LANGAN



QUALIFICATIONS

Renewable Energy Services



LANGAN

is committed to applying principles of sustainability and environmental stewardship to our internal operations.

In addition to minimizing the environmental footprint of our operations, Langan partners with CarbonFund, a non-profit entity, that manages carbon reduction projects that protect the environment and reduce the threat of climate change.



EFFICIENT ENERGY NEEDS EFFICIENT ENGINEERING

The development of solar arrays, biomass facilities, geothermal plants, EV charging stations, wind farms, and other renewable facilities requires complex engineering design. Having the in-house capability to address issues from feasibility, to permitting, to entitlements, to construction documents, to infrastructure design, and well beyond makes Langan an efficient choice of consultant, often leading to a simplified communication and coordination process.

LANGAN

Corporate Summary

Integrated Solutions. Measurable Value.

Langan provides an integrated mix of engineering and environmental consulting services in support of land development projects, corporate real estate portfolios, and the energy industry. Our clients include developers, property owners, public agencies, corporations, institutions, and energy companies around the world.



1,600 Employees



53
Years in Business



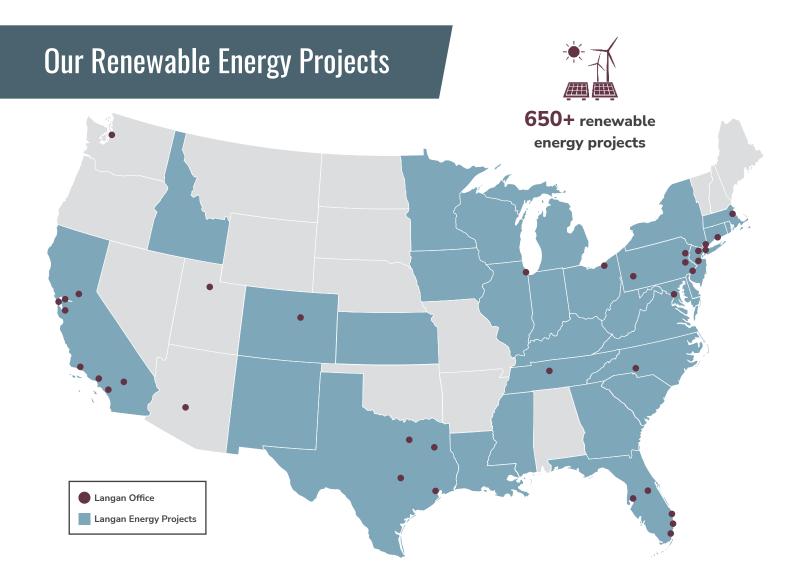
40+
Office Locations
Nationwide



6 international office locations



48
States Engineers
are Licensed in



SOLAR ENERGY



The Bright Alternative

As renewable energy systems rapidly become more efficient and effective, and energy consumption continues to increase across the board, the need for the development of more renewable energy facilities and related infrastructure continues to grow.

For over a decade, Langan has been providing solar energy expertise to clients across the country. Due to the nature of solar funding programs and their fast-paced schedules, Langan has been challenged with providing high quality deliverables under tight deadlines. To meet these challenges, Langan provides a full array of multi-disciplinary services creating a seamless line of work through all project phases.

- Digital Solutions/GIS
- · Geotechnical Engineering
- Due Diligence Support
- Surveying/Mapping
- · Site/Civil Design
- · Geotechnical Design
- Foundation Design
- Brownfield Remediation
- Environmental Compliance
- Natural Resource Permitting

BATTERY STORAGE



Bolstering The Grid

Battery Energy Storage Systems (BESS) are becoming the leading energy storage option in the renewable market and the need for the development of more facilities and related infrastructure of this type continues to grow. These facilities convert and store excess energy so it can be re-converted and utilized when it's needed. It sounds simple in theory, but battery storage site development requires expert engineering.

Multiple challenges – stormwater management, flood resiliency, and noise mitigation – are just a few common issues on battery storage sites. On the other hand, what's promising about this market is its versatility. Battery storage structures can be placed on sites ranging from 10 acres in rural areas near solar fields to 1/2 an acre in tightly constrained urban pockets. Langan's multi-disciplinary services create a seamless line of work through all project phases.

Considering that energy storage systems are being utilized to retire and decarbonize urban areas, Langan's technical expertise in brownfield remediation, geotechnical, and site/civil design drives Langan to be a logical choice as a collaborator in your energy storage projects.

- Feasibility/Due Diligence
- Digital Solutions/GIS
- · Geotechnical Engineering
- Surveying/Mapping
- · Site/Civil Design
- Brownfield Redevelopment
- Environmental Compliance
- Natural Resource & Permitting
- Foundation Design

ELECTRIC VEHICLE (EV) CHARGING STATIONS



Bringing Value to Your Vision

Langan continues to be part of creatively repurposing existing retail, residential, mixed-use, entertainment, institutional, and specifically designated parking sites, incorporating new uses and amenities such as electric vehicle (EV) charging station infrastructure. Our team's experience and expertise has proven successful on projects for nationwide partners as they transform under-performing properties into contemporary live, work, play, and shop spaces.

Our smart growth and sustainability-oriented design approach, coupled with the fact that Langan offers geotechnical and environmental services for sites challenged by difficult subsurface conditions, makes us the onestop shop for implementing new and improved features as part of land development projects.

- Digital Solutions/GIS
- · Geotechnical Engineering
- Surveying/Mapping
- Site/Civil Design
- Landscape Architecture
- · Environmental Engineering
- Traffic Engineering
- Permitting

WIND FARMS



The Power Of Nature

Langan has assisted clients both on land and off-shore to develop wind farms. Having the in-house capability to address issues from feasibility, to permitting, to entitlements, to construction documents, to infrastructure design, and well beyond makes Langan an efficient choice of consultant, often leading to a simplified communication and coordination process.

- Digital Solutions/GIS
- · Geotechnical Engineering
- Due Diligence Support
- Surveying/Mapping
- Site/Civil Design
- Foundation Design
- Brownfield Remediation
- Environmental Compliance
- Natural Resource Permitting
- Construction Support

SUBSTATIONS & TRANSMISSION LINES



We Know What You Need To Know

Langan's integrated mix of engineering and environmental services ideally supports power development projects, including plants and transmission. Projects that span long and short distances and traverse roadways and bodies of water require the technical and regulatory expertise Langan possesses. With 50+ years of experience nationwide, no other firm is better suited to support power projects than Langan.

- Digital Solutions/GIS
- Geotechnical Engineering
- · Surveying/Mapping
- Site/Civil Design
- Permitting/FERC
- Foundation Design
- Construction Management
- Environmental Compliance
- Ecological Assessments
- Traffic Engineering

COMMUNITY CHOICE AGGREGATION (CCA)



Utility Scale Customer Management

Langan has have extensive experience providing digital solutions/GIS services to multiple Community Choice Aggregation (CCA) clients, also known as municipal/governmental aggregation throughout California and a variety of clean energy clients around the country. Specific areas where digital solutions can play a critical role include managing and analyzing customer information to understand customer eligibility and increase customer engagement, managing and tracking assets such as electric vehicle charging facilities, battery storage sites, and renewable energy facilities, site selection analysis for potential renewable energy facility sites through a wide variety of automated site selection and criteria ranking tools, and custom web/mobile application development to customer and asset tracking needs.

- Digital Solutions/GIS
- Environmental
- Traffic
- Site/Civil
- Geotechnical
- EHS

