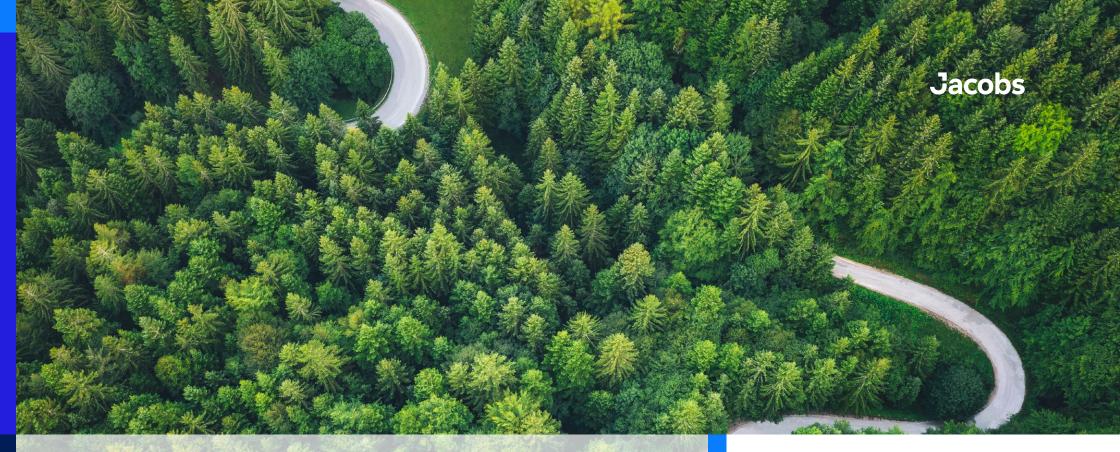
## Jacobs

Challenging today. Reinventing tomorrow.



### **Sustainability Solutions**

CAPABILITY STATEMENT



Seamless, global collaboration leading to innovative solutions that leverage integrated data and connectivity

## To create a more connected, sustainable world.

Delivering with a triple bottom-line focus – social, environmental and economic – through people, places and partnerships

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# Jacobs sustainability consulting approach

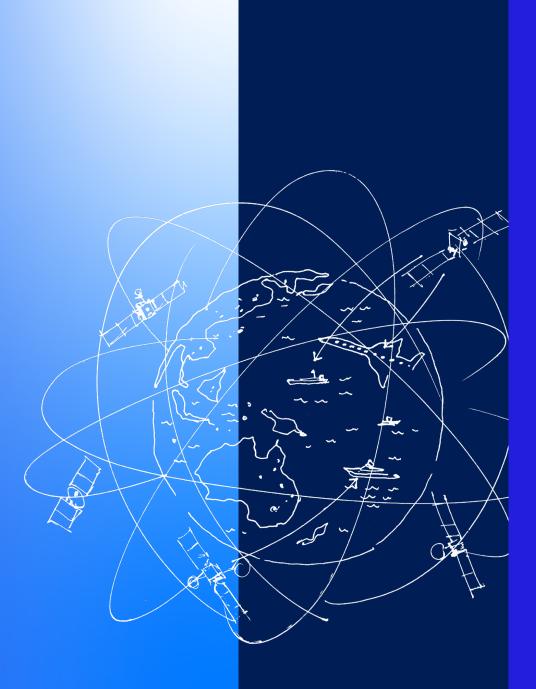
We help clients operate more efficiently, achieve cost savings, manage risks, improve quality of life, and enhance their social, economic and environmental position. Our engineering and consulting professionals integrate sustainability – from strategy and vision, to planning, design, implementation and operations, and to sustaining the project or program over time – delivering whole of life benefits.

Jacobs' work across the value chain in the raw materials, manufacturing, and services sectors provides valuable insights and a unique systems view to help clients meet their goals by uncovering opportunities for smarter and more sustainable operations. -2

## **Our sustainability solutions**



## **Key projects**



#### Sustainability consulting

#### STRATEGY

#### **Transmission network provider**

Created environmental sustainability metrics aligned with stakeholder expectations, and a simple template for reporting progress internally.

#### **Confidential footwear brand**

Supported creation of a Corporate Water Stewardship Strategy for the value chain, including innovation around water neutral cotton to restore natural capital and reduce risks.

#### SUPPLY CHAIN

#### Personal care manufacturer

Identified highest priority suppliers to target and improve client's overall supply chain sustainability; conducted follow-up audits on riskiest suppliers to ensure compliance.

#### Independent power producer

Assessed sustainability risks and opportunities in supply chain, including fuel sources and non-fuel procurements.

#### **REPORTING & DISCLOSURE**

#### Australian energy company

Undertook a mock assessment of Carbon Disclosure Project (CDP) reporting in advance of submission to inform business improvements for climate and carbon related impacts.

#### U.S. electric utility

Assured compliance of annual reports with the Global Reporting Initiative (GRI). Conducted materiality assessment to identify material risks and opportunities in operations and supply chain.

#### **CIRCULAR ECONOMY**

#### **Zero Waste Scotland**

Working with small businesses to develop a circular economy across energy, construction, manufacturing and bioeconomy. Supporting robust business model development and commercialisation.

#### **CARBON & GHG MITIGATION**

#### High tech manufacturer

Enacted global resource management program to track and report cost savings while reducing energy, water, and greenhouse gas emission impacts. Progressed the program to a global management system to inform public-facing communications and disclosures.



#### Infrastructure

#### SUSTAINABLE BUILDINGS

#### **Merck South San Francisco**

Build-to-suit and interior fitout for new research laboratory and office environment. Project achieved LEED Gold Certification under LEED for Civ4 and has been awarded WELL Silver "Pre-Certification" pending onsite performance verification. Sustainable design contributes to 1,215 in metric tonnes CO2e saved per year and 387,472 gallons of water saved annually.

#### Jacobs EcoPlan Framework

Developed EcoPlan framework, based on "triple bottom line" principles, to distill the complexity of a building, community, precinct or city to a manageable level of understanding, while responding to the larger interconnected context. The systems-based framework examines the three lenses of environmental, social and economic sustainability and the 16 filters within them. These filters break down the complexity of a project to a level where its characteristics can be evaluated subjectively.

#### SUSTAINABLE INFRASTRUCTURE

#### Sydney Metro Authority

Working to ensure the successful delivery and implementation of sustainability ratings, targets and initiatives for the Central Station upgrade. Proactively collaborating with the principal contractor to ensure environmental compliance and to mitigate potential risk areas before they become realised, our Sydney Metro environment team is applying best practice environmental management during planning and construction.

#### HS2

Partnering with our client to develop and integrate sustainability into the design and operation of this new multibillion rail line in the UK, covering environmental, social and economic considerations. Work has included benchmarking sustainability of the programme against other projects worldwide as well as development and implementation of an assurance programme to confirm appropriate standards for sustainability are met.



#### **Resilience projects**

#### Thames Estuary Asset Management 2100, London, U.K.

Serving as delivery partner for the design and development of an extensive program to protect flood defense assets along the 175 km tidal River Thames, we're incorporating a series of fortifications, embankments, flood gates, pumping stations, outfalls and major barriers to protect London.

#### Connected, Secure & 10 Gig Smart Cities, Canada

Developing innovative, outcome-based business models and cutting-edge technologies to deliver competitive, connected, safe and resourceful cities – in partnership with Smart City Capital and Nokia.

#### Rail Network Climate Change Vulnerability and Risk Assessment, Australia

Worked with the Western Australian Public Transport Authority (PTA) to build resilience into the rail network by understanding current and future network exposure to the effects of climate change. The project identified key vulnerable areas of the existing and future rail network, as well as key climate and natural hazard related risks, impacts and recommended adaptation measures.

#### Temaiku Land & Urban Development, Tarawa, Kiribati

Jacobs assessed the feasibility of increasing the height of a 330-hectare area of land to approximately two meters above the highest measured sea level. We are also developing a conceptual land use plan that addresses resilience issues impacting the atoll, including rapid urbanisation, limited water supply, ecosystem services and an increasing risk of land inundation from king tides.



#### **Major projects**

#### Expo 2020 Dubai

Creating and delivering a plan to integrate sustainability into all aspects of Expo 2020, while also creating a meaningful impact beyond the six months of Expo and inspiring visitors to commit to sustainability.

The plan includes:

- Generating clean energy and outperforming industry standards for building efficiency.
- Reducing water consumption using smart metering and irrigation as well as cuttingedge systems that convert moisture in the air into water.
- Enhancing the ecological value of the site and promoting local species.
- Minimising carbon footprint through mitigation, offsetting greenhouse gases, and public transport.
- Using sustainable building materials and retaining 80 per cent of permanent construction post Expo.
- Reducing waste by diverting 85 per cent of all waste from landfill by reducing, reusing, recycling and repurposing.

#### London Olympic and Paralympic Games

Development of a robust sustainability legacy plan that provided national benefits in culture, sport, volunteering, business and tourism, as part of an international programme management consortium.

#### **ZDHC - International Apparel Consortium**

Provided tools to enable members to phase out the hazardous chemicals in their supply chains, and provided communication tools, common platforms, and incentive structures to leverage the collaboration's power.



## Sustainability capabilities

Jacobs' capabilities span the spectrum of engineering and professional services, including management systems, information management, decision-making support, resiliency, management consulting, organisational change and communications. We provide these specialised services alongside traditional engineering design, build and operate capabilities.

#### **CLIMATE RISK & RESILIENCY**

Comprehensive infrastructure, technology and intelligence solutions to adapt, mitigate and recover from climate, cybersecurity and biosecurity-related risks.

#### ASSET DESIGN

High performance design with integration of architectural and engineered systems.

#### ASSET DEVELOPMENT Ю

Built environment master planning, certifications and green construction.

#### **OPERATIONS & MAINTENANCE**

Leading processes, integrated management systems, technologies, governance, performance measurement, efficiency and certifications.

#### **CLEAN WATER**

Treatment, conveyance, reuse and return to the natural environment



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#### **ENERGY**

Technical and environmental services critical to renewable and distributed energy technologies.



#### SOCIAL VALUE

Practices and solutions related to social value and wellbeing principles.

#### ENVIRONMENTAL SOCIAL & GOVERNANCE

Managing outcomes and positively reflecting those results across environmental, social and governance indicators for stakeholders



#### **GREENHOUSE GAS**

Greenhouse gas protocol measurement, verification and mitigation strategies.



#### **CLEAN AIR**

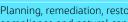
Monitoring, modeling, analysis, guality, pollution control and permitting.



#### APPLIED SCIENCE

Analytical chemistry (wet chemistry, inorganics, and organics), air toxics, aquatic toxicology, treatability and consulting.





Planning, remediation, restoration, regulatory compliance and natural capital.



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#### WASTE

Materials, forward-reaching waste, recycling, and circular economy and diversion programs.



#### **GEOSPATIAL DESIGN**

Holistic solutions for planning, engineering, construction and asset management, surfacing important insights from a project's geographic context.



## Our internal sustainability approach

## Jacobs' corporate approach to sustainability is PlanBeyond – planning beyond today for a better future for everyone.

We strive to positively contribute toward the UN Sustainable Development Goals, foster a culture of sustainability innovation, and be accountable up to the Board for delivering our sustainability strategy. We apply our PlanBeyond approach to client projects, and have developed JacobsValue+, a data capture tool for information on carbon savings, green buildings and energy incentives to measure the sustainability impacts of our projects.

As we set out to reach these goals, our values continue to drive our behaviors, relationships and outcomes: We do things right. We challenge the accepted. We aim higher. We live inclusion. These values underpin and celebrate all that we do, both within our company and in our communities.

Together, we are pushing the limits of what is possible and staying ahead to create the new standards of our future — **committed to 100% renewable energy and Net Zero Carbon in 2020 (achieved) and a long-term goal to be carbon negative by 2030** — planning beyond today for a more sustainable tomorrow. Additionally we set targets approved by the Science-Based Targets initiative (SBTi) for GHG emissions reduction, renewable energy sourcing, and emissions reductions in our supply chain.





## Value by Design

Jacobs understands that providing value is much more than just offering low cost solutions, or meeting time and budget targets. It is about delivering whole of life costs which respond to and reflect the social, governance, environmental and economic setting over project delivery and legacy timeframes.

In view of this, Jacobs has developed a hands on, interactive 'Value by Design' workshop process, utilising tried and tested strategic planning tools and processes. The workshops identify the key risks and challenges for our clients, subsequently developing innovative, yet practical solutions that address the key risks and provide solutions that go beyond 'business as usual' to deliver sustainable outcomes.

The workshop process allows us to work collaboratively with our clients to understand the nature of their issues, their strategic direction and encourages co-development of practical solutions that design out risks and design in long term value.



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#### Let's talk

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