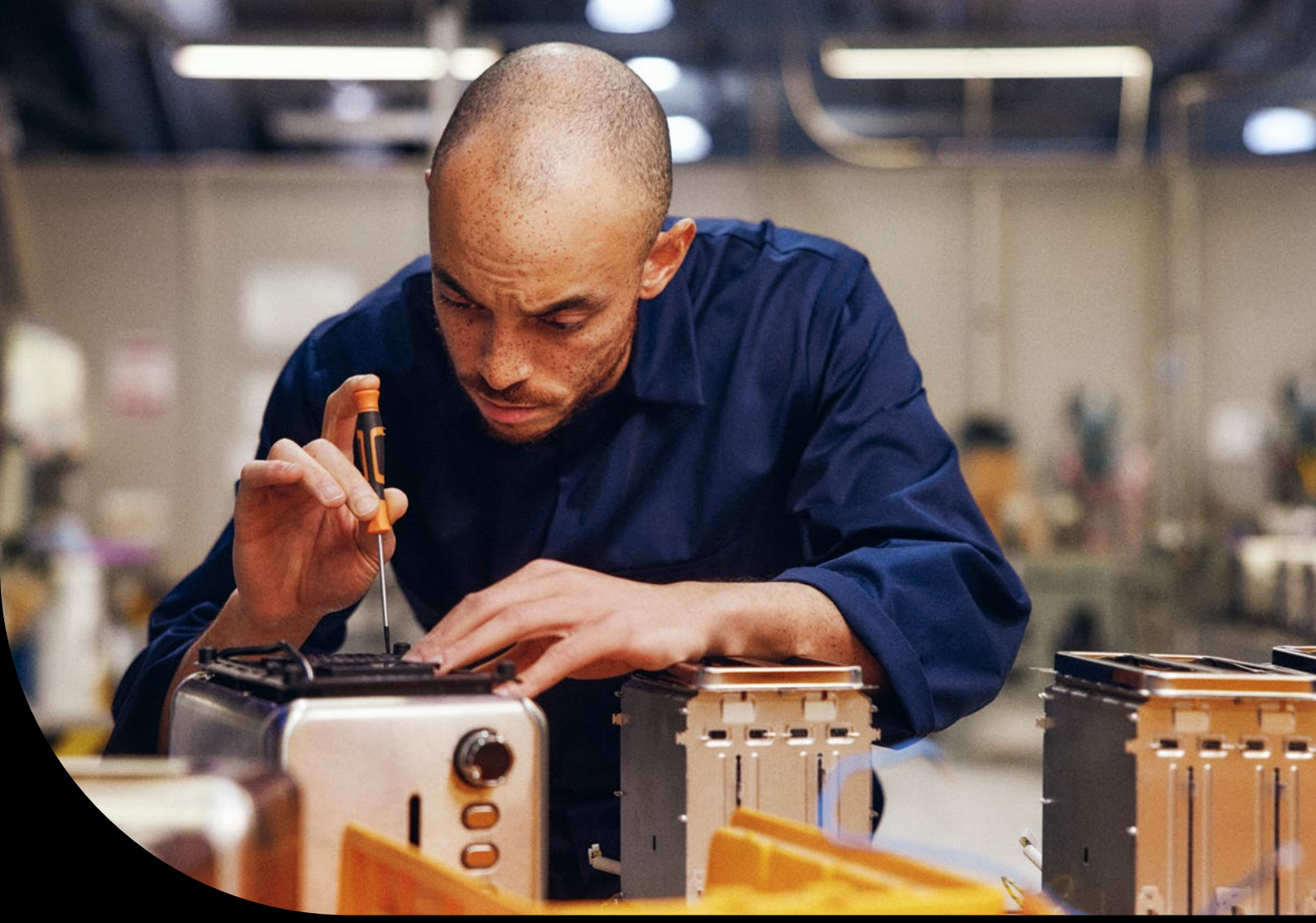


Cheat Sheet

Growing Green

How the planet and your business can both thrive

Sage

Nobody can ignore the challenges of climate change anymore

In 2021, Australia and California have again been ravaged by wildfires, while in Europe, 2020 was the hottest year on record. And the peak of the Greenland Ice Sheet experienced rain for the first time in recorded history.

Nations and states are scrambling to put together a co-ordinated response to these global challenges, and clearly businesses—including manufacturers—must play a role.

But in the cut-throat world of business, who cares? It turns out, everyone!

- **Customers:** Deloitte's latest (2021) annual sustainability report shows that despite the pressure of Covid, which might make us all a bit more self-centred, "ethical and sustainability issues remain a key driver for almost a third of consumers, who claim to have stopped purchasing certain brands due to related concerns."
- **CEOs:** Make UK, the organisation which represents UK manufacturers, has researched Britain's readiness for a more sustainable cadence of business, and in their **Green Skills** report, 2021, they confirm that "62% of manufacturers have identified the skills they require in their business to manufacture goods and products in a more sustainable way."
- **Investors:** In his 2021 letter to CEOs, Larry Fink, Chairman and CEO of BlackRock, one of the world's most successful investment management firms, wrote: "I believe that the pandemic has presented such an existential crisis—such a stark reminder of our fragility—that it has driven us to confront the global threat of climate change more forcefully and to consider how, like the pandemic, it will alter our lives. We are asking companies to disclose a plan for how their business model will be compatible with a net zero economy [and] how this plan is incorporated into your long-term strategy and reviewed by your board of directors." That's right: BlackRock is only going to invest in businesses with a clear environmental strategy.

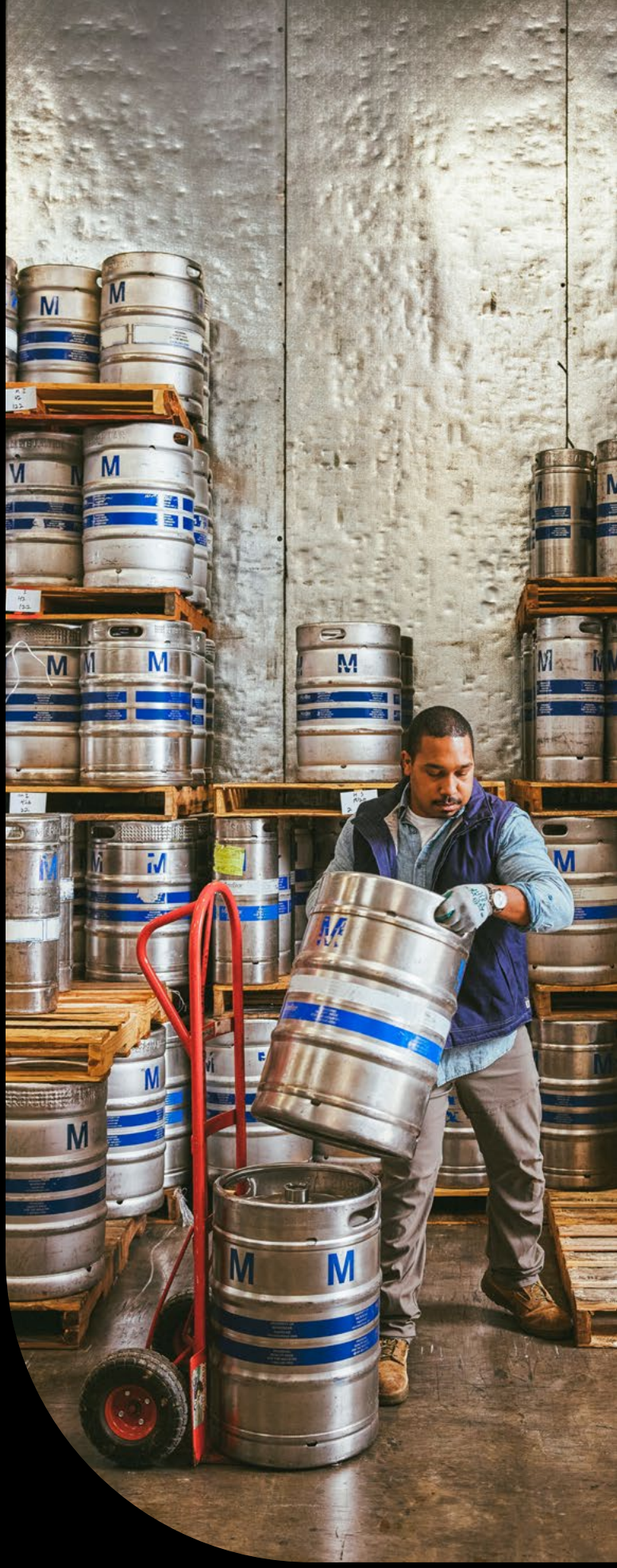
"Being a good human being is good business."

Paul Hawken
Environmentalist & Entrepreneur

What can I do?

Manufacturers of all sizes can contribute to the fight against climate change. More importantly, it now represents good business practice too.

- **Conduct an energy audit:** Most factory estates will find energy-efficient practices which will immediately reduce your cost base and protect the environment too. Lighting, thermostats, weatherproofing and a review of HVAC facilities are all good top targets.
- **Use renewable energy:** There is now a competitive market for green energy targeting businesses. If you don't have the space or resources for your own solar panels or wind turbine, you can comfortably buy energy that is just as green.
- **Buy local:** Green Diary writes, "Transportation of raw material is one of the things which leads to increase in the overall carbon footprint of your factory. Raw material which is sourced from a huge distance or is imported, consume a huge amount of fossil fuels, as well as polluting the atmosphere during travel. Sourcing raw material locally will reduce the carbon footprint of your factory drastically and support the local community too."
- **Reduce and reuse:** Save waste. Manufacturing has traditionally been wasteful. But as other avenues to efficiency are exhausted, it's starting to make financial sense as well as environmental sense to squeeze every ounce of value out of raw resources. Put waste product back into the manufacturing process wherever possible and see whether genuine waste can be used elsewhere.
- **Extend the lifespan of your capital equipment:** Use "predictive maintenance to increase the lifetime value and durability of machines and equipment". For those many machines which like to be kept on 24/7, "lend equipment as part of the sharing economy": is there equipment which you can monetise by sharing across businesses or shifts? All of these are clear financial wins too.
- **Demand green standards from your supply chain:** Industry Today reports, "Choose Eco-Friendly Partners. Manufacturing plants source raw materials from other companies. These companies may package your products or supply you with machinery and equipment. Whatever the case may be, you need to make use of green manufacturing companies instead."



Do it with data

All these efforts matter in their own way. They will help you to reduce your carbon emissions. But doing the job is only half the story. Measuring your carbon performance is just as crucial:

Playing the offset game:
Few businesses will achieve net zero through operational efficiency—most will have to engage in carbon offsetting too. Carbon offsetting is a global system; and systems have rules. You will only be able to account for your offsetting activity if you can fully and credibly record your own environmental footprint.

Reporting in:
Today's stakeholders—investors, partners and customers of all shapes and sizes—will now want to know the trajectory of your environmental performance and your achievements against defined sustainability goals for the business.

Making progress:
With Environmental, Social and Governance (ESG) at the top of the corporate agenda, understanding the sustainability KPIs which move your business forward will be crucial.

Technology is at the heart of extracting this performance data and making it meaningfully available to the business; without adding a new and painful burden of manual labour. ERP systems, the natural home of cross-business reporting, should be the key tool for sustainability metrics, driving:

- **Real-time data:** Connecting to multiple data sources, including emerging IoT systems for increasingly granular green insight.
- **Reporting:** Reliable and comprehensible carbon accounting based on fact.
- **Responsible sourcing:** Using APIs to pull data from businesses up the supply chain.
- **Demand planning:** Consultants Datix write, "Demand planning empowers manufacturers to accurately recognise how future customer demands will affect the future of the business's manufacturing demands."
- **Lean manufacturing processes and waste reduction:** Giving you the data to power new efficiencies.
- **Regulatory compliance:** The data to prove that your operations meet environmental standards. In the words of Gradient Consulting, "The stricter regulations get, the more of a requirement there will be to improve data gathering tools."
- **Demand from customers:** Today's tenders invariably include an environmental commitment. If you don't measure your environmental performance, you are likely closing off whole markets of opportunity.

Sage, powering your connected, green business

Sage offers powerful business management solutions, such as Sage 200 and Sage X3 designed to manage your finances, customers, and business insight in one ecosystem—propelling your business to the next level. With the real-time data, reporting and analytics provided by Sage solutions, your business will have the data to track, record, and report on your sustainability goals, and deliver on your green supply chain and compliance ambitions, without a significant new overhead in effort.

In 2021, Sage have also partnered with Make UK on their report **"Unlocking the skills needed for a digital and green future"**, helping manufacturers recognise what steps are needed for manufacturers to meet the net-zero goal. Together, Make UK and Sage want to guide, inspire, and support manufacturers as the sector seeks the skills to transition towards a digital and green economy through actionable green skills principles.

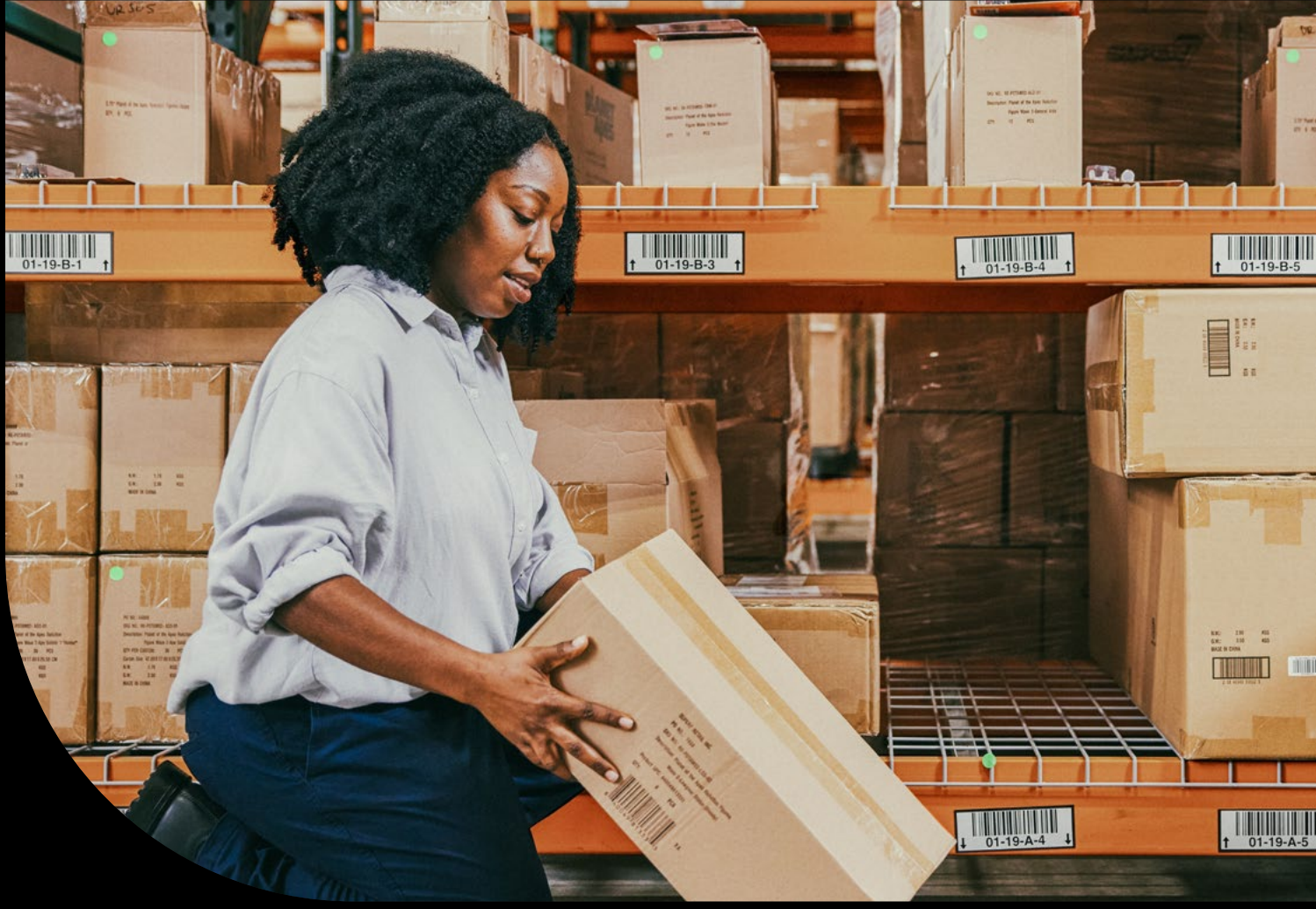
You can also be sure that we're playing our part too. As part of its **"Knocking Down Barriers"** programme, Sage is committed to achieving Net Zero by 2040 across scope 1, 2 and 3 emissions as a business. Sage is also committing to the SBTi (Science-Based Target initiative), the UN climate change Race to Zero and signing up to the UN Global Compact Business Ambition for 1.5°C Pathway.

Sage continues to participate in the annual CDP (formerly Carbon Disclosure Project) and is rated AA by MSCI and low-risk by Sustainalytics, supporting the recommendations of the Task Force on Climate-related Financial Disclosures (TCFD). Our emission reduction initiatives include:

- Reducing air travel and hotel stays.
- Transitioning to renewable energy in all Sage offices.
- Transitioning to electric vehicles.
- Engaging with suppliers on mutually beneficial Net Zero journeys.
- Investing in certified projects to offset any emissions that can't be cut completely.

"Climate change is destroying our path to sustainability. Ours is a world of looming challenges and increasingly limited resources. Sustainable development offers the best chance to adjust our course."

Ban Ki-moon
Former Secretary General of the United Nations



When do I have to be ready for sustainability reporting?

In November 2020, Chancellor Rishi Sunak announced that environmental reporting will become mandatory in the UK for companies of a certain size (listed or large companies) and financial institutions. The foundation of this reporting will be the standards laid down by the Task Force on Climate-related Financial Disclosures, or TCFD. Financial services businesses must comply with TCFD reporting by 2023 at the latest, with large businesses following suit by 2025.

Smaller businesses don't have to worry—yet. We can assume that the route to 2040 will include further regulation and reporting for businesses of all sizes, and smart manufacturers will begin to put the tools in place to meet new reporting obligations in a hassle-free and automated way.

A similar set of standards is operated by SASB, part of the Value Reporting Foundation. "SASB Standards guide the disclosure of financially material sustainability information by companies to their investors. Available for 77 industries, the Standards identify the subset of ESG issues most relevant to financial performance in each industry." Manufacturing categories include everything from extractives & minerals processing, to industrial machinery and goods; and SASB has a "Find your Industry" tool to help.

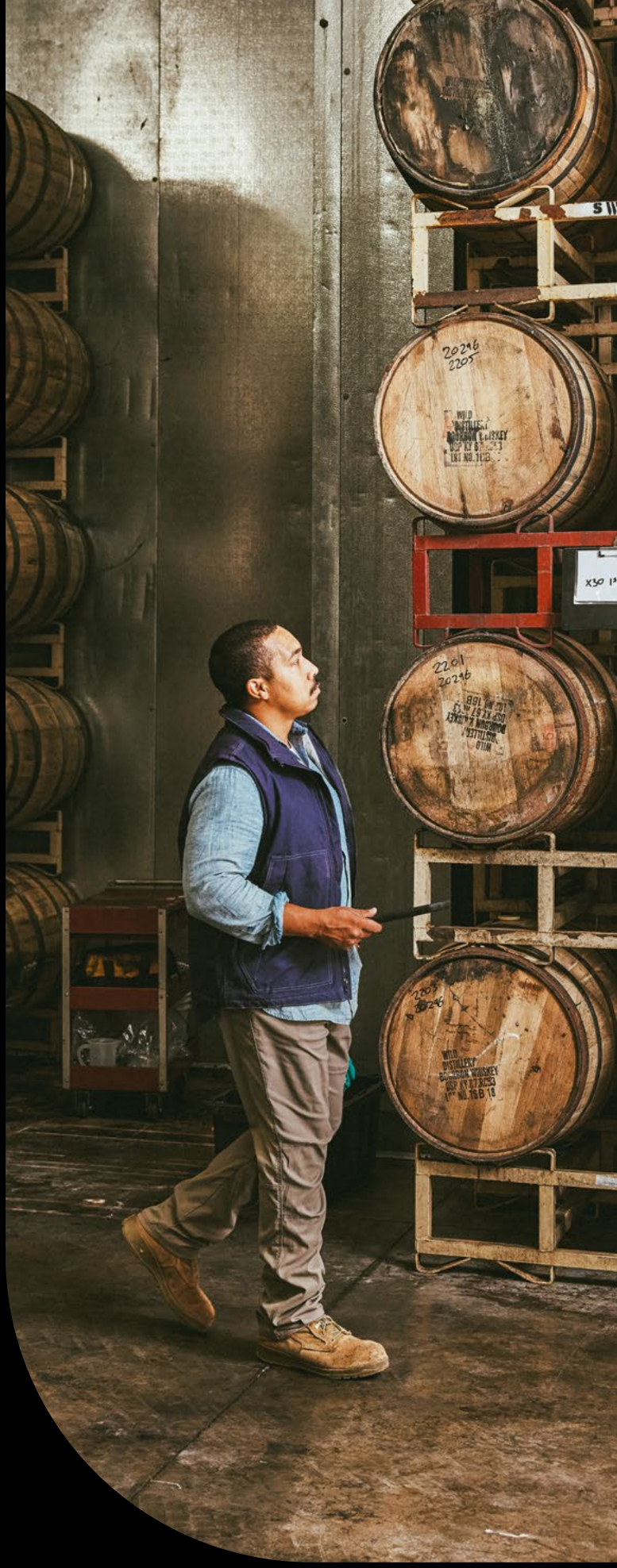
Sustainability is everyone's job

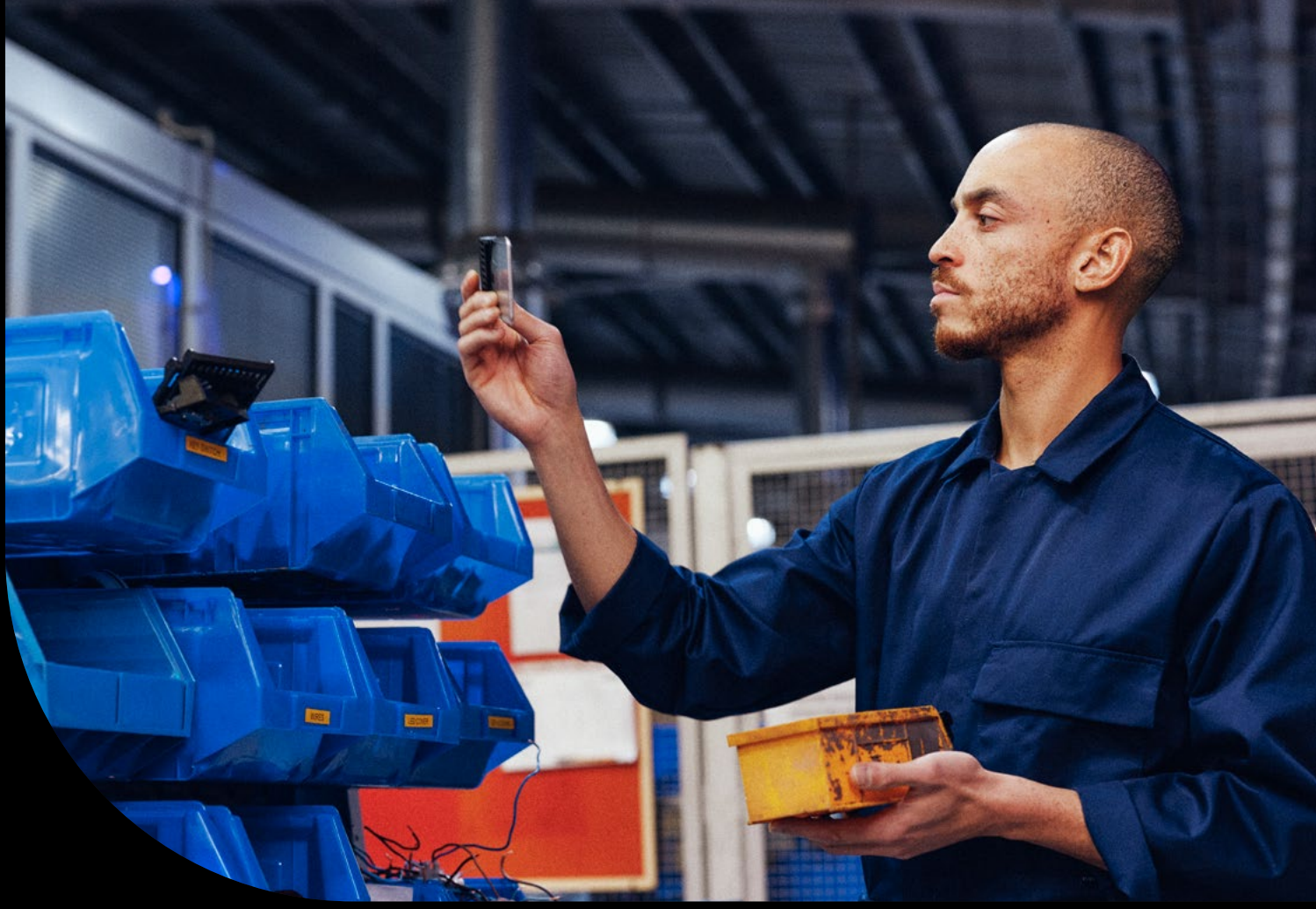
Writing in the Harvard Business Review, CB Bhattacharya, Chair of Sustainability and Ethics at the University of Pittsburgh's Katz Graduate School of Business, says: "Companies that are winning the sustainability battle have created the conditions for their stakeholders to own sustainability. In these companies, sustainability is not someone else's problem."

Everyone has a part to play in delivering sustainability. In his seminal 2008 book, "Making Sustainability Work", Marc Epstein writes "Core stakeholders are visible and are able to impact corporate decisions due to their power or legitimacy." If you have an ESG specialist on your board, you're in the lucky minority; but that's not crucial: Epstein goes on to say that roles with a key interest in sustainability include Procurement, R&D, Operations and Marketing. Don't make it a role in itself: sustainability is transformative, and that means it's everyone's job.

"Companies that are winning the sustainability battle have created the conditions for their stakeholders to own sustainability. In these companies, sustainability is not someone else's problem."

CB Bhattacharya,
Chair of Sustainability and Ethics at the University of Pittsburgh's Katz Graduate School of Business





The future of sustainability

Technology remains at the centre of achieving societies' environmental and sustainability ambitions. Top of the list of innovative approaches to continue to keep an eye on are:

- **IoT:** Sensors embedded in production lines (and throughout our cities) to improve the data on which decisions relevant to sustainability are made in real time and with ever more granularity. The World Economic Forum calls IoT "undoubtedly one of the largest enablers for responsible digital transformation".
- **The digital supply chain:** Visibility of sustainability criteria from farm to fork, mine to market.
- **Predictive analytics and AI:** These are universally transformative technologies which can allow us to change course (as businesses or whole countries) with more agility and insight. But these tools need plenty of raw data in the first place. To quote consultants, Deloitte, "By collecting and analysing data on a wide range of sustainability-related factors—including energy and resource use, greenhouse gas emissions, and supply chain performance—companies can generate the deep insights they need to guide their sustainability-related initiatives and improve their overall resource efficiency. Thanks to the latest tools and techniques, companies can now conduct real-time (or near real-time) sustainability analysis on vast quantities of data in three dimensions of time: past, present, and future."

Glossary

The circular economy
Traditionally, manufacturers made products and, by focussing on profit alone, did not account for the fact that the product would ultimately become waste.

In the circular economy, manufacturers consider resale, reuse, repair and eventual recycle and remanufacture to minimise waste and pollution by keeping products in use for longer and using more components that can be reused and recycled. A good example of regulation supporting the Circular Economy is the UK's "right to repair" law, which forces manufacturers to make spare parts available, so that consumers can fix white goods, rather than scrapping them.

Net Zero
Net Zero, or Carbon Neutrality simply means an organisation or country achieving zero carbon dioxide emissions (the leading cause of global warming) alongside other greenhouse gas reductions. The UK became the first major economy to commit to countrywide Net Zero by 2050, and has just committed to a mile-marker on this journey of 78% emissions reductions by 2035. Manufacturers can expect significant pressure to contribute towards these aims.

There are two ways to achieve Net Zero:

- Cut carbon emissions by using new manufacturing techniques and equipment.
- Offset carbon emissions by investing in decarbonisation strategies so that your own carbon emissions are at least matched by further decarbonisation activities.

Scope 1, 2 and 3 emissions
According to the Carbon Trust, "Greenhouse gas emissions are categorised into three groups or 'Scopes' by the most widely-used international accounting tool, the Greenhouse Gas (GHG) Protocol.":

- Scope 1 covers direct emissions from owned or controlled sources, e.g. fuel usage, company vehicles.
- Scope 2 covers indirect emissions from the generation of purchased electricity, steam, heating, and cooling consumed by the reporting company.
- Scope 3 includes all other indirect emissions that occur in a company's value chain, e.g. purchased goods and services, business travel, investments etc.

A Sage partner

Acorn
Business Management Specialists

https://acorn-bms.com/

Acorn BMS are one of the largest fully accredited Sage Business Partners in the UK & Ireland. We are always thinking ahead. Creating software solutions that are fine tuned to your business needs today, whilst planning for the challenges of tomorrow.

Find out more about
Sage Software Solutions for Manufacturing

Sage