

ISSUE 2 / AUTUMN 2022

FUTURE

BUILDING A BETTER WORLD TOGETHER

FEATURING INSIGHT FROM:

- **WWF**
- **UN GLOBAL COMPACT NETWORK**
- **BYE BYE PLASTIC BAGS**

FROM THE OCEANS TO THE FORESTS: SUSTAINING NATURE

**WHY SUSTAINABILITY AT ALL LEVELS OF
THE SUPPLY CHAIN MUST BE A PRIORITY**

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ANDREA PIAZZOLLA
CHIEF PURCHASING
OFFICER,
SOFIDEL GROUP

LOOK INTO THE FUTURE

Sofidel Group cares deeply about the future of the planet – and its people. That’s why we are committed to growing our supply chain digital magazine and showcasing inspiring stories from around the world that focus on sustainability.

In issue #2 we hear from Alessandra Prampolini, general manager of WWF Italy; Ingmar Rentzhog, founder and CEO, We Don’t Have Time; Dara Datita Ginting, Global Team Leader, Bye Bye Plastic Bags; Christine Schäfer, researcher and speaker at GDI Gottlieb Duttweiler Institute; Alina Husung of Linnaeus University; and three Sofidel executives, among others.

You can also read case-studies from Sofidel’s suppliers and industry partners including Henkel, Mercer International, Ocean Conservancy and UN Global Compact Network Italy.

Enjoy the read. This is truly a *Future* that we can only build together!

CHAIN OF EVENTS: KEEPING SUPPLY CHAINS STRONG – AND SUSTAINABLE

Andrea Piazzolla, Sofidel Chief Purchasing Officer, talks to *Future* about the qualities and principles he and his team look for in potential suppliers

What is your definition of a highly functioning supply chain?

Andrea Piazzolla: My ‘scholastic’ definition is one that implies a long-term, continuous relationship. But that is very generic. You can actually change the meaning of the phrase in relation to the economic period or historical era that you’re living in. For example, the American anthropologist and futurist Jamais Cascio defines our world today as “BANI”: brittle, anxious, non-linear and incomprehensible. So, in a world where benchmarks are not as reliable as they were in the past, where cause and effect become distorted, where life becomes non-linear and uncertain, “continuous long-term” takes on a different meaning.

But a high-functioning supply chain should be consistent, capable, and resilient in difficult economic scenarios. For that to happen, it requires an organization to have good governance and train its staff to be adaptive and flexible, adapting themselves quickly to different situations. Organizations should be transparent, because, in a such a non-linear world, information is increasingly important. The exchange of information and data is a key factor to being highly efficient. Last but not least, you have to have intuition. You must think outside of the box. That, to me, delivers a highly efficient supply chain.

How does ‘out of the box’ thinking help deliver efficiency?

Andrea Piazzolla: A perfect supplier is one you can share your knowledge with, creating innovation and giving you a competitive advantage. A supplier should share our principles

on sustainability, but really on everything else too: all 360 degrees. We have operational risks and one of those is the continuity of the business, so, in such a disruptive market, you have to pay attention to where you’re sourcing your goods from. You have to assess the geographical area and the political situation. A good partner is therefore able to reduce our risk.

Why does a partnership model with suppliers yield better results?

Andrea Piazzolla: A partner for us is someone that we want to share a long path with. Because of that, we cannot squeeze them. It doesn’t make any sense therefore to focus all our strategy on pricing only, because that is really a short-term strategy. A long-term strategy requires someone supporting you in reaching your goals.

For example, we wouldn’t be able to hit our CO₂ reduction targets without the help of our suppliers, because part of those targets are linked to them.

What qualities do you look for in a potential supplier?

Andrea Piazzolla: A coherent strategy depends on consistency. A partnership is something you build day by day. I don’t think a ‘right’ recipe exists for that. It’s just about getting to know each other and moving that supplier or customer relationship into a partnership relationship. For sure, there are minimum requirements that any supplier must have in order to work with us, including some specific sustainable standards and certifications. We also prefer partners that have different operations in different countries to minimize our risk.

What specific standards or benchmarks do you demand with regards to ESG?

Andrea Piazzolla: Our CEO started talking about environmental sustainability at Sofidel more than 15 years ago, thinking about how to reduce the environmental impact of our production into the environment. Then we started involving other stakeholders. We’re trying to protect the future generation, but we are also trying to protect our reputation, because we are investing money, time and our reputation on sustainability and we don’t want a supplier that doesn’t have our same principles to ruin everything.

That’s the reason why we trust in sustainability. So, if you trust us, you can work with us. If you have other targets, that’s not a problem, but our path cannot be a common one. Even if that means we are going to lose out on opportunities.

Does it make it harder, or more expensive to source sustainably? Why is all that extra effort worthwhile?

Andrea Piazzolla: We need to talk about the pillar of economic sustainability before we can get to the pillars of environmental and social sustainability. Without economic sustainability, any additional notion of sustainability will be short term. For us, choosing sustainable options costs more than most other, typical products. So,

"WITHOUT ECONOMIC SUSTAINABILITY, ANY ADDITIONAL NOTION OF SUSTAINABILITY WILL BE SHORT TERM. FOR US, CHOOSING SUSTAINABLE OPTIONS COSTS MORE THAN MOST OTHER, TYPICAL PRODUCTS. SO, IT CAN BE MORE COSTLY TO BE SUSTAINABLE"

yes, it can be more costly to be sustainable.

There is also an indirect price: perhaps we lose out on opportunities because we won’t buy from unethical suppliers, even if they are cheaper. We don’t buy from suppliers that are not in line with our principles. There are no excuses and no exceptions.

Is it more difficult? For sure, yes. Your supplier network becomes smaller. You have to do more research and make more of an effort. But we have sustainability in our DNA, so we don’t consider it a difficulty.

Tell me about the Sofidel Suppliers Sustainability Award (3SAward)

Andrea Piazzolla: I have always considered the 3SAwards to be more than a celebration. It’s a sustainability booster. It helps us gently push our suppliers to improve their sustainability profile. It’s the ‘nudge theory’ [a behavioral economics concept where positive reinforcement can influence behavior and decision-making].

The largest part of our spending is sourced by sustainable suppliers, so we have to have a way to measure and compare their sustainability performances. We use a scale between zero and 100. The ones that score more than 80 are consider excellent suppliers – those that are in line with our principles in terms of environment, human rights, anti-corruption, and labor. And, in 2021, 82% of the total spent of Sofidel was sourced by ‘excellent’ suppliers.

What do you have planned for the next 3SAward?

Andrea Piazzolla: We’re going to skip 2022 and host the next one in 2023, because we only had the last one in December 2021. We want to give time to suppliers to put their ideas in place and to apply them. The next awards will be in-person again, not virtual, so, that will mean a big party. I’m going to celebrate! But as to specific speakers, topics, and the location there will be no spoilers, I’m afraid. No comment! ■



Sofidel Group pulp warehouse and conveyor belts in Italy



WWF Italy's Alessandra Prampolini
Credit: Giovanna Quagliari



Luigi Lazzareschi,
Sofidel Group CEO

A problem shared, is a problem halved', as the old saying goes. And there are not many problems as complex and challenging as that of how to improve global sustainable development. Finding a partner that understands the size, scale and scope of that challenge – and believes in tackling it in a like-minded, collaborative way – is therefore the key to creating meaningful and lasting solutions. Some partnerships were simply meant to be. Sofidel's 15-year collaboration with WWF, which began in 2007, is fundamentally focused on sharing and achieving the same goals.

For Luigi Lazzareschi, CEO of Sofidel Group, the experience of working with WWF has been a successful one precisely because, much like the international non-governmental organization – which was founded in 1961 – his company "has always followed a long-term strategy in its choices." This is a characteristic, he says, that, in many cases, has made Sofidel more sensitive to sustainability issues "by fostering the emergence

of a model of 'responsible proximity' capitalism."

In the early 2000s, Lazzareschi and his team "found it necessary to systematize and enhance this heritage by integrating sustainability into the way we operate."

The intention, he says, was to make sustainability a strategic growth factor. The fact, then, that the paper industry is energy- and water-demanding, using forestry-derived raw material, led Sofidel at that first stage to focus particularly on the environmental aspect.

As a consequence, in 2007, Lazzareschi decided to contact WWF since it seemed "the most suitable partner, due to its history, international profile, and authority." Enthused by the experience, the following year Sofidel joined the international Climate Savers program, which proposed that companies voluntarily adopt plans to reduce greenhouse gas emissions by implementing innovative technologies and strategies. "This," he says, "was the start." Sofidel now has emissions targets in line with climate science and a goal of 84% purchased energy from renewable sources by 2030.

CONCRETE ACTION PLANS

As Alessandra Prampolini, general manager of WWF Italy, recalls, the idea for a collaboration followed a positive discussion on the main environmental issues for the tissue paper industry, from energy usage to forests. "Sofidel wanted to invest in and support WWF projects to protect nature, and we found great willingness to discuss how to improve the group's environmental policies and practices. Thus, from the outset, a holistic partnership was established that included the definition of challenging environmental goals and concrete action plans to achieve them; as well as the development of communication and awareness-raising activities on key environmental issues, which have also been enriched over the years with educational programs and institutional events."

Of the many initiatives carried out together between WWF and Sofidel, many have produced significant results through a symbiotic, collaborative partnership. Lazzareschi cites the Climate Savers program as something he is particularly proud of. Between 2009-2020,

"FROM THE OUTSET, A HOLISTIC PARTNERSHIP WAS ESTABLISHED THAT INCLUDED THE DEFINITION OF CHALLENGING ENVIRONMENTAL GOALS AND CONCRETE ACTION PLANS TO ACHIEVE THEM; AS WELL AS THE DEVELOPMENT OF COMMUNICATION AND AWARENESS-RAISING ACTIVITIES ON KEY ENVIRONMENTAL ISSUES"

Sofidel reduced its direct emissions (carbon intensity) of CO₂ into the atmosphere by 24%. "Since the Climate Savers experience, the collaboration with WWF has expanded and strengthened. In fact, we have shared with WWF a pathway to improve our forest procurement process, which in 2016 led us to have 100% of the fiber we use certified by independent third parties with forest certification schemes."

Sofidel also has joined or supported numerous activities to raise awareness, educate and inform on sustainability issue that are close to Lazzareschi's heart, including 'I'll Take Care of You' ('Mi Curo di Te'), an environmental education program made available free of charge to Italian primary and secondary schools that, since 2014, has already involved more than 650,000 students.

Prampolini was equally satisfied with "the quality and positive reception" of the 'I'll Take Care of You' project and its impact on schools in recent years. She considers Sofidel's role as being that of a strategic 'change agent' on climate and energy within its own production

AN ENDURING, SUSTAINABLE PARTNERSHIP: WWF AND SOFIDEL

Alessandra Prampolini, general manager of WWF Italy, and **Luigi Lazzareschi**, CEO of Sofidel Group, discuss the power of collaboration and its importance when tackling an issue as challenging and nuanced as sustainable development

sector and along the value chain because the group’s commitment “has also virtuously involved its suppliers, acting as a multiplier.”

Another significant achievement, according to Prampolini, is the most recent joining of the Forests Forward program for sustainable forest resource management, because “the Group’s global commitment to responsible sourcing is a strategic part of our work together.” Sofidel has not only achieved 100% certified cellulose, of which 80% is Forest Stewardship Council (FSC®) certified, but “is constantly comparing notes with WWF to improve environmental policies and reduce any possible risk of impact on the ecosystems where the company’s operations insist,” she says.

LONG-LASTING SHARED VALUE

The relationship between WWF and Sofidel is a perhaps rare example of a “long-lasting” collaboration between a for-profit company and a non-profit organization. For Lazzareschi, in Sofidel’s efforts to create long-lasting shared value, “collaborations with stakeholders play a central role.” For him, that is “an important lever

for building transparency and trust, but it also helps to “combat poor quality information or harmful forms of greenwashing,” he says.

“These 15 years have strengthened us in this belief. Today, sustainability issues are more relevant than ever,” says Lazzareschi. The importance of changing paradigms of production and consumption and focusing on ecological transition, the energy crisis and supporting the creation of new skills, is more vital than ever before

“There are many areas in which the business world and an organization like WWF can work together in the interests of people and the planet,” says Lazzareschi. “Among other things, right now, we are working with WWF for ‘Sofidel4Talent’, a training activity dedicated to young people, and we adhere to the Re-Nature Italy campaign for the protection and regeneration of natural capital in our country. I see this as a very good basis for looking positively towards the future.”

Prampolini agrees that she always envisioned “a multi-year path on topics of mutual interest,” but such a long-standing collaboration is

"THERE ARE MANY AREAS IN WHICH THE BUSINESS WORLD AND AN ORGANIZATION LIKE WWF CAN WORK TOGETHER IN THE INTERESTS OF PEOPLE AND THE PLANET. AMONG OTHER THINGS, WE ARE WORKING WITH WWF FOR 'SOFIDEL4TALENT'"



“truly a cause for satisfaction and has been made possible by the group’s willingness and continued support on sustainability issues,” she says.

Following the goals of the conservation program, WWF works with companies to address complex challenges such as climate change and biodiversity loss so that they can produce and consume within the limits of a single planet,” says Prampolini.

“Today and in the near future, given the urgency of the environmental crisis, our demands on institutions and the private sector will be increasingly ambitious, aimed at building resilient communities and ecosystems.”

For Prampolini and her team 2030 is the key year “by which we must be on track to decarbonize and reverse the loss of nature to create a secure future for people and the planet.” The Sofidel and WWF partnership therefore, which has become a best practice benchmark for for-profit and non-profit collaborations, continues on this path according to the challenges identified as priorities:

"IN THE NEAR FUTURE, GIVEN THE URGENCY OF THE ENVIRONMENTAL CRISIS, OUR DEMANDS ON INSTITUTIONS AND THE PRIVATE SECTOR WILL BE INCREASINGLY AMBITIOUS, AIMED AT BUILDING RESILIENT COMMUNITIES AND ECOSYSTEMS"



commitments to climate and nature that can truly contribute to a transition to a net-zero and nature positive global economy.

From his perspective, Lazzareschi believes the experience of working with WWF has enabled his organization to gain an enhanced insight into sustainable development and also helped improve process and innovate new products. “WWF has acted as a powerful catalyst. It has helped the company grow in awareness, strengthen itself culturally, and become familiar with issues and sensitivities at the center of international public debate,” he says.

For Prampolini, partnerships are about “sharing vision, values, and know-how to achieve more together than can be achieved alone – we believe strongly in this hybridization,” she says. “Our collaboration with Sofidel will see us work increasingly together, with the possibility of testing new approaches to reducing ecological impact, knowing that good practices can be shared, involving the entire supply chain and industry sector in these crucial years. Nature is everyone’s business.” ■



FURTHER DETAILS:

For more information about WWF, visit wwf.panda.org or www.wwf.it (in Italian)

“Nature is everyone’s business,” says WWF’s Alessandra Prampolini

TO PROTECT AND CONSERVE: CARING FOR OUR OCEANS



In the US, Sofidel partners with Ocean Conservancy, an organization that creates evidence-based solutions for a healthy ocean. **Allison Schutes**, Director of the International Coastal Cleanup at the non-profit environmental advocacy group, discusses the importance of its work and its partnership with Sofidel

How does the partnership between Ocean Conservancy and Sofidel make sense in terms of sustainability?

Allison Schutes: Ocean Conservancy believes that all people and stakeholder groups have a role to play in solving our ocean's challenges: partnerships are part of our DNA. We engage and collaborate with policymakers, academia, thought leaders, influencers, the private sector, and other key players to drive long-term change for a healthy ocean. This expertise extends to large-scale, public facing campaigns and partnerships.

We partner with companies that are genuinely and demonstrably committed to improving their practices and achieving sustainability. We conduct a robust due diligence process and obtain sign-off from our team of experts before entering into new corporate partnerships. Sofidel's commitment to reduce its plastic usage by 50% by 2030, along with greenhouse gas emission and water usage reduction goals, demonstrate alignment with Ocean Conservancy's vision for a healthy ocean. Sofidel's support of the International Coastal Cleanup® (ICC) bolsters our efforts to mobilize volunteers to clean up beaches and waterways around the globe.

What is Ocean Conservancy doing to benefit the environment?

Allison Schutes: The health of the ocean is intricately connected to the fate of humanity. More than half of all life on Earth is found in the ocean, and 40% of the world's population lives within 60 miles of the coast. The ocean is the original source for the air we breathe, the water we drink, and for many, the food we eat. The ocean regulates our climate and has absorbed about one third of the carbon dioxide in our atmosphere; and more than three billion people worldwide depend on seafood as a primary source of protein.

For nearly 50 years, Ocean Conservancy has worked to protect the ocean from today's greatest global challenges. Together with our partners, we create evidence-based solutions for a healthy ocean and the wildlife and communities that depend on it. Our priorities include: Cutting carbon emissions – Advance ocean mitigation measures to help secure a stable, 1.5°C future (stop global warming to no more than 1.5°C degrees above pre-industrial levels); Stopping pollution – Stem the tide of plastics, waste and other contaminants flowing into the ocean; Increasing marine life – Protect and restore ocean biodiversity and abundance; Securing sustainable use – Ensure ocean uses result in a net benefit for the ocean and people.

What sets Ocean Conservancy apart?

Allison Schutes: Ocean Conservancy takes a holistic approach to the ocean plastics

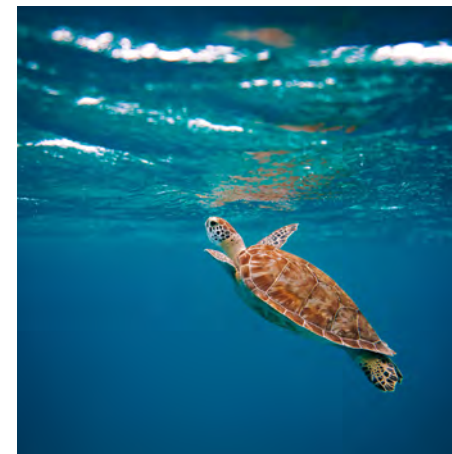


crisis – because the science shows we need to keep plastics out of our ocean. We develop critical scientific research to better understand the problem, organize and implement large-scale cleanups, advocate for improved policies and private sector practices that keep plastics out of our ocean to begin with, and educate and engage communities around the globe.

One of our best-known public initiatives is our International Coastal Cleanup® (ICC), which mobilizes hundreds of thousands of people around the world to remove trash – much of it single-use plastics – from local beaches, waterways, and parks. What also makes the ICC so unique is our focus on data. Volunteers record what they find through paper data cards and our Clean Swell mobile app. Since the first ICC in 1986, over 17 million volunteers have removed more than 348 million pounds (158 million kilograms) of trash. The ICC is the backbone of Ocean Conservancy's Trash Free Seas® program, which brings together some two dozen experts fighting to keep plastics and other debris out of the ocean.

Can you provide further details regarding the flagship cleanup in Washington, D.C.?

Allison Schutes (above): As part of the ICC, the Washington, D.C. flagship cleanup is one of many local cleanups that engage communities in ocean stewardship each year. Ocean Conservancy is headquartered in D.C., so this cleanup is also the preeminent event that Ocean Conservancy hosts to celebrate the ICC right in our own backyard. In the years leading up to the pandemic, the event grew steadily.



In September 2019, approximately 1,000 volunteers collected 6,000 pounds of trash from Kingman Island during a single day. During the pandemic, we have still celebrated the ICC on Kingman Island but with a smaller group of volunteers in accordance with local guidance. We look forward to a larger turnout this year and anticipate that hundreds of local volunteers will come together once again on Kingman Island on September 17, 2022.

What does your stamp mean for the product that has your logo to be branded as such?

Allison Schutes: As a non-profit organization, Ocean Conservancy does not endorse companies or products. We do create strategic partnerships with companies that are working toward sustainability and align with our mission and goal of a clean, healthy ocean. The use of Ocean Conservancy's logo indicates that a company is supporting our work in a meaningful way and acts as an opportunity to reach and educate new audiences about ocean conservation.

What every day actions can consumers put into practice to help our oceans?

Allison Schutes: We all have a role to play in tackling the ocean plastic problem – and there are many actions that every day citizens can take to help protect our ocean. Individual choices such as skipping plastic cutlery and straws, carrying reusable bags and water bottles, and avoiding unnecessary plastic packaging can make a big difference for our ocean.

Individuals can join Ocean Conservancy's International Coastal Cleanup® (ICC) and help collect trash from their local beaches and waterways while contributing data to help inform larger scale solutions. At the same time, we ultimately need big systemic changes from governments and corporations to truly stem the tide of plastics entering our waters. Individuals have a role to play here, too: they can call on governments to pass laws that reduce plastic pollution through product bans, improvements to recycling, and holding companies that make plastics accountable for cleaning up the waste their products create. ■



WAVING BYE-BYE TO SINGLE-USE PLASTIC

Bye Bye Plastic Bags was started by young Indonesian climate activists Melati and Isabel Wijsen to raise public awareness in Bali and beyond against single-use plastic bags. “It has become a global movement,” **Dara Datita Ginting**, Global Team Leader, tells *Future*



Born in Bali, Indonesia, to Dutch and Indonesian parents, Melati Wijsen was 12 years-old, and her sister Isabel was 10 when they established Bye Bye Plastic Bags in 2013.

Sickened by the sight of plastic bags constantly washing up on the otherwise unspoiled shores of their beautiful ‘Island of the Gods’, they decided they could play their part in starting a campaign to rid Bali of single-use plastic bags. From organizing annual mass beach clean-ups, to staging hunger strikes and using the stages provided by TED, CNN and the United Nations among others, the young ladies – and their organization – have proved to be a force to be reckoned with.

Nine years later, Bye Bye Plastic Bags is now an international NGO, with 60 locations in 30 countries around the world led by teams of young people burning with the mission to rid, not just Bali, but the world of single-use plastic. One of those leaders is Dara Datita Ginting, who first followed Melati Wijsen on Instagram eight years ago, before joining the organization in 2021, becoming Global Team Leader earlier this year.

“Bye Bye Plastic Bags is a social initiative driven by youth to get people around the world to say ‘no’ to single-use plastic bags,” says Ginting. “The numbers keep growing.”

The mission is nowhere near done though, says Ginting. “Single-use plastic is everywhere. It harms the environment and it’s not also good for human health – there are micro-plastics in our bodies, not just in the bottom of the oceans and in our rivers. But we believe that education can happen everywhere too. You cannot solve the problem if you do not know the solution, so we raise awareness and educate about how harmful plastic is to our environment, our animals, and to us humans.”

Bye Bye Plastic Bags volunteers and team members, including Ginting, stage school presentations in Bali and overseas, showing local children how they can make a difference. “We distribute our educational booklets, which have fun activities and puzzles in them. Education is our first pillar.”

COLLABORATION AND WORKING WITH THE MOUNTAIN MAMAS

The second pillar is focused on lobbying and campaigning. “When we do Bali’s big beach clean-up every year, we use one voice,” says Ginting. “We get all of the NGO community and the video companies to join us to clean five regions of Bali in one day, every February. We can gather around 4,000 people in 130 locations.”

The organization works closely with local waste management companies, selecting which plastics can be recycled and which can be re-made into new household objects, such as chairs. “We cannot do this alone. Collaboration is the key for every project. We also connected to businesses, such as restaurants and hotels, speaking to them about ending single-use plastics. We approach them to sign a pledge of the commitment to eliminate single-use plastics step-by-step in their businesses,” says Ginting.

Bye Bye Plastic Bags also produce a *Sustainable Guidebook*, showing tourists to Bali where to find alternatives to plastics. Another initiative is an empowering social enterprise movement called Mountain Mamas. It sees the organization provide sewing equipment for woman in the Mount Batukaru region of Bali to create alternative bags from different materials, including

"WHEN YOU START TAKING ACTION AND COMMIT TO REDUCING PLASTIC BAGS ONE BAG AT A TIME, EVERY DAY, IT BECOMES A MASSIVE RIPPLE EFFECT... WE MUST WORK TOGETHER"

hotel bedsheets and discontinued garment stocks. “We give a second life to those materials and make bags that are really beautiful. We train our Mountain Mamas to create these bags – they all have their own signatures.” Those bags are sold, thus supporting the village communities and crucially – also reducing single-use plastic in the process.

Ginting is from North Sumatra and first got inspired about Melati and Isabel’s campaigns in Bali when she saw their Insta-

gram posts while studying for her psychology degree. She worked for another NGO in the field of plastic pollution, educating local school children in Bali’s surrounding islands. Today, she continues to give presentations to Bye Bye Plastic Bags’ volunteers and host workshops.

THE YOUNG AND THE RESTLESS

Melati Wijsen recently founded a new youth empowerment project, Youthtopia, having united young, likeminded change-makers and activists around the world. “Her persistence and commitment to do all of the hard work and achieve her goals and make a better world and environment for us – I get inspired every day by her,” says Ginting.

So, what does the future look like for Bye Bye Plastic Bags? “We envision a world that is plastic-free,” says Ginting. “But we are very specific with our own mission of ridding the world of single-use plastics, because plastic is a really complex problem.”

Ginting is optimistic of achieve those aims “100%” but reiterates that “we cannot do it alone. We need to do this as a collaboration with all of the stakeholders, such as government organizations and producer companies,” she says.

One important aspect, says Ginting, that people sometimes forget, is “they also have the power in their own selves. When you start taking action and commit to reducing plastic bags one bag at a time, every day, it becomes a massive a ripple effect. The powerful way is to stop using plastic – to refuse it, not to recycle it. Right now, in Indonesia, we are the second most polluted country in terms of plastic bags after China. It’s everywhere. So, we must work together. We must start thinking about how we can make a difference. Individuals can feel overwhelmed, because you think you are doing this alone, but actually, there are people everywhere thinking about the same problem, and they also want to make solutions. From that knowledge we can start taking real action.” ■

FURTHER DETAILS:
For more information, visit
www.byebyeplasticbags.org



HELPING CREATE THE WORLD TO COME

Derek Dafoe, Executive Vice President, Sales, Marketing & Customer Service, tells *Future* how a fast, focused, flexible, and friendly strategy forms the foundations of Sofidel America's sustainable development ambitions



He may have joined the business during a worldwide pandemic but his experience in businesses as diverse as Proctor & Gamble, Nielsen, Sysco, and Southeastern Grocers ensured Derek Dafoe (pictured, above) had the tools he needed to help steer Sofidel America through the challenge.

Since he was brought in by CEO Luigi Lazzareschi in 2019 to lead sales and marketing at Sofidel America, it has become the largest operating division of the Group. The business has opened a plant in Oklahoma and doubled output, while the corporate U.S. HQ in Pennsylvania has doubled in size.

Dafoe's own family business background means he understands the values of this family-business. He feels just as comfortable building team culture as he does collaborating with colleagues across Europe to grow a sustainable development strategy.

He describes his role leading around 80 people working across consumer brand, private label, and away-from-home as a tremendous opportunity to join a green-focused company that's truly changing the industry in North America.

"It's exciting. I was hired to help build a vision and replicate the Sofidel values here. We believe there are things that we've brought to market and industry in Europe that will benefit North America and the world."

THE TRANSITION TO A LOW-CARBON ECONOMY

Dafoe says the values of the business in North America are built on Lazzareschi's deeply held belief that we are all responsible for combating climate change and achieving the goals of the Paris Agreement.

The long-term strategy of the business is to create economic, social, and environmental value for all. It's bringing tangible results: "We've brought over \$1bn investment to the US, our CO₂ output is lower, our environmental footprint is strong. We're proud of our paper, it's what drives the benefits for all our employees, the communities we're in, and the planet."

SCIENCE AND TRANSPARENCY

Many organizations like to say they're green or sustainable – Sofidel America will not make claims or statements it can't back up with science or third-party validation. This is a key differentiator.

Its systems and processes are transparent, says Dafoe. "We've made clear statements on reducing CO₂ emissions; of 100% certified paper products and forest preservation.

"We don't clear cut forests; we don't pulp our own trees; we don't own forest land. It's important our suppliers have environmental practices and follow the Forest Stewardship Council's (FSC®) guidance."

The business has also invested in state-of-the-art facilities intrinsic to reducing

"WE DON'T CLEAR CUT FORESTS, PULP OUR OWN TREES OR OWN FOREST LAND. IT'S IMPORTANT OUR SUPPLIERS HAVE ENVIRONMENTAL PRACTICES AND FOLLOW THE FOREST STEWARDSHIP COUNCIL'S (FSC®) GUIDANCE"

energy and water consumption and therefore ecological footprint. Where the average paper machine in North America is 35 years old, Sofidel maintains control of its ecological strategy by investing in new plant and innovative technology.

A great example of that in North America is the launch of Nicky, the first brand in the U.S. to eliminate all plastic and switch to paper packaging.

Another example is how they developed an alternative to virgin ABS plastic for dispensers by repurposing discarded fishing nets – the largest source of plastic pollution in the ocean.

"We found a supplier for the resin, a supplier for the dispensers. We invested time and energy working on different formulations and models so you would never know it's a different product. We've taken something out of the waste stream that will sit on the wall for between five and 10 years that you don't pay a premium for. It's about protecting the planet."

ACTIONABLE SUSTAINABILITY

Using innovation to help protect the environment and future generations is in Sofidel's DNA. Dafoe has enjoyed many conversations with Sofidel leadership about how to boost performance without compromising on core principles and standards.

Whether it's through education for children and local communities, studies on clean living, or working as an ambassador for the World Wildlife Fund for Nature (WWF), Lazzareschi's values run deep.

Where action backed by data is taken in one part of the Group, says Dafoe, it's put into practice across the organization.



\$1BN
SOFIDEL'S INVESTMENT IN THE US

13
COUNTRIES SOFIDEL IS BASED IN

100%
CERTIFIED PAPER PRODUCTS

Learning from colleagues in 13 countries around the world keeps everyone focused on the global opportunities and challenges for the business.

The strategy is consistent and fit for the long-term, adds Dafoe. "We've had strong and level performance – we don't have huge peaks and valleys from short-term decisions. We invest significantly in green equipment, technologies, and strategies that we believe will deliver a long-term benefit to the planet and will reward us as good stewards of the economy."

SMALL THINGS MAKE A BIG DIFFERENCE

Although the business has the benefit of a visionary leader with a global outlook, there are still challenges. How does everyone in the business come to understand that a sustainable strategy will benefit them and their communities as well as be good business?

It starts with hiring and retaining the right people, says Dafoe. Their head of sustainability, for example, ensures everyone has a



"WE DON'T HAVE HUGE PEAKS AND VALLEYS FROM SHORT-TERM DECISIONS. WE INVEST SIGNIFICANTLY IN GREEN EQUIPMENT, TECHNOLOGIES, AND STRATEGIES THAT WE BELIEVE WILL DELIVER A LONG-TERM BENEFIT TO THE PLANET"

voice by asking questions and establishing needs. He leads by example. This attracts people with a similar mindset, whether it's in the sales team or accounts.

"You start to attract people that really feel they can join an organization and have a voice on a bigger scale. They hold each other accountable, have conversations and submit their ideas on ways to do things. We try and live it every day."

THE NET EFFECT

Although Sofidel America is still building its presence as a brand, its message is beginning to generate a buzz and drive significant growth. It's not only consumers responding but retailers, too. Dafoe believes that's because its ESG (Environment, Social and Governance) credentials are transparent and robust.

"We're going in with a clean, green message and high-quality products. We bring companies to our plants, walk them through our facilities. There's no business in this industry in North America, and very

few in the world, that can compare to what we do at our newest, state-of-the-art Inola, Oklahoma, and Circleville, Ohio greenfield facilities."

"We're the largest, greenest tissue manufacturer no one's ever heard of," he adds with a smile.

Sofidel America also measures the sustainability of its supply chain, constantly monitoring its performance. "They must show us they've got systems in place to hit key environmental positions," says Dafoe. "It's not just about what Sofidel does as a manufacturer of tissue. For instance, it's about what our plastic supplier does to make the packaging for the retail shelf. We're trying to hold ourselves to a higher standard."

A BUSINESS FIT FOR THE FUTURE

Because Sofidel is a family-owned business, it means it doesn't have to serve short-term shareholder needs. Instead, it can focus on creating jobs and ensuring the well-being of its team members, their families, and communities.

"IF YOU CAN FEEL GOOD AT THE END OF THE DAY ABOUT THE COMPANY YOU WORK FOR AND THE PEOPLE YOU WORK WITH, AND SEE THAT YOU'RE MAKING A DIFFERENCE, IT MAKES YOU PROUD"

"We're trying to build something sustainable for the long-term. Our CEO Luigi Lazzareschi really does see Sofidel as his family, that's why it's not about the next month or two years from now, it's the future," says Dafoe.

This long-term vision and respect for the planet has a real impact on Dafoe and his close-knit team and how they value their roles. "If you can feel good at the end of the day about the company you work for and the people you work with, and see that you're making a difference, it makes you proud," he says.

"Why long-term, not short-term? There's more to life than money." ■



As evidence of accelerated climate change is mounting, a group of Silicon Valley ‘techies’ decided to come up with practical plans to help solve the problem

Terraformation was set up more than two years ago after founder Yishan Wong learned that restoring native forests outperforms any other method of carbon capture. Tina Nielsen speaks to Yee Lee (pictured above), VP Growth & Special Projects, who first met Yishan Wong at Paypal, one of his first jobs in Silicon Valley. He explains the group’s endeavors to not just mitigate but solve climate change.

What is the primary goal for Terraformation? What are you hoping to achieve?
Yee Lee: Terraformation’s mission is to help solve climate change, by causing billions of net new acres of forestry to come into existence in the next decade, so that those trees can reach maturity in the next 30 years, and be able to sequester tons of carbon dioxide. Every generation up until now, as parents, we had at least the hope, or at least the confidence that the world is going to



a better place with more opportunity, for the for the generations ahead. And if you don’t have that confidence, then it’s really hard to figure out what they [future generations] should do, let alone what you should be doing.
 So, 2019, for both Yishan and I, was a year of really strong introspection. And we decided, we’ve donated to climate causes for a long time, now it’s time for us to roll up our sleeves and get into the field. Even

as technologists, we don’t necessarily know climate science, and we don’t know forestry, we don’t know botany and things like that. But we can learn these skills. And there is a skillset to scaling things that Silicon Valley has cultivated over the decades. We can figure out how to apply this skill set to help avert climate change.
 Basically, we made a pact between the two of us, we’re going to work on climate for the rest of our working lives.

Forests are the most powerful carbon capture system on Earth – what more must we do to protect them?
Yee Lee: It’s super critical for trees, once they’ve been grown to maturity, for us to maintain those forests stocks and to make sure that they naturally replenish, because trees have a have a lifecycle of their own, right. So as long as the trees and forests are maintained and are able to self-regenerate, then there is permanent sequestration.
 I think of it as like the highest ROI kinds of opportunities, the very pinnacle of highest ROI is just protecting the trees that you’ve got. The simplest thing you can do to promote permanent carbon sequestration is just keep the trees there. Next in the stack is to find high potential reforestation zones, that the carbon scientists and soil scientists have identified, and go replant those areas, regenerate those areas with forestry. Then, lowest in the stack, there’s a bunch of really hard projects that you could take on, for example greening desert, and there are technical interventions that you could take to create water supply or to introduce, changes to the environment to try to reintroduce topsoil to be able to create more forest. But those are sort of like lowest in the stack. The easiest, highest ROI thing we can do is protect the forest that we have.
How can we restore native forests globally?
Yee Lee: Climate scientists say that we have a 30-year window to affect climate change. These are findings for 2019 to 2020, so we’re down to 28 years now. In order to actually have trees reach maturity in that 30-year window, we have to plant now.
 We’ve given ourselves about a decade to achieve this mission of planting several billion acres of new forest, and over the next 30 years, we’ll have to safeguard and maintain those forests.
How do we restore native forest ecosystems?
Yee Lee: When we talk with partners about what’s needed to make a project successful, we very quickly find a common set of challenges that our projects need to overcome in order to reach scale. Seed supply is one of the most vexing problems, especially if

you’re trying to work on native forestry. If you’re just trying to sprinkle eucalyptus, everywhere, cedar or Douglas fir – we have huge seed stocks of timber, plantation seeds, because commercially we’ve been good at stocking up seeds of timber. But we don’t actually want to cover the world with just eucalyptus or bamboo. Even though these fast-growing, plants do have commercial value. I’m not saying there’s anything wrong with eucalyptus but trying to grow eucalyptus forest in a in a biome that’s not appropriate is going to have very deleterious effects around the flora and fauna, and the soil. It will inhibit the growth of natives and create an ecosystem that is more fragile and more vulnerable to fungus or beetle blight.
 Planting native and endemic species that are adapted for a particular biome is really important. To do that, you need to have seeds. If you want to cover billions of acres with native species, it’s going to take about a trillion trees. And do we have multiple trillions of seeds? The answer is ‘no’, we don’t.
 Training and capacity building is another key bottleneck. Just getting more people trained in seed collection, seed banking, nursery operations, how to handle seedlings and germination, how to move seedlings out to a field and establish them in the ground in some of these more degraded soil regions.
What are some of the key challenges?
Yee Lee: If you’re talking about degraded and rocky soils, and you’re really trying to help native plants get re-established, you are going to have to get out there, dig a hole at the appropriate spacing, put a seedling in the ground, mulch it, give it some sort of moisture supply. That’s not complicated work, but it is a particular skill that needs training and practice to hone. Today, we estimate there’s only half a million to a million trained foresters in the world. And the world needs 10s of millions of trained foresters to accomplish the scale of planning that we’re talking about.
Why is seed supply an issue?
Yee Lee: Anybody who’s planting trees intensively understands the seed to seedling, germination to planting process. The issue

is where do you get supply? That one of the key losses is that we’ve lost this skillset, the ancient knowledge of there are certain trees and they’re founder trees. If you want to be able to replicate that tree, then you need to go collect seeds, but not just from one tree. You should go collect from a diversity of founder trees because even trees of the same species that are on the leeward side versus the downwind side, are growing in different environments. They’re going to produce slightly different seeds. Being able to collect from a diversity of founding trees, and get the knowledge of how to correctly desiccate and store them.
 Seeds have been with humanity for a long, long time. But, just in the last couple generations, the knowledge of how to do this seems to have waned. We almost feel like it’s kind of reintroduction of older knowledge that we have known that human societies have relied on for a long time. It’s about training people in those practices and assembling teams to go out in the field and look specifically for trees of certain species, collect their seeds, figure out how to clean, get the seeds desiccate, and store them again.
Are you positive for future success?
Yee Lee: Yes. There is an awareness. As soon as you think about long-term planning, and you want to plant a forest that’s going to endure for centuries then you quickly come to the conclusion, ‘we should work with native and endemic species’. Then, seed supply immediately becomes top of mind for foresters. It’s about changing people’s mindsets about the style of forest that we’re trying to create. It’s not ‘plant today and then harvest in 10 years.’ We’re trying to plant the forest now that’s going to endure for centuries. And if that’s the case, then everybody’s mindset pivots around that and we start to get the right kind of awareness. So, there is an education and awareness challenge, but once people click into that mode, then the conversations are straightforward. ■

FURTHER DETAILS:
 For more information on Terraformation, visit terraformation.com

THE RACE AGAINST TIME

We Don't Have Time is the world's largest review platform for climate solutions.

Ingmar Rentzhog, founder and CEO, speaks to *Future* about “engaging in a climate dialogue” with influential companies, governments, organizations, startups, and NGOs around the world

Headquartered in Stockholm, Sweden, and with offices in Washington DC and Nairobi, We Don't Have Time is a hugely influential voice in the fight against climate change. With a monthly social media reach of over 50 million, among its 150+ partners are United Nations Development Programme – UNDP, Ericsson, Volvo, Spotify, Vodafone, Nordic Co-Operation, BT, and The Exponential Roadmap Initiative. Here, he addresses “restoring the greatest climate solution of them all – nature”, and how his organization works as a kind of TripAdvisor for the climate.

Why did you form We Don't Have Time?

Ingmar Rentzhog: I was an entrepreneur in the finance industry, running my own successful company, when I had my first

kid. Becoming a father got me thinking more about the world of tomorrow, the world my children was going to inherit, and so I started reading about the climate crisis. At first, I thought, ‘It cannot be this bad’. If it was, everybody would talk about it, and our leaders would focus all their energy on trying to solve this crisis. But as I dug deeper into it, I realized it actually was far worse than I thought it was, and that it still was not taken seriously. My real moment of clarity was when Donald Trump was elected as US president. That was when I realized our leaders were not going to fix this for us. So, I sold my company and founded We Don't Have Time with my dear friend and previous colleague, David Olsson.

How is it making a difference?

Ingmar Rentzhog: We Don't Have Time is the world's largest review platform

for climate solutions and a social media network for everyone who wants to be a part of the solution. A kind of TripAdvisor for the climate, if you will. Instead of rating tourist destinations, our community sends climate love, climate warnings or climate ideas to companies, leaders and organizations, based on their climate action – or lack thereof. We also invite companies, governments, organizations, startups, and NGOs around the world to join as partners to engage in a climate dialogue on our platform.

We regularly invite our partners and members to join our solution-oriented broadcasts and global digital summits that reach millions of viewers on social media. By highlighting and spreading climate solutions on a global scale, and make sure they reach the people in power, we help these solutions to be scaled up and implemented widely.

Tell us about the success of Nature in The Race to Zero! – The Exponential Climate Action Summit V – on Earth Day [April 22]

Ingmar Rentzhog: One of the great things of We Don't Have Time is that we collaborate with everyone who wants to be part of solving the climate crisis. We gather global companies, scientists, media, activists, organizations, startups and the youth. People are not used to seeing such a diverse mix of change-makers under the same roof, and I truly believe this has a big impact. There is so much we can learn from each other when we start cooperating across sectors and borders. With the Earth Day event we showed people that nature-based solutions is important not just for environmental organizations and local communities, but also for investment companies and global corporations, such as Ericsson, Google and Netflix.

How can nature-based solutions help us deliver a third of the greenhouse gas reductions needed by 2030 to meet the Paris Agreement? Why is the right way to progress?

Ingmar Rentzhog: It's all about quickly restoring the greatest climate solution of them all – nature. Forests, wetlands, healthy oceans and healthy land. Healthy natural environments draw down carbon, lower temperatures in overheated regions, increases human health, purifies air and water, brings back biodiversity and provide both humans and animals with food. It's a super win-win. And a super cheap solution at that. There are a number of innovative solutions that are scaling up and speeding up this restoration, but we also need to implement system changes that make it more profitable to let the forests remain, than to cut the trees down.



Ingmar Rentzhog is CEO and founder of We Don't Have Time, the world's largest review platform for climate solutions and a social media network for everyone who wants to be a part of the solution

Just five weeks after the Earth Day broadcast, you organized an ever bigger event, the STHLM+50 Climate Hub. Tell us about it.

Ingmar Rentzhog: The STHLM+50 Climate Hub was organized, from May 31 to June 5, 2022, in association with the UN Meeting Stockholm+50, which was set up 50 years after the first global environmental conference, which was also held in Stockholm. This was by far our most challenging and ambitious task to date. We created a five-day event, with 50 hours of live broadcasting, 250 speakers on stage, and a bigger live audience than we've ever had before. We somehow managed to pull it off, and we reached more than 32 million people on social media. We have never before received such great feedback as we did after this event.

Are you hopeful and optimistic about the future? Do we actually have sufficient time to enforce a positive change?

Ingmar Rentzhog: I am 100% certain that we will meet the goals of the Paris Agreement, despite the fact that many of our elected leaders are lagging behind, and in many cases actively trying to pull us back, by increasing fossil fuel subsidies and cutting down on climate investments. Because at the same time millions of companies, leaders and organizations are setting ambitious climate targets and really starting to take serious climate action. The snowball is rolling, and it's growing bigger and bigger and faster and faster by each day. And the younger generations are behind this big time. There's no stopping it. So yes, we will reach our climate goals. The question is if we will reach them in time to keep us within the planetary boundaries. And that's where we come in. To accelerate the transition, to spread the new and more positive narratives, and to show that the sustainable future is also the better and more prosperous future. ■

FURTHER DETAILS:
For more information, visit wedonthavetime.org.

BRINGING THE A GAME: COMBINING SUSTAINABILITY WITH ECONOMIC GROWTH

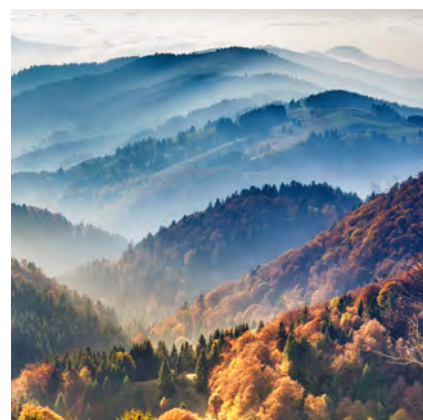


Riccardo Balducci, Sofidel Energy and Environment Director, shares his insights with *Future* on science-backed sustainable action and how a CDP 'A' rating brings the company closer to achieving its goal of a 40% reduction in carbon emissions by 2030

Responsible for Sofidel's energy and environment strategy since 2010, Riccardo Balducci is taking leadership on ensuring the entire business is fit for the future by seeking growth opportunities as well as measuring and understanding the risks. Formerly an environmental manager of the company, he perhaps knows more than most how sustainability must sit at the heart of the agenda for a business that relies on the availability of natural resources.

Even through periods of rapid change and the challenges of the pandemic, the global energy crisis, dramatically increasing prices, and geo-political tensions, the business is committed to fighting climate change. In fact, Balducci points out that the Covid19 pandemic, along with the ongoing cost crisis, has been an eye-opener for Sofidel and many other companies because it allowed them to further understand sustainability in a very practical sense. Balducci believes key factors such as energy consumption, climate change, socio-economic change and the geopolitical environment have dramatically changed the playing field when it comes to sustainability.

"Sustainability means we must compromise as little as possible to reduce our carbon footprint and protect our workers and their families. Although our products [toilet paper, kitchen towels, napkins,



"SUSTAINABILITY MEANS WE MUST COMPROMISE AS LITTLE AS POSSIBLE TO REDUCE OUR CARBON FOOTPRINT AND PROTECT OUR WORKERS AND THEIR FAMILIES... IT MEANS TRYING TO PROTECT OURSELVES FROM RISK AND ACHIEVE ECONOMIC GROWTH"

handkerchiefs and tissues] are disposable, they are also essential in our lives – a factor made all the clearer during the pandemic. So, sustainable business means trying to protect ourselves from risk and achieve economic growth to maintain a business like Sofidel that employs almost 7,000 people," he says.

Balducci says Sofidel's forward-thinking policies established many years ago have helped the business mitigate the economic storm currently hitting the marketplace. This includes establishing a long-term agreement for energy purchasing, which gives Sofidel some stability in terms of costs and alleviates the market risks from issues such as the CO₂ crisis.

WHY SUSTAINABILITY IS EMBEDDED IN SOFIDEL'S STRATEGIC MINDSET

The business has embarked on some important steps to raise its profile and translate a sustainable mindset into positive action. Because of its own reliance on raw materials, Sofidel is committed to helping coordinate the fight against deforestation and working to reduce the impact of its activities on natural capital such as forests.

According to Balducci this includes a forensic selection process when reviewing potential new suppliers. All raw materials used sourced by Sofidel have a forest chain of custody certification. These certifications are awarded by the FSC® (Forest

Stewardship Council) and PEFC™ (Programme for the Endorsement of Forest Certification) and both of these programmes ensure that the procedures used to obtain raw materials from forests are sustainable. "We display these logos on our products, so customers are aware they come from well managed forest sources. It's a big part of our sustainability activities," says Balducci.

"The second step is reducing energy consumption. We've invested heavily in software as well as next generation tissue paper machines. This investment amounts to around €700m and means we continue to produce premium quality tissue as well as reduce power and natural gas consumption. We see the results – less consumption, less carbon emissions, increased production efficiency."

The Group's 2030 emission reduction goal equal to -40% (of those emissions directly produced by the Sofidel business) per tonne of paper by 2030 compared to the base year 2018, have been approved by the Science Based Targets initiative (SBTi) as consistent with the reduction standards required by the 2015 Paris Agreement to limit global warming to well below 2°C. The business is successfully introducing alternative fuels and long-term renewable power contracts across Europe. Not only does this positively impact efforts to build a more sustainable future for people and the planet, but it also helps combat rising energy costs.

"WE CONTINUE TO REDUCE POWER AND NATURAL GAS CONSUMPTION. WE SEE THE RESULTS – LESS CONSUMPTION, LESS EMISSIONS, INCREASED PRODUCTION EFFICIENCY"

INNOVATION, EMISSIONS AND RENEWABLES

Sofidel is taking leadership on renewables with a 10-year agreement with Meva Energy for the construction of a renewable bio-syngas generation plant at the Kisa site in Sweden. The new plant will supply renewable energy, replacing fossil fuel sources within two years. As well as benefiting from additional green energy, the agreement enables the Group to reduce CO₂ emissions by a further 8,500 tons compared to the current carbon footprint generated by the consumption of LPG. Meva Energy will run the plant, which will have a generation capacity of at least 4.2 MW. Balducci adds: "In the first quarter of 2023 paper production will be fuelled by approximately a third of green energy."

Another highlight is the new onshore wind farm – Alcamo II in Sicily, Italy – where the green electricity produced has been contracted to Sofidel until 2030 as part of a Power Purchase Agreement

(PPA). The contract also enabled the German firm RWE Renewables to build the wind farm, which consists of four Goldwind turbines, without having to rely on state subsidies. In turn, Sofidel comes a great deal closer to sustaining its green energy transition.

SUSTAINABILITY AT SCALE

Chief executive officer, Luigi Lazzareschi is clear about Sofidel's sustainability goals of the future. "At Sofidel, we believe in building an inclusive and sustainable future and, in our commitment to minimize our impacts on natural capital and encourage the transition to a low-carbon economy, we are increasingly focusing on renewable energy," he says. The business is making great progress in countries such as Sweden and Italy. Now, negotiations are taking place in other markets such as Spain, the UK and the US, where there are different challenges to embed low-carbon solutions in place of natural gas.

There are many new innovations and opportunities that could lead to more sustainable ways of getting energy so, according to Balducci, "It is important that they have colleagues working in different countries, who all understand our environmental sustainability goals and can ensure that they remain updated on new innovations." Balducci points out that Sofidel is a global company with a set of global targets, but it remains important that they "act locally" to ensure they can access the opportunities different countries may have to offer. In the UK, that could be biomass boilers, in France it could be working with farmers on waste treatment plants.

This is where the strong Group network comes in to play. Every business in every market is in constant communication about opportunities and challenges, to ensure the global Sofidel approach works at a local level.



"WE BELIEVE IN BUILDING AN INCLUSIVE AND SUSTAINABLE FUTURE AND IN OUR COMMITMENT TO MINIMIZE OUR IMPACTS ON NATURAL CAPITAL AND ENCOURAGE THE TRANSITION TO A LOW-CARBON ECONOMY, WE ARE FOCUSING ON RENEWABLE ENERGY"

4.2 MW

GENERATION CAPACITY OF NEW BIO-SYNGAS PLANT



COMMITTED TO FIGHTING CLIMATE CHANGE

When Sofidel obtained the maximum score – an "A" rating – from the Carbon Disclosure Project (CDP) for its commitment to the fight against climate change, it was an important achievement in many ways. CDP is a non-profit organization that supports investors, companies, cities, states and regions in managing their environmental impact and provides information on environmental performance to more than 590 investors with assets worth more than \$110trn.

The A grade reflects that the company has achieved good results in carbon management but can also govern itself and is able to manage the risks and opportunities associated with reducing carbon emissions and climate change. The CDP questionnaire is updated every year in order to make sure companies remain engaged in furthering sustainable processes.

"The way to keep the CDP "A" rating is to progress on our performance," says Balducci. "To introduce more sophisticated metrics and methodologies for

"WE ENCOURAGE AS MANY PEOPLE IN THE COMPANY AS POSSIBLE TO SPREAD AWARENESS AND WORK TOGETHER"

measuring improvements. To manage risks and focus on opportunities. We encourage as many people in the company as possible to spread awareness and work together." As Riccardo says, reducing greenhouse gas emissions is not at the expense of economic growth. In fact, it boosts performance and competitiveness, bolsters corporate governance and resilience, raises awareness of risk and improves investor confidence.

"It's possible to run an economically successful business and meet ambitious climate protection goals," adds Balducci. He also remains confident that, in the future, most of the energy Sofidel uses will come from renewable sources, while the scale of the company's carbon footprint will be dramatically reduced. ■

KEY TAKEAWAYS Sustainable business growth

Sofidel's emissions reduction targets have been approved by the Science Based Targets initiative (SBTi) as consistent with levels required to meet the goals of the Paris Agreement.

Sofidel has obtained the maximum score – an "A" rating – from the Carbon Disclosure Project (CDP) for its commitment to the fight against climate change.

A Power Purchase Agreement with RWE means green electricity produced by the onshore wind farm Alcamo II in Sicily will be purchased by Sofidel on a long-term basis.

Sofidel has produced 30,000 tons of paper (that's nearly 150m rolls of Rotoloni Regina toilet paper) using clean energy from the Alcamo II onshore wind farm in Sicily, Italy.

A 10 year-agreement with Meva Energy for the construction of a renewable bio-syngas generation plant means Sofidel will replace fossil fuel sources at its Sweden site in two years.

BEING BETTER: HOW HENKEL HARNESSSES 30 YEARS OF SUSTAINABLE THINKING



Jenna Koenneke is director, market strategy at Henkel Adhesive Technologies, a leading solution provider for adhesives, sealants and functional coatings for consumers, craftsmen and industrial applications.

When Sofidel invited Henkel to enter its 3SAwards, the multinational chemical and consumer goods company could call upon 30 years of experience in thinking sustainably, reports *Future*

Sofidel's Supplier Sustainability Award (3SAwards) is bestowed by the group to partners who stand out for their commitment to environmental and social sustainability. Henkel won the 'Procurement & Purchasing' category in 2021. As well as producing laundry, detergent and cosmetics on its consumer side, the other half of the company is a B2B business, managed under the adhesive technologies unit.

"Adhesive sealants and coatings actually get used in hundreds of industries, among others, the adhesives that go into the products for Sofidel," explains Jenna Koenneke, director, market strategy at Henkel Adhesive Technologies.

"Sustainability is anchored as a core element of our company strategy. And that dates back a long time. Henkel actually published its first sustainability report in 1992, exactly 30 years ago, well before a lot of other companies published sustainability reports, and before it was expected [to do so]."

Henkel is taking a specific focus on

the circular economy over the past 10 years. "When we talk about sustainability, particularly in adhesive technologies, we want to have a positive impact on climate," says Koenneke. "We have a lot of discussions around carbon footprint, energy efficiency and water usage. Also, as a chemical business, safety always needs to be a focus for us. So, circularity is part of sustainability, it is something that has been a growing part of the company for a very long time."

USING RESOURCES SMARTLY

As a frequently purchased product, bathroom tissue and kitchen towel are resource intensive. Koenneke explains in detail just how many different Henkel products are used in such products.

"CIRCULARITY IS PART OF SUSTAINABILITY, IT IS SOMETHING THAT HAS BEEN A GROWING PART OF THE COMPANY FOR A VERY LONG TIME"

"There are five to six different adhesives in Sofidel products. The first adhesive is used to make the cardboard roll at the core of the toilet paper or kitchen towel. Then you have adhesive number two that fixes the first sheet of paper of tissue paper to the core. And you'll also have adhesive number three that fixes the last sheet of paper to the rest of the roll. And it's a different one because the first sheet needs to stick really well, and the last sheet just enough.

"Then you have the fourth adhesive that is in between the different plies. Tissue products have several plies to be softer and nicer for the consumer. Then, then you have the fifth product, which is not really an adhesive, more a surface treatment that you use to make sure the tissue feels very fluffy. This can also be used to bring additives to the tissue. For example, for a facial tissue it can carry an active ingredient that is nice to the skin, such as avocado. It can also be a carrier for perfumes. And then the packaging adhesive is the sixth product."

IMPROVING PACKAGING

Following the award, Henkel has been working with Sofidel on a project to further improve packaging. Tissue products are, for hygienic reasons, historically packed in conventional plastic, which raises some sustainability concerns as it may not be possible to recycle this type of plastic everywhere across the globe. But a



humid environment would affect tissue products without the protection of plastic compromising their quality. And, in recent years, consumers have come to increasingly prefer paper packaging to plastic because it is more easily and consistently recycled, but pure paper does not protect the product from moisture.

"The project we worked on with Sofidel was developing a paper coating that is compatible with paper recycling," says Koenneke. "If we bond something together, it either needs to be still recyclable while it's bonded together, or, if we

bond to materials that need to be separated, we need to produce adhesives that allow that separation. Our heat seal coating – the outcome of our joint project – has already been rolled out in several countries, for selected brands."

Henkel is not resting on its laurels. It is working on a fossil-free adhesive range, ensuring raw materials for its products are from renewable sources and 100% bio-based. It is always working to the strictest standards and likes to be ahead of the game. "We don't want to just meet the regulatory standard, explains Koenneke.

"Regulations become stricter and stricter over time. We make sure that we already meet the next stricter proposed standard."

Sofidel's aim is to work with suppliers that share its sustainability vision. As the UN 2030 Agenda for sustainable development encourages, with its partners Sofidel is doing things together to try to reach better goals. ■

FURTHER DETAILS:
For more information, visit
henkel-adhesives.com



MERCER INTERNATIONAL: WORKING TOGETHER FOR SUSTAINABILITY

Future reports that a nearly 30-year relationship with wood pulp producer, Mercer International, makes Sofidel confident that its products are produced as sustainably as possible



Bill Adams (left) and
Uwe Bentlage of
Mercer International

The knowledge that its suppliers sustainably do business is invaluable to Sofidel. As one of the world leaders in the tissue paper production market for hygienic and domestic use, the supply of sustainably produced wood pulp is crucial for manufacturing toilet paper, napkins and kitchen paper. The Canadian Company, Mercer International, is one of the world's largest producers of pulp across the globe, and it has enjoyed a successful business relationship with Sofidel since 1994.

TRANSPORTATION AND SUSTAINABILITY

Transporting raw materials is one of the main contributors to a manufacturer's carbon footprint. As a result, Mercer prefers to use trains to transport its product wherever possible. "Wherever we can, we prefer to use train transport over the truck transport," says Uwe Bentlage, Mercer Managing Director and VP Pulp Sales and Marketing Europe. "In Europe, we adopt a 'local' or 'proximity' approach regarding sourcing raw materials. For example, our wood sources are located primarily in Germany, where we work closely with suppliers in the surrounding area." Mercer believes engaging with the local communities where its mills are located is essential for good business as a corporate citizen.

"Mercer received an award last year for train utilization," says Bill Adams, VP of Sustainability and Innovation at Mercer



"WE CANNOT STAND STILL. CONTINUOUS IMPROVEMENT IS REQUIRED AND THERE WILL NEVER BE AN ENDPOINT"

International. "We have introduced electric locomotives, shunting robots, cranes, and log loading equipment to reduce our reliance on fossil fuels.

"We designed and built dedicated rail trains to transport round wood from suppliers to our facilities. The trains are principally electrically driven and replace trucks and classic railcars that held 40% less volume for the same length of a train; a savings of energy and ultimately cost for us," says Adams.

RESOURCE MANAGEMENT: THE FOUNDATION OF SUSTAINABILITY

Like any responsible company, Mercer International takes steps to manage its resources to ensure sustainability. "One part of our sustainability initiative at Mercer is maximizing resource efficiency. That can mean water consumption, energy consumption or fiber consumption. Our mills are modern, especially in Germany. Using the best available technology, we are

able to minimize our greenhouse gas emissions and use the least amount of chemicals possible," Adams continues.

"Our mills are net exporters of electricity as we use only a portion of the electricity that we generate from biomass fuel sources. Our investments, to be more efficient, provide a competitive advantage by utilizing less energy, less wood per tonne of pulp, or less water consumption. So there's an economic impact as well as the sustainability impact," says Adams.

The biomass fuel Adams refers to is lignin, the matter left over when the cellulose is extracted for the wood pulp. Lignin is burned in a recovery boiler to produce steam to turn a turbine. The efficiency of the modern plant ensures that more power is produced than the mill requires, thus providing excess energy available for export onto the grid. "It's considered a renewable energy source because it comes from a renewable natural resource - wood," adds Adams.

THE JOURNEY OF CONTINUOUS IMPROVEMENT

Mercer International states in its literature on sustainability that the Company is committed to "doing the right thing every day." So is 'the right thing' in the future for Mercer?

"To maintain our leadership in sustainability, we cannot stand still. We know that continuous improvement is required, and

there will never be an endpoint. It's a journey. It's a journey for Sofidel. It's a journey for Mercer," says Adams.

That's just how the world works, especially around sustainability and Sofidel wants suppliers to also think about continuous improvement.

"Today we have exceptional performance, for example, in water consumption. But new technologies, approaches, and products will continue to allow mills to consume less water. In addition, we have made the effort set our sustainability targets to 2030 – especially those related to our decarbonization efforts – validated under the Science Based Targets initiative (SBTi). This validation process is extensive, but that's part of this continuous improvement. As a result, there are higher expectations, not only from our customers but also from society," says Adams.



GOALS FOR THE FUTURE

"Maybe the most important goal for companies, institutions, associations, and citizens, is we should collaborate more to build stronger relationships and bonds like those Bill was mentioning. By working together, we can create joint initiatives on those issues that we are all linked to having a better outcome; because sustainability and the management of our resources matter to us all," comments Sofidel.

"For the future, we have an aspirational goal to have 80% of our wood sourcing coming from certified forests by 2030," concludes Adams. "We already ensure that 100% of our fiber comes from sustainable forests through our due diligence process. Our Mercer team is constantly working with our forest owners and regional governments to understand how we can encourage a higher level of certification for their forests. It will be challenging for us to get to 80%, as many forest owners operate incredible multigenerational sustainable forests, and they may not see the benefits of certification. We continue to engage in discussions and share our perspectives by working with these forest owners. It will be challenging, but we're committed to continuous improvement through collaboration." ■

FURTHER DETAILS:
For more information, visit
mercerint.com

SOCIAL SUSTAINABILITY AND NETWORKING FOR THE GREATER GOOD

Daniela Bernacchi is executive director and secretary general of UN Global Compact Network Italy (GCNI). "Acting sustainably should be integrated into the strategies of companies at all levels," she tells *Future*



The world's largest corporate sustainability initiative' is a bold stake to claim, but the United Nations Global Compact can more than back that up— and has a worldwide network to do exactly that. A voluntary initiative based on member company CEO commitments to implement universal sustainability principles, the Global Compact provides a principle-based framework, best practices, resources and networking events that "have revolutionized how companies do business responsibly and keep commitments to society."

Its Ten Principles are derived from the Universal Declaration of Human Rights, the International Labour Organization's Declaration on Fundamental Principles and Rights at Work, the Rio Declaration on Environment and Development, and the United Nations Convention Against Corruption, and focus on Human Rights; Labour; Environment, and Anti-Corruption.

Here, Daniela Bernacchi, executive director and secretary general of UN Global Compact Network Italy, provides her views on what it means to truly act sustainably and why she is optimistic for the future of sustainable business in Italy and beyond. "I have to be positive. It's in my DNA," she laughs.

What does your role entail?

Daniela Bernacchi: I manage the Italian staff and plan the strategy for the

network reporting to the board I also have an institutional role in representing the organization with our government, at events and congresses at national as well international level. We are connected at a regional level that combines Western Europe and North America, including Canada. I collaborate with the network in this region on joint programs when needed and help organize activities. It's very important for me to have a connection with the Region and local networks, plus the European authorities, on new laws coming up on reporting, sustainability directives and so on.

What is the overall mission statement of the GCNI?

Daniela Bernacchi: We are focused on growing the network and acquiring new members every year. Then, from a programmatic point of view, we are engaged in two main areas: climate and environment; and targeting gender equality, while there is an additional focus on sustainable finance. On that, we collaborate with the CFO Coalition, which was launched in 2019. It's an international program, where all the CFOs of big, prestigious companies gather to share best practice on environmental, social, and corporate governance (ESG) investment, as well as finance principles and indicators to monitor impact on sustainable ESG investment.

Our network also develops activity around the main subject of diversity and inclusion. We have an observatory that started in 2021 where we work together with experts, such as ILO and AIDP and companies to share best practice, and methodologies for companies that are committed to working in an inclusive environment.

How does the Italy division interact with other country networks?

Daniela Bernacchi: Every 15 days, I meet with the other executive directors of our

regions, and we share opportunities for joint activities. Last year, we worked closely with the UK Network, because the UK was hosting COP26, while Italy was hosting the Pre-COP events. So, we collaborated in Milan and Glasgow. On the other hand, there is multi-stakeholder activity, including peer learning groups at a European level on climate and human rights. We have quarterly meetings on best practice and share our experiences.

What are some of the social sustainability topics GCNI is currently addressing?

Daniela Bernacchi: This year, we have been working on a program on sustainable supply chain. That led to a paper [in Italian] called *Sustainable Supply Chains: Opportunities and Challenges for Companies*. One of its dimensions was human rights. Sustainability in supply chains has a lot to do with [de]-carbonization, but also with responsible production, especially when you go from tier one of a supply chain to tiers two and three. Big companies really do have great responsibility, and therefore, procurement shouldn't be based on cost efficiency only because it might result in the risk of abuse of human rights. We are also working on a global/local program to target gender equality to prevent discrimination against women in terms of career opportunities, but also salary gaps and sexual harassment in the workplace. This is an exceptionally social dimension, but we see it a lot in companies.

What does people and businesses acting sustainably mean to you?

Daniela Bernacchi: Acting sustainably should be integrated in the strategies of companies at all levels. So, what we're seeing at Global Compact is that often company sustainability departments are trying their best, but it's not enough if there is not a strong commitment from their CEOs. So, it's important sustainability strategies are integrated in all process from purchasing, to human resources and sales too — it must be a vision that leads all decision-making and

"SUSTAINABILITY IN SUPPLY CHAINS HAS A LOT TO DO WITH [DE]-CARBONIZATION, BUT ALSO WITH RESPONSIBLE PRODUCTION"

strategies in a company. I'm also reminded that our tenth principle focuses on Anti-Corruption. So, procurement has a lot to do with this belief as well. Acting sustainably means employing a sustainable strategy throughout your company. A strategy can be tactical, but it must also be long-term. We all have a responsibility for the way we have destroyed parts of the environment and the ecosystems. So, all companies must engage on the reducing the negative impact they're having. If we see sustainability as a long-term investment, then it will come back to you — because the only companies that will still be here in five years' time, will be the sustainable ones. If you don't work on your operations and on your people, I don't think you ever own your governance and processes. You won't stay competitive. Institutional investors are more likely to give money to companies that are sustainable. Talented young people won't want to join you either.

Are you confident the world will be in a better place by the end of this decade?

Daniela Bernacchi: I have to be positive. It's in my DNA. We are improving consciousness of the risks of not being sustainable, but at the same time, we're not on track for 2030 Agenda. We have to raise the bar, and increase the commitments of not only companies, but other responsible players: institutions, governments and also citizens. Companies can also have a positive role in influencing and educating consumers on sustainable behaviors. But I'm also conscious that there are still areas for major improvement currently missing. 'Business as usual' is not an option anymore. I can understand it can be seen as more profitable, and less costly, but it's not acceptable anymore. ■

GLOBAL SOUTH: WHY THE CURRENT APPROACH TO SUSTAINABLE DEVELOPMENT IS UNSUSTAINABLE

New research by economist **Alina Husung**, a PhD student in Business Administration and lecturer at Linnaeus University in Växjö, Sweden, is challenging conventional approaches to sustainable development in the southern hemisphere. She talks to *Future* about the radical rethink required to tackle climate change and poverty in developing nations

In her dissertation, Alina Husung investigated the twin perils of climate change and poverty, most notably in Sub-Saharan Africa, where the consequences of the former, especially environmental degradation, are intertwined with the lack of economic and social development. Part of the research involved scrutinizing how social entrepreneurs aim to affect socioecological regenerative change, but also how the current approach to sustainable development needs to undergo a transformation.

“Basically, we need to reinvent everything we do if we are to secure a more sustainable future,” says Husung. “I believe that we need a radical social change of guard to address unsustainable lifestyles because we are really running out of time.

“I’m fascinated by the speed and grandeur of many changes that are already taking place, where many people in the global south are making innovative changes to the way they live. And I’m driven by a sort of frustration at the unfairness of the fact that these countries have the lowest greenhouse gas emissions, but they’re the countries that are the most at risk from the adverse effects of climate change.

“How can we deal with these injustices and the adverse effects of climate change? I really struggle with that, and it’s the reason why I’m so passionate about the topic of the ‘north-south’ conflict.”

The conflict, Husung says, is the socio-economic and political divide between the industrial countries of the northern hemisphere and the developing countries in the south. The former are assumed to be the ones with all the solutions (in the form of development aid) while the latter are the ones “lumbered with all the problems”. But, says Husung: “My dissertation illustrates how individuals in the global north can learn from individuals who are already adapting to the consequences of climate change. They can do this by experimenting and trying out new forms of livelihood possibilities. Thus, we can see that adapta-



“WE TEND TOWARDS THIS VIEW THAT PEOPLE IN THE GLOBAL NORTH HAVE ALL THE ANSWERS TO GLOBAL CHALLENGES. BUT INDIVIDUALS IN THE GLOBAL SOUTH ARE MOST IMPACTED BY THE DEGRADATION OF NATURAL RESOURCES”

“INDIVIDUALS IN THE GLOBAL NORTH CAN LEARN FROM INDIVIDUALS WHO ARE ALREADY ADAPTING TO THE CONSEQUENCES OF CLIMATE CHANGE. THEY CAN DO THIS BY EXPERIMENTING AND TRYING OUT NEW FORMS OF LIVELIHOOD POSSIBILITIES”

tion strategies for handling climate change can be developed directly by the people who need them most.”

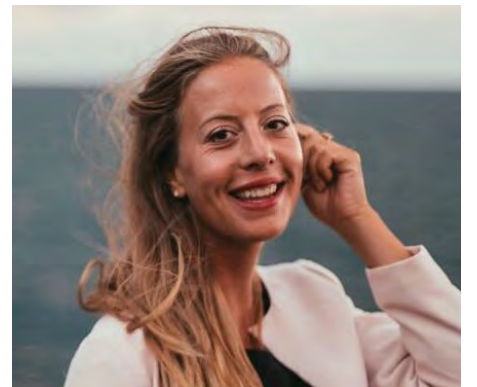
A GRASSROOTS APPROACH

Part of the radical strategic change Husung proposes in her research is for decision-makers and financiers in the global south, who are involved in funding social entrepreneurship, climate adaptation and poverty reduction, to redefine their roles. Entrepreneurship is, she acknowledges, an important part of the transition towards a more sustainable world.

“Entrepreneurship is related to change and newness, which may entail the creation of something novel, doing things differently in a new way. And also taking risks,” says Husung. “Sustainable entrepreneurship can be used to organize the economy in a way that repairs damage caused by humans to the ecosystem by striving towards social and environmental regeneration.”

She suggests making regulations that control relations between the global south and global north more equal, and to ensure such regulations are co-decided. “We tend towards this view that people in the global north have all the answers to global challenges, including climate change. But individuals in the global south are the ones who are most impacted by the degradation of natural resources.

“I think it’s very important that you have the global south or other community members who can offer valuable insights to the global north, like innovating, experimenting, and creating new forms of living, rather than providing fixed solutions. We need to keep that in mind and have sustain-



Alina Husung of
Linnaeus University

able development strategies that include knowledge that is sourced at the grass-roots level, and that includes marginalized perspectives. This shift is necessary because traditional or global-north-centric sustainable development solutions have been shown to be disempowering for the majority of people on this planet.”

This era of cooperation includes funding for development projects. Husung says people in the global south must be able to decide what to do with the project money themselves. “It’s ethically necessary to involve the global south in the decision-making process,” she says.

“Dominant actors in south-north collaborations need to be aware of and really embrace a plurality of voices and the marginalized perspectives that exist in the south, because we need to develop a more diverse and holistic vision regarding how an inclusive and sustainable regenerative future can be achieved.”

“For many people in the global south, climate change is not a problem for the future: it’s a lived reality. It’s the consequence of climate change effects that threaten their everyday lives and put their survival at risk. They depend on the ecosystems that they make a living from, so they are at the forefront of climate change, and they’re already experiencing the changes every day, and they are responding to them in one way or another. And so, the global south can offer valuable lessons to people in the global north,” says Husung.

“It’s crucial that we embrace different views of development than those based on the neoliberal ideology, and to revise forms of development that can work within the planetary limits. That allows for a more biocentric view of the world.”

EMPOWERING LOCAL COMMUNITIES

One of the projects Husung studied as part of her dissertation was a spice plantation on the Tanzanian island of Pemba, located about 50 kilometers from the mainland.

"FOR MANY PEOPLE IN THE GLOBAL SOUTH, CLIMATE CHANGE IS NOT A PROBLEM FOR THE FUTURE: IT'S A LIVED REALITY. IT'S THE CONSEQUENCE OF CLIMATE CHANGE EFFECTS THAT THREATEN THEIR EVERYDAY LIVES AND PUT THEIR SURVIVAL AT RISK. THEY DEPEND ON THE ECOSYSTEMS THAT THEY MAKE A LIVING FROM, SO THEY ARE AT THE FOREFRONT OF CLIMATE CHANGE"

Pemba has some of the most fertile soil in the world and is responsible for the majority of spices exported from Tanzania, including cloves, black pepper, vanilla, cinnamon and nutmeg. Husung investigated Community Forests Pemba (CFP), part of the EU-funded Global Climate Change Alliance Plus, and how it was working to improve sustainability in forest agriculture at a grassroots level, while also empowering communities.

The project looked into the growing land use challenges on the island, rejecting the global north’s traditional solution of clearing forests to open up land for monoculture farming in favour of polyculture, helping farmers to diversify their offering. “Monoculture farming actually leads to poor subsites,” says Husung. “And the removal of indigenous vegetation negatively impacts the fertility of the entire ecosystem.”

“In the Kilimanjaro region, there’s a land use tradition known as the ‘tiger home gardens’ which combines agriculture, forestry and animal farming practices. So, the intention behind the spice project and Pemba Island was to promote similarly

successful land use techniques and adapt them to the island’s unique cultural and environmental conditions. And this is done in the form of polyculture systems, with a variety of trees, crops and spices planted together to grow diverse food systems. As part of the project, the CFP team has assisted farmers on Pemba to move from the monoculture lamentation type of land use, which is very vulnerable to rain patterns and rising temperatures.

“Most of the farmers are smallholders – they don’t own large pieces of land. So, the project also enables them to practise intensive polyculture on their small properties. That really combines natural forest restoration with climate-smart space farming, and it provides an income for the communities.”

FROM ACORNS GROW MIGHTY OAKS

The communities then benefit as a whole because the income can be used for school and medical fees, and remain within the community, creating economic resilience and empowering its people. These are some of the ‘small wins’ Husung describes in her research.

“It’s generally assumed that the big effects require big causes,” she says. “But this assumption overlooks how it is essential to identify, collate and label any small changes that are present that go unnoticed. Striving for so-called small wins and engaging in small changes can put forces into motion that will then support and lead to other small wins.

“As an example: in Penang Island, Lake Ontario, community members use their social networks, including community ties and accumulated knowledge to provide training sessions and farmland for schools and their communities. So, during these sessions, community members collectively share their knowledge and forms of doing things. This is the same thing that made the spice project on Pemba grow, despite the ending of project funding. That shows how important these small wins are.” ■



Farmers on Pemba, which is located approximately 50 kilometers from the Tanzanian mainland

"IT IS ESSENTIAL TO IDENTIFY, COLLABORATE AND LABEL ANY SMALL CHANGES THAT GO UNNOTICED. STRIVING FOR SMALL WINS AND ENGAGING IN SMALL CHANGES CAN PUT FORCES INTO MOTION THAT WILL THEN SUPPORT AND LEAD TO OTHER SMALL WINS"

FROM THE GUT: WHY OUR INTERNAL ECOSYSTEMS AND BIODIVERSITY NEED PROTECTING TOO



A researcher and speaker at GDI Gottlieb Duttweiler Institute, **Christine Schäfer**'s work frequently addresses the damage human over-consumption does to the environment around us. Here she tells *Future* how the ecosystems in our own bodies are now also under threat



Christine Schäfer, researcher and speaker at GDI Gottlieb Duttweiler Institute, is passionate about several subjects that regularly make news headlines and capture the public consciousness in these challenging times. Sustainability, the environment, our changing diets, and key trends in how we are consuming global resources dominate her research.

Much of her latest work links all of these subjects of the human condition and the world around us, together – with the common denominator being the global food system and the impact it has on both the ecosystems around us, but also within our own bodies.

AFFECTING CHANGE

Schäfer studied in Bern, Switzerland, and Valencia, Spain. During her master's degree, she focused on marketing and consumer behavior, a topic she has continued to be fascinated with. Following a trainee program in Johnson & Johnson's fast moving consumer goods (FMCG) division, where she decided, "this is a lovely company, but it's just too big for me and I cannot affect anything," she went looking for new opportunities. She found GDI Gottlieb Duttweiler Institute, an independent think-tank and the oldest organization of its kind in Switzerland.

Six years later, her research focuses on food systems and consumer decisions, "how our needs are changing and how that affects the whole food business." A frequent speaker at industry events, she also organizes workshops, writes reports, and interviews numerous industry experts.

In recent years, Schäfer has conducted significant research on the subject of alternative proteins and reducing our consumption of animal protein. "There is lots of money going that way. And laws are changing to make this protein transformation possible," she says.

WHY WE ARE STILL WHAT WE EAT

So, why does she find that topic, and countless others in the food sector, so compelling?

“Firstly, I just love food and discovering new flavors. Secondly, food impacts us all. We all have an opinion on it. And we can all make a difference [to the environment] by changing our eating habits. Thirdly, food also affects our health or wellbeing. ‘You are what you eat’ is a very old saying, but it hasn’t lost any of its validity. What we eat can also influence how we feel both physically and mentally. It’s fascinating,” she says.

The global food system has a direct impact on climate change too. Food production contributes around 37% of global greenhouse gas (GHG) emissions. “GDI always tries to look at the global food system as a whole because it’s so interconnected and entangled,” she says.

Schäfer, while utterly passionate about sustainability and committed to improving the global food system, is fully cognisant as to how hard it is for people to change habits – or fully realize the consequences of their consumption. “The world is just too complex to fully understand the consequences of all our actions and all the decisions – in their thousands – that we make in our day-to-day life. It’s almost impossible to live truly sustainably, while still having a job, hobbies or maintaining some sort of social life. It just takes up so much time to be informed about everything and always make the more sustainable choice. It’s something we are all struggling with – feeling overwhelmed by how many choices we have to make every day, trying to be sustainable,” she says.

OUR MUTATING MICROBIOMES

Despite what choices those of us in developed nations might make that can impact our diet or even the planet, changes are already taking place within our bodies that we cannot fully control. Schäfer mentions a scientific study of indigenous people from

the Brazilian rainforest, who have not been exposed to so-called Western diets, healthcare, hygiene ‘standards’, or industrial pollution. Stool samples collected from the tribespeople demonstrated their gut bacteria was markedly different and more diverse than that of the majority of the global population. The samples contained double the number of different microorganisms as those of Western city dwellers.

The human microbiome is the collection of all microbes, such as bacteria, fungi and viruses, which naturally live on and inside our bodies. “Our microbiomes are changing,” says Schäfer. “And they’re as fundamentally under threat as the wider

environmental ecosystems around us. We live in a very close partnership with our microbes. So, what we are doing to our outside world with pollution, loss of biodiversity and climate change, we’re also doing to our insides via the food we grow in these outside ecosystems. We consume that and it then becomes a part of our ecosystem – and that’s affecting our health.”

Many so-called lifestyle diseases, such as diabetes, allergies and food intolerances are closely linked to a microbiome that lacks the ‘good’ bacteria we need, says Schäfer. “Our microbes play such an important role in our bodies. They not only help with our digestion or immune response, they also



"MICROBES PLAY SUCH AN IMPORTANT ROLE IN OUR BODIES. THEY NOT ONLY HELP WITH OUR DIGESTION OR IMMUNE RESPONSE, THEY COMMUNICATE WITH OUR BRAIN AND NERVOUS SYSTEM VIA THEIR METABOLIC PRODUCTS. RESEARCHERS EVEN SPEAK OF US POSSESSING AN 'INDUSTRIAL MICROBIOME'"

communicate with our brain and the nervous system via their metabolic products. Researchers even speak of us possessing an ‘industrial microbiome’ because it lacks a lot of the good bacteria we need for our health. After industrialization, the mass production of food and greater convenience, our diets started changing. We eat more meat, food is increasingly processed – and this has had a big influence on our microbiomes.”

So, how do we stop or even reverse this diminishing biodiversity within our own bodies? “Science and research are only at the beginning of this subject. We don’t completely understand it yet because it’s so complex,” says Schäfer. “Microbiomes are as individual as your fingerprint, so it’s really hard to say, ‘You should eat this’ or ‘That’s unhealthy for you’. In a few years, though, science should be able to fully analyze our microbiomes and recommend what we should eat to be healthier.”

SLEEP WELL, REDUCE STRESS, EXERCISE REGULARLY

But there are some do’s and don’ts for a healthy microbiome that seem to be universal, says Schäfer: eat more fiber – although it cannot be fully digested by humans, it is an excellent source of nutrition for numerous bacteria; eat more fermented foods because they contain a lot of the “good” bacteria; and don’t consume so much sugar, red meat, alcohol or processed foods.

We should, says Schäfer, also spend more time outside in nature or petting animals to get in touch with different types of bacteria, sleep well and sleep more, reduce stress, exercise regularly and only take antibiotics if they’re really necessary because they also kill a lot of the good bacteria and not only the ones that make us sick. “It’s not only about food but also about your lifestyle choices. A microbiome that’s out of balance can affect our health and make us sick. It can also affect our mental health because those bacteria that live in our gut produce neurotransmitters. They are constantly in contact with our brains. Our gut also affects the

"I THINK THAT HAVING ACCESS TO AFFORDABLE, HEALTHY FOODS SHOULD BE A HUMAN RIGHT"

way we feel and our mental wellbeing.”

Schäfer tries to remain positive for the future of the ecosystems within us. “I always try to be optimistic about the future, because otherwise, my job would be really hard! On one hand, people are changing their eating habits, because they are starting to realize how the food we eat is affecting us and also the effect that we have on nature, on the climate and on ecosystems. But on the other hand, we still very often eat too much of the wrong foods because they’re available, convenient, and cheap, and not enough of the right foods, because they’re more expensive and take up more time to prepare. I think that having access to affordable, healthy foods should be a human right, but that’s just not the reality for everyone. So yes, sometimes staying positive is a bit hard, but I try to.”

Ultimately Schäfer finds it interesting on a philosophical level how much control microscopic lifeforms can have on their dominant species. “It starts to mess with our conception of ourselves as humans. In the pyramid of life on Earth, humans see themselves on top because we have the biggest brains and therefore think we are the most important beings on our planet. But then, when you think about how we are controlled by these microorganisms, and how big their effect is on how we behave, it makes you reconsider how we should see ourselves. Not as the kings of the world, rather just one part in a larger ecosystem.” ■

FURTHER DETAILS:

For more information, visit gdi.ch/en/food-trends-nutrition-trends

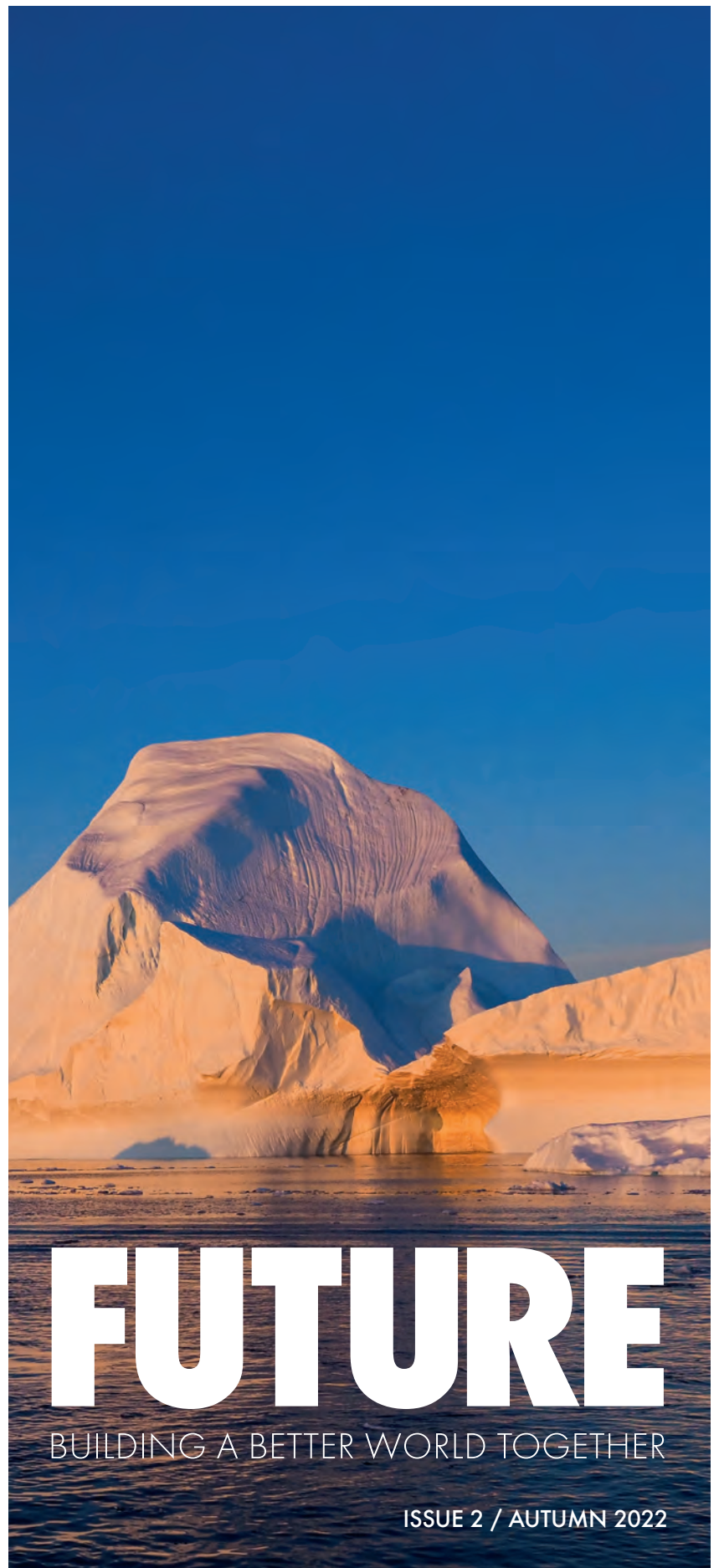
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