ubq

Global Trailblazers:

Today's Sustainability Leaders

A Report by UBQ Materials

2022

Contents

The Leaders

Shifting Today's Industries

A letter from Tato Bigio, Co-Founder and CEO, UBQ Materials

2021 has arrived and has ushered with it the collective hopes to adjust to a new reality and a new normal. The need to withdraw the boundaries that separate between us all to beat a common cause like a virus, climate change or the impact to our natural environment is clearer than ever. And so, the need to implement innovative solutions to our global challenges. At UBQ Materials we welcomed 2021 with open arms, excited about the world-changing potential of our technology and that of others. UBQ is proud to publish Global Trailblazers: Today's Sustainability Leaders, a report featuring top sustainability executives from around the world who are pioneering climate impact and positive global change through profitable endeavors.

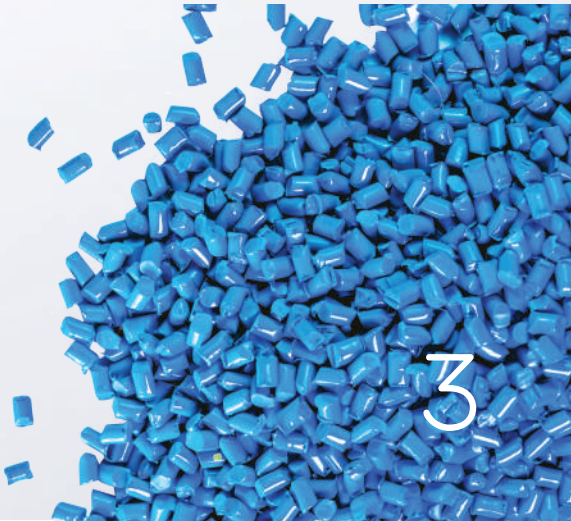
These executives are disrupting the status quo, steering their companies and their industries at large towards a more sustainable tomorrow. Each featured leader is a key stakeholder in bringing their company's environmental proposition into action. Companies were selected based on predefined qualifiers associated with data-backed climate impact and definitive roadmaps to a net zero future.

We are firm believers that the sustainability ecosystem does not have competitors, only allies working to achieve a goal bigger than ourselves. UBQ is proud to showcase the sustainability leaders making a difference across industries, from retail and beauty to energy and marine construction. The challenge of climate change requires us to band together, support innovation, and implement change as a global community.

As Co-founder and CEO of UBQ Materials, **Jack (Tato) Bigio** leads the company's vision and strategy, bringing 25 years of experience in international project development, financing and capital markets with leading global companies.

UBQ Materials was founded by Bigio and Yehuda Pearl while exploring the possibilities of converting society's waste into a new raw material. The vision was clear: a world without waste. Joining the duo early on was Executive Chairman, Albert Douer. Invigorated by the challenge, together they set out to develop a technology that would address the entire, heterogeneous waste stream, a solution that would eliminate the need for landfills.

UBQ Materials prioritizes excellence; in our product, in our team and in our partnerships.
A scientific breakthrough, UBQ™ is the most climate positive thermoplastic material on the market, converted from 100% unsorted household waste. UBQ™ brings with it a dawn of a new era in sustainable materials, where manufacturers are finally able to create products that positively impact our world without compromising on profitability.



A New Climate For Innovation

Foreword by John Elkington

Welcome to the world of sustainability's Global Trailblazers. Extraordinary people doing extraordinary things, people on whom our future increasingly depends. People working on climate change—and, critically, on scalable solutions to the climate emergency. They come from every sector of the economy and they come from around the world.

This is a community of impact leaders pursuing "Green Swans". As I researched my latest book, Green Swans: The Coming Boom in Regenerative Capitalism, I discovered that the swan has long been a symbol of transformation. The book tells the story of the accelerating transformation of capitalism, markets and business—a process likely to reach an inflection point in the 2020s.

The result will be a world either of Black Swan breakdowns, taking us exponentially where we don't want to go, or of breakthrough Green Swan solutions, taking us exponentially where we do want to go. More likely, of course, it will be a shifting mix of both, challenging us to move the needle from black to green.

Green Swans are positive market developments once deemed highly unlikely—if not actually impossible. For most people, they also arrive more or less out of the blue. And they can have a profound positive impact across the triple bottom line of economic, social and environmental value creation. At their best, they are simultaneously environmentally restorative, socially just and economically inclusive.

Early on, many Green Swan innovators and entrepreneurs tend to be dismissed out of hand, very much like the Ugly Duckling in the Hans Christian Andersen's fairy tale. Only later do critics and sceptics see what their eyes—and their minds—have been blind to. The ungainly cygnets (or start-ups) morph into something else entirely.

Happily, Green Swan solutions—including new mindsets, technologies, business models and policy frameworks—are already at work solving at least some of today's apparently impossible challenges. But they need help to reach the necessary pace and scale.

We have carefully scanned the innovations and innovators spotlighted in the following pages—and hope that you not only find their work inspirational but also spot ways to support and collaborate with them.

John Elkington is often dubbed "the godfather of sustainability", credited for coining terms such as environmental excellence, green consumers, and the triple bottom line. John is the co-founder of SustainAbility, a consultancy and think-tank helping clients integrate sustainability into their business, and currently Chairman and Chief Pollinator at Volans, a transformation agency working at the intersection of sustainability, entrepreneurship and innovation.

Elkington is a member of UBQ Materials' Advisory Board, overseeing the development of UBQ's technology and environmental impact alongside Prof. Roger Kornberg, Connie Hedagaard, Prof. Oded Shoseyov, Dr. Ilan Cohn and Dr. Glenn Frommer.

Qualifier Key

All companies featured in this list are members associated with or have been certified by at least one of the following organizations.

Solar Impulse Foundation's 1000 Efficient Solutions

For the past three years, the Solar Impulse Foundation has been working towards creating a portfolio of 1000 labelled solutions that are both profitable and have a positive impact on the planet. Following a meticulous evaluation process, The Solar Impulse Efficient Solution Label is awarded to sustainable companies, introducing them to decision-makers looking to adopt more ambitious environmental targets and energy policies.

Learn more

B Corporation

Certified B Corporations are a new kind of business that balance purpose and profit, legally required to consider the impact of their decisions on their workers, customers, suppliers, community, and the environment. After completing a rigorous impact assessment, Certified B Corps join a global movement of companies using business as a force for good.

Learn more

Science-based Targets

Science-based targets provide a clearly-defined pathway for companies to reduce greenhouse gas (GHG) emissions. Targets are considered 'science-based' if they are in line with what the latest climate science deems necessary to meet the goals of the Paris Agreement, under the assumption that the private sector must play a fundamental role in protecting the environment.

Learn more

Meet the Trailblazers

1/11

Dr. Jennifer Holmgren, CEO, LanzaTech

Dr. Jennifer Holmgren is CEO of carbon recycling company LanzaTech. Prior to LanzaTech, Jennifer was VP and General Manager of the Renewable Energy and Chemicals business unit at UOP LLC, a Honeywell Company. She was named most influential leader in the Bioeconomy by Biofuels Digest in 2017 and received the Digest Global Bioenergy Leadership Award in 2018. A member of the National Academy of Engineering, a dog lover and committed greyhound rescuer, Jennifer holds a B.Sc. degree from Harvey Mudd College, a Ph.D. from the University of Illinois at Urbana-Champaign and an MBA from the University of Chicago.

LanzaTech

Dr. Jennifer Holmgren is CEO of carbon recycling company LanzaTech. Prior to LanzaTech, Jennifer was VP and General Manager of the Renewable Energy and Chemicals business unit at UOP LLC, a Honeywell Company. She was named most influential leader in the Bioeconomy by Biofuels Digest in 2017 and received the Digest Global Bioenergy Leadership Award in 2018. A member of the National Academy of Engineering, a dog lover and committed greyhound rescuer, Jennifer holds a B.Sc. degree from Harvey Mudd College, a Ph.D. from the University of Illinois at Urbana-Champaign and an MBA from the University of Chicago.

SOLAR IMPULSE
OUR CHALLENGE
1000
EFFICIENT SOLUTIONS

Sustainability Leader Qualifier:

LanzaTech was named a Solar Impulse Efficient Solution in 2020 for its cost-competitive innovation to address SDGs 7, 9 and 12 through carbon capturing and recycling.

Dr. Holmgren, what do you think are the biggest barriers in sustainability today?

The greatest barriers today are around getting products to market and driving the scale we need to make a difference. This is tied to investor certainty which is in turn linked to stable policy frameworks. Clear barriers exist where there is a narrow prescriptive policy landscape. It is imperative that a broad spectrum of solutions is required and there must be a level playing field in terms of policy. We must remind ourselves of the intent of the policy itself and ensure that the outcomes of technologies assessed are combined with sustainability criteria, rather than adhering to prescriptive lists that promote the status quo.

What is your advice for cleantech start-ups?

It is hard trying to change the world! You need to be patient and have patient investors. You need to work across all sectors and develop partnerships and friendships because it really does take a village when you are trying to bring new technologies to market. They say you must cross the valley of death, but it is really a Grand Canyon! You need to be able to pivot and react to time delays and work with different stakeholders as you navigate across this tough period between demonstration and commercial scale. You also need to look ahead to the next wave as you think about how your platform will evolve over time to changing market conditions.

What else is happening in carbon capture

Ink made of car exhaust?! Also breaking news in the space is Graviky Labs, turning air pollution into ink, paints, coatings, plastic and construction materials.

2/11

Rhea Mazumdar Singhal, Founder and CEO, Ecoware

Rhea Mazumdar Singhal is the Founder and CEO of Ecoware, India's first and largest sustainable packaging company. Rhea was awarded the Nari Shakti Puraskar, the highest civilian honor for women by the President of India. Rhea is a World Economic Forum Young Global Leader (2018) and an Asia 21 Young Leader (2019). Rhea is an invited member of the Confederation of Indian Industries (CII) National Committee on Women Empowerment and CII India CEO Forum on Air Pollution; she is also the Chairperson for the Indian Women Network for North India.

ecoware®

Ecoware is responsible for creating 100% biodegradable, eco-friendly, and compostable-certified food packaging and garbage bags. Ecoware is India's first and largest sustainable food packaging company, working with farmers to turn their biomass — which is otherwise burned — into a source of positive outcomes, taking what was once waste and turning it into an eco-friendly product.

SOLAR IMPULSE EFFICIENT SOLUTIONS OUR CHALLENGE 1000

Sustainability Leader Qualifier:

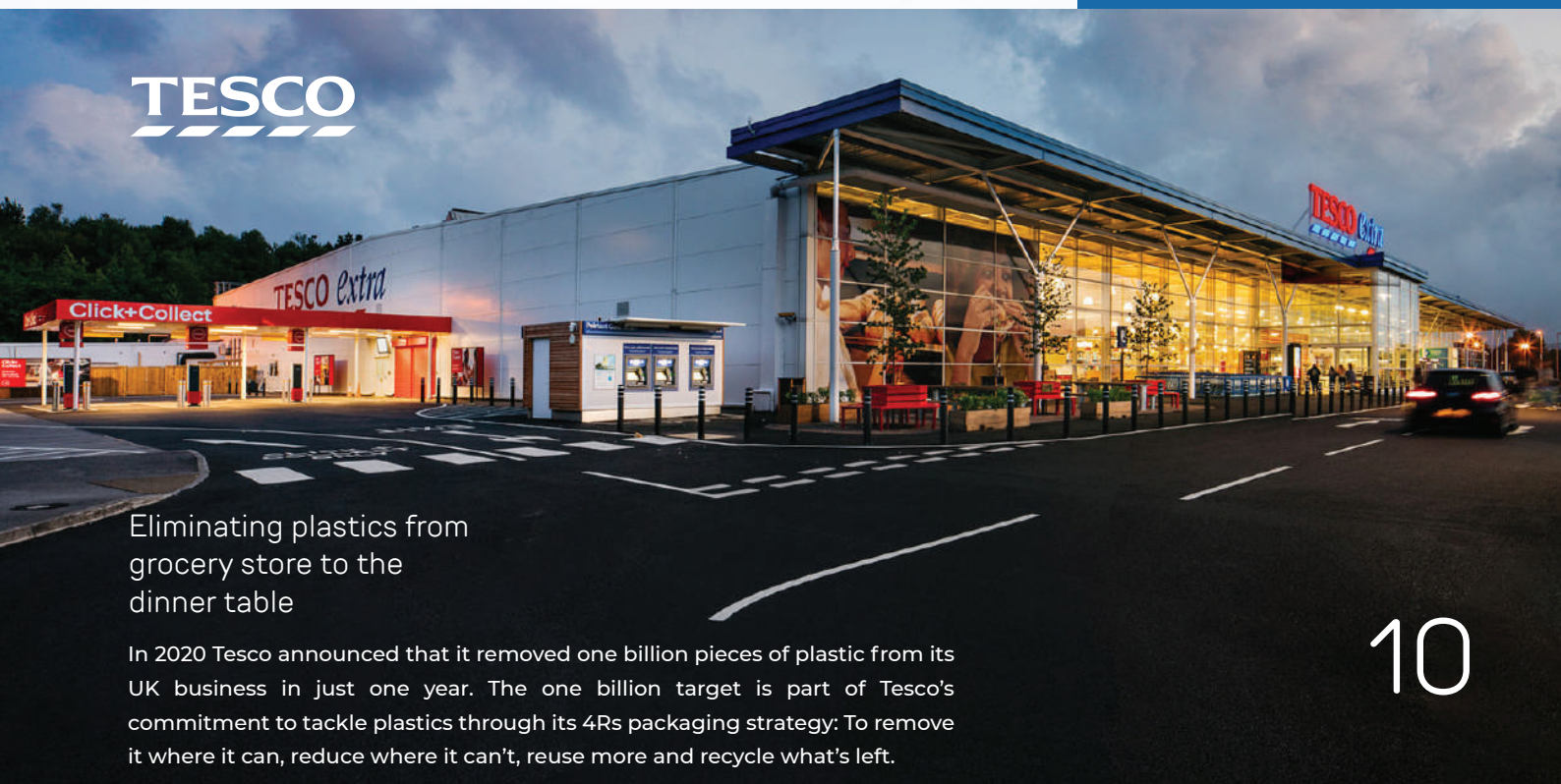
Named a Solar Impulse Efficient Solution in 2020, EcoWare is the only USDA Bio-based certified manufacturer in India, is PFAS free, and has been audited on Environmental, Social and Governance (ESG) parameters, achieving $2.41 of impact for every $1 invested.

Rhea, how do you measure your sustainability metrics?

I believe sustainability and profitability can go hand in hand. We have a 100% renewable circular economy model, with no waste. The agricultural waste that we use to make our products is typically burnt which causes air pollution, so we're also able to make a reduction in that. And I'm so proud that at the end of each year we can say how much we sold and how much single-use plastic was replaced. Last year alone we replaced 50 million items of single-use plastic with our Ecoware.

Rhea, what do you view as your biggest sustainability challenge today?

Educating people about the harmful effects of single-use plastic and convincing the sellers about how despite Ecoware products being just 15 per cent more expensive than regular tin and other plastic containers, the advantages are plenty. Also, there are no industry standards for this in India, so we run to global standards. It's a huge task to change the consumer mindset, and for this purpose I go out to schools, businesses and offices to give talks on why we should remove single-use plastic.



Eliminating plastics from grocery store to the dinner table

In 2020 Tesco announced that it removed one billion pieces of plastic from its UK business in just one year. The one billion target is part of Tesco's commitment to tackle plastics through its 4Rs packaging strategy: To remove it where it can, reduce where it can't, reuse more and recycle what's left.

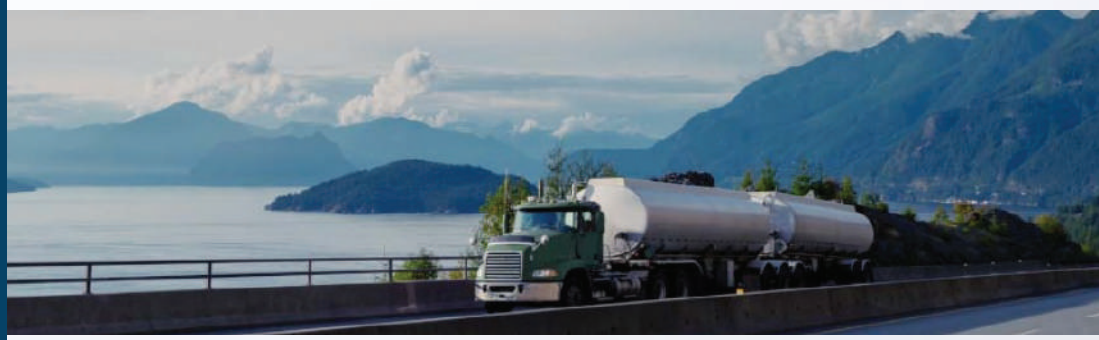
3/11

Pekka Tuovinen,
Senior Advisor, Sustainability, Neste

Pekka Tuovinen is the Senior Advisor of Sustainability in Neste, the world's leading supplier of renewable diesel. Prior to his current position he led Sustainability issues in Neste and environmental and product safety issues in Neste Oil. He has also worked as Corporate Vice President, EHS Management in Fortum, as well as Communications Manager in Fortum Oil and Gas.

NESTE

With inspirational goals such as reaching carbon-neutral production by 2035, Neste refines waste, residues and innovative raw materials into renewable fuels and sustainable feedstock for plastics and other materials. Neste is the world's leading producer of renewable diesel and sustainable aviation fuel.



Sustainability Leader Qualifier:

Neste is dedicated to science-based sustainability goals and is committed to reduce customers' GHG emissions by at least 20m tons annually by 2030 and to reach carbon-neutral production by 2035.

Pekka, how do you incorporate sustainability into your decision-making processes?

We as Neste are selling sustainable solutions. By doing so, we live up to our purpose to create a healthier planet for our children. As the sustainability thinking is intertwined with the strategy, our decision-making process has to follow suit. In 2019, we established an external independent Advisory Council on Sustainability and New Markets. The Council consists of a group of carefully selected experts, able to provide strategic insight, guidance and assistance. They are committed to help accelerate Neste's transformation and extend its leadership activities.

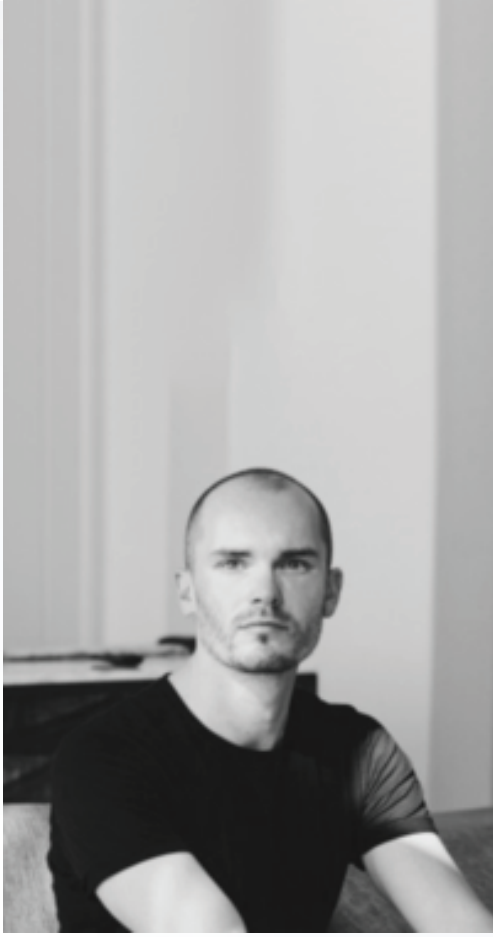
How do you see your role within your industry and the economy at large in the advancement of a sustainable tomorrow?

Neste has had the luxury to run business without any upstream operations and is supported by a strong in-house R&D and engineering team. We have learnt the importance of cooperation and mutual trust. Unlike many bigger companies, we have not been forced to think of the value of fossil reserves. This has, in fact, urged us to seek unconventional solutions, thus speeding up the transformation of the business. Being faster and bolder!

4/11

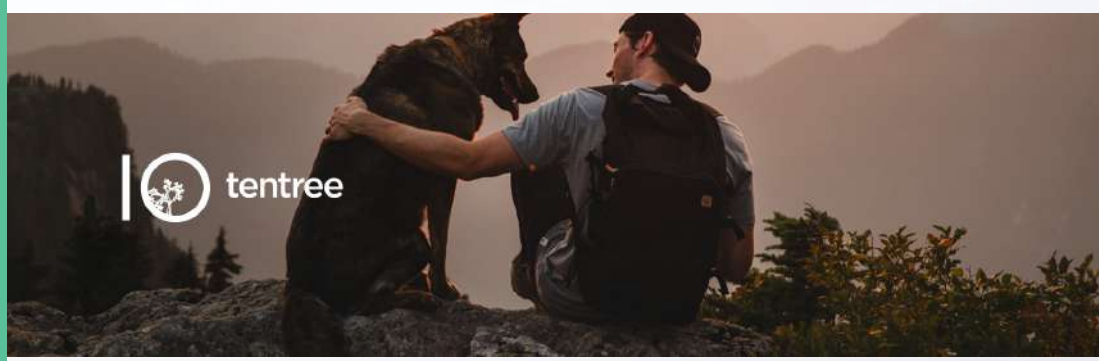
Arthur Kononuk,
Co-Founder and Creative Director, TenTree

As co-founder and Creative Director at TenTree, Arthur Kononuk has been responsible for helping guide the brand's strategic vision and product development. Arthur is an award-winning entrepreneur and creative, who earned his start building international campaigns, brands, and strategy in the advertising industry. Outside of work, he volunteers his time as an impact investor and advisor for brands helping make our world a better place.



tentree

Made with hemp, cork & organic cotton, TenTree is a lifestyle apparel company that plants ten trees for every item purchased. TenTree allows every customer to make a difference and is building forests one t-shirt at a time.



Certified B Corporation

Sustainability Leader Qualifier:

TenTree is a proud B Corporation with previous titles including Best for Community, Best for Overall and Best for Changemaker.

Arthur, what do you view as your biggest sustainability challenge today?

Every minute millions of products are being produced. On the flip side of that coin, millions of products are being discarded. I passionately believe the biggest sustainability challenge right now is bridging the gap between new and old. There is a world of value that is literally right in front of us, that needs to be looked at with fresh eyes. This is no surprise why secondhand clothing apps are seeing explosive growth, the younger generations see this. Some people look at a thrift store as a pile of used junk, others look at it the same way gold prospectors did in the early days. A friend of mine runs a business that recycles chopsticks and turns them into high quality wood tiles (shout out to ChopValue), loves to call this idea "urban harvesting". There is so much value to be found in what we currently deem as trash. The challenge is bridging the gap between creating new, repurposing old and finding value.

What is your advice for cleantech start-ups?

We place a lot of emphasis on measuring our impact metrics through the physical process of planting trees. While to date we have planted over 50 million trees, what's more impressive is what's happening on the backend: our trees are being tracked in ways that have never been done before. Using a slew of

proprietary tech, we are tracking the planting, maintenance, and longevity of every tree we plant. Thanks to the help of GPS data, satellite mapping and 3D imaging of drones. On the product level, we've placed a tremendous effort on measuring the impact of our clothing, and throughout our website you will see what we call an "eco log" which is a data hub for environmental impact of an individual item. Here we track CO2, Material Waste, and Water waste during the manufacturing process. This not only allows us to track our own progress with each collection, improving our own impact numbers, but it allows us to measure up to the competition globally.

How do you incorporate sustainability into your decision-making processes?

In the earlier days of the business we decided to bake sustainability directly into the decision process, we've made things easy for ourselves by essentially creating rules that govern the development and production of almost everything we do. When it comes to our footprint as a business material plays the biggest part, so we go out of our way to ensure we are using the absolute best sustainable option we can, or do not continue with that project. Other small things, like setting metrics around how much freight is sent via sea versus air give our teams a sustainability metric to aim towards when deciding timelines and calendars for future releases.

Climate-forward fashion never goes out of style

In 2019, Patagonia took the lead from its eco conscious customers and launched ReCrafted, a line of upcycled clothing.

5/11

Christina Keller,
President and CEO, Cascade Engineering

Christina Keller is President and CEO of the Cascade Engineering Family of Companies, a position she has held since September 2018. Christina joined Cascade in 2009, with previous work experience including consulting at Accenture and program management at Polaris Management Partners in New York City and ERT in Washington, DC.

Christina holds an MBA from the Samuel Curtis Johnson Graduate School of Management at Cornell University and has delivered two TEDx talks in Michigan on entrepreneurship and sustainable business. She was ranked as one of West Michigan's 40 under 40 and recognized as a rising star by Plastics News Magazine.

CASCADE engineering

Cascade Engineering is a family-owned manufacturing and plastics business based in Michigan, with 14 locations around the U.S. And Hungary. Cascade is making waves in the injection mold space and is wholly committed to bringing sustainable products to market that contribute to the triple bottom line. The company manufactures products for a variety of industries such as automotive, commercial truck & bus, solid waste & recycling, furniture, and material handling. Focused on being an Employer of Choice, Cascasde is a Woman-Owned Business and maintains the values of triple bottom line, servant leadership, pathways out of poverty and anti-racism.

Certified B Corporation

Sustainability Leader Qualifier:

Dedicated to the triple bottom line of People, Planet and Profit, Cascade is the first certified B Corp member in Michigan and one of the largest B Corporations in the world, with previous titles including Best Overall, Best for Environment and Best for Community.

Christina, how do you measure your sustainability metrics?

Cascade measures success not only by monetary gain but by the positive impact we are making on society and the environment. Cascade publishes our Triple Bottom Line report each year publicly to further enhance the transparency of our commitment to People, Plant, and Profit. Cascade Engineering is one of the largest certified B Corporations in the world. B Corporation's rigid independent auditing process ensures Cascade is positively impacting social and environmental change. Cascade Engineering upholds rigorous 3rd-party certifications such as B Corporation and ISO14001 to demonstrate our positive impact on the environment.

How do you see your role within your industry and the economy at large in the advancement of a sustainable tomorrow?

As a Triple Bottom Line company we believe in leading by example. We encourage and empower our teams to be leaders of the future. Our teams work every day to reach zero waste to landfill while creating products that are adaptable and sustainable. The Cascade engineering teams are continuously investigating materials, including UBQ™, which will help create a circular economy.

IKEA

Similar Sustainability Initiatives

IKEA is dedicated to reducing its carbon footprint, including a commitment to halve its absolute net GHG emissions by 2030. The home giant recently announced it will include disassembly instructions for its products, encouraging consumers to extend the life of their furniture, and introduce a "buyback" scheme where customers can return old products in exchange for 50% of the cost price in voucher form.

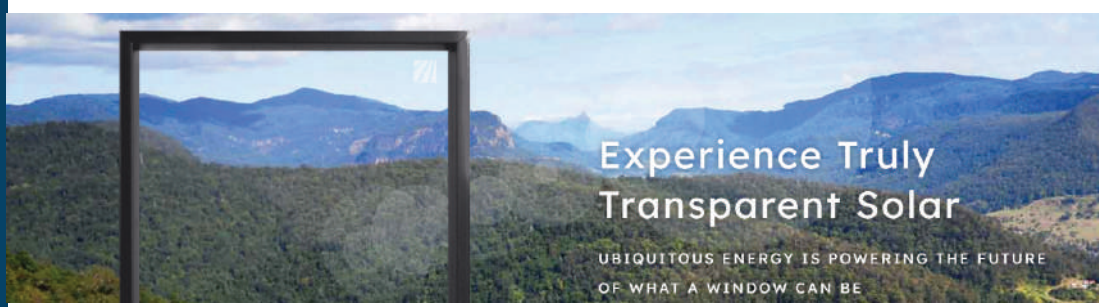
6/11

Susan Stone,
CEO, Ubiquitous Energy

Susan Stone is CEO at Ubiquitous Energy. She has been a longtime board member and investor in the company. Prior to joining Ubiquitous, she was the founder and CEO of Sierra Wasatch Capital, an early stage venture capital firm, and managed early stage investing for Riverhorse Investments, Inc. Susan has also worked at JPMorgan in New York and Houlihan Lokey in Los Angeles as an investment banker focused on mergers & acquisitions.

ubiquitous ENERGY

Ubiquitous Energy's award-winning technology is the world's only transparent solar product. Ubiquitous Energy harvests solar energy and serves as an invisible source of electricity for a variety of products. Reminiscent of sci-fi invisibility, the thin coating applied to the surface of window glass provides electricity generation and energy efficiency while remaining visibly indistinguishable. Originally spun out of MIT, Ubiquitous Energy is now producing its highly transparent, efficient solar cells and windows in its production facility in Silicon Valley.



SOLAR IMPULSE EFFICIENT SOLUTIONS
OUR CHALLENGE 1000

Sustainability Leader Qualifier:

A Solar Impulse Efficient Solution with an extra emphasis on solar, Ubiquitous Energy can turn every window in every building into an electricity generator while maintaining the window's look and transparency.

Susan, what areas of sustainability will be your focus in the next year and in the next five years?

Over the next year, we will be working to bring our patented technology to market primarily through the residential and commercial window industries. We are in the process of partnering with several industry partners to incorporate our technology into high-quality residential windows and commercial facades. Our next 12 months will be focused on manufacturing as we work from within the existing industry ecosystem to drive manufacturing and adoption of our products.

Over the next five years, we look to become the industry leader in photovoltaic technology applied to windows and commercial glass facades. By integrating our transparent photovoltaics into traditional windows and commercial glazing, we can bring energy generation to buildings beyond just rooftop solar. Our vision is to turn skyscrapers into vertical solar farms.

Additionally, we will continuously improve our product through R&D, improving the power conversion efficiency of our coating while maintaining beautiful aesthetics, and increasing its possible applications to surfaces beyond glass.

ubiquitous ENERGY

What is your advice to cleantech start-ups looking to develop commercial partnerships?

When pitching clean technology, we suggest working with the existing industry ecosystem where possible. When doing so, promoting the stability and simplicity of your product or service to your potential partners is important. Additionally, selling potential partners on how unique and forward-thinking your technology is makes a big impact.

For example, when we promote our technology to potential manufacturing and distributing partners in the window industry, we show how simple it is to incorporate into their products and manufacturing processes and how viable our technology will continue to be as the industry continues to grow. Our patented coating is easily applied to surfaces such as glass via a simple process that is designed to fit into existing manufacturing processes and product formats. Partners want to be on the cutting edge, but don't typically want to overhaul their companies to do it. End customers also want to be on the cutting edge, but we can't ask them to give up the aesthetic beauty of window glass. With our truly transparent photovoltaic coating, windows and glass facades melt away, maintaining unobstructed vision through architectural glass without a visible tradeoff. Pitching ease of incorporation and the uniqueness of your technology will intrigue many potential partners.

Seamlessly Solar

A further integrated innovation of standard solar panels, Tesla enables you replace your current roof with Solar Roof and power your home with a fully integrated solar system. With a seamless design, each tile looks great up-close or from the street, making the solar roof nearly indistinguishable from a standard one.

7/11

Gregory Constantine, CEO, Air Company

Gregory Constantine is an Australian entrepreneur and businessman who is currently Co-Founder and CEO of Air Company. Gregory began his career as a marketing and tour manger in Australia, transitioning his skills to lead a global festival strategy and cultural partnership with Smirnoff. As CEO of Air Company, Gregory has worked closely with his team of PhD chemists to develop the world's first carbon-negative vodka.

AIR COMPANY®

Air Company is a technology and lifestyle company in New York City that ideates, creates and manufactures products for our future. The company is focused on using proprietary technology to transform carbon dioxide from the air into consumer products while helping solve some of our planet's most forthcoming problems. Air Company invented a way to capture excess carbon from the air and turn it into ultra-refined, covetable products. Air Company was named one of Fast Company's Most Innovative Products of 2019 and Most Innovative Companies and World Changing Ideas of 2020.

Sustainability Leader Qualifier:

Carbon emissions from vodka made by Air Company are net-negative, removing 1.5 kg of CO2 from the atmosphere per kg of alcohol produced.

Gregory, what areas of sustainability will be your focus in the next year and in the next five years?

Over the next one to five years, we're focused on scaling our technology globally to be the leading clean alcohol company on the planet. We've just built our second facility in North America and plan to continue expansion throughout the continent with our CO2 reduction footprint. From a consumer goods perspective, our technology's main output is impurity-free ethyl alcohol that can be used in anything from spirits to fragrances, sanitizers, and even cleaning products. Over the next few years, we're on a mission to disrupt these markets, providing high-quality sustainable solutions.

How do you see your role within your industry and the economy at large in the advancement of a sustainable tomorrow?

Sustainability and innovation are at the heart of everything we do at Air Company as we work toward a cleaner and greener future. Every 750 mL of alcohol our technology produces cleans as much CO2 from the atmosphere that eight fully-grown acacia trees do daily. As we scale our technology over the years, we can see a horizon that could potentially reduce our global CO2 emissions by about 7%. While 7% may seem like a small number, it would equal billions of tons of CO2.

RON Flor de Caña

Raising a glass for sustainability

Cheers to Flor de Cana who has been committed to sustainability for over 130 years. The premium rum brand has become an industry leader for its sustainable practices, being the world's only spirit to be both Carbon Neutral and Fair Trade certified.

8/11

Paul Benoit,
Founder and CEO, Qarnot Computing

Paul Benoit is the founder and CEO of Qarnot Computing. A graduate of Ecole Polytechnique and Telecom Paristech (X-Telecom), he is a banking expert, particular to the field of High-Performance Computing (risk analysis, structured products), and previously created a web startup in 2000. Paul is strongly involved in Qarnot's long-term strategy and product design, along with the company's national and international commercial development.

QARNOT

REUSING WASTE HEAT FROM COMPUTERS

We've all experienced the heat generated from laptops and other electronic devices. Qarnot's computing-heater warms buildings ecologically and for free, thanks to the waste heat released by embedded microprocessors. These high-performance computers release heat that is directly dissipated to heat lats, social housings, public buildings and offices.

SOLAR IMPULSE
OUR CHALLENGE
1000
EFFICIENT SOLUTIONS

Sustainability Leader Qualifier:

A cutting-edge technology that enables Qarnot to reuse heat from computers has awarded the company a Solar Impulse Efficient Solution label in 2019.

Paul, what do you view as your biggest sustainability challenge today?

Our biggest challenge will probably be pedagogy. We are very happy that most companies, including the biggest ones, get involved and actually take actions. As pioneers in green cloud computing, part of our job is to give clear explanations on the carbon footprint, how to measure it and the levers to decrease it. All providers will soon claim to be green at some stage. Giving the keys to a better understanding of what energy efficiency really is and making sure it shows the path to customer adoption, that's the challenge!

How do you see your role within your industry and the economy at large in the advancement of a sustainable tomorrow?

Datacenter stakeholders are not willing to change their model to reach improved sustainability even though they could. Apart from major actors such as Google and Microsoft who promise carbon neutrality by 2030, Qarnot computing is already in position to propose close-to-zero carbon footprint cloud services today. During the next 10 years, we will pursue the promotion of a sustainable and sovereign cloud computing model to disrupt the datacenter industry paradigm.

Positive Impact at Every Temperature

Did you know that air conditioning and refrigeration systems consume 25% of the electricity generated worldwide? Similar to Qarnot, but on the chillier side of things, SkyCool Systems is a clean energy company focused on new and climate-friendly methods for cooling.

9/11

Brianne West,
Founder & CEO, Ethique

Brianne West is a New Zealand entrepreneur and the founder & CEO of Ethique, named EY's 'Young Entrepreneur of the Year' in 2019. While studying towards a science degree in 2012, West reached the conclusion that with so much water found in our bathrooms there's no need to add it to the likes of shampoo, moisturizers and cosmetics, which are usually 60-95% water. By redesigning these products into solid bars of active ingredients, Ethique eliminates the need for plastic containers, reduces product weight and limits the redundancy of water usage.

Ethique is the world's first zero-waste, full-range beauty & lifestyle brand. The company creates premium, concentrated and sustainable beauty bars. Products include solid shampoos, conditioners, body wash, face creams and moisturizers, deodorants, self-tanning bars, household cleaning products and pet wash. By removing water from the products, Ethique created a range of completely plastic-free body products. Formulated from natural ingredients and ethical and sustainable sources, the products are not tested on animals, and are sold in biodegradable and compostable packaging.

Sustainability Leader Qualifier:

On track to become climate positive by the end of 2021, Ethique is currently carbon neutral and 100% plastic free.

Brianne, what is your biggest sustainability achievement in the last year?

Ethique now has a vast range of products from deodorants and baby shampoo, to facial scrubs and pet care. The best part is that they really do work just as well as 'normal' products–just look at our reviews. It was always my goal to ensure that every product worked as well as, if not better than, the liquid equivalent and I'm really proud to have achieved that.
However, we know that not everyone likes using bars and that the majority of the population is still used to liquid products. Plastic and water-waste remain key issues that both people and the environment face with approximately 300 million tonnes of plastic waste produced annually. By 2025, water shortages are predicted to impact two billion people and two-thirds of the world's population will live in water-stressed regions.

We are rethinking refillables with our world-first, patent-pending range of concentrates that has been two years in the making – which have also been recognized by Time Magazine in their annual TIME Best Inventions awards this year. We provide the concentrated blocks and you provide the water! Each concentrates bar saves 700ml of water and one plastic bottle from manufacture and disposal into landfill. I am excited and proud of this new range and can't wait to see the positive impact we can all have, helping us save half a billion plastic bottles from landfill by 2030.

Other major achievements this year have been saving 10 million bottles from landfill; planting 100,000 trees and becoming palm oil free certified. Outside Ethique, I have established a charitable foundation to distribute 20% of Ethique's net profit to education, environmental conservation and animal welfare.

How do you see your role within your industry and the economy at large in the advancement of a sustainable tomorrow?

I want Ethique to continue to be an example to other businesses of one that can be sustainable, ethical and of course, profitable. This year we have begun to expand out of the beauty/personal care space because there are so many products out there with hideous amounts of packaging that is so unnecessary. There is so much scope to grow, but the biggest change will be achieved by inspiring other businesses to do better and by encouraging consumers to ask for better from their brands.

LUSH

Look good,
feel good,
do good

Keeping customers clean and feeling good, Lush Cosmetics' classic black pots and bottles are made from BPA-free 100% post-consumer recycled plastic that can be reused, recycled, or returned to a Lush shop for recycling.

10/11

Amy Hall,
Vice President, Social Consciousness, Eileen Fisher

Amy serves as Vice President, Social Consciousness for women's clothing designer Eileen Fisher. In this capacity, she guides the company toward greater alignment with its B Corporation status and quadruple bottom line goals. Amy collaborates internally and externally to position the company at the leading edge of human, environmental and economic sustainability. She serves on the editorial committee of the Decade of Courage podcast, and as an advisor to SlowCo. Amy also runs her own sustainability consultancy called, Impactorum LLC. An avid cyclist with a self-built bamboo bike, Amy can frequently be found exploring New York

EILEEN FISHER

A socially conscious company, EILEEN FISHER is a pioneer in sustainable fashion and is working to empower women and girls. Eileen Fisher clothes are sold at over 65 EILEEN FISHER retail stores, 1,000 department and specialty stores internationally, as well as 2 RENEW stores, which feature gently worn and remade designs from their takeback program. EILEEN FISHER is one of the largest women's fashion companies to be a certified B Corporation.

Certified B Corporation

Sustainability Leader Qualifier:

Guided by a beautiful aesthetic and an ongoing commitment to support women and make a positive impact on the world, EILEEN FISHER is a certified B Corp with past honorees including Best Changemaker.

Amy, what is your biggest sustainability achievement in the last year?

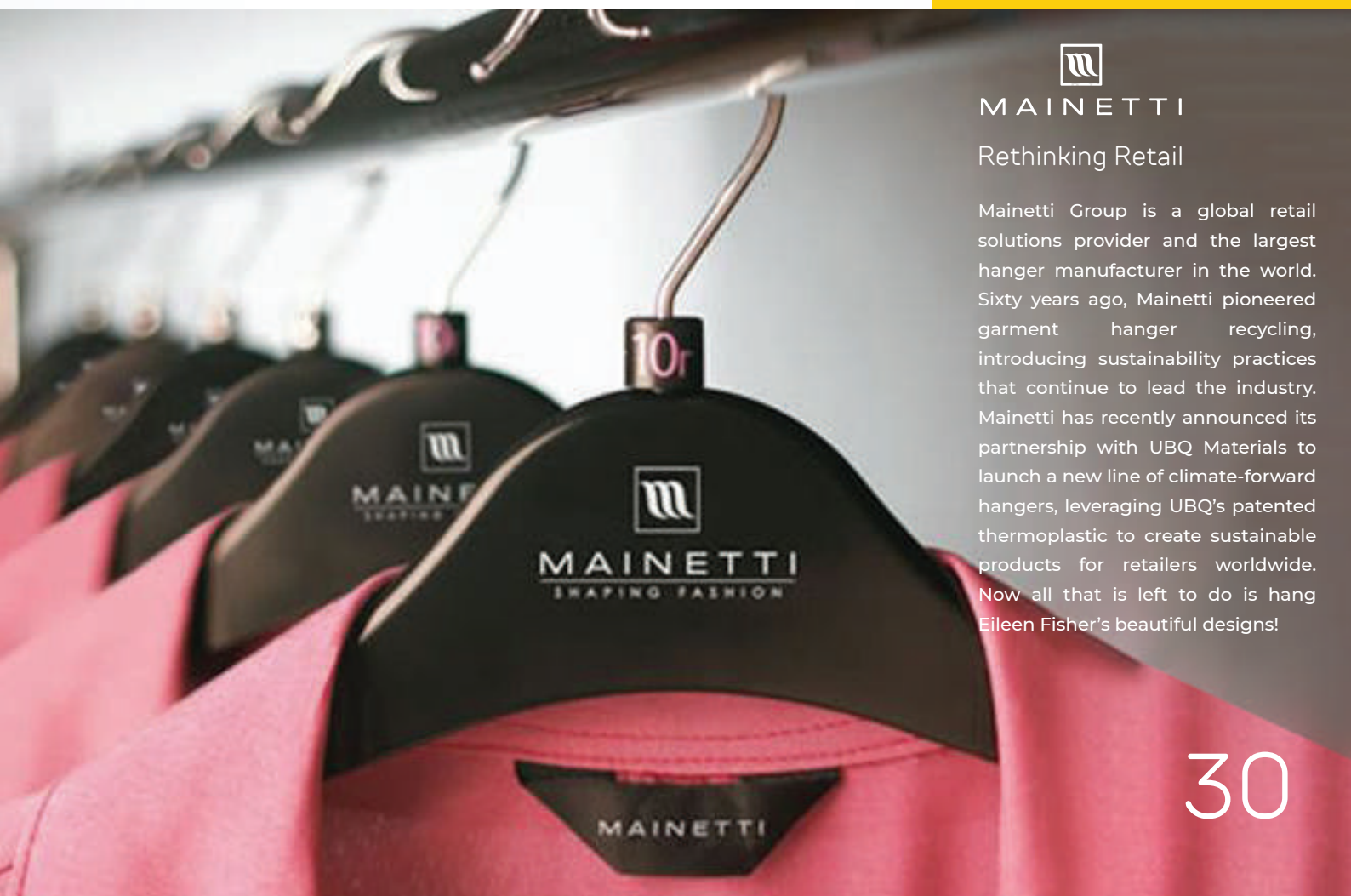
Over the past year, I (together with my team and colleagues) wrapped up EILEEN FISHER's Vision2020 commitment. This was the culmination of nearly 7 years of hard work, which involved realigning the company's product-related teams around shared environmental and social goals – and then working to achieve those targets. These targets fell into 8 buckets: materials, chemistry, water, carbon (on the environmental side) and conscious business practices, fair wages & benefits, worker voice, worker & community happiness (on the social side). Not only did we transform our clothing from conventional organic, recycled and otherwise responsibly sourced, but we successfully de-centralized the sustainability work so that it is truly a shared effort across the company.

What do you view as your biggest sustainability challenge today?

We must, as an industry, shift the conversation away from simply measuring our own accomplishments year over year (i.e. how much carbon are we emitting this year vs last year, how much money do our supply chain workers earn) to measuring real impact. This means finding a way to understand and communicate the material difference that our actions make. From our regeneratively-sourced wool: How much healthier is the soil as the result of regenerative farming practices? How much has biodiversity improved? And from our factories, how have higher wages benefitted the workers? How have their lives changed/improved? Those are the sorts of questions we should be seeking to answer. Not whether or not we are using more or less water than previous years. Otherwise, we are simply checking off boxes on a list and not looking at the big picture.

How do you see your role within your industry and the economy at large in the advancement of a sustainable tomorrow?

I have recently started my own consultancy (Impactorum LLC) in order to encourage other businesses – small or large – to think differently about their environmental and social impact. To consider the larger question about the change they actually seek to make. We can't survive by simply being sustainable (which implies keeping things as they are). We must be bold with our actions, honest with our communications, and serious about having a net positive impact. Otherwise, nothing will ever change; in fact, our planet and the wellbeing of her people will continue to decline. And that's not a reality I'm willing to live with. To help shift the conversation, I've launched a webcast called, "Impact Matters," to feature changemakers from a variety of industries who are truly thinking differently about impact.



MAINETTI

Rethinking Retail

Mainetti Group is a global retail solutions provider and the largest hanger manufacturer in the world. Sixty years ago, Mainetti pioneered garment hanger recycling, introducing sustainability practices that continue to lead the industry. Mainetti has recently announced its partnership with UBQ Materials to launch a new line of climate-forward hangers, leveraging UBQ's patented thermoplastic to create sustainable products for retailers worldwide. Now all that is left to do is hang Eileen Fisher's beautiful designs!

11/11

Dr. Shimrit Perkol-Finkel
Co-Founder and CEO, ECOncrete

An innovator, scientist and entrepreneur with over 20 years of experience in ecological engineering, sustainability, and environment, Dr. Perkol-Finkel focuses on eco-design, evaluation and monitoring of man-made habitats and reducing the ecological footprint of coastal and marine infrastructure like breakwaters and seawalls. She holds a B.Sc. in Life Sciences, M.Sc. and Ph.D. in Zoology, all from Tel-Aviv University. Dr. Perkol-Finkel is a former Marie Curie Fellow and leader of the EU funded MarUrbe project dealing with sustainable management of urban marine structures.

Tragically, during the writing of this report Shimrit passed away z"l. Her legacy and her mission to preserve the environement will live on with us all. This first edition of Global Trailblazers: Sustainability Leaders is dedicated in memory of Shimrit Petrol-Finkel.

ECOncrete®

ECOncrete consider themselves optimistic innovators bent on protecting coastal communities, ports, and infrastructure from flooding and erosion, while regenerating marine biodiversity. They make all this underwater magic happen by changing the composition, surface texture, and 3-D design of infrastructures so that they absorb CO_2 and increase biodiversity.

SOLAR IMPULSE EFFICIENT SOLUTIONS OUR CHALLENGE 1000

Sustainability Leader Qualifier:

Labeled in 2019, ECOncrete is a proud member of the Solar Impulse 1000 Efficient Solutions list.

Dr. Perkol-Finkel, how do you incorporate sustainability into your decision-making processes?

For ECOncrete, sustainability is not a side-dish, it is at the core of our technology. As an organization founded by marine biologists, our company's mission is to solve problems at the intersection of marine environment and the concrete industry. Our solution is based on three elements that work in synergy to regenerate marine biodiversity and create stronger infrastructure. Our patented bio-enhancing admix is made up of over 90% recycled and byproduct materials, using waste products from several industries as inputs for our own. The admix also increases the chloride resistance and compressive strength of concrete, so products can have a longer service life. The admix and surface textures work together to create a nature-inspired substrate that encourages native marine life to grab on and grow into a diverse community. 3D forms are designed biomimetically to mimic natural coastal features, like tidepools, creating a waterfront that performs ecologically, structurally, and beautifully.

What is your biggest sustainability achievement in the last year?

In 2020, ECOncrete was honored with the Ray of Hope prize (Ray C. Anderson Foundation and Biomimicry Institute), showing that sustainability is not just a buzzword or philosophy, but that design which mimics nature is a practicable strategy for better solutions to tough problems. In the field, ECOncrete has secured several large-scale projects with major industry players. We are confident that these projects will showcase the viability of a sustainable concrete coastal construction industry. While we can use scientific jargon, technical terms, and awesome graphics to describe why sustainability is critical to a coastal construction industry capable of meeting the needs of a world with a changing climate—seeing is believing. Transitioning from smaller pilot and demonstration projects to large-scale deployments is not only a win for ECOncrete and clients, or a win for the local communities and ecosystems—it's a win that clarifies sustainability is the future of the industry.

Under-the-Sea Sustainability

Parley for the Oceans is an environmental movement addressing threats towards our oceans through global clean-ups, activist platforms, and the creation of "Parley Ocean Plastic", a range of materials based on trash found in the sea mixed with other recycled material. Parley launched the novel material in 2018 through a collaboration with Adidas, with more announcements lined up in the fashion, automotive and furniture industries.

adidas | PARLEY

Brought to you by UBQ Materials

Bringing the Dawn of a New Era in Sustainable Materials

UBQ Materials has developed an advanced conversion technology, patenting the world's first bio-based material made of unsorted household waste;
A revolutionary way to divert municipal solid waste from landfills and transform it into a sustainable substitute for oil-based plastics, concrete, wood and minerals. With a climate positive impact and a cost-competitive price, UBQ™ is replacing linear consumption models with a circular economy, eliminating the need for landfills, and conserving finite resources for future generations.

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