Deloitte.

Delivering Sustainable Capital Projects

Rewrite the future

Capital project insights

Contents

Capital Projects Insights is a series of papers bringing together the latest thinking from members of our team on optimising performance and value across the lifecycle of capital projects.

Capital projects have a uniquely large impact on climate change. These are generally long-term construction projects that are large in scale and cost. The built environment sector alone contributes 45 percent of UK Greenhouse Gas (GHG) emissions[1], and so can contribute significantly to achieving our local and global net zero goals.

The sector has the capability and mandate to 'rewrite the future' of sustainability.

A sustainable capital project is one that embraces Environmental, Social and Governance (ESG) principles to pursue goals for reductions in GHG emissions and consumption of finite resources. It also creates a positive cultural legacy by encouraging sustainable operations, social change and biodiversity.

Executive summary

Sustainable capital projects are the new normal: organisations have a mandate to act now and rewrite our future climate outcomes.

The move towards a clean energy future is under way and is changing how capital projects are delivered. Corporations and governments have made bold commitments to reach net zero: where the amount of GHG emissions going into the atmosphere are balanced by the amount removed from it.

Capital projects have shown how they can help 'rewrite the future' with solutions to our climate crisis, but to achieve net zero targets, capital project organisations must adapt.

A sustainable capital project is one that embraces ESG principles to pursue reduction goals for GHG emissions and consumption of finite resources. It also creates a positive legacy by encouraging sustainable operations, social change and biodiversity. This report draws on research and insights from across Deloitte, as well as examples from the capital projects industry to outline the case for change. Our report defines the benefits and characteristics of the Sustainable Capital Project (SCP) Lifecycle, and highlights the exciting potential for making a difference now.

The time to act

We are at a turning point in the climate crisis. The technology and solutions for reducing net zero emissions are now as effective and compelling as the societal and political pressures to act.

Capital projects operate in the industries responsible for the highest levels of waste and emissions[2], and therefore have a disproportionate ability, opportunity and responsibility to meet local and global sustainability goals.

Some capital project organisations, such as Shell[3], have begun to declare carbon neutrality goals, but the industry still lacks in changing to achieve net zero. Although commitments have been made, these have been criticised for not delivering big changes now – typically because industries such as oil and gas have historically put carbon at the core of their business.

Countries recovering from the effects of COVID-19 are putting infrastructure investment high on the agenda, with the UK looking to 'build back better, greener and fairer'[4]. This presents an immediate opportunity to embed sustainability at scale, so now is the time for action.

Transformation helps both planet and business

End-to-end sustainability across the capital project lifecycle can improve top- and bottom-line value, and benefits both employees and society. Sustainable projects can also support positive social and cultural transformation, to improve an organisation's reputation while still meeting its commercial requirements. Current talent and future leaders will actively favour organisations with strong ESG values.

Capital project organisations that act now to embrace ESG principles will benefit from greater investment, attraction and retention of top talent, and improved credit quality.

The cost of sustainable delivery is lower than ever before meaning that transformation has become an industry norm rather than a pioneering risk. Regulatory incentives and taxes on pollution from governments also make the commercial argument more compelling.

Practical steps throughout the lifecycle

Capital-intensive organisations must assess both their emissions and appetite for change. Our SCP Lifecycle model helps pinpoint emission hotspots and to embed sustainability across project operations. It assists organisations in aligning project design and financing with ESG principles, to drive action on emissions throughout the value chain.

Capital project organisations embracing the SCP Lifecycle will need to change their operating model to see the long-term benefits. In our latest report we explore the practical steps needed for sustainable delivery: from building sustainability metrics into project reporting, to appointing net zero specialists to governance roles.

How we can help

Deloitte understands the 'stick or twist' dilemma that organisations are now facing. We help clients digest the challenges and get started on their net zero agendas, identifying ambitious targets across the lifecycle.

With expertise across capital project industries, and experience in designing and managing large capital projects, the Deloitte Capital Programmes team is well-placed to help deliver sustainable capital projects.

Why now?

There are increasing financial, investor, ethical, regulatory and political imperatives to 'rewrite the future' of our climate crisis, with many benefits for organisations that use sector solutions to lead the way.

The infrastructure and capital projects market continues to grow as corporations and governments invest in sustainable economies. Now, it's further fuelled by government investment in the economic recovery from COVID-19.

The infrastructure and capital projects market spans carbon-intensive industries such as transport, utilities, oil and gas, chemicals, concrete and steel, so it can hugely influence climate change.

Moving to sustainable ways of living and building is a global challenge. Although the energy mix is changing from fossil fuels to renewables and green hydrogen, fossil fuel consumption is actually going up, driven by increasing demand from emerging markets.

This may seem daunting, but leading the way is getting simpler. Technological advances in green steel, concrete and biomaterials are already available, along with new local and global collaboration opportunities and ecosystems.

For example, Swedish company Hybrit has recently begun supplying Volvo with green steel, which should be embedded across its manufacturing operations by 2026[5]. Companies can harness such developments to reduce emissions, improve energy efficiency, increase renewables use, and create new markets for their carbon and other by-products through a circular economy.

The upfront design of capital projects is critical to sustainability outcomes, to ensure that their legacy and their build is carbon neutral. Capital projects that are already underway may need help to rapidly embed sustainability opportunities, to achieve those goals and understand how they affect valuations, operations, employees and markets.

The sustainability challenge will change every aspect of a capital project organisation's assets and operations. A closer examination reveals that the top drivers of this challenge are also the enablers of the solution:

- customer, employee and community demands;
- investor pressure;
- policy and government targets; and
- technology and operational cost reduction.

Many capital project organisations have declared carbon neutrality goals to help meet the UK government target of being net zero by 2050, and are now navigating the decisions and challenges of the next five to ten years.

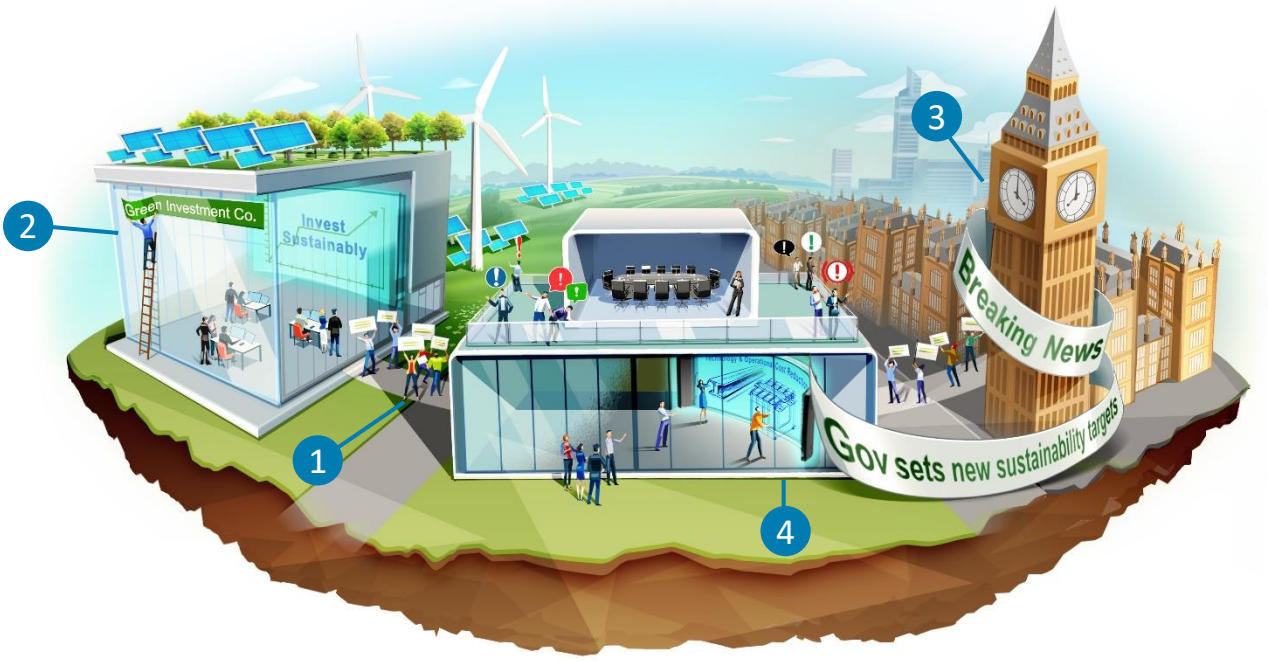

Figure 1:
Increasing pressures on organisations to act now and 'rewrite the future' of our climate crisis

Why now: external pressures faced by organisations also act as the enablers to drive change

1 Customer, employee and community demands

Today, social pressure is arguably a more potent driver of corporate change than regulation, and comes from both the public and employees.

2 Investor pressure

Shareholder value is inextricably linked to brand and reputation – even for capital projects. Companies that are perceived to be irresponsible will lose investors and customers.

3 Policy and government targets

With popular sentiment and investors all now demanding action on climate change, governments are compelled to respond and have a mandate to set emissions-reduction targets and pass green legislation.

4 Technology and operational cost reduction

New technologies with direct application to the sustainability challenges of the capital project industry have seen rapid growth globally.

Customer, employee and community demands

Public attitudes on climate change could not be more explicit, and we've seen a wave of climate activism since 2019 demanding immediate action on climate change and pollution. The economic shutdowns caused by the pandemic and the increased focus on wellbeing we've seen across organisations have all also prompted individuals to demand more purpose and benefit in choosing which companies they use. For example, Greenpeace's public campaigns against Kimberly Clark led to the firm increasing its use of environmentally friendly fibres from 54 percent to 83 percent in its global manufacturing of tissue products[6].

Public pressure is causing climate-related regulatory change, and this can affect capital projects disproportionately because of their greater contribution to carbon emissions.

Deloitte's March 2021 Consumer Attitudes survey found that sustainability remains a key consideration for consumers in 2021, with 32 percent of consumers highly engaged with adopting a more sustainable lifestyle.

Younger employees increasingly want to work for companies that benefit society, and they are monitoring the corporate response to external issues. This may lie behind the recent rise in employee activism. Climate change is also a focus in higher education courses, and the next generation of graduate engineers want to apply their talents to the climate crisis: the brightest new talent will be drawn to the projects that they can believe in.

Capital projects require community engagement and support. Those with ambitious sustainability practices, bankable sustainability goals and legacies are better placed to find such support, and avoid inviting active protests that can result in reputational and financial costs.

Investor pressure

We predict that in the future, capital projects that lack a compelling sustainability story can expect to earn a reputation as being reckless. High-profile moves away from fossil fuel investment by BlackRock (the world's largest fund manager) and HSBC show that investors are taking sustainability seriously, and recognise that 'climate risk is investment risk'. Investor pressure has also followed failures by oil giants to set out low-carbon futures: ExxonMobil has since been forced to appoint climate activists to its board to help drive a greener strategy[7].

Investors perceive that, in the near future, there will be global reallocation of capital to address the climate threat, and this is already seen in US$40.5 billion investments in global sustainable funds in Q1 2020 (41 percent increase year on year)[8].

This is also apparent in the UK's National Infrastructure Plan and the EU's European Green Deal. Capital project organisations with sustainability initiatives in place will be less susceptible to future carbon-related regulation and brand and reputation risk, and will have better access to new markets. Overall, sustainability is a prudent investment.

Policy and government targets

Governments are compelled to respond and have a mandate to set emissions-reduction targets and pass green legislation. For example, the recent Dutch court ruling towards Shell shows that companies need to reduce their carbon footprint and GHG emissions drastically, throughout their supply chain[9].

Such policy initiatives may be sudden. For instance, the UK government's acceleration of carbon dioxide reduction targets in April 2021 shows how legislation can increase unpredictably. Capital project organisations must recognise and respond to this reality.

Many sovereign infrastructure investments, such as the UK's £200 million Sustainability Innovation Fund[10], now have an explicitly green agenda that informs the outcomes of investments as well as their build. Meanwhile, we have seen the exponential growth of green bonds designed to support climate-related projects[11]. Research has shown that the value of green bonds issued in the first six months of 2021 rose to U$248 billion, exceeding that for the whole of 2020.

Despite the progress made to date, the current trajectory of GHG emissions will not achieve the Paris Agreement targets[12], so the spectre of further and sudden legislation and emissions pricing looms large over the next five to ten years.

Acting now will help capital projects mitigate their long-term financial risks, including those related to 'stranded' assets that are not financially sustainable due to changing demand.

Mitigating short-term financial risks can be extremely challenging for industries with high carbon emissions, such as oil and gas, but changes across capital projects – such as portfolio diversification and reducing emissions – can offer real solutions.

Technology and operational cost reduction

New technologies with direct application to the sustainability challenges of the capital project industry have seen rapid growth globally.

Materials science is helping reduce the carbon footprint of concrete, and the first batches of green steel are now rolling off the production line. New battery technologies for site vehicles are powering the first shipments of electric excavators. Renewable power is now designed into some projects from the outset, where owned and directly connected energy sources reduce fees from grid connections and lock-in power costs.

Low-cost sensors provide real-time measurement of noise and air quality, enabling a rapid response to onsite issues. Meanwhile, new digital tools use data and machine learning to help companies rapidly model projects, sites and supply chains, bringing more efficient design and planning, and reduced construction wastage.

New technology costs are decreasing as markets go from experimental to emerging and mature; renewable energy in the construction industry is already being used to increase efficiency, reduce costs and meet sustainability goals[13].

Transformation to sustainability can be a complex journey for capital projects, but many companies have already taken the first steps by making commitments and using new technologies and practices. It requires systems thinking and cultural change as well. When applied to the end-to-end operating model, sustainability can have huge benefits. With the right investment, collaboration and partnerships, capital project organisations can indeed rewrite the future.

The benefits

End-to-end sustainability can improve top- and bottom-line value, as well as deliver wider benefits for employees and society.

Organisational

Over 90 percent of most organisations' emissions lie within their supply chain – often from suppliers on the other side of the world. Simplifying supply chains creates business efficiencies, reduces uncertainty and risk, and increases resilience to external shocks such as COVID-19. By building stronger supplier relationships, organisations can encourage suppliers to share their sustainability goals. For example, BT has reduced emissions by 19 percent since 2017[14] through collaborative partnerships and contractual changes.

Financial

Sustainable capital projects are increasingly attractive to investors, as shown by BlackRock and HSBC moving towards less-carbon-intensive investments, and the exponential growth of green bonds. With the race to net zero intensifying, further climate legislation is inevitable. Carbon pricing schemes have already tripled in the past decade[16], and sustainable capital projects will carry lower emissions costs and carbon taxing, and better navigate the financial risk of future green legislation.

Cultural

Sustainability can create a focus to unite a capital project organisation, shape behaviours and improve morale. Companies with strong sustainable practices increase employee loyalty by 38 percent, with productivity subsequently increasing by 16 percent[15]. Top talents are drawn to projects that actively pursue a net zero agenda.

16%
Productivity boost

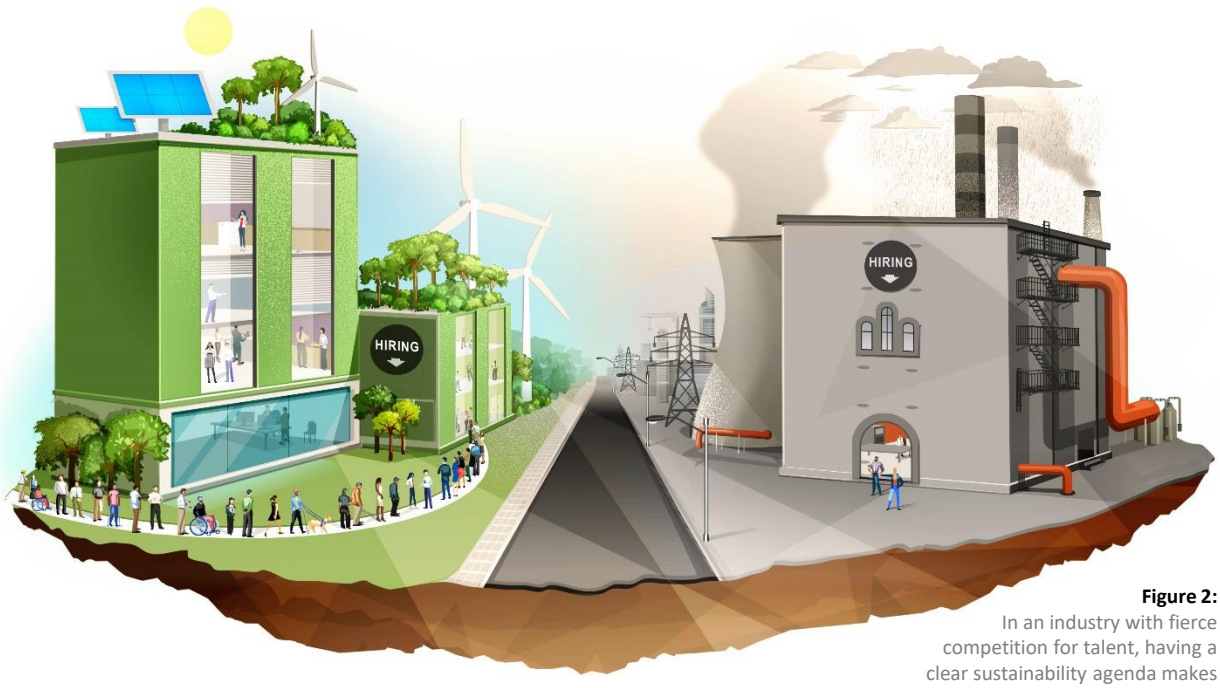

Figure 2:
In an industry with fierce competition for talent, having a clear sustainability agenda makes organisations more attractive

Cost Saving

Sustainability not only adds value, but provides opportunities to cut costs. One example is Old Oak Common station, where designing for carbon reduction led to 27 percent less structural steel in the roof of the new HS2 station, saving £7 million and the equivalent of 2,700 tonnes of embodied carbon[18].

£7m
Saved

Environmental

Capital projects have a huge, positive and lasting impact on local and national environments. The right ESG reporting and business cases can help ensure that capital project organisations are suitably rewarded for making positive environmental changes, which can then give a competitive advantage for securing future contracts.

Social

Projects can gain a huge amount of goodwill by prioritising social responsibility. Investing in the local community, with re-skilling and education initiatives, will engage the public while providing job opportunities and stimulating local economies. The London 2012 Olympics was a catalyst for one of Europe's largest regeneration projects, and Stratford benefitted from £12.5 billion public and private sector investment. This has transformed the region to a tourist and business hub, with 40,000 new jobs by 2025 and 24,000 new homes by 2031[17].

£12.5bn
Investments

Figure 3:
Investors and markets will reward those companies who can agree and communicate a strong corporate social purpose

The Sustainable Capital Project Lifecycle

Embedding the SCP Lifecycle involves challenging traditional methods to drive sustainable thinking across the project and create lasting change.

Recognise | Eliminate and re-use | Reduce | Grow | Monitor and intervene

Sustainability is recognised in the Strategy for performance and growth, enshrined in company policy to focus the organisation and hold capital projects to account for sustainable delivery across the lifecycle.

Informed by strategy, sustainable Design rigorously applies the five pillars of sustainability above to raise the bar for green innovation.

Decommissioning becomes more innovative, by considering alternatives to simply removing assets, such as repurposing, converting or re-using to benefit local and regional communities. Where this is not possible, remediation occurs early and is considered at the strategy phase.

Financing is raised from funds and bonds that have climate-related targets, integrating ESG principles and disclosures as part of their conditions.

Operations & Asset Management applies the 'grow' and 'monitor and intervene' lenses, as part of a sustainability culture that is as strong as that of health and safety, working to continuously improve the environmental impact of the asset.

Procurement embeds sustainability in the supply chain, with ESG criteria and supplier selection that encourage and reward innovative, cost-efficient and sustainable solutions.

Construction is the most visible activity in the capital project lifecycle. Delivering sustainably improves community and social impact, and showcases the organisation's values. Transparent reporting identifies lessons for future projects.

Step into practical action

The practical steps below illustrate how organisations can embrace the SCP Lifecycle, embed sustainability and achieve net zero targets.

1 Strategy and Design

Integrate ESG into strategy with transparent disclosures

Integrate an ESG agenda into your core decision-making and strategy processes by understanding what customers, investors and regulators expect from your organisation, and aligning this with your corporate social purpose. Demonstrate clear action by reporting on targets with transparent ESG disclosures, such as annual ESG reports[19], alongside traditional financial reports.

Appoint a Chief Sustainability Officer (CSO)

CSOs make a unique contribution to sustainability challenges, agreed 99 percent of respondents to a global survey commissioned by The Institute of International Finance (IIF) and Deloitte. The report found that organisations giving strong executive support and broad, strategic mandates to CSOs benefit from having a 'sense-maker in chief' at senior level. Capital projects operate in a world where speed, volume and complex change can throw their operators off their stride, so it's vital to have strategic thinkers who can clarify the issues at stake, mobilise their colleagues and orchestrate meaningful change.

Embed sustainability metrics in project value, outcome and risk management processes

Establish a valuation framework that integrates financial benefits and strategic ESG goals, to help inform decisions that work for both the environment and the balance sheet. One such framework is the Value Driver Model proposed by the U.N. Global Compact, which helps define opportunities to increase social and financial value in tandem[21]. BlackRock's annual letter to CEOs suggests that such changes are shifting the allocation of capital, as climate risk is priced into the value of global securities. This has resulted in £288 billion being invested globally from January to November 2020 – a 96 percent increase from 2019[22].

Build a net zero workforce

The next generation of business leaders needs to know what sustainability means for the businesses they are inheriting. According to the Financial Times, business schools are lacking in this area and must integrate ESG into their curricula to reflect current commercial priorities[20]. Businesses themselves are training their staff on topics such as carbon literacy and innovative analytics software that shed light on sustainability progress. Deloitte's Global Millennial Survey shows that climate still dominates concerns in the next generation, and their development should focus on sustainability issues.

2 Financing and Procurement

Re-invest cost savings into sustainability initiatives

Recent high-profile social justice movements have increased the effect of environmental and social forces on businesses. Even with a strategy that considers corporate social purpose, capital project organisations must engage with the societies in which they operate, to understand how best to fulfil that purpose. This involves working in innovative ways with government, non-profit organisations and civil society, to design and deliver solutions that contribute to a sustainable and prosperous future for all. Examples include investing in initiatives to support local re-skilling and education, and in nature-based carbon-removal solutions, such as large-scale tree planting, to directly remove emissions from the atmosphere.

Share sustainability goals across the supply chain

Supply chains account for 80 percent of world trade, and need systemic thinking, locally and globally, to achieve sustainability goals. Take the lead by developing sustainable supply chains that benefit you and your partners. These can reduce common project risks, damage or disruptions, improve regulatory compliance and protect corporate reputations. Deloitte has developed a practical guide to defining, understanding and building supply chain transparency, to enable collaboration with supply chain partners. Some practical examples include adapting Requests for Proposals (RFPs) to incorporate ESG filters, and requiring comparable ESG disclosures from all partners.

Figure 4:
A sustainable capital project embraces ESG principles across the project lifecycle to deliver on net zero targets

3 Construction and Operations

1 Build better carbon and biodiversity legacies

Sustainable capital projects set tangible legacy objectives and outcomes, tracking them throughout the lifecycle. Metrics that monitor and track nature-based risks follow guidance from bodies such as the Climate Disclosure Standards Board (CDSB)[23]. Eco-centred design, asset management and maintenance strategies are central to this approach. Involving local communities in the planning and implementation of such schemes helps to tailor this approach and build trust in what you are doing.

2 Innovate to reduce waste

Reduce waste by using less material throughout the project's design and manufacture; re-use parts by cleaning, repairing or refurbishing them; and reprocess waste to create new substances with anaerobic digestion, incineration with energy recovery, gasification or pyrolysis. Deloitte's circular economy potential for climate change mitigation report tells how recycling can help reduce emissions by around 17 percent, and improve product reuse by up to 34 percent[24].

3 Overhaul the construction site

Companies have expedited the use of connected construction, modularisation and digital technologies to address long-term costs and drive the 'ecosystem' approach in this sector. According to Deloitte's 2021 Engineering and Construction Industry Outlook, such initiatives often arose as a response to the pandemic.

The ecosystem approach for engineering and construction brings several independent stakeholders onto a common platform. This enables greater collaboration, fewer project risks, streamlined portfolio management, and better outcomes for all stakeholders. Deloitte monitors changing construction practices around the world, and can help capital project organisations overhaul their construction sites to be more sustainable. This means embracing new construction models (MMCs), using sustainable building materials, reducing operational energy and water use, and prioritising onsite renewable energy supplies to meet net zero targets.

4 Asset Management and Decommissioning

Optimise assets

Many asset managers are optimising their assets for the future and achieving positive ESG change, by investing in their engagement and stewardship functions. Deloitte's 2020 Asset Management Survey found that 90 percent of asset managers include ESG characteristics in their portfolios, but data remains the main challenge: only 30 percent of asset managers use labels, certifications or flags to identify ESG conformity. Internet of Things technologies, such as sensors, can improve how an asset's performance is measured, both operationally and environmentally (emissions, CO_2, NO_X etc). As sensors get cheaper, they can be used across assets, to provide a better flow of information between remote and distributed assets. This in turn helps give investors a clear and objective understanding of key ESG parameters.

Use advanced analytics to understand carbon impact

Organisations are now using big-data techniques to collect, model and benchmark energy usage, GHG emissions and supply chain performance against sustainability criteria. For example, the Philippines government comprehensively reviewed how it uses citizen-generated data for the SDG indicators[25]. The digital revolution is transforming such data from static to dynamic and forward-looking. Deloitte has helped many clients start their data journey, and develop analytics that give insights into sustainable performance, and we have seen organisations using predictive analytics and green AI to achieve real impact against net zero targets[26]. Other examples include the use of algorithms to classify images of illegal animal products, and energy modelling to optimise infrastructure and urban planning.

Create a circular economy for capital projects with digital twins

Deloitte's 'live' digital twins replicate the real-time operation of physical assets, which can support the move toward a more circular economy, in which products are easily re-used and re-purposed, eliminating waste from the lifecycle. The circular economy approach can potentially reduce GHG emissions by 22–44 percent by 2050, and unlock global GDP growth of up to US$4.5 trillion by 2030, compared to current linear models[27]. Digital twins help realise these circular economy benefits by holistically modelling an asset's inputs and outputs, and can inform more efficient use and recovery of resources by giving an ongoing analysis of the asset's performance across its lifecycle. For example, BT has developed a digital twin to help it transition to net zero; it cut costs by £40 million in the past year alone[28].

How Deloitte can help

Deloitte combines expertise in capital project delivery and sustainable transformation, to help your organisation on its journey to net zero.

Deloitte has an established community of multidisciplinary teams ready to help you achieve your sustainability goals. Our three-tiered approach combines expertise in sustainability and capital projects with excellence in service, to set ambitious targets and implement the systemic changes needed to hit them.

1 Create: get started with net zero and embed the SCP Lifecycle

Deloitte's dedicated Net Zero Transformation team works with our capital project specialists to assess the size and scale of the challenge. We then design a tailored sustainability strategy that sets the right net zero goals for your organisation using the SCP Lifecycle. We will help you get started with these first steps:

Understand your emissions footprint. A risk and opportunity assessment helps you identify your emission hotspots across the SCP Lifecycle. This includes emissions from critical parts of your business ecosystem, whether products or suppliers, and is the first step to taking action.

Make the easy changes fast. Our experts will help you to identify high-priority risk and opportunity areas of the SCP Lifecycle, where changes can be made relatively quickly. Early action gives stakeholders a clear signal that sustainability is a priority, enabling more complex and considered changes in the long term.

Decide where to lead. A comprehensive sustainability strategy that follows industry best practice can help you make clear and consistent commitments to reduce your organisation's absolute emissions, and create a positive legacy for you to communicate to your customers, investors and the public.

'Systems thinking' and building partnerships. Considering the lifecycle as a system is essential to realising meaningful legacy changes across operations. We use the operating model to design this into your organisation, and will help you build mutually beneficial relationships with partners to reduce emissions throughout your value chain.

2 Transform: integrate sustainability across the organisation

Deloitte's Capital Projects team has over 20 years' experience of helping clients deliver capital project excellence. Working closely with our Sustainability and Climate Change team to implement sustainable strategies for capital projects, charting a path to net zero that preserves value by transforming existing activities to a form fit for the future.

This stage is all about building on your commitments and embedding the right changes through culture, incentives and, critically, management information. Our five offerings across the SCP Lifecycle provide an integrated proposition to drive internal change, support your sustainable reporting and make good on your promises.

Our five offerings work across the SCP Lifecycle

Investment Confidence
Connecting corporate social purpose to long-term value through ESG principles.

Cost & Schedule Confidence
Recognising that ESG is the new lens through which your organisation and project will be evaluated, by aligning costing and scheduling to net zero metrics.

Delivery Confidence
Integrating 'systems thinking' to build a sustainable organisation and supply chain through the operating model.

Asset Management & Optimisation
Integrating ESG goals across your asset portfolio to provide a sustainable legacy for customers, shareholders and users.

Digital Transformation
Embracing 'Fourth Industrial Revolution' technologies such as BIM, AI and biotechnology to meet net zero goals.

3 Measure and Communicate: become an industry leader in sustainability

Sustainability is a journey, and how its progress is monitored must reflect changing global trends. Deloitte's Major Programmes practice leads research that helps our clients understand and prepare for these changes. External reporting, through annual sustainability reports, is the main vehicle for summarising the risks and opportunities arising from sustainability issues, for investors, market participants and stakeholders.
Deloitte stays abreast of the latest policy developments and regulatory changes, to keep you ahead of the curve and help you understand the main frameworks for measuring and communicating your sustainability narrative, including:

- **International targets e.g. SDG Impact Platform**. The Goal 13 Impact Platform is a partnership led by Deloitte to accelerate progress in the climate transition, helping reduce emissions and enhance resilience. We publish company insights, to inspire further climate commitments and action, and facilitate collaboration. We will implement a Measurement Framework and ESG External Report to align with these global targets.
- **Reporting standards e.g. Task Force on Climate-related Financial Disclosure (TCFD).** Approximately 60 percent of the world's largest public companies now support the TCFD recommendations, which aim to drive a step-change in managing climate-related risks and opportunities. Changes in reporting climate impact have sped up rapidly, and support for sustainability-related financial disclosures is expected to grow further.

  What's more, Deloitte has been working alongside the WEF and Impact Management Project to facilitate and advance five leading sustainability reporting standards: the Climate Disclosure Project, the Climate Disclosure Standards Board, the Global Reporting Initiative, the International Integrated Reporting Council, and the Sustainability Accounting Standards Board. We will undertake a Stakeholder Engagement and Sentiment Measurement analysis to develop a coherent and comprehensive reporting system for corporate sustainability that aligns with these frameworks.
- **Industry-specific insights e.g. The Future of Energy.** We understand the challenges and opportunities the future of energy brings, and actively help our clients make fast, positive impacts in their markets – for commercial stakeholders and for society. Our sector knowledge and scale helps us combine what we know about strategy, implementation, innovation and social solutions, to create the right value balance for our clients.

Deloitte can help you prepare for these changes, mitigate the risks, and support your journey to becoming an industry leader in sustainable capital projects.

World*Climate*: Deloitte's climate strategy

Our commitment to becoming a net zero organisation.

World*Climate*, Deloitte's climate strategy, will focus on raising awareness of personal choices and changing behaviours – both within our organisation and toward those we influence – to reduce GHG emissions. We know that change comes from within, so must set and meet higher standards for Deloitte, including achieving net zero emissions by 2030, and 'operating green' through new internal climate policies and practices.

As we change ourselves, we will work to change the world by empowering Deloitte people to take individual and collective climate action alongside Deloitte clients and communities. Deloitte will also encourage others in its ecosystem to make responsible climate choices at a systems level, and enhance our reputation as a leader in climate-specific professional services and thought leadership.

Deloitte's World*Climate* strategy recognises how an organisation of our size can improve the environment, and how our professional status and influence give us a responsibility to inspire others in tackling the defining crisis of this century. The opportunity to create a more sustainable world is at our collective fingertips. We are all compelled to act.

"The challenges presented by the climate crisis are enormous, and no organisation can solve them single-handedly. The greatest impact will come through the collective action of like-minded organisations, people, innovators and non-governmental organisations." *Punit Renjen, Deloitte Global CEO*

Deloitte's World*Climate* strategy has four main components:

1. Net zero by 2030

We commit to achieving net zero GHG emissions by 2030 for our own operations, ahead of the 2050 timeframe set by the Paris Agreement. Specific goals include to:

- reduce our business travel emissions 50 percent per FTE by 2030 (from 2019 levels);
- engage with our major suppliers with the goal of having two-thirds of them (by emissions) adopt science-based targets; and
- invest in meaningful market solutions for emissions we cannot eliminate.

Deloitte has had its emissions-reduction targets approved by the Science Based Targets initiative as consistent with levels required to meet the goals of the Paris Agreement (1.5°C trajectory).

2. Operating green

We recognise we must align our climate policies, practices and actions across our organisation, and will:

- designate a senior leader to be responsible for climate in each geography;
- prioritise climate change discussions on executive agendas; and
- embed climate-smart considerations into decisions on office operations, real estate and investments.

3. Empowering individuals

We will engage and educate our employees on climate change impacts, including decisions about what they consume, use and buy. We will empower our people to make positive climate choices at home and at work, and amplify these through their personal networks.

4. Engaging ecosystems

We will collaborate with clients, alliance partners, NGOs, industry groups, suppliers and others to address climate change at systems and operations levels.

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