

The high-level approach to achieving real net zero is straightforward: eliminate Greenhouse Gases (GHGs) where you can across the lifecycle; reduce emissions of those that can't be eliminated: substitute more carbonintensive activities and sources with less intensive approaches and renewable energy; and as a last resort **neutralize** only that which is unavoidable, through the acquisition of offsets.

Before taking any action, however, it's important to establish an accurate, baseline carbon footprint for your organization across all scopes. Without this, it is impossible to understand the key risks and opportunities to your business and material issues that will require longer-term planning to address.

Using recognized international standards can help ensure this baseline is calculated accurately and completely the Greenhouse Gas Protocol and ISO 14064-1¹ are two leading examples. An experienced and accredited verifier will help with the gap analysis of your approach from the outset and verify your final baseline while providing assurance that your starting point is correct.

Quantifying scope one and two emissions is most straightforward, as the organization has complete control over the sources of emissions and from where they are acquired. Scope three emissions, however, present a far more significant challenge. These emissions are generated from activities outside of the company's primary operations and cover a vast range of activities upstream and downstream.

In an effort to address this complexity, the Greenhouse Gas Protocol has produced specific guidance for scope three², which describes 15 categories of emissions; eight in upstream value chains and seven downstream to help companies

understand where to focus. Working closely across the value chain is essential to quantify and address scope three emissions – a theme we will return to in the final part of this series.

An accurate baseline carbon footprint will go a long way towards quantifying the major sources of emissions. However, all business risks and opportunities presented by this shift to decarbonization must also be identified, considered and planned. The business impact of achieving net zero should not be underestimated in many business models, it will require a paradigm shift in thinking and must be fully embedded across the organization. To achieve this, successful organizations are adding net zero targets into existing and proven management systems, for example, through the environmental management system ISO 140013 or energy management system ISO 500014.

By using these management system structures, organizations can more effectively:

- Respond to the needs of stakeholders such as investors and consumers
- Manage business risks and compliance obligations, such as customer standards and legislation
- Ensure net zero goals are adequately reflected in the business's purpose and strategy

These standards create a framework that drives continuous improvement through a 'plan', 'do', 'check', 'act' model. They also require lifecycle thinking, which will support the identification of risks and opportunities from design to end of life, enabling net zero targets to be integrated into all decision-making and business processes.

With the suitable business systems in place, the next step is capacity-building across the organization, including the executive team and board. Everyone needs to understand the concept, the need for change, and the benefits of aligning the business with a net zero target. There will almost certainly be a need for new technical competencies, particularly in new products, processes, and business model innovation. Keeping employees informed and excited by progress while securing their engagement and input will be vital to achieving the innovation, action-oriented mindset and shared learning culture that net zero will demand across the business.

Scope one and two emissions, where organizations have control, typically offer an opportunity to make progress relatively quickly and with little or no cost. Early steps will include eliminating wastage in scope one emissions from combustion sources such as heating, fleet management and industrial processes. Reducing scope one emissions from mobile sources is another quick win, achieved by reviewing and reducing business travel in owned vehicles and, where possible, replacing vehicles with those powered by non-fossil fuel sources.

Hydrofluorocarbon (HFC) emissions from air conditioning and refrigeration usage are often overlooked from scope one. Replacing these units can deliver significant gains, as while HFC emissions are generally low in volume, one ton typically equates to thousands of tons of carbon dioxide.

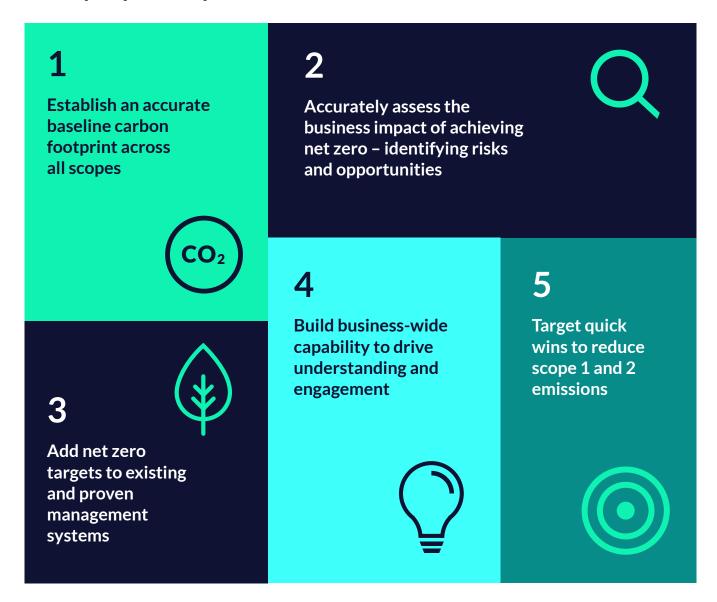
Reducing wastage in scope two emissions through improved efficiency in energy management is another simple step, and where electricity consumption cannot be reduced, substituting fossil fuelgenerated electricity with renewable sources is an obvious and effective step. Even here, however, care needs to be taken. Green tariffs can claim to be 100% renewable by acquiring Renewable **Energy Guarantee of Origin certificates** (REGOs), even when that energy is not renewable. This is because the energy and the REGO do not have to be sold together. To ensure a green tariff is indeed green, look for companies that buy renewables with a REGO through power purchase agreements.

These fundamentals are the first steps on the path towards net zero and will put your organization in the right position to take the more difficult next step - exerting its influence to address emissions where it has less direct control. In our final installment in this series, we will examine the approach to and mutual benefits of net zero collaboration across the value chain and beyond.

- 1 ISO 14064-1:2018 Specification with guidance at the organization level for quantification and reporting of greenhouse gas emissions and removals
- ² The GHG Protocol. Technical Guidance for Calculation Scope 3 Emissions (v1). Supplement to the Corporate Value Chain (Scope 3) Accounting and Reporting Standard. ³ ISO 14001:2015 Environmental management systems —
- ³ ISO 14001:2015 Environmental management systems Requirements with guidance for use
- $^{\rm 4}$ ISO 50001:2018 Energy management systems Requirements with guidance for use



Five key steps on the path towards net zero



How can LRQA help your organization?

LRQA's verification services help put you in control - driving positive change and greater transparency across every aspect of your sustainability agenda. Our sector specialists apply extensive carbon management expertise to both demonstrate compliance and accurately verify your carbon emissions – helping to reduce the footprint of your organization and its wider supply chain.

Delivered against the world's leading standards and schemes, or through a tailored program built around your unique requirements, LRQA's verification services will support your journey to a more sustainable future.

For more information visit www.lrqa.com/us





YOUR FUTURE. OUR FOCUS.

About LRQA:

By bringing together unrivaled expertise in certification, customized assurance, cybersecurity, inspection and training, we've become a leading global assurance provider.

We're proud of our heritage, but it's who we are today that really matters, because that's what shapes how we partner with our clients tomorrow. By combining strong values, decades of experience in risk management and mitigation and a keen focus on the future, we're here to support our clients as they build safer, more secure, more sustainable businesses.

From independent auditing, certification and training; to technical advisory services; to real-time assurance technology; to data-driven supply chain transformation, our innovative end-to-end solutions help our clients negotiate a rapidly changing risk landscape – making sure they're shaping their own future, rather than letting it shape them.

Get in touch

Visit www.lrqa.com/us for more information 866-971-LRQA info-usa@lrqa.com







LRQA 1330 Enclave Parkway, Suite 200 Houston, TX 77077 United States

Care is taken to ensure that all information provided is accurate and up to date; however, LRQA accepts no responsibility for inaccuracies in or changes to information. For more information on LRQA, click here. © LRQA Group Limited 2021.

