ENERGYCAP.

1000 YEARS OF ENERGY & SUSTAINABILITY EXCELLENCE

Stories and lessons from 60+ industry experts



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Executive Summary

Across all industries, sustainability is becoming a business imperative. Nearly all organizations across public and private sectors are working to decarbonize their operations. We know that 40% of global carbon emissions come from the built environment, and there is an incredible opportunity for those of us who own and operate facilities to have a significant, positive impact on the climate. Individually we can do some good, but together we can achieve greatness. That is why we created the Eco Champions Community.

The Eco Champions Community is the convergence of energy, sustainability, finance, and leadership teams working together for the common goal of decarbonization. We are an alliance of energy & sustainability practitioners, educators, executives, industry analysts, and thought leaders joining together to share ideas, challenge the status quo, and push forward together in building a more sustainable world.

The goal of the community is to elevate best practices, technology, and innovation to achieve sustainability through responsible consumption of earth's finite resources and minimize our footprint.

In this book, you'll hear personal stories and best practices from 67 energy and sustainability professionals with a combined 1,000 years of industry experience. This book will continue to evolve as more people join this community.

This book is just the beginning. Tune in for monthly webinars with our Eco Champions at <u>www.EnergyCAP.com/ecochampions</u> and subscribe for future events, podcasts, networking opportunities and much more.

Thank you for your participation in the Eco Champions Community. We look forward to sharing more ideas and accomplishing great things together!

Amber Artrip VP Marketing, EnergyCAP, LLC

Methodology

The Eco Champions survey was conducted to gather personal stories and advice from Energy & Sustainability professionals across several industry backgrounds and levels of experience, bringing together a diverse community of Eco Champions. The survey was sent from multiple marketing channels to provide maximum reach. We collected a total of 67 responses from experts with more than 1,000 years of collective experience. Written responses from the survey were copied and pasted verbatim into this ebook to maintain authenticity.

GREG NORRIS

Manager, Energy & Utility Systems **UT MD Anderson Cancer Center**

How many years have you worked in the industry?

22

THE UNIVERSITY OF TEXAS

Making Cancer History®

Cancer Center

What is your most memorable energy/sustainability project and why?

The automation and optimization of four interconnected chilled water plants serving an MD Anderson research campus was one of my most memorable and favorite projects. Our team operated the plants manually for many years after an effort to automate the system had failed. However, the team had gained the operational knowledge to achieve a reliable and relatively efficient state. My affinity for this project is that it included a strong collaboration between engineering, building automation, operations, and eventually a great vendor partner. We started in-house by installing the necessary instrumentation to bring more real-time visibility of building demands and plant performance to operations. This phase helped us make some data-driven decisions on ideal equipment selections and more quickly identify issues in the system. Next, we worked together to understand the impacts of variable occupancy, seasonal, and emergency events needing specific system reactions. Once these in-house goals were met, MD Anderson issued an RFP for 3rd party support in our optimization journey. Our vendor partner helped distill the previous lessons learned to rewrite plant sequences, rebuild building automation graphics to support the operators, and even automate the chilled water asset selection to the most optimal available combination of equipment to meet the cooling demands. This project embodies a successful journey of knowledge sharing, unlearning/ relearning of standard operating practices, strong vendor partnerships (not just install and leave), and an overall project where the favorable ROI was ultimately less valuable than the operational knowledge gained.

What's been your biggest challenge and how have you overcome it?

The biggest challenge when making big changes with energy and sustainability is overcoming the mindsets of individuals resistant to change (e.g. "this way has always worked"). An equally important challenge is to change the mindset that ROI must be the only driver for anything related to energy and sustainability. Overcoming these challenges is not a single-step process. Gaining internal buy-in requires challenging processes across many responsibilities. For example, operations, project management, engineering, etc. all have a stake in minimizing issues which leads to conservative decisions. Finding the opportunity to match proven strategies to achieve energy and sustainability "wins" goes a long way toward turning efforts into standard operations. As codes, state and federal mandates, and equipment make advancements toward more sustainable buildings, buy-in gets easier. I find staying on top of those trends and getting ahead of their adoption can help keep from appearing to fall behind.

What excites you about the future of energy management & sustainability?

At the institution level, MD Anderson is continuing to improve energy and sustainability visibility by integrating project deliverables and milestones into our owner design guidelines that extend from the project intent through the warranty period after construction. We are having conversations during projects today that were a struggle to shoehorn into projects in the past. At an even more basic level, we are continually working to make data more accessible than ever (both raw data and analyzed data). EnergyCAP is a part of our suite of energy tools, which also include a few in-house developed daily analyses and automated fault diagnostics. Without being able to quickly move data from its source (sensor data, utility invoices, task management) and share it with these tools, more time ends up being spent collecting data than analyzing. In addition, being able to quickly share actionable insights from the analytical tools is essential to making a difference. Data-driven decisions are easier to use to drive decisions. Finally, a broader global focus on a sustainable future is exciting, including seeing the DOE push programs that include discussions of equitable decarbonization.

What advice do you have for other professionals in the industry?

I've found that people with both analytical and field experience are hard to come by and valuable in energy and sustainability work. Otherwise, building teams where this type of knowledge can be gained through collaboration is also effective. When it comes to analytical tools that drive good work to be done, I've found that challenging tedious processes, even if the issue is with a software solution, is important to operational efficiency. Never be afraid to challenge a vendor when workarounds are being developed. Often the software vendor may know a better solution or will include our feedback in future development.



JOHN HODGES

Director of Sustainability, CSR/ESG and Waste, **Burlington**

How many years have you worked in the industry?

in

6

What is your most memorable energy/sustainability project and why?

Right now, setting a long-term, authentic, GHG reduction goal for my company, as well as working with vendors to understand how we achieve those goals. It is a really exciting time to be in this profession, and it is only going to get better over the coming years.

What's been your biggest challenge and how have you overcome it?

Influencing leadership based on where ESG/CSR standards/frameworks are moving. Being able to look forward, while changing the course of an organization. Investors have been a large help, but being able to integrate across the organization (even with leadership buy-in) there is still push back. Being able to provide real-time examples as the sustainability world becomes more consistent with benchmarking has been an amazing help. As always, showing the ROI has been vital, and bridging the concept of brand reputation and doing the right thing has helped as well.

What excites you about the future of energy management & sustainability?

EVERYTHING! The sustainability "present" is morphing at the speed of sound, and keeping up with it is invigorating. Consistent standards, SEC Proposals, standards coalescing to the ISSB, EU Green Deal, European standards, and everything else mixed in. It is an amazing time to be in this field, and it is only going to get better.

What advice do you have for other professionals in the industry?

Stay your course and continue planting seeds with leadership. Every seed you think is valuable, is. Eventually the things you have been telling your leadership will make sense. Utilize what your top investors are doing to help guide conversations as well as what your closest competitors are doing. Those three things eventually will come together in leaderships head, and provide you a platform to make real change within your organization.



JESSICA HUSEMAN

Senior Sustainability Specialist, **United Airlines**

How many years have you worked in the industry?

in

3

What is your most memorable energy/sustainability project and why?

Working on United's EcoSkies Alliance to help corporate customers purchase sustainable aviation fuel to bridge the gap.

What's been your biggest challenge and how have you overcome it?

The biggest challenge has been telling our climate narrative. United is leading the industry in sustainability, but we're lacking in telling our story to stakeholders. By doing peer benchmarking I was able to convince leadership we had a gap in our climate narrative and was able to help update a new corporate responsibility report.

What excites you about the future of energy management & sustainability?

This is an evergreen industry and there is always new and exciting advancements. I'm excited to see how the transportation industry evolves and expands to see more electric vehicles and aircraft.

What advice do you have for other professionals in the industry?

Sign up for email newsletters and read or learn one new thing every day.



ELENA DANIEL

Senior VP - Head of Environmental, Social and Governance, Logistics Property Company

How many years have you worked in the industry?

in

20

What is your most memorable energy/sustainability project and why?

The most memorable energy/sustainability project I have worked on was at CenterPoint Properties, where I brought triple-net lease utility reporting from 5% to over 80% through the implementation of energy management software and partnering with YARDI. This was the most memorable because the company had struggled for years to get utility data on its 350 asset portfolio across the United States. I was able to build an energy strategy across the portfolio, optimize the data received and provide an automated solution to manage the portfolio's costs, consumption, and reporting across the portfolio and report greenhouse gas emissions, and effectively target improvements and efficiency solutions for assets that were not performing adequately.

What's been your biggest challenge and how have you overcome it?

As the Head of Environmental, Social and Governance, my biggest challenge has been to ensure that all employees in the company become ESG ambassadors. ESG truly touches every part of the business, therefore it's very critical that everyone in the company understands the value that ESG brings to our industrial developments and to all of our stakeholders, including employees, customers, suppliers, partners, investors and board members.

What excites you about the future of energy management & sustainability?

Automation, digital technology and artificial intelligence (AI) excite me about energy management and sustainability. The future of ESG will become much more digital, and there will be more digital solutions introduced on an annual basis. The other key item that excites me is the grid becoming renewable. More utility providers are incorporating VPPA opportunities for solar or wind power to the built environment. As owners we require as much renewable energy options as much as possible.

What advice do you have for other professionals in the industry?

My advice for other professionals in the industry is to continue to be at the forefront of the industry. Don't ever become complacent with what you are doing. Continue to learn about all the solutions available and compare them to ensure that you have the best service providers.



LISA ROBERTS

Manager, Energy Administration, **UniFirst Corporation**

How many years have you worked in the industry?

in

25

What is your most memorable energy/sustainability project and why?

My most memorable energy/sustainability project was the implementation of EnergyCAP! Before finding this company, I had to request copies of our utility bills from my AP department and enter them into an Excel spreadsheet, create formulas, and track costs manually. In order to feed this information into my production reporting system, it then had to be rekeyed again into a separate system. My AP department was responsible for making the actual payments, but no one was tracking due dates or late fees or providing any analysis of the bills.

Convincing my financial executives and others to invest in EnergyCAP, changed our entire process of utility bill payment, and automating this process along the way was no easy task. They were very old-school and loved paper. I eventually won them over and implemented my first and only energy management system.

What's been your biggest challenge and how have you overcome it?

The biggest challenge aside from what was mentioned above was getting all the billing addressed changed to come to our attention at corporate as each location was responsible for receiving these bills and sending them to our corporate office for payment via the mail system (25 years ago, there were roughly 100 and today we are roughly 250 including production facilities, smaller branches, and leased facilities).

When COVID hit, the next biggest challenge became handling this remotely. We had to get as many of these set up on paperless and electronic/email billing as possible. Since not all entities had this capability, I had to go into the office twice a week to scan all the bills in the mail to my team for processing and payment. We did it though!!

What excites you about the future of energy management & sustainability?

I am excited to enter into a new phase of energy management and provide sustainability measurements. With GHG becoming a hot topic and requirement these days, to lighting upgrade incentives becoming less advantageous we are finding ourselves looking more at green energy such as solar projects, EV installations, and more. This is a challenge for me as it's a new area of knowledge.

What advice do you have for other professionals in the industry?

Don't rely on one entity to be your mentor. Listen to the advice or explore the knowledge of a couple of solid companies in the energy industry from brokers to energy efficiency professionals as you learn something different from each. Read, join webinars and learn as much as you can as the industry is constantly changing. Gain an understanding of the terminology so you can speak to it, but you don't have to be the most knowledgeable as that's what your energy management professionals that you partner with are for. I have multiple companies I work with in various areas so I have a vast array of knowledge and experience.



FABRICIO LIMA

Global Environmental Specialist, **EXPRO**

How many years have you worked in the industry?

in

26

What is your most memorable energy/sustainability project and why?

The most memorable project I worked on was with a consulting services company called Salvaterra from 2001 to 2004, called "SGI-BR" in Brazil. It was a project to develop integrated management systems for the fuel supply chain for Petrobras. We had to support the ISO 900, 14001, and OHSAS 18001 for fuel distribution terminals and some chosen petrol stations. My role was to provide technical assistance in environmental licensing for petrol stations (a brand new topic in Brazil, with a poor environmental protection culture in the sector), and the chosen stations were distributed around the country, including one floating station for boats and jet-skis with a convenience store in the middle of a river in the Amazonian Region.

It was an incredible project for several reasons: the implementation of an environmental management system to drive cultural change at that time (petrol stations had historic environmental spills, poor hazardous waste management, and no willingness to become environmentally friendly), the landscapes (Brazil is a huge and beautiful country, and most of the petrol stations are located in sensitive places like the Amazonian Region, or iconic places like Maracanã Stadium), and all of the learning acquired and shared with amazing people I knew at this time.

What's been your biggest challenge and how have you overcome it?

Recently I was requested to develop the processes to establish the company's global carbon footprint in 2020/2021. The company was initiating its journey to enhance their sustainability performance, and some ambitions related to climate action were established to become net-zero in 2050.

We had to perform several scenario exercises to establish an initial road map to pavement our journey towards the "net-zero" ambition. However, the company did not have a global baseline of its carbon emissions (some locations had established their GHG footprint for scope 2 emissions, but this was a brand new issue on a global scale - we operate in 60 countries).

The challenge became more interesting when the company announced a merger, and our locations to consider in the global GHG inventory almost doubled! Not to mention the need to integrate the different processes between companies with two different corporate cultures.

We started to engage with the environmental community in all locations, and the workforce could establish a good baseline supporting company disclosures, with data helping us adjust our road map and establish initiatives to enhance our environmental impact management.

What excites you about the future of energy management & sustainability?

The area of energy and sustainability is gaining a very important visibility, mainly because of the urgent need we have to provide an effective global response to climate change. It passes through constant development and an idea that our efforts and endeavors shall look for a shared vision. Every day there is something new to learn, and some new problem to deal with, and it's very exciting!

This vision of a low-carbon world to mitigate the effects of climate change will require technologies that are yet to be discovered, and the effectiveness lies now in how we exercise empathy. Energy management & sustainability is not a race where the first to cross the finish line is the winner—we only will win if we cross the finish line together!

Effective climate action demands global thinking and the understanding of different cultures. Belonging to a global family is another empowerment factor!

What advice do you have for other professionals in the industry?

My advice for professionals is to seek constant learning and development. The world is changing at a fast pace and requires the development of new competencies constantly. So keep your mind open to new views, and different approaches and listen to diverse ideas.

Every environmental & sustainability professional is an advocate for a better planet—so you have to be consistent with the ideas you defend! Do your best to make your personal habits consistent with the message you preach to your coworkers, clients, and suppliers.



POOJA KNIGHT

AVP of ERM & Climate Change Initiatives, Arthur J. Gallagher & Co.

How many years have you worked in the industry?

2

What is your most memorable energy/sustainability project and why?

Collecting our carbon emissions data.

What's been your biggest challenge and how have you overcome it?

Getting better estimates and overcaming it by working with the landlords.

What excites you about the future of energy management & sustainability?

Where we are headed and the improvements we can collectively make.

What advice do you have for other professionals in the industry?

Be thoughtful and don't rush to the finish line.



KENDYL SAINBURG

ESG Manager, CARROLL

How many years have you worked in the industry?

in

1

What is your most memorable energy/sustainability project and why?

Creating a community garden at one of our properties. We took an unused space and hired a local carpenter to create planter boxes. We made sure to have some lower to the ground and some raised planter boxes so that those with accessibility and mobility issues will still be able to access them. We also made the lanes between planters wide enough to get through and concrete floors so a walker or wheelchair would not get stuck. We provided resources like garden tools, kneeling pads, a moveable chair, water cans, and a rain barrel next to it so residents can use the water from that to water their plants.

What's been your biggest challenge and how have you overcome it?

The biggest challenge so far has been figuring out how to measure all of our utility data accurately and completely. We are working to overcome it by using a 3rd party service to track it.

What excites you about the future of energy management & sustainability?

I'm excited by the idea of streamlining sustainability efforts and making goals easier to achieve. I look forward to sustainable practices being the norm in the industry.

What advice do you have for other professionals in the industry?

My advice is to reach out to others, share goals, and ask for help. I have found that most people in the sustainability industry are very passionate and excited to share their knowledge and help others succeed.



EMILY PIERCE

Director of Sustainability, Easterly Government Properties, Inc.

How many years have you worked in the industry?

in

10

What is your most memorable energy/sustainability project and why?

My current role in general is my most memorable project. As the first sustainability hire at a real estate company, I'm truly walking the talk in helping a company advance ESG in ways they quite literally never have before. We need more first sustainability hires and I'm excited to be in this role.

What's been your biggest challenge and how have you overcome it?

Facing pessimism, doubt, and burnout in the sustainability world. There is much of it to go around and it's oftentimes hard to silence those voices. I try to recognize the signs of burnout earlier than I did in my career and start taking the time that I need, whether it's a vacation or just re-shifting of my focus for a day or two. As far as facing doubt and pessimism, I try to think a few steps ahead of those who express doubt and come armed with facts, stats, and numbers to argue my points instead of approaching from a more emotional or altruistic place.

What excites you about the future of energy management & sustainability?

There are more and more companies adding sustainability hires or teams to their staff than ever before. We need Chief Sustainability Officers to be as ubiquitous as CFOs, but we'll get there. This coupled with the fact many new graduates are graduating with degrees that didn't even exist when I was in college. I know there is a momentum that has been building and is finally getting attention from multiple angles.

What advice do you have for other professionals in the industry?

Figure out what type of work brings you the most joy and go after that within the sustainability industry. These days there are tons of jobs that span writing, management, data science, technology, and everything in between with an ESG/sustainability & energy focus. If you land in a role, whether it's your first or last, and it's not filled by day-to-day tasks doing what you love, you'll burn out, hit a ceiling, or just simply miss out on the joy of doing what you love but in the aggregate and on a daily basis.



NEETI SUHAG

Consultant, **Dunsky Energy + Climate Advisors**

How many years have you worked in the industry?

in

10

What is your most memorable energy/sustainability project and why?

Feasibility study to electrify a cluster of remote islands through renewable energy. This project was special to me because it created real-world solutions for almost all the stakeholders.

For example, this project offered cleaner energy solutions to 400,000 people who were either deprived of energy access or were majorly relying on Diesel Gensets. Energy access led to employment generation and thus poverty reduction. It allowed children to study during evening hours, which was not possible without an energy supply. A major livelihood option was fishing, but fishermen faced issues with no facility to preserve fish for long. With electricity access, not just fishermen could store fish but there were other commercial establishments as well.

On the other hand, the project promoted clean energy generation through a Solar-Wind hybrid project and thus reduced GHG emission footprint in the overall energy mix. It was recommended that the excess energy could also be used for charging batteries of e-rickshaws and thus, expand the greener solutions to mobility.

The distribution utility mandated to electrify all the consumers, while the government had the target to step towards net-zero solutions. This project could cater to both of these mandates. This project was an excellent example to electrify remote areas through decentralized clean energy solutions.

What's been your biggest challenge and how have you overcome it?

My biggest challenge on this project and most of the projects in the clean energy industry is the lack of organized and systematic data. To perform an analysis, it is important to gather precise data inputs. However, due to continuous evolution and upgradation of technical innovations as well as regulatory standards, the market is always dynamic. It is difficult to collate a standard set of data.

There are a few measures I undertook to overcome this barrier:

- a. Gather as much primary data as possible: for example, in the above mentioned project, I visited the islands to collect on-ground information and not just secondary data. This gives a closer picture of the realistic situation.
- b. Stakeholder involvement: involve different stakeholders, like regulators, project developers, investors, and community members to understand the issues and potential solutions. This step also helps to overcome another barrier of stakeholder disagreement. Stakeholder involvement from early stages helps in easy planning and implementation of projects.

- c. Extensive secondary research on best international practices. For example, while developing India's first mini-grid regulations I came across best practices of mini-grid in the African market from the study conducted by the World Bank.
- d. Share (non-confidential) data and analysis in public forums, and seminars to allow the industry to progress quicker.

What excites you about the future of energy management & sustainability?

I always get amazed by the innovations in clean energy and sustainability space and how these innovative solutions tie together to address the challenges of the entire ecosystem. With steep growth in every corner of the industry, I am more excited to see the integration of decarbonization, decentralization, and digitalization.

What advice do you have for other professionals in the industry?

Open to ideas and continuous learning.

This industry is evolving at a very high pace and we need to grow with it as well. There are brilliant technologies and solutions across the value chain of the eco-industry. We need to think of solutions that can address the challenges of the entire ecosystem by continuously learning about these upcoming advancements. One way is to regularly attend public events, like webinars, and conferences which allows learning from industry leaders, and experts across the globe.



BEN WEDGE

Director, Virgin Media

How many years have you worked in the industry?

10

What is your most memorable energy/sustainability project and why?

Replace lighting with led bulbs.

What's been your biggest challenge and how have you overcome it?

Time management and working to deadlines.

What excites you about the future of energy management & sustainability?

The changes that are happening across the world.

What advice do you have for other professionals in the industry?

Try to adapt quickly.



GILLIE MAY FAIRBROTHER

Senior Manager ESG, **Syniverse**

How many years have you worked in the industry?

in

1

What is your most memorable energy/sustainability project and why?

As a fresh face in the sustainability industry, I have had the opportunity to build an ESG program from the ground up. I work for a Tampa, USA-based tech company that has employees across the globe, including China, India, the UK, Costa Rica, and many more countries. As an IT services company, understanding our carbon footprint has not been straightforward, especially as most of our exposure is in the hands of our supply chain. Getting our board and newly formed ESG council to understand the risks of climate change, as well as its impact on our employees, suppliers, customers, investors, and overall business was a memorable and rewarding journey.

What's been your biggest challenge and how have you overcome it?

Getting buy-in for ESG initiatives has been a challenging journey. Having a dedicated sustainability resource to drive change with passion, as well as facts around impact and benefit has been crucial to getting forward momentum.

What excites you about the future of energy management & sustainability?

I would be excited to see more uniformity around reporting as well as the use of tools to track and validate data. I am excited to see collaboration, across supply chains, industries, and even competitors. As we realize that change can be more easily achieved together, the greater future we will be able to shape.

What advice do you have for other professionals in the industry?

Build a network of allies, if you care, your stakeholders will care. I never introduce ESG-related work as a chore, or tick box exercise, but as an exciting opportunity to make positive change and create value add, for the company, for the people involved, and for the future of our planet.



MIKE PRINKEY

Senior Energy Program Engineer, The Pennsylvania State University

How many years have you worked in the industry?

24

What is your most memorable energy/sustainability project and why?

I think of two projects most memorable to me, because they were very photogenic projects. I still see them all the time on our website and other media. Most energy and sustainability projects are very behind the scenes. Variable speed drives, building automation programming, or lighting upgrades are all very effective, but this is little to see after the project. The first of these projects was an envelope improvement at our Bryce Jordan Center, a large events and sports arena. This project was the first time we used infrared photography to identify areas on the building envelope that were leaking air or lacking insulation. We were able to photograph the building before and after the project to overlay the side-by-side views. This resulted in a very visual way to display energy efficiency and so they have been used in presentations and websites for quite a while. The other project was the installation of a solar PV array on the east side of campus. It also is a very visual project we have photographs of it from the President's Suite in Beaver Stadium, aerial photos from a drone, and many other site views from elevated locations.

What's been your biggest challenge and how have you overcome it?

Making actionable information from the abundant energy data that we collect. For many years our team has worked to simply get all the meter data collected or organized accurately. We haven't fully overcome this challenge, but we are working towards it. We use dashboards, automated reports, and trending to support this. Identifying the difference between meter error and building changes in use is one of the biggest challenges. Many times, we must manually review outliers to make assumptions, and take next step activities based on that assumed identification. It could include initiating a work order to repair or calibrate a meter, surveying a building for a water leak, or analyzing interval data for use anomalies.

What excites you about the future of energy management & sustainability?

I find it exciting whenever we are able to use technology to do things that we have only been able to dream about in the past. We were recently able to interface room scheduling with our building automation systems using technology. While we were able to think of this as a concept years ago, there was never the technology to support it until recently. It could be done with a lot of manual intervention and programming in the past, but now it's possible to just make the system connections, and watch it update on the fly.

What advice do you have for other professionals in the industry?

Be a continual learner! There are always new things out there to learn whether it's a technical subject or people skills. Make this an every day or weekly habit rather than a once-a-year training event.



MICHELE MARKOVITS

Energy Management Analyst, Miami-Dade County

How many years have you worked in the industry?

13

What is your most memorable energy/sustainability project and why?

As a student, participating in the Department of Energy's Solar Decathlon as the Project Engineer for the Florida International University solar house was an exciting opportunity. We were a large multi-disciplinary team working very closing to design a sustainable, net-zero home for the tough building codes in Miami-Dade County. We constructed the house in Miami, deconstructed it, transported it to Washington D.C. to reconstruct it and compete against collegiate teams from around the world. It was most memorable because we successfully created a net-zero home and tied for first place. As a result, I was invited to China twice to collaborate with Tsinghua University for China's first Solar Decathlon.

Professionally, two projects stand out for me due to the potential impact they have for our community. One project was writing a solar feasibility study analyzing energy data from EnergyCAP and applying technical assistance from the National Renewal Energy Lab (NREL) to rank all county buildings for installing rooftop solar systems. This prioritization ultimately led to a RFP and planned rooftop solar installations. The second project was conducting community-wide GHG emissions inventories to quantify and understand the contributions from different sources and share the results with the public. With two inventories to compare, regression analysis was used to evaluate the drivers of change between GHG emissions inventories. Both of these projects are most memorable because they help the county be a part of the solution to reduce GHG emissions with the use of solar energy and help our community understand how much and where we use energy.

What's been your biggest challenge and how have you overcome it?

I think the biggest challenge is wanting to find solutions to apply today to reduce energy consumption and use alternative energy sources. Unfortunately, the problems are very complicated and cannot be solved overnight. To overcome this, taking small steps everyday to engage and educate myself and others can bring about big changes in the future. I ask myself daily, what have I done today to make a difference to bring about the change I want to see in my community and the world?

What excites you about the future of energy management & sustainability?

I am exited to see more and more people of all ages and backgrounds discussing our use of energy in our lives and the impact it has on the planet, near and far. More people learning complex topics and participating in discussions about the issues that are detrimental to the planet and our survival, the better the solutions will be for all to live sustainably now and lesson the footprint left behind for our descendants to live in the world long after we are gone.

What advice do you have for other professionals in the industry?

Always continue to learn and strive to communicate complicated information in ways everyone can understand and apply it to their benefit. Meeting people where they are and helping them be a part of the global solution is required for real changes to occur.



TIM PEGLOW

AVP Patient Care and Prevention Facilities, MD Anderson Cancer Center

How many years have you worked in the industry?

40

What is your most memorable energy/sustainability project and why?

Internal team led a retro-commissioning project that reduced electric and chilled water consumption by 10% and steam by 40%. The effort was in a large clinical building. The majority of the improvements were through enhanced BAS applications. These enhancements used dynamic setpoint reset on air handlers, changes to heating hot water temperature based upon need, and more aggressive equipment scheduling.

What's been your biggest challenge and how have you overcome it?

Convincing leadership to fund these initiatives. Started with easy wins that delivered results and then used that success to expand the program. Net annual cost savings for the program above was \$2 million in annual expense reductions.

What excites you about the future of energy management & sustainability?

The ability to use renewables more economically and applying AI to Building Automation Systems to help diagnose problems. Smart Building Technology has great promise when integrated into these platforms.

What advice do you have for other professionals in the industry?

The more important advice is to believe in what you are doing. Gain advice and listen to others. Build momentum and success through early wins. Thank others for support and own mistakes. Realize through sustainability you can impact the lives of future generations.



RYAN JOYCE

Associate Director, Sustainability Measurement & Reporting, Ernst and Young

How many years have you worked in the industry?

4

What is your most memorable energy/sustainability project and why?

Holding an impact measurement framework, system and reporting for an organization with 350,000+ employees.

What's been your biggest challenge and how have you overcome it?

The constant change. Trying to remember the big picture of what we're trying to accomplish.

What excites you about the future of energy management & sustainability?

Stakeholders across the board are becoming much more engaged on the topic.

What advice do you have for other professionals in the industry?

Stay the course.



ANUSHKA BOGDANOV

Founder, Risk Insights

How many years have you worked in the industry?

28

What is your most memorable energy/sustainability project and why?

Founder of model that measures the disclosure of ESG variables of listed companies in Africa. Model was launched in SA and stratified across Africa into Nigeria and Kenya. Model being used by PwC SA exclusively for Africa. ESG GPS built using AI.

What's been your biggest challenge and how have you overcome it?

Being an entrepreneurial company that is regarded as an SME in Africa, having large companies pivot into reporting and disclosing ESG information was difficult. With changes and pressure from various stakeholders, this has improved. Market maturity helped overcome the challenge. Competition from large ESG rating companies allows our company to continue to innovate. We currently have 522 ratings for Africa, which is the largest ESG dataset for Africa.

What excites you about the future of energy management & sustainability?

Carbon transitioning is critical for people, the planet, and prosperity. 95% of energy in SA is derived from coal-fired power stations. Deriving renewable energy sources will assist carbon neutrality and will require innovation and policy changes in Africa. There are several opportunities for SMEs and jobs that can be created in this new era.

What advice do you have for other professionals in the industry?

Keep an open mind to innovation and transformation. New tech abilities are coming to light. Listen, be objective, and do the right thing for the planet.



DANIEL VERCELLI

Managing Partner, Manuia

How many years have you worked in the industry?

in Y

5

What is your most memorable energy/sustainability project and why?

Strategy of carbon neutrality for the largest petrol distributor in Chile, leading the way for a complex industry.

What's been your biggest challenge and how have you overcome it?

Leading the circular strategy for Coca-Cola LATAM, aiming to achieve 100% of post-consumption packages collection. Changing the entire governance and incentives scheme accros the organization.

This is one of the most significant innitiatives around energy saving that a CPG can do, because it enables recycling at large, which is significantly less energy consuming vs. producing packages from Virgin material.

What excites you about the future of energy management & sustainability?

Energy storage will decarbonize the world.

What advice do you have for other professionals in the industry?

Read, understand, apply and communicate.



LUIS MARTINEZ

Executive Director of Energy, Miami-Dade County Public Schools

How many years have you worked in the industry?

36

What is your most memorable energy/sustainability project and why?

A senior high school with multiple chiller plants consolidated into a single plant & cooling tower, replacing the old chillers with high efficiency magnetic chillers. It was a contracted guaranteed energy performance project, which also included lighting and plumbing upgrades and energy management system control upgrades. It was a 12 year program where a letter of credit was established to guarantee the district the return on investment projected, as well as, full maintenance for those 12 years on everything they touched. We have three of these engaged at this time and have targeted a forth senior high school.

What's been your biggest challenge and how have you overcome it?

Currently, supply chain challenges are adversely affecting the timely delivery of equipment.

We're ordering heavy equipment and their peripherals (ie. pumps, VAV's, AHU's, etc.) As soon as the projects are funded.

What excites you about the future of energy management & sustainability?

I'd like to leave a fish or two for my grandchildren to catch and hopefully their children as well. I remember as a young man diving a reef in the Florida Keys and the vibrant colors you would see. Colors so vibrant you'd dare say no where else can you witness this type of nature. Not anymore. Reefs are often gray and lifeless.

What advice do you have for other professionals in the industry?

As you consider energy projects, identify the assets that will have the greatest impact on your energy usage. If you're a LEED AP you'd have studied the book and recognized where the best values are in energy conservation projects. Get the biggest bang for your buck. And as a benefit of the project: new equipment, a guaranteed savings contract, maintenance & preventive maintenance. Establish the terms and conditions of your program to net these additional benefits.



KALYANI INAMPUDI

ESG and Sustainability Consultant, **Ensur.earth**



How many years have you worked in the industry?

5

What is your most memorable energy/sustainability project and why?

Working for Poland's energy consulting company on creating a CSR report.

What's been your biggest challenge and how have you overcome it?

Net-zero solutions. I am an ESG consultant and have seen loads of greenwashing coming out from this end.

What excites you about the future of energy management & sustainability?

Management of emissions.

What advice do you have for other professionals in the industry?

Be genuine and don't overpromise.



STEVEN LAW

Instructor, Resilient World Institute

How many years have you worked in the industry?

lin

24

What is your most memorable energy/sustainability project and why?

My most memorable energy/sustainability project is the renovation that I am currently doing for my condo building. For many years I have worked on energy/sustainability projects for others but was never able to adopt this knowledge to my building until now. My condo is 22 years old and needs upgrades to the HVAC system since the original boilers and chillers are inefficient by modern standards and often need repairs due to malfunctions. So I worked with our contractor to design a new system that is much more efficient and will even have air conditioning in the hallway corridors during the summer, which we never had before.

What's been your biggest challenge and how have you overcome it?

The biggest challenge has been a lack of education among the public regarding energy and sustainability, so it is difficult to have informed discussions. That is why I jumped at the chance a few years ago to design and deliver a 1-day short course on renewable energy and energy storage when I was offered this part-time teaching position at Resilient World Institute. In the years since, I have incorporated education-type formats into everything I do, whether on the job or anywhere I happen to be with anyone I happen to encounter. Education is the key to solving our biggest challenges!

What excites you about the future of energy management & sustainability?

I am excited about the future of energy management and sustainability because of the massive amount of investment now flowing into this sector of the economy. In years gone by, it was activists and governments who tried to enforce change, but now it is happening naturally and it is expected that companies will make efforts to reduce emissions and choose more environmentally friendly processes. Environmental, social, governance (ESG) disclosure and reporting is now a major driving force in the economy that did not exist 20 years ago.

What advice do you have for other professionals in the industry?

Always focus on education, value creation, and win-win scenarios, rather than seeking to impose an ideology where it might cause more harm than good. Due to the lack of education regarding energy and sustainability within our population, you will likely get more buy-in with your ideas if you take the time to explain things and educate your contacts rather than just trying to push it through. There are a lot of great resources online now that did not exist even 10 years ago! And always make sure your projects are financially sustainable as much as environmentally sustainable, or they won't get approved for the long term.

MorganFranklin Consulting Aveo Company

EDWARD THRELFALL

Senior Consultant, MorganFranklin Consulting

How many years have you worked in the industry?

2

What is your most memorable energy/sustainability project and why?

Helping lead the strategy and development of my company's CSR report!

What's been your biggest challenge and how have you overcome it?

The broader ESG ecosystem is still in the early innings meaning the current environment is fast-paced and always changing. This is exciting because so much is happening, but it can also be challenging to understand the nuance of disclosure requirements in the context of business operating environments.

What excites you about the future of energy management & sustainability?

I believe that every company has a responsibility to operate in a sustainable way. I think it is exciting that many companies are now making serious investments in the space, some of which are fundamentally transforming their businesses.

What advice do you have for other professionals in the industry?

Try your best to stay up to date on what is happening from both a government regulatory and corporate disclosure perspective.



LALIT AGARWAL

VP, Energy Management & Sustainability, EnergyCAP, LLC

How many years have you worked in the industry?

in

20

What is your most memorable energy/sustainability project and why?

Developing the building automation system at UNL (University of Nebraska–Lincoln) that enabled the university to reduce energy consumption by about 40% since 2004.

What's been your biggest challenge and how have you overcome it?

Funding for energy projects was never easy at UNL. We had to make our own funds from energy cost avoidance. Even those budgets continued to reduce. Alternate approaches to communicating the need with senior administration became a crucial step in seeking new funding or reducing further cuts.

What excites you about the future of energy management & sustainability?

Technology is improving to track and measure kBtu and GHG. Equipment is getting more energy efficient. The grid is becoming more greener. People are becoming more aware of the need for energy management and sustainability.

What advice do you have for other professionals in the industry?

Be positive. Be proactive. Enable communication and be willing to take calculated chances with new technologies.



CATHERINE MARSHALL

VP R&D, **Greenbilt**

How many years have you worked in the industry?

in

12

What is your most memorable energy/sustainability project and why?

Designing and building a net-zero residence called the FlexPlex through my company Greenbilt. The FlexPlex is an urban multi-family residential design that "flexes" from a single family home to four 2-bedroom apartments with minimal renovations since all configurations are built into the design.

What's been your biggest challenge and how have you overcome it?

Taking ESG from marketing material and embedding it in the core of the business.

What excites you about the future of energy management & sustainability?

The proliferation of new cost-effective technology.

What advice do you have for other professionals in the industry?

Continually invest in yourself with courses and online learning opportunities.



RICHARD PERRY

Advisor,

Environment Agency - Abu Dhabi

How many years have you worked in the industry?

30

What is your most memorable energy/sustainability project and why?

Masdar City Phase I construction. Most memorable as it was cutting-edge carbon counting to the extreme as we aimed for zero carbon, and zero-waste during construction.

What's been your biggest challenge and how have you overcome it?

Subsidies for water and electricity mean little incentive for people to reduce demand. As a result, water and energy use per capita here is amongst the highest in the world.

By working with the water and electricity sector, we have gradually introduced green (digital) billing that illustrates household usage, compares against average, and targets to raise awareness. We have also reduced the level of subsidies, so people are more cost-conscious about their usage.

What excites you about the future of energy management & sustainability?

In Dubai recently, they have introduced smart metering and apps so that households know precisely which appliances are using what energy etc. and can act accordingly to reduce their demand. Smart appliances and better information for users are two key aspects that are helping to reduce demand.

What advice do you have for other professionals in the industry?

Look for the small incremental gains, as these gradually add up until there is a critical mass. I believe we are starting to see that critical mass moment in many areas right now. For example, ESG is taking off big time, and it will change the way corporations think, influencing their actions.



STEVEN ANDERSEN

CEO, Frostbyte Consulting

How many years have you worked in the industry?

in

31

What is your most memorable energy/sustainability project and why?

In the mid-2000s, I architected the air emissions quantification systems for many energy companies, bringing a level of rigor and timeliness to the business problem that laid the foundation for future actions such as forecasting and reducing greenhouse gases. Previously, it had been known that GHGs were contributing to climate change and that energy companies had a part in emissions, but the inventories were guesses and therefore no meaningful reduction opportunities were available and no reduction regulations were possible. The cliche "if you don't measure it you can't manage it" is absolutely true in this case and opened the door to climate action.

What's been your biggest challenge and how have you overcome it?

The biggest challenge is the sheer complexity of energy operations and the level of accuracy needed to confidently make the critical operations decisions that reduce greenhouse gases. The combination of complexity and needed accuracy results in a high level of effort for implementation of quantification systems. This in turn requires strong change management and project management efforts to deliver the desired outcomes.

What excites you about the future of energy management & sustainability?

The profile of the issue has increased tremendously since ESG has taken hold. This enables companies to fund GHG reduction efforts and the associated systems and teams at a level that makes a meaningful dent in the problem. I believe this momentum will continue and force major change over time in GHG emissions from the energy industry.

What advice do you have for other professionals in the industry?

Focus on specifics. Sustainability can be a very large term that encompasses many topics—creating the risk that a vague commitment to sustainability actually generates no positive change. The focus on standardized metrics to measure sustainability performance is a positive development that narrows companies' efforts to measurable, effective change initiatives.



KENNETH ANDERSON

Sustainability Engineer, Daimler Truck North America

How many years have you worked in the industry?

in

40

What is your most memorable energy/sustainability project and why?

Using EaaS funding to install \$8 million in energy upgrades for a truck manufacturing plant.

Initiating a Power Purchase Agreement to buy 100% renewable electricity from a truck plant in Mexico last year for a future purchase for our other Mexico plant.

Buying community solar for 16 company meters in Oregon and helping over 200 employees also buy community solar for their homes.

Supported adoption of ISO50001 for all manufacturing plants.

What's been your biggest challenge and how have you overcome it?

Getting controllers to accept the concept of EaaS. This has been blocking further energy upgrades for almost a year.

What excites you about the future of energy management & sustainability?

Even using OPM via EaaS, company controllers do NOT believe savings are real, do not trust guaranteed savings, and do not trust long-term warranty. They will not approve investments with a longer than 3-year simple payback. I am hoping that outside pressure will drive home the need for deeper investment.

What advice do you have for other professionals in the industry?

Do not give up. Keep searching for ways around objections.


JONATHAN MOSER

SVP & ESG Practice Lead,

Rubicon Strategy

How many years have you worked in the industry?

15

What is your most memorable energy/sustainability project and why?

Developing a net-zero plan for a global building materials company.

What's been your biggest challenge and how have you overcome it?

Changing company culture to embrace sustainability programs. Success has come from getting buy-in from senior leadership and deploying ambassadors across business units and functions.

What excites you about the future of energy management & sustainability?

There is so much room for continuous improvement and better practices.

What advice do you have for other professionals in the industry?

Be persistent when pursuing change. Bring energy to every engagement opportunity.



JEFFREY EADES

VP, National Sales Director K4G Clean Energy,

KEF Clean Energy



How many years have you worked in the industry?

6

What is your most memorable energy/sustainability project and why?

I do not believe that any one project is more important than the next, each holds value to both client and the organization. It's about awareness and a solution.

What's been your biggest challenge and how have you overcome it?

Awareness and the level of importance internally. Repetition and education, presenting and informing.

What excites you about the future of energy management & sustainability?

The horizon is enormous and growth is exponential. Most importantly is the ability to play Marvel superhero and leave this place in a better place.

What advice do you have for other professionals in the industry?

Persistence, education, and openness.



ALLISON HAWKINS

Director, Corporate Affairs, **AMIDA 3D**

How many years have you worked in the industry?

in

7

What is your most memorable energy/sustainability project and why?

Right now, I'm working with two startups doing great work to advance sustainability. One mines carbon, removing it from the atmosphere, and the other working to build sustainable 3D printed infrastructure. I am a founder at Hot Planet Repair Team, a not-for-profit dedicated to promoting carbon-negative technologies and ending greenwashing. It's truly amazing to see the number of people working to address climate change and the breadth of knowledge and ideas out there.

What's been your biggest challenge and how have you overcome it?

The biggest challenge right now is greenwashing and the lack of standards for ESG reporting. It's very difficult to get a true sense of an organization's commitment to stopping climate change and far too easy to gloss over the actual ESG achievements.

What excites you about the future of energy management & sustainability?

I'm excited by the people I meet week after week who are dedicated to addressing climate change. There are so many people around the world who are working tirelessly to come up with solutions. Every person I speak with is generous and willing to help others in their efforts to stop our planet from continuing to warm.

What advice do you have for other professionals in the industry?

Keep at it and don't be convinced it won't make a difference. Every single action we take as individuals and organizations to tackle climate change matters.



CAMERON BALCH

Director, Impact Cooperative

How many years have you worked in the industry?

in

12

What is your most memorable energy/sustainability project and why?

Establishing the San Antonio Bay Marine Protection Area (SABMPA) in Nueva Valencia, Guimaras, Philippines. The project was memorable because it provided an example of a best practice approach to collaboratively creating ecosystem protection with community support and local government approval. Of all the protected areas in the waters of Guimaras Island, SABMPA is the only one that began with alternative livelihoods for fisherfolk as a core goal. Through more than 12 months of community outreach, sustainable tourism mechanisms were embedded in the foundation documents to provide livelihood opportunities for affected community members aligned with the protections placed on critical habitats in the core zones. Additionally, SABMPA was not zoned with absolute prohibitions on all fishing activity but instead accommodated sustainable fishing practices and provided a phased-out approach for practices currently in place that could not immediately prohibited without negatively impacting subsistence livelihoods.

What's been your biggest challenge and how have you overcome it?

My biggest challenge has been finding effective means to communicate sustainability value to stakeholders that do not have a shared valuation system to incorporate sustainability into decision making processes. When dealing with energy and sustainability, the most useful tool to overcome this challenge has been targeting efficiency improvement of low-hanging fruit. For example, lighting, refrigeration, HVAC systems and other notable inefficient energy using equipment or facilities are relatively easier to translate the value of sustainability into classical evaluations of value generation. Looking to the future, the proliferation of ESG management and reporting has the potential to change the game on sustainability valuation across industries and global jurisdictions in a way that can effectively deliver meaningful progress on the transition to a low and ultimately zero-carbon global economy.

What excites you about the future of energy management & sustainability?

Sustainability tech's explosion continues to be fascinating to watch, and there seems to be an endless stream of innovations that will be useful in bridging gaps that previously were insurmountable for renewables or other measures. Additionally, the movement towards a more complete picture of sustainability beyond environmental to deeply encompass social, economic, cultural, and governance aspects is exciting as it spreads the responsibility to new and different parties that previously were siloed out or not considered integral for sustainability discussions.

What advice do you have for other professionals in the industry?

Stay on top of the latest developments. Now is a golden age sustainability professionals that looks poised to last for decades. While it is important to maintain your core aptitudes and expertise, new connections and applications are popping up every day. If you are not in tune with how markets are moving, some excellent opportunities may pass you by.



LOU SANDOVAL

President & CEO, Halo Advosory Group

How many years have you worked in the industry?

15

What is your most memorable energy/sustainability project and why?

Setting sustainability criteria for a marine manufacturer.

What's been your biggest challenge and how have you overcome it?

Organizational support. This has improved a lot over the past three years where the topic is now front of mind.

What excites you about the future of energy management & sustainability?

Making a difference.

What advice do you have for other professionals in the industry?

Seek sector benchmarks or parallel Industry benchmarks.



KRIS RUSSELL

Senior Manager, Armanino LLP

How many years have you worked in the industry?

in

25

What is your most memorable energy/sustainability project and why?

Net-zero 2030 Climate Action plan with supporting initiatives including the transition to 100% renewables, fleet electrification, and digital twin technology (facility operations and mobility).

What's been your biggest challenge and how have you overcome it?

Breaking down organizational silos and proving the financial business case for sustainability.

What excites you about the future of energy management & sustainability?

Much like the 4th Industrial Revolution of 'digital', the transition to net-zero is now at the top of the agenda in Board rooms driving support for sustainability and rethinking the purpose of a business to create 'positive impacts' and solve society's problems vs. creating them.

What advice do you have for other professionals in the industry?

To get better at your craft as a sustainability professional, dedicate yourself to improving your communications skills. Find a mentor in the communications profession and learn from them to help move sustainability forward.



MELISSA BALDRIDGE

Owner, **The Green Desk**

How many years have you worked in the industry?

in

18

What is your most memorable energy/sustainability project and why?

I did my graduate capstone (Harvard, 2020, ALM, sustainability) on biochar businesses in Colorado. Briefly, I worked with a construction waste management company, and their top three wastes were/are: (1) asphalt shingles, (2) gypsum drywall, and (3) wood waste (treated and untreated). They assigned wood waste to me and asked me to figure out a way and a business to divert it from landfill and turn it into a business (model).

So I worked with them to explore a wood shop (no go, too labor-intensive), wood pulp (like for animal bedding), and finally, I modeled and created a business plan for a biochar startup in Colorado. While they did not move forward with the business, another company on Colorado's western slope did, with my initial client's permission, buy my plan to do the same only with forest "slash" (downed trees, limbs, etc.) That company had a contract with the Forest Service to remove it, and they too wanted to turn it into an upcycled product with tremendous carbon sequestration capability.

Lots more to discuss here, and that's the highlight. SUPER-fun project.

What's been your biggest challenge and how have you overcome it?

The biggest challenge I've had in the 18 years I've been in sustainability is finding and making a business case for these initiatives. They're always there, but they are never obvious and often not easy, either.

The way to overcome it, is knowing it will, in fact, show itself. It always does, though the route there may be circuitous. So staying the course is key.

What excites you about the future of energy management & sustainability?

We're at the stage where so many companies are making net-zero/net-positive carbon claims with halfbaked plans for how to achieve that. And I'm OK with that. Net-zero carbon is no snap, especially if we're talking about mapping out supply chains. I applaud companies that publicly own their ignorance about how to get there. They must be transparent and own their progress and challenges. I relish the challenge with this work.

What advice do you have for other professionals in the industry?

STAY THE COURSE! Don't get discouraged. Check out "Project Drawdown" if you do. The team that put that project together basically mapped out our path to zero carbon, and we have the tools & technologies NOW. We just need the will.



JOAN MICHELSON

Speaker, Coach, Consultant, Journalist, ESG Specialist, Electric Ladies Podcast & Green Connections Media LLC

in 🎔

How many years have you worked in the industry?

17

What is your most memorable energy/sustainability project and why?

My podcast! I interview women innovators and leaders in the energy, sustainability, and climate space, including corporate responsibility. It's "memorable" because I'm talking to remarkably talented women who are putting their talents to work to save the planet every day, at scale. Listen at <u>electricladiespodcast.com</u> or wherever you like to listen to podcasts (e.g., Apple, Spotify, iHeart, we're everywhere).

What's been your biggest challenge and how have you overcome it?

Persuading men that a show featuring women is worth listening to also. I talk to a lot of men and enroll them in the topic and the cause, often talking about the women and girls in their lives.

What excites you about the future of energy management & sustainability?

What excites me about the future of energy management and sustainability is that so many talented, creative, smart, resourceful people are dedicating their abilities and resources to save the planet and make our world better in the process.

What advice do you have for other professionals in the industry?

Don't give up. Find a way....no matter what the challenge....find a way to move forward. You can do this.



GEORGE AMOH

ESG Associate, Huri Movement

How many years have you worked in the industry?

in

4

What is your most memorable energy/sustainability project and why?

I was able to work with a community group to connect them with local funding for a BIPOC-led sustainability initiative. This helped champion inclusivity and overall business development.

What's been your biggest challenge and how have you overcome it?

Support from bigger organizations. Visibility has been a huge issue and slowly we are having more folks engage in inclusive conversations.

What excites you about the future of energy management & sustainability?

Seeing more inclusive stories with BIPOC leadership roles at the forefront.

What advice do you have for other professionals in the industry?

Never be afraid to create spaces you fail to see. "If you don't see it, make it."



CHENL LIN

Independent Environmental Consultant, Self-Employed

How many years have you worked in the industry?

in

22

What is your most memorable energy/sustainability project and why?

Project Mingus: An approximately 70-MG ground-mounted solar development project located in Chiayi Taiwan. The project site is located in an extensive wetland area that has been identified by the local conservationists as wintering habitat for the endangered Black-faced Spoonbill. As a sustainability professional hired by a 3rd party environmental consulting firm contracted to complete environmental and social due diligence assessment as part of the project's financing application, I have helped facilitate the communication among ecologists, solar developers, construction contractors, and local stakeholders to resolve disagreements and reaching a consensus on a Biodiversity Action Plan (BAP). The ground-mounted solar development project has begun operations in 2020, and the implementation of BAP has been successful as many bird species to date, including the endangered Black-faced Spoonbill, have continued to utilize the conservation area within the project site for nesting or wintering.

What's been your biggest challenge and how have you overcome it?

The biggest and continuing challenge I have faced as a sustainability professional for the past twenty-two years is the fragmentation of the economy, because of which worthwhile projects by NGOs and green business start-ups as SMEs are often confronted with funding limitations and financial difficulties. The way I plan to overcome it is by seeking to become Google's Net-zero program manager in Taiwan, and help build up the information infrastructure, perhaps with ESG BOOK as a start, such that individual investors, as well as global financing institutions, can better search and locate credible projects to include in their portfolio, such as carbon off-set and habitat conservation initiatives.

What excites you about the future of energy management & sustainability?

The prospect of establishing carbon credit certification in Taiwan is such that individual farmers and landowners have the economically viable option to engage in sustainable farming or agroforestry practices.

What advice do you have for other professionals in the industry?

When you feel hopeless or having arrived at an dead end, don't give up. Give yourself a much needed break and rest, meditate on it, and you will eventually see new possibilities and opportunities.



KONSTANTINOS AND

Consultant, Ernst and Young

How many years have you worked in the industry?

3

What is your most memorable energy/sustainability project and why?

Incorporation of ESG in the credit granting process for a bank due to the spectrum of changes required.

What's been your biggest challenge and how have you overcome it?

Traditional mindset of the people working in the industry and lack of expertise.

What excites you about the future of energy management & sustainability?

The room for innovation.

What advice do you have for other professionals in the industry?

Try to look in the future, not in the short-term gains.



CONNIE EKELUND

CEO,

Synergy CMC



How many years have you worked in the industry?

5

What is your most memorable energy/sustainability project and why?

So far most memorable energy/sustainability project was empowering a multi-national to start their ESG journey. The board wanted to move forward, but then got cold feet and wanted to wait until it was put into law.

To see their eyes light up when we figured out ways to create new revenue models by cleaning up their supply chain was the best!

What's been your biggest challenge and how have you overcome it?

Generally, it has been challenging to create urgency and get clients into action. Budgets have also been an obstacle.

What excites you about the future of energy management & sustainability?

I'm super passionate about making a difference in the way organizations approach sustainability and make it part of their standard process.

What advice do you have for other professionals in the industry?

RUN as fast as you can towards 2030 and bring as many organizations as you can with you!

CARRIE LOFTUS

Sustainability Programme Manager, **Direct Line Group**

How many years have you worked in the industry?

1

DirectLine

Group

What is your most memorable energy/sustainability project and why?

Installing hydrogenated vegetable oil as a replacement for diesel in our trucks. The drivers loved the change and it was the first sustainability project implemented on our company's journey to net-zero!

What's been your biggest challenge and how have you overcome it?

Understanding our buildings and the investments needed to enable them to support the electrification of vehicles, and all the technologies and machinery that use gas today. We are working with third parties to bring in greater understanding and best practices so we can map out our estate portfolio and the changes required to support them in the coming years as more technology moves to use electricity from renewable sources instead of using gas or diesel.

What excites you about the future of energy management & sustainability?

Seeing the changes happen as we overcome the challenges we currently face and seeing the opportunities to show people that the things that are important to us at home—the future of our loved ones, energy costs and usage—are also important priorities we face in the workplace and in business. Our colleagues are hugely important assets in successfully implementing the changes needed to get us all to net-zero.

What advice do you have for other professionals in the industry?

Always think of the change you are trying to make from the point of view of the person on the receiving the change, so you can make it relevant to them, and they can understand why it is happening and why it is important.



MARILYN JOHNSON

Sr. Director, Sustainability, **Clarivate**



How many years have you worked in the industry?

25

What is your most memorable energy/sustainability project and why?

Launching from scratch (twice) sustainability from the ground up at two different publicly traded professional services companies (IHS and Clarivate). To watch an organization work through everything from the language, the framework, the strategy, and to launch into a formal effort all the way through implementation and ultimately INTEGRATION of sustainability - ESG, throughout all that a company does it remarkably rewarding and empowering for all involved and impacted. The most exciting part is the continual education and seeing the sparks ignite as people truly begin to understand what corporate sustainability is and how it connects to the work that they do and the lives they live every day.

What's been your biggest challenge and how have you overcome it?

The biggest challenge is to bring each and every colleague in the company along the exciting sustainability journey, in a way that is genuine, meaningful, and impactful. That too however, is the greatest opportunity and where true sustainable business practices and innovation take hold.

What excites you about the future of energy management & sustainability?

There is so much potential to really make the world more energy-efficient, and to reduce the inequities and impact of our current energy system. From the environment to people, we must and we will innovate to provide everyone the energy they need; and further, I believe we can through the right systems and processes, build an abundance of energy over time, such that the power structure of the world shifts as Energy no longer becomes the controling factor in the world's balance of power and political structure.

What advice do you have for other professionals in the industry?

Never, ever give up. Transformational leadership to make the world a better place for generations to come is not an easy task, and it takes a bold combination of perseverance and patience, optimism, and collaboration. Enjoy the journey—every step you take forward is progress.

SOCIETE GENERALE

JAMES CORNWELL

AMER Head of Compliance Risk Management, **Societe Generale**

How many years have you worked in the industry?

26

What is your most memorable energy/sustainability project and why?

I am relatively new to this field and looking to learn and share industry best practices.

What's been your biggest challenge and how have you overcome it?

Bandwidth and clarity, maintaining a robust risk management framework in a sustainable manner is placing a heavy burden on resources. Part of the challenge is clearly identifying and documenting the material ESG risks we face and how to effectively measure our risk exposure and the effectiveness of controls in place to mitigate those risks.

What excites you about the future of energy management & sustainability?

Leading a project to establish a robust and meaningful ESG risk identification and management framework that is sustainable and scaleable. The idea of establishing an industry-leading framework that others can utilize.

What advice do you have for other professionals in the industry?

All processes established surrounding ESG risk management need to be sustainable and clearly articulate ESG goals/objectives that are to be met by the risk management framework. The goals should be high-level initially as this space continues to evolve at a fast pace. Better to acknowledge you are in a due diligence and design mode rather than indicate you have a fully backed risk management framework, which for most organizations is not the case.



CASSANDRA TOME

Utilities Director, Tome S.A

How many years have you worked in the industry?

60

What is your most memorable energy/sustainability project and why?

The energy monitoring prevents leakage in the compressed air system. With the cloud data available, the process of surveying the energy diagnosis began to highlight the energy waste of the system. In addition to the available data, a specific methodology was used to also "see" how much of the energy consumption used in the compressors was being "thrown away" through compressed air leaks from the plant. making the invisible visible, we could engage our team members. Adopting behavior change and maintenance our company reduced 42.5% initial waste. Our foundry reduced 333.018,70 kgCO2. We had to transform waste into money.

What's been your biggest challenge and how have you overcome it?

Our biggest challenge was not having money to start a completely energy-efficient program and seeing how much opportunity of recovering money we had.

We contracted a consultant company named EfficienC to install big data to collect data and analyze our potential. Once we had the precise information, we decided to segment investment, making one action pay for the next and so on.

What excites you about the future of energy management & sustainability?

Achieving the Paris agreement, reducing the emissions, decarbonizing the planet.

What advice do you have for other professionals in the industry?

Don't waste time to start monitoring your consumption. You must act now. The cheapest KW is the one you don't waste.



CHRISTINE TRINGALE

Head of Strategy, **Deed**

How many years have you worked in the industry?

in

10

What is your most memorable energy/sustainability project and why?

Creating a tool within Deed's social impact platform to enable and support employee engagement and inclusivity in corporate ESG efforts. So often, a company's ESG efforts are conducted "at the top," without much visibility to employees and other stakeholders, and without their contributions. Deed's differentiator in the impact space is that we have created a platform for employee donating and volunteering that employees actually ENJOY using, and thus are engaged with. By applying this same approach to exciting and engaging employees to participate in ESG efforts—the sky is the limit!

What's been your biggest challenge and how have you overcome it?

Communicating corporate ESG efforts to employees in a way that resonates and feels personal, so that engagement in ESG is inclusive and exciting. We have a great solution to do exactly this, through ESG-related challenges, community building, and transparent communication of employee and corporate efforts.

What excites you about the future of energy management & sustainability?

Increasing the inclusivity of participation in these efforts. So much of this work is done based on decisions by company leaders in closed rooms. Employees want to help and to be involved, and to feel aligned with corporate values. Leveraging employees as a significant resource to advance energy management and sustainability efforts has incredible potential.

What advice do you have for other professionals in the industry?

Continue to think out of the box for how we can engage everyone in ESG efforts—not just through top-down decision making.



DAVID GRISLAIN

ESG Manager, **Woodside**

How many years have you worked in the industry?

in

23

What is your most memorable energy/sustainability project and why?

Project Director of Sodexo Madagascar (Africa), constructing a mining village for Rio Tinto QMM Ilmenite project in Fort Dauphin back in 2005–2007.

Memorable due to the remoteness of the location and the excellence in social performance achieved with the collaboration of surrounding communities in which we operated.

Recognized by **Oxfam UK as a case study** in sustainable development best practices.

What's been your biggest challenge and how have you overcome it?

Supply chain challenges required global thinking but acting locally to enable the value of a circular economy to be unlocked in a sustainable manner.

We have invested in building capability locally to have the communities directly benefiting from the project development in terms of employment, training, and business economic participation.

Through collaboration with the local population, we established long-term business opportunities in a new sector of industry (i.e textile, food, agriculture, construction) which have been existing since then.

What excites you about the future of energy management & sustainability?

It is about marking a clear demarcation limit between compliance and performance. The answer is in what we should be doing, what we ought to do...and not what we must do. Business ethics and governance come into play here to signal how and why we do business. Caring for people and the planet is not necessarily the opposite of profit. The 3 Ps can be integrated and must be to establish long term sustainable businesses.

What advice do you have for other professionals in the industry?

Increase your level of literacy and ESG awareness. Get involved. Be courageous and brave in taking action. Everybody can make a difference and challenge the status quo.



MANOJ JOSHI

ESHS Process Specialist, TCS

in

How many years have you worked in the industry?

18

What is your most memorable energy/sustainability project and why?

Carbon neutrality for entire North America Geo. A versatile and challenging environment to define the boundary, materiality, and account for the emissions was key learning.

What's been your biggest challenge and how have you overcome it?

Understanding the Sustainability Gamut. Current and previous experience blended with by ongoing Doctorate of Business Administration has helped me to understand the subject better.

What excites you about the future of energy management & sustainability?

The depth and width of the subject and enormous potential to benefit the triple bottom line.

What advice do you have for other professionals in the industry?

Keeping a close eye on new information. Learning and sharing is the key.



ANDREY BOGDANOV

Principal and Interim CEO, **Risk Insights**



How many years have you worked in the industry?

5

What is your most memorable energy/sustainability project and why?

Building and launching first in Africa AI-powered ESG rating model - ESG GPS, now covering all listed companies in major African markets.

What's been your biggest challenge and how have you overcome it?

Different levels of understanding and appreciation of ESG from different stakeholders overcoming with constant dialogue.

What excites you about the future of energy management & sustainability?

Bright perspectives and huge amount of work in front of us all.

What advice do you have for other professionals in the industry?

Be ready for the long term game...



TANIS MARQUETTE

Vice President, Sustainability & ESG Practice Leader, Woodard and Curran

How many years have you worked in the industry?

lin

30

What is your most memorable energy/sustainability project and why?

Sustainability isn't about a project. It is about changing the culture to support a sustainability journey. Every conversation, whether internal or external that leads to a change in thinking or additional perspective is what drives success for the professional, practitioner, community, and company.

I have led both internal and external stakeholder efforts and every interaction, good, bad, or indifferent, informs my perspective to celebrate, do better, or push forward.

Twice recognized by Environmental Leader for stakeholder engagement innovations - internal and external.

I was able to use Survey Monkey to simultaneously conduct sustainability awareness training, materiality, and internal stakeholder strategy engagement. Through this effort I had a 78% return on questionnaires with hundreds of written comments.

I partnered with a professor at the Ohio State University for five years, and co-taught his Sustainable Business Practices (Materiality) class of 50 students. He also received an award from the University for our innovative collaboration. Students learned executive presentation skills, how to conduct a market assessment, and complete a materiality assessment. Over our engagement, my company received marketfocused materiality assessments across 14 sectors and five years of assessments, trend data from the next generation of consumers.

What's been your biggest challenge and how have you overcome it?

Multiple times in my career, I have proposed new projects or new directions and almost always those suggestions were met with pushback—no funding available, limited "buy-in", wanting "proof" this is the right direction.

Thinking through and anticipating feedback, preparing data-driven justifications, and meeting people where they are, has helped me not only move forward with innovative ideas, but to be recognized by my peers for that innovation.

- Tracking not only customer requests, but the sophistication of those requests over time and providing revenues analysis tied to the requests as part of social license to operate.
- Creating an internal questionnaire to meet a multiple objectives because we were "only going to do it once".

- Partnering externally to conduct materiality assessments when internal partners didn't see the value.
- Adapting the lens of sustainability for each function and against known goals, so each team could see themselves and their success in the success of the sustainability strategy—it is not a stand-alone function or siloed activity, or at least it shouldn't be.

And, then, you share...you communicate far and wide how you overcame challenges so others can hopefully avoid the same obstacles!

What excites you about the future of energy management & sustainability?

Our profession is changing so rapidly, with new people and functions joining the conversation for the first time. I am energized at all the possibilities and innovations yet to come. Collaborating with so many talented people is incredibly rewarding. I learn something new from every person I engage, regardless of topic!

What advice do you have for other professionals in the industry?

Be curious. Be courageous. Be collaborative.

And, above all else, never stop learning.



JAY IYER

Climate Solutions - Commercialization Executive, **MorningStar**

How many years have you worked in the industry?

25

What is your most memorable energy/sustainability project and why?

Explaining the need to customers/audience to first understand the physical risks from climate change & then quantify it across carbon emission scenarios and time horizon. Sustainability projects need to be crafted/ designed as the next step; else, assumed productivity or output/rewards from sustainability projects cannot be achieved.

What's been your biggest challenge and how have you overcome it?

Explaining the complexity of ever-changing climate science and the transition risks involved in addressing them is a challenge. Cause/Effect/SWOT analyses are usually performed to overcome these challenges.

What excites you about the future of energy management & sustainability?

Hope - about a greener economy for very many generation to come!

What advice do you have for other professionals in the industry?

Understanding physical risks from climate change is the first step. Quantifying is the second step. Then embark on sustainability projects.



CHRISTOPHER DE CREE

EHS Implementation Manager, Locus Technologies

How many years have you worked in the industry?

lin

33

What is your most memorable energy/sustainability project and why?

In my previous company (not current), preparing the environmental component of my company's first ESG report, because the process required us to challenge our methods and assumptions, and really develop a process that would be accurate, transparent, verifiable, and relatively easy to use.

What's been your biggest challenge and how have you overcome it?

In my previous company (not current), before the parent company required ESG reporting, obtaining executive buy-in for the sustainability program, in general, was a huge obstacle that could only be overcome by one-on-one meetings with individual leaders or their staff to incrementally obtain program participation. After the parent company required ESG reporting the obstacle became acquiring the resources, database system, and consulting expertise in a very short time that would support an accurate, transparent, verifiable, and relatively easy-to-use process to capture ESG inputs.

What excites you about the future of energy management & sustainability?

In the future, I am excited about the practical applications of sustainability to operations, including how to implement improvement projects based on ROI and e-ROI, and how to help others implement accurate, transparent, verifiable, and relatively easy to use processes to capture their ESG and sustainability inputs.

What advice do you have for other professionals in the industry?

- 1. Take a professional class on the GRI standards. There are many ESG standards and frameworks, but the GRI are among the most comprehensive and they're the best place to start in my opinion.
- 2. Learn the importance of ESG from an overall company financial perspective. The reality here is that ESG is becoming as important as corporate financial reporting in terms of businesses having access to funding and future business capture opportunities.
- 3. Understand the implications of public reporting—your company needs to take its goals and targets seriously and have plans and projects in place to meet them because year over year the progress on these goals will also be reported publicly.
- 4. Get a good database because spreadsheets are corruptible and not sustainable over time.



CHARLES EBERLY

Chief of Staff, **Noho ESG**

How many years have you worked in the industry?

in

10

What is your most memorable energy/sustainability project and why?

Working on the Mpatamanga hydro project in Malawi (Southern Africa). This was a project that would double the amount of installed capacity in the entire country and was designed with precedent-setting environmental and social standards. Malawi is a country where only 13% of the population has electricity access, and that 13% endures blackouts most of the day. It is also a population where the average age is 16—so if there is to be a future for the youth electricity access is critical.

What's been your biggest challenge and how have you overcome it?

Connecting sustainability to business value. How can you effectively communicate to climate skeptics, or people who just don't care, that by pursuing sustainability they can in fact create value and become a better business.

What excites you about the future of energy management & sustainability?

- The commercialization of technologies, such as storage, hydrogen, and software that will allow for Grid 2.0. For those seeking to innovate, there has never been more hard tech available to achieve. Similarly, the financing ecosystem is maturing in a way that more innovation can be financed and stay true to its mission!
- 2. Sustainability professionals as change agents are becoming mainstream. Stakeholder capitalism is under less skepticism than its ever been. The momentum is with us.

What advice do you have for other professionals in the industry?

You have to stay up late at night with a flashlight under your covers reading. The accessibility of information is incredible and the rate of change is unbelievable. You have to be curious and constantly be learning.



JOHN ANMO

Business Owner, Betterworld

How many years have you worked in the industry?

2

What is your most memorable energy/sustainability project and why?

Installing stand solar home system because in Africa there is a huge energy poverty.

What's been your biggest challenge and how have you overcome it?

Make people aware of climate change, decarbonization, and net-zero emission by sensitizing my community about the effect of carbon from the stove, why methane is bad, and telling them how self-conscious we must be about net-zero emission.

What excites you about the future of energy management & sustainability?

How there will be economic growth and development, social impact, and can't wait for it, integration of microgrids (I call it climate heroes) with technology.

What advice do you have for other professionals in the industry?

Commit to the energy transition era, clear climate policy, and knowledge transfer.



KIRAN P Center of Excellence, Ametek Instruments

How many years have you worked in the industry?

lin

15

What is your most memorable energy/sustainability project and why?

In the industry where I was working for a finance shared services center, we printed a lot of paper copies received by the supplier to account for invoices.

Instead of taking print out of paper copies, we used to drag & drop PDF copies received in our mailbox to our ERP which saved a lot of time and paper usage.

What's been your biggest challenge and how have you overcome it?

The acceptance of "change" in our working environment. We overcome this through a lot of training and assessments and doing proof of concept to develop acceptance of the digital way of working in our organization.

What excites you about the future of energy management & sustainability?

Future of Energy Management: I personally see transformation through renewables like solar, wind, and hydro will help us but having generated more current challenges is sustainability over storage. We are still finding out good techniques here.

Sustainability: I see we should focus more on the reuse-recycle-reduce of our existing natural resources through the support of the digital platform.

What advice do you have for other professionals in the industry?

Digital Platform: Usage of digital tools in our day-to-day life (Metaverse is one example).

Blockchain: Exploring the industry practices to follow and adhere to blockchain technology.

ESG: All industries to be compliant with our environment social governance model.

Leasing: Develop the strategy over day-to-day practices to follow the leasing methodology.

Organics: All of us to transform our interest of usage of organic products and services.



ALICIA SILVA

CEO, Revitaliza Consultores



How many years have you worked in the industry?

22

What is your most memorable energy/sustainability project and why?

Torre Mayor is a 55-story building in Mexico City and was my first class A certified building. Not only do I think of it as working for an international client, the complexity of a building that allocates 10k people daily, with a huge environmental footprint, but that was also built with top of line for everything. They thought there was nothing we could add, and even we were surprised by all the benefits committed energy and sustainability consultants brought to the business. That was 10 years ago and even today, it is an iconic example for the industry in LATAM.

What's been your biggest challenge and how have you overcome it?

Our biggest challenge is always about people. Technology well-implemented has never been a problem. The grinch of the company that does not believe this can bring benefits, after everything has passed with results, they always come back and say I always thought that was a good idea. Changing people's minds is the great block, the mid-gap that we need to cover, and investing in an energy or sustainability project always has come with doubts. Fortunately, the market has changed, and there is more certainty. People are evolving and getting convinced, and new commerce still has to break that barrier to the mind gap. It has been slow, and we need that gap to close faster, and that is the industry challenge that the technology is ready to be applied.

What excites you about the future of energy management & sustainability?

IT WORKS, IT WORKS. Having worked on more than 100 projects, every project and every implementation has shown results. I am excited to be presenting proposals that add to the benefit of all, the project, the people, and the planet. I am confident that my job is creating a solution to climate change and that there is hope for humanity if we only make it happen and play the net-zero game.

What advice do you have for other professionals in the industry?

Get educated in the technical part but never forget to leverage your presenting skills to inspire people to change. At the end of the day, your message should be understood by every single person. So work on your message to be simple.



CARLOS ZAPATA

Sr. Manager ESG, **Twist Bioscience**



How many years have you worked in the industry?

15

What is your most memorable energy/sustainability project and why?

Starting from ground zero, a company's inaugural sustainability report and reaching the goal of publishing it.

What's been your biggest challenge and how have you overcome it?

Convincing an executive team of the importance of a materiality assessment but demonstrating the importance by tying financial impact on risks, I was able to execute.

What excites you about the future of energy management & sustainability?

Potential standardization of reporting, frameworks and standards.

What advice do you have for other professionals in the industry?

Be patient, we are still in evolution. This is also exciting!



TODD LUKESH

Digital Twin Expert, Building Performance & Sustainability Director, Gafcon Digital

How many years have you worked in the industry?

in

20

What is your most memorable energy/sustainability project and why?

California Academy of Sciences in Golden Gate Park in San Francisco.

LEED platinum at early days of LEED, 2.5 acres of green roof on top of a building, pulling fresh seawater from the Pacific Ocean 2 miles away to feed the enormous saltwater tanks, indoor rainforest, need I say more?

What's been your biggest challenge and how have you overcome it?

People need to wake up to the concept of decarbonization, 1.5 degree C impact, ESG in general, and our human impact of the built environment on the world's climate.

It is not resolved. It is a continuous uphill battle.

What excites you about the future of energy management & sustainability?

The ability that technology allows us to get aggressive targets like net-zero, buildings as batteries, carbon neutrality, the impact of performance-based digital twins on facility operations, etc.

What advice do you have for other professionals in the industry?

Get out of tunnel vision and understand the industry's bigger picture problems and implement solutions now that will have a lasting impact over time and improve performance using data, ML, AI, RPA, IoA, HCI, etc. embrace technology, R&D, and innovation. Don't fear it.



HIMANSHU KOTHARI

Founder & SNR Managing Director, Global Venture Capital Advisors, LLC USA

How many years have you worked in the industry?

in

42

What is your most memorable energy/sustainability project and why?

Re Forestation Project in semi-arid zones with very scanty rainfall and very poor water resources availability for agriculture activities after the monsoon.

We developed a program to plant saplings that are fed very little droplets of water—approx 500 ml during a week.

The sapling survival rate was increased to over 80% after a few trials and errors.

Today we can transfer these valuable learnings to any forestation and agro projects facing similar climatic and soil conditions.

What's been your biggest challenge and how have you overcome it?

Biggest challenge is always people involvement at the grass root level to accept new methods and trust new methods for adopting on their own farm land.

What excites you about the future of energy management & sustainability?

Energy management and sustainability issues need to be solved based on wider and deeper insights on local ecosystems and experiments that are acceptable to local ecosystem players and grass root level people.

Small scale green hydrogen generations and small wind mills connected to microgrids are sure ways for local eco system development based on local energy production, management and sustainability.

What advice do you have for other professionals in the industry?

Do not ignore to understand the local ecosystem and grass root level local populations and indigenous population when planning and implementing any sustainability projects.

RIGHTSHIP

KRIS FUMBERGER

Head of Sustainability and Environment, **RightShip**

How many years have you worked in the industry?

20

What is your most memorable energy/sustainability project and why?

Maritime emissions portal. Built the portal from the ground up, and now used by ports around the world to measure and reduce emissions.

What's been your biggest challenge and how have you overcome it?

Buy-in to sustainability. Relate the benefits to the business.

What excites you about the future of energy management & sustainability?

Growing area.

What advice do you have for other professionals in the industry?

Remain determined! ALWAYS!!!

ANDREA HOELSCHER

Investment Accounting & Operations Manager, VP, Amerant Bank

How many years have you worked in the industry?

1

ΛΜΕRΛΝΤ

What is your most memorable energy/sustainability project and why?

The most memorable energy/sustainability project was coming up with metrics and measurables for goals, short term, and long term. It was a challenge to collect information, interpret it and lay it out in measurable metrics that will be impactful in reducing our carbon footprint. However, I learned so much in that process, and it also helped bring awareness to other areas as I was contacting folks from several departments. In the end, seeing the result of such hard work on our very first ESG report was most rewarding.

What's been your biggest challenge and how have you overcome it?

My biggest challenge has been time management. Since I am a "champion" of Climate Resilience for my organization, I still have a full-time-very-active job. My position is Investment Accounting & Operations Manager, and recently another department was merged into mine. So, it was very difficult to juggle training in a new area, keeping up with the ever-changing market conditions and consequent active portfolios and staying close to my ESG responsibilities. To overcome this challenge, I did a lot of breathing and prioritization. I only attended meetings where I could be impactful and streamlined certain tasks so I could dedicate the appropriate time and energy to what mattered most. I found that if I committed to handling only one Climate task a day, I could handle it. If I could do more, then I would. Championing the "E" in ESG feels energizing, new and almost like a pause from my other heavy responsibilities, so I make time for it.

What excites you about the future of energy management & sustainability?

What excites me about the future of energy management & sustainability is that there is so much we can do and learn. I get to make a difference for generations after me. What we are building now, will impact future generations. Those "seeds" that we plant now will become the new normal in the future.

What advice do you have for other professionals in the industry?

My advice for other professionals in the industry is to act now. And, emphasize that there is so much opportunity in the industry, and it's up to each of them to take advantage of it.



EZEKIEL ADU

Investor Relations Officer, GRAWINDY WindAgroTech Renewable Technologies

in 🎔

How many years have you worked in the industry?

2

What is your most memorable energy/sustainability project and why?

Having prospect for green investment for GRAWINDY for one and a half years as Investor Relations Officer have been an exciting journey. GRAWINDY with our novel technology, Windagrotech, an innovative, cheap and recyclable wind energy generator. This gave me the privilege to engage with myriads of green and impact base venture firms globally. I had the opportunity to acquaint myself with the major keen interest of many venture capital firms from early to late stage investment. It really has been an interesting green ride.

What's been your biggest challenge and how have you overcome it?

My biggest challenge as Investor Relations Officer was sourcing funding from green angel investors, fundraisers, and private to government. As our progressive Technology Readiness Level (TRL) was at the 6th stage, and most investors look forward to funding above 8th TRL, it became a struggle to secure one. We are currently very close to securing major funding for our commercialization from European Innovation Council (EIC) through ALIEN Technology and Transfer.

What excites you about the future of energy management & sustainability?

I was super excited to witness the current actionable feedback from COP26 held in Dublin dubbed #COP26Action. Many areas from green energy infrastructure and innovation to the workforce have been addressed with much emphasis on green funding.

What advice do you have for other professionals in the industry?

Upskill, upskill and upskill.

AGNE GRIGAITYTE

Consultant, UAB "Tagri Konsultacijos"

How many years have you worked in the industry?

4

champions

What is your most memorable energy/sustainability project and why?

I have worked on theoretical planning of a 100% energy-neutral/self-sufficient building. We have explored many options for heating, cooling, energy recovery, waste management, possible smart trees and smart flowers, rooftop installations such as solar panels and vertical wind turbines, as well as green air conditioning. It comes at the top of my sustainability projects since all results were calculated mathematically, the savings, the ROI, feasibility analysis as well as SWOT analyses for each measure.

What's been your biggest challenge and how have you overcome it?

The biggest challenge without a doubt is the psychology of people both inside and outside the field. The drive for change has to be collective and transformational within the systems humans function in. There is a lack of information spread to citizens and a lack of legal action against big corporations that are the main drivers of climate warming.

What excites you about the future of energy management & sustainability?

There is geopolitical action in Europe that is moving the energy independence of Eastern European Countries from Russia. I see this as a strong kick toward non-fossil fuels and more sustainable infrastructure in Ukraine that I see as a driver towards further change in Europe. Hopefully, the rest of the world follows.

What advice do you have for other professionals in the industry?

Stay focused. You have a vision—work towards it. Collective action is what will get us to our environmental goals.



OLADAYO ADU

Managing Partner, Famsville Solicitors

How many years have you worked in the industry?

in

5

What is your most memorable energy/sustainability project and why?

Interfacing with a regulator with respect to the environmental concerns of an International Mining Company in Nigeria (McMahon Contractors) as it pertains to their environmental waste and pollution concerns as well as the health and safety of their employees.

It was novel because the extant law in Cross-Rivers state had not yet been tested and this assisted the Company in developing an effective process for the health and safety of their employees as well as their commitment to ensuring a cleaner environment.

What's been your biggest challenge and how have you overcome it?

The biggest challenge is enlightening corporates about the importance of ESG-related concerns. I overcame this by ensuring that we share resource materials and conduct free trainings and webinars to share more insights on ESG.

What excites you about the future of energy management & sustainability?

The possibility of developed nations and underdeveloped nations committing to net-zero and renewable/ clean energy, and the belief that on the part of government and corporates by the turn of the century, we would have left a better earth for the next generation.

What advice do you have for other professionals in the industry?

They need to continually raise awareness of ESG and push relevant stakeholders and the importance of embracing ESG at every level.



SAM MCNEIL

Managing Director, **River Capital Partners**

How many years have you worked in the industry?

in

19

What is your most memorable energy/sustainability project and why?

Oilfield services company client valued at \$16 million when we closed their financing transaction. The client grew to a \$64 million valuation in 6 years while revenue and EBITDA increased 10x.

What's been your biggest challenge and how have you overcome it?

ESG influencing investors and lenders to not finance oil and gas, and other industries such as firearms.

What excites you about the future of energy management & sustainability?

If public perception & understanding goes the way of being reasonable [e.g. people realizing that true energy "transition" will take decades, and not months or a few years], then that's positive and exciting. If anything good comes out of Russia v. Ukraine hopefully that will be a much better public understanding of energy economics, time frames, and constraints.

Also, I think the government being too heavily involved and unnecessarily high taxes to subsidize green energy is wrong. The US is, by far, the greatest economy in world history, and it was built via capitalism and not government subsidies and handouts.

What advice do you have for other professionals in the industry?

Be realistic.

Be very, very careful about depending on the government.

Know the numbers, and determine whether a project or company makes sense [i.e. makes a good return for stakeholders] with reasonable assumptions.



MICHELLE NICHOLLS

Principal, Nicholls Consulting, Inc.

How many years have you worked in the industry?

in

20

What is your most memorable energy/sustainability project and why?

All of my technology analysis projects have been memorable because I've been able to meet with a number of vendors and thoroughly evaluate the potential for application within the solid waste industry.

What's been your biggest challenge and how have you overcome it?

Recently, my biggest challenge has been dealing with unscrupulous vendors that won't work with me, the project manager, because they only want to deal with the "money people." I've been able to overcome this by working with my "money people" to identify issues with the technologies' promises versus reality, and developing joint strategies to make the technology work. By having a strong team and united front, we've been able to resolve our integration issues.

What excites you about the future of energy management & sustainability?

I'm glad to see there's a renewed focus on the topic and I certainly hope that it sticks around for a while. Having strong leaders that know the industry and can separate the wheat from the chaff will be instrumental in keeping sustainability top of mind instead of relegated to a "nice to have."

What advice do you have for other professionals in the industry?

Do your homework! There are so many inventors and charlatans in the space that you must be judicious in your review of them and hold them accountable for claims made.



CHUNGHA CHA

CoFounder, **Re-Imagining Cities Foundation**

How many years have you worked in the industry?

in

13

What is your most memorable energy/sustainability project and why?

Deep energy renovation of our home in Boston into a net-zero energy house.

What's been your biggest challenge and how have you overcome it?

To help accelerate the decarbonization of the built environment by working with large real estate developers, investors, and large real estate portfolio owners.

What excites you about the future of energy management & sustainability?

The rapidly depleting "carbon bank" and there's so much to do!!

What advice do you have for other professionals in the industry?

Do all you can toward becoming the positive change you want to see in the world, toward building net-zero and sustainable communities.



ANDREW SPARKE

Executive Chairman, **QMines Limited**

How many years have you worked in the industry?

lin

20

What is your most memorable energy/sustainability project and why?

QMines kind of flipped the whole mining and exploration business on its head and said we can do this in a more sustainable way, we can do this in a cleaner, greener way. QMines has rolled out several initiatives recently and while most companies are in the strategy phase, we are well and truly past that, we're in the implementation phase. Currently working as Executive Chairman of QMines, I have been leading the company towards its mission of being a zero-carbon copper and gold developer. As a junior cap miner, it is quite unusual in the space to be thinking and acting this way. QMines however is one of only three ASXlisted mining companies to be certified Carbon Neutral under the Australian Government's Climate Active scheme.

What's been your biggest challenge and how have you overcome it?

I think one of the big impediments is the perception that it will cost a lot to implement, but we're demonstrating that even at the smaller end of the market we can become carbon neutral. For example, the first solar system that we installed on-site cost us about \$36,000 but now our site at the Mt. Chalmers project in Queensland is completely off the grid and we haven't paid a power bill in 18 months. So there is actually a longer-term financial benefit to the company as well.

What excites you about the future of energy management & sustainability?

Mining is historically seen as quite a dirty business and since QMines listed in May last year, we've come at it from a different angle. There's this fantastic energy transition going on throughout the world and we need more copper, zinc, lead, and other metals to really fuel that transition, and there's a nice synergy between what we're doing as an exploration and development company trying to find enough minerals to support that transition and approaching it in a more sustainable way.

What advice do you have for other professionals in the industry?

The key is to be very transparent about your commitment to becoming a more sustainable business, keep the market regularly updated on the steps you are taking and most importantly not just talk the talk but also walk the walk. QMines has demonstrated this by attaining Climate Active Certification—the government-backed rubber stamp in Australia for being carbon neutral. We are one of only three ASX-listed companies that has attained this certification.



JEAN PIERRE AZAÑEDO

CEO & Founder, Sugo Company

How many years have you worked in the industry?

lin

11

What is your most memorable energy/sustainability project and why?

I had a company in Peru, that focused on the management and final disposal of solid wastes with energy recovery. Due to my daily work, I saw a common problem: batches of products destroyed in an accelerated manner.

I teamed up with my partner, who worked for many years in an FMCG company in the USA, and understood the reasons why companies were exposed to these situations and the commercial and regulatory rules that led to it.

After thinking about and discussing this problem, I co-created Sugo in 2019 to encourage a world without waste. We put together an ecosystem of innovative solutions that accelerate the path toward a world with zero waste, generating tangible value for each effort that accompanies this purpose. We used technology to serve our purpose and developed two products that materialize and encourage the zero-waste & climate action agenda:

Sugo Store is an online discount store that democratizes sustainability and promotes responsible consumption by preventing unsold products from being discarded and offering them at a fraction of the retail price (between 30% and 90%). Slow rotation, limited shelf life, or packaging damage are reasons that put products at risk of becoming waste. Thus, the disposal of these products in landfills, garbage dumps, or incinerators is avoided, and with this, greenhouse gas emissions (CO2 equivalents), causing global warming and the climate crisis, are reduced. We are operating in Peru, Colombia, and México and currently expanding to other countries in the region. We work with partners such as L'Oreal, Unilever, and Diageo that rely on us to strengthen their sustainable development agendas and mitigate the discard of unsold products together. As a result of this, more than 4 million unsold products have been saved from final disposal, and more than 1.700 tons of CO2eq emissions have been avoided.

CoreZero, a PaaS, seamlessly integrates into different projects and partners to measure the impact of diverting waste. Using proprietary or third-party validated methodologies, we analyze the carbon reduction units and develop projects that will go on generating carbon credits. These carbon credits represent an incremental financial incentive to accelerate and scale up the impact of such initiatives.

This is my most memorable sustainability project. It's boosted by a strong purpose and generates triple impact: economic, social, and environmental. The business model has been assessed by a third-party and certified as a B Corp., scoring +60 points versus regular businesses.

What's been your biggest challenge and how have you overcome it?

Zero-waste projects contribute to fighting climate change, but only a few are currently quantifying their contribution to reducing CO2eq emissions. Therefore, I wanted to disrupt and pave new ways for carbon markets, noting that the World Bank has concluded that the current demand for carbon credits exceeds supply by 4 to 1 and where Nature Communication has published that about 80% of the area of "traditional" sources of carbon credits, such as forestry and agribusiness, have limited financial viability and will be insufficient to get all companies to carbon neutral.

That is why new sources of generation of carbon credits have to appear. Aligned with my purpose of fighting for a world without waste, I decided to find that source of credit generation in any project or initiative that pursues that purpose: avoid waste generation and keep materials and/or products valuable.

As there was no available methodology to calculate the emissions and the positive impact of these projects, I decided to generate what now is the first (and only) approved taxonomy to certify carbon credits from diverting items and products from final disposal. Our methodology has been duly validated by an independent third party under the requirements of international standards. Today, CoreZero's PaaS (Platform as a Service) is using the methodology and creating additional monetary incentives for the initiatives and new sources of carbon credits for the needy.

What excites you about the future of energy management & sustainability?

I'm excited to see how the ecosystem of solutions that I have created is contributing to solving two of today's greatest challenges: the generation and management of waste and the fight against climate change. We are on our way to create one of the most transformative voluntary carbon credit markets in the world, creating financial tools that provide a solution on the scale of a zero-waste world, while combating climate change.

Furthermore, by scaling up these projects, I'm excited for the co-benefits and value these projects are generating for the planet, society and economy, such as reducing hunger and poverty, reducing waste and generating sustainable employment, amongst others.

What advice do you have for other professionals in the industry?

My advice would be to follow your vision. Immerse yourselves in the problem or challenge you want to solve and feel how it relates to your personal story. This will define your purpose and boost your energy and motivation to carry out the initiative successfully.

ENERGYCAP

About EnergyCAP

EnergyCAP is the leading Energy & Sustainability ERP empowering customers with full control and understanding of their energy & sustainability data to reduce their carbon footprint and drive savings.

For over 40 years, thousands of public and private institutions have been using EnergyCAP to streamline accounting processes, reduce resource consumption, and identify opportunities for sustainable operations. EnergyCAP helps customers who are drowning in paper bills, manual processes, and cumbersome spreadsheets and enables them to execute, analyze, and report on the energy and decarbonization projects needed to create a more sustainable world.

Visit www.EnergyCAP.com to learn more