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MANAGING Sustainability CHALLENGES

A standards-based approach to minimizing impact, protecting natural resources and innovating for the future.

Foreword

BSI is dedicated to promoting best practices to support sustainable consumption, production and development. Working with organizations of all sizes, we help drive compliance, reduce risk and increase resilience.

Howard Kerr, Chief Executive, BSI

Introduction

Without a doubt, the natural environment is our most precious asset. Recognizing its value is more crucial now than ever before: the stress that humans have placed upon the biosphere through excessive demand and exploitation of natural resource is significant, and in some cases, irreversible. It is our responsibility to protect and restore our natural environment, leaving it in a better state for future generations. But how do we do this? Which standards will help ensure a stable climate and economy, as well as safeguard the wellbeing of all citizens across the globe?

This is the underlying challenge that runs through the UK Government's 25 Year Environment Plan (25YEP) for *England — A Green Future: Our 25 Year Plan to Improve the Environment*. Taken together with the companion-piece Industrial Strategy and the Clean Growth Strategy, the 25YEP points towards a future in which the environment and the economy are in harmony, and where the former underpins the sustainable development of the latter.

The 25YEP identifies 10 key goals it seeks to achieve, spanning everything from wildlife to plastics. Amongst its most fundamental ambitions are plans to:

- Mainstream the concept of natural capital, the full value that nature provides to people and the economy, into decision-making
- Embed the practice of environmental net gain, ensuring that development leaves the environment in a measurably better state than it was beforehand, into housing and infrastructure development
- Ensure high quality green infrastructure, especially in towns and cities, to improve human health, increase resilience and benefit wildlife

The plan also recognizes that key shifts are needed to support more sustainable living by reducing pressures upon essential natural resources, such as water, whilst ensuring we adapt to the consequences of climate change as we address its root causes. Rising to the challenge of resource scarcity will help businesses survive and thrive during any uncertain times. The importance of taking appropriate organizational action to address these issues cannot be underestimated.

To help achieve these ambitions Natural England is working on the development and enhancement of robust but easy-to-use biodiversity and natural capital metrics to measure net gain outcomes. In addition, we are supporting the development of BS 8683, a British Standard for biodiversity net gain. Across government we are exploring how standards can secure the delivery of high quality and sustainable green infrastructure.

The 25YEP puts the UK at the forefront of global thinking about how we can harness the value of nature and the natural environment for people and the economy, whilst ensuring that development creates a positive environmental legacy. Standards will play a key role in helping to realize that ambition ●

Dr Nick White, Senior Advisor at Natural England

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Environmental challenges in business:

Standards as solutions

Nick Blyth, Policy and Practice Lead on Climate Change, Corporate Sustainability and Natural Environment at the Institute of Environmental Management and Assessment (IEMA), outlines how organizations can address key impacts and dependencies on the climate with a standards-based approach.

The Paris Agreement was adopted on 12 December 2015 at the annual Conferences of the Parties (COP) summit. Signatory countries came together to assess global progress in dealing with climate change and establish legally binding obligations for developed countries to drastically reduce their greenhouse gas (GHG) emissions. Civic society, business and a host of NGOs have all played important roles, contributing to the new international consensus.

COP21 in December 2015 famously led to the signing of the Paris Agreement, which sets out a global plan to limit global warming to well below 2°C. Such global plans are badly needed, and International Standards are an integral part of the solution – crucial in supporting the climate change framework.

All countries in the world signed the Paris Agreement, making commitments not just for governments but also reflecting an unprecedented momentum for action from cities, companies and communities (the so called non-state actors). For these important contributors and for their governments, international standards have a unique role to play. They offer a route for building effective frameworks and tools, all developed through international consensus, and are vital in underpinning the growth of new technologies, new markets and economic transformation.

GHG emissions quantification, monitoring and reporting, and promoting good practice in environmental management and design, are just some of the ways in which ISO international standards help organizations address climate change. ISO has produced more than 600 environment-related standards, including those that help to open world markets to clean energy and energy-efficient technologies and support climate change adaptation and mitigation schemes.

ISO standards are already well developed in climate change mitigation, providing credible, accepted approaches that measure and account for GHG emissions. Along with management system standards, they help organizations to plan and take effective actions to reduce GHG emissions.

However, in addition to addressing the causes of climate change (mitigation) ISO international standards are now supporting actors in addressing and responding to the impacts of climate change (adaptation). A UK-led adaptation principles and framework standard (ISO 14090) is near completion, along with developments assessing vulnerability and risk and a framework for climate actions.

Opportunities, however, are not limited to these climate change specific international standards. A wide range of mainstream standards are in development and, with new developing guidance, these too can be future-proofed to make their own contribution to climate change adaptation and carbon reduction.

As we move towards a low-carbon and climate-resilient society, these new standards will help organizations to adapt, transform, communicate sustainability performance and better allocate resources. Climate change is fast becoming a business reality through carbon taxes, procurement practice, supply chain risks and extreme weather events.

Significant governmental and private sector collaboration is needed to increase the impact of all climate programmes, and a standards-based approach is important to enable and support coordinated international response ●

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MANAGING SUSTAINABILITY CHALLENGES

> “...standards will help organizations to adapt, transform, communicate sustainability performance and better allocate resources.”

Engaging with the UN Sustainable Development Goals (SDGs)

SDG 3: Good health and wellbeing

Ensure healthy lives and promote wellbeing for all at all ages[1]

SDG 6: Clean water and sanitation

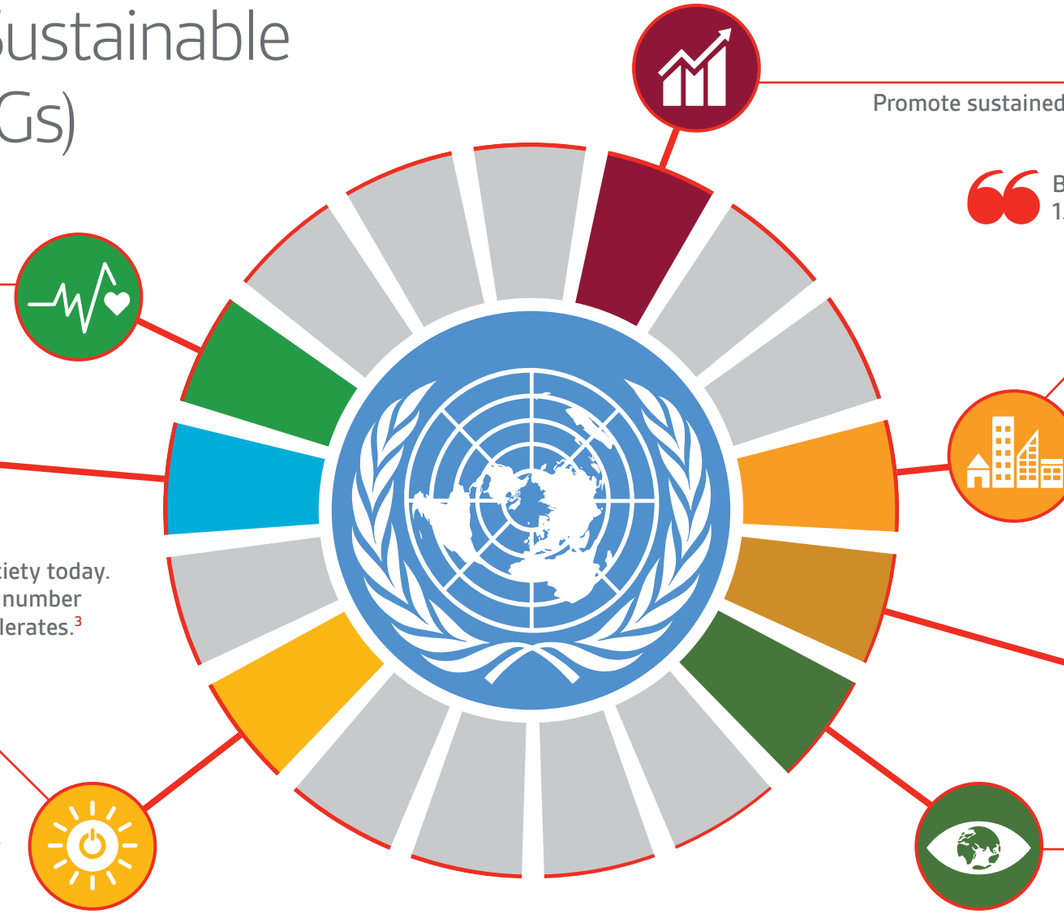
Ensure availability and sustainable management of water and sanitation for all[2]

> Water scarcity is among the main problems faced by society today. It affects around 40 per cent of the global population, a number predicted to rise significantly as population growth accelerates.[3]

SDG 7: Affordable and clean energy

Ensure access to affordable, reliable, sustainable and modern energy for all[4]

> A 48 per cent increase in world energy consumption has been predicted from 2012 to 2040.[5]



SDG 8: Decent work and economic growth

Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all[6]

> By 2030 expansion in circular economy has the potential to create 1.2 to 3 million jobs in Europe alone.[7]

SDG 11: Sustainable cities and communities

Make cities and human settlements inclusive, safe, resilient and sustainable[8]

> Cities consume close to two-thirds of the world's energy and emit more than 70 per cent of the world's greenhouse gas emissions.[9]

SDG 12: Responsible production and consumption

Ensure sustainable consumption and production patterns[10]

SDG 13: Climate action

Take urgent action to combat climate change and its impacts[11]

Become more sustainable with standards:

ISO 14001	Environmental management systems. Enhance your organization's environmental performance, making your day to day operations more sustainable.
ISO 50001	Energy management systems. Measure and monitor your business' energy use, identify risks, cut energy consumption and improve overall performance.
ISO 14046	Environmental management systems. Assess your organization's water footprint, improve its management and reduce environmental impact.
BS 8001	Implement the principles of the circular economy in your organization.
BS 8583	Environmental protection. Incorporate biodiversity considerations into your management systems, to protect and enhance biodiversity through your everyday operations.
BS 7592	Sampling for Legionella bacteria in water systems.
BS 8580	Water quality. Risk assessments for Legionella control.
BS 8551	Provision and management of temporary water supplies and distribution networks (not including provisions for statutory emergencies).
ISO 26000	Social responsibility. Operate your business in a socially responsible way.
ISO 37106	Smart cities. Develop and deliver your own smart city strategies.
PD 8100	Smart cities overview. Adopt and implement smart city strategies.
PAS 182	Smart cities. Classify information from data sets, understand the needs of city dwellers.
ISO 37101	Smart cities. Guidance for community sustainable development.

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The UN SDGs:
A standards-based approach

Louise Scott, Director of Global Sustainability and Climate Change at PwC, is responsible for leading the firm's work in relation to the SDGs. Here she describes how organizations can use standards to help accelerate progress on many of the SDGs.

Climate change; dwindling natural resources and unchecked overconsumption; a growing, increasingly urbanized population; technology that is radically reshaping how we all live and work. These are just some of the major challenges our world will have to solve in the coming decades. That's why it is imperative that the UN SDGs succeed.

Unanimously agreed by 193 UN member states, the SDGs offer both a strategy and framework for navigating the challenges we all face. The 17 goals address core global issues such as:

- Access to clean water and sanitation
- Responsible production and consumption
- Sustainable and clean energy
- Combating climate change
- Resilient industry, innovation and infrastructure
- Safe, resilient, sustainable cities and communities

The goals are set to drive the policy and direction of every government, and, in turn, every major company will need to build them into their operations, business strategy and planning. Doing so makes good business sense; they offer a huge opportunity — the goals are anticipated to generate at least $12 trillion a year in market opportunities and create or maintain 380 million jobs.[1]

Given the size of the opportunity, you might think that every major company was rushing to embrace the SDGs. So far, however, that's not the case. As PwC's recent SDG Reporting Challenge[2] — an analysis of 470 companies globally — demonstrated, just 37 per cent have taken the time to prioritize the most relevant SDGs, whilst the remaining 63 per cent of companies aren't offering any meaningful level of engagement with the goals.

If the SDGs are to be achieved, organizations need to put them at the core of their business strategy. The place to start is by taking a forensic look at which of the SDGs most matter to the business in terms of both positive and negative impact and the opportunity for value creation.

This isn't always easy because the goals (and the 169 targets that accompany them) were written foremost with government in mind. In seeking to prioritize goals, organizations find themselves having to adapt governmental SDG targets to their own context. They also have to weigh up their existing environmental and social programs to see how they align with the SDGs.

In many cases, they face tough decisions about whether they are focusing on the most relevant goals in terms of specific business targets and country-level needs. PwC created its SDG Business Navigator[3] and Selector[4] tools specifically to help companies prioritize goals based on their relevance to their countries and sectors of operation, and then focus on the targets that make most sense to plan activity towards.

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4. https://dm.pwc.com/SDGSelector/

> If the SDGs are to be achieved, organizations need to put them at the core of their business strategy.

Getting SDG priorities right is just the first step, however. In order to deliver real value for the business and greater society, organizations need to demonstrate to employees, investors and other external audiences how they are helping the SDGs succeed — and vice versa. That requires accurate, assessable data for the measurement of SDG performance and robust financial-focused reporting.

So far, most companies have struggled to find a way to meaningfully combine their operational and financial reporting with the reporting of their wider impact on the SDGs. Aligning already-established business standards to incorporate SDG decision-making and measurement could go a long way to helping organizations prioritize the correct goals, convince investors of their worth and embed them at the heart of business performance.

Take ISO 14001, for example. Its focus on environmental management and stewardship directly addresses eight of the 17 goals.[5] ISO 26000, meanwhile, provides specific guidance for organizations to operate in a socially responsible way that could be used to help meet various SDG targets.[6] Then there is BS 8001, a new standard established in 2017 to aid the growth of the circular economy — a core driver of SDG 12 that relates to sustainable consumption and production.[7]

Ultimately, aligning the SDGs with well-established business standards can help demonstrate their legitimacy to the world. In doing so, standards can be a truly valuable partner in a strategy that, if successful, will improve all our futures ●

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Closing the loop:
Aligning to the SDGs with more circular thinking

Our global economic system is dominated by a linear model which relies on large quantities of easily accessible resources and energy. Given the severity of the environmental problems we currently face, this "take, make and dispose" approach to consumption and production is no longer viable.

Moving towards an inclusive and circular economy, one in which resources are recovered at their highest quality, re-used and kept in circulation for as long as possible, is an essential transition that governments and organizations must make.

Circular economy thinking challenges businesses to scrutinize their resource management, in light of the environmental impact of their production and consumption patterns. The circular approach promotes resource and energy efficiency and reduces supply chain waste. It increases resilience and cuts costs, creating new economic and employment opportunities through improved resource use. In fact, according to research from the Waste and Resources Action Programme (WRAP), expansion in circular economic activity has the potential to create 1.2 to 3 million jobs by 2030 in Europe alone.[1]

In this way, circular economics will help businesses tackle several challenges that the SDGs present — managing climate and environmental pressures whilst unlocking new economic opportunities. This includes those which promote economic growth and jobs (SDG 8), and those which ensure clean water and sanitation (SDG 6) and affordable and clean energy (SDG 7), all through a move towards more sustainable patterns of consumption and production (SDG 12).

The difficulty for many businesses is in applying the principles of the circular economy to take advantage of SDG-linked market opportunities. Taking a standards-based approach can help. BS 8001, for example, helps organizations establish a practical framework to create financial, environmental and social benefits — both in the long- and short-term. It provides the guidance needed for businesses to take the crucial first steps towards increasing their levels of sustainability, and then define the pathway towards true circular economy participation.

BS 8001 is also the world's first standard designed to help organizations implement circular economy principles. Whilst this is a British standard, it has global application and is useful to businesses worldwide, regardless of size, sector or type.

BS 8001 provides an eight-stage flexible framework and navigational tool for organizations to simplify and identify what is relevant to them, so they are better able to mitigate their environmental impact.

> "...circular economics will help businesses tackle several of the challenges that the SDGs present."

It enables businesses to properly align themselves with social issues, as expressed in the SDGs, which is crucial if our planet's natural resources are to sustain future generations.

As testament to this, analysis by Ecofys and Circle Economy found that circular economy strategies, including re-use and re-manufacturing techniques in construction sectors, nutrient recovery in agriculture and shared ownership transport models, may deliver emissions reductions that could cut the 1.5°C target in half (as outlined under the Paris Agreement).[2]

The report uses case studies to show how small changes in critical sectors, like industry, agriculture, forestry, construction and transport, have extraordinary potential. For example, construction firms investing in sustainable cross-laminated timber (CLT) products in place of concrete and steel, could result in global emissions reductions of 14 to 31 per cent.[3]

Initiatives such as these cut carbon rates, achieve energy savings, reduce costs and minimize waste. And while the above example is specific to one industry, similar opportunities exist for all sectors. Organizations have the chance to deliver better environmental performance, whilst simultaneously creating a more socially responsible business model — but only if they are prepared to make circular initiatives a core part of that model.

Standards provide the support needed to make this transition. Using a systemic approach, organizations will be able to take practical actions towards circular economy thinking — solving environmental and development challenges so that everyone can thrive in the long-term, on a global scale. Those who lead the way towards the transformations ahead will reap huge commercial benefits, ultimately improving their reputation amongst consumers and policymakers as they help to protect the planet ●

The Welsh Government is in the process of radically changing its approach to Innovation and R&D support in Wales by embracing the Well-being of Future Generations Act, and focusing on areas such as sustainability, circular economy, ecodesign, waste reduction, carbon reduction and equality.

Llywodraeth Cymru
Welsh Government

The Welsh Government identified the circular economy as a key area for Innovation and R&D and approached BSI to examine how it might use BS 8001:2017 Framework for Implementing the Principles of the Circular Economy in Organizations to support its work.

BSI designed a series of workshops and masterclasses for the governmental body's in-house team of Innovation Specialists and for a range of Welsh businesses. The aim of these courses is to use BS 8001 to inform organizations across the country about circular economy principles, and to grow the circular economy in Wales.

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Smart cities:

The digital solution to sustainability challenges

We are undergoing the largest wave of urban growth in history. At the turn of the 20th century, just 15 per cent of the world's population lived in cities. Now it's over 50 per cent – and by 2050, it's expected that 68 per cent of the world's 9 billion people will be city-dwellers.[1]

This ongoing rapid urbanization presents a unique set of challenges and opportunities for towns and cities, and their inhabitants. With more than 80 per cent of global GDP generated in cities, increasing urban populations provide the potential for significant economic growth, innovation and development.[2]

However, these benefits are not guaranteed. To harness the positive effects of a city's growing population, there are many challenges, including resource depletion, rising pollution and overpopulation, that must be addressed. Here, authorities should look to standards to help cities meet their future potential.

The rapid flow of populations into urban areas puts pressure on local infrastructure, with governments being unable to provide services for everyone. Demand for housing increases, leading to overcrowding which puts a strain on already-stretched resources, such as energy and water.

Sanitation issues, including a lack of proper waste disposal methods, create multiple health hazards for citizens – as does air pollution caused by traffic congestion. The risk of environmental hazards, like flash flooding, also increases due to exposure to climate change, to which cities are inextricably linked: cities consume close to two-thirds of the world's energy and emit more than 70 per cent of global greenhouse gas emissions.[3]

If urban planning is not implemented strategically, this threatens the progressive and sustainable growth that is vital to a city's prosperity. Managing the distribution of limited natural resources, as well as managing healthcare, education, city infrastructure and urban mobility, is a major challenge that must be acknowledged and understood by cities.

This requires a clear vision and long-term planning, which is why the concept of the smart city is of increasing importance to city leaders and town planners. The smart city provides an effective solution to the challenges of current and future urban contexts, using digital technology and data to optimize city functions, drive economic growth, improve sustainability and enhance quality of life for citizens. Standards that help authorities to implement smart city concepts, such as PD 8100 and PAS 182, allow governing bodies and organizations to address issues at different levels and better serve the needs of their citizens.

In a smart city, individual city systems are highly integrated, not just within themselves but also with each other. This means they can seamlessly deliver the best for the local area, fully responsive to the needs of their citizens and businesses. What's more, the smart city agenda isn't only for major cities; it's just as important for smaller cities and towns.

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In Barcelona, the city's parks use technology to remotely sense and control park irrigation and the water in public fountains. This program alone increased the city's water conservation by 25 per cent, saving around €472,000 a year.[4] Meanwhile, Copenhagen plans to become the world's first carbon-neutral capital city by 2025, using smart city initiatives such as smart district heating and cooling grids.[5]

Building cities that are smart and sustainable requires effective planning and strategic delivery. Different cities will have different visions, reflecting the needs and circumstances of their different populations. A standards-based approach helps citizens and leaders to adapt and innovate successfully.

Smart city standards provide city leadership with the tools needed to develop and deliver their own smart city strategies. For example, ISO 37106, based on BSI's PAS 181, gives guidance on establishing a city's unique strategy, putting the citizen at the centre and helping the city manage its digital assets in order to create effective services and deliver change. Meanwhile, ISO 37101 allows for the creation of specific sustainability strategies, through the provision of a management system that helps cities to prioritize their goals and actions.

> **“Standards that help authorities to implement smart city concepts, such as PD 8100 and PAS 182, allow governing bodies and organizations to address issues at different levels and better serve the needs of their citizens.”**

As a result, standards can help eliminate risks, cut costs and make it easier for leaders to grow and manage towns and cities effectively, whilst also preparing for the challenges that lie ahead. Urbanization should be viewed as an opportunity to be taken advantage of, improving the lives of residents and helping urban centres to meet sustainable development goals. Utilizing standards will allow individuals and groups to lead the way, as their smart towns and cities become the benchmark of the future ●

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Global water stewardship:

The impact of standards

Water is arguably our most valuable natural resource; a human necessity with a universal ecological impact. It plays a dominant role across economic, social and environmental development.

Water is vital to public health, food and energy security, as well as industrial growth and poverty reduction. Yet water scarcity is among the main problems faced by society today. It affects around 40 per cent of the global population[1], a number predicted to rise significantly as population growth accelerates. And much of the problem is our own doing: more than 80 per cent of wastewater generated by all human activity is released back into the environment without being treated or reused.[2]

Perhaps it's no surprise, then, that sustainable water management features heavily in the UK Government's 25 Year Environment Plan and is embedded within several of the SDGs. For example, SDG 6 is the UN's key water goal and aims to "ensure availability and sustainable management of water and sanitation for all"[3].

Water resilience is also essential to reaching other goals, such as those focused on:

- Ensuring good health and wellbeing for all (SDG 3)
- Responsible consumption of natural resources (SDG 12)
- Climate action (SDG 13)

To progress towards these objectives, a collective effort is needed from businesses and individuals to protect our water sources. Standards have a key role to play in helping organizations minimize their impact. They provide a framework by which businesses can measure and understand the effects of their water use. As a result, business owners can make informed decisions on how to optimize efficient water management, at all levels.

Efficiency standards have already allowed countries like Israel and the United Arab Emirates, where natural water sources are in short supply, to effectively manage their water production and distribution.

Through the development of advanced water management systems, and local education schemes, they have survived drought and turned water problems into business opportunities. In fact, 90 per cent of the waste water in Tel Aviv is now purified and reused across the agriculture and industrial sectors, making it one of the world's most water-efficient cities.[4]

But not everyone is moving fast enough. Due to growing pressure on resources, water shortages represent an immediate risk in many parts of the world. Cities like Cape Town and São Paulo are now in danger of running out of water – and they're not alone.[5] Addressing this risk is vital if we are to safeguard against scarcity and address climate change issues.

It's never been more important for businesses to consider their water management. Standards, like ISO 14046, help flag and mitigate water-related business risks. ISO 14046 allows organizations to assess their water footprint and identify ways to reduce it. By protecting water resources, organizations can reduce operational costs, unlock economic growth and protect the environment.

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> Due to growing pressure on resources, water shortages represent an immediate risk in many parts of the world.

No modern organization can afford to ignore their social responsibilities. Standards such as BS 7592 and BS 8580 support regulations related to water supply, as well as health and safety at work, to prevent or control outbreaks of Legionnaires' disease by testing artificial water systems for legionella bacteria. BS 8551 gives recommendations for providing and managing temporary water supplies and distribution networks to ensure the delivery of wholesome water. By demonstrating a clear contribution to sustainable resource management and global sanitation, a company can improve its reputation amongst customers and key stakeholders.

Standards provide a clear path towards better management of these accountabilities. For example, ISO 14046 supports water footprinting and ISO 26000 provides definitive guidance on social responsibility, while BS 8001 offers a framework for implementing the principles of the circular economy. All can help businesses embark on water reform and lead the way for others.

With a standards-based approach, organizations can develop coherent water management strategies to use this vital resource more sustainably and efficiently. Taking responsibility in this way helps businesses work collectively towards making safe water a reality for all ●

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Sustainable energy management:

A framework for responsible businesses

Global energy consumption has risen steadily over the past century, driven by strong economic growth and an ever-increasing population. This demand puts increasing pressure on our natural resources, whilst continued use of fossil fuels contributes directly to pollution and global greenhouse emissions. And, despite mounting environmental concerns, it continues to rise.

In its 2016 International Energy Outlook report, the US Energy Information Administration (EIA) projected a 48 per cent increase in world energy consumption from 2012 to 2040.[1] A significant change in direction is required to ensure adequate energy supply for all. To minimize environmental impact, and achieve long-term sustainable economic growth, organizations worldwide must take the necessary measures to offset their consumption of energy resources.

Standards, like ISO 50001, can help businesses to implement energy management solutions, increasing their energy saving as they become more climate neutral. A standards-based approach to sustainable energy management enables businesses to measure and monitor their energy use, identify and manage risks, and improve performance through cutting consumption and energy bills. It also promotes corporate social responsibility (CSR), enhancing a company's image and offering a competitive advantage, along with a greater return.

As it stands today, effective energy management isn't just good for business; it's also becoming a requirement. Regulation, such as the UK Government's Energy Savings Opportunity Scheme (ESOS), has put energy use high on the corporate agenda.[2] As such, many businesses have started to invest time and budget into reviewing their current consumption, identifying cost-saving opportunities that will safeguard their business and protect the planet (and its populations) – now and for the future.

To commit to sustainable energy management and comply with legislation where required, organizations must take an integrated approach, embedding the sustainability agenda into their core business strategy. As part of this strategy, a structured energy management system is required.

The ISO 50001 standard can help all businesses deliver this, regardless of size, location or industry. Even smaller companies, with limited financial and technical resources, will feel the practical benefits of introducing organizational change. In fact, The Carbon Trust has found that low and no-cost actions can reduce an organization's energy costs by at least 10 per cent, producing quick returns on investment.[3]

The worldwide application of an international standard like ISO 50001 also contributes to more efficient use of available energy sources, and to reducing greenhouse gas emissions and other related environmental impacts – including waste and pollution. As such, it is inextricably linked to the 17 SDGs.

Efficient energy use relates directly to SDG 7, which aims to ensure universal access to "affordable, reliable, sustainable and modern energy".[4] This is essential in reaching overall climate change mitigation goals (SDG 13). It also:

- Contributes to furthering long-term economic growth (SDG 8)
- Aids in the transition to smart, sustainable cities (SDG 11)
- Ensures responsible consumption of natural resources (SDG 12)

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> A significant change in direction is required to ensure adequate energy supply for all.

Analysis by Williams Sale Partnership (WSP) Sweden shows that in truth, SDG 7 is linked, directly or indirectly, to all of the SDGs.[5] This means that by proactively taking steps to manage energy more efficiently, organizations will help facilitate the achievement of all 17 goals.

In addition to ISO 50001, the ISO 14000 family of standards, such as ISO 14001 and 14006, provide practical tools that enable organizations to set up an effective environmental management system. These standards help firms introduce targeted initiatives for reducing raw material use, energy consumption and disposal costs.

It is clear that such guidance will become increasingly valuable as the environmental context in which businesses operate changes. Organizations that take responsibility to address energy efficiency will reap the rewards and contribute to the behavioural changes that are critical for future generations ●

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Improving your Environmental Management System

Managing Carbon

ISO 14064-1 Greenhouse Gases
Specification with guidance at the organization level for quantification and reporting of greenhouse gas emissions and removals

PAS 2050
Specification for the assessment of the life cycle greenhouse gas emissions of goods and services

Implementation **ISO 14001**

Guidance **ISO 14004**

Evaluation **ISO 14031**

Phased Implementation **BS 8555**

Managing Water

ISO 14046 Water Footprint
Principles, requirements and guidelines

Managing Biodiversity

BS 8583 Biodiversity
Guidance for business on managing risks and opportunities

BS 42020 Biodiversity
Code of practice for planning and developing

Managing Energy

ISO 50001
Energy Management Systems
Requirements with guidance for use

BS EN 16247 Energy Audits
General requirements

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Reduce risk
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We are one of the world's leading providers of training, information and knowledge on environmental management standards.

Our experts provide top quality training for firms at all stages, enabling them to progress their sustainability programmes and translate sustainability into business value.

Our tutors work across the world to transfer their knowledge, skills and the tools needed to promote excellence. World-class quality management standards training can be undertaken at venues across the country, where our experts will:

- Determine how standards can help your organization respond to environmental issues
- Help teams plan and implement management systems with a systematic approach to sustainability
- Embed monitoring, auditing and compliance

Certification

For over a century, BSI has led the way in standards. Certifying with BSI sends a clear message to customers, competitors, suppliers, staff and investors that a business is committed to being the best it can be.

With more than 80,000 certified clients and more full-time assessors than any other body worldwide, BSI is one of the largest and most experienced certification providers. We certify to environmental quality management standard ISO 14001, as well as other vital standards related to sustainability. In addition, we offer the BS 8001 standard, which helps an organization turn the circular economy concept and theory into practical action.

Driven to ensure the long-term health of your company, after certification, we will provide regular visits to assess and ensure compliance, carefully matching our industry experience to your needs, and giving free analysis, benchmarking performance against other organizations in your industry. With our help, your business will be able to deliver sustainable development on a continuing basis.

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www.bsigroup.com/en-GB/our-services/certification/

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