

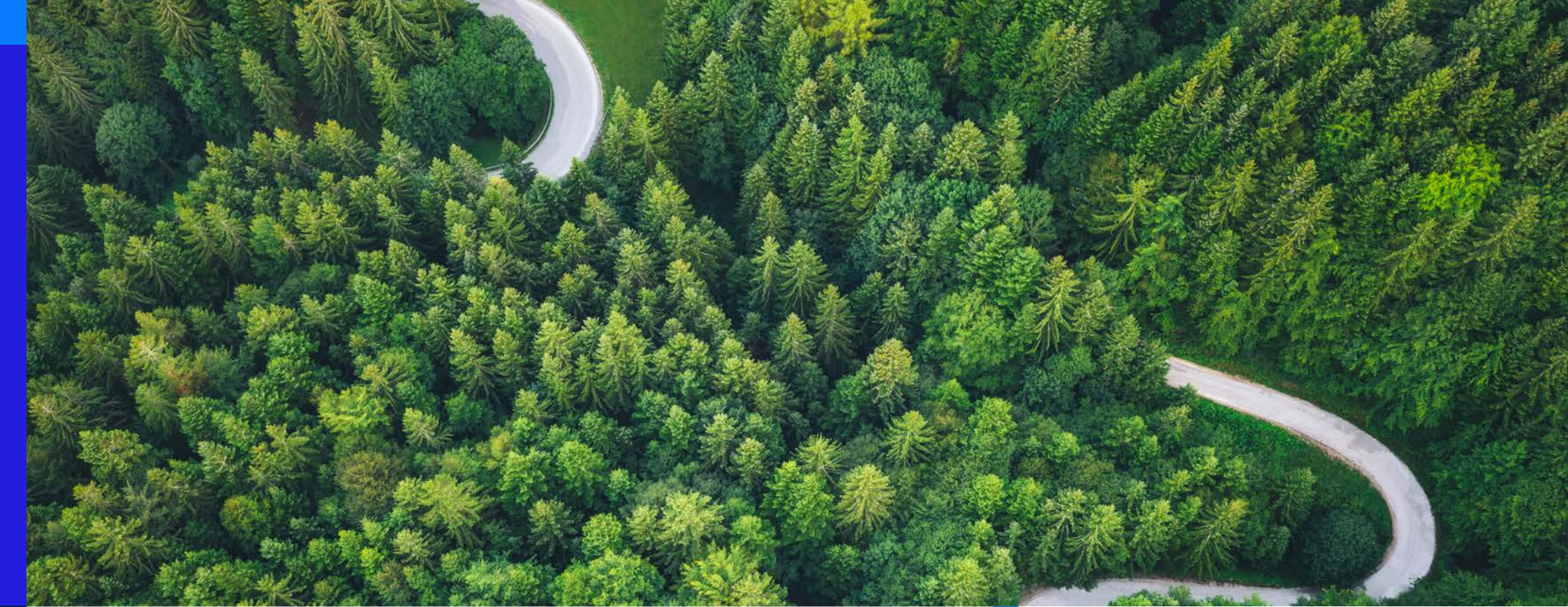
Jacobs

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

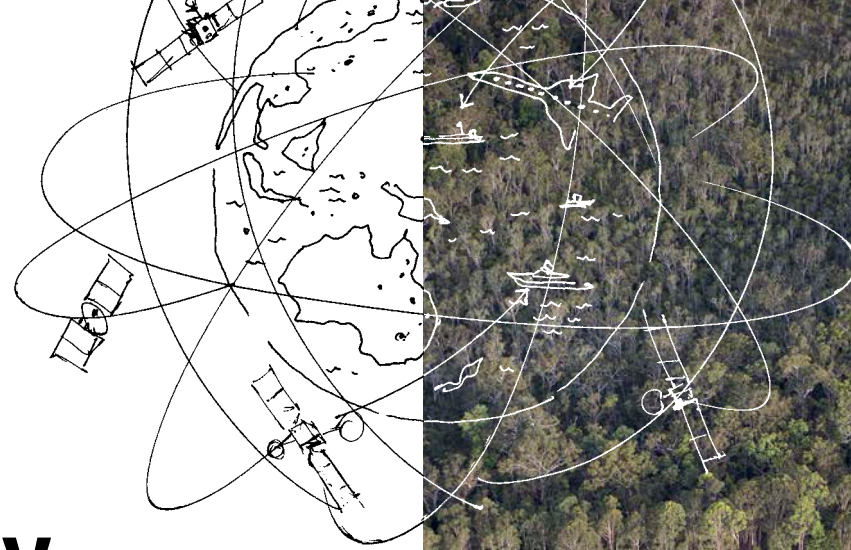
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Jacobs sustainability consulting approach

We help clients operate more efficiently, achieve cost savings, better manage risk, improve quality of life, and improve their social, economic, and environmental position. With our experience in sustainability strategy creation and delivery, Jacobs leverages our engineering and professional services to assist in setting tangible priorities, goals, and milestones while measuring and reporting results. We 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.

Our work across the value chain in the raw materials, manufacturing, and services sectors gives us valuable expertise and a unique system view to help clients meet their goals by uncovering opportunities for smarter operations.



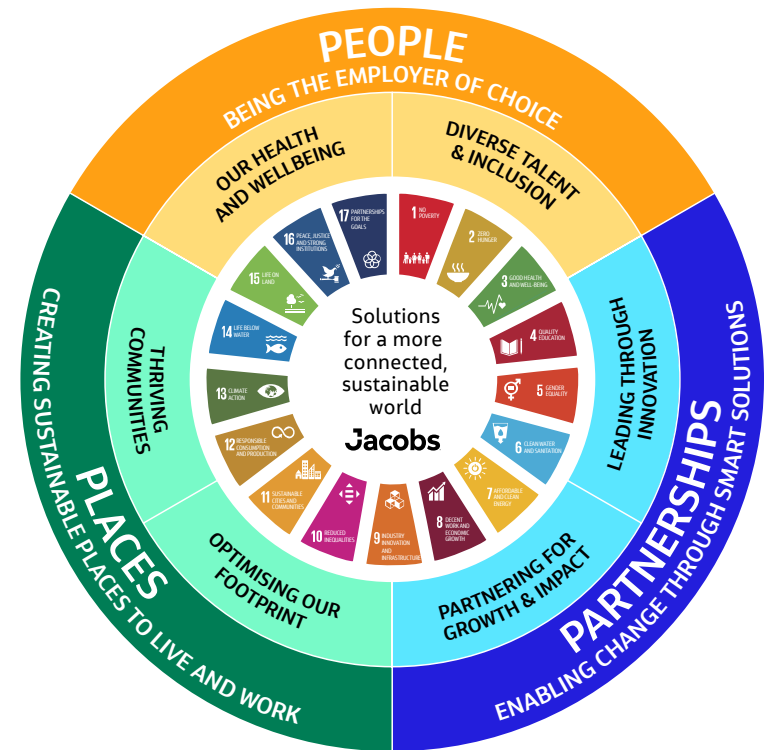
Our internal sustainability approach

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 JacobsSustainability+, 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 — **committing to 100% renewable energy and Net Zero Carbon in 2020 and a long-term goal to be carbon negative by 2030** — planning beyond today for a more sustainable tomorrow.



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 identified key risks and provide solutions that go beyond 'business as usual' and 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.

Our services

SUSTAINABILITY CONSULTING

- Sustainability Intelligence - Determining material Environmental, Social and Governance (ESG) risk and opportunities
- Strategy - Developing frameworks, goals, and metrics for strategy implementation
- Reporting - Preparing public reports (e.g CDP, GRI, DJSI) to nurture trust and support from stakeholders
- Supply chain - Managing value chain impacts and driving sustainability priorities up and downstream through industry collaboration, supplier engagement
- Resource productivity - Promoting efficient use of critical resources (carbon, energy, water) using advanced tools to identify opportunities and drive improvements

PROGRAM MANAGEMENT

- Supporting major programs and consortiums in tackling sustainability challenges

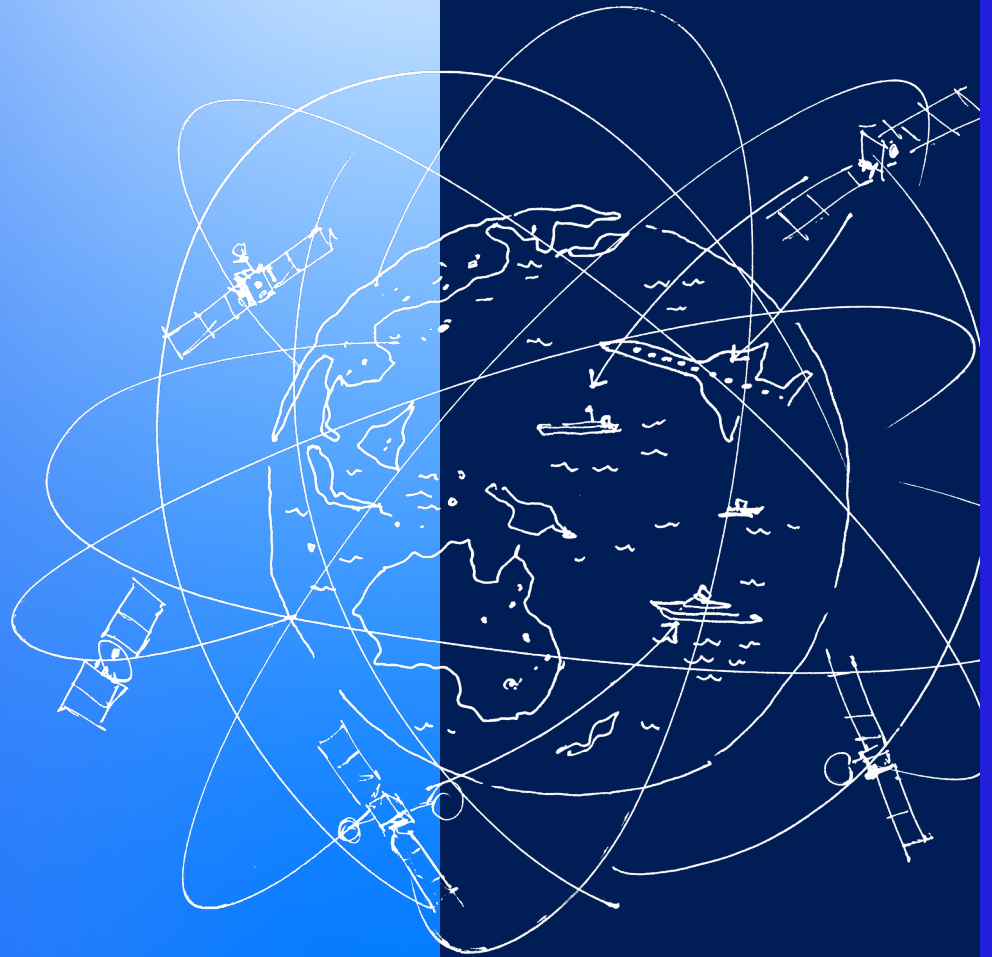
RESILIENCY

- Comprehensive infrastructure, technology and intelligence solutions to adapt, mitigate and recover from climate, cybersecurity & biosecurity-related risks
- Our resiliency experts engage with clients and stakeholders across the project lifecycle, assisting in early hazard definition, evaluation, strategy development, design of solutions and full implementation, including vulnerability mapping/planning for operations and maintenance of organizational and infrastructure systems

SUSTAINABLE DESIGN

- Implementing building and infrastructure solutions in line with frameworks incl. CEEQUAL (2018), Envision, Infrastructure Sustainability (IS), LEED, Green Star, BREEAM etc
- Applying our Resilient and Sustainable Infrastructure Framework to operationalize priorities across all projects and integrate triple-bottom-line evaluation

Key projects



Sustainability consulting projects

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 Corporate Water Stewardship Strategy for the Value Chain including innovation around water neutral cotton to restore natural capital and reduce risks.

SUPPLY CHAIN & PRODUCT SUSTAINABILITY

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

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 matters.

U.S. Electric Utility

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

RESOURCE PRODUCTIVITY

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.

High-tech manufacturer

Enacted global resource management program to track and report dollar 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

Sustainable design projects

SUSTAINABLE INFRASTRUCTURE

Sydney Metro Authority

Jacobs is working to ensure the successful delivery and implementation of sustainability ratings, targets and initiatives for the Central Station upgrade. Working proactively with the principal contractor to ensure environmental compliance and mitigate potential risk areas before they become realized, the Sydney Metro environment team is demonstrating applied best practice environmental management during planning and construction.

HS2

working with the 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 also included a 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. Key outcomes: sustainability key to performance outcomes and being used to drive change and promote stronger and better connected communities.

SUSTAINABLE BUILDINGS

Merck SSF

Jacobs was responsible for build-to-suit and interior fitout for research laboratory and office environment. Project has 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

The Jacobs EcoPlan framework is based on the Triple Bottom Line, which is composed of environmental, social and economic sustainability, and provides an integrated means of goal setting and performance measurement.

EcoPlan is a systems-based tool used to distil the complexity of a building, community, precinct or city to a manageable level of understanding while responding to the larger interconnected context. The EcoPlan framework examines the three lenses of environmental, social, and economic sustainability with the 16 filters within them. These filters break down the complexity of a project to a level where its characteristics can be evaluated subjectively.

Resiliency 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 and 10 Gig Smart Cities, Canada

Jacobs and our partners Smart City Capital and Nokia are using innovative, outcome-based business models and cutting-edge technologies to deliver competitive, connected, safe and resourceful cities.

Rail Network Climate Change Vulnerability and Risk Assessment, Australia

Jacobs is assisting the Western Australian Public Transport Authority (PTA) in understanding current and future network exposure to the impacts of climate change, helping to build resilience in to the rail network. Climate change vulnerability assessment and mapping outputs are being delivered to provide long term value to PTA, flagging key issues that could arise on the new and existing network and providing adaptation options which can practically be applied to reduce risk on the network.



Temaiku Land and 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 urbanization, limited water supply, ecosystem services and an increasing risk of land inundation from king tides.

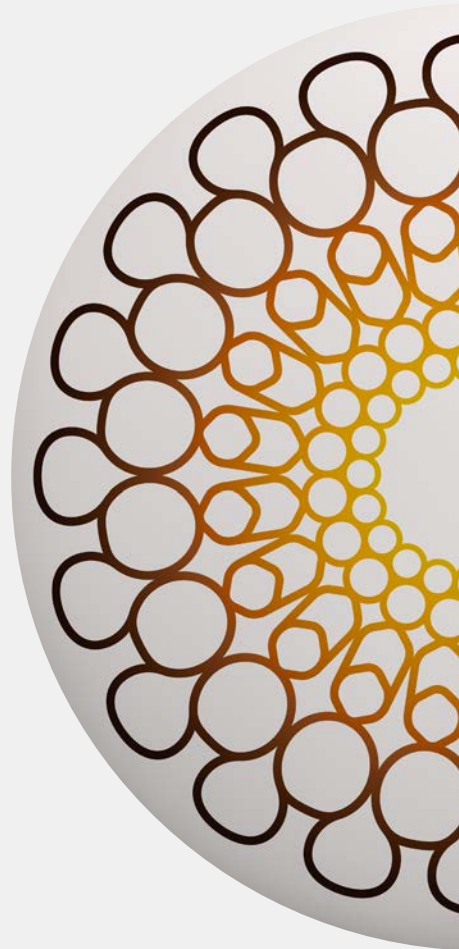
Program management projects

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 cutting-edge systems that convert moisture in the air into water.
- Promoting natural solutions with green canopy shading, and local species managed without the use of chemicals.
- 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.

Additional sustainability capabilities

Beyond sustainability consulting, Jacobs team members develop their capabilities across a spectrum of engineering and professional services including management systems, information management, decision-making support, resiliency, management consulting, organizational change, and communications. We provide these specialised services alongside traditional engineering design, build, and operate capabilities, including the following:



CLIMATE RISK & RESILIENCY

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



ASSET DESIGN

High performance design with integration of architectural and engineered systems.



ASSET DEVELOPMENT

Built environment master planning, certifications and green construction.



OPERATIONS & MAINTENANCE

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



CLEAN WATER

Surface, ground, desalination, storm, flood, conveyance, waste, reuse and environmental flow.



ENERGY

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



ENVIRONMENTAL SOCIAL & GOVERNANCE

Expertise in 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

Leading monitoring, modeling, analysis, quality, pollution control, and permitting.



APPLIED SCIENCE

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



ECOSYSTEMS

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



WASTE

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





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Reinventing tomorrow.

Let's talk

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