

A global purpose

In September 2015, the United Nations unveiled 17 sustainable development goals to achieve by 2030. Businesses worldwide will play a critical role in meeting them. **Penny Walker** explains why

Over the next few months, I will look at the UN sustainable development goals (SDGs) in detail in a series of articles grouped into six themes: dignity; people; planet; partnership; justice; and prosperity. This first piece (pp 32–34) focuses on dignity and goals for ending poverty and achieving gender equality.

Introducing the goals

On 25 September 2015, the world's governments came together to adopt a set of sustainable development goals that are wide ranging and specific. The 17 goals (see panel, opposite) and 169 associated targets – created through a multi-stakeholder consultation – form a comprehensive description of the environmental and social challenges to overcome if greater sustainability is to be achieved. The goals and targets came into effect on 1 January and are expected to trigger action. 'The SDGs provide a stimulus for individual action on targets that would add up to greater recognised change, even if incrementally, across a very broad set of global challenges,' says Adrian Campbell, associate director at Arup.

Leading names in business and sustainability are already exploring how to use the SDGs. Stephanie Draper, deputy chief executive at Forum for the Future, explains her organisation's experimental approach. 'We'll map all our major projects against the goals and ask questions about what the analysis implies.'

As well as providing a baseline, Draper anticipates this will help staff understand how Forum for the Future's work can accelerate achieving the goals.

Campbell says his team is using the SDGs as a basis to review the consultancy's current sustainable building design strategy. Campbell says: 'As independent consultants, we value the freedom to define how we approach our work. The SDGs are so universal. For once, they allow us to use these as guiding principles for our thinking without constraining how best to advise clients.'

Why are businesses focusing on the SDGs?

There are four main reasons why many companies are engaging with the goals. First, the SDGs, which replace the millennium development goals, are likely to set the context for action by governments and



multi-sector initiatives around the world over the next 15 years. Phil Cumming of Koru Sustainability points out that they provide 'insights into future investment and public policy – and in particular offer a more international view of what sustainability is all about'.

Second, the SDGs can be a benchmarking tool, helping organisations spot gaps and opportunities as Arup and Forum for the Future are finding out.

Third, as Colleen Theron of CLT envirolaw, explains: 'They are a brilliant shortcut to briefing yourself on the non-environmental sustainability issues that you may need to get up to speed with quickly.' Having emerged from a multi-stakeholder process and with the stamp of approval from the UN, the SDGs form a credible systemic survey of the issues, especially when the targets that underpin each goal are examined.

Last, they provide a common language and shared purpose, making in-house and external communication and collaboration easier.

The tools to help

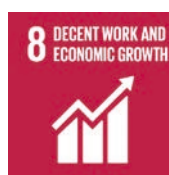
For businesses wishing to use the goals strategically, a free online toolkit called SDG Compass is available. It shows how companies can align their strategies with the SDGs and how to measure and manage their contribution. It was produced by three organisations, the World Business Council for Sustainable Development, UN Global Compact and the Global Reporting Initiative.

- sdgcompass.org – online guidance on using the SDGs in your business.
- sustainabledevelopment.un.org/sdgs – homepage for the SDGs.
- unstats.un.org/sdgs – the ongoing development of indicators to measure progress on the SDGs.



SUSTAINABLE DEVELOPMENT GOALS

17 GOALS TO TRANSFORM OUR WORLD



1. End poverty in all its forms everywhere.
2. End hunger, achieve food security and improved nutrition and promote sustainable agriculture.
3. Ensure healthy lives and promote wellbeing for all at all ages.
4. Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all.
5. Achieve gender equality and empower all women and girls.
6. Ensure availability and sustainable management of water and sanitation for all.
7. Ensure access to affordable, reliable, sustainable and modern energy for all.
8. Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all.
9. Build resilient infrastructure, promote inclusive and sustainable industrialisation and foster innovation.
10. Reduce inequality in and among countries.
11. Make cities and human settlements inclusive, safe, resilient and sustainable.
12. Ensure sustainable consumption and production patterns.
13. Take urgent action to combat climate change and its impacts.
14. Conserve and sustainably use the oceans, seas and marine resources.
15. Protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, halt and reverse land degradation, and halt biodiversity loss.
16. Promote peaceful and inclusive societies for sustainable development, provide access to justice for all and build effective, accountable and inclusive institutions at all levels.
17. Strengthen the means of implementation and revitalise the global partnership for sustainable development.



SDG 1: Dignity

Penny Walker looks at the role of businesses in helping to end poverty and achieve gender equality

1 NO POVERTY



Poverty

The first of the UN's sustainable development goals (SDGs) is to end poverty in all its forms everywhere. Targets focus on halving poverty and eradicating the most extreme examples of it, building social protection systems, establishing economic rights and access to basic services, ensuring resilience and developing policies that help to end destitution.

Business can play a profound role in lifting people out of poverty, other than through the established methods of corporate philanthropy and charity drives. How an organisation conducts its business can make a huge difference – positively or negatively – to the very poorest people. They may be part of the supply chain or want to be; they may be neighbours, impoverished or empowered by the way the organisation uses natural

resources and looks after the local community. CARE International is a development NGO that has worked with businesses to make their operations more 'pro-poor', as well as drawing on expertise and funding to set up projects to help people rise out of poverty.

One of its partners is the mining multinational Anglo American. The company has funded CARE projects as far apart as Brazil and Zimbabwe to help micro-entrepreneurs establish and grow businesses. It also runs a long-standing enterprise development initiative in South Africa, supporting small and medium-size enterprises (SMEs) through a mixture of finance and mentoring. For its own staff with money problems, Anglo American provides a programme to help them manage their debts.

Other companies have looked at personal financial management in their wider supply chains. Nyati Sacco Society is a savings and credit cooperative set up to help current and former security guards in Kenya. Companies can partner with the society to give their lower paid employees access to low cost loans and interest bearing savings accounts.

UK owned drinks company SABMiller and Colombian food processing conglomerate Grupo Nutresa are two firms that have prioritised bringing small, local producers into their supply chain.

SABMiller's Nile Breweries subsidiary in Uganda has trained local farmers in agricultural and entrepreneurial skills, and the farmers in turn supply the company directly with locally grown sorghum, thus increasing their income. Grupo Nutresa, meanwhile, which has nine production plants across South and Central America, works with local farmers to improve yields and quality, increasing the competitiveness of small, local suppliers so that their businesses are on a sounder footing.

In the UK, more companies are signing up to become a living wage employer, with more than 2,000 registered at the end of 2015. The range of organisations that have committed to paying the living wage rate, as set by the Living Wage Foundation, include ready meals business COOK, charity Friends of the Earth, the City of Lincoln Council and the National Grid.

Making a start – poverty

There are myriad ways in which an organisation can make life better or worse for the poorest people, and lots of starting points when it wants to better understand and improve its impact. These include:

- Making an overall assessment – through, for example, the poverty footprint process developed by Oxfam and the UN Global Compact.
- Employment commitments – employee and sub-contractor wages and security of employment. For example, paying the UK living wage through the supply chain and recognising trade unions.
- Support – helping staff through short-term challenges, such as their homes being flooded or sudden illness, which can spiral into a crisis for those without a safety net.
- Accessibility – consider the goods and services the organisation supplies. Are they available to poorer people? Do the poorest end up paying more for the same service because they cannot access the discounts available for paying by direct debit or online?
- Procurement – are new, smaller businesses able to sell the organisation its goods and services or does the procurement process preclude or hinder them?
- Reaching out – what groups could the organisation help by providing access to financial support? Employees? Companies in its supply chain? The local community?



Gender issues

The fifth SDG is to achieve gender equality and empower all women and girls. Associated targets focus on discrimination and equality of opportunity; ending violence, including sexual violence; eradicating practices such as child marriage and female genital mutilation; ensuring unpaid domestic work is valued; providing access to sexual and reproductive healthcare; and achieving equal rights in democratic and economic spheres.

According to the UN, worldwide women in the labour market still earn 24% less than men in comparable work and more than a quarter of countries do not guarantee equal rights for women in their constitutions. As the UN says: 'In many nations, gender discrimination is still woven through legal and social norms.'

Even in the UK there is no room for complacency. The Fawcett Society, which campaigns for women's rights, says the gender pay gap for full time workers in the UK is 13.9% in favour of men. Moreover, 20% of mothers experience harassment or negative comments related to their pregnancy or caring responsibilities from colleagues or their employer. Executive directorships held by women on FTSE 100 boards reached an all-time high of 8.6% in 2015, according to Cranfield University's annual benchmarking report. Dizzy heights indeed.

Taking action

Cosmetics company L'Oréal has been pioneering an approach to gender equality by getting its businesses around the world certified by EDGE (Economic Dividends for Gender Equality). This third party certification aims to ensure that companies have a 'structured and systematic approach to measure, track and close the corporate gender gap'. The EDGE Standard covers not only the pay gap between men and women, but also the under-representation of women in senior positions and the different advancement opportunities and career paths between the genders.

Angela Guy, senior vice president of diversity and inclusion at L'Oréal USA, says gender equality helps to retain employees by meeting their needs and embracing values that are important to them. 'To us, it is not just

about advancing women; it's about creating a culture where both men and women can thrive,' she says. 'It's good for business and for the bottom line. We want to create a workplace that inspires the creativity of our workforce.'

On why L'Oréal USA has sought external certification, Guy says: 'It's not enough to say we're committed to gender equality; we need to always measure it, track progress and hold ourselves accountable. The EDGE certification creates a system of checks and balances to ensure we're constantly identifying ways to foster equality in the workplace and gives us a major competitive edge in recruitment, development and retention of talent.'

The products and services a company supplies can have an impact on gender equality. Take toys. Toys R Us received a lot of media attention in the run-up to last Christmas by announcing that it would no longer demarcate toys by gender in the UK. Spanish company Toy Planet has gone further. Its catalogue has boys pushing prams and girls playing with toy power tools. Some toy producers, GoldieBlox being one, are designing ranges to encourage girls to learn about STEM – science, technology, engineering and maths.

Making a start – gender equality

- Examine current practices – the Equality and Human Rights Commission has an equal pay audit toolkit. In the UK, the government has been consulting on mandatory gender pay gap reporting, and this year it will make a decision on this. EDGE certification looks at policies and improvement plans, as well as monitoring and measurement. Issues to consider include carers leave and the impact of flexible working on promotion.
- Products and services – do they promote equality or reinforce stereotypes?
- Supply chains – are suppliers predominantly from one gender? Can women work with dignity and an equal chance of economic independence?
- Impacts – consider wider systemic impacts of projects and developments. Are women disproportionately affected? What can the organisation do to address this and improve the lot of women and girls?



Another sector looking at gender is fashion. Explicitly citing the SDGs as its inspiration, Italian clothing business Benetton has taken an integrated approach, raising money and awareness through its orange dress campaign. Posters show women in various careers – from doctor to artist, student to athlete, and soldier to mother – and money raised from the sale of the limited edition dresses is going to the agency UN Women to support its gender equality work.

Benetton is also working in partnership with other companies in the ready made garments supply chain to promote women's empowerment and equality. Initiatives include training on gender issues, microcredit and financial support for women, and programmes in factories for female workers and their children to raise economic self-sufficiency. The firm expects to invest €2 million over the next five years in these projects.

Infrastructure and large construction projects have different impacts on women and men. Tom Streater, social safeguards team leader at engineering and development consultancy Mott MacDonald, says: 'At a World Bank financed irrigation project for which Mott MacDonald is providing resettlement planning services, we found that local women were predominantly economically active in selling shea nuts. The reservoir being developed is expected to result in the loss of some trees, which would potentially have an adverse impact on their livelihoods. We explored these impacts through

surveys and focus group discussions with the women to enable us to develop appropriate livelihood restoration measures, such as the promotion of women-only agricultural cooperatives.'

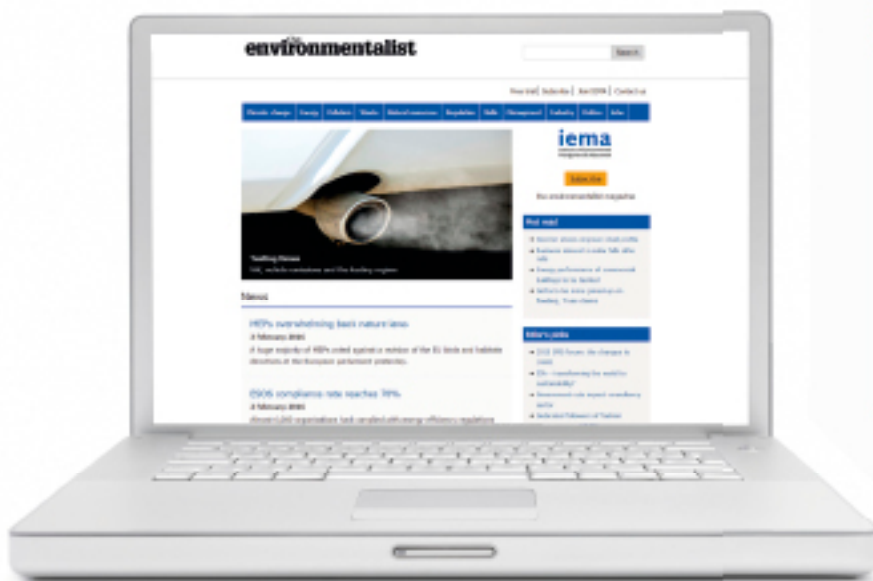
Because multinational lenders demand that social impact assessments for such projects address gender issues, Mott MacDonald offers clients gender action plans. These are intended to reduce any negative effects and make the most of its opportunities to empower women.

Streater says: 'In terms of how this work specifically relates to meeting SDG targets, such as ensuring the equal right of women to own and inherit property, sign contracts and register businesses, we promote the inclusion of women's names on land title deeds provided through resettlement processes. Mott MacDonald also contributes to SDG targets related to ending discrimination, mainly in the arena of labour and working conditions, where we help our clients to develop non-discriminatory human resources policies.'

Other considerations in developing countries include providing: separate bathrooms and changing areas; sexual and reproductive health services; childcare and schooling to free women from caring responsibilities; and safe whistleblowing routes for women to report harassment and sexual violence.

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SDG 2: People

In part two of her series on the sustainable development goals, **Penny Walker** looks at the role of business in helping to cut hunger and promote healthy lives



Zero hunger

The second sustainable development goal (SDG) is to 'end hunger, achieve food security and improved nutrition and promote sustainable agriculture'. Targets include: ensuring safe, nutritious and sufficient food for all; ending malnutrition, particularly among vulnerable people, such as under-fives, adolescent girls, pregnant and new mothers and older people; and increasing food production, while maintaining ecosystems and strengthening resilience to climate change.

According to José Graziano da Silva, director-general of the UN's Food and Agriculture Organisation, nearly 80% of the extreme poor and undernourished people live in rural areas and climate change is making their lives harder. 'Poor family farmers are driven off their land by prolonged drought, coastal fishing communities are losing their homes because of rising sea levels, and pastoralists are forced to migrate in search of land on which their cattle can graze,' he says.

Working the land and seas harder will not solve the problem since unsustainable practices undermine future harvests. Business and smallholders need to get smarter, so this year's hungry are fed without denying those next year.

Making a start

If food is your business questions to ask include:

- Do your suppliers earn a decent living?
- Do practices conserve soil, water and genetic diversity?
- Do they build resilience and reduce reliance on intensive inputs?

Resources to help answer these include Unilever's sustainable agriculture code (bit.ly/22KLQ8E) and the Sustainable Agriculture Initiative's practitioner guide to sustainable sourcing (bit.ly/1UsSdbX).

If you buy, procure or commission food-related services ask whether you help people to make healthy, seasonal choices that support sustainable agriculture. Ask yourself too, what you can do to support the nutritional needs of the very young, very old, teenage girls and new mothers? Also, look to use ingredients and products backed by credible sustainability labels, such as Fairtrade International, Bonsucro or the Roundtable on Sustainable Palm Oil. All are members of the ISEAL Alliance, the association for sustainability standards, and meet its criteria for credibility and impact.

Unilever has a history of devoting considerable resources into research and development to make agricultural practices more sustainable. Its sustainable agriculture code, which sets out targets for suppliers and farms to work towards, was revised last year to include new expectations on land rights, worker health and climate resilience. Sustainable agriculture for Unilever includes switching to drip irrigation for growing gherkins to reduce water use by up to 70% while nearly doubling yields. Now, 24,000 smallholder farmers in India who supply Amora and Maille brands are using the technique and have increased their incomes as a result.

Development NGO Practical Action has also been focusing on micro-practices that can make the difference between livelihoods and subsistence, between farming that progressively weakens the underlying ecosystem and sustainable farming. Practical Action has been helping family coffee farmers in the Peruvian Amazon adapt to the impacts of climate change, including extremes of drought and rainfall, as well as an increase in diseases such as plant rust. The adaptive practices include a layered agroforestry approach in which crops as diverse as cassava and banana are grown alongside coffee, with canopy layers of seed- and shade-producing inga tree, and long-term timber-yielding cedar. Productivity and incomes are up, and the farmers have been able to organise themselves more effectively and gain better access to coffee export markets.

Smarter use of food resources also equates to fairer shares of healthier food. Reducing meat consumption in the developed world and switching to plant proteins has benefits for people's health and the environment, which is why the UN has declared 2016 the international year of pulses. Independent food business Hodmedod's has been reviving the growing of UK pulses such as organic black badger carlin peas, gog magog beans and fava beans. The Suffolk-based company is also pioneering varieties new to the UK and helping its customers love old-style dishes like parched peas.

Businesses outside the food sector can also contribute through their onsite catering facilities: staff restaurants at Jaguar Land Rover, the Scottish parliament, Defra and Decc hold the Soil Association's Food for Life catering mark.

2 ZERO HUNGER



3 GOOD HEALTH AND WELL-BEING



4 QUALITY EDUCATION



Good health and wellbeing

The goal is to ensure healthy lives and promote wellbeing for all at all ages. The targets focus on mother and baby mortality; epidemics, including AIDS, TB and malaria; non-communicable diseases and mental health; substance abuse, including drugs, alcohol and tobacco; road accidents; sexual and reproductive health care; universal health coverage, including for those who cannot pay; hazardous chemicals and pollution; and access to vaccines and medicines.

There are well-recognised, long-established ways of managing and reducing direct risks to a workforce through attention to health and safety. Some companies are finding ways of going beyond this into wider wellbeing. Professional services company EY's approach to employee wellbeing has, at its core, the capacity to use feedback from health providers to ensure it is targeting the most pressing problems.

The Health EY programme encompasses training in mental health first aid as well as a range of more general health topics, such as posture and safe exercise. It has evolved by working with teams in HR, learning and development, procurement and reward functions, and is part of standard induction and management training. EY's mental health network has grown to 300 people. Amy McKeown, senior manager at EY UK who is responsible for driving the work, says: 'If you're planning on looking at wellbeing, make sure you understand what's already in place and think through what you want to do and why. Make sure there are support structures in place and pay attention to how it all links together.'

Charity Business in the Community (BitC) recognises that mental health is one of the biggest threats to the wellbeing of businesses and society. Its campaign, Time for Change, calls on every UK organisation to demonstrate their commitment to mental wellbeing by signing a pledge to tackle the issue in their workplace. So far, 393 organisations have done so. Founder members of the campaign include: American Express, BT, Bupa, Friends for Life, Mars, National Grid, P&G, Royal Bank of Scotland and Santander.

Companies including Crossrail and Thames Water have approaches that share learning and improvement up and down their supply chains too. Every supplier to Thames Water has access to the same confidential one-to-one annual occupational health check as employees of the utility company. This gives them the knowledge to make lifestyle changes that can improve their health. The Health Maturity Model, which Thames Water developed with its suppliers, can be used by any organisation to self-assess. Crossrail's learning legacy website (bit.ly/1SZZ1Nv) shares what has been learned on the project about reducing risks and promoting good health across a multilingual, multicultural workforce.

Different countries have different health priorities. In Nigeria, businesses have been involved in a long-term push to treat and prevent malaria. Nigerian Breweries, part of the Heineken group, has workplace programmes on malaria and other communicable diseases, including rapid diagnosis and supplying anti-mosquito bednets to employees and their families to reduce the chance of infections. The business works closely with the Heineken Africa Foundation to support wider communities near breweries in similar ways.

Making a start

Health and safety is among the more mature topics of interest in the SDGs, so begin by looking at what your organisation already has in place. Both Thames Water and Crossrail offer models for organisational self-assessment. New areas of interest include mental health – visit mhfaengland.org for mental health first aid courses. Business in the Community has developed its Workwell model (bit.ly/1qZDBVI). Its four segments cover employer actions to help staff make informed, healthy choices as well as the need for people to take responsibility for their own health and wellbeing through an approach pioneered by the New Economics Foundation.

Look beyond the boundaries of your business and site to suppliers, subcontractors and employees' families. Consider the impacts of your products and of your lobbying activities. In countries with limited access to healthcare for the poor, consider how to contribute to health equality.

3 GOOD HEALTH AND WELL-BEING





Quality education

This goal aims to ensure inclusive and equitable quality education and promote lifelong learning opportunities for all. Targets focus on ensuring that girls and boys, women and men have access to education and training in safe, non-violent and inclusive environments. This includes the pre-school stage; free, quality primary and secondary education; and affordable, post-secondary education and training.

Gender disparities and equal access to opportunities for people with disabilities or from marginalised groups are also being tackled, with targets for scholarships and teacher training for developing countries and small island states. Basic literacy and numeracy, as well as knowledge and skills specific to promoting sustainable development, are given particular attention.

The UN says that a child born to a mother who can read is 50% more likely to live beyond the age of five. In sub-Saharan Africa and south and west Asia, nearly 25 million children leave school before completing primary education. However, great strides have been made globally in early years education, with 90% of children now attending primary school. But the poorest and most vulnerable still miss out, typically stopping education early to earn because of disability, gender inequalities, conflict or displacement.

Tata Power, part of the India-based multinational, supports literacy in the communities it operates. The programme is run with local NGOs using a bespoke course and materials developed by Tata Consultancy

services. The literacy and numeracy classes are intended to help women run small businesses and households more effectively and make them less vulnerable to fraud. The initiative had grown to 290 centres by the end of 2015, with nearly 18,000 women participating.

Banking group HSBC is also funding support through specialist NGOs. One scheme, the Opportunity Partnership programme, focuses on unemployed young people in the UK and aims to support 25,000 people over three years. As well as a funding package of £30m, HSBC staff are involved too. Volunteers provide advice on CVs, interview techniques and managing money. There is also a four-week vocational training programme to build skills relevant to work in financial services, with the opportunity to be interviewed for a permanent post.

Simon Martin, head of global corporate sustainability at HSBC, says: 'The education programme focuses on helping young people achieve their potential – supporting disadvantaged children and providing financial education and scholarships. It is delivered in partnership with charities that are experts in their field and have a proven record of working in the areas they serve.'

In a similar vein, as part of its global Skills to Succeed collaboration, consultancy Accenture has developed a free online training course for young job seekers. The Skills to Succeed Academy comes with a smartphone app and interactive and downloadable exercises.

Skills to Succeed is integrated into Accenture's businesses around the world, with its consultants using their professional skills (for example, in online learning) to support many of the individual initiatives. Some are also benefitting from financial contributions and volunteering activities. Working collaboratively, Accenture has provided 1.2 million people with skills to build a business or find a job since the programme started in 2010. The new goal is to increase that number to three million by 2020.

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Making a start

How could your business support basic numeracy, literacy and employability skills?

Traditional fundraising and charitable donations help: charity Mary's Meals supports basic education by ensuring food is provided at school, tackling two goals at the same time (marysmeals.org.uk), while non-profit organisation Valentino Achak Deng Foundation (vadfoundation.org) is running successful schools in South Sudan.

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SDG 3: Resources and consumption

Penny Walker looks at firms innovating to conserve resources and move society towards more sustainable consumption, in the third of our series on the SDGs

6 CLEAN WATER AND SANITATION



Clean water and sanitation

More than 40% of people worldwide are affected by water scarcity, a figure that is projected to increase as global temperatures rise, according to the UN Development Programme. At the same time population increases will force people into more densely packed communities, many of them exposed to the risks of disease due to the lack of adequate sanitation. The strain water shortages is expected to place on local ecosystems and biodiversity will be immense. Add to this the prospect of water wars, as communities and countries fight over the dwindling supplies, and the need for UN's sixth sustainable development goal (SDG) appears ever urgent.

Its aim is to 'ensure availability and sustainable management of water and sanitation for all'. Targets cover safe, affordable drinking water and access to sanitation and hygiene, improving water quality and its efficient use, and reducing the number of people suffering from the effects of water scarcity. Protecting and restoring water-related ecosystems and reducing pollution are also covered. In short, the sixth SDG is about quality and quantity; about human health and thriving ecosystems.

Pharmaceutical giant GSK's work on water addresses many of these issues. Its PHASE approach has promoted hygiene and improved sanitation in developing countries since 1998. Early work concentrated on diarrhoea-related disease associated with poor hygiene.

Recent programmes in Ecuador and Ethiopia have focused on oral health. GSK has piloted ways to reduce water use in its supply chain too, rehabilitating water bodies in rural Indian communities that supply wheat, barley and milk for Horlicks.

Matt Wilson, GSK's head of global environmental sustainability, says: 'Our involvement in water and sanitation activities stretches back a long way. As a business, we are also working hard to cut water waste across our operations and we've achieved a 25% reduction in water usage since 2010. We are now focusing on the bigger challenge – aiming to reduce our water impact across our value chain by 20% by 2020. This includes use of water in raw materials, logistics and how patients and consumers use our products.'

Clothes business Levi Strauss has not only been innovating to reduce water use in making a pair of its jeans, it has run workshops for competitors to share its Water<Less know-how. Water used to grow cotton, effluent standards and advice to consumers to wash jeans less often also form part of a comprehensive approach by the San Francisco-based company.

You might expect water companies to take a keen interest in this goal – they have responsibilities to supply this basic life-support need, yet they do not control how others use these resources. Working collaboratively is essential for successfully managing and protecting catchments. Wessex Water and Severn Trent Water both operate catchment partnerships, working with farmers, landowners and stakeholders to protect drinking water quality, as part of Defra's response to meeting Water Framework Directive targets.

Drinks company Diageo has been taking a strategic approach to water stewardship. Its water blueprint recognises that a whole-watershed approach is needed, and that this requires action in the community as well as at its site. This includes replenishing water-stressed areas so that there is no net-take of water in the final products, and helping suppliers protect resources. *the environmentalist* reported in March how another drinks company, Bacardi, had reduced water consumption at its plants.

Making a start

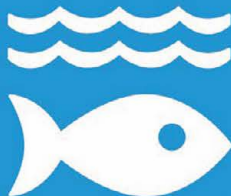
These tools can help organisations start to address their water footprints:

- The Carbon Trust has developed a standard for water (bit.ly/1Oab0aq).
- CDP (formerly the Carbon Disclosure Project) has a water programme (cdp.net/water).
- UN Global Compact CEO Water Mandate offers a water stewardship toolbox (ceowatermandate.org).
- WASH4Work helps organisations act on water, sanitation and hygiene (wateractionhub.org/wash4work).

6 CLEAN WATER AND SANITATION



14 LIFE BELOW WATER



12 RESPONSIBLE CONSUMPTION AND PRODUCTION



Life below water

The 14th SDG is to conserve and sustainably use the oceans, seas and marine resources for sustainable development. There are targets on pollution (including land-based sources), ecosystems and overfishing, ocean acidification, and conservation zones as well as perverse subsidies that encourage damaging fishing practices. Support will be given to small-scale, artisanal fishers and less developed, small island states, while improvements will be made to international scientific knowledge and governance.

Fish

Marine Stewardship Council (MSC) certification is widely recognised: the fish tick logo has been on products in UK supermarkets since 2001 and many companies now have certified products.

French retailer Carrefour has committed to sustainable fisheries management and the MSC approach. In its stores in France, 50 own-brand products are MSC-certified. It has stopped selling at least ten threatened species, including eels and skate. It is also supporting an artisanal fishery, which holds more than 60% of the sole quota in the Eastern Channel and North Sea. Catering businesses have also embraced MSC certification. Brakes Group provides catering supplies to pubs, restaurants, hotels, schools and care homes and carries a number of lines from MSC-certified fisheries.

But it is not only the fish supply chain that can take action to support SDG 14; there is a role for other businesses in conserving and sustainably using the oceans, seas and marine resources.

Shipping

The shipping sector has big impacts on the marine environment, including pollution, and not just during use. Maersk Group has been wrestling with how to scrap its ships responsibly but only a tiny number of yards worldwide can meet its demands. The Danish company has been working with yards in Alang, India, to upgrade scrapping facilities as well as with other ship owners in order to improve how the sector deals with unwanted vessels. This all-encompassing approach is also apparent

in Maersk's support for the Sustainable Shipping Initiative (SSI). The SSI priorities include establishing responsible governance of the oceans and promoting the use of marine spatial plans. These seek a more rational use of the seas to balance demands for development with the need to protect the environment and bring about beneficial social and economic outcomes.

Farming

Land-based sectors have a big impact on oceans too. Agriculture is a main source of land-based nutrient pollution in the Baltic Sea, for example. In response, HELCOM (Helsinki Commission – the Baltic Marine Environment Protection Commission) has established working groups on marine spatial planning, fishing and agriculture. Meanwhile, WWF's Baltic Ecoregion Programme is working with other NGOs, government bodies and businesses to promote a sustainable Blue Economy for the Baltic. It runs the Baltic Sea Farmer of the Year award, rewarding farming businesses that reduce nutrient run-off. Juris Sprukulis won the Latvian heat in 2015 for reducing pollution through careful recycling of manure as fertiliser.

Finance

Standard Chartered bank recognises that its biggest impact is through the businesses it finances. It adopted the Equator Principles in 2003. Ship breaking and fisheries are among its 14 position statements on key sustainability risk issues. Through these policies, the bank aims to discourage poor practice and support the good.

Making a start

- Marine Stewardship Council (msc.org).
- Aquaculture Stewardship Council (asc-aqua.org).
- Marine Conservation Society's Good Fish Guide includes a 'fish to avoid' list (goodfishguide.org).
- Sustainable Shipping Initiative (ssi2040.org).
- Sustainable Agriculture Initiative Platform (saipatform.org).
- Equator Principles (equator-principles.com).



12 RESPONSIBLE CONSUMPTION AND PRODUCTION



Responsible production

Goal 12 aims to ensure sustainable consumption and production patterns. Targets include overarching commitments to sustainable consumption and production, with specific priorities including food waste, chemicals, tourism and fossil fuel subsidies. Company reporting is also seen as critical. Every business can do something to help meet SDG 12. Dealing with food waste, improving the sustainability of tourism, making better use of materials are three examples.

Food waste

Between growing and eating, about one-third of food produced for human consumption is lost or wasted. Food waste is number 12.3 of the 17 SDGs and a coalition of businesses, under the banner Champions 12.3, has been established to support it.

Tesco has introduced a Perfectly Imperfect range of fresh fruit and vegetables to make better use of edible crops. Mark Little, head of food waste reduction, has identified 11 other ways that the company is working to reduce waste. These include donating surplus produce to food banks, changing the specifications for fresh items, and encouraging innovation through a competition run in partnership with waste body Wrap and government agency Innovate UK. The 2016 winner was the Use-By-Mate app, designed by Wales-based THAW, which Tesco is trialling. The app provides recipe ideas and reminders to help consumers reduce waste.

Meanwhile, Swadlincote in Derbyshire is receiving £1m from Sainsbury's over 12 months to invest in ways to cut food waste. The aim is to cut it by 50% and save each household £350 a year. Paul Crewe, head of sustainability at Sainsbury's, says: 'Food waste is an issue affecting us all, so remember to look at the whole chain to see where it can be avoided. Last year Sainsbury's launched Waste less, Save more, a £10m investment to help customers save money by reducing the amount of food they throw away. We've done this alongside reducing waste in our own operations, and

are continually growing the number of local charities we work with to redistribute surplus food.'

Tourism

Target 12.b focuses on understanding, monitoring and maximising the positive benefits to local communities from tourism. Holiday business TUI Group worked with sustainability charity Travel Foundation and PwC to look at the impact of tourism in Cyprus using the consultancy's Total Impact Measurement and Management approach. The study found surprisingly small negative environmental and social impacts. Direct positive economic impacts included wages for people employed directly in hotels and tax receipts for the government. It also found that seasonal work and placements gave young people work experience, providing skills and employability over and above what can be learned in formal education. This finding led TUI to invest in hotel schools and work placement schemes in Morocco, Turkey, Greece, Dominican Republic and Tunisia.

Tourists' discretionary spending had a slightly greater economic impact than the procurement choices made by hotels. TUI is following up insights from the study with pilot projects in Cyprus to encourage customers to book excursions with local providers and to increase the proportion of food that hotels source from producers on the island.

Jane Ashton, TUI Group's director of sustainable development, has advice for companies in the tourism and travel sector. 'The first place to look are the hotel and destination sustainability certification programmes recognised by the Global Sustainable Tourism Council, for example Travelife,' she says. 'This will help you and your suppliers understand impacts, so you and they can manage and improve the most significant ones.'

Materials

Jaguar Land Rover (JLR) is aiming for zero waste across its operations by 2020, and in 2015–16 saved around 50,000 tonnes of aluminium or 500,000 tonnes CO₂ equivalent emissions. The automotive company wants 75% of the aluminium in new vehicles to be from recycled and closed-loop sources by 2020. The REALCAR (recycled aluminium car) is its showpiece. This will use a new grade of high-strength, recycled aluminium the company has developed with support from Innovate UK and supplier Novelis.

Ian Ellison, sustainability manager at JLR, says: 'We wanted to use aluminium because it is light and makes the car fuel-efficient. But making new aluminium is very energy-intensive, so would we also get the lower CO₂ results we wanted? That tension meant we had to use innovation to close the loop. It required collaboration, and that can be hard. So identify your most critical material – the non-trivial problem that you need to solve. You'll end up innovating technically and organisationally.'

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Making a start

Begin by looking at the detailed targets for specific issues relevant to your business. As a baseline, measure and report on the consumption of materials in line with GRI 4, the sustainability reporting guidelines. These include environmental indicators on total materials used, percentage sourced from recycled materials and the amount of waste generated.

For more on the issues in this article:

- Information on Wrap's food waste work is available at bit.ly/1ZA16zu. The waste body is convening the Courtauld Commitment 2025, a voluntary collaboration of the UK food sector to reduce food waste by 20% by 2025.
- Champions 12.3 is a global coalition tackling food waste (champions123.org).
- Global Sustainable Tourism Council establishes and manages global sustainable standards (gstcouncil.org/en).



Protecting the Earth's life-support systems

Penny Walker looks at how firms are working to mitigate and adapt to climate change, and to protect land-based ecosystems in part four of our series on the UN goals

13 CLIMATE ACTION



Climate action

Increasingly businesses are focused on reducing their own greenhouse-gas (GHG) emissions. At the climate change summit in Paris last December, 114 companies pledged to reduce these in line with the goal of keeping the global temperature rise below 2°C – the threshold that most scientists agree would trigger abrupt climate change.

More than 170 companies, including H&M, Renault and Société Générale, have joined the Science Based Targets initiative, set up by WWF, CDP, the World Resources Institute (WRI) and UN Global Compact to encourage businesses to cut emissions. By July, 18 had set targets consistent with the Paris temperature cap.

This action chimes with the 13th UN sustainable development goal (SDG) and the need to take urgent action to combat climate change and its impacts. Targets focus on resilience and adaptation as well as mitigation, support to developing countries, education and awareness and ensuring governmental processes take account of climate change.

Reducing emissions

Video calling and e-communications are seen as effective ways to reduce the impacts of paper manufacturing and travel, but datacentres use huge amounts of energy to run and cool servers. Technology companies are addressing this by investing in renewable energy to power datacentres. In 2015, Apple announced plans to invest €1.7bn in two European datacentres powered by renewables. Planning permission is being sought in Ireland, while construction on a centre in Denmark is expected to start this year. Meanwhile, Samsung is helping its

customers use less energy, with a 42% improvement in product power efficiency across its range since 2008: smart TVs have made 44% energy savings and air conditioners are 75% more efficient.

Individual professionals are taking action to cut their emissions, with symbolic as well as practical impacts. To help achieve this, since October 2015 academics in 12 countries have been petitioning universities and professional bodies to reduce flying to attend conferences.

Adaptation, risk and resilience

Adaptation and resilience are increasingly important. According to the independent Committee on Climate Change, UK annual non-residential costs from flooding stand at around £800m and are expected to be £1bn by the 2050s. It also forecast that, in the 2040s, half of all summers would be as hot as that in 2003, when temperatures across Europe soared and caused business losses of almost £500m.

Customers and employees may be affected by extreme weather and supply chains may be cut. Zurich Insurance Group established its global flood resilience programme in 2013 to share its skills and experience with wider society. Linda Freiner, group head of corporate responsibility, says: 'Risk management is something we have expertise in, and we are at the front line in seeing the impacts of extreme weather and changes in climate patterns.' Her advice to companies is to begin with a systematic risk assessment, encompassing short- and long-term exposures and the effects floods and other extreme weather would have on their business. Look beyond your own locations, into your supply chain, and the impact on employees and customers.

Money and climate action

Many investors, including the Environment Agency Pension Fund (EAPF), have signed up to the Montréal Carbon Pledge, committing to measure and publicly disclose the carbon footprint of their investment portfolios each year. The EAPF has gone even further. Faith Ward, chief responsible investment officer and a PIEMA, says the body believes that considering climate risk forms part of its legal duties in managing the fund. In October 2015, the EAPF set goals to

decarbonise the fund: disinvesting from coal (by 90%), oil and gas (by 50%); investing in climate mitigation (15% of the fund); and actively engaging with others in the investment industry to support progress to a low-carbon economy. The fund is two-thirds towards its coal target, and ahead on oil and gas.

‘Ask yourself what your own pension fund is doing to manage climate risk,’ says Ward. ‘It’s about looking at resilience in supply chains and positive investment in companies providing solutions, not just focusing on a few fossil fuel companies. You may well be able to help in applying your skills and knowledge to assist those managing funds.’

The financial context for climate action is hugely influenced by what the government does. Increasingly, the lobbying voice of mainstream corporations backs more action. Some companies have spoken out, supporting the Fossil Fuel Subsidy Reform Communiqué, which in November 2015 called on the international community to increase efforts to phase out subsidies to fossil fuels. Aviva’s group chief executive officer, Mark Wilson, who signed the communiqué on behalf of the insurance firm, said: ‘Climate change is arguably the world’s most critical contemporary market failure. It has significant consequences for people, the planet and the profitability of a broad range of companies – including insurers. Fossil fuel subsidies fan the flames of this market failure. We believe the subsidies should be phased out as soon as possible.’

Making a start

Emissions

- The Greenhouse Gas Protocol – helps to measure and report on greenhouse-gas emissions (ghgprotocol.org).
- Reducing academia’s carbon footprint (flyingless.org).
- Inspiring businesses to set greenhouse gas emission reduction targets in line with climate science (sciencebasedtargets.org).

Resilience

- For UK-based assets and suppliers, the evidence report of the Climate Change Risk Assessment 2017 (bit.ly/29ASGWk). It covers priorities for the next five years.

Finances

- Montréal Carbon Pledge (montrealpledge.org).
- Friends of Fossil Fuel Subsidy Reform Communiqué (fffsr.org).



Life on land

The goal is to protect, restore and promote sustainable use of terrestrial ecosystems, manage forests sustainably, combat desertification, and halt and reverse land degradation, and halt biodiversity loss.

Targets relate to ecosystems ranging from mountains, drylands, forests and deserts to wetlands. The goal also covers endangered species and poaching, and invasive alien species. On the governance side, targets have been set for fairly sharing the benefits of using genetic resources, and to mobilise the financial resources and improve planning and poverty-reduction strategies so that these take account of ecosystem and biodiversity values.

Protecting ecosystems

Companies in the cocoa supply chain have been making moves to protect biodiversity in this way. One of these is Mondelez, the world’s largest chocolate producer, whose brands include Cadbury’s Dairy Milk and Oreo. In partnership with the UN and the government of Côte d’Ivoire, Mondelez is working with up to 26,000 smallholder farmers to help meet the country’s ambitious target of zero net deforestation from cocoa growing through its Cocoa Life programme.

Jonathan Horrell, international director of sustainability at Mondelez, says: ‘Farmers are trained on good agricultural and environmental practices. This is critical

to increase their productivity on the same area of land and reduces the incentive to clear rainforest for other uses.

‘Further, together with UNDP and the Forestry Commission, we have provided 787,000 economic tree seedlings to more than 9,600 cocoa farmers since 2014. Planting shade trees achieves farm income diversification and helps to conserve biodiversity.’

Nestlé is also changing practices to secure long-term supplies of cocoa and protect ecosystems through its Cocoa Plan. The target, set in 2010, is for no deforestation in the company’s supply chains by 2020. Farmers’ incomes are being raised through higher-yielding cocoa plants and training. In Ecuador, farmers are being supported to diversify into agritourism alongside cocoa production.

Nestlé is part of the Initiative for Sustainable Landscapes, convened by the IDH, a sustainable trade collaboration based in the Netherlands. Action by individual smallholders, government bodies and multinationals is needed to protect ecosystems through collaboration at the landscape level. Pollinators, rivers and soil do not recognise the boundaries of supply chains.

Cocoa is not the only ‘soft commodity’ that depends on healthy, functioning ecosystems. In 2010, the board of the Consumer Goods Forum, whose members encompass retailers and manufacturers, passed a resolution to achieve zero net deforestation by 2020, with a particular focus on palm oil, soy, beef, paper and pulp.

In the finance sector, businesses are developing products to support investment in conservation and income streams for people through sustainable use of resources. Fabian Huwyler, a member of the sustainability affairs team at Credit Suisse, describes how the company's products, such as Nature Conservation Notes, can help: 'They allow investors to support nature conservation in developing countries and economic development for their local communities through the conservation-related revenues, like the sale of sustainable commodities or ecotourism, generated by the financed projects.'

There are sector-wide initiatives too. The Soft Commodities Compact, for example, aims to finance the transformation of supply chains so that companies can meet their zero net deforestation targets.

Goal 15 also covers individual species and organisms, such as those poached from the wild and trafficked. United for Wildlife is a coalition of conservation organisations convened by the Royal Foundation. In March 2016, companies in the transport and logistics sector (including China Shipping Company, Dubai-based ports operator DP World, Stena Line UK and Qantas) signed the Buckingham Palace Declaration to crack down on the illegal wildlife trade. The declaration is open to additional signatories from the transport and logistics sector.

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Making a start

The Natural Capital Protocol offers a standardised way of identifying, measuring and giving a value to the impacts an organisation or supply chain has on natural capital, and how it depends on biodiversity and ecosystems services, such as flood defence, climate regulation, pollination and recreation (bit.ly/29MRq4Q). The protocol was launched in July 2016.

A corporate ecosystems services review is another approach to understanding dependencies and impacts. Developed by the World Resources Institute, the WBCSD and others, and tested by firms including paint and chemicals business AkzoNobel, Dubai-based ports operator DP World, Swiss agribusiness Syngenta and mining firm Rio Tinto, the tool has been used by an estimated 300 companies since 2008 (bit.ly/2bxOXOv).

Looking specifically at biodiversity offsetting, Forest Trends' Business and Biodiversity Offsets Programme aims to test and monitor the use of the standard (bit.ly/2buRkgC). It is a global collaboration between more than 75 companies (such as cement business Cemex, energy firm Électricité de France and consultancy Arup), financial institutions (such as the European Bank for Reconstruction and Development), government agencies (including Defra) and civil society organisations.

Organisations operating initiatives include:

- Consumer Goods Forum (bit.ly/2aWmI5J).
- Initiative for Sustainable Landscapes (bit.ly/2b0UYyC).
- Banking Environment Initiative (bit.ly/1l01Gsb).
- United for Wildlife (unitedforwildlife.org).



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7 AFFORDABLE AND
CLEAN ENERGY11 SUSTAINABLE CITIES
AND COMMUNITIES

Cleaner energy and thriving communities

Penny Walker looks at corporate action on the UN sustainable development goals on energy and sustainable communities in part five of our series

7 AFFORDABLE AND
CLEAN ENERGY

Affordable and clean energy

Energy use is the dominant contributor to climate change, accounting for around 60% of greenhouse-gas emissions. About 20% of the world's population are without access to electricity and 40% rely on wood, coal, charcoal and manure for cooking and heating. Cleaner, affordable energy for the poorest is a priority.

Targets in UN sustainable development goal seven include increasing the share of renewables, doubling the global rate of improvement in energy efficiency, upgrading supply technology, and ensuring universal access to affordable, reliable and modern energy services. Initiatives to achieve these aims are under way worldwide.

Frontier Markets is an award-winning Indian business empowering its network of solar sahelis – women trained in marketing and after-sales servicing who sell clean energy products to people in remote areas of Rajasthan and Andhra Pradesh. This bottom-of-the-pyramid 'last mile' distribution model has helped them sell more than 127,000 products, including solar streetlights, lamps, torches, PV panels and clean cookstoves. The vision of Ajaita Shah, who founded Frontier Markets, is to provide access to clean energy for one million households in India by 2020.

Renewables specialist Acciona is helping off-grid communities in Mexico and Peru through its Microenergia Foundation. The Spanish firm works closely with public authorities and local communities through its Luz en Casa (Light at Home) initiative, which provides subsidised photovoltaic lighting to homes and community centres.

Progress is being made in redesigning and retrofitting energy grids and modern buildings to cut waste and make them renewable-ready. UK-based Demand Logic focuses on energy management solutions. Working with existing building management systems (BMSs), its software continuously monitors data, identifying when pumps, coolers and heaters need adjusting so that they work more effectively and efficiently. Demand Logic's software can benchmark performance across a client's portfolio and rank buildings for energy efficiency, comfort, maintenance requirements and business-critical factors, such as stable temperatures in the case of galleries and datacentres.

The London head office of the *Financial Times* saved £100,000 over two years after investigations and adjustments made by Demand Logic working with Chartwell Energy Solutions and building maintenance and engineering services provider Optimum. Another Demand Logic client is property firm Land Securities, whose senior engineer, Charlie Railton, says: 'The speed of deployment of the software on one of our sites was overnight. It has changed the way we manage our buildings.'

Managing energy

Individual businesses and sites can also help the grid as a whole to be more energy-efficient. On a windy night or a sunny midsummer morning, more electricity from renewables may be generated than is required. When this happens, National Grid needs to balance the supply. The most sustainable way to do this is to use the excess electricity when demand is there and to reduce it when renewable generation is low.

Power Responsive is one way National Grid is building the UK's capacity to do this kind of balancing. Businesses including utility Dwr Cymru Welsh Water, construction materials manufacturer Saint-Gobain and retailer Sainsbury's are taking part. They are paid for automatically switching electrical equipment on and off within a very short timeframe to help balance out the peaks and troughs in the grid.

Oxford Brookes University's approach is different. It does not have a single large electricity use. Instead, a sophisticated electric heating control system in two student halls of residence allow a large number of small uses to be aggregated. These are remotely managed by Open Energi as part of a pool of demand response assets. Electricity for water heating is interrupted for seconds or minutes, making no difference to students' comfort. Gavin Hodgson, the university's energy manager, says: 'Advanced controls mean we can pool together smaller electrical items which would otherwise not be large enough to receive payment within a demand response programme.'

National Grid hopes that by 2020 power responsive methods will balance between 30% and 50% of energy. 'Traditionally, meeting the energy needs of the nation has meant matching supply to meet demand,' says Paul Lowbridge, power responsive manager at National Grid. 'By using energy intelligently and encouraging the

uptake of demand-side response we can make the most of the energy we have, and reduce costs and carbon, which benefits society as a whole.'

National Grid is also looking at battery storage. This is already in use for frequency balancing, which supports integration of renewable electricity into the grid. In future, the company expects grid-level battery storage to help to make best use of intermittent supply from renewables.

Elsewhere, Nissan, which manufactures the Leaf electric vehicle (EV), is vying with Tesla, which also makes EVs, to turn its cars into portable power stations, selling energy back to the grid and charging their batteries when there is excess supply. Nissan announced in May that it had been working with National Grid and power management company Eaton to develop a storage system to enable additional energy from a Leaf's batteries to be transferred to the grid.

Further information

- National Grid's Power Responsive – powerresponsive.com
- Forum for the Future's Living Grid – livinggrid.net
- Demand Logic – demandlogic.co.uk

11 SUSTAINABLE CITIES AND COMMUNITIES



Sustainable cities and communities

Humans are an increasingly urbanised species. Half of the world's population live in cities, with more than 860 million living in slum conditions, according to the World Health Organization. Cities put enormous pressure on water resources, waste systems and wildlife, but also offer opportunities for efficiency, community and sharing.

The UN's sustainable cities targets cover housing, transport, disaster resilience, air quality, green spaces, and protection of cultural and natural heritage. There is a strong emphasis on safety and inclusion of vulnerable groups. One country buying into these UN targets is China, where urbanisation continues apace. Shanghai Landsea Architectural Planning and Design, as a founding member of the China Green Building Council, has promoted the use of ground-source heat pumps, solar thermal and, in a country with notoriously bad air pollution, filtered fresh air. Its green building museum is open to the public. Yang Ke, Shanghai Landsea's chief engineer, says the company is committed to putting sustainable development into practice.

'The strategic goal of green building is not only the focus of our company, it is a first choice for developing countries with a big population, like China,' he says. 'Because China's per capita natural resources are not rich, the ecological environment cannot be deteriorated any more. Only by taking the sustainable development path can we achieve balance in economic development and ecological environment.'

City-wide

Elinor Huggett, sustainability officer at the UK Green Building Council, says the challenge of sustainability is often best viewed through a city-scale lens. 'Making meaningful interventions can be simpler at a city level than a national level, but the collective impact will be of a similar scale,' she says. 'Smart, green, resilient cities will provide a high quality of life for their citizens without compromising the wider environment and can support economic growth, jobs and poverty alleviation.'

This is the approach taken by the C40 Cities Climate Leadership Group, a global coalition of more than 80 cities that between them house one in 12 of the world's population. C40 cities work on mitigation and adaptation, alongside improving wellbeing and opportunities for citizens. One of C40's 16 specialist networks focuses on mobility management. Network members learn from each other about using data to optimise routes and schedules, and how cashless payment can provide flexible pricing options, such as combinations of low-carbon travel choices.

MasterCard is supporting this network. 'If you're responsible for transport operations within a city you're in a constant battle for market share with private cars,' says Will Judge, head of urban mobility at the financial services company. 'Do not underestimate how many imagined barriers stop people making the journey without their car in the first place. There are ways you can streamline the experience for customers, using

technology to make payment simple or to provide real-time updates about the most convenient transport options. The ultimate goal is to encourage more people out of their cars and on to public transport.’

Another C40 initiative is its work on financing sustainable cities, supported by Citi Foundation in partnership with the World Resources Institute’s Ross Center for Sustainable Cities. The programme enables cities to learn from each other, benefit from practical tools and receive specialist technical advice on developing financing options for sustainability projects and services.

Valerie Smith, director and head of corporate sustainability at Citi, says the initiative is intended to accelerate the financing and implementation of sustainable urban projects by helping city decision-makers, technical experts and financiers to better understand their funding choices and work strategically with each other. She also highlights the importance of sustainable urban projects to efforts to tackle global

warming: ‘Under the Paris Agreement, world leaders have committed to ambitious targets to fight climate change. Our collective ability to achieve those goals depends in part on an equally visionary plan for creating sustainable and equitable cities.’

Accessibility is not just about transport for the masses. On a different scale, technology giant Microsoft has been working with Guide Dogs and Future Cities Catapult, the global urban innovation centre, to develop hardware and software as part of an initiative called Cities Unlocked, which aims to improve mobility for people with sight loss. The innovations include modified headphones so people with sight difficulties know which way they are facing and an app that provides a detailed audio description of the streetscape, down to benches and rubbish bins. This makes walking through unfamiliar places easier and safer for people with visual impairments.

Jarnail Chudge, user experience architect at Microsoft Consulting Services, is enthusiastic about the potential: ‘Cities Unlocked trials continue and we are validating the feedback from triallists to ensure we get the experience right before making concrete product promises. The pace of technical development has been promising, however, and we are really excited about the direction it is headed.’

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penny-walker.co.uk/blog.

Further information

- Future Cities Catapult – futurecities.catapult.org.uk
- C40 Cities – c40.org
- UK Green Building Council – ukgbc.org

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8 DECENT WORK AND ECONOMIC GROWTH



9 INDUSTRY, INNOVATION AND INFRASTRUCTURE



10 REDUCED INEQUALITIES



Work, growth, innovation and equality

Penny Walker looks at corporate action on building a more sustainable, equitable and decent economy in part six of our series on the UN 2030 goals

8 DECENT WORK AND ECONOMIC GROWTH



Decent work and economic growth

For too many, work is underpaid, insecure and dangerous. The International Labour Organization estimates that 327 million people with jobs live in extreme poverty. To help to address this, the UN sustainable development goal (eight) for decent work and economic growth aims to expand the global economy and improve productivity. Targets include full, productive employment for all, regardless of ethnicity, religion, gender, abilities, sexual or gender identity. These issues are also relevant to goal ten – reducing inequality within and among countries (below). Child labour, forced labour, trafficking and modern slavery are also given special attention, as are the rights of migrant workers.

A strategy being adopted by US food business General Mills is to enable local suppliers in lower-income countries to find ways to add value to the products they make. The firm, whose brands include Cheerios, Häagen-Dazs and Yoplait, buys vanilla from hundreds of farming families in Madagascar. Since 2013, it has run a programme in the Sava region, training farmers in how to cure vanilla pods. These sell for significantly more than uncured ones. The initiative is helping General Mills work towards its target of sourcing 100% of its vanilla by 2020 in ways that improve the livelihoods of smallholder farmers.

Decoupling economic growth from environmental impact is a key aspiration underpinning the sustainable development goals. Unilever has set a public goal to decouple its environmental footprint from its

underlying sales growth. The fast-moving consumer goods firm is a global partner of the Ellen MacArthur Foundation's Circular Economy 100 programme, which aims to accelerate progress towards a circular economy.

A much smaller player, also contributing to the circular economy, is Rype Office, which refreshes and remanufactures office furniture. One of its clients is Public Health Wales. Sally Attwood, head of strategic programmes and facilities at the health body, says: 'We were moving more than 500 people from nine buildings to one larger building. We wanted a modern workplace to support collaboration and connectivity.'

Rype Office worked with Greenstream Flooring to maximise the reuse of furniture and flooring. Some 94% of more than 2,500 items of furniture were either remanufactured or refurbished. South Wales social enterprise Orangebox made the small quantity of new furniture needed, providing training and work for people who had been long-term unemployed.

Attwood is enthusiastic about the multiple benefits: 'Public Health Wales stands for valuing things, re-loving things, taking care of neglected assets. We wanted to spend our money to create maximum public value.'

Further information

- Ellen MacArthur Foundation Circular Economy 100 Programme – bit.ly/2kmBVGI
- Sustainable Vanilla Initiative – bit.ly/2laBI9M
- Sustainable office furniture – bit.ly/2lFQkDL

9 INDUSTRY, INNOVATION
AND INFRASTRUCTURE

Industry, innovation and infrastructure

Meeting the aspirations of the 8.5 billion people forecast to be living in 2030, when the SDGs should be achieved, for decent, healthy lives demands technological innovation and smart infrastructure: mass transit, renewable energy, information and communication technologies, resilient and eco-efficient engineering and construction, clever planning and design.

Targets under goal nine include planning and implementing infrastructure at a regional level rather than be constrained by national boundaries. There is a focus on affordability and equitable access to critical services, both physical (such as water and flood protection) and intangible (internet access and affordable credit). Research, development and innovation are essential to underpin all the other UN sustainable development goals.

Information and communications technology infrastructure is essential for access to markets, services and education. According to BT, people in Africa pay ten times as much of their salary for broadband than those in other parts of the world. BT has delivered free broadband access, via satellite, to SOS Children's Villages, which provide homes for orphaned and vulnerable children in 13 African countries. The free broadband also benefits the wider community, bringing clinics, families and community workers online.

Upgrading and improving physical infrastructure is also badly needed in disadvantaged areas, and it needs to be resilient to climate shocks. In Mexico, it takes ten years on average for road and pavement projects to be completed in low-income neighbourhoods. Mexican building materials business Cemex has developed a microloan programme to help communities fund this infrastructure and complete projects in less than 18 months. The Mejora tu Calle (Improve your street) initiative is providing more than 35,000 such loans

to fund paving. Cemex also invests in research and development, one product benefiting from this being porous and insulating concrete to help reduce flooding and improve energy efficiency.

Marshall's is another building materials company heavily engaged in the research and development of products such as permeable surfaces to reduce flash flooding and recharge groundwater. It has also developed what it says is the world's first carbon-neutral paving system, called Bioverse. Group marketing director Chris Harrop says: 'Bioverse consists of reduced-carbon concrete, specially formulated grass seed and a carefully designed sub-base. The elements of the system together create a hardstanding area which is not only attractive and hardwearing, but is also a biosphere which takes carbon from the atmosphere.'

Where the problem is too little water, efficient irrigation is key. Netafim has pioneered drip irrigation technologies for use in agriculture and extractive industries. Research and development is focused on reducing the chemicals needed to keep water clean, and more precise delivery of the right quantity of water at the right time.

Financing the infrastructure of the future is central to insurance business Aviva's target of investing £500m a year from 2015 to 2020 into low-carbon infrastructure, such as energy efficiency measures in NHS hospitals, onshore wind and rooftop solar. Aviva's strategic response to climate change states: 'The transition to a low-carbon economy requires capital. A large proportion of this will need to be directed towards infrastructure.'

Further information

SOS Children's Villages – bit.ly/1wOggSi
Netafim – bit.ly/1KdVzpN

10 REDUCED
INEQUALITIES

Reducing inequality

Economic growth in countries or regions of widening inequality fails to translate into improved quality of life or environmental protection. According to the UN, the richest 10% of people earn up to 40% of global income, and for the poorest 10% it is somewhere between 2% and 7%. Economic inequality is overlain and accelerated by discrimination, on grounds of race, gender, age, disability, sexuality, religion and immigration status. In many countries, there is legal and institutional backing for equal treatment, but some companies go beyond this.

Targets for goal ten include income growth for the poorest, inclusion, equality of opportunities and outcomes. The cost of remittances home by migrants and the importance of well-managed migration

policies are highlighted, as well as inequalities between countries in international trade negotiations.

P&G's worldwide policy prohibits all forms of discrimination based on sexual orientation and gender identity and expression. In Spain the fast-moving goods firm has gone beyond the legal minimum. Doreen Chow, HR leader for company's homecare businesses in Europe, India, Middle East and Africa and sponsor for its gay, ally, bisexual, lesbian employees (GABLE) Europe network, says: 'All of P&G's policies in Spain were reviewed to ensure staff benefits apply equally to same-sex and different-sex couples. These include health insurance, life insurance plans, leaves of absence and other company benefits such as company cars and relocation support.' P&G took part in Spanish Pride

in 2016 and is a member of Stonewall's network of global diversity champions. The LGBT equality charity provides expertise on how to support employees and promote inclusion in countries where the prevailing culture and legal context is challenging. Staff have been trained about unconscious bias, and suppliers are required to follow the sustainable business guidelines, which include anti-discrimination clauses.

For people with disabilities in low-income countries, ADD International is a source of support. The organisation stresses the importance of government action, while also working with businesses to help people with disabilities into jobs. Mosharraf Hossain, director of global policy, influencing and research, says: 'Businesses have an essential role to play in ensuring persons with disabilities are not left behind in development. We urge businesses to work with organisations of persons with disabilities to identify contextually appropriate ways to

make their practices more inclusive.' ADD International's margins-to-mainstream project in Bangladesh helped more than 650 people with disabilities to set up their own businesses or do work placements with member companies of the Bangladesh Garments Manufacturers and Exporters Association. Tailored training and advice on workplace accessibility were a key focus.

M&S has UK-based and international programmes to help disadvantaged people through its Marks & Start work placement programme. The firm is also part of Business in the Community's Ready for Work network, helping long-term unemployed people, care leavers, ex-offenders and other vulnerable people to improve their employability.

Businesses can also co-operate with local charities to support people into employment. IEMA corporate member Willmott Dixon Interiors has been working with the Amber Foundation in south-west England. Amber runs residential centres and supports young people who have been homeless, have been affected by substance misuse or have been in trouble with the law. The interior fit-out and refurbishment company has provided work experience placements for Amber clients. It is contributing to the company's long-standing commitment to transform the lives of 10,000 young people by 2020.

Further information

Stonewall – bit.ly/2laH3Oj

ADD International – bit.ly/2jU0mWW

Business in the Community – bit.ly/1zEqd65

Willmott Dixon Interiors – bit.ly/2kJYCn7

The Amber Foundation – bit.ly/2lfdcQx

Penny Walker is an independent consultant. She is facilitating a season of conversations for sustainability leaders in 2017. Go to bit.ly/2lfsGFa for more information.

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Peace, justice, partnerships and corporate strategy

The final part of Penny Walker's series on the UN SDGs looks at action on building a peaceful, just society



Peace, justice and strong institutions

Around \$1.26trn is lost in low-income countries to corruption, bribery, theft and tax evasion, according to the UN. This money could be used for the common good: public infrastructure, environmental protection, healthcare and education. Where there is war and conflict, children miss school, disease is rife, and infrastructure and the environment suffer. Where laws are not enforced, unethical players have an advantage.

Targets under UN Sustainable Development Goal 16 include reducing violence and ending abuse, trafficking, violence and torture of children. It also calls for the rule of law to be observed and equal access to justice, as well as measures to tackle money laundering, arms trafficking and organised crime. The incidence of corruption and bribery needs to fall. Effective, transparent, accountable institutions ensure participatory and representative decision-making and require support. SDG 16 also covers legal identities and birth registration.

Human rights

In March, the results of the first pilot Corporate Human Rights Benchmark (CHRB) revealed that most of the 98 companies analysed had far to go, with just three falling into the top band: mining companies BHP Billiton and Rio Tinto, and high-street retailer M&S.

The CHRB was developed with support from a coalition, including financial services firms Aviva Investors and APG Asset Management, and NGOs with expertise in responsible investment and human rights. Because it is an open-source methodology, any company can self-assess to see where it sits in relation to others.

Conflict minerals

In areas dogged by high levels of violence and insecurity, social and economic development is held back and the

environment suffers. The search for precious metals and diamonds is one activity that can be exploited by criminals, fuelling conflict and destabilising communities. Swiss-based refiner Valcambi is committed to sourcing gold only from sources that respect human rights and do not contribute to conflict. Nicoletta Ferro, of Valcambi's corporate affairs team, says: 'Our updated procedures systematise the whole due diligence process, introducing a new set of tools for carrying out a thorough risk assessment, mitigation and remediation.'

Valcambi involved experts in artisanal small-scale mining and responsible sourcing, and an independent academic to help it refresh its systems. 'We have now reached the stage where we are testing feasibility in the field and seeking feedback from key stakeholders: suppliers, clients, UN agencies and NGOs,' says Ferro.

As well as ensuring that its own supply chains are conflict-free, Valcambi hopes its approach will empower artisanal small-scale miners, helping them to access markets and be recognised as a sector. This should strengthen their communities, making them less vulnerable to exploitation by violent criminals.

Companies with links to the gold supply chain can refer to a handbook developed by sustainable mining consultancy Estelle Levin and the Global Initiative Against Transnational Organised Crime as part of the Gold and Illicit Financial Flows (GIFF) Project. Follow the Money helps companies to research financial flows linked to artisanal and small-scale gold mining so they can spot and eradicate money-laundering, smuggling, tax evasion and corruption. 'Every actor has a role to play,' says Levin, who is the GIFF project director. This includes traders and financiers as well as refiners and jewellers. She is passionate about the need to share information to accelerate progress: 'Donors and companies need to invest in knowledge management and communications, so the

impact of public funds is maximised and they give life to the knowledge that comes out of projects.'

When buying gold and jewellery, customers can look for the Fairmined certification and for companies certified by the Responsible Jewellery Council.

Taxation

It is not enough to obey the letter of the law in paying taxes. Some multinational companies have been criticised for complex legal arrangements that aim to lower tax bills, a strategy that is seen as unfair by many people. Power company SSE has taken its tax policies to the next level with the award of the Fair Tax Mark. Director of sustainability Rachel McEwen says the company changed little of what it was doing, but under the terms of the accreditation, it must now disclose a lot more information and publish a standalone, accessible tax report. 'It has led to deep thinking about the role of a big corporation

in society, our rights and responsibilities, our social contract,' she says. 'We benefit from public spending on roads, health and education, so we should pay our fair taxes. It's part of the deal. The Fair Tax Mark sends a powerful message to our customers and our employees about what we stand for.'

Further information

Corporate Human Rights Benchmark – bit.ly/2mjnz
Global Initiative Against Transnational Organised Crime and Follow the Money guide bit.ly/2nvScFO
Responsible Jewellery Council – bit.ly/1Bi4bKN
FairMined – bit.ly/2n3IVJW
Transparency International Business Integrity Toolkit – bit.ly/2o1Jp2A
Fair Tax Mark – bit.ly/2osOCBz

17 PARTNERSHIPS FOR THE GOALS



Partnerships for the goals

As a whole, the sustainable development goals provide a powerful, credible mandate for various organisations and institutions to work towards the same objectives. The challenges are huge. The changes they imply will not be easy. Individual excellence is not enough: change will need to be at the level of the whole system. So it is sensible to work together on the goals.

Targets for goal 17 include direct financing of development through aid and investment; co-operation on sharing knowledge, technology and science; and promoting rules-based multilateral trade. There are targets related to policy and institutional coherence in public bodies and governments, and to credible statistical monitoring and transparency about progress.

Like goal 16, the 17th is both enabling and an end in itself. Cat Tully, of the not-for-profit School of International Futures, says: 'Effective, inclusive and accountable institutions and working in partnership are the keys to unlocking the transformative power of the SDGs. The real question is how we create a common view of the future, harnessing everyone's enthusiasm and energy.'

Genuine transformation, Tully argues, relies on a conversation between governments, citizens and businesses. Corporations increasingly see the need to be part of those multi-stakeholder conversations.

Protein challenge

One multi-stakeholder collaboration, catalysed and convened by sustainability consultancy Forum for the Future, is the Protein Challenge 2040. Waitrose, The Hershey Company and Quorn are among the businesses working together on the question 'how can we feed nine billion people with enough protein in a way that is affordable, healthy and good for the environment?'

What makes this collaboration special is its focus on system-level change and innovation. The organisations involved are not content with the easy and incremental.

They want win-win solutions and have identified innovation for immediate action and longer-term scoping.

Landscape level partnership

A different approach to system change is happening at the landscape level. Examples include the catchment-based approach to improving water quality (see *the environmentalist*, July 2016, pp 22–24) and the KELOLA Sendang landscape partnership in South Sumatra.

With partners including the Zoological Society of London, the Department for International Development and Dutch development NGO SNV, KELOLA Sendang works with oil palm and rubber smallholders to achieve ecological and social benefits across the whole landscape. The anticipated environmental benefits include a reduction in carbon emissions from forest fires and less peatland destruction, and preservation of crucial habitat corridors for the Sumatran tiger.

Seth Shames, director of policy and markets at US-based land use consultancy EcoAgriculture Partners, says a landscape level approach is important. Single-objective strategies that are pursued to solve global challenges such as biodiversity loss, poverty and food insecurity are highly connected, he explains, and solutions aimed at growing

Further information

Protein Challenge 2040 – bit.ly/2osS6nI
Landscapes for People, Food and Nature – bit.ly/2osVnU0
UN Global Compact – bit.ly/1Ks4ZkY
World Business Council for Sustainable Development – bit.ly/1kJJC4m
UK Stakeholders for Sustainable Development – bit.ly/2n3G6sh
Working Collaboratively: a practical guide to achieving more is available at bit.ly/2nO8L1F

more food or conserving more habitat can alleviate one problem but exacerbate another.

His organisation helps to run the Landscapes for People, Food and Nature Initiative, a global partnership of conservation, agriculture and development organisations that use whole-landscape approaches in which both the producer and the communities benefit. Current projects include working in partnership with the international development organisation Solidaridad in northern coastal Honduras, where palm oil is the main crop. Producers in sugar and cocoa supply chains are involved in the

project but so are community, public sector and NGO stakeholders, ensuring a holistic approach.

What makes a great partnership?

Joint working can be disappointing if clear, shared goals and skilful convening are lacking. Potential collaborators need to listen to each other's assumptions about how they expect to work together, as well as what they want to achieve. This approach, and other useful frameworks and tips, are explored in my book *Working Collaboratively: a practical guide to achieving more*.



Strategic responses

Different businesses are taking different approaches when responding to the UN SDGs. Acciona, the Spanish renewables and infrastructure company, is using them to focus its corporate volunteering, while Cemex, BT and Samsung are highlighting links to specific goals in their sustainability reporting. GRI, the Global Reporting Initiative, has mapped the SDGs against its reporting frameworks. Meanwhile, Novozymes is using them as part of filtering and prioritising in its innovation pipeline. The biotechnology firm has gone further, linking the bonus scheme for its executive leadership team to annual operational targets, derived in part from the goals.

Many organisations are using the SDGs to augment their materiality analysis. Global consultancy firm PwC has developed a sophisticated tool to assist clients to take their first steps in engaging with the goals. Louise Scott, who helped to develop the Navigator tool, says: 'Our detailed country-by-country research has helped companies to spot things they didn't realise were important, and catalysed conversations, grounded in geography, about where they can have the most impact.'

Make some noise

Businesses have a powerful voice and can choose whether to support or undermine robust government action in favour of sustainable development. This is particularly important for policy coherence, which is targeted in goal 17. BT is part of the We Mean Business coalition, which involves companies working to accelerate the transition to a low-carbon economy. More than 120 members have signed a commitment to responsible corporate engagement on climate change, promising to audit their activity, ensuring consistency and disclosing their positions, actions and outcomes.

Expert after expert told me that companies need to look hardest at where they may be undermining the SDGs, albeit inadvertently. 'It's not just about opportunities, it's also about responsible conduct and impact,' says Ruth Mhlanga, Oxfam's private sector policy adviser. 'Don't undermine one goal while tackling another. Sustainability leaders will include those who support government efforts to govern for the common good and are willing to stand up to peers who undermine those collective efforts.'

Collaborate to shift the system

Picking off the goals and targets that seem easiest could be a flawed strategy if the actions involve trading off progress on one front with undermining it on another. In its research into the interconnections between the SDGs, the International Institute for Applied Systems Analysis (IIASA) highlights an area ripe with what it calls 'wicked trade-offs': environmental protection versus reducing food prices. The IIASA found that the most effective action would be to reduce the proportion of meat in diets.

Mhlanga also advocates collaborative, system-level action. 'Where companies, governments and civil society work together, making issues like suppliers paying a living wage precompetitive, no single company is disadvantaged by competitors undercutting.'

The Business and Sustainable Development Commission's *Better Business, Better World* report is clear on the need for system-level change: 'Business as usual will not achieve this market transformation. Nor will disruptive innovation by a few sustainable pioneers be enough to drive the shift: the whole sector has to move.' Stephanie Draper, at sustainability NGO Forum for the Future, says: 'Successfully delivering the SDGs requires a really strong systems approach. That means joining up with others' efforts to achieve individual goals; looking at the inter-relationships between all the goals; and delivering the them in a way that models the characteristics we need for a sustainable society.'

Which brings us back to goals 16 and 17, with their call for inclusion, participation and collaboration. 'If you want to go quickly, go alone. If you want to go far, go together.' We need to go far and quickly. So we'd better figure out how we're going to do both.

Penny Walker is an independent sustainability consultant. Penny-walker.co.uk; @penny_walker_sd

Further information

Global Reporting Initiative – bit.ly/1aVFfc3
PwC's Navigator tool – pwc.to/2nSa8Oz
Responsible Corporate Engagement in Climate Policy – bit.ly/2nOiG7A
Business and Sustainable Development Commission – bit.ly/2oPWrx9