

INNOVATION WITH AN IMPACT

Delivering a safer, healthier, more connected world.

We offer a full array of services to plan, design and support complex sustainable infrastructure projects for our clients across many market sectors, such as aviation, industrial, rail and transit, and smart cities.

Sustainability: It's Who We Are

For us, sustainability is more than just a buzz word, it's a core value. Parsons sustainability staff experience combines alternative project delivery (APD) for large-scale infrastructure projects, service life/resilience planning, and expertise in applying multiple infrastructure sustainability frameworks. With over 250 sustainability accreditations held collectively across Parsons, we utilize the the best industry practices, leading-technology, and tools to deliver sustainable and resilient infrastructure projects and implement renewable energy programs.

Parsons delivers sustainability services for small and large scale projects, playing a lead role in helping our clients apply LEED, Envision, Estidama, and other rating systems utilized worldwide. Our goal is to meet our clients' needs and assist them in optimizing sustainable life cycle project performance. The total value of our projects with sustainability scope is over 25 billion dollars.




Solutions: It's What We Do

We take pride in our comprehensive approach to solving sustainability and resilience challenges. We study analyze, research, model, design, manage, and plan at a narrow or broad scale, as dictated by the project or organizational needs of our clients. As a result, we achieve excellent outcomes for clients in a range of industries, including infrastructure, defense, and security. The three dimensions of our sustainable infrastructure program development are represented in the diagram on the right.

Enhancing Sustainability Through Innovation



We are always looking for ways to push the boundaries of sustainable solutions to meet the growing need of our clients and regulatory requirements. For example, we have used, the following innovative concepts and technologies on recent projects:

-  First-of-its-kind hydrodynamic model to simulate tsunamis and storm events, combined with sea level rise for Coastal Areas
-  ParGRES, proprietary software to evaluate green remediation sustainability impacts
-  Intelligent Networks (INET), our cloud based system that uses real-time traffic monitoring and predictive analytics to drive down pollutant emissions.



Success: It's What We Achieve



King Salman Energy Park (SPARK) Phase 1, Abqaiq, Saudi Arabia / \$1.1 billion

Parsons provided front-end engineering design, proposal design, procurement assistance, and project and construction management services. SPARK, a three

phase development, is a city dedicated to energy-related industries and covers approximately 17 mi². Phase 1 covers 6 mi² and includes a mix of industrial, logistics, residential, commercial, retail, education, and government components.

- ★ First industrial city LEED v4.1 Cities: Plan and Design Rating Silver certification (2020).



Dubai Metro Red Line Extension to Expo 2020 Dubai, UAE / \$2.9 billion

As part of a joint venture (with Systra), Parsons provided program management services including feasibility studies, concept and preliminary design, construction supervision,

and project closeout for this 9-mile transit extension. The project includes 7 miles of elevated guideways, seven stations, and 2 miles of tunnel from the existing Dubai Metro Red and Green Lines to the Expo2020 Dubai site.

- ★ LEED v4 BD+C:NC Gold certification for all metro stations (2020 - 2021), and Sustainable Transport Best Consultant Award from Dubai Roads & Transport Authority (2022).



Yas Island Zone K (West Yas) Residential Community Yas Island, Abu Dhabi, UAE / \$163.6 million

Parsons provided design and construction supervision services, including construction monitoring activities for roadway infrastructure, marine, landscape works, and public

space. The project vision resulted in an exemplary residential precinct on Yas Island that features low density residential homes, significant open space, and waterfront access facing an extensive mangrove marine park.

- ★ Estidama Two Pearl Community Rating - Design (2013) and Construction (2022).



International Renewable Energy Agency (IRENA) Headquarters Masdar City, Abu Dhabi, UAE / \$83.6 million

Parsons provided project management services for the design and construction of IRENA Headquarters, a mixed-use commercial building located in Masdar City, Abu Dhabi. The

solar panel rooftop feature supplies approximately 305 MWh of renewable electricity to tenants annually and reduces water usage by more than 50% compared to a similar conventional office building.

- ★ First Estidama Four Pearl Building Rating of the Emirate (2014) and Middle East Economic Digest Sustainable Project of the Year Award (2016).



Emirates Identity Authority Headquarters Building (EIDA) Khalifa City A, Abu Dhabi, UAE / \$80.4 million

Parsons provided project management services from design through construction and project closeout, including support for the achievement of client green building goals for

10 Service Point Buildings around the UAE that accommodate the processing of UAE national identity cards, as well as an expanded design-build scope for a new headquarters (HQ) building.

- ★ Estidama Two Pearl Building Design Rating for the HQ building (2014).

Key Services

- Climate change vulnerability analysis and risk assessment
- Energy efficiency evaluations and modeling
- GHG inventory development and reduction strategies
- Green infrastructure design and low impact development (LID)
- Greenhouse gas and carbon impact calculations
- Infrastructure resilience evaluations and enhancement planning
- Key performance metrics development
- Life-cycle cost analysis (LCCA)
- Sustainability assessment and gap analysis
- Sustainability project or program planning and management
- Sustainable environmental remediation
- Sustainable infrastructure master planning
- Third-party certifications (e.g., LEED, Envision, Estidama, BREEAM Infrastructure)
- Waste management planning
- Water efficiency and reuse studies



Accreditations are an important way to stay current with industry best-practices. Our employees hold numerous credentials, including:

- LEED Green Associate, LEED AP
- Envision Sustainability Professional
- Estidama Pearl Qualified Professional
- Certified Energy Manager
- Certified Climate Change Professional
- BREEAM Infrastructure Assessor