes 1%–6% of an equity stake in a company in exchange for $75K to $1M, depending on the maturity of the company. While this might seem counterintuitive for a nonprofit, the justification is threefold:

1

Maximizing impact

The more successful a company is, the more it displaces fossil fuels, and the more it serves the mission of the organization.

2

Proving their investment model

By investing in companies and getting returns/making money, EEx is able to prove that investing in cleantech companies, even in their traditional "valleys of death" (aka stages at which companies tend to fail), is a smart investment. This helps bring other investors into the space and expands the total capital pool, which also furthers their mission.

3

Keeping the lights on

EEx has a P+L (profit and loss statement) just like any other company, with a big staff and big operating costs. When a portfolio company has a "financial event" (getting sold or acquired), EEx's equity in the company turns into cash, and that money gets returned to the program in a structure called an "evergreen fund." This keeps the program going, and the impact growing.

To make things even more complex on the for-profit/nonprofit front, EEx also has a for-profit follow-on fund intended to support companies after they exit the program. This kind of structure is very common, and for good reason: the EEx portfolio companies are highly vetted and de-risked after going through due diligence and the intensive program, and good bets for investors.

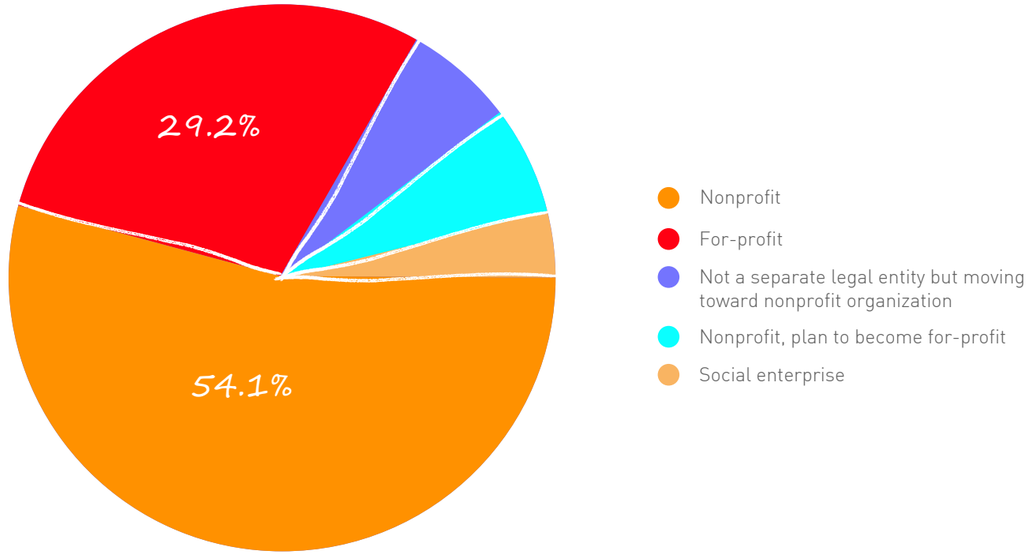
Why are there so many structures? Each program is a specialized tool, designed to serve its objectives, geographies, and industry, so there are as many structures as there are startup ecosystems and funders.

New Energy Nexus community of clean energy accelerators represents this diversity. Some, like Rockstart, are a clean energy program with a for-profit structure. Others, like the World Bank's Climate Innovation Centers (in Ghana, the Caribbean, Ethiopia, Kenya, Morocco, South Africa, Vietnam, and beyond) are a network of mission-first nonprofits. Overall, about 80% are nonprofits, which is a little higher than the 60% global average.

Each program is a unique snowflake, designed for specific purposes.

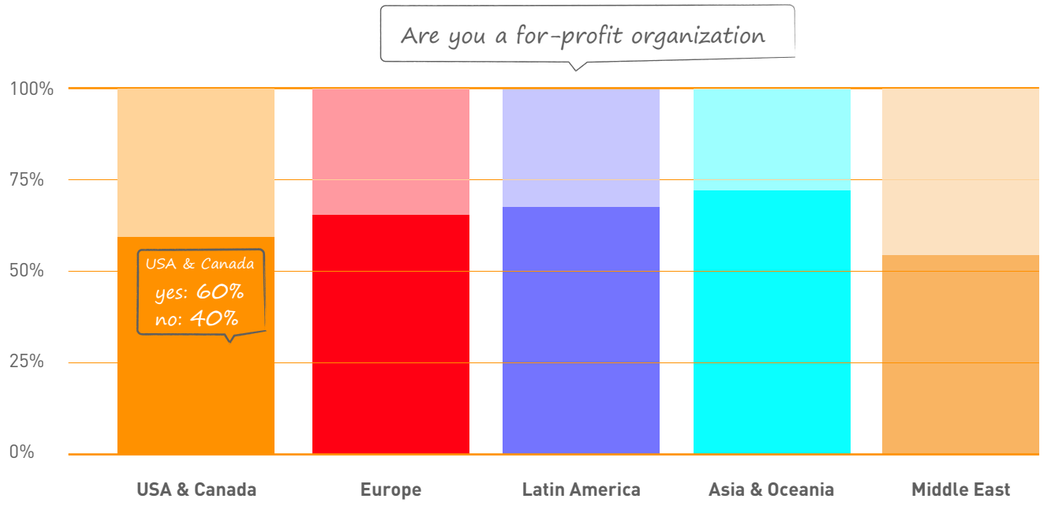
Are You A...

24 RESPONSES



Source: *Based on New Energy Nexus Survey, November 2017.*
Note: *Survey of 32 clean energy accelerators from the US, Asia, Africa, Middle East, Europe, India, and Australia.*

Type of Organization



Source: *Gust (2016),* Global Accelerator Report 2016.

WHY THE FOCUS ON STAGES/ MATURITY OF A COMPANY?

Accelerators often focus on certain stages of a company. You'll hear things like, "We're looking for late stage (or early stage/pre-revenue, etc.) companies for our program."

Why? The logic here is that companies in different stages of maturity have different needs – different funding needs, different training and skill development needs, different partner and customer needs. By focusing on a stage, programs can serve their companies better.

At Elemental Excelerator, for example, they focus on two stages of maturity: an earlier stage for startups with a working prototype and two full-time employees, and a later, growth-oriented stage, for startups looking for large customers like utilities, universities, or corporations for deployment of their tech.

For startups, this whole stage business is critical information to understand. If you don't fit the stage requirements of a company, your chances of getting into the program dim significantly. See the "Due Diligence" section below, but you'll potentially end up getting cut in the first Rough Cut round. So, what to do? Try to evaluate what stage you're in and find programs that match. If you have read all the materials and are still unsure, reach out and ask. Also keep an eye on, and stay friendly with, the programs that are later stage than you are – you might be in their program one day.

KAT MANALAC

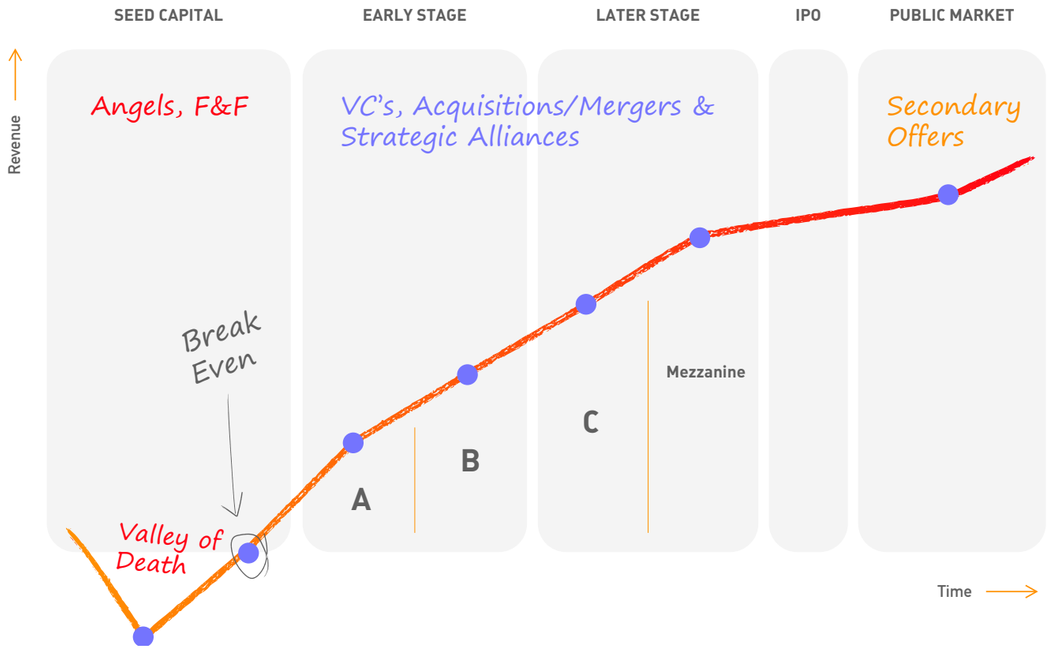
Partner
@ Y Combinator

"We will fund any number of founders in a team, though the ideal is two or three. We prefer that the team has the ability to both build the product and sell it – a technical capability to build a prototype, and then get it to market.

Most people have a prototype, if they haven't already launched their product – very few are at idea stage. For all teams, we look at what they have built in the past, which to us is an indication that the team can actually execute.

The main thing we focus on is founders, because we understand that ideas change. We can't marry the idea, so we really focus on whether founders can execute. We think, "Does this company have the potential to become a billion-dollar company?" Or, if it's a nonprofit, "Can it impact millions of people, and how we can help them do that?"

Typical Stages Of Startup Funding



Source: *J. Zenn,* "The Stages of Startup Funding (with infographic)," *blog, Evus Technologies.*

RAMEZ NAAM

Sci-Fi Author, Angel Investor & Co-Chair of Energy & Environment
@ Singularity University

“ Sometimes the company I’m investing in has a real product and they can show how fast their sales are going up. In that case, I ask things like: What’s your cost of customer acquisition? What’s your customer retention? What’s your revenue per month? What’s the payback? How fast is your growth happening? Then you can put numbers to it. But there are other companies that are super interesting but are pre-product, so I can’t quantifiably define their product market yet. In that case, it’s really important that I talk to their customers.

I see a lot of people, especially at an early stage, who have something that really is cool and sounds doable, and if they made it, it would make the world better or make some person’s life better and easier... but they don’t have a way to monetize it. So, we talk a lot about business models. I ask: How do you structure this business in such a way that, while adding value to your customers, you’re also capturing some of the value and staying alive? ”

RAMSAY SIEGAL

Head of Partnerships & Pipeline
@ Elemental Excelerator

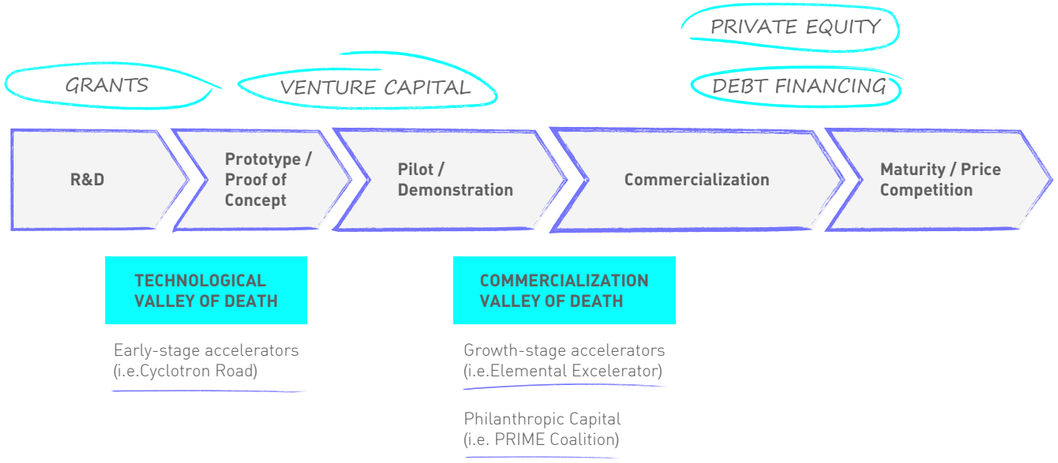
“ When people hear “accelerator,” they often think of programs like Y Combinator, 500 Startups, and Techstars. These tech accelerators, which helped launch startups like Airbnb, Dropbox, and Instacart, are positioned to take ideas and create companies out of them through seed-stage funding and support. There is another breed of accelerators designed to help startups operating in capital-intensive markets cross their second and third “valleys of death.” These companies need patient capital, longer timelines, and support over multiple years as they continue to grow their businesses. This is particularly relevant in industries – such as energy, water, agriculture, and mobility – that transform the way we live.

The Breakthrough Institute published a white paper in 2011 explaining the two gaps in funding that test the survival of startups with world-changing ideas:

Continue

1 The first gap is called the "Technological Valley of Death."

At this stage, companies are still developing their technologies and business models as they get ready to raise a first round of institutional capital.



Source: *J. Jenkins and S. Mansur (2011),* "Bridging the Clean Energy Valleys of Death," *Breakthrough Institute.*

2 The second gap occurs when startups are seeking capital to fund commercial-scale projects.

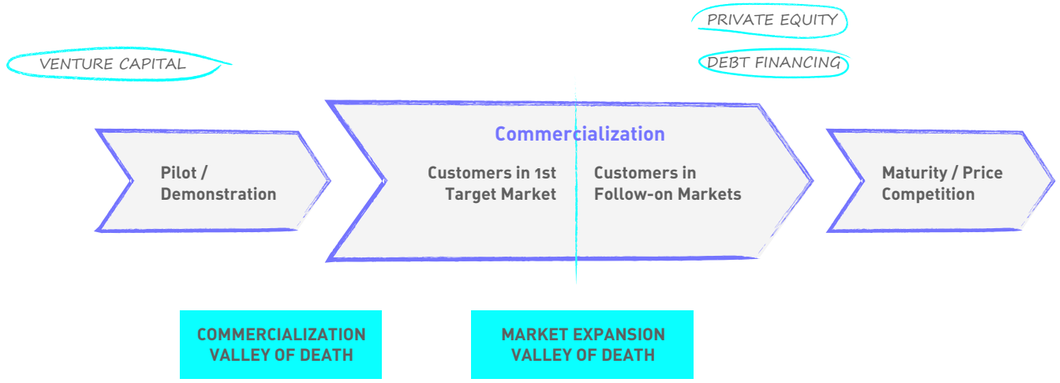
The Breakthrough Institute calls this the "Commercialization Valley of Death." Venture capitalists can tolerate moderate technology risk but not the larger check size, while traditional financiers are comfortable writing large checks but not funding technology risks.

	GRANTS	SEED FINANCING	ANGEL INVESTORS	VENTURE CAPITAL	DEBT FINANCING	PRIVATE EQUITY	UTILITIES AND CORPORATES
Typical investment amount	Medium to large	Small	Small	Small to medium	Any size	Any size	Large
Technology financing stage	R&D prototype	R&D prototype	R&D prototype	Prototype commercialization	Commercialization deployment	Commercialization deployment	Deployment
Expected time for ROI	Long-term	Long-term	Long- to medium-term	Short- to medium-term	Medium- to long-term	Medium- to long-term	Long-term
Risk tolerance	High	High	High	High	Low	Low	Low

Source: *J. Jenkins and S. Mansur (2011),* "Bridging the Clean Energy Valleys of Death," *Breakthrough Institute.*

3 We have observed a third "valley of death" – when startups attempt to expand and scale into new markets.

This could mean new geographic markets or new customer segment, such as expanding from the US to Japan or from military customers to utilities.



Growth-stage accelerators (i.e., Elemental Excelerator's Go-to-market, Demonstration, and Equity & Access Tracks)

Source: *Elemental Excelerator*

At **Elemental Excelerator**, we ask our Demonstration Track applicants to apply with a transformational project in mind. The idea is that we bridge the third valley of death by subsidizing a substantial project to prove out the next generation of their technology, test an expansion on their existing business model, or subsidize the risk of entering a new customer segment or geography. Our most successful companies have identified the barriers that stand between where they are now and what it will take to fully commercialize their technology. We work with these companies to structure a project that will serve as the best case study for future clients and accelerate their path to market. Companies that are in this stage of growth tend to be more mature. In our last round, applicants had

ELEMENTAL EXCELERATOR

between 2 and 30 full-time employees, an average of $1.9M of outside capital raised, and an average of $298K in revenue.

In addition to the standard metrics of success for accelerators (i.e., ratio of active to inactive companies and follow-on funding), growth-stage accelerators also track revenue, **Elemental Excelerator measures company growth and portfolio success in five primary ways:**

Revenue Generated	$110M
Follow-on Funding	$350M raised, companies fall between pre-seed to Series D
Funding Awarded	$22M awarded by EEx to 63 portfolio companies
Capital Unlocked for Innovation	$12.3M of cost share for demonstration projects from utilities, building and land owners, agricultural operations, government agencies, and other local businesses
Team Size/Jobs Created	995 total full-time equivalents

DO ACCELERATORS ACTUALLY WORK?

So, do programs work? Do they serve companies in the way they purport to, and are they beneficial or a succubus on the economy and the balance sheets of young enterprises? Fair questions, and among the most common ones we get.

Our conclusion, based on research and experience in the field is: yes, they work! On balance, they help companies succeed in terms of raising money, staying alive, getting customers, and sometimes exiting. Programs can also help companies fail fast and move on to new pursuits, and the more industry specific the programs are, the more likely they are to help.

Programs help companies raise money. Multiple studies have shown that companies which have participated in accelerators are more likely to later pick up funding from angels or venture capital firms.

Programs also help companies attract more customers and revenue:

A fundamental challenge for new ventures is overcoming liabilities of newness – particularly, lack of business knowledge and lack of social embeddedness. Accelerators, intense, time- compressed entrepreneurial programs, attempt to alleviate these liabilities and accelerate venture development by facilitating learning and network development in new ventures. Compared to the non-accelerator new ventures, we find that ventures backed by top accelerators are faster in raising venture capital and gaining customer traction.[1]

[1] B.L. Hallen et al., "Do Accelerators Accelerate? A Study of Venture Accelerators as a Patch to Success?" Abstract, *Academy of Management Proceedings*, January 2014.

In both emerging and mature markets, the average earnings per company/startup are higher for those that have gone through programs versus those that didn't.

Experienced founders don't need to worry so much, right? Actually, the data also suggests that prior founder experience is not as much of an indicator for success as accelerator participation, given you're participating in a top accelerator. Participating in a top accelerator can increase your chances for success in a way your own experience can't.

Acceleration Effects in 43 Programs

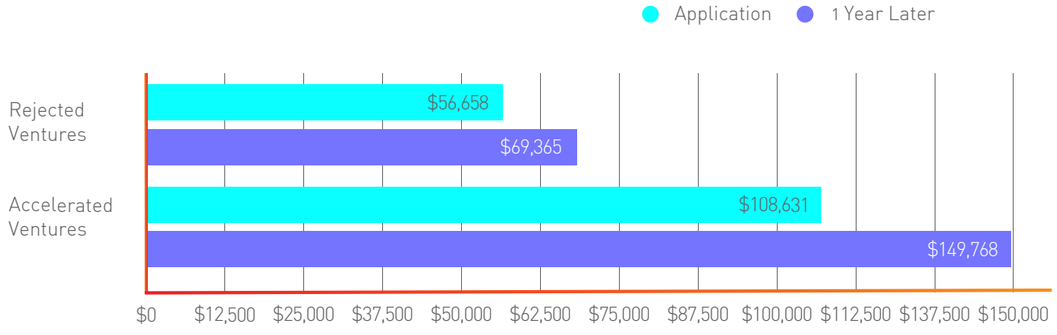
ONE-YEAR CHANGES IN KEY PERFORMANCE METRICS

		PARTICIPATED AVERAGE CHANGE	REJECTED AVERAGE CHANGE	DIFFERENCE	
Revenue	High-Income Countries	$35,062	$10,530	$24,532	✓
	Emerging Markets	$26,134	$11,043	$15,090	✗
Full-Time Employees	High-Income Countries	0.81	0.3	0.51	✓
	Emerging Markets	2.18	1.22	0.96	✗
Equity	High-Income Countries	$23,415	$8,878	$14,536	✗
	Emerging Markets	$22,239	$8,195	$14,045	✓
Debt	High-Income Countries	$21,620	$7,048	$14,572	✓
	Emerging Markets	$14,616	$1,566	$13,050	✓

Statistically significant difference at the p<.05 level: ✓ **YES** ✗ **NO**

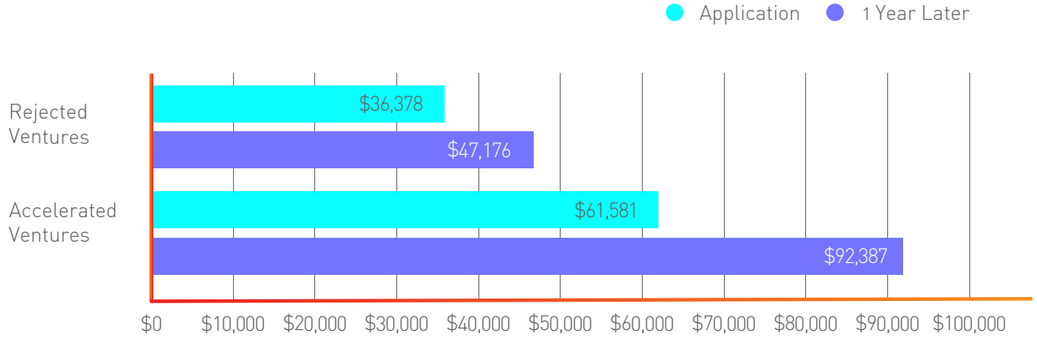
Source: *GALI (2017),* Accelerating Startups in Emerging Markets: Insights from 43 Programs.

Debt And Equity Financing Grew 38% For Accelerated Ventures, Compared To 22% For Rejected



Source: *GALI,* "Initial Insights from GALI." *www.galidata.org/insights.*

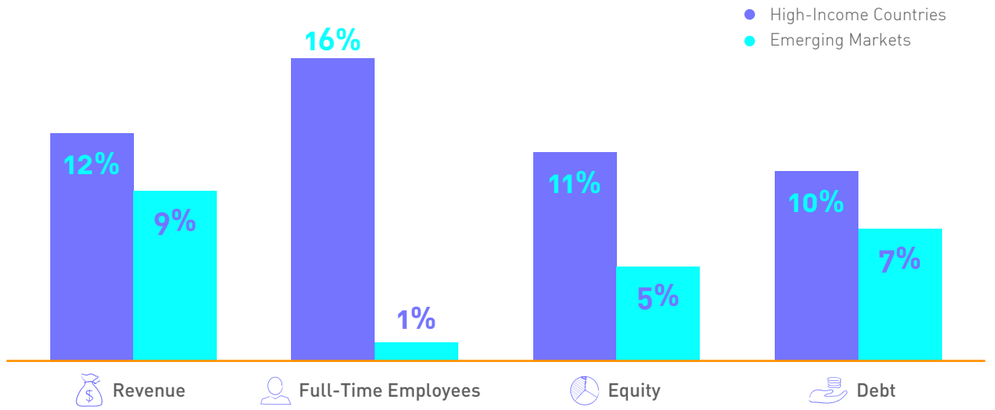
Revenue Grew 50% For Accelerated Ventures, Compared To 30% For Rejected



Source: *GALI,* "Initial Insights from GALI." *www.galidata.org/insights.*

Are Accelerated Ventures More Likely To Grow?

Difference in Percentage of Participated and Rejected
With Positive One-Year Changes



Percentages for the full sample: Revenue (10%); Employees (7%); Equity (8%); Debt (9%)

Source: *GALI (2017),* Accelerating Startups in Emerging Markets: Insights from 43 Programs.
Note: *Data based on study of 43 programs.*

Can any accelerator program help any enterprise, and are they all "worth it"?

Certainly not, so let's get deeper into programs to tease the factors and forces out, and help give more clarity as to when programs help, when they don't, and whether you, as an entrepreneur, should take the dive.

WHY ARE INDUSTRY-SPECIFIC PROGRAMS BETTER?

Simply put: **value**. Break a program down to a set of activities and think about the value you hope to get from it. The more relevant training, investor and customer introductions, etc. are for you, the closer they will get you to sales/impact, and the more valuable they will be. If you're trying to make Internet of Things devices for buildings, how valuable are introductions to food innovation folks? Not very. Alternatively, how valuable is an intro to GE or Honeywell? Very.

The good news is that industry-specific programs are the hot hotness du jour, so whatever industry you are in, there is likely a specific program for you. This is why New Energy Nexus is so passionate about supporting energy-specific programs – to harness industry-specific connections, introductions and expertise.

I'm personally working on two brand-new, industry-specific programs right now: an ocean technology accelerator and fund, and a carbontech accelerator and fund. On both, our program design and partner curation process is laser-focused on providing maximum value to our companies, with little or no fluff.

AVARY KENT

Co-Founder
Conveners.org & the Accelerating the Accelerators Program

"Industry and problem-specific programs are a sign of a healthy and maturing ecosystem. Ten years ago, every accelerator supporting social entrepreneurs had cohorts that looked pretty much the same: one company focused on financial technology, one on women's sanitary products, solar lighting, clean water filters, and so on. Back then, there were not enough entrepreneurs of any given industry or focus to support an entire cohort, let alone an entire accelerator program. As more entrepreneurs started working to solve a specific problem, industry-specific accelerators started to pop up, like Uncharted and the Global Alliance of Clean Cookstoves, which bring cohorts together to collaborate and access industry-specific mentors, investors, and customers."

FAIL FAST, OR NOT

Failure, the culture of it, and the ability to see failure as a positive is a much written about phenomenon. Many credit a positive culture of failure as one of the main ingredients in the secret sauce that has made the San Francisco Bay Area/ Silicon Valley consistently one of the most innovative and productive places in the world.

Accelerators have a role in this. Though this may seem counterintuitive, studies have shown that accelerators can actually shorten the life of some companies, and this is a good thing. If you're working on a company that is destined for failure, a good accelerator can help you come to terms with that quicker. Failing fast lets you lick your wounds, move on, and create something new and hopefully more successful.

> The [What Works Centre for Local Economic Growth] study finds that accelerators are associated with a reduction in the amount of time until the firm is "*terminated*", both in the short run (120-500 days after being admitted to the accelerator) and in the longer term (at least 500 days after admission). The study notes that this may be due to the fact that accelerators feature "demo days," in which startups present their idea to investors. If a firm does not guarantee investment on this day, its likelihood of success is limited. Ultimately, this speeds up the process through which firms fail, but also, through which they are acquired.[2]

This all rings true with my own experience as an entrepreneur. My post-MBA startup Cozmos is a good example. We came into the Mix & Stir accelerator with an idea for a group communication tool, something that would compete with Facebook groups and LinkedIn groups. We were targeting large member organizations like Greenpeace, which have millions of members but whose members have few ways of getting to know each other or self-organizing. We had this massive, Swiss Army knife of tech in mind: pages, subpages, direct messaging, connecting social feeds. The accelerator program we were in forced us to prioritize, and look critically at our customers, the sales cycle, customer lifetime value (Margin * (Retention Rate ÷ ([1 + Discount Rate] – Retention Rate) and how we would ultimately make money.

Ugh... it was terrible. As it turned out, it would have been a tough business, with long sales cycles and specious numbers on customers' willingness to pay for our service. We had a short runway of cash, and the whole thing crashed. It was tough, but after my team broke up, we all moved on to other, more successful enterprises – and that was a gift. Thank you to Hiroshi and the Mix & Stir accelerator team for hastening the demise of Cozmos and gently pushing me out of the nest.

[2] *Toolkit Business Advice Accelerators," What Works Centre for Local Economic Growth, 2017.*

JOHN CLARKE MILLS

Co-Founder & CTO
Zenput

“ Here are my three pieces of advice for startups:

1

Provide value, don’t die.

This may sound simple, but it’s incredibly hard and takes a lot of perseverance. Providing value is hard enough, but doing it over time while growing constantly is challenging. Most startups never provide enough value to grow, and if they do, they often die or stagnate even after product/market fit is achieved.

2

Build for today and tomorrow, not next year.

Most companies never make it to next year, so you need to think long term but build for the short. This goes for sales as well as product. It takes time to iterate and to find market fit, and building alone will not create those things – interactions with customers will.

3

Don’t be afraid to say no to customers.

Your customers want every problem solved and they are often not in your wheelhouse or don’t fit in your vision. I’m continually amazed by how many sales opportunities we have lost due to some outlandish requirement… only to see them come back a year later and buy our product, even if the price has gone up. If I always did what my customers said, I wouldn’t still be running a company. ”

ERIC MATZNER

Biohacker, Futurist & Founder
@ Nootroo

“Part of selecting the right problem involves solving a problem that you personally care about. Having an idea about a market you know nothing about or that doesn't personally appeal to you is usually not the best formula for success. It is hard to solve a problem if at your core you don't fully understand the issue that needs to be solved.

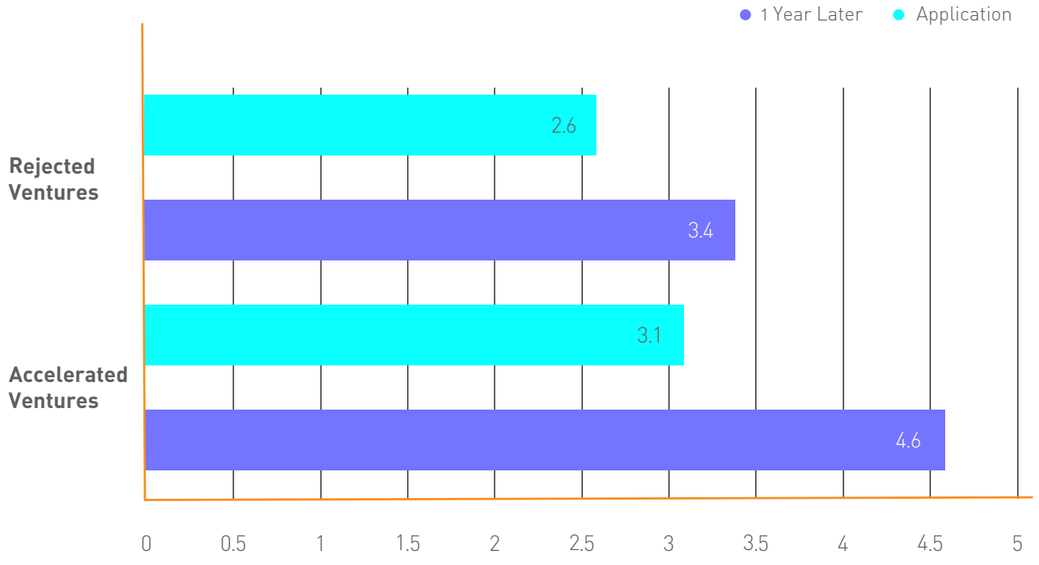
Also, if you do not have a burning desire to solve a problem, you are not going to want to work on it for as long as it takes to make a successful company and to weather the storms, the ups and downs, and general roller coaster ride that is building a startup, company, and product. If you are not willing to work on a singular idea for at least the next 10 years, you might want to choose something else. You will likely spend a few years just trying to get traction and drilling down on the problem, then a few years continuously improving the product, then a few years just selling or continuing to expand on what you are doing successfully. Next thing you know, it is 10 years later.”

ARE ACCELERATORS GOOD FOR THE ECONOMY, AND THE WORLD?

Zooming out from the enterprises to the accelerators themselves, do they benefit the economy? This is a particularly relevant question if you – as a taxpayer, university, or corporation – are footing the bill, which is quite common for regional or academic programs.

Overall, yes. The areas accelerators are based in have more seed and early state funding activity, and this benefits both accelerated and non-accelerated companies. Effectively, programs tend to nucleate ecosystems and create connections, which benefits everyone. We call this the “honeypot effect” – programs draw people in, attract interest, and perform the essential role of community organizing. When we coach people about starting programs, we advise them to take this positive externality seriously, anticipate it, and design for it. We'll go into strategies for harnessing these externalities later in the book.

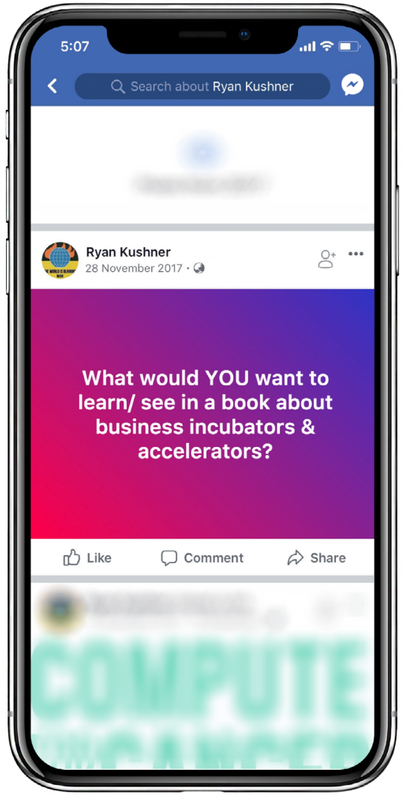
The Number Of Employees Grew 47% For Accelerated Ventures, Compared To 30% For Rejected



Source: *GALI,* "Initial Insights from GALI." *www.galidata.org/insights.*

ACCELERATED ACCELERATION (OF ACCELERATORS), AND SKEPTICISM OF THEM

One of the first things I did when I started this book project was ask the amazing hive mind of Facebook what they would want to learn from a book about accelerators and incubators. I expected the requests to be pretty tactical: Which are the best programs? How do you get into them? Wow! I did not expect such an amazing level of emotion and raw skepticism from a derpy little Facebook post.



Adam Smiley Poswolsky I'd like you to honestly address the fact some accelerators are a complete joke and waste of time for start-ups/founders. Name those accelerators and what doesn't work about them, why they failed, etc... Interview the people who started them and get them on record about where they fucked up. I think the space is very "hot" -- everyone wants to have an incubator/accelerator, but that doesn't mean everyone should. What are the common factors involved in a successful incubator/accelerator program? When is it actually worth it for a founder to do one, cause I think often it isn't, although many entrepreneurs think that if they get accepted into something, they have to do it.

14

Like · **Reply** · 7w

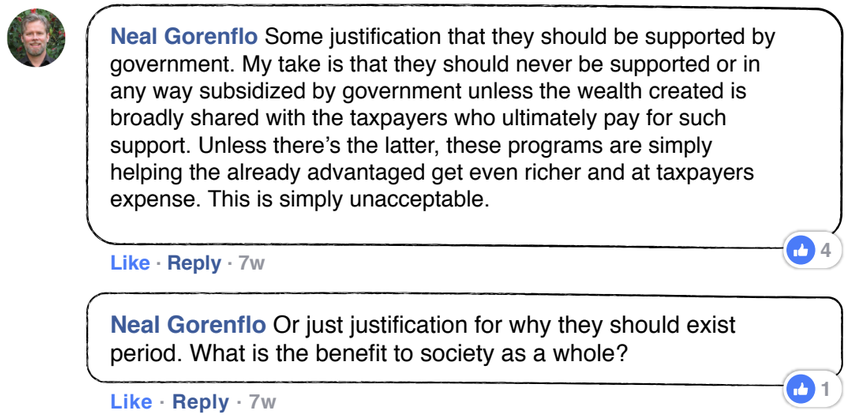
Source: *Facebook direct message to author from Adam Smiley Poswolsky, author of* The Quarter-Life Breakthrough. *Used with permission.*

AVARY KENT

Co-Founder, Conveners.org
& the Accelerating the Accelerators Program

"There are a few programs that are a waste of time, but the core challenge is frequently just finding the right fit between entrepreneurs and programs. Too often entrepreneurs only apply to those programs that are popular and have strong search engine optimization (SEO). This leads to a few groups getting the vast majority of applications, but they are only able to serve a small number of entrepreneurs.

What are the common factors involved in a successful program? We find that having a program team with a strong network of mentors and investors, a curriculum that is culturally relevant and contextualized to the industry focus, and an emphasis on building relationships over preparing for a pitch presentation are the key ingredients to success."



Source: *Facebook direct message to author from Neal Gorenflo, editor of Sharing Cities: Activating the Urban Commons. Used with permission.*

Where are these reactions coming from? Well, there are just a *ton* of programs now. The number of US-based accelerators increased by an average of 50% each year between 2008 and 2014, according to Harvard Business Review. This growth isn't just restricted to tech hubs like Singapore and Silicon Valley. Accelerators are being founded all over the world. Entrepreneurship is becoming accessible in a way it never was before, but with more programs comes more potential for abuse – and mediocre programs.

"China's 13th Five-Year Plan (2016-2020), which aims to become an 'innovation nation' by 2020, an international leader in innovation by 2030, and a world powerhouse in scientific and technological innovation by 2050, has for the first time incorporated accelerators into the national incubator system.

The country aims to increase the total number of domestic incubators, makerspaces and accelerators to more than 10,000 by 2020, with a target of 100 overseas incubators, makerspaces and accelerators for the same period.

These programs are estimated to generate three million job opportunities and 2,000 listed companies, according to staff at Torch High Technology Industry Development Center."

– "China Tops the World in Incubators, Makerspaces," ChinaDaily.com.cn, September 9, 2017

One thing that certainly exists is "innovation theater," as our entrepreneur friend and Tokyo Electric Power Company (TEPCO, the fourth biggest utility in the world) internal disruptor Jeff Char calls it. There's lots of hand shaking, cocktail parties, and feel-good stabs at innovation, but the programs aren't supported, and they aren't linked to the core business, so companies end up wasting their time to make someone else feel good (generally, this is the CEO or head of innovation).

We hear a lot of "we asked for a connection to company (or person) X and we didn't get it." Fair enough, and maybe you got short shrift. However, consider this from the accelerator's point of view: they get asked for intros pretty much all the time, and they are either building or destroying their own social equity with every intro. So, be persistent, prove your value, and make sure to justify the rationale for the intro request.

All this being said, companies do need to do their own due diligence (laid out in the "How To Find And Vet A Program" chapter), talk to graduates, and assess what their opportunity costs are. In general, we have found that bad experiences with accelerators are mostly mismatches in expectations, which leads to disappointment and resentment.

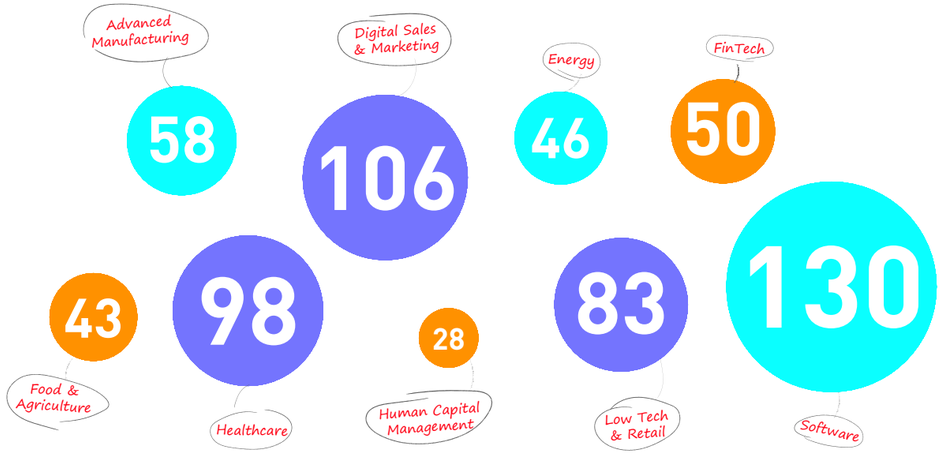
MORGAN BERMAN

Director of Business Development
@ Techstars North America

“I would agree there is accelerator fatigue in the world. I think the reason is that it’s very easy to just stand up an accelerator. I think you could start one today, build something, and probably get a couple of startups to apply. But who knows how successful it would be? To be successful, there are about 10,000 things that you need to do. We’re continuously improving, working, looking at our model, and refining.”

Number Of US Programs By Industry Investment Focus

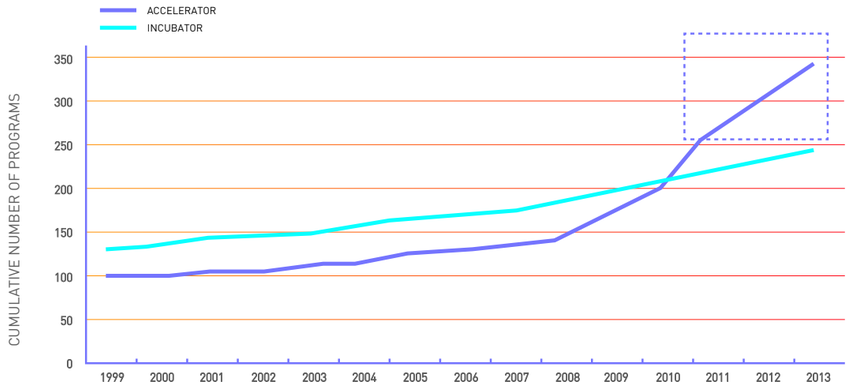
Source: Signals Intelligence Group



Source: *California Business Incubation Alliance (2016),* California Tool Works: Incubation and Acceleration in the Cauldron of Innovation

Number Of Incubators And Accelerators In The United States 1999-2013

Source: Signals Intelligence Group



Source: *California Business Incubation Alliance (2016),* California Tool Works: Incubation and Acceleration in the Cauldron of Innovation

66%

Programs Investing in Companies They Select

44%

Programs Providing Access to Shared Equipment

46%

Programs with Fixed Dates for Participating Startups

32%

Programs Providing Access to Corporate Services

73%

Programs with Associated Physical Space

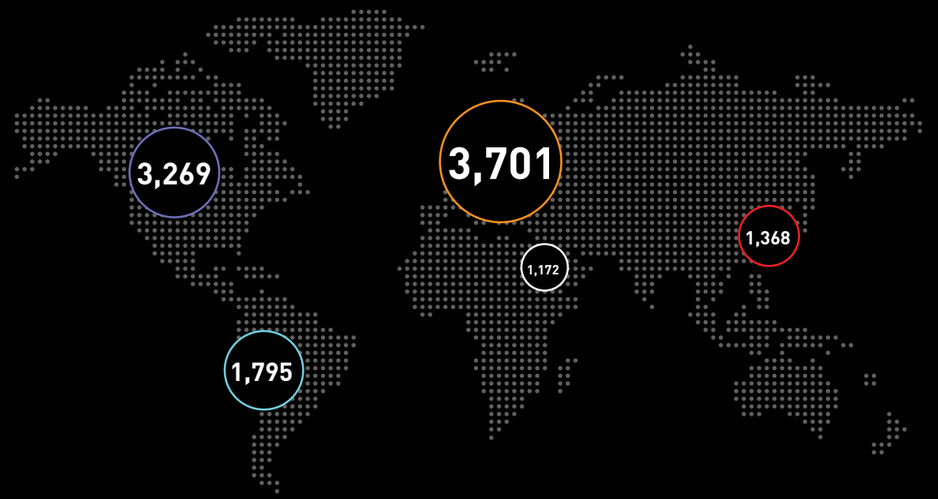
Source: *California Business Incubation Alliance (2016),* California Tool Works: Incubation and Acceleration in the Cauldron of Innovation

Total Investment Worldwide

US$206,740,005

in 11,305 Startups

by 579 Accelerator Programs



US & Canada	US$107,264,392
Europe	US$50,124,145
Latin America	US$24,186,330
Asia & Oceania	US$17,577,400
Middle East & Africa	US$7,587,738

Europe	3,701
US & Canada	3,269
Latin America	1,795
Asia & Oceania	1,368
Middle East & Africa	1,172

Source: *Gust (2016), Global Accelerator Report 2016.*

ARE PROGRAMS JUST SKIMMING? (ADDITIONALITY)

Good question. You can make a fairly sound argument that all programs do is skim the top, taking the best companies, who are bound for success anyway, and claim those companies' successes as their own.

One way to think about this is "additionality": the tangible effect that programs have versus the base state of what would have happened anyway. Do some programs have low additionality, giving little in terms of training, mentors, investment? For sure.

But low additionality is also not a death sentence, since you can't discount the validation inherent in going through due diligence and being selected by a program – that's a mark of trust that is a valuable signal to partners and investors.

You can argue that a program is more of a certification than an accelerator program, but having that certificate does matter and may help you succeed. So it's a balance.

Lastly, studies have taken similar groups of companies and compared those that went through programs versus those that didn't to really get at the meat of the skimming/additionality question. Not all programs actually help, but the best programs do what they claim: pick good companies and make them better with both training and reputation.

TIEN NGUYEN

Commercialization Specialist
Vietnam Climate Innovation Center (VCIC)

How do you know that you're making a difference/ having additionality?

"We are the only cleantech incubator in Vietnam, and have a strong team to support the companies. The World Bank and the Vietnamese government directly supporting the incubation program brings a unique competitive advantage to our companies. We are very confident that without our support these cleantech companies would not have been able to further develop their businesses and raise funds."

BHUSHAN SHAH

@ Nepal Agribusiness Innovation Centre
nabic.com.np

How do you judge your success?

- Jobs created
- Sales/profitability of clients
- Funds raised by clients
- Taxes paid by clients
- Income and employment in rural areas though supply chain linkages

FIGHTING CLIMATE CHANGE WITH ENERGY ENTREPRENEURSHIP

DANNY KENNEDY

Managing Director
@ the California Clean Energy Fund

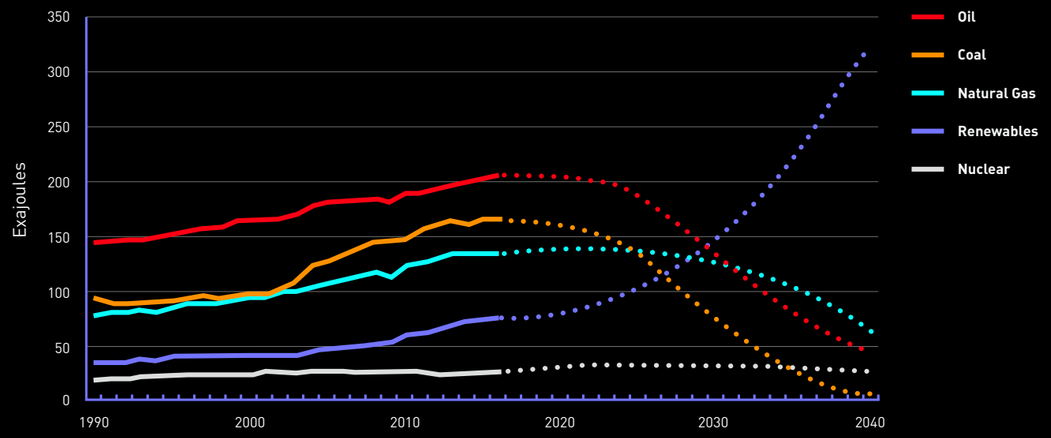
As we roll through 2018, a complete disruption of energy is happening globally. China is adding a London-sized electric bus fleet every 5 weeks. A solar plant was recently built at the site of the Chernobyl nuclear disaster. An Achuar community on the Amazon is using a solar-powered river bus to get their kids to school. California is having days with 75% of its power coming from renewable sources... and less than 1 gigawatt of capacity from fossil fuels. Germany has had 100% renewably powered days. India added more energy capacity from renewables than coal last year. Saudi Arabia just announced a $200B solar project.

The world is rapidly moving beyond 20th-century energy systems for the provision of electricity and mobility services. The pace of change is greater than any experienced in over a century by the incumbents of the utility and automobile industries in the so-called "developed world." And for the very first time over a billion people in the global South have the prospect of benefiting from electric power and modern transport.

By the numbers, the wheel of creative destruction that is turning through the "commanding heights of the economy" is staggering.

World Energy Consumption By Fuel Type (1990-2040)

Actual: US EIA data 1990-2016 & forecast
Chart and Projection @FSS_Au @ProfRayWilsl update 24Feb18



$300B was spent on clean energy projects in 2017 – $160B on solar alone – while only $106B went to finance coal and gas projects. That sort of ratio has been the case for years now: more than twice as much capital flowing into clean energy project finance compared to dirty energy project finance.

Next, the transformation of transportation will start to see a similar scenario play out with shared, electrified, autonomous, and networked (SEAN) transport options icing ICE (internal combustion

> *All forecasts are wrong, as you will learn from working on the energy transition – normally on the underside as to the dramatic pace of change. But the question for you, Dear Reader, is: How do we accelerate this? These curves are probably directionally right, and we need to make them happen sooner.*

engine) vehicles and potentially private automobiles altogether. Think Mobike, Genze, Lyft, Didi, Uber, Turo, Zipcar, and electric scooters to get where you're going.

Yet, all this is not enough. According to a study from the United Nations, renewable energy and energy efficiency can provide over 90% of the energy-related CO2 emission reductions required to keep global temperatures from rising by 2°C, but we need to increase the rate of adoption of these technologies sixfold.

The rate of change in end-use energy systems is the issue of our times. And a key determinant of that rate of innovation and adoption of these solutions on the ground is the entrepreneur: how many we have, and how successful they are in their work.

Entrepreneurs and the businesses they build come in a variety of shapes and sizes. Some big factories in China are making batteries for those buses. A developer from Germany is remotely monitoring the solar plant at Chernobyl. An ingenious indigenous leader took the effort to secure 30 solar panels and an electric outboard motor for a canoe to show the Achuar that they don't need to depend on oil. A financier from Japan needed to partner with the Saudis to get them to realize their solar potential, etc.

Around the world there are thousands of stories playing out in the energy transition with startup companies and social enterprises creating new electricity and mobility solutions.

Some of this requires novel invention, while much of it is the adaption of an existing business – a PV plus battery installation, for example – in a locally appropriate way.

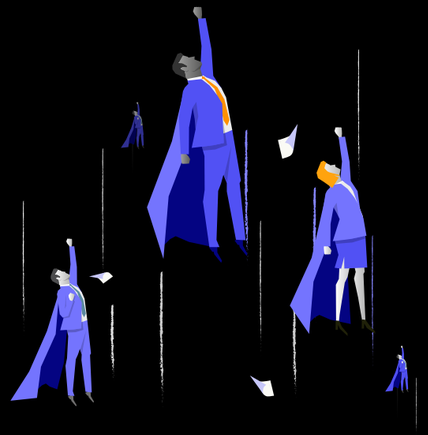
Again, the dollar values are staggering. Hundreds of billions in wind and solar projects last year made for a lot of companies being busy for a lot of months in a lot of different markets. And they created a lot of jobs. But for that to continue to grow at the scale required, many more startups are required. And all these startups need support and capital to succeed.

Since the rate has to increase sixfold, we soon will have to be creating over a trillion dollars of value annually in the energy transition. That's 1,000 times a billion dollars. Enter the entrepreneurs.

We need tens of thousands to try, because to grow 1,000 successful (aka $1B) businesses in these industries, delivering new goods and services, many more will try and fail. Napster wasn't the first or last company needed to disrupt the music industry, nor Nokia the phone business. How many more were needed to innovate, find customers, sell, finance, and scale the business of streaming music or mobile communication that we take for granted today?

Energy is a much bigger game. In order for the energy entrepreneurs of the world to "try" – to innovate, identify their customers, find their product market fit, build prototypes, break and build them better, make their first sale, get their first finance, and hire the right people – they need help. This is why we have produced this guide.

ACCELERATE THAT!



WHAT'S UNIQUE ABOUT ENERGY ACCELERATION/ CLEANTECH?

Energy acceleration (and cleantech in general) presents a very specific set of challenges, and potential rewards. If done well, the rewards are a direct impact on climate change by reducing or eliminating the use of fossil fuels, and the opportunity to participate in one of the largest and fastest-changing industries in the world: power production and delivery, mobility and electric cars, water, food, and agriculture.

However, there are unique challenges that need to be considered by anyone in the cleantech startup or accelerator space. Some of the challenges include:

Investor issues: bigger check sizes and longer time horizons for exits

Most of the tech world thinks in terms of software, which shoots for 3–5 years for exits and relatively low costs for things like equipment. Cleantech investments generally run more in the 5–10 years range for a financial event (aka investors get their money back), and many products require expensive physical goods, certifications, pilot projects, etc. – things that make companies have higher burn rates and thus require more funding to keep afloat. This scares away many investors and, from an accelerator point of view, creates the need to curate a set of longer-term thinking funders with the stomach to stay invested for the long haul and budget appropriately for the program. This is changing as energy gets more digital and mergers and acquisitions heat up in the cleantech sector (especially with the oil majors getting into the space again), but much of this unique cost structure is likely to remain.

Real physics, with bigger, older gatekeepers

While this also is changing as more of the energy and transportation worlds become digitized and regulations loosen, startups and accelerators are operating in a world with established gatekeepers like power utilities, transportation, construction, or heavy industry behemoths. These can be 100-plus-year-old companies that are embedded and protected in the legal system. This makes sense, since they handle the transportation and associated risks of real electrons, cars and trucks, and food. Larger, older companies tend to be slow to innovate, cautious to experiment, and often create barriers for new entrants. The opportunities here tend to be forced by law or glaring breakdowns in the existing system. For example, TEPCO joined the Free Electrons accelerator program after the Fukushima nuclear disaster led to the government stripping their monopoly status for residential customers. Suddenly, they were forced to compete and fight for customers, spurring them to innovate and work with startups.

Competing with an existing product

You flip the switch, the lights turn on. Unless you are in a developing market, you likely have an existing energy provider... but do you have a home device like Alexa? This is the difference between incumbency and not; competing with an established service required more activation energy for customers to adopt it.

Policy

Cleantech has a special challenge, in the form of regulatory capture, aka being locked out of an industry by a wall of policy. Want to sell a new electric car like Tesla? Want to install a meter on your customer's electric box? Imagine the local, state, and federal safety and regulations you have to deal with versus, say, a new dating app. Yeah, you can't just swipe right on this one. I tried to create a community solar company in California, where it is 100% legal, with some of the smartest and most experienced solar energy folks I could find. We pounded the pavement for months – and eventually gave up. We aren't the only ones who have tried: as of this writing, there are exactly zero community solar commercial projects in California because the fees you are mandated to pay the utility to use their power lines make it a losing economic proposition. That's capture.

ANDREW CHANG

New Energy Nexus
Free Electrons & Powerhouse

"What makes energy startups unique is that energy impacts all our lives more than we think. From technology that powers your iPhone to cybersecurity software that protects the grid from external threats, energy is related in one form or another. The energy value chain extends far and wide and the opportunities to innovate continues to grow as energy sources become cleaner and more decentralized. Energy startups, like the sector, will evolve.

Challenges lie in identifying all the stakeholders and understanding how they work with one another. Large utilities and energy companies are often slow-moving, not adaptable, and innovation isn't the priority. Often times, governments can be bureaucratic and rigid, and deploying innovative energy solutions isn't a priority. However, in order for startups to succeed, they'll need to partner with both utilities and government.

Once an energy startup has perfected the formula, the biggest upside is impact and scale. Partnering and working with local utilities will give you access and insight to the local market."

MARK SILBERG

ELab Network Manager
@ Rocky Mountain Institute (RMI)
& Founder @ Spark Clean Energy

"Transitioning cleantech from the lab to the field and then to scale is a tough endeavor, whether facilitated by government, universities, the private sector, or some combination thereof. My experience working with the Department of Energy through the national Cleantech University Prize program, as well as other multi-stakeholder pilot and demonstration endeavors through RMI's Electricity Innovation Lab, has clarified some of the key challenges and opportunities.

WHAT IS CHALLENGING ABOUT BRINGING CLEANTECH TO MARKET?

Operating In A Commodity Business

In most cases, provision of electrons and BTUs is a commodity enterprise. This means existing markets, insofar as they are well designed, are often driving costs to their lowest possible level already. New technologies take time to scale and reduce costs enough to be competitive.

High-Cost Pilot Projects

Historically, many cleantech innovations are capital intensive. Though the chemistry or engineering may be sound, finding a willing partner and investor to support pilot projects is time-consuming and often cost-prohibitive. Finding capital for the first pilot project is where these technologies often face the feared "valley of death." Cleantech accelerator programs work endlessly to overcome that valley, and there are many examples of success, as well as failure, at that junction.

Institutional Barriers

The energy system in particular is highly regulated, with strong and well-financed incumbents who have established business practices and powerful institutional momentum. Regulators, responsible for ensuring low-cost, safe, and universal service, are understandably reluctant to experiment. And regulated monopolies like electric utilities are uncertain as to how best to manage technological change in the industry. Many times, willingness of regulators and utilities to participate requires deliberate cultural change, something that startups don't have the time or resources to facilitate alone. I've observed many regulators and incumbent businesses being part of the solution, when the opportunity presents itself.

Opportunity Costs For Investors

In short, software scales faster with higher margins than capital-intensive projects, and network effects of startups outside of the energy and cleantech space raise the ceiling of scalability and revenue. When investors weigh trade-offs between projects, many prefer those with the highest ceiling.

AND WHAT ARE THE BENEFITS?

Decentralizing Power (Pun Intended)

For over 100 years monopoly utilities (water, waste, energy, and others) have been highly vertically integrated and centralized. New technologies offer the opportunity for more participation in the design of these critical systems, and allow customers to take more control and ownership in these distributed systems.

Building More Resilient Infrastructure

Decentralization distributes risk too. Whether the risk is cyber attack, EMP, or extreme weather, new technology can support a more resilient system that can isolate incidents or isolate failure points.

Disrupting Incumbent Monopoly Business Models

New technologies call into question the existing business models of regulated monopolies. Integrating new technologies and services into existing businesses often necessitates the development of new business models and regulatory regimes to better align public and private interests, and disruptive businesses help inspire this conversation and change.

Save The World

Innovation to drive a more resilient, less resource intensive, less environmentally harmful, and less costly system is a noble endeavor, and one with the promise to ensure the sustainability of human and natural systems long into the future. It's hard work, but someone has to do it.

PATRICIA CHIN-SWEENEY

Senior Partner & COO
@ I-DEV International

"From our work managing the Green Mini Grid Facility in Kenya and various work with the World Bank and private energy startups, we're seeing these challenges, among others:

Mini Grid Challenges:
High up-front capex (capital expenditure), and unfriendly policies toward private operators in the form of short-term operating agreements or no-cost subsidies to match those given to the grid.

Home Solar Challenges:
Limited access to functioning pay-as-you-go options, which makes the ability to pay hard for low-income consumers, and the ability to collect hard for the companies that must rely on cash; high import taxes and cheap, low-quality products that flood the market and cause disappointment and skepticism among consumers when the product breaks.

Overall, a lack of reliable market information on opportunity makes investors hesitant, and sometimes makes it uncertain for companies to know about the next best place to expand into. Strong local technical talent continues to be a struggle.

Building an energy startup requires a lot of grit, patience, and creativity to succeed! Teams must navigate policy and behavioral change barriers. The upside to all this is that in emerging markets, people with no access to energy get access, and beyond being able to read at night, can power equipment and even build small businesses to generate additional income."

CHRISTOPHER JOHNSON

COO
@ Blue Planet Energy Systems, LLC

"The energy sector is going through a fundamental paradigm shift. A hundred years of monopolistic business models are being shaken up because we can now all get the technology to be grid independent and energy self-sufficient. The future of utilities depends on how they choose to adapt business models to the changing landscape and the speed of scaling access to clean power. We are witnessing the scaling of renewable energies as the most affordable and wise path for future energy systems. It's an awesome phenomenon to be a part of."

RYAN WARTENA

President & Director of Product
@ Growing Energy Labs, Inc. (GELI)

"Energy is the largest business in the world and literally powers all other sectors' businesses. Innovating and implementing in energy infrastructure has been one of the hardest problems I've dedicated myself to understand and drive to solution. Those who have studied macroeconomics, planetary health, and global politics quickly glimpse the vision of problems resolved with a distributed and networked renewable energy system. Yet the span between here and there is not visible to even those who glimpse the solution for all the reasons of difficulties discussed.

This is where the dedicated energy entrepreneur has a chance to make a difference:

- By dedicating to a vision
- By embarking on an education process of learning how the current system works
- By learning how to work within that system
- By developing a healthy and scalable solution
- By executing on a scalable plan

The dedicated energy entrepreneur must acknowledge the time scale differences to other sectors. Assets are developed for 10–40 years. Utility commissions plan in 10-year cycles. Projects can take 1–3 years of planning. It's hard, but this is how we show our love for the planet. ”

GREG SATELL

"Why Some of the Most Groundbreaking Technologies Are a Bad Fit for the Silicon Valley Funding Model"

Harvard Business Review, *April 5, 2018*

“ The myth of Silicon Valley is that venture-funded entrepreneurship is a generalizable model that can be applied to every problem, when in actuality it is a model that was built to commercialize mature technologies for certain markets. We're now entering a new era of innovation, one that the model doesn't quite fit, and we will have to develop new approaches to build the future. ”

RAJAN KASETTY

Venture Partner @ The 22 Fund
Executive In Residence @ LA Cleantech Incubator
Mentor & Judge @ Cleantech Open

"Cleantech-related startups usually have a physical product. This means they have to make lab and production prototypes from a concept. They then have to find ways to manufacture at scale. Very few accelerators and incubators have the facilities, resources, contacts, and, more importantly, the multidisciplinary expertise for hand-holding them through this process. Most often, they find a contract manufacturer who will help with industrial design and production. This is not always the least expensive option, nor does it give a lot of design independence and control to the startup.

There are some accelerators and incubators that support manufacturing and fabrication startups in fields like IT, automation, AR, and VR. But not many and not nearly enough exist for cleantech product startups, given the lack of immediate and high financial returns."

JULIA PYPER

Senior Editor
@ Greentech Media

"Launching a startup is hard. Launching a cleantech startup is especially hard.

New companies in this space have to work their way into a century-old industry where there are monopolies and corporate giants, complex regulations, strict technical requirements, and often they have to summon significant capital just to get started. On top of that, cleantech startups have to develop a brand, manage staff, find customers, and market just like any other company out there.

But the challenges aren't what make cleantech companies unique – it's that entrepreneurs succeed in spite of them. The motivation of people in this space to create a better world is incredible. It's not just about doing a deal and making money.

It's about something much bigger that drives the people we cover for Greentech Media. We are seeing an increasing number of deals get done and more money come in as we go through the energy transition – so the hard work is paying off. As this sector continues to advance, we just can't forget that it took a lot of smarts, scrappiness, and, I believe, a core mission to create a sustainable economy to get cleantech to a point where it can no longer be ignored."

STEFAN HENNINGSSON

Senior Adviser Climate Energy & Innovation
@ WWF Sweden

"The Earth's climate is changing and disrupting a number of natural systems on which we all depend. Predicted effects of a temperature increase above 2°C include more extreme weather events, sea level rises, precipitation changes, disappearing coral reefs, ocean acidification, eroded food security, prolonged poverty traps, and forced migration of thousands of species, including humans.

International climate change negotiations delivered a turning point in 2015 at COP21 in Paris. All the world's countries agreed for the first time on the shared objective of "holding the increase in the global average temperature to well below 2°C above pre-industrial levels." In reality, this means that the world agreed to halve greenhouse gas emissions every decade over the next 30 years, and create a fossil fuel–free energy system.

However, national climate action plans are not yet delivering sufficiently to reach the globally agreed targets. The current trends of energy investments fall well short of the amount needed to avoid dangerous global warming. This all makes accelerating investments in solutions by business, financial institutions, countries, and cities even more crucial. That's why we need to **Accelerate This!**"

IT'S TOUGHER FOR SMALLER MARKETS

Studies on accelerators have found that programs in "dense entrepreneurial networks" (i.e., more early stage investors, meetups, overall ecosystem) and areas with high property values (i.e., cities) are more successful. This makes sense if you think about it: larger markets means more investors, more customers, more partners... all parts of a thriving startup ecosystem. Disadvantages of smaller markets can be overcome with locally grown things like sector specificity and partners willing to play along.

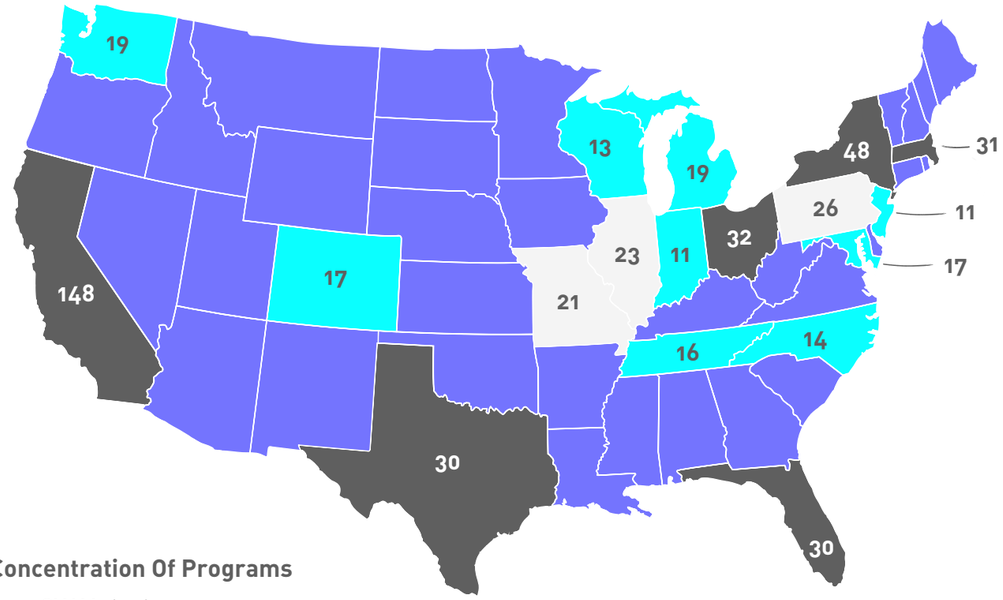
A good example of this is Elemental Excelerator. Based in Hawaii – one of the most remote pieces of land in the world and home to just over a million people – EEx has managed to build a cleantech accelerator that's considered to be among the best in the world. How did they do this? Top of the list is diligent partner building, with corporates and the local utility in particular. Plus, they turned lemons into lemonade, taking a place with the most expensive energy in the US and using that as an innovation advantage. Essentially, the pitch has been: "Have an energy efficient widget that saves pennies? That's dollars in Hawaii, so get started here, make money, then grow and scale." The state's commitment to 100% renewable energy adds an additional policy boost. Elemental Excelerator has deftly used its specific, local resources and environment to help it build a fantastic program, despite being in a "smaller market."

If you are creating or running a program in an emerging or smaller market, ask yourself: what natural advantages and resources do you have available?

Also, if you're in a smaller market and you don't have a program near you, there are lots of great online options. Y Combinator is launching a massively open online course called Startup School, and lots of programs post their content for free, including 500 Startups.

Incubators And Accelerators In The United States

Source: Signals Intelligence Group



Concentration Of Programs

- **SMALL** (1-10)
- **MEDIUM** (11-20)
- **LARGE** (21-30)
- **VERY LARGE** (OVER 30)

Source: *California Business Incubation Alliance (2016),* California Tool Works: Incubation and Acceleration in the Cauldron of Innovation.

OVERCOMING BARRIERS FOR WOMEN AND MINORITIES

Yes. It's a thing. Data suggests that female venture capitalists invest in female entrepreneurs at twice to three times the rate of their male counterparts, so with only 8% of VC firms having female partners, the total invested in female entrepreneurs is simply lower. On the startup side, fewer than 5% of VC-funded companies in the US have women on their executive teams, and less that 3% have female CEOs.

This is amazing to me, since much of the philosophy in startups is about disruption and empowering outsiders. Happily, there is renewed focus on this in the accelerator world, as there is in the wider tech community, and there are woman and minority-focused programs popping up to address it head-on, like the Founder Institute's Female Founder Fellowship, Black Founders and Code2040 for "Black and Latinx technologists."

But, rather than mansplaining this super important, are-we-still-in-the-50s?! issue, our good friend and clean energy entrepreneur Sandra Kwak teamed up with Vicki Saunders, the founder of SheEO, to break it down for you.

SANDRA KWAK

CEO @ 10Power
Echoing Green Fellow & Rockstar

"Despite the fact that women-led businesses are the fastest growing sector in US entrepreneurship, the odds are stacked against women raising venture capital. *Fortune* reported that women received 2% of venture capital in 2017, while *Inc.* in 2018 illuminated an even deeper chasm faced by women of color, who received only 0.2% of VC dollars.

This is distressing, especially considering that diversity improves portfolio performance: companies with a female founder outperformed all-male founding teams by 63% according to First Round data. Between 2007 and 2016, there were 2.8 million new firms launched by women of color and nearly 8 out of 10 new woman-owned enterprises have a founder of color. The lack of representation in VC firms plays a large role, entrenching patterns of exclusion through unconscious bias. In 2017, *Harvard Business Review* reported: "Firms with a female partner are more than twice as likely as firms without a female partner to invest in a company with a woman on the management team (34% vs 13%); and they are three times as likely to invest in women CEOs (58% vs 15%)."

Rather than trying to fit women into the existing systems and level the playing field, models like SheEO are creating an entirely new field. SheEO is a radically redesigned ecosystem to support, finance, and celebrate female innovators. Launched in 2015 in Canada, SheEO supports women on their own terms, bringing out the best of humanity through radical generosity. The SheEO model is scrupulously designed to attract, assess, select, and support women entrepreneurs through processes that are relational and democratic. It's an entirely new values set designed with a feminist lens.

The model brings together 500 women (called Activators) in each cohort, who contribute $1,100 each as an Act of Radical Generosity. The money is pooled together and loaned out at 0% interest to five women-led ventures selected by the Activators. All ventures are revenue generating with export potential and creating a better world through their business model or their product and service. The loans are paid back over 5 years and then loaned out again, creating a perpetual fund that will be passed on to daughters, nieces, and granddaughters. The 500 Activators in each cohort become the de facto "team" of the five selected ventures, bringing their buying power as early customers, their expertise and advice, and their vast networks to help grow the businesses. The goal is to reach 1 million Activators and create a $1B global fund.

"We need more women entrepreneurs who hold a dual focus on creating a better world and making money," writes SheEO founder Vicki Saunders in a white paper available at sheeo.world.

SheEO companies exemplify Gandhi's advice to *"be the change you wish to see in the world."*

My company, 10Power (www.10pwr.com) is proud to be a SheEO investee. 10Power is providing renewable energy in global economies that lack electricity. We develop and finance commercial-scale solar projects, partnering with local installers to build capacity with a gender-empowerment lens. In Haiti, 10Power has installed solar on NGOs working with children and on water purification centers preventing cholera and dysentery, bringing clean water to families and schools in surrounding communities, and supporting over 600 micro-enterprises, the majority of them women-led. Renewable energy is the fundamental building block for access to clean water, technology, education and global markets. My mission is to create a regenerative path for human evolution, which we can do profitably. ”

NATHALIE MOLINA NIÑO

CEO @ BRAVA Investments & Author of *Leapfrog: The New Revolution for Women Entrepreneurs* (TarcherPerigee, 2018)

"Women of color get 0.1% of venture capital, but as my fellow investor Denmark West likes to say, *"Greed is greater than bias."* I don't think investing in women will become mainstream until we prove that it is lucrative."

I was visiting my lifelong friend Sasha Millstein in NY and saw startup evaluation forms on her desk. That amazing piece of synchronicity opened a world into 37 Angels, a fascinating organization focused on cultivating female investors.

ANGELA LEE

Chief Innovation Officer
@ Columbia Business School & Founder @ 37 Angels

"I created 37 Angels as the network I would have wanted to pitch when I was a founder, and also as an angel network I wanted to be a part of as an investor. We have a 1-month in-person boot camp, and an 8-week online boot camp that activates new investors by taking them through the entire deal flow process.

Continue

Our secret sauce is, in a word, EMPATHY. There is a nice virtuous cycle built into this. The best founder referrals come from other founders, so this also improves our deal flow. Plus, it's simply the right thing to do.

- We're efficient: We guarantee a 4-week timeline from pitch to funding decision, and I believe we are the only angel network to guarantee a timeline.
- We get startups: Half of our investors are former founders (37 Angels is my fourth startup).
- We are transparent and helpful: My favorite statistic is that we have a ton of founder testimonials, and 75% of those came from founders we didn't fund.
- We treat founders the way they want to be treated and the way they should be treated.
- We are helpful even if we don't invest: we make decisions quickly and communicate those decisions to founders.
- If it's a no, we tell them 15 minutes into a call: we don't say "it's too early" (which investors love to say!).

Our process for founders is as follows:

- Founders apply via Gust and we let them know if we want to hop on a 20-minute call.
- We let them know within a week if they will be invited to pitch to our network.
- Founders pitch, and we then spend 4 weeks in diligence.
- Founders receive a funding decision (usually between $50K and $200K) within 4 weeks of pitching.

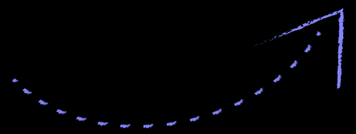
In terms of the value-add we bring to investors:

- Deal Flow: We have really high-quality, curated deal flow. We look at 2,000 startups a year and only bring the best to our angels.
- Performance: We have invested in 50 companies and our portfolio IRR is in the top 20% of VC funds.
- Education: Given that my day job is education (I'm the CIO at Columbia Business School), I knew I wanted an angel network where continual learning was core to the network. So not only do we train new angels through an investment boot camp (37angels.com/bootcamp), but we also have monthly lunch and learns on topics like Bitcoin, digital literacy, and venture math. ”

SHERRI PITTMAN

Managing Director
@ CalCEF & CalSEED

“ California is a recognized leader in progressive energy, climate policies, and tech innovation, but many communities in the state still lack access to clean energy resources. As we promote energy innovation, we're committed to bringing the full benefits of a clean energy economy to our most underserved communities. We do this by making equity a key component of CalSEED, an initiative funded by the California Energy Commission to advance energy innovation. We award seed-stage energy startups with up to $600K in non-dilutive grants, and we filter for diversity and inclusion by measuring the following:



Social Equity In:

Encouraging a diverse pool of applicants

We make sure we have applicants from small, woman-owned and diverse-owned businesses as well as from underserved, low-income, LGBTQ, rural, and veteran communities.

Social Equity Out:

Supporting equity-led clean energy solutions

We support low-income communities with clean energy investments that create healthier environments and reduce the cost of basic necessities. CalSEED encourages entrepreneurs to develop equitable energy solutions for our most vulnerable populations.

Continue

We encourage projects that:

- Target air pollution reduction in underserved and heavily polluted communities
- Prioritize clean energy or sustainability needs (e.g., community-owned and operated energy projects; low-cost energy efficiency programs in low-income communities)
- Increase access to green technologies and resilient infrastructure in underserved and low-income communities
- Create health benefits and economic opportunities in heavily polluted communities
- Include meaningful community engagement with underserved and low-income communities throughout project development

Demographic Groups Supported By Incubation Programs

DEMOGRAPHIC FOCUS	PERCENTAGE
No Special Focus	69%
College/University Students	12%
Hispanics	9%
Women	9%
African Americans	8%
Social Entrepreneurs	7%
Low-income Entrepreneurs	6%
Native Americans	4%
Youth	4%
Foreign/Non-domestic Entrepreneurs	3%
Other	2%

Source: *JPMorgan Chase & Co. and ICIC (2016),* "Creating Inclusive High-Tech Incubators and Accelerators: Strategies to Increase Participation Rates of Women and Minority Entrepreneurs."

Note: *Incubators may focus on more than one demographic group and percentages do not sum to 100%. Source: Knopp, L. (2012).* 2012 State of the Business Incubation Industry. National Business Incubation Association, p. 12.

SHOULD YOU JOIN AN ACCELERATOR?

There's a fair chance you picked up this book to answer this single question. I feel you. I've been there as an entrepreneur, wondering what kind of fun house I might be walking into, what part of my soul I was selling off, and having that little twinge of social anxiety about committing to spending a whole bunch of time with people I don't know (who might be smarter than me – eek!). I've also sat on this decision with many a company, talked them through the issues and helped them decide. Let's start generally, then get more specific.

Generally, do it. Game it. Get after it. As we saw in the "Do Accelerators Actually Work?" section, the odds are forever in your favor to join a program. Get into the best program you can, and then hustle – your tenacity, focus, and dedication can tip the scales, and make all the difference. I've seen this first-hand while running many programs: the most engaged and ambitious companies do the best. But that's easy to say, hard to do. And there are a ton of factors that go into the decision to join a program. Let's parse them, using the Accelerator Decision Calculator to break down the issues.

Accelerator Decision Calculator

REASONS TO JOIN A PROGRAM	**Funding**	Think about this in terms of the investment amount/ how much runway this gives you. Generally, this is nice money to have, but it will not make or break your company.
	Intro to other investors	This is important. Ask the program who their circle of investors are, who comes to their demo day, etc. Ask the alumni of the program and look for fliers/invites/decks from previous events and demo days to really vet this.
	Intro to customers	This is even more important, particularly in a B2B environment. Customers are your business.
	Skills training	Think about this in terms of your work hours x efficiency/strategy (including mental health/stress). Ideally, you leave the program being a more effective leader, strategist, and employee.
	Advisors	Important for guidance, avoiding pitfalls, and further introductions to customers and investors. Remember that your contacts are always either building or destroying their social captial with intros.
	Peers	Important for building your network/potential collaborators, future hires, and making you feel less crazy/lonely as an entrepreneur.
	Verification / stamp of approval	Getting into a program with a good reputation communicates that you're serious, and some what vetted. This increases your ability to make connections, raise money, etc.
	Bonuses	Things like the reputation of the program, strength of the alumni and mentor network, industry specificity, and how much energy you can put in are all bonus factors.
REASONS TO NOT	**Giving away equity**	This is a big factor, but make sure you're being logical and not emotional/sentimental about it.
	Wasting time/ opportunity cost of not doing other things	Think about this in terms of how many hours you will spend on the program, including the program time, time spent doing the application, time spent travelling or moving to a new location.
	Bad advice/Not being understood	Might you get bad advice and be taken of track? Absolutely. Vet the program, its track record and its staff.

From: *Accelerate This! A Super Not Boring Guide To Startup Accelerators And Clean Energy Entrepreneurship.*

REASONS TO JOIN AN ACCELERATOR

Funding

Cash is financial energy, and usually somewhere near the top of the list for reasons to join a program. See more in the "Funding and Grants" section in part 3, but the flavors are generally investment for equity, or a grant with no equity taken.

In terms of the traditional cash-for-equity model, this comes in many forms. Some programs have a range and each deal is negotiated (Elemental Excelerator, for example, is 1%–6%). Others, like Techstars and Y Combinator take a standard amount (6% and 7%, respectively) from every company. EnergyLab Accelerator in Australia takes between 1.25% and 10%, depending on the track.

What's fair here, and what can you expect? Also, if you're going to negotiate, how can you benchmark? These points cause a lot of stress in folks looking to join a program – they certainly did for me! When I joined my post-MBA accelerator program, I built a whole spreadsheet to compare rates and make sure I was being treated fairly (and ended up renegotiating after the program when I felt like I wasn't).

A much more thorough job was done by the Seedstars accelerator: across the 44 programs they looked at, equity taken ranged from 3% to 22% and cash given ranged from $10K to $150K. If you boil this all down, you get an average of about $5,700 for every 1% of a company if you subtract program fees, and about $10,500 if you don't, with a range from $800 to $35K. This is helpful to know if you're going to negotiate or just want to benchmark, but be aware that geography, industry, and company maturity are all factors, so find the closest comp you can.

Beyond that, much of a negotiation comes down to leveraging some distinguishing aspect of your company, or something that makes it less risky, or maybe less so than the typical companies your counterparty is choosing from. Successful team, maybe with exits? Patented tech, or contracts in hand? More than average money raised? As Tim Ferriss likes to say about deals, "He who cares less, wins," so having options and the ability to walk away is always powerful.

Quick note about "program fees" here. Some programs charge you for being in their program, and this is generally an outright fee if there is no investment, or it's deducted from the investment (arguably a way to inflate, or at least not damage, your valuation).

Overall, think about investment and grants in terms of how much runway it gives you versus how much time the program itself will occupy in your life. Seedstars says to "consider the program as an investment that you want to get 3x return on within a year," but there is no hard and fast rule around this, as it's all quite subjective.

Intros to Investors

This is bread and butter for most accelerators, and it's worth really digging into and thinking about since the quantity and quality of intros need to be strong to result in an actual investment. Fundraising is a pretty analog process that relies on a ton of human intelligence to do matching ("Oh, you should talk to these guys!") and then a lot of social connectivity for intros and someone (like the accelerator staff) to vouch for you. Ask the program who their circle of investors are, who comes to their demo days, and research the alumni of the program and who has funded them. Look at the logos on invites and decks from previous events and demo days and the website to see who is buying into the program.

Intros to Customers

Particularly in a business-to-business environment this is critical. If your accelerator can facilitate relevant introductions to customers for your product/service, that brings in cash, momentum (for fundraising, morale, and beyond) and can start you down the road toward a possible acquisition. Be bold. Ask a prospective program who they have in their network that could be a customer for you (it's also a good test to see if they understand your business... or if you do). Customers are your business.

Skills Training

Good programs will teach you skills to help you run your business more strategically and more efficiently, and help you feel more supported and calmer during the process – all great things. Think about this in terms of your work hours times efficiency/strategy (including mental health/stress). Ideally, you leave the program being a more effective leader, strategist, and employee.

Advisers

A good adviser can make the difference between shutting down and moving on up. While we hear many stories of advisers who don't produce, there are many more from entrepreneurs who credit their advisers with getting them investments, customers, and acquisitions. The potential of your accelerator to validate you and pair you with someone who gets you, will stand by you, help you avoid pitfalls, and make introductions to their network, is hard to understate.

Peers

Being in a cohort with other entrepreneurs is fantastic. Yes, you share the pain, get drunk and sing karaoke, but there's also a fair chance you'll end up swapping contacts or accountants, working for one of them, or vice versa. The better, sharper, and more open your peers are, the better this is for you. Aka, "You show me your friends, I'll show you your future." This is important for building your network of potential collaborators, future hires, and making you feel less crazy as an entrepreneur.

Verification

Getting into a program with a good reputation communicates that you're serious and have been vetted. This increases your ability to make connections, raise money, and more. Investors and partners are always looking for shortcuts to evaluate you, and having the stamp of a reputable accelerator (or customer, or investor) can get you in the door.

Reputation of the program, industry specificity, how much energy you can put in

These are all X factors, which can be looked at as coefficients to your "Should I join this program?" equation. If one of these are particularly strong, it can make a huge difference. For example, the carbontech accelerator I'm working on is the only program like it in the world. A stamp of approval from us goes a long way because our offering is unique and we have a staff with deep and discerning knowledge of the space – the opposite of a generalist program – and investors and partners know that. Also, hustle: if you can really rock a program and pour yourself into it, you can overcome potential mediocrity of the program and be their golden boy/girl/person. Lastly, the reputation of a program: you benefit from all the hard work, branding, and reputation building that the program has been doing. The only trick here is that "reputation" is pretty subjective and can ebb and flow over time.

JEFFREY GOLDSMITH

Marketing Strategist Extraordinaire

"WHAT'S THE BENEFIT?!"

"A message that expresses the true customer benefit of your product or service is far superior to a random clever line of copy; test the hell out of that "brilliant headline" because finding the right words will give you 10 times the results or more.

People jump to the conclusion that they've come up with the greatest tagline for their brand or a headline for their homepage because the lines of copy sound good and make your company sound clever or interesting. Often, though, those lines of copy are ineffective, empty formalism that mimics the marketing zeitgeist. It feels like advertising, but it doesn't express the benefit of the product or service that a target market is really looking for because the words don't really get to the heart of the emotional or economic fulfillment.

What does your audience really want from you? Start with the need, then try coming up with a line of copy that offers a solution to that problem. Like, this bar of soap will make you clean and you will smell good all day and your skin will feel soft. Then say it in a nice way like, "Get silky, scented clean." Now, apply that messaging development process to your geothermal heat pump business, or your initial coin offering consulting firm, or your soy-based instafood.

Optimizely, Google experiments, A/B tests on Facebook, and Mixpanel can all help you discover why people click on your button. You can literally spend $1K instead of $20K to get the same result – if you have a good headline. Seriously."

KAT MANALAC

Partner @ Y Combinator

"Alumni in our program say that one of the main things that helped them grow was being surrounded by other founders who move quickly, and who expose them to new ways of thinking and problem solving."

JUSTIN ROSENSTEIN

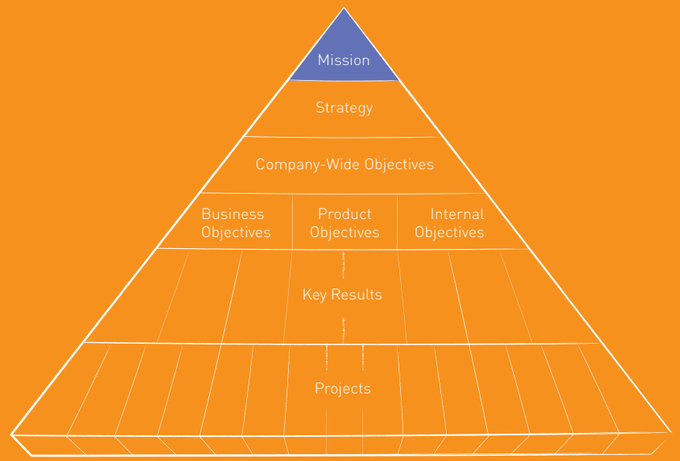
Co-Founder @ Asana

"Here's how I recommend turning your ideas into reality:

1. **Clarity of Purpose.** Start with your mission and vision. Take the time to author a succinct description of what you're trying to do, and what the world will look like once you have succeeded.

2. **Clarity of Plan.** Define your pyramid of clarity: What's the highest-level strategy for achieving your mission? What are your 3 to 10 most important objectives that will drive that strategy this year? Break those annual objectives down further into quarterly key results, then the projects necessary to achieve those, and then the individual tasks in those projects.

3. **Inner Clarity.** Manifesting big ideas is hard. Find the deep motivation and community that will keep you going through difficult times. Invest in your own health – physical and mental. Cultivate equanimity through a practice like meditation, yoga, or dance. Your idea may or may not work out, but, either way, it's better to have enjoyed the ride than stressed out about the outcome."



When I thought about out-of-the box and insightful entrepreneurs for this book, my mind went right away to Casey Fenton. You may know him as the creator of Couchsurfing.com, a massive global network of travelers and adventurers. He's also the creator of Mast.ly, a tool for entrepreneurs to track and reward employees with equity. He's a total brainiac who is constantly learning and synthesizing. I had the pleasure of working with Casey on a project; it was never boring. At the end of a workday at our startup house in Maui, he threw an epic blacklight party, complete with body painting and an open invite to all the neighbors. He later billed it as "an energetic team building activity" – which it definitely was.

CASEY FENTON

Founder @ Couchsurfing.com

"We got into the Founder Space accelerator for Mast.ly and wanted to pay them $5K for the optics of it – we wanted their seal of approval – but the community was a big part of it too. It was great for team building, with all of us learning together and having a shared powerful experience. You're the sum of the five people you hang out with, and we wanted to be with great people. Here are three key things that make successful enterprises:

Continue

1

Emotional intelligence

If you want to go far with your enterprise, the #1 thing you need is leadership, and emotional intelligence (EI) is a cornerstone of this. You need to understand your emotional state, and the state of the person you're speaking to, since they are natural filters that enable or confuse communications. Seventy percent of success is EI.

2

Cooperation theory, also known as game theory

People might know the "prisoner's dilemma," with cooperators/givers and defectors/takers. Essentially the design of the game (your product) determines the outcome. It can become a game of selfish grabbing, or you can make it so that everyone working together gets more than they would individually: 1 + 1 + 1 = 5. This is what we do as entrepreneurs, and that's really what Couchsurfing is – a system that enables trust and creates value. This is something we know intuitively, but it's helpful to name it and break it down. Check out the book *Givers and Takers*, which I was interviewed for.

3

The psychology of pitching

For better or worse, pitching is often about scarcity and the root-level brain, sometimes called the amygdala. Unfortunately, investors and people you are pitching don't always have a great way of knowing if what you're sharing is a good idea or not – there's just too much information, so they need shortcuts. The first thing many look at is the team: Do I believe they can pull this off? The second thing, and less talked about factor, is how the deal feels. The major driver here is scarcity: Is the deal moving away from me? Am I going to miss out? If a deal is too easy or available, it feels less pressing and less important. I used to pitch as Mr. Nice Guy and be soft on this, but people took that to mean there was less value in my offers. I'm still nice, but now I use aspects of scarcity and do things like putting a limit on how much I'll take from investors, or limit the offer time frame. That helps keep things moving. I encourage all entrepreneurs to think about this. ”

Benefits From Accelerator Programs

POTENTIAL BENEFIT FROM ACCELERATOR PROGRAMS	AVERAGE RANK (LOWER = MORE IMPORTANT)
Network development (e.g., with potential partners and customers)	3.31
Access and connections to potential investors/funders	3.44
Mentorship from business experts	3.48
Securing direct venture funding (e.g., grants or investments)	3.58
Business skills development (e.g., finance and marketing skills)	3.92
Gaining access to a group of like-minded entrepreneurs	5.03
Awareness and credibility ((e.g., association with a recognized program, press/media exposure)	5.05

Question asked: The following are some of the potential benefits that are typically associated with entrepreneurial accelerators. Please rank these benefits in terms of how important they are to your venture's development and success.

Source: *Social Enterprise @ Goizueta and ANDE (2017),* "The Entrepreneurship Database Program at Emory University: 2016 Year-End Data Summary."

Alternatives To Equity Investment As A Route To Growth

ROUTE TO GROWTH	PROS	CONS
Bootstrapping	Don't lose equity or take on large debts	Growth can be slow Can be more difficult to get external advice
Bank loans	Don't lose equity	Difficult to obtain pre-revenue or without security
Soft start (using consulting projects for early-stage funding)	Don't lose equity Can lead to new intellectual property	No direct customers so difficult to get feedback Can be distracting from overall aims
Government funding	Don't lose equity	Often reliant on match with subject areas in call for proposals Slow approval process May require relocation or come with other strings attached Often bureaucratic reporting procedures
Friends and family investment	Can be quick	Emotional pressure

Source: *P. Miller and K. Bound (2011),* "The Startup Factories: The Rise of Accelerator Programmes to Support New Technology Venture," NESTA discussion paper, 29.

REASONS TO NOT JOIN AN ACCELERATOR

Giving Away Equity

This is usually at the top of the list, sometimes for good reasons and sometimes not. I've found that there's a lot of mental accounting that goes on here (thinking of value in relative rather than absolute terms), since it feels so darn personal to have someone else own part of your sweet baby enterprise, maybe for the first time. Totally understandable, but you should be dispassionate and Spock/Data-like about this. Generally, it's better to own a little something than a lot of nothing, so be open... but shrewd.

Wasting Time/Opportunity Cost Of Not Doing Other Things

Especially if you're concerned about the quality of the program or how much value you'll get from it, this is a big one. Some programs are a pretty light touch, with maybe 10-15 days of your time, plus travel. Others, like Techstars, are a solid 90 days, plus travel. That matters. Think about this in terms of how many hours (including cost of moving and time) you'll spend, and what you would be doing otherwise – in other words, the opportunity cost. Yes, this is flirting with the counterfactual (the multiverse of realities you're not in), but you have to go there.

Bad Advice/Not Being Understood/Status Quo

I've heard quite a few stories of entrepreneurs being sent down rabbit holes pursuant to the whims of personalities in the program. It's not common, but it can happen and is something to look out for. As always, consider the source, and use Carl Sagan's golden rule: extraordinary claims require extraordinary evidence. Long story short, yes, bad advice is a thing, and people can have their own motivations (trying to please an outside partner or funder, for example), but generally accelerators align their success with yours in multiple ways, and just want to help.

Techstar's "Equity Back Guarantee"

In the course of research for this book, I spoke to Morgan Berman (Director of Business Development, Techstars North America) and Audun Abelsnes (Managing Director at Techstars Energy). The programs that Techstars have built – almost 40/year, in pretty much any industry/vertical you can imagine – are amazing. I learned about their put-your-money-where-your-mouth-is equity back guarantee. Here are the details, found on their website:

- The EBG permits participating companies to repurchase some or all of the equity purchased by Techstars at the same price per share paid by Techstars.
- The EBG may be exercised at any time after the final day of the Program (Demo Day for those programs with a public Demo Day).
- The EBG will automatically terminate early upon (1) the closing of a financing (equity, convertible notes, SAFEs or a combination thereof) with aggregate proceeds to the company in excess of $250,000 that occurs after the date of the signed Letter of Intent to participate in the Program; or (2) the sale or acquisition of the company.

HOW TO FIND AND VET A PROGRAM

So how are you supposed to find and vet programs in the first place? Here are our suggestions:

1

Make your list.

Use tools like
GALI (galidata.org/about)
New Energy Nexus (energynexus.co)
Conveners.org's Accelerator Selection Tool (accelerator-selection-tool)
Gust (accelerator_reports/2016)
and good old Googling.

2

Narrow it down.

Are you willing to travel? Do they require you to, for a little or a long time? Narrow by your industry and stage. Is this something your audience will understand...?

3

Talk to alumni.

Companies that have been through programs are, in my experience, brutally honest about their experience as long as they feel that what they say will be kept in confidence. So become friends, get the scoop, and do this for a good sample size, ideally for companies that are as similar to yours as possible.

4

Use the Accelerator Decision Calculator.

Use the calculator from this book to lay out all the issues. Once you have some research and perspective in hand, make a call.

5

Never, ever regret the decision you made.

Do your best, make a decision of sound mind and body, and never, ever look back. I have yet to find one good thing about having regret.

For insight on what the journey toward an accelerator might be like, see this nicely detailed story of Paul Howey and his decision to interview with but not join Techstars:

> *“ It is your responsibility as a leader to question anyone that is taking a portion of your company in exchange for what they deem valuable. This was not a simple matter of investment for equity share. Techstars claims their true value is in everything else they offer. So asking questions or bringing up concerns should never offend or cause one to become defensive. If it does, then you may have identified an issue with the opportunity that you are considering. Just because someone tells you what they have is valuable, doesn't mean it is. ”*

James Said, “Thanks, but no.” Twice

Interview with James Parle, of Muir Data Systems

James founded Muir Data Systems, which makes field service software for the wind industry. Think: technicians repairing giant wind farms with iPads in their hand – that's James' software. He's also been on many sides of accelerators and incubators. He worked for Greenstart, a now dormant cleantech accelerator based in San Francisco, and, more recently, as an entrepreneur he has received – and rejected – offers from multiple incubators and investors.

Why? Terms. One incubator wanted monthly payments of $500 for a single desk, and 5% equity vested over 21 months. Plus, they expected him to track new metrics around jobs created, minority hires, and more... all for NO cash. But beyond that, James just wasn't sure they could produce in terms of relevant contacts and add real value to his business.

He's also walked away from investment deals. An investment group found him on AngelList and wanted to give him $2M for 30% of his company. He went for it but then had doubts: “The legal was done, but a misalignment of values was becoming increasingly clear,” James told me. Namely, the investors wanted to be in control of his hires, and the investment would be dispersed in chunks/tranches, which is pretty uncommon, and meant that they could pull the plug whenever they liked. Again, the fit was not great and James walked away.

Did he do the right things? Unless you can find a wormhole and go back in time to see the counterfactual, it's impossible know. The best thing is to make an informed decision and never look back. Always assume you dodged a bullet by deciding what you did – it'll keep you (more) sane.

UNDER THE HOOD OF ACCELERATORS

OK, let's go deeper and dig into the nitty-gritty of how programs operate. We'll go through the entire process from start to finish, soup to nuts, outreach to demo day, and beyond. We'll have examples throughout so you entrepreneurs can understand things from the accelerator's side, and those of you who manage (or are thinking of starting) a program can leverage the best practices of others.

We organized the activities of an accelerator into the Accelerator Generator – a graphic layout of all the activities and structures that make up a program. At the end there are blank Generators for you to fill out so you can noodle on your program's design. Lastly, the "How To Build an Accelerator" chapter will do just that, and give you a step-by-step approach for creating (or re-creating) your program.

Accelerator Generator

1. Pipeline/Outreach	2. Due Diligence	3. The Program	4. Post-Program
How to reach the right companies	How to vet and choose companies	How to run your program	What happens after the core program is over?

Governance, Leadership, and KPIs: How are decisions made? How do you judge success?

Business Model: How do programs pay the bills?

Ecosystem Building/Stakeholders: How do the accelerators advance their field?

From: *Accelerate This! A Super Not Boring Guide To Startup Accelerators And Clean Energy Entrepreneurship*

STEP 1: PIPELINE / OUTREACH

A fundamental part of any program is building a "pipeline" of companies that you want to apply to your program. A pipeline effectively gets entrepreneurs/companies onto an internal list and into your customer relationship management (CRM) or other system. Once you have your list of companies and applications open, you commence your outreach to get them to apply. Since pipeline and outreach are two sides of the same coin, we group them together here.

Suffice it to say, most programs don't just open up applications, kick back, and wait for companies to come rolling in – they hustle to get significant numbers and high-quality applicants. The better the companies, the better the program. The more companies that apply, the more you can pick and choose in order to balance the cohort.

It was amazing to see this in action at some of the programs we've worked with: huge spreadsheets with intel on hundreds of companies gathered from web searches, conversations at conferences and referrals from other companies, mentors, and partners. Even the best programs still work to get great applicants.

Here are a few of the most effective methods programs use to attract companies:

Personal Networks/Referrals

Most programs rely heavily on referrals from their networks. This is often the most high fidelity way to source applicants, mainly because whoever refers a company knows both the startup and the program. Without exception, every program I've worked for or consulted with plumbed the depths of their personal and professional networks to find quality applicants.

Social Media / Advertisements

Programs advertise on platforms like Facebook, Twitter, newspapers, partners' mailing lists, and traditional media outlets. In my experience running social media strategy, we've found Facebook ads to be incredibly effective, especially on a dollar-for-dollar basis, with clicks to websites from a targeted audience coming in at around three US cents/click.

Using Partners

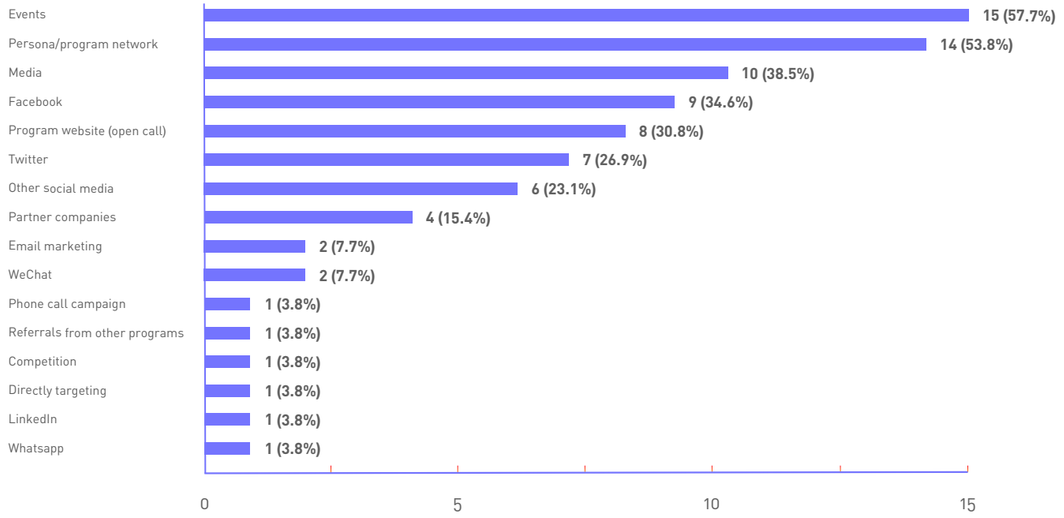
"Hey, do you know any good seed-stage companies in battery storage?" "Hey, our applications just opened. Can you send a blast out to your list for us?" This kind of thing goes on all the time – programs help other programs spread the word and recruit companies. It's generally effective, and a win-win since directly competing programs are rare, and acceptance rates are low, so there are always more companies than slots in programs.

Events

Programs use events like classes, lectures, and parties to build their email list, get attention, attract mentors, investors, potential team members, and more. The fairly sound logic here is that the greater the name recognition a program has, the stronger the applicants will be. For entrepreneurs attending events... yes, the programs are watching you and being super judgy, so behave accordingly.

What Are Your Best Three Channels For Outreach, In Order Of Historical Effectiveness?

26 RESPONSES



Source: *Based on New Energy Nexus Survey data, November 2017.*
Note: *Survey of 32 clean energy accelerators from the US, Asia, Africa, Middle East, Europe, India, and Australia.*

ANDREW CHANG

New Energy Nexus

Free Electrons & Powerhouse

“Here is how the Free Electrons team did outreach in 2017:

1
Define objectives

Once the scope of the program was established between the international utilities and program partners, we met as a team to define our outreach objectives and develop the promotional strategy. Things we considered: What was the content we would promote? Frequency – how often would we have touch points? What was the content schedule? Channels – how would we reach entrepreneurs?

2
Content is king

It needs to tell the story of why this program is unique. We developed social media banners, posts, key selling points/value proposition of the program, promotional videos, interviews with the utilities and accelerator partners.

3
Toolkits

We knew that our networks were a key asset. We developed shareable marketing toolkits and shared with the utility marketing teams and network partners to promote on their media channels. We engaged more than 100 other clean energy organizations, incubators and accelerators. We continually checked in with partners to see if they were indeed promoting the program – people have a lot on their plate, so you have to maintain mindshare.

4
Traditional media

We pitched to traditional media outlets, tech bloggers, and energy enthusiasts – a story by *Huffington Post*, *New York Times*, *Forbes*, etc., really shows credibility.

5
Mailchimp

We used mailchimp to manage our list, and build subscribers through a button on our site

6
Timing

We sent outreach emails at optimal times depending on their time zone. Little things like that can make the difference.

7
Ads

We made Facebook ads to target specific markets that are known for a density of cleantech startups, like Silicon Valley, Tel Aviv, etc.

8
Meetings

We scheduled meetings with specific startups that were interested in the program and spent time encouraging them to apply. Some prospects require a bit more hand-holding through the application process.

9
Follow up

Follow up, follow up, follow up until startups say no. Sometimes you have to sell something, even if it’s in people’s best interest.

10
Focus

As the deadline for applications got closer, we focused outreach efforts to our short list of strong candidates for the program.

11
Countdown

We created social media banners, emails, etc., saying when there were 2 weeks, 1 week, 5 days, 3, 2, 1, etc.

By the end of this process, we took a totally new program and ended up getting over 400 applicants from all over the world and creating a best-in-class program, right out of the gate.”

DAWN LIPPERT

Founder & CEO
@ Elemental Excelerator

"The key is focusing on the quality over quantity of pipeline and articulating exactly what kind of companies you're looking for.

And you can never know the market well enough. Whether it's in water, agriculture, transportation, energy, etc., really understanding where people's pain points are, and where they're willing to spend money, where they are looking for solutions but haven't found something – that's the most important thing. We know our market really really well, and that's the best thing you can do for the pipeline."

TREVOR TOWNSEND

CEO @ Startupbootcamp Australia
Startupbootcamp.org

"Historically, events, Facebook, and email have been our best three channels for outreach and the best referrals have been from alumni and mentors. Reach out to your network early and have them look for startups."

KEVIN BRAITHWAITE

VP Global Programs
@ Cleantech Open
cleantechopen.org

"For the GCIP (Global Cleantech Innovation Programme) accelerators around the world, **these are generally our best channels for outreach:**

1. Referrals from incubators and competitions who want to take their cohorts further
2. Referrals from people who are part of the network (e.g. mentors)
3. Referrals from national and regional partner organizations
4. Social media, varying from country to country (in particular Twitter, Facebook and LinkedIn)

Working effectively with partners and leveraging the combined network to improve the odds of entrepreneurs succeeding is key. As the proverb goes:

It takes a village.

Leveraging partners is important to avoid duplication and provide differentiation from other accelerators and incubators. In our international programs, we are increasingly focused on supporting national and regional partners and the broader ecosystem, in addition to our carefully selected startups."

KUNAL UPADHYAY

@ PowerStart (India)
infuseventures.in

What are your best three channels for outreach?

"We have an annual print media partnership in daily business newspapers, and we conduct significant scouting exercises across the country. We get 120,000 applications with things like these ads. If you are a startup or entrepreneur, we also provide mentoring and funding and have 600 mentors involved in the application process.

1. **Social media campaigns**
   Twitter, Facebook, online blogs, google marketing ad spend.

2. **Partnering with tech blogs**
   Referral marketing 200,000 aspiring entrepreneurs and get them to reach out.

3. **Roadshows**
   Four roadshows (Delhi, Bangalore, Hyderabad, Mumbai); 1 to 2-hour events and then discussions afterward."

KAT MANALAC

Partner @ Y Combinator

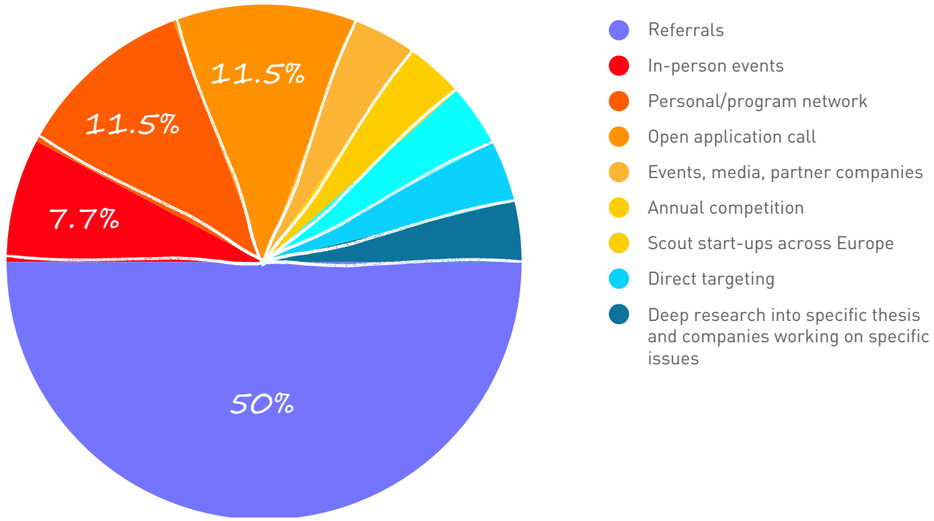
"The number one way we hear about companies these days is through our alumni.

Originally, most people heard about YC through the content the founders put out – Paul Graham's essays and Jessica Livingston's book *Founders at Work*. In that tradition, we still put out a lot of resources for startups. We share resource guides, best practices, we host a free "How To Start a Startup" class; and we make everything we do available for free online. We constantly ask ourselves, What resources are most needed by an early stage founder? What should they know? and then we build the resource and make it available.

One thing to note is that we have an open application process. Over 60% of the founders we fund have never talked to a YC partner or alumni."

Historically, Where Do Your Most Successful/Star Companies Come From?

26 RESPONSES



Source: *Based on New Energy Nexus Survey data, November 2017.*
Note: *Survey of 32 clean energy accelerators from the US, Asia, Africa, Middle East, Europe, India, and Australia.*

STEP 2: DUE DILIGENCE

Once applications are in, you need to vet applicants and select the best candidates for your program, a process called due diligence. Here is a common approach and the logic behind it, but form follows function and there are countless variations of this. Due diligence is typically broken up into four phases, or stages.

Examples Of Selection Processes

TECHSTARS LONDON

ONLINE APPLICATION	CORE TEAM REVIEW	EXPERT REVIEW	FACE-TO-FACE INTERVIEW
Online application via fós application software platform asking for a description of the business, or by referral through affiliated investors.	The applications are reviewed by the core team accelerator to select the 75+ most promising startups.	A series of interviews with the accelerator's core team and external experts to reduce the selection to between 20 and 30 applicants for final selection.	Face-to-face interview with a selection committee made up of accelerator's core team, who then select the top 10 startups.

Criteria: Highly focused on team and opportunity; looking for full-time founding team; team focus; team background and dynamics; prototype required.

Source: *Courtesy of Techstars.*

STAGE 1

THE ROUGH CUT

If programs do a good job with pipeline building and outreach, they end up having way more applicants than they can handle, so the first stage tends to focus on weeding out the obviously unsuitable candidates, usually getting the applicant pool down to around 25% of its original size (going from 400 applicants to 100, for example).

Companies typically get rejected at this stage for a number of reasons:

- Not filling out the application completely or competently, leaving questions blank or not answering the questions asked.
- Application materials that look sloppy, cheap, or are riddled with spelling and grammar mistakes.
- Not being the right fit in terms of industry, company maturity/stage or societal impact potential.
- Straining credibility, in terms of basic science (people: there is no "free" energy) or basic business strategy (don't predicate your success on selling to 100% of humanity).
- Weak team or weak description of team. You need to convince the people reading the apps that you can pull off what you're aiming to, in terms of technical and business skills, and dedication to the enterprise (entrepreneurship is hard and requires dogged commitment).

Buckminster Fuller Challenge Criteria

Most programs have a published set of criteria that spells out the kind of companies/projects they are looking for. One interesting example is The Buckminster Fuller Challenge, which has a "systems solutions" lens. The idea is that point-source solutions often have unanticipated negative consequences, and thinking in systems can ameliorate this. The epic track record of the Challenge backs the claim up. Here is their secret/not secret sauce for finding such great projects:

Visionary	The project puts forth an original idea or synthesizes existing ideas into a new strategy that creatively addresses a critical need.
Comprehensive	The project applies a whole-systems approach to all facets of the design and implementation process and aims to simultaneously address multiple goals, requirements, and conditions.
Anticipatory	The project factors in critical future trends and needs as well as the projected impacts of a project's implementation in the short- and long-term.
Ecologically Responsible	The project reflects nature's underlying principles while enhancing systems that support life on Earth.
Feasible	The project demonstrates proof-of-concept and relies on existing technology and/or proven science, has a solid team in place, and/or demonstrates a convincing capacity to implement the project.
Verifiable	The project is able to withstand rigorous empirical testing and provide evidence for potential or actual positive impacts while making authentic claims.
Replicable	The project is able to scale and be widely adapted to similar conditions elsewhere.

STAGE 2

THE SHORT LIST

The next phase typically tries to get the numbers down to a short list, which is about two times the size of the cohort. So you're now going from 100 companies down to around 20 for a final cohort of 10 companies. You'll end up putting a lot of work into these companies in the next phase, so keeping the short list lean and focused is important. Programs often use skilled volunteers and/or technical advisers to weigh in and validate scientific or technical claims.

Most programs use a system like Fluid Review, F6S, or a Google doc with vectors and scores, to coordinate this.

AVARY KENT

Co-Founder @ Conveners.org
& the Accelerating the Accelerators Program

"From my experience with Echoing Green, Relay Foundation, and others, there is the rough cut, which gets rid of 10%–20% of applications as just a straight up no, but then there is a period of getting a wide network of judges to help review to create your short list, which are the ones that then get a deeper level of due diligence."

STAGE 3

INTERVIEWS, AUDITS, AND REFERENCES

Now things get very real. You've taken hundreds of applicants down to only 20 or so, and there's a high likelihood that any one of the companies will be in your program. It's time to dig in deep and find out if there are any red flags (or gold stars).

Almost all programs do interviews with both the company and their references. These might be over the phone, video, or in person, and they are to establish the following:

- Is the founding team who they say they are, and do they know what they are talking about?
- Do their references and customers know and endorse the company and founders? How well do they really know the company?
- Does the founding team understand what it is they're getting into? Programs can be a very intense experience, and you want to make sure founders understand this – it's not good for a company to drop out halfway through because of misaligned expectations.
- Can they pitch, be presentable and cogent? The program will end up vouching for these companies, so they need to have game and be able to demonstrate grace under pressure.
- Are there internal conflicts or other things that should be known?
- Are they are open-minded and coachable?
- Does the founding team understand the competitive landscape? Do they have an awareness of who else is doing what they do? Do they understand who has tried and failed, and why?
- Do they seem fun to work with?
- Are their financials in order? If there are irregularities, what is the explanation for them?
- Are there issues with the underlying technology, in terms of credibility, product/market fit, licensing, patents, etc.?

STAGE 4

FINAL SELECTION/ MARKETPLACE

Final stage! All of the metrics have been collected, interviews completed, and now it's down to brass tacks of who will get offers to be in the program. At this stage, it's often not just numbers – programs typically strive for a "balanced" cohort, so other factors come into play, like industry/customer (avoiding situations where two companies directly compete), gender balance, maturity of companies, personalities and more. If you're planning to spend intense weeks or months with a group of people, there's more to consider than just aggregate scores. It gets pretty subjective.

In programs I have been a part of, we have used a "marketplace" approach – each company's name goes onto a sticky note on the wall and we debate the merits and challenges for the companies, moving them from left to right, from "unsure" to "for sure"/definitely in the program. This proceeds until we feel satisfied that we have a cohort that meets the goals and requirements of the program and feels balanced. The marketplace is a nice approach because it gets everyone's voice in the room, and you end up walking away with a more democratically/hive mind selected cohort.

All told, the process from tip to tail typically takes 1–3 months. A 2017 survey of New Energy Nexus members showed that the average number of candidates a program accepts into their cohort is between 10% and 30%, with some programs accepting as many as 40% and some programs accepting as few as 5%. Y Combinator hovers around 2%.

DAWN LIPPERT

Founder & CEO
@ Elemental Excelerator

“We have two sides of due diligence going simultaneously. One is very much about the company, the quality of management, the financials, the technology, track record. The other is about the market and what is needed on the ground. We run a community “marketplace” process with utilities, policy makers, and potential customers to understand what really has pull from the market.

By the time we get to a cohort, we have companies that are complementary and can add value to each other, not just in terms of technology but in terms of skill sets and networks. ”

LAURA ERICKSON & FRANZISKA STEINER

From swissnex San Francisco
Programs Partners @ Free Electrons

Free Electrons Due Diligence:

“In designing the selection process for Free Electrons, the challenge was to align eight very different utilities with varying levels of experience in working with startups. At one extreme, there was a utility with a decade of startup experience and five structured innovation programs, and at the other extreme was a utility that had only done one startup deal and had no set innovation team. We had to create a process that worked for everyone.

Here’s how we organized due diligence at Free Electrons:

Continue

Outreach

- *We used a customized Smart & Simple portal (a grant management tool that was far from optimal).* → **Advice** No need to customize an app, existing ones like F6S do the job well.

- *For our selection criteria, we used feedback from the utilities and the experience of swissnex, CalCEF, and Elemental Excelerator (the accelerator partners).* → **Advice** Talk to different people to gather perspectives on what's important.

Downselect

- *Each partner went through all 300 qualified applications (of 450 total) using a scorecard.* → **Advice:** Only assess what's truly important – having too many criteria creates unnecessary complexity and takes too much time to score. Also, don't rely on score alone – unless you can design bulletproof criteria that can't be interpreted differently, there will always be some aspect of subjectivity.

Each partner came up with their own top 30 list and put the top 3 in order. We combined these to reveal overlaps. A big consideration was total funding to date, with a preference for investments over grant money, and balanced representation across technology categories and B2C/B2B.

Final selection

- *We had a marathon, 5-day final process with 3 days of due diligence, 1.5 days of interviews, and a half day of final selection.*
- *Due diligence phone calls were done mostly by accelerators, but some utilities did participate, which was helpful and informative.*
- *We broke into two groups to do interviews concurrently so we could do all 20 interviews in 1.5 days, all done using Zoom video calls.*
- *Finally, we had a "Marketplace," facilitated by Ryan Kushner and team at Elemental Excelerator. We really wanted to empower the utilities (who ultimately would be doing the deals) to choose, so we arranged categories on the wall and debated until we had our cohort!* ❞

STEFAN HENNINGSSON

Senior Advisor Climate, Energy & Innovation
@ WWF Sweden

What is your process for narrowing down applicants?

“ We use jury member experts (about 90 jury members spread over seven countries) to assess the best applicants annually down to a short list of approximately 10–15 who have significant impact potential, and are aligned with the World Wide Fund for Nature's values of a sustainable, global 100% renewable energy transition.

For these 10–15 applicants, we use www.climatesolvertool.org to do the final selection, by assessing which ones have the largest potential for

- climate change mitigation impact potential, measured in million tonnes of CO2 equivalent over the coming 10 years if they take X% of market shares; the potential should be at least 20 million tonnes; and
- clean energy access potential for number of poor people over the coming 10 years if they take Y% of market shares. ”

Here's a demo we use on this assessment tool on slideshare.

JOSEPH SILVER

@ Urban Future Lab/ACRE
ufl.nyc

What is your process for narrowing down applicants?

“ Companies apply online through Gust.com, answer basic questions and submit a pitch deck. ACRE staff screen them and conduct due diligence, including calling the company's customers and partners. Short-listed companies are invited to pitch to a panel of experts (internal ACRE staff and external) representing tech, government, etc. The pitch committee is catered to the specifics of the company. For those we don't accept, we make referrals to other programs. ”

Overall, what's proven to be the #1 most important part of your due diligence process?

“ Calls to the customers and partners have been very valuable. This helps ACRE to understand not only whether the product meets the demand, but how the team handles adversity and how they work. We like to de-risk the entrepreneurs in addition to the technology. ”

JAMES TILBURY

EnergyLab, Australia
energylab.org.au

What is your process for narrowing down applicants?

"We have a three-stage process:

1. Interested startups fill out an online application form on F6S.

2. The most promising applicants are invited to an in-person interview where we get to know the founders and assess whether they are a good fit for the program.

3. A small number of applicants are then invited to pitch to an independent panel of experts who assess the business potential."

KUNAL UPADHYAY

PowerStart (India)
infuseventures.in

What is your process for narrowing down applicants?

"We use F6S, a great open source tool with basic evaluation parameters. Then we break down every application down into three or four pieces. Different groups evaluate different aspects. For our program Powerstart, we get 300 applications and have internal and external experts run basic screening. Then we do a face-to-face evaluation process, and interview them in person, over the phone, or online."

FREERK BISSCHOP

Smart Energy Program Director

@ Rockstart

What is your process for narrowing down applicants?

“We get 150 candidates per cohort and start the selection process by choosing companies based on written info on the F6S platform. We then select the top 50 to do online interviews. The program director talks to each one for half an hour on Skype, and invites two of our mentors to have interviews as well. We try to match specific startups with specific mentors. We collect their feedback in one system to rate them along with written information from each mentor about what they like. This is used to invite the top 20-25 to Amsterdam for 3 days for final selection.

It's a very specific format. The first day, we organize speed meetings with mentors in one big room, 20 minutes with each mentor. On the second day, the startups have two things to do: see a selection committee with 5-minute pitch and 25 minutes of Q&A, and a team assessment with HR professionals for team dynamics analysis. Then on the last day, we get together and use the HR assessment and selection committee to arrive at the choice.”

What is the #1 most important aspect of the due diligence process?

“The addition of team assessment and selection committee assessment. Doing the mentor interviews gets us more data on the assessment of the startups, but even more important is that the startups that make it to the program get a better sense of the value that they will get, so it's also part of the marketing. Independent assessments by professionals gives good insights that help you to avoid falling in love with a technology and forgetting about if the team can make it work.”

HELMUT HERTZOG

@ Sarebi (South Africa)
sarebi.co.za

What is your process for narrowing down applicants?

“We have a screening process called WILL, CAN & MAY, which refers to three components of entrepreneurial capacity.

Will: “Will you be a successful entrepreneur?” Here we use tools such as Gritt Scale or thinking preferences, psychometric and values assessment to determine the likelihood of entrepreneurial success.

Can: “Can you actually do this?” Many would-be entrepreneurs want to start businesses in the energy sector without the requisite technical knowledge. It is critical to verify that entrepreneurs actually possess the technical skills required for the business to succeed.

May: “May you play here?” In the energy and engineering sector, many trades require legal certification. If the entrepreneur does not have the requisite certification, odds are against any future success.”

Overall, what’s proven to be the #1 most important part of your due diligence process?

“The screening. The better the screening, the better the candidates. A good jockey can change the business model, but a sexy business model cannot change the jockey!”

KAT MANALAC

Partner
@ Y Combinator

What is your process for narrowing down applicants?

“Sixteen full-time partners read applications and we have an admission team of two. We get over 7,000 applications per batch and we have a panel of about 100 alumni who help us read them. The top 60–65% of applications are sent to partners, and 3 or more of us read each of those. We invite the top 1,000 companies to in-person or video interviews. The top 500 or 600 teams come to interview in person. Having that in-person interaction is an important part of the process. We use custom software to manage all this.”

SERVING THE REJECTED (AND, WHY CARE ABOUT THE REJECTED?!)

Every year or so, hundreds or maybe thousands of people find your accelerator, read your materials, decide to do an application, wait, are rejected, and are sent away. At best, maybe they are tagged on an email list to receive a “Try again next year!” message.

This is a missed opportunity. These are self-identified entrepreneurs/leads/customers – people who are knocking at your door, wanting to come it. How would this be handled in another field, like e-commerce? As soon as a prospective entrepreneur landed on your homepage, they would be tagged, remarketed, and hounded until they got deeper into your engagement funnel. These are customers – people who wandered into your store, asked for an item, were told that it was out of stock… and sent away.

What is a smarter approach? Take the entrants (and really anyone you can get your hands on) and create a community, both digital and offline. Invite them to your events. Make a Google Group, or Facebook, or whatever you like, and let people do what they do best: communicate, self-organize, learn, share and ferret out opportunities.

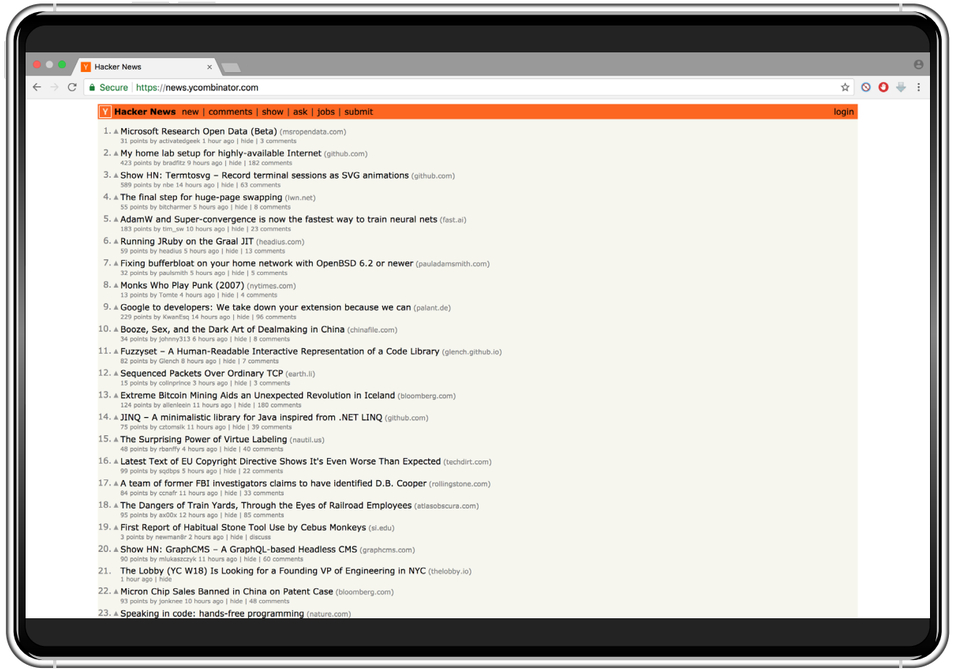
Most programs we talk to and support don't fully take into consideration that, yes, they run a program, but they are also an amazing honeypot that attracts a motivated, self-identified community – and the companies in the program are actually the **smallest** part of the community. Think about it: if you have a 2% acceptance rate, the pool of companies that you reject is potentially 50 times **larger** than the companies you accept. So, leverage that!

Why care? Pipeline. You want experienced entrepreneurs, right? The generalized principles of startups state that first-time entrepreneurs are making their first baby steps. Second-time entrepreneurs are more experienced, and third, fourth, and so on are even better, with more wisdom, more experience, and better connections... and are more likely to succeed.

All told, keeping this crowd of rejects (no offense) engaged and feeling good about your program is undeniably good for the long-term prospects of your program and your impact.

A great example of this is Y Combinator's Hacker News. It's a basic, Reddit-style news/discussion board where the YC community posts and upvotes. It keeps entrepreneurs in the YC orbit even if they don't get into the program, which maintains mindshare, goodwill, and future leads for YC. Hacker News is a hack in and of itself really, since all of this takes minimal staff time and budget. YC gets 7,000 applicants a year. With a 1.5% acceptance rate, that makes it harder to get into than Harvard (which is about 5%). The other 98.5% plus thousands of others in the startup ecosystem? You guessed it: audience for Hacker News.

Hacker News - a hack in and of itself



Source: *news.ycombinator.com*

STEP 3: PROGRAM

Once companies are accepted into the program, it's game time. What the program looks like varies widely – it can be all in person, all online, or some combo of the two. It can be high touch, low touch, all technical, all business, or communications-focused. This makes sense, and flows from the fact that programs generally address specific problems, or opportunity spaces, with their own company stage foci, and this determines what the program time is spent on. Ideally the tool fits the job, and the program has spent intense amounts of time ensuring that the program matches the goals. Read more about how to do this and "designing backward" later, in the "How to Build an Accelerator" chapter. With that in mind, here's a breakdown of some typical program activities.

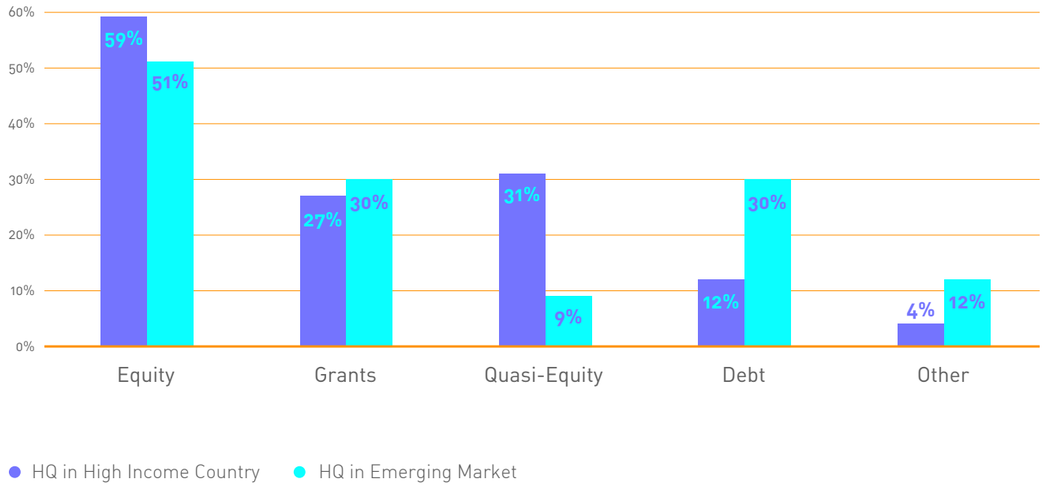
Funding and Grants

One of the most common things programs do is provide financial energy for their companies. This happens in a variety of ways, but it's generally either some form of direct investment (with equity taken) or grant (with no equity taken, also called "non-dilutive") by the program itself. It's also common to have follow-on investments and connections made to outside investors after the program is done and companies are even more highly vetted.

This is all a crucial part of the acceleration process, both for the obvious reason of companies needing money to pay employees, expenses, etc. (especially during the program when the startup's time may be taken away from normal activities). An investment is a show of faith from the program and acts as a mark of legitimacy for a startup, especially from a well-respected program. Investment can have a gravitational effect for other investment, with money providing perceived de-risking and safe harbor for other money.

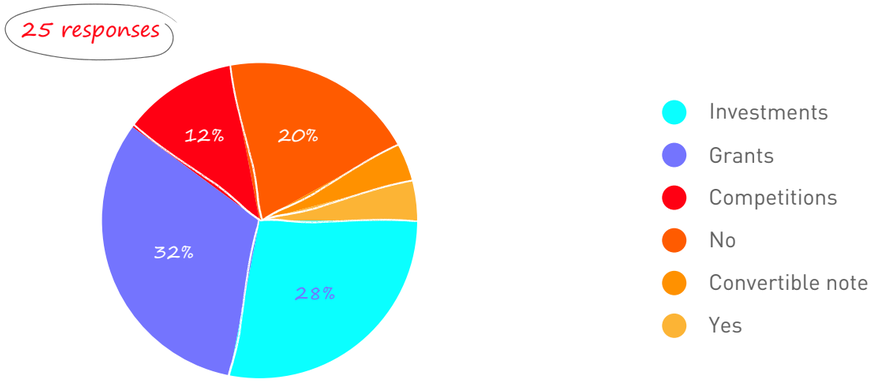
Equity Is The Most Common Investment Instrument

Among the 91 respondents who provide direct investment to participating ventures, about half make equity investments, while less than 30% provide grants, quasi-equity, or debt.



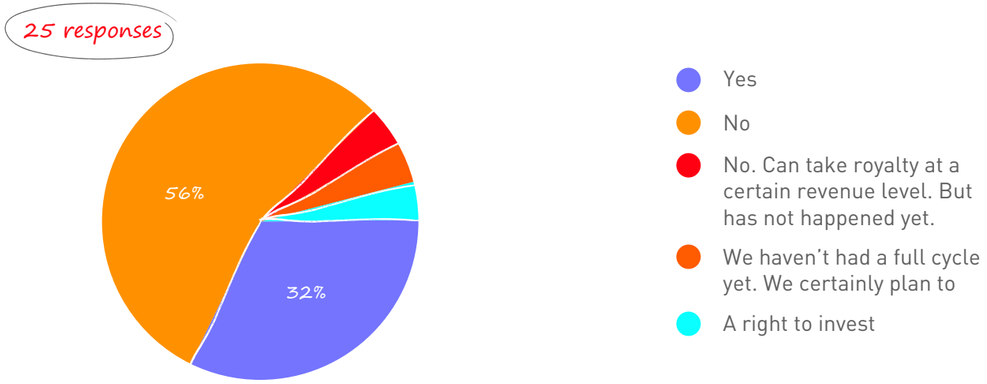
Source: *GALI, 2016 Global Accelerator Survey.*
Note: *GALI surveyed 164 organizations headquartered in 41 different countries.*

Do You Give Money To Startups?



Source: *Based on New Energy Nexus Survey data, November 2017.*
Note: *Survey of 32 clean energy accelerators from the US, Asia, Africa, Middle East, Europe, India, and Australia.*

Do You Take Equity In Your Cohort Companies?



Source: *Based on New Energy Nexus Survey data, November 2017.*
Note: *Survey of 32 clean energy accelerators from the US, Asia, Africa, Middle East, Europe, India, and Australia.*

Types Of Startup Funding

There are five general categories of funding for startups: business revenue, grants, debt, equity, and hybrid.

	DESCRIPTION	PROS	CONS	FINANCING COSTS	EXAMPLES
Business Revenue	Startup can use their business revenue to finance new ventures, such as development of a new product, or scaling up	Low or no financing costs	Not available to pre-revenue startups; revenue may not be sufficient or stable enough for the financing needs; can put pressure on cash flow	No or low costs	Any money made from the normal course of business
Grant	Startup receives financing in exchange for delivering impacts prescribed by the grant-making body	Low or no financing costs. Boost startup credibility. Many funders offer addition-al support, connections and access to other government initiatives or opportunities. If the startup fails there is not financial consequence	Long lead time for grant to be approved; detailed paperwork, stringent monitoring and evaluation criteria. Multi-year grants are rare	Administrative costs	Government clean energy funds (municipal, state or federal)
Debt	Startup receives financing in exchange for an obligation – e.g. scheduled payment to lender at a certain interest rate	Clear obligations, as long as they are met, founders retain full control of the company/asset	Interest rates can be very high in developing markets; often requires collaterals (e.g., your home); banks tend to be conservative and may not be willing to lend to energy startups	Interest rates can be high	Bank loans for SMEs; micro-financing institutions (MFI); some crowd-funding initiatives are set up as loans; Peer-to-peer (P2P) lending; project financing for large-scale energy projects (syndicated loans)
Equity	Startup receive financing in exchange for a stake in their company. which can happen at any stage	Boost startup credibility; many of this type of investors offer support in addition to money – mentoring, access to network, marketing, etc.	Investors can ask for large stakes in the company and want to exert control over the business	Stake of the company	Seed stage: friends & family, angel investors, accelerators, crowd equity funding, incubators Growth stage: venture capital, corporate investors, private capital
Hybrid	Emerging funding sources that are hybrid or cross-cutting	It depends on the source, but ideally these are flexible and entrepreneur-friendly	These are often new, and carry risk. Because of unknown consequences traditional investors might get scared away	It depends on the source	Crowd-funding; impact investors; initial coin offerings, revenue financing, some public-private partnerships

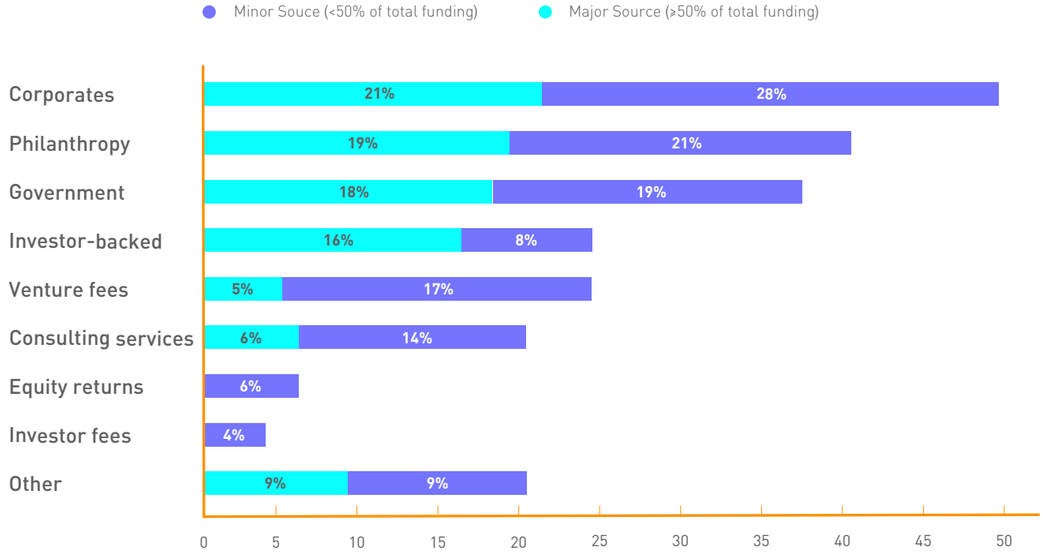
Corporate Involvement And The Customer-Driven Accelerator

In many cases, established corporations are the lifeblood of accelerators: they fund the program, provide mentorship and industry intelligence, and ideally become customers, investors, or end up acquiring the companies – all potentially good things.

According to research by Global Accelerator Learning Initiative (GALI), corporations are actually the single largest source of funding for programs.

Corporates Are The Most Common Funding Source

Nearly 50% of respondents received corporate funding, and 21% relied on corporate funding for at least half of their total funding. Less than 10% generated revenue from equity returns or sucess fees charged to investors.



Source: *GALI, 2016 Global Accelerator Survey.*
Note: *GALI surveyed 164 organizations headquartered in 41 different countries.*

Often the engagement with a corporation is through their venture or innovation departments, and these business units use accelerators as a source of vetted "deal flow" (investment opportunities), and as a way to keep their finger on the pulse of what's happening in their field. In industries affected by technology (which is most, if not all), change happens quickly and accelerators act as antennas to the outside world, keeping companies better informed about potential disruption or opportunities. There is also a nice PR angle for the corporation, where they get to at least appear innovative. Programatically, this all manifests in representatives of companies coming to dinners, demo days, and pitches, and being seen as a friend of the program.

Free Electrons was a flavor of a corporate accelerator program that we designed specifically for the utilities in the program. Our approach was to let the utilities drive the selection process as much as possible (see the details about this in "Due Diligence") and the result was that the utilities selected companies they wanted to work with. This almost seems so obvious that it's a tautology, but this approach makes a lot of sense. The standard practice is that accelerator programs pick companies they think are good bets for the program, then shop them around at things like demo days. Free Electrons, and other corporate-driven programs like Techstars, flips this model on its head and lets the customers drive the process, which generally ensures a tighter product/market fit, or in this case a company/customer one. A customer-driven accelerator can 5-10x your results. It's a simple design change that can have a huge difference for the program and the companies.

Our overall advice to people running and designing programs: identify the entities with economic (or impact) self-interest in the companies coming through your program, and get them involved as early as possible. Ideally they get involved in program design, but certainly in the company selection process. Aka, let customers drive the process.

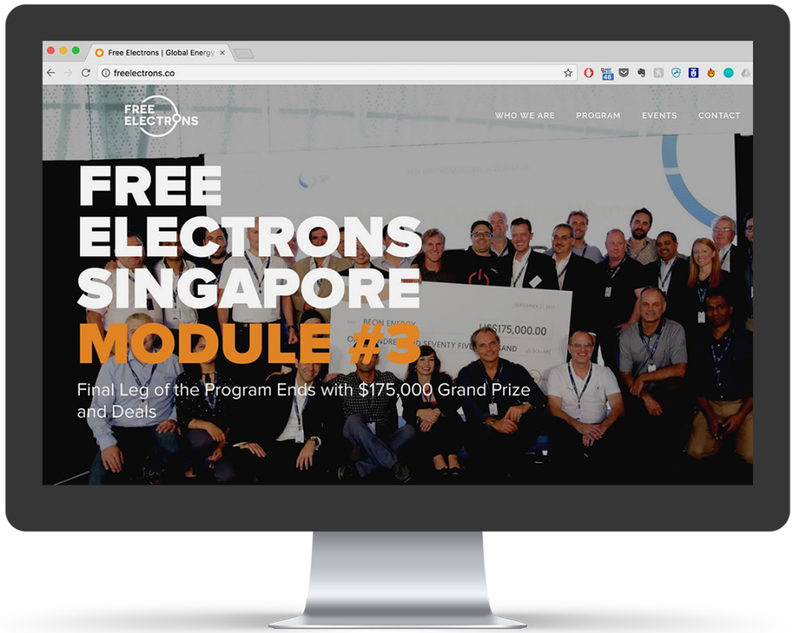
techstars

Techstars is one of the largest and most respected accelerators in the world, and it pretty much defines corporate involvement and a customer-driven accelerator approach. Look at any list of top accelerators, and Techstars is on it. The number of programs they run (about 40 a year) and breadth (from fintech to cleantech to real estate to music) is mind-boggling.

Here's how it works: Techstars get a financial commitment of $3M a year, for a minimum of 3 years, from a corporation, or group of corporations, generally in the same industry, then Techstars takes it from there and runs the whole program, from outreach to demo day. This makes it super easy for corporations, and prevents them from having to spin up their own program. Basically, they cut a check and get a fully kitted out program, the opportunity to put a finger on the scale in the selection process, and first look at pre-vetted, due diligenced companies from all over the world. It's a smart approach that works. Of the 1,207 companies that have come through the program, 76% are still alive, 12% have been acquired, and 12% have died, with a total of $4.7B raised.

Free Electrons 1.0

The startup that won this giant check refused to accept it, and instead pooled it with the other startups. Cohort bonding for the win!



Source: *www.freetheelectron.com*

MORGAN BERMAN

Director of Business Development
@ Techstars North America

"The Techstars program is designed to be turnkey. The idea is, if you are the World Bank, for example, and you come to us with the idea of building an accelerator, we would do everything with you, soup to nuts. We would first work to have a really good understanding of what the industry looks like and who's out there from a startup perspective, then we would be responsible for all of the recruiting, the website and social channels for outreach, staffing, demo day, and everything involved in the program,

When we look to build a new program, we look at it in three different dimensions. The first is location. Is it an area where we can be additive to the ecosystem? Second is industry: is it an area where we, as a venture partner, would see a future from an investment standpoint? The third is partners. We build the programs only with the highest quality corporate partners who are really committed to innovation and committed to really learning and working with startups."

STEFAN HENNINGSSON

Senior Adviser Climate, Energy & Innovation
@ WWF Sweden

How do you connect startups with corporates or investors?

“ We always invite corporate partners to final events and we tend to piggyback on other events. A newsletter with honoured Climate Solver companies goes to WWF corporate partners in Climate & Energy and there are a lot of cases where this connection has led to new ventures, partnerships, and investments.

In some countries (mainly China and India), we have capacity workshops where Solvers are trained and meet corporates. In some cases, we do direct linkages, but we lack capacity/resources to properly use this powerful network component.

We also see the need to connect big corporates with environmental supply chain challenges in new ways, to increasingly become test beds for disruptive innovation, which we explore with Project X with the aim to transform 10 industries in 10 years. Unlike most accelerators that focus on the “innovation push,” Project X focuses on the major companies, supporting them to test and procure new innovations into their value chain – “the market pull” approach. ”

FREERK BISSCHOP

Smart Energy Program Director
@ Rockstart

How do you connect startups with corporates or customers?

“ There are basically three flavors.

One obvious one is sponsorship so a corporate can attach their name to the program in exchange for some sponsorship money, generally between $25K and $75K per sponsor.

The **second** way is to invest in the cohort through the accelerator. This is the dominant mechanism, which is structured as a convertible loan that converts to shares on an exit. This is typically $100K–$200K per investor.

The **third** way is engagement fees. We offer corporate partners the opportunity to organize a conference or challenge alongside the program. Different types of activities could be in-house workshops for the corporate with their staff to meet startups, to learn about lean startup methodologies, matchmaking, or business challenges to invite startups from across the world to win access or prizes from the corporate partner. It could even be parties that they can organize in our space. Anything goes as long as it’s somehow connected to the startup domain. ”

AUDUN ABELSNES

Managing Director
@ Techstars Energy

“ My goal is to link these big corporates that have a genuine desire to actually innovate and work with early stage companies with young, nimble, talented companies. Techstars Energy can put you in front of Statoil, Kongsberg, and McKinsey, but we do not build your company for you.

This form of corporate innovation can’t become another beauty contest, and you can’t do it because it looks good on a PowerPoint slide. With organizations that are prepared to actually work and innovate, big things can happen. ”

Skills Training

Learning skills is a standard part of most accelerators. The more relevant the skills are to the business practice, the more valuable the program is to the companies, so it's worth spending time with your founders to discover their needs and then tailoring the curriculum. These are some great lessons that apply broadly across stages and industries:

Customer Discovery

This is "getting out of the building," as the Startup master Steve Blank, creator of the Lean Startup movement, calls it. Essentially, entrepreneurs talk to customers. This is *not* selling; this is *listening* and trying to deeply understand the needs and challenges of prospective customers, then going back and making sure the product or service matches. I've done this in the format of a "reverse pitch," where entrepreneurs ask questions of their customers. For example, at a table partnering one utility and several startups, only the startups are allowed to ask questions – always revealing and a great process.

Value Proposition Workshops

Closely related to customer discovery, this asks: How are you describing the benefit/utility of your product or service? Effectively, why should people use your widget? Many companies fall flat here because what they think is valuable about their product is not what their customers care about. Especially in the tech sphere, where things are new/emergent, this is a worthy exercise.

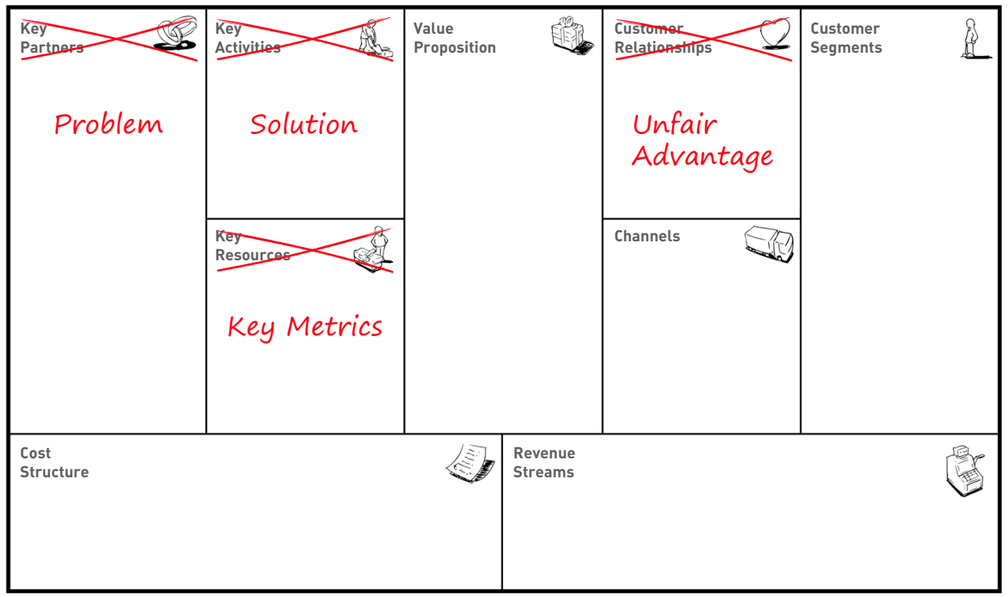
Thinking Lean

Inspired by the Lean Startup methodology. Entrepreneurs tend to fall in love with a problem, then try to boil the whole ocean with a solution that does a whole bunch of things at the same time: "My blockchain solution is going to provide traceability for supply chains, be a micro-payments platform, and work on the carbon market!" The Lean Startup helps you think through your product with a "build-measure-learn" loop. Effectively, listen to your customers, do your best to build just what they ask for (and no more... often called a minimum viable product, or MVP), measure if it's working, and go from there. One thing at a time, testing as you go.

Business Model Innovation

Sure, you might sell things, but how will you sell it? Cash up front, freemium, over time with financing? Maybe you just take a cut of the money you save? All great options, depending on the business and customers. The Business Model Canvas, from Alexander Osterwalder's book *Business Model Generation*, is a great tool that helps entrepreneurs sketch this out. The book itself looks at models of everything from Nespresso to iTunes, laid out nice and graphically. You can also check out the Lean Model Canvas, which is a variation on the BMC, which frames business models more in terms of problem/solution, which is a bit more direct for some people.

The Lean Model Canvas



Source: *Ash Maurya, from his Medium, based on* The Business Model Canvas *from Strategyzer.com.*

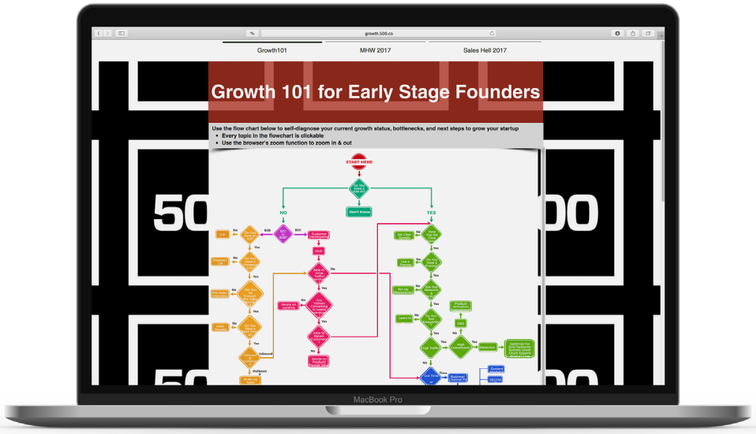
Sheel Mohnot is a partner at 500 Startups and runs their FinTech and InsurTech programs. 500 Startups has campuses all over the world and takes a hands-on approach, with a ton of training. They also give a lot of this info away for free on their website. And check out their totally amazing flowchart that helps you navigate to the information, based on where you are as a business and what challenges you're facing. Pretty cool!

SHEEL MOHNOT

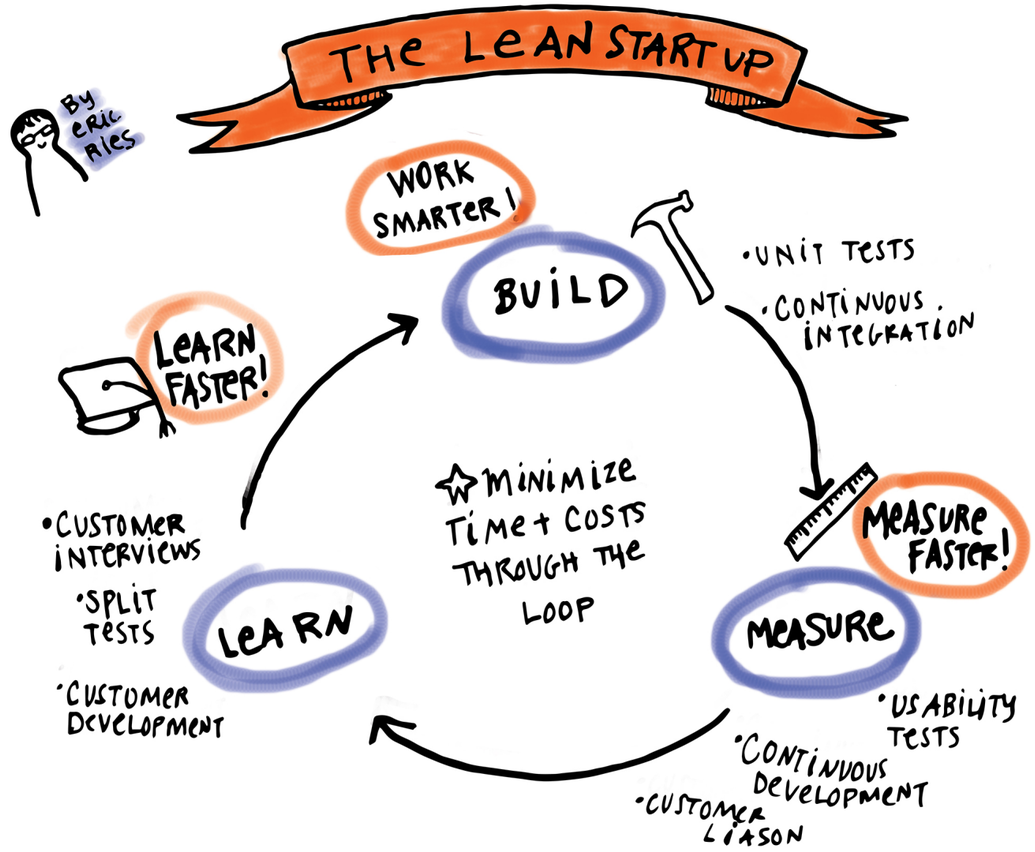
Partner
@ 500 Startups

"Companies work out of the office and we meet with them almost every day. That makes a big difference, and the companies being with each other provides a lot of value and support. One example is "*Marketing Hell Week*," which crams a lifetime's worth of information into mere days."

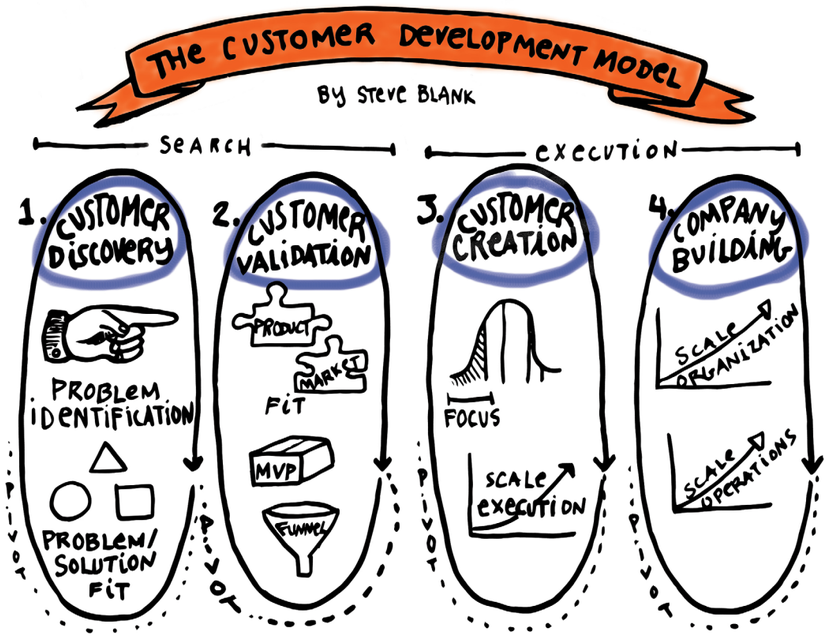
Source: *www.growth.500.co*



Source: *www.growth.500.co/schedule*



Source: *Based on* The Lean Startup, *by Eric Ries."*
Graphic by Nasimeh B.E., @veryhumansociety



Source: *Based on* The Four Steps to the Epiphany, *by Steve Blank. Graphic by Nasimeh B.E., @veryhumansociety*

KAT MANALAC

Partner
@ Y Combinator

“We say that the only two things you should be doing during YC are building product and talking to users. Everything else is a waste of time.

It’s a reasonably lightweight program. We don’t require entrepreneurs to do anything. During the program, founders can do as many one-on-one office hours as they want, and every 2 weeks there’s a group office hours where they keep themselves accountable – not only to the partners but to the other founders in the group. During group office hours, the founders talk about what two things they’ve accomplished in the past 2 weeks, the two things they hope to accomplish in the next 2 weeks, and any bottlenecks or barriers they’re experiencing.

At this point there have been so many companies that have gone through the program, that we have now seen patterns. We can say, “This is how other people have overcome that challenge.”

Oftentimes, the best advice for overcoming a specific challenge comes from another founder in the batch. With 150 companies, it’s likely that there is a founder who just solved a problem that you are currently experiencing, or there may even be a founder who is working on a company that addresses the particular problem you’re facing.”

KEVIN BRAITHWAITE

VP Global Programs
@ Cleantech Open
cleantechopen.org

“On average, a startup participating in a Global Cleantech Innovation Programme (GCIP) accelerator will go through 30–45 hours of online training (1-hour interactive webinars) in addition to extensive in-person workshops and training sessions. We hold the webinars in different time zones to give several opportunities to participate, which gives more chances for startups to also engage with each other regardless of which country or region they are in. It’s a great chance for peer interaction, not just for learning new skills.”

RENATO GALLI

@ Climate-KIC Accelerator
climate-kic.org

“Here’s how we organize skills training:

- Individual coaching (1:1) between startups and individual coaches
- Local-level (country-level) monthly trainings
- Master classes – 2 or 3-day training events where the whole startup community comes together. We have training on topics such as pitching, finance, how to talk to investors, customer-funded business, negotiations, sales, etc.”

FREERK BISSCHOP

Smart Energy Program Director
@ Rockstart

“We do skills training through the whole process, with trainings on lean startup methodology, team development, marketing and sales, funding practices and financial planning, and do quite a few on building your tech. It ranges from building scalable software to engineering and manufacturing. It always has a software and data side, and sometimes also a hardware component.”

TIEN NGUYEN

Commercialization Specialist
@ Vietnam Climate Innovation Center (VCIC)
vietnamcic.org

Do you do skills trainings?

“VCIC prepares a training plan based on the company's needs. In addition to conducting a survey to seek the companies' input, VCIC also conducts an assessment, as some companies don't know exactly what they need. There is an evaluation survey after training on content and delivery which is used to help VCIC improve. Business model development/lean startup is the most popular and effective training topic. Financial model training hasn't been as effective, mainly because the entrepreneurs are not familiar with the topic and sometimes not very much interested in the topic. VCIC encourages companies to apply for IP protection, but many didn't recognize the importance.”

MS. WENJUAN WU & MR. XIAOSONG LI

Center for Green Entrepreneurship
University of International Business and Economics (Beijing)

Is there a virtual component to the program?

“We have online teaching modules on green entrepreneurship, in the form of recorded lectures/TED-type speeches and real-time mentoring, on marketing, HR management, financial management, business planning, etc. This has been proven quite effective in reaching those participants who could not come to the on-site training program, and very useful for providing them with extended learning materials after they conclude the on-site training. We try to do the following:

Expand entrepreneurs’ horizon

Precisely identify development challenges and green/sustainable business opportunities, comprehensively understand the strength and weakness of themselves, to formulate solid theoretical and practical foundations for business development

Enhance entrepreneurs’ capability

Especially their capabilities in responding to the business challenges of innovation, communication, and operation

Achieve the balance of economic and social benefit

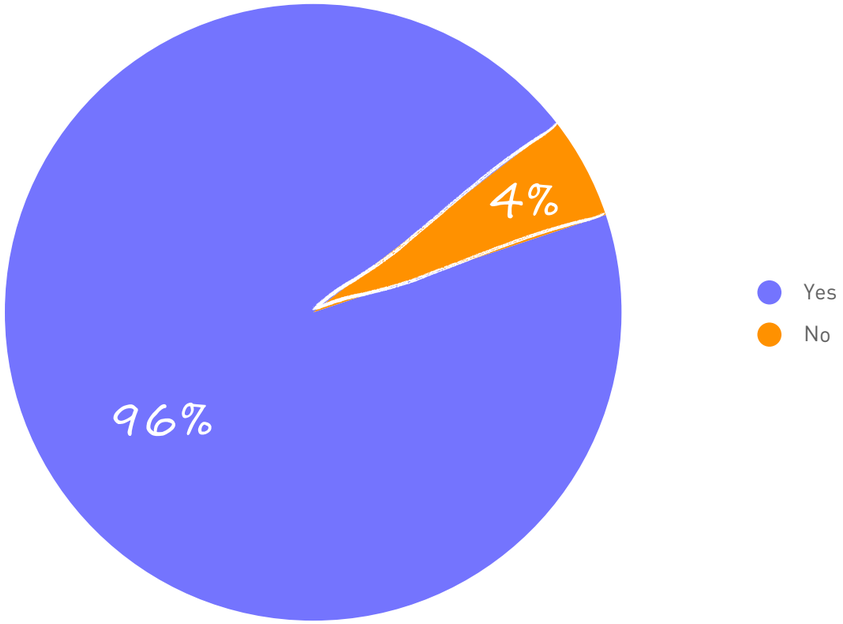
Understand the trend, identify the opportunities, innovate the business, and balance the output

Ensure sustainable development of the startup business

Facilitate the consistency of the business target and decisions, ensure their commitment to green/sustainable development”

Do You Do Skills Trainings (For Example, Business Skillls?)

25 RESPONSES



Source: *Based on New Energy Nexus Survey data, November 2017.*
Note: *Survey of 32 clean energy accelerators from the US, Asia, Africa, Middle East, Europe, India, and Australia.*

Office Space (About Those TPS Reports)

Many programs offer their portfolio companies office space. This is a key element of incubators, but less common for accelerators. The upside of providing an office space is that you get to keep your companies close, see them more on a casual basis, and enable companies to learn from one another on a more ad hoc basis.

A pretty common practice is to extend the use of a space by converting it to meeting and event space in the evening, which helps programs get their name out in the world and helps offset the main downside of physical space: the cost.

In my experience, I've ended up going to accerators for demo days and evening events like cocktail hours with accelerator-relevant content. Being in the program space has really helped me understand their vibe, style, and theory of change. Programs like Powerhouse in Oakland, CA, LACI in Los Angeles, and Greentown Labs in Boston have a regular cadence of events and build their physical space into their brands.

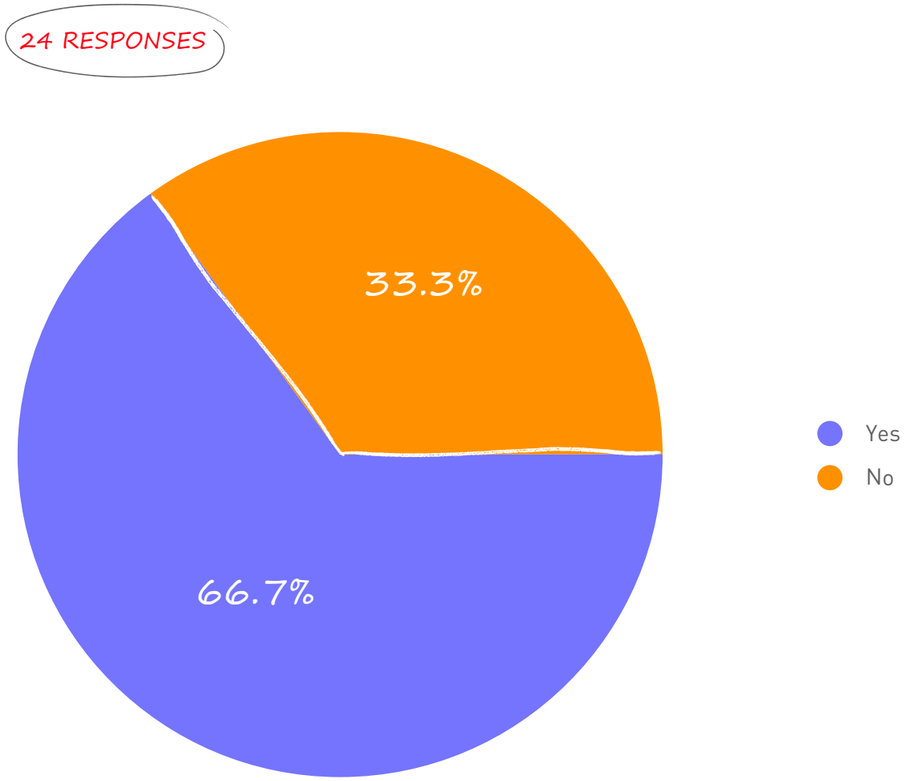
ACRE is a cleantech incubator in New York. It's a lovely space, and looks and behaves like a prototypical incubator, with companies coming when they are ready, and going as they mature.

JOSEPH SILVER

@ Urban Future Lab/ACRE
ufl.nyc

"Our program is flexible depending on the company's needs and growth. Every 6 months companies are evaluated for further support, graduation, or exit. Some of our most successful companies took over 2 years, pivoting many times while incubated by ACRE. Some found success quickly and outgrew the space in under a year."

Is There A Co-working Space For Companies While In The Program?



Source: *Based on New Energy Nexus Survey data, November 2017.*
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Mentors

Nothing replaces the wisdom of experience. A good mentor can guide you through the many challenges and near insanity of entrepreneurship. Sometimes mentors make all the difference for a company, and become board members, investors, and friends. Alternatively, mentors can become a source of frustration, leaving the startup feeling unsupported and the mentor overtaxed and uninspired. As with most things, solid mentor program design and clear expectations are key.

There are lots of ways to slice this cake, but the ways to design a mentor program generally fall into high-touch and low-touch methods, with the accelerator either curating relationships and making individual intros, or taking a more ad hoc approach, where mentors are invited to events, and casual conversations ideally turn into more formal coaching relationships.

MORGAN BERMAN

Director of Business Development
Techstars North America

"Techstars is a mentorship-driven accelerator. We want to help startups really question all their assumptions and get them to think through their business model. The ultimate goal is that we want them to be able to do more in the 13 weeks of the Techstars accelerator than they would be able to do in a year and a half of normal activity. **At Techstars, we break our program up into thirds.**

The first part of the accelerator is "mentor." We have Mentor Madness, where we bring mentors back-to-back-to-back to really help the startups question their business model and assumptions, and to give them feedback and perspective.

The second third of the accelerator is really helping them put their business model back together, based on the mentor feedback, and the final third is helping them position themselves for scale and the next round of funding."

LEILA MADRONE

Founder @ Sunfolding
Accelerated at Otherlab & Y Combinator

“ The best thing about Y Combinator is the access you have to the incredible mentor talent there, from a variety of fields, for the rest of your life. They have a list of experts in all different disciplines – you sign up, and within 2 weeks, you get to meet with them.

Y Combinator is awesome if you're very proactive in getting exactly what you need. ”

HELMUT HERTZOG

@ Sarebi (South Africa)
sarebi.co.za

“ We've eliminated mentoring because we didn't feel like it was working. The program was adding very little tangible value. The mentors spent a lot of time at cost with no measurable outputs. We changed this to a coaching program with measurable service level agreements. ”

KEVIN BRAITHWAITE

VP Global Programs
Cleantech Open
cleantechopen.org

“Mentors are carefully assigned to a particular team and act as their advisors and champions. Many of our mentors are in-country, often very close to where the startup team is located so that there is maximum face-to-face contact. We have an increasing international community of mentors who tend to help remotely, especially in specific sectors and domains. We also focus on cross-region mentorship (i.e., Turkey to Pakistan, the US to South Africa, etc.) and hold our startup award event, the Cleantech Open Global Forum, in California each year. We also give annual mentor awards for excellence based on feedback from our entrepreneurs and the mentor community.”

JAMES TILBURY

EnergyLab (Australia)
energylab.org.au

“**We have three different layers of engagement:**

1

We provide tailored matchmaking, introducing founders to mentors throughout the program.

2

We email our mentor network monthly to let them know what challenges the startups are facing and asking for assistance.

3

We run events for just mentors and the cohort to allow for a bit of serendipity.”

FREERK BISSCHOP

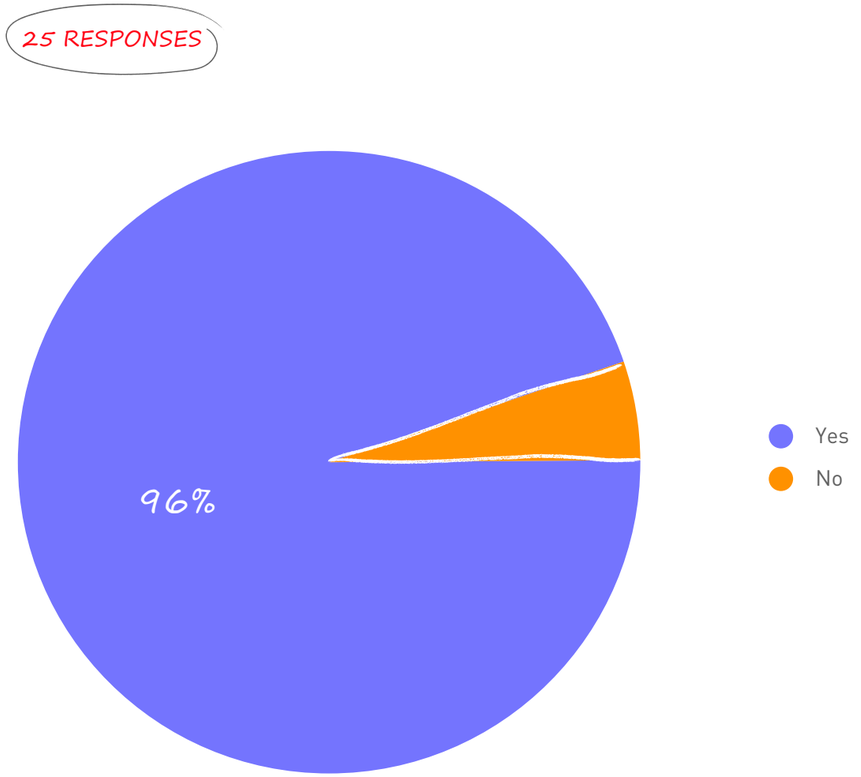
Smart Energy Program Director
@ Rockstart

"We have a mentor update newsletter every 2 weeks to keep them informed about what is happening with the startups throughout the program and they are in a separate slack channel so they can exchange information with each other and the startups.

The schedule is up to the mentors and the startups to organize themselves. We keep track of what the startups do with their mentors by having a one-on-one with the startups every week to ask what they did and what they are planning for next week. If we notice mentors are not active, they go off the mentor list but are still ambassadors of the program.

Subject areas change over time, so this year we have been looking for people who understand new things, like blockchain."

Do You Engage Mentors?



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Peer-to-Peer Learning

One of the more undervalued benefits of an accelerator is being surrounded by peers. Entrepreneurs tend to be (rightly) laser-focused on hard skills and hard numbers, and this sometimes feels softer, and less important. It's not necessarily soft, nor less important, so it's important to design time for this into the program.

We took a very intentional approach to peer interactions with Free Electrons. The first day of the program, we had the utilities and startups meet separately, and we continued this format throughout the program. Startups would share their experience working with the eight utilities: Who was ready to move fast? Who was talking a big game but moving slowly? Who had better relationships with their business units and deployed better projects? This was critical info that really shaped the startups' strategies. There was a softer side too – real friendships were formed, and a sense of community emerged. This came to the fore at the end of the program, when the utilities planned to award $175K of prize money to their favorite of the 12 startups. The whole idea of a prize didn't sit well with the startups – it seemed to be a potential wedge – so they made a pact to share the award. Sure enough, BeOn, a startup from Portugal won the prize and committed to share it with the rest of the entrepreneurs. That's love.

One interesting take on peer-to-peer learning is at Powerhouse, an Oakland, CA, co-working space and seed fund supporting entrepreneurs building software-enabled solutions for the clean energy industry. Every Wednesday, Powerhouse hosts Open House, an informal community networking event where people share their work and make asks and offers to the other entrepreneurs and guests who come by. I've been to a few and have always been impressed by how simple and effective this is. After everyone stands up and gives their 30-second ask and offer, there is an immediate flood of helpful ideas and connections made.

Lastly, I was on a accelerator retreat with Elemental Excelerator and we organized an "unconference," which sources conversation topics from participants. There was a massive range – everything from deep technical cleantech stuff to business model conversations – but the most popular topic was "dealing with founder depression." The session had real, vulnerable sharing and the catharsis was through the roof. Accelerators for the win.

Demo Day

Most programs have a demo day at the end of the program, an event where cohort companies pitch to an audience. Imagine if *So You Think You Can Dance?* and a board meeting had a baby – that's a demo day. The event is generally there to serve both the companies – introduce them to potential investors, partners – and the program itself, so they can impress their value on their own partners, sponsors, investors, and future startups. There is generally beer, and they are fun.

Y combinator, who pretty much invented accelerators as we know them, put on the first demo day in 2005. Today, they have have become massive, filling the room, and having an additional 4,000 investors watching online from all over the world.

KAT MANALAC

Partner
@ Y Combinator

"Having a demo day is essential. It's the thing that everyone is gunning toward. A lot of the founders say that YC is most productive 3 months of their company's life because the stakes are high. We have experimented with a bunch of other programs at YC and found that if there is no demo day, there is a lack of focus.

During YC, we say absolutely don't talk to any investors or potential funders until right before demo day – just focus on building product. This is probably the only time in your whole life you are going to able to do that.

For 3 months, founders are just building and talking to users, and 10 days before demo day, we flip into fundraising mode. Our financing and legal team will walk founders through all the documents, and then we go through rehearsal day where founders practice their 2-minute presentation in front of everyone, and we give feedback. Most of those 10 days are spent practicing, getting the presentation perfect, and figuring out a fundraising strategy.

At demo day, there are usually about 450 investors there in person. We prioritize investors who've funded YC companies before, but any accredited investors can watch the live stream online.

About 4,000 investors watch the live stream, so now a lot of founders are raising from people who weren't even physically in the room. Our software lets investors watch the **2-minute** presentations, press on the "I want to meet" button, and automatically share their information with the founder.

At the end of demo day, investors stack rank the companies they want to meet, and the companies stack rank their investors. The day after demo day is called investor day. At this event, each company sits at a table and the investors come to them. Some companies close their rounds that day, but for others it's just the beginning of the conversation and the beginning of investor due diligence. ”

LEILA MADRONE

Founder
@ Sunfolding, Accelerated at Otherlab & Y Combinator

“ Y Combinator's lessons about how to pitch are exceptional. I thought I was decent to begin with, but then I got to the end of it and realized how I was now 10 levels better.

You start with something rough and then you iterate and get ripped apart over and over again, and you watch other people doing the same thing, which is really helpful. You just keep doing it for 2 weeks. I would go outside, work on my next version, go in 2 hours later, pitch again. They know how to pretend to be bored investors. They are pros at giving you the "bored investor" face – there's not a better training. ”

DAWN LIPPERT

Founder & CEO
@ Elemental Excelerator

“A good demo day should be enjoyable, and you should learn something. We have art and culture, and remind people why we do the work we do. People are humans – we’re not just like data machines – so we really think about the whole person.”

MS. WENJUAN WU AND MR. XIAOSONG LI

@ Center for Green Entrepreneurship,
University of International Business and Economics, Beijing

“After learning the knowledge and skills on green business opportunities, business planning, marketing strategy, HR management, and financing and revising their business plans, the entrepreneurs are invited to present their ideas in front of a group of expert academics, incubators, and investors. After each presentation, the experts give feedback about optimization of business model, team management, financing, operation, and marketing. This is all to help the entrepreneurs identify the loopholes in their business ideas, improve it for sustainable growth, and practice their presentation skills.

On graduation day, the entrepreneurs and trainers are all invited to participate in an open dialogue on entrepreneurship and SDGs.”

STEFAN HENNINGSSON

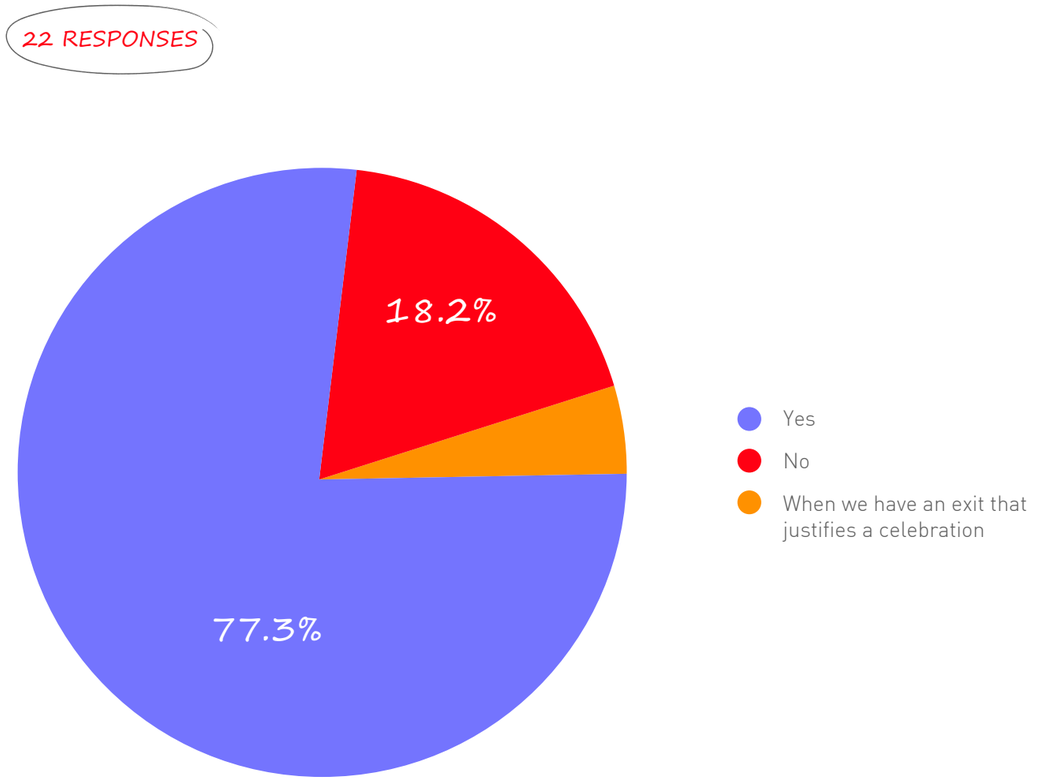
Senior Adviser Climate, Energy & Innovation
WWF Sweden

“For our demo day, we first make a press release about how WWF and our partners have identified startups with the biggest climate and energy impact potential.

At demo day, the entrepreneurs pitch their innovations and share thoughts about specific opportunities and barriers to rapid growth. We have a panel with representatives from policy, investments, and corporations, and they respond to specific opportunities and challenges, and talk about what can be done to enable the rapid growth of cleantech entrepreneurs from China/India/South Africa/Nordics in order for emissions to shrink, and get more people out of energy poverty faster.

Many public and private investors and venture partners are in the audience, and we post the company profiles on www.climatesolver.org for the broader public to see, to understand why these innovations are important for the world.”

Do You Have A Final Celebration, Demo Day, Etc.?



Source: *Based on New Energy Nexus Survey data, November 2017.*
Note: *Survey of 32 clean energy accelerators from the US, Asia, Africa, Middle East, Europe, India, and Australia.*

STEP 4: POST-PROGRAM

The end of the program is the beginning of the next phase. Different programs have different levels of involvement at this point, but savvy ones tend to recognize that a program's success is tied to the companies' successes, and create a very intentional plan for this phase, which is monitored and iterated on.

At Elemental Excelerator, we took the perspective that while companies were technically in the program for 12–18 months, they never really left. We dedicated a lot of resources and people-hours into speaking to all our portfolio companies regularly, tracking their progress, and seeing how we could support them with funding, corporate or utility partners, or anything that would help them. It's a long-term investment, especially in a regulated and hardware/software industry like cleantech.

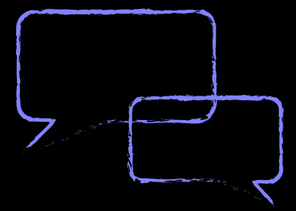
Typical post-program activities

- Inviting alumni to events, which are typically also attended by current candidates, corporate partners and investors.
- Continued access to the program's private networks, which provide connections to investors, partners, and consultants. Techstars, for example, has an internal platform like LinkedIn that connects all the mentors and entrepreneurs from all their 40 programs, all over the world. Y Combinator offers a similar platform for their whole community in perpetuity.
- The offer of office space to graduates for free or a discounted rate. This is a nice way to keep casual, water-cooler-style track of companies.
- Continued training, and opportunities to coach current companies. Nothing replaces experience, and inviting graduates back to mix with current companies is a great approach. At Elemental Excelerator, we paid for all company CEOs to come for a weekend in Hawaii – a great time, and a critical way to connect across cohorts.

KAT MANALAC

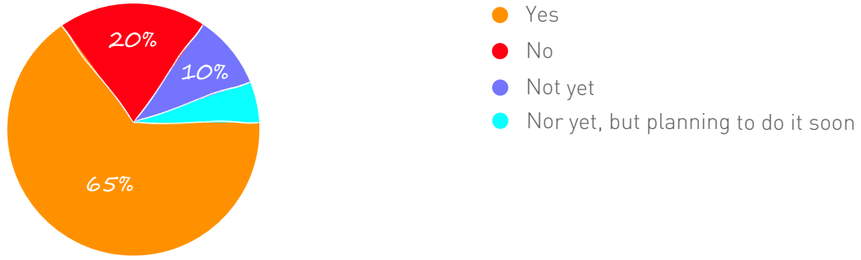
Partner
@ Y Combinator

"Forty-two percent of our founders check in at least once a month to Bookface, our internal network, and it's really very well used and well loved. When you ask the alumni, they say that, long term, it's really the alumni community that has helped them succeed."



Do You Give Continuing Business Development Help After Startups Graduate?

20 RESPONSES



Source: *Based on New Energy Nexus Survey data, November 2017.*
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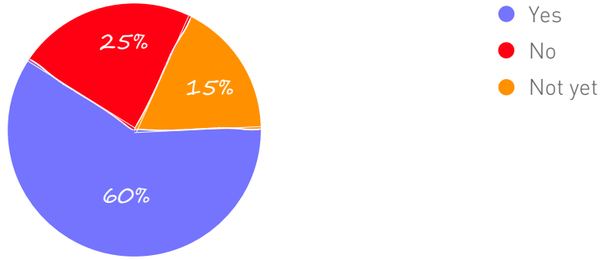
Do You Give Continuing Mentorship After The Program Ends?

20 RESPONSES



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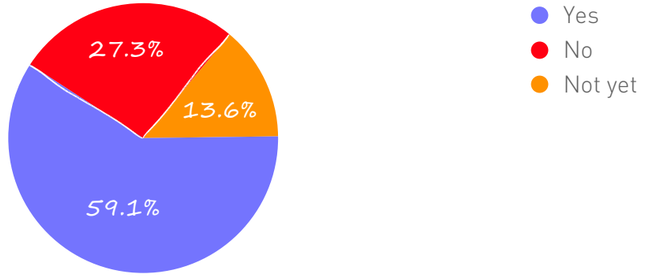
Do You Have A Digital Network/Way For Companies And Other Stakeholders To Communicate Online?

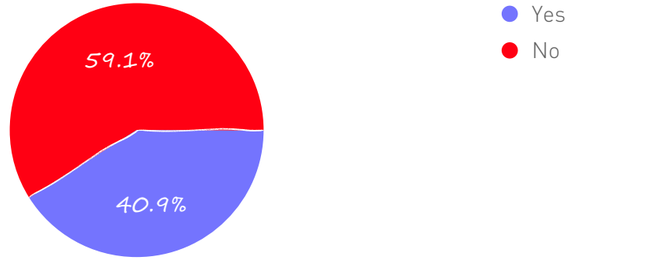
22 RESPONSES



Source: *Based on New Energy Nexus Survey data, November 2017.*
Note: *Survey of 32 clean energy accelerators from the US, Asia, Africa, Middle East, Europe, India, and Australia.*

Do You Have A Work Space For Startups In The Program After They Finish?

22 RESPONSES



Source: *Based on New Energy Nexus Survey data, November 2017.*
Note: *Survey of 32 clean energy accelerators from the US, Asia, Africa, Middle East, Europe, India, and Australia.*

BUSINESS MODEL

Any program, whether for-profit or nonprofit, has to keep the lights on. So just like any other company, it has to have a business model. Accelerators should know what the options are, and entrepreneurs can benefit from understanding what the drivers and key performance indicators (KPIs) are for the program, as this shapes their psychology and choice of companies.

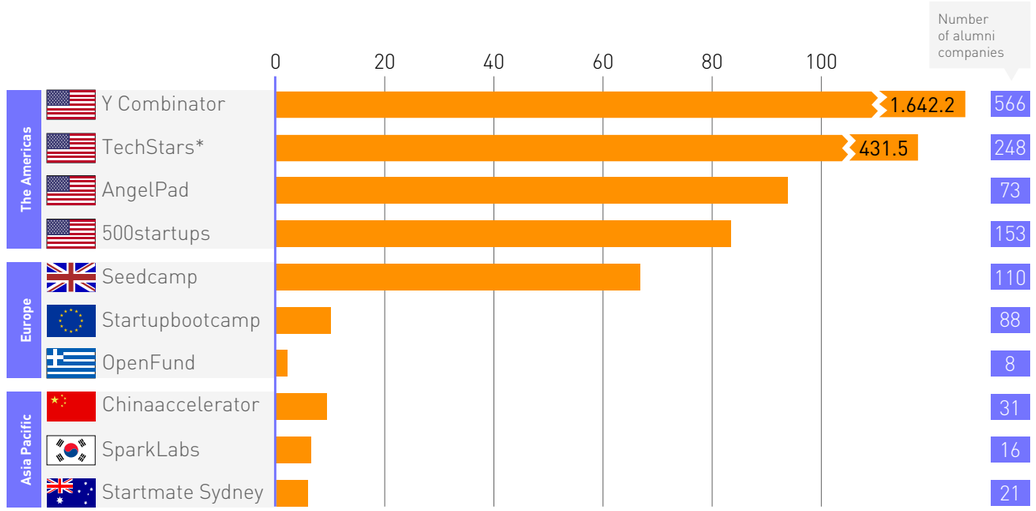
The cash-for-equity model receives a lot of press and attention, but it's actually a pretty tough way for programs to make money. All kinds of factors go into this, like time frame – software and app companies hope for a 3–5-year exit, while 5–10 years is more common for cleantech companies – but nothing seems to tip the balance as much as **how much the startup is sold for.**

Think about it: broad studies generally conclude that **90% of startups fail**, though I find this to be a bit of an optimistic number since smaller, self-funded ones generally slip through the cracks of surveys. Let's say that you fund 6 startups a year, giving each one $100K for 5% of their equity. You've been SUPER lucky, and in year 5, 10% of your 30 startups have been bought for $5M a piece. This means that you've put out $3M over 5 years and made $750K back. Not good. Fund more startups at the same rate, and you're not making any more headway. Something has to change to make this make sense – namely, the sale price needs to be much higher. These companies need to be sold for $20M a piece just to make your investment money back, and this doesn't include any of the program costs like staff and office space, and totally ignores opportunity costs and a host of other things.

The *Economist* reported in January 2014 that "a financial picture of the industry is starting to emerge. Jed Christiansen, who works for Google in London, tracks 182 accelerators which have nurtured more than 3,000 startups. Between them, those have raised $3.2 billion in follow-on funding and generated 'exits' worth $1.8 billion. This landscape is dominated by American firms, with Y Combinator and TechStars franchises leading the pack. This suggests that accelerators are a winners-take-most market."

Startup Your Engines

Total follow-on funding for alumni from top accelerators
By region, $m



Source: *Seed-DB*

Total of accelerators in network

Source: "Accelerators: Getting Up to Speed," *special report*, Economist *(January 16, 2014).*

Going by these numbers, that $1.8B in exits at 6% (the Y Combinator rate) means that there have only been returns of $108M. This is still not keeping the lights on, and indicates that the conclusion of the study is correct – there is a dominance of accelerators that have been able to have outsized returns on a few companies to be profitable.

So, despite being the most public aspect, equity in companies is highly unpredictable and an overreliance on this will absolutely sink your accelerator. Because of this, accelerators generally rely on outside money and other activities that help them make money and stay afloat.

Outside funding: government and foundation grants

This kind of funding is generally given on a first-loss or philanthropic basis, and is done so because the accelerator is seen as a tool for broader economic growth by a local, state, or national government, or because it fulfills the mission of a foundation or other charitable organization. For Elemental Excelerator, we were lucky to get money from the US Navy, Department of Energy, and then the Emerson Collective, the philanthropy started by Steve Jobs' wife, Laurene Powell Jobs.

Outside funding: corporate

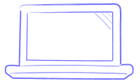
Programs like Techstars lean on this heavily, charging companies and then running programs for them. Some corporates opt to run their own programs, and absorb possible losses in the name of long-term innovation. At Elemental Excelerator, for example, they cultivated corporations and utilities to be part of their Global Advisory Board, which gave them the opportunity to weigh in on our selection process, have first look at our portfolio and other market intel.

Events

Everything from small events to large conferences with larger ticket prices.

Program and application fees

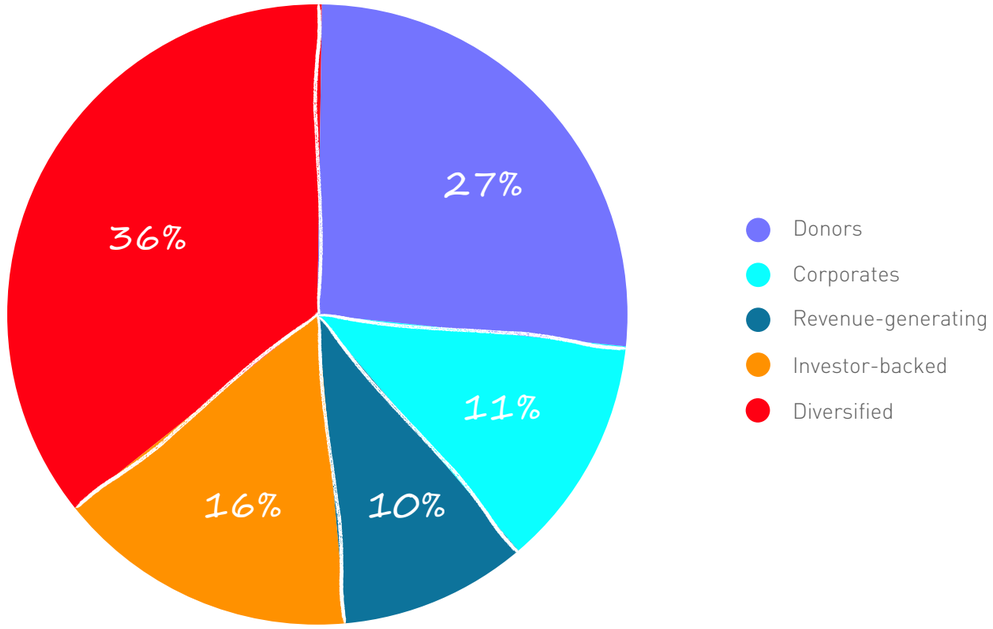
While less common, some programs like the Founder Institute charge startups $2K for going through their program, and many programs have an application fee.



Office space

Charging for desk space is a nice way to supplement income and maintain the community. Refer back to previous space section.

Five Funding Profiles

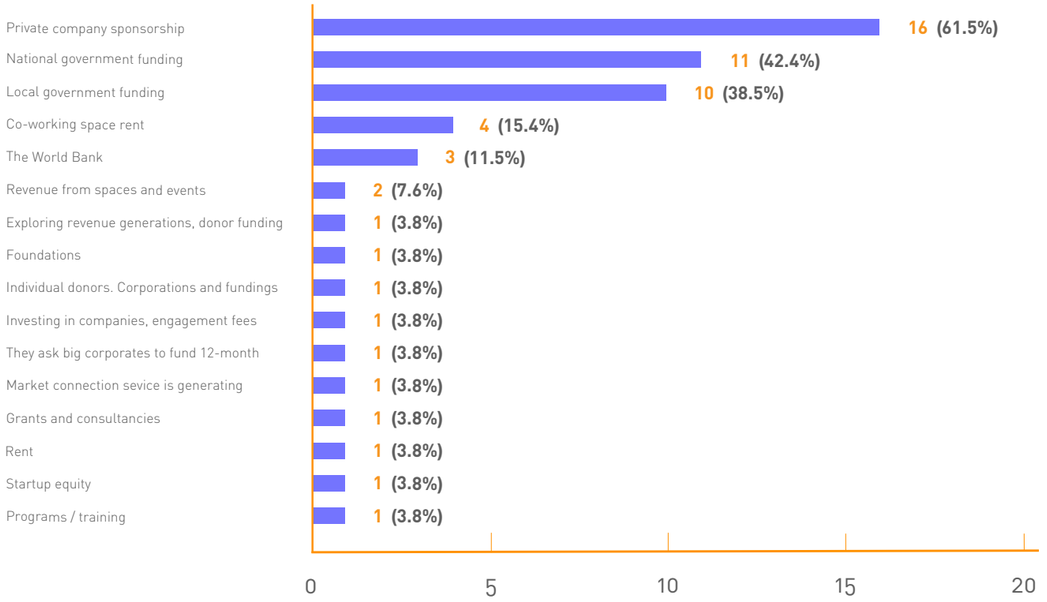


N = 139

Source: *GALI (2017),* "Funding Accelerator Programs: Questions from the Field," 4.

What Are Your 4 Main Sources Of Revenue?

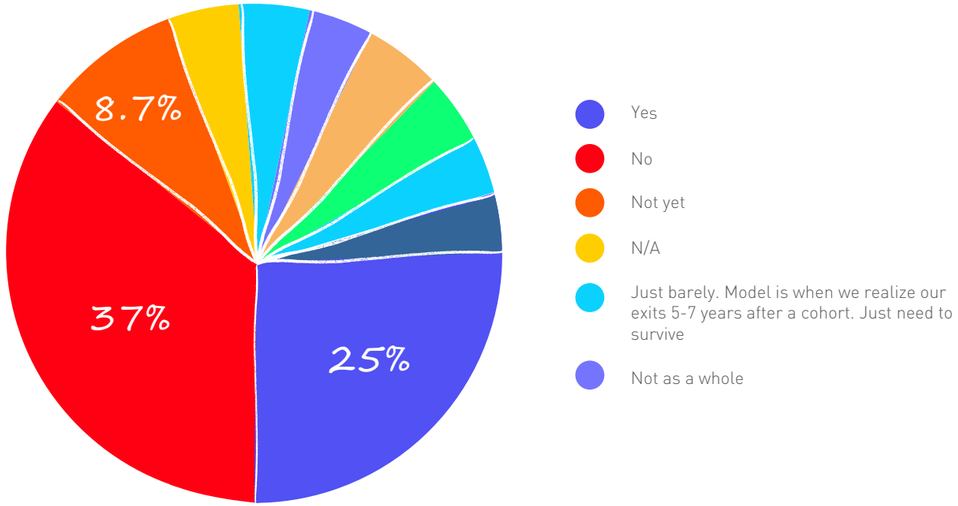
26 RESPONSES



Source: *GALI (2017),* "Funding Accelerator Programs: Questions from the Field," 4.

Is Your Program Profitable?

23 RESPONSES



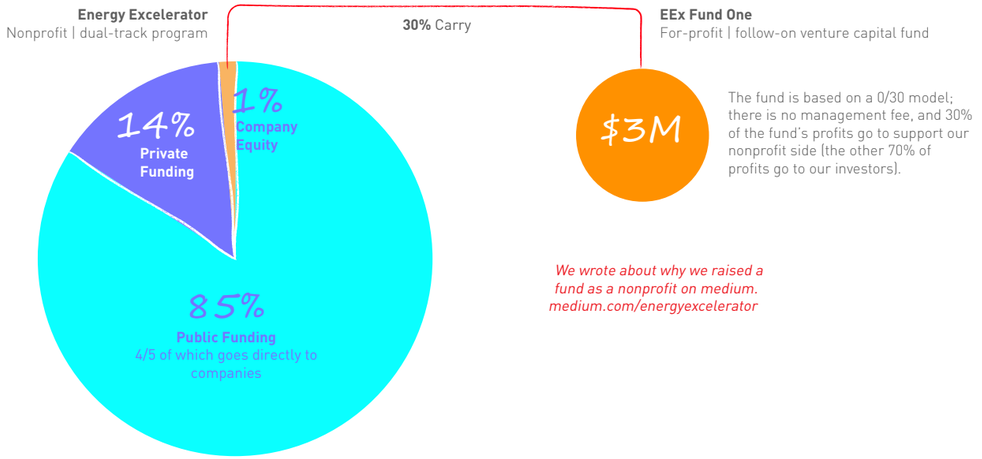
Source: *Based on New Energy Nexus Survey data, November 2017.*
Note: *Survey of 32 clean energy accelerators from the US, Asia, Africa, Middle East, Europe, India, and Australia.*

The Nonprofit Accelerator/For-profit Fund Model

One popular model is to operate the accelerator as a nonprofit, and then have a for-profit follow-on fund, which pays fees to the accelerator. This allows the accelerator to receive grants and get nonprofit tax benefits, while the fund benefits from having the accelerator do the scouting, due diligence, and vetting for them. Funds tend to operate on a "2 and 20" model, meaning that they take an automatic 2% for managing the money, and then get 20% of the profits, and some of this money goes to the accelerator for these scouting and vetting services.

Elemental Excelerator Fund One

In 2016, the Elemental Excelerator added a for-profit venture fund to create a hybrid nonprofit/for-profit model. They went with a "0 and 30" model, which meant no management fee and 30% of the fund profits going to the accelerator.



Source: *Elemental Excelerator (2017),* Elemental Excelerator Impact Report 2015-2016*, 19.*

A peek inside the EEx follow-on fund, aka funding for companies after the program:

- Various check sizes, with an aim to diversify. This includes corporations, lawyers, individual investors, and nonprofits.
- It took a year to research and create the fund itself, while also securing the $3M of capital.
- Ninety percent of the funds have been invested, expected to be fully invested by the end of 2018.
- Two investment criteria:
  1. The companies graduate the EEx program and remain in good standing.
  2. The companies raise a minimum matching $300K from a qualified investor.
- Equity amount depends on the size of the company, but it is typically minimal since many of the companies are raising millions and the fund is only coming in at $300K.

RUPESH MADLANI

Former Equity Analyst @ Lehman Brothers and Barclays
Co-Founder @ Global Sustainable Capital Management
Co-Founder @ Bankers Without Boundaries

“In addition to providing an ecosystem and sense of community, accelerators and incubators offer a passport to regular and ongoing funding far beyond the earliest stages. By allowing full participation across the timeline of a company’s evolution, accelerators and incubators are able to reap the full benefits from their investment and market knowledge and allow them to reinvest in their areas of expertise.”

YES, BUT I THOUGHT ACCELERATORS WERE CASH COWS?

I know – easy to think so if you just read the news. It makes sense: grab a bunch of companies, get a slice of each, and let the dollars flow in. That’s really just success bias, because while Y Combinator makes the headlines for big exits, you’re not reading about all the thousands of other players in the space (as Bill Clinton would say, “headlines versus trendlines”) who are squeaking by, losing money or reliant on additional funding to keep going. As we just showed, betting on companies getting exits alone generally isn’t viable.

JAMES TILBURY

@ EnergyLab (Australia)
energylab.org.au

What are your 4 main sources of revenue?

- Corporate sponsorship
- Government grants
- Venue hire
- Co-working rent

JOSEPH SILVER

@ Urban Future Lab/ACRE
ufl.nyc

Are you a nonprofit or for-profit?

Nonprofit.

What are your 4 main sources of revenue?

The New York State Energy Research and Development Authority (NYSERDA; the biggest), New York University (ACRE is a part of NYU), corporate sponsorships, rent payment by companies (below market rate compared to co-working space).

What's the rough return on investment of your program?

Our leverage is the simplest calculation of ROI for our program: for every dollar that our funder NYSERDA provided to ACRE in our last contract, our companies raised $100 from the private markets. Since 2009, our companies have raised over $350M from the private sector (non-grants), they employ over 340 people, and our company survival rate is greater than 90%.

FREERK BISSCHOP

Smart Energy Program Director
@ Rockstart

Do you give money?

“ Yes $20K, through a convertible note. ”

Do you take equity?

“ We take 8% equity for a $20K convertible note, with $50K in in-kind services (space, services, administration, legal advice, marketing and branding services). We also have all kinds of free access to cloud facilities like Amazon, Microsoft, Azure, Slack. Microsoft, a partner to the smart energy program, provides perks and organizes trainings. ”

What's your business model?

“ We are a for-profit and have four main sources of revenue: investment, sponsorship, engagement fees, and corporate assignment events like trainings, conferences, and challenges apart from the program. 75% revenue from investment, 10% sponsorship and engagement fees, 15% corporate assignments. One cohort costs a little under $1M to run. ”

Is your program profitable?

“ Just barely. The model is when we realize our exits 5–7 years after a cohort graduates. ”

What's the return on investment for the program?

“ We see it as the value of the startups. We measure by what level of investment they get, and the typical rate of return is between 20% and 40% a year, but this is all on paper until it materializes in an exit. ”

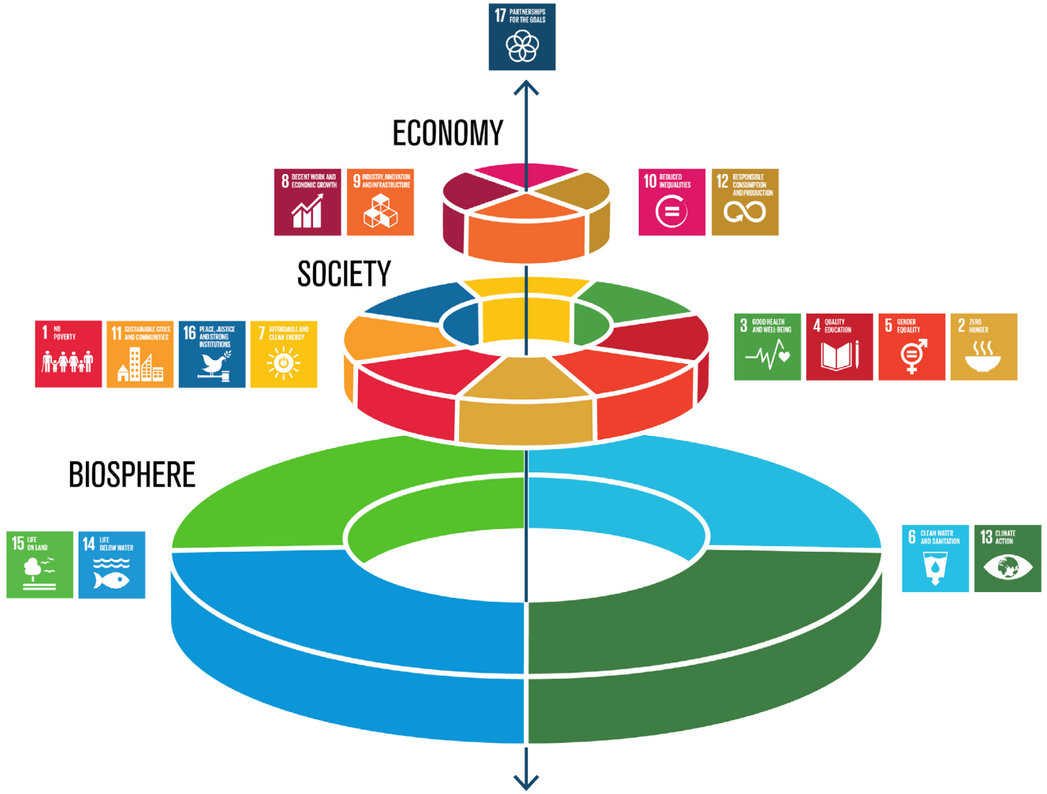
GOVERNANCE, LEADERSHIP, AND KPIS

Form generally follows function in terms of the governance, leadership, and the key performance indicators (KPIs) accelerators are expected to follow. For-profit programs tend to resemble for-profit structures, with a CEO and a board, while nonprofits have an executive director and a board, all of these providing a system of checks and balances. Just like for a startup, the importance of the personality, resourcefulness, and drive of the accelerator leadership is hard to overstate, and an inspired leader can make all the difference in terms of attracting companies, funding, and partners.

What KPIs should your program be tracking?

This is both important and relatively subjective, but there are three categories you can pull from to create your own formula:

- **What your funders want.** Especially if this is a large organization like an NGO or bank, with an established set of metrics, this might be fairly well spelled out for you already. That's great, but by the same token, that large org might not be very deep in the innovation game, so you might need to adjust significantly.
- **What your cohort companies are tracking.** Your cohort companies are likely getting hammered all the time by investors and grant-making organizations about their metrics (both business and impact), so aligning with your cohort companies is a good option.
- **Global metrics.** Particularly for more impact-focused programs, there are great opportunities to get KPI inspiration from things like the UN's Sustainable Development Goals.



Source: *Stockholm Resilience Centre*

GOVERNANCE, LEADERSHIP, AND KPIS

HELMUT HERTZOG

@ Sarebi (South Africa)
sarebi.co.za

What's your governance?

"We have a governance board and an advisory committee. The advisory committee only works on our strategy; the governance board oversees strategy, finance, and other governance matters. There is a strong governance process with external auditors, an external company secretary, and quarterly board meetings. the board appoints new directors with a prescribed process, and the board and director's performance are managed through a formal annual review process."

KPIs: How do you judge your success?

"
- New small/medium enterprises created
- New jobs created
- Small, medium, and micro enterprises supported
- Customers supported
- Revenue growth of incubatees
- Profitability of incubatees
"

STEFAN HENNINGSSON

Senior Adviser Climate, Energy & Innovation
@ WWF Sweden

What are your main sources of revenue?

“ Philanthropic and corporate grants, namely the Swedish Postcode Lottery, MacArthur Foundation, Dustin Home, and government agencies and multinational institutions. ”

Is your program profitable?

“ Not as a whole. Climate Solver works on accelerating a selection of high-impact startups primarily focused on triggering broader climate and energy access. We do this for impact, based on grants. ”

How much money does it take to run your program?

“ For 2017, the budget was 630K euros. Additional support-in-kind is given by the WWF communication team when there are demo days. ”

How do you judge your success?

“
- Tons of CO2 reduced. In terms of tons of CO2 reduced, the 100 entrepreneurs that have passed the program do not have a common reporting format so we don't have an aggregated figure, but rough numbers state that there have been about 22 million metric tons of CO2 reduced.
- Number of people out of energy poverty that now have access to clean energy services, which is around 749,000.
- Job creation.
- Positive changes in the national innovation cleantech ecosystem in terms of policy, and finance. ”

How do you know that you're making a difference/ having additionality?

“
- We do a SurveyMonkey every two years.
- In total, 53% more people are employed today compared to when the companies were honored as Climate Solvers.
- Sixty percent of the companies noticed an increase in inquiries into their business after it was honoured as a Climate Solver, with the biggest increase in China and South Africa.
- Seventy-one percent claim the Climate Solver recognition has given them better confidence to approach financial institutions and investors that they were not in contact with previously.
- Sixty-nine percent claim Climate Solver materials have helped in marketing the innovation. ”

Full 2017 survey result by country available on SlideShare.

JOSEPH SILVER

Urban Future Lab/ACRE
ufl.nyc

What governance structure does your organization have?

“ ACRE is owned by NYU, and managed in the department under the vice dean of innovation and entrepreneurship. The managing director is part of NYU’s Cleantech Initiative, and we have two program managers, one community manager, one design lead, one assistant, and we have an advisory board appointed by the managing director. ”

STARLENE SHARMA

Sangam Ventures
sangam.vc

What’s the rough return on investment of your program?

“ We look for impact that includes development and climate mitigation or adaptation. We support companies that are developing products or services that have additionality/novelty, affordability, accessibility, and availability. The program expects that by its end, companies should have a clearly demonstrable product/market fit and the ability to raise investment capital. ”

MS. WENJUAN WU & MR. XIAOSONG LI

Center for Green Entrepreneurship
University of International Business and Economics (Beijing)

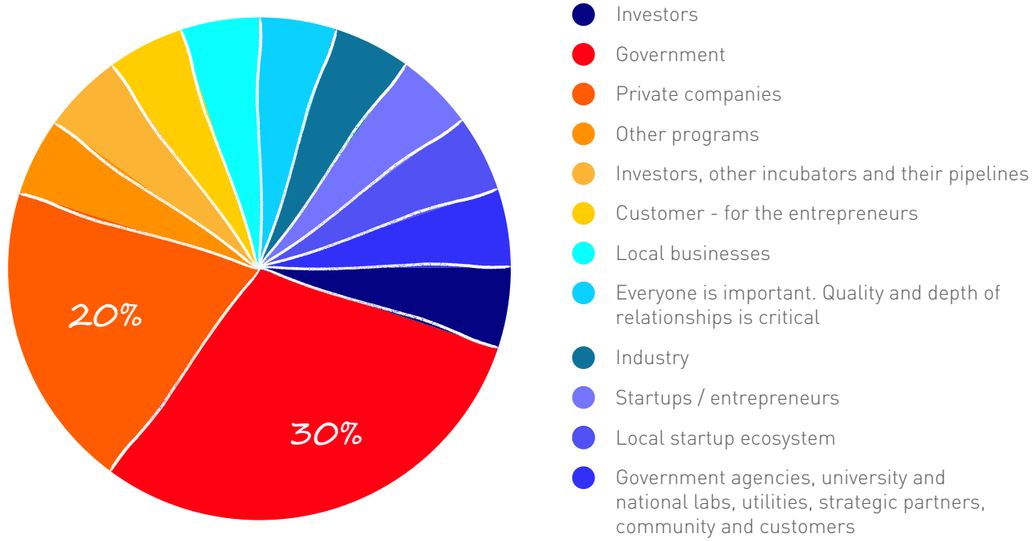
“We judge our success by how much impact we make, e.g., how in-depth the startups’ understanding of green/sustainable development is, and how capable they are to run their startup, both before and after the training.”

How do you know that you’re making a difference/having additionality?

“After each program, we conduct a thorough survey of the participants. The top gains from the program, according to the entrepreneurs, are inspiration, self-reflection, professional knowledge, comprehensive and systematic thinking, and knowledge and tools of SDGs. This shows that the training has achieved its objectives of not only capacity building but also ensuring sustainable business development.”

What Are The Most Important Stakeholders In Your Startup Ecosystem?

20 RESPONSES



Source: *Based on New Energy Nexus Survey data, November 2017.*
Note: *Survey of 32 clean energy accelerators from the US, Asia, Africa, Middle East, Europe, India, and Australia.*

FREERK BISSCHOP

Smart Energy Program Director
@ Rockstart

What governance structure does your organization have?

“ We have very flat organization, with four founders, three of whom are still involved on a daily basis and one spends a quarter of his time. The management team consists of six, with two founders as members of that team, and a supervisory board of four people that is like a steering committee. Really important decisions for the company go through the board. ”

How do you know that you’re making a difference/having additionality?

“ We measure follow-up funding, the amount of money raised, and number of jobs created. For smart energy, we measure impact by trying to get a feel for the potential carbon reduction impact. ”

TIEN NGUYEN

Commercialization Specialist
@ Vietnam Climate Innovation Center
vietnamcic.org

What governance structure does your organization have?

“ We have a project director from the Vietnamese government under the Ministry of Science and Technology (who reports directly to the minister), who oversees the whole project. Portfolio managers work on managing the companies and the World Bank team provides technical assistance throughout the year, with biannual, in-person meetings to review progress and develop action plans plus monthly calls. ”

ECOSYSTEM BUILDING/STAKEHOLDERS

There's a virtuous cycle to feeding the ecosystem around an accelerator program through altruistic things like events, education, and community building. Smart programs with long-term vision especially get this, and also understand the principles addressed in "Serving the Rejected" – namely, that startup entrepreneurship is not a slice in time, it's a journey, and helping entrepreneurs learn and improve will eventually serve the program itself.

Techstars, for example, has an emphasis on ecosystem building, with public events like Startup Weekends to help build their pipeline of companies. They also stay in touch with their companies in perpetuity, with a yearly get-together called FounderCon for all the companies, in all the tracks and geographies. They keep their community of 10,000 mentors, and 3,000+ investors active through in-person and digital events and comms, and they have been able to snowball this into a larger and larger sphere of action and impact.

Obviously, depending on your program size and staff, you might have to have more humble goals, but do remember the cachet you have as an accelerator program, and don't forget that you are a great honeypot for investors, entrepreneurs, and anyone looking to understand a field or geography. This gets into the conversation around stakeholders versus shareholders – which is really the difference between those that you touch in a direct sense and those that you affect (or affect you) in ways that might be more subtle. Good program design and savvy business acumen is to be aware of who these entities are, maybe through a stakeholder map, and have an engagement strategy and set of goals for each. Particularly for folks in state and local government who often feel like the un-cool kids who don't get invited to parties, a little love can go a long way.

KAT MANALAC

Partner
@ Y Combinator

We tell founders at the very beginning of the program:

> Okay for the next 3 months you should call in all the favors, use partner time, reach out to alumni, take as much time as you possibly can. Then when you graduate, it's your turn to pay it forward.

JOSEPH SILVER

@ Urban Future Lab/ACRE
ufl.nyc

> We have tons of events for the wider community, with things like hackathons, pitch events, and things that help us utilize our event and exhibition space. All of our alumni are invited to attend our events and investor pitch events.

SHANA RAPPAPORT

Director of Strategic Programs
@ GreenBiz Group

“Partnering strategically with incubators and accelerators is an essential part of our work at GreenBiz and with our VERGE conference. Our core audience of senior leaders from large companies, progressive cities and utilities have real challenges (and opportunities) related to things like renewable energy, clean transportation and eliminating waste. Working with startup accelerators enables us to connect executives with the entrepreneurs who can help solve these problems, facilitating a core piece of our mission to accelerate the clean economy.”

TREVOR TOWNSEND

CEO @ Startupbootcamp Australia
startupbootcamp.org

Who are the most important stakeholders in your startup ecosystem?

“For us, they're the local startup ecosystems, investors, corporate partners, and mentors. Corporate partners in particular play a big part in the program and often provide staff to the program itself as entrepreneurs in residence. They provide both business and technical expertise and act as an interface to the business units.”

TIM WEST

Founder & CEO
True West Ventures

Growing up, I always wanted to help people. It made me feel good and I could tell it made others happy. So naturally, when I discovered cooking, I fell in love with feeding people. But soon, while cooking at the Facebook HQ in Palo Alto, CA, I realized that I could only feed so many people with my chef knife and fire, so I decided to try to start a business that could feed more people and make more people happy.

Inspired by Facebook's epic weekend hackathons, I helped launched the first Food Hackathon to great success: we hosted 250 people from five countries and created the most exciting weekend-long horizontal learning environment I'd ever experienced. Ideas were shared, connections were made, molds were broken and everybody had a great time while we inoculated them with delicious, nutrient-dense, and fair trade culinary delights. FoodTech quickly became the hot new industry as others copied our model and began hosting food hackathons all around the world.

In developing these events I learned many lessons (often the hard way) on what makes a hackathon successful.

The 5 Key Ingredients to a Successful Hackathon

1. **Positivity** — Only focus on what's possible. Never shoot down an idea.
2. **Accessibility** — Make the event on a weekend and financially affordable (but charge something to make sure people show up!).
3. **Socialness** — Create cross-pollination and serendipitous collision zones in the physical environment to facilitate horizontal learning.
4. **Diversity** — Invite a variety of folks with different skill sets, backgrounds, levels of education, cultures, socioeconomic identities, races and ages, plus make it gender balanced.
5. **Fun** — Celebrate working together for the greater good! Have great food, music, hacking-cheerleaders, prizes, surprises, and exciting performances to keep everybody engaged and working all weekend.

Please take this anecdote and these lessons to your industry, your community, and your zone of genius. May you give rise to the positive social, environmental, and global change necessary for our collective evolution. And may you all feel good while making others happy.

HOW TO BUILD AN ACCELERATOR ?!

There's no doubt about it: running a program is a tough gig. Take the challenge of operating one business, and now imagine that the business of your business rests upon other, less experienced businesses. It's hard, it's a lot of work – and it's incredibly rewarding.

For accelerator staff and leadership, my overall recommendation is to design backward from the impact you want to have. Then, cross-reference that impact with your own capabilities and connections as a team, a sharp awareness of what companies in your industry and geography need, where they fail, and the macro industry factors.

How do you do this? Get outside the building, ask good questions, listen, recruit appropriate self-interested partners, and always keep an eye a couple steps down the road. At Free Electrons, we were on the lookout for disruptive companies that could hit the ground running with the utilities, so we set a floor of $1M raised and a scalable-ready product. At Elemental Excelerator, they designed the two tracks to fill in two valleys of death, which were discovered by talking to cleantech companies and accelerators. At the Center for Carbon Removal, we held an investor day, did lots of listening, surveys, and interviews, and then we thought long and hard about how to kick-start an entire industry (that doesn't exist, but needs to if we want to keep the world from runaway climate change, according to the IPCCC – sheesh!).

To break it down further:

Figure out your goals, and design backward.

I call this "reverse engineering" from the results you want. If your program goals are to reduce dependence on fossil fuels in various ways, how will you do that, step by step? Perhaps you should spend your time commercializing existing technology? Or spend money connecting cohort companies to government initiatives or utilities or corporations? What current structures and programs can you leverage? If you are purely profit-focused, what industry is growing, what do you personally understand and have the capacity to do? What's your strategy for getting companies to join and fork over their own equity?

Look at existing models.

This book has tried to unearth some good ones, but you should intimately know what else has been tried, what has worked, what has failed and why. A lack of awareness of the competitor landscape as an enterprise or accelerator is never acceptable.

Be customer-driven.

Yes, you are smart and know a whole lot of awesome things. But, you're likely not the target customer for your startup… so get out of the building and talk to the people that are. What do they need? What are they willing to pay for? What do they maybe not even know they need? Shape your program and industry or company focus around these needs and, critically, invite these people to be part of your program – as sponsors, as shapers of your assessment criteria, as part of your due diligence. You're creating product/market fit with your companies, so fit the products/companies to the markets/customers.

Map your assets (and shortcomings) as a founding team.

Your team has specific capabilities and connections: what are they… and where are you falling short? Use the Accelerator Generator to map all aspects of the program, and highlight where you are strong and where you are lacking. Then, build around what you have and make a plan to fill in shortcomings with partners and team members.

Pick good companies.

Kind of obvious, but worth stating. Successful companies attract more companies to your program, which also brings in more grants, investors, and mentors. To have good companies, you need good outreach and solid due diligence.

Be willing to take risks.

Just like startups, programs should be willing to try new things when it makes sense. Create a culture where it's not only acceptable but encouraged for founders to sincerely share what they're struggling with. Don't make people maintain a veneer of success where there isn't any – only when everyone is comfortable admitting to struggles can people really pave the way to success.

Build an amazing partner network.

Think about who your companies need to work with, chase them down and get them on board. Having a great program without a next step for graduating companies is not thinking in systems, and will hamstring your program.

Build runway.

Think realistically about your program costs, and pad everything to buffer against unexpected events.

Location matters.

If your program is located in an area without a dense entrepreneurial ecosystem, make specific efforts to overcome this, and try to turn lemons into lemonade, but be creative about what advantages you do have.

The Accelerator Generator

Now, let's get our hands dirty and use the Accelerator Generator to sketch out your program. Even if you have an existing program, try taking a fresh view of things and fill in the sections. In all cases, turn back to the program breakdown we just went through and think if any of the examples could add to your program and efficacy.

Accelerator Generator

1. Pipeline/Outreach	2. Due Diligence	3. The Program	4. Post-Program
How to reach the right companies	How to vet and choose companies	How to run your program	What happens after the core program is over?

Governance, Leadership, and KPIs: How are decisions made? How do you judge success?

Business Model: How do programs pay the bills?

Ecosystem Building/Stakeholders: How do the accelerators advance their field?

From: *Accelerate This! A Super Not Boring Guide To Startup Accelerators And Clean Energy Entrepreneurship*

KAT MANALAC

Partner
@ Y Combinator

Let's say you are starting a program fresh. What's your advice?

"For the program to work well you need a couple of things:

First, the person running the program, picking companies, and advising should have a relevant background. Ideally the person running the program has built a company, sold to customers, etc.

Second, you need to think about how you build a community of founders and funders. Is it through contacts? For YC, many of the people who applied for the first batch were fans of Paul Graham's writing. How do you build the community of investors? For YC, angels are an important part of the ecosystem and the vast majority of YC companies will get most of their seed round from angels. At first, YC was just Paul and Jessica begging local VCs and angel investors to come to demo day. Initially, there weren't very many who came, but it grew in popularity as the years went on."

STEP 1	STEP 2	STEP 3
MISSION What will your accelerator do?	**SPECIALISM** Will it have a specific focus?	**FUNDING STRUCTURE** How will it be funded, and what funding will you offer to startups?
STEP 4	**STEP 5**	**STEP 6**
ATTRACTING TALENT How will you recruit startups?	**SELECTING START-UPS** How will you manage the selection process?	**PROGRAM PACKAGE** What support will you offer startups?
STEP 7	**STEP 8**	**STEP 9**
ACCESS TO NETWORKS What networks will you connect them to?	**ALUMNI SERVICE AND POST-PROGRAM SUPPORT** How will you support startups once the program has ended?	**MEASURING AND EVALUATING PERFORMANCE** How will you track the impact of your program?

Source: *NESTA (2014),* "Startup Accelerator Programmes: A Practice Guide," *15.*

PROGRAMS AT A GLANCE

Bonus!

Here's a quick look at some programs we've covered in the book so you can see some of the fundamentals. Side note: it took a ridiculous amount of time to get all these details from program websites. Imagine being an entrepreneur and trying to compare 15 programs – yikes. Just saying, what if all programs standardized this, or just made it easier to glean from their website?

Programs At A Glance

Name of program. Founded what year?

Length and location of program - do you have to move?

Cash given/equity taken

Is there an industry/sector focus?

Stage focus/qualifications (aka, prototype, series A)

Success story/ company

Key partners/ network/ differentiator

FREE ELECTRONS

PROGRAM

Free Electrons is a global, electrical utility-backed accelerator with weeklong modules in Berlin, Sydney, Melbourne, and Silicon Valley between April and October. The program begins with an initial week in Lisbon with 30 teams, but they are whittled down to 15 after the initial pitch day. The program has three modules: learning about the utility industry, diving deep into silicon valley and tech, and scaling. It culminates in a demo day where companies present to investors and global utility companies. 10 global utility giants are partners of Free Electrons – an exciting prospect for startups in the cleantech and/or energy space.

PRE-REQS

Unclear

FUNDING

$200K non-dilutive awarded to the winner, plus expenses paid to all modules for all companies

INDUSTRIES

Mobility, Clean and Smart Energy, and Digitalization

STAGES

Ready to scale with a utility

KEY PARTNERS/DIFFERENTIATORS

10 global power utilities, including utilities from Singapore (Singapore Power Group), Japan (TEPCO), Germany (innogy), Ireland (ESB), Portugal (EDP), Australia (Origin Energy & AusNet Services), Dubai (DEWA), CLP (Hong Kong), and the US (American Electric Power)

WEBSITE

freetheelectron.com

ELEMENTAL EXCELERATOR

PROGRAM

A yearlong program with hot desks in Silicon Valley and Hawaii, and weeklong work sessions in both throughout the year. 15–20 companies are accepted in each cohort across three tracks (Go-to Market, Demonstration, and Equity & Access). Elemental Excelerator begins with a kickoff week in Honolulu and continues through a CEO & Leadership Summit, also in Hawaii. The program offers mentorship, ongoing support, and a wide range of facilitated connections to people within the sustainability sphere.

PRE-REQS

At least two FTE and an operating prototype

FUNDING

Go-to Market: $75K; Demonstration: up to $1M; Equity & Access: up to $750K. But they charge fees: Go-to Market: $3K; Demonstration: $5K; Equity & Access: $3K

INDUSTRIES

Mobility, Water, Food & Agriculture, Energy, Cybersecurity, Fintech, Fuels, IoT, Materials and Plastics, Natural Resource Management, Recycling and Waste Management, AI

STAGES

Go-to Market: Seed to series A; Demonstration: Seed to Series C; Equity & Access: Seed to series A

KEY PARTNERS/DIFFERENTIATORS

US Department of Defense, Office of Naval Research, Hawaii State Energy Office, Hawaiian Electric Industries, Vector (New Zealand), Tokyo Electric Power Company Holdings, Inc. (TEPCO), First Philippine Holdings Corporation, SK Gas (South Korea), and GE Ventures

WEBSITE

elementalexcelerator.com

Y COMBINATOR

PROGRAM

A 3-month-long program located in Silicon Valley, and perhaps the most famous in the world. You don't necessarily have to relocate (though most people do), but you do have to be physically present for a large portion of it. Batches are large – 85 companies or more – but they are organized into groups of 25, led by two alumni. The focus is very much on building product – "build something people want." They don't offer office space, but they do offer weekly office hours, as well as a robust program including their well-known weekly dinners (that last half a day, and include a guest speaker). At the end of the program, companies present at an invite-only demo day for potential investors; Y Combinator helps companies through this process and beyond, with a boastful alumni network and lots of post-program resources. Notable alumni include Airbnb and Dropbox.

PRE-REQS

Pretty much just a solid idea

FUNDING

$120K in exchange for a 7% stake in the company

INDUSTRIES

Startups that disrupt currently established industries, whatever that industry may be

STAGES

Pre-series A is preferred

KEY PARTNERS/DIFFERENTIATORS

Y Combinator's alumni network includes such startup giants as Airbnb, Dropbox, and Twitch

WEBSITE

Ycombinator.com

TECHSTARS

PROGRAM

A 3-month, mentor-driven program with a very global presence. Techstars has almost 40 accelerators in cities around the globe, from Adelaide to Austin, as well as an (almost) entirely online program. Program cohorts are about 10 companies. The program offers office space and works in three stages: finding mentors, execution, and finances. It culminates in a demo day; after the program is over, Techstars has a network of thousands of alumni and companies for graduates to tap into. Techstars also sets itself apart by offering an equity back guarantee – the only one in the industry. Notable alumni include ClassPass and Sphero.

PRE-REQS

Not much. Companies of any sort are encouraged to apply, from those with "an idea, a dream, and maybe a dog," to those that have raised over a million already

FUNDING

$120K in exchange for 6% equity

INDUSTRIES

A wide swathe; mainly technology based. From their website: "we don't fund biotechnology companies, restaurants, consultancies, or other local service oriented companies"

STAGES

Pretty much all

KEY PARTNERS/DIFFERENTIATORS

It's a corporate-sponsored accelerator, so a ton. There are 72 listed on their site

WEBSITE

techstars.com

ROCKSTART

PROGRAM

Based in the Netherlands (with one program in Colombia), Rockstart is actually four different accelerators: Smart Energy, Web & Mobile, Digital Health, and AI. Programs last between 150 and 180 days and are focused on taking startups from early traction to global market. Companies get dedicated office space, a deep well of specialized knowledge from mentors and investors, and lots of workshop options to learn from. The program culminates in a demo day, and if you're applying from outside the EU or Colombia, they'll help you secure the visa to make that happen. Funding varies, but they also have a strong investor network for startups to tap into. Plus, you get to be in a cool location, so that's a win. Notable alumni include 3D Hubs and Peerby.

PRE-REQS

Must have at least an MVP

FUNDING

Varies per program, but around €20,000 in cash and €80,000 of in-kind funding and office space in exchange for 8% equity

INDUSTRIES

Smart Energy, Web and Mobile, Digital Health, AI

STAGES

At least MVP with some customer traction

KEY PARTNERS/DIFFERENTIATORS

Rabobank, Shell, Accenture, and many others, listed at www.rockstart.com/rockstart/partners/

WEBSITE

rockstart.com

500 STARTUPS

PROGRAM

500 Startups is unique in its commitment to one of its core values: diversity. They make a point of finding and bringing in diverse teams from across the world. The Seed Program is a 4-month-long accelerator focused on pre-series A companies (who nonetheless have some traction), while the Series A program is for companies that – you guessed it! – are on the verge of raising their Series A round. 500 Startups offers companies (shared) office space, mentorship, and advice, and culminates in a well-attended demo day. The 500 Startups community is robust and diverse, with founders and startups all over the world. Companies get $150K in exchange for 6% equity, but 500 Startups also charges a program fee of $37,500. Notable alumni include Credit Karma, Hinge, Zesty, and Talkdesk.

PRE-REQS

Most companies have some traction – definitely an MVP, as well as a solid monthly revenue

FUNDING

$150K (minus the $37,500 fee, so participants actually walk with $112,500) in exchange for 6% equity. 500 Startups then has the right to make a follow-on investment of an additional $500K or 20% of your next priced round of $1M or more, whichever is lower, which expires after the conversion of their convertible security. Speaking of, check out their open-source KISS ("Keep It Simple Security") investment docs (500.co/kiss) – super useful.

INDUSTRIES

Many; specific tracks for Fintech, Digital Health, Fashion and Beauty, and Big Data

STAGES

Seed or Series A

KEY PARTNERS/DIFFERENTIATORS

Microsoft, IBM

WEBSITE

500.co

WAAABAM!

HENDRIK TIESINGA

Co-Founder & Program Director
@ New Energy Nexus

"Welcome to the end, or perhaps just the beginning of your journey. This is a bit of a golden era for accelerators, with more and more popping up, in more geographies and more industries – all good things. We hope that this book serves new and existing accelerators and helps them be more effective, more efficient, and more confident in their offerings.

If you enjoyed this book and want to stay involved here are some next steps:

1. This is v1 of Accelerate This! We would love your feedback and examples from your work for the next version of the book. Please send to either our facebook page or email: hello@energynexus.co.
2. Join the New Energy Nexus - Accelerate This! Facebook Group to keep the conversation going with peers from around the world.
3. Check out the New Energy Nexus website (www.energynexus.co) and sign up for the newsletter to learn more about energy startup programs from around the world.
4. Want to work with Ryan and the New Energy Nexus team behind Accelerate This!? We can help you design and deliver cutting-edge startup programs tailored to your specific context – from a smart energy hackathon to a global accelerator program or a seed fund. Email us (hello@energynexus.co) and hope to talk soon!"

RYAN KUSHNER

I would like to give a HUGE thanks to the California Clean Energy Fund and New Energy Nexus. They are two of the biggest-thinking, clearest-eyed organizations I've found, and it's been an honor to work with them in general, on this book specifically, and with Hendrik Tiesinga, Andrew Chang, and Danny Kennedy in particular.

Also, thanks to my wife Amanda Joy Ravenhill - she's the bee's knees. Swoon.

I love startups and the role they play in solving serious social and ecological problems, and accelerators are one of the best tools I've found to help startups grow. I hope that this book serves the multitude of startups out there as they look to grow and create impact, and particularly if they are considering joining an accelerator or incubator program. The whole accelerator world was a lot of gobbledygook to me before I worked in the field and was able to parse the issues one by one, so I hope Accelerate This! has been useful and clarifying.

Accelerators: you are my trimtab! Help me help you help the world. We need it....

Stay in touch!

Find me on LinkedIn: linkedin.com/in/ryankushner
Check out my website: www.ryankushner.com
Do whatever it is people do on Twitter: @kushykush

Much love :)
Ryan

Waaabam!

ACCELERATE THIS!

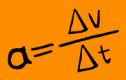
Accelerator (noun) ik-ˈse-lə-ˌrā-tər: one of those co-working places. Oh, wait, actually it's a training program. They give you money. Or, they don't. Well, sometimes, but they take some of your company. Or they don't. Wait, which one of these is the right answer?!

We're excited to cut through all the confusion so you can:

- Decide if you want to join a program
- Create a program (or run yours more effectively)

This book is about sharing best practices and demystifying:

- How can you be more customer-driven for better results?
- What are accelerators and incubators? How do they work? We'll define the terms and tell you what makes them tick.
- Are they "worth it" for companies? We'll help you parse the issues and make a decision.
- Are they good, writ large, for society?
- If you're running an accelerator or thinking of starting a new one, what can you learn from other program to be more effective and have more impact?



Whether you're a startup or an accelerator, this book was written with YOU in mind!

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