

sustainable
HEROES
green leaders in focus



Jeff Eckel

Counting Carbon

Lila Preston

Writing the Roadmap for
Sustainable Capital

Anja-Isabel Dotzenrath

Earth, Wind, and Power Player

Pooja Goyal

Moving the Energy Transition Forward

Sarah Slusser

Powering a Sustainable Future

Now is the time to lead!

Effective leadership is inspirational - it enables people to find meaning and purpose in life. Effective leadership also creates systems which optimize how teams of people cooperate and harmonize their respective strengths to create sustainable value for customers, employees, communities and investors.

It is easy to confuse effective leadership with outcomes, and to focus only on results. There are other myths about leadership. One is that it is a formula. Another is that the team suffers when a great leader is gone. Both are wrong, as leadership is intensely contextual, and true leaders build effective cultures and processes that enable the team to succeed long after the leader has transitioned.

This issue of Sustainable Heroes profiles five accomplished leaders who are in the prime of their careers, driving change in companies that are on a mission to deliver a more sustainable future. While having already created valuable businesses, our Sustainable Heroes are striving for greater impact. Their stories have both significant similarities and differences.

Lila Preston, the Co-Head of Growth Equity Strategy at Generation Investment Management, began with an environmental awareness gained through a love of the outdoors, and is enabling sustainable growth companies to scale and succeed by investing equity capital and delivering deep expertise.

Anja-Isabel Dotzenrath, CEO of RWE Renewables, oversees 3,500 employees across APAC, Europe and the U.S. and puts employee well-being and health and safety as her number one priority. Anja has utilized her foundational training as an engineer to lead RWE Renewables to help solve the world's environmental

problems, and is encouraged by trends in floating offshore wind, hydrogen and energy storage.

Jeff Eckel, Chairman and CEO of Hannon Armstrong, had an epiphany about the environmental footprint of proteins, wrote a critically acclaimed academic paper about the flaws in utility capital budgeting frameworks (only to then find it difficult to get a job at a utility), became enamored with the second law of thermodynamics, and then launched a career financing energy efficiency projects and took Hannon Armstrong public.

Pooja Goyal, Partner and Head of Renewable and Sustainable Energy at The Carlyle Group, for over 15 years has aided the energy transition by investing capital in teams and projects which are rapidly decarbonizing power. Harnessing the global resources of Carlyle, Pooja is able to utilize her extensive industry relationships and knowledge to back high quality entrepreneurs with the vision and foresight to make the world sustainable.

Sarah Slusser went from Wall Street to a leading global Independent Power Producer to founding two clean energy companies before becoming CEO of Cypress Creek Renewables. Crediting her success as a leader to being a good listener, Sarah's interest in sustainability began as a young girl watching President Jimmy Carter's fireside chat on energy, and she remains mission driven in her leadership at Cypress Creek.

The stories of these Sustainable Heroes are both inspirational and informative. They illustrate that the challenges and opportunities of the sustainable transition are varied, and that there is more than one life / career path to effective leadership. I hope you enjoy them as much as we did!



A handwritten signature in black ink that reads "Jeff McDermott".

Jeff McDermott
Head of Nomura Greentech

Counting Carbon

Jeff Eckel, Chairman and CEO of Hannon Armstrong, had an epiphany about the environmental footprint of proteins, wrote a critically acclaimed academic paper about the flaws in utility capital budgeting frameworks (only to then find it difficult to get a job at a utility), became enamored with the second law of thermodynamics, and then launched a career financing energy efficiency projects and took Hannon Armstrong public.

Jeff Eckel, Chairman and CEO, Hannon Armstrong

How did you first become interested in sustainability and energy efficiency?

It's hard for me to imagine a world where sustainability is not my focus. It has been since I was young. A pivotal moment came when I was seventeen and read Frances Moore Lappé's 'Diet for a Small Planet.' There was a bar chart in the book showing BTUs per gram of protein from beef, pork, chicken, goat, seafood, and soybeans. I remember exactly where I was sitting in the library when I came upon that data. Consider there are three reasons why people become vegetarian: health, compassion for animals, and environmental impact. And at seventeen, I was not particularly concerned with my health. But, the efficiency of resource use was profoundly impactful to me. I've always thought that you should get as much out of resources as you can without wasting them. I've always looked at things this way.

Tell us about your early career leading up to Hannon.

Every job I've held had to have a sustainability focus. It also had to make money because I didn't have any. If the job only had one of those components, and not the other, it wouldn't work for me.

I graduated from college in 1980. Along the way, I learned the second law of thermodynamics. The first law is, of course, that energy is a constant. The second law is that as energy is used, a portion of it is converted to useful work, and the balance is wasted. If you look at Hannon Armstrong's energy savings performance contracts and our investment thesis, you will see they are built on that concept.

Those concepts just stuck with me. I was in college when the Three Mile Island nuclear meltdown occurred, and that focused me on electric power and utilities. I went and got a Master's in Public Administration with a concentration on Energy Policy at Syracuse. I started thinking about capital budgeting for utilities. I was sure that building ten billion dollar increments of utility power capacity was at least risky, if not stupid.



JEFF ECKEL



Image credit: Hannon Armstrong

I got a cover article published about utilities in the Financial Analysts Journal. It was called “Assessing a Troubled Investment Environment.” I very proudly sent that article off to 88 investor-owned utilities to make the case on why they should hire me, and I got 92 rejection letters back. So here I am feeling crushed and without a job, and my co-author, a Syracuse University professor, suggested I talk to a guy doing utility supply studies. That launched my career through Booz Allen, then Time Energy Systems, the first U.S. energy service company. After that, I joined Hannon Armstrong and started a new energy project finance group, which was followed by stints at Wärtsilä Power Development and Energy Works, working on high-efficiency power systems and renewables in emerging markets, before finding my way back to Hannon Armstrong as CEO. I’ve basically been doing the same thing the entire time.

How has the business model at Hannon Armstrong changed over time? What caused you to decide to transform the business model of the predecessor company to focus on sustainability?

Hannon has always been a classic vendor finance shop even in the 1980s when I was doing efficiency and solar projects – the latter of which are still running today I might add. When I came back in '99, Mike Hannon said to me, “Jeff, we’re old, we don’t work very hard, and we’ve made our money. You’re young, you work like a dog, and by the way you are dressed, you clearly haven’t made your money. So, why don’t you take

this thing over?”

I came back with a whole head of steam on climate change, which had been my focus the decade I was away. There was no capital. The firm had operated 32 years with a thousand dollars of paid-in capital, so it was very much a transactional business that focused on reducing carbon. Nobody else cared about it, even in the company. But I knew that was what I needed to do to be happy. I knew that someday it would make money. I just thought it would make money a whole lot sooner than it eventually did!

In 2013, we took time for deep reflection on this business. We were making decent money, and a modest positive impact on climate change. But if we were going to make a difference, we would need capital. I was certain that clean energy was a large investable area that would produce outsized returns – and it was going to need a lot of capital. Thank goodness a few bankers and investors believed in us, and we went public that same year.

“I was certain that clean energy was a large investable area that would produce outsized returns – and it was going to need a lot of capital.”

What's exciting to you now? What trends do you anticipate in the next 4 to 5 years? Hannon has roughly doubled its AUM and its core net investment income since 2015, while at the same time nearly tripling annual avoided CO₂ emissions from 1.3m metric tons to 3.2m, proving that being sustainable and profitable can be a win-win combination. What initiatives currently underway at Hannon Armstrong are you most excited about for the next five years of growth?

Everyone is talking about green hydrogen, but for us that is further in the future. What excites me now is the convergence of technologies into true microgrids and smart buildings, taking things that nobody values and creating value out of that.



Image credit: Hannon Armstrong

I'm also amazed and enthused by what is happening in the convergence of the supply-side and demand-side of energy, particularly in what our clients are doing with their corporate clients. They can supply renewable energy and manage their commodity energy bill, and get on the ground to upgrade the infrastructure. This is what companies really want. They want someone to do it, certify it, report it, and get meaningful results in reducing their carbon footprint.

We have a strong alignment with our clients as to what the

future of energy will look like. It often starts with a very small transaction, and that's fine; we know if we perform the capital need will be orders of magnitude larger over time.

We believe the ability to offer permanent capital that is internally -managed with a stable team is a significant advantage we have over funds. That may sound very subtle, but it's an extraordinarily powerful combination. We know who we want to do business with, and our clients know they have a partner who is not going to have to liquidate a fund in seven years. We have seen so many instances where the client runs an auction to get the cheapest capital, and then they realize there are very long tails on these assets. Who your partner is really matters.

If we are going to get an acceptable outcome on climate change, we have to price carbon pollution.

Hannon has been a pioneer of the CarbonCount® system. Why is leadership in carbon and sustainability reporting important to Hannon?

The best way to think of the assets we invest in is that they are a means to an end. Energy efficiency, wind power, and solar power are a means to decarbonize, but the end is to decarbonize so we can avoid the catastrophic impacts of climate change and build a cleaner and more resilient future. We developed the CarbonCount® concept in 2015 as a tool for evaluating investments to determine the efficiency by which each dollar of invested capital reduces annual carbon emissions.

The notion is pretty simple: if carbon counts – and because of climate change it does really count – and capital is scarce, we ought to make the most impactful investments. This is a framework that is obvious to me, but has been elusive to a lot of people. I'm glad to see that's maybe changing now with the emergence of the Partnership for Carbon Accounting Financials (PCAF) gaining some momentum. It's very much aligned with CarbonCount® and it's encouraging to see we now have a global initiative that enables financial institutions to measure and disclose the greenhouse gas (GHG) emissions financed by loans and investments.

Our recent partnership with ENGIE on a U.S. solar and wind portfolio has a carbon count of 2.0, which is the metric tons of carbon emissions avoided by these projects. There is nothing inherently useful about that number except that relative to our overall portfolio, which is about 0.2 carbon count, you can say that it's ten times more impactful.

If we are going to get an acceptable outcome on climate change, we have to price carbon pollution. When that happens, our investments will be even more valuable, and we will have the knowledge of where that carbon is.

Do you believe, as a matter of public policy, that a price on carbon would accelerate decarbonization?

No question. Look at the rapid changes over the past 5-10 years in the wind, solar, and efficiency business. If anybody is not impressed with the power of markets from that experience, they're not really paying attention.

Once the carbon price is set, our clean power industry will be able to accelerate – and not just that industry – but also transportation, agriculture, and industrial sectors. The flip side is that fossil fuel companies' ability to attract capital will deteriorate even further. Investors will have to exit those investments for economic reasons. Frankly, we need both to happen. Let's find the political will to do that.

What are the biggest obstacles to increasing carbon and sustainability reporting in the finance industry in the future? Will we ever have a universal standard like the US GAAP or SASB standards for carbon and sustainability reporting?

One of our clients said the wonderful thing about reporting standards is that there are so many to choose from, and that is a problem.

As mentioned before, we're very impressed with what PCAF is doing. Their initiative has tremendous potential to bring prompt changes in portfolios, addressing the financed emissions problem and putting us in line with what science and the Paris Agreement calls for.

I've said before that investors need to consider whether an incremental investment is good or bad for climate change. It is a simple question, but hard for a lot of banks to ask themselves because of legacy businesses.

Investors also need to report on every investment, not just the ones they want to talk about. The third piece is the efficiency with which we are using capital to reduce carbon, with a metric like CarbonCount® and what PCAF is proposing.

Who is your sustainable hero, and why?

Amory Lovins and his concept of soft energy paths. If you look at what he articulated 50 years ago and the timelines he projected, they were quite on track. He has done a marvelous job and is still doing great work as co-founder and chairman

of the Rocky Mountain Institute.

Also, my two daughters, Elizabeth and Madeline, who for 20 years have been even more thoughtful eaters than I have been!



Image credit: Hannon Armstrong

Looking back on your career, what advice would you give your 22-year-old self? Speaking to young people today, what should they do if they have a passion for accelerating sustainability?

Embrace the instability that is inherent in this decarbonization battle. Work with companies that are growing, but perhaps a bit unstable. You will learn a lot, perhaps become unemployed occasionally, but you will come out of it with so much more experience than somebody who chooses a more conventional path. Take the risk when you're young because it's harder to do that later.

If you have a passion for sustainability, get the skills to match it. Master the conventional analytical and quantitative skills to be useful in the industry. I would also suggest gaining intellectual capital by getting a Master's degree in any one of the hundreds of brilliant energy and environment programs that are out there today.

Lastly, because we love reading and talking about books at Hannon Armstrong, I would recommend young people read *Energy and Civilization: A History*, by Vaclav Smil. It is not an easy read, but you will understand carbon, energy, and physics in a way that will be a foundation that you can lean on throughout your sustainability career.

The Future Heroes

This magazine intends to bring our sustainable heroes and heroines to the forefront and celebrate their achievements and insights into how they are shaping our future.

nomuragreentechcommunications@nomuragreentech.com
www.nomuragreentech.com

NEW YORK

309 W 49th St
New York, NY 10019
United States
Phone: +1 212 667 9300

SAN FRANCISCO

Three Embarcadero Center, #1150
San Francisco, CA 94111
United States
Phone: +1 415 445 3800

CHICAGO

1 N Upper Wacker Dr
Chicago, IL 60606
United States
Phone: +1 312 234 9584

ZÜRICH

Bahnhofstrasse 26
8001 Zürich
Switzerland
Phone: +41 44 578 3900

sustainable
HEROES
green leaders in focus

LYNN JURICH
Empowering Homes

BRYAN MARTIN
Catching the First Wind

LARRY BURNS
Evolving Mobility

MINDY LUBR
Climate Warrior

VICTORIEN F
Floating

greentech
capital
advisors

JAY INSLEE
The Circular Economy

LOUISIANA