# ENERGY, WATER & INFRASTRUCTURE





Meco is an industry leader offering civil, geotechnical, Hydrotechnical and project management services with a focus on energy, water and infrastructure.

Meco has nearly two decades experience in energy and infrastructure; planning design, maintenance and management. We have an eclectic portfolio of experience with water utilities and renewable energy, including hydro, wind and non-conventional sources, as well as related heavy civil and instrumentation projects.

Meco provides exceptional engineering and geoscience consulting services through a timeproven strategy, incorporating the three essential ingredients of effective and efficient project delivery: innovation, reliability, and performance. These ingredients—combined with outstanding customer service—make Meco a trusted extension of your

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# **Meco Services Include:**

#### **Dam Safety Management**

Meco provides design, construction and maintenance services related to the safe operation and management of dams and associated hydraulic structures including:

- Dam safety reviews
- Geotechnical analysis and design
- Designs and modifications
- Installation and interpretation of monitoring equipment
- Flood studies and development of regional hydrologic models
- HEC-RAS modeling
- Operations and maintenance plans
- Low flow studies
- Dam break and inundation mapping
- Emergency preparedness planning

#### **Project Management**

Meco uses risk management models to define client goals and objectives, which in turn guide project delivery. Our project management model means we regularly interact with our client and seek input at all stages for needs re-assessment and resource availability. Our services include:

- Conceptual planning and feasibility studies
- Construction specifications & tender documents
- Costing and scheduling
- Construction Supervision

### **Civil Engineering**

Meco offers civil and geotechnical services in the marine, municipal, structural, infrastructure and energy sectors. Our blend of geotechnical, hydraulic and structural skills have allowed us to be innovative across a broad sector of these industries including:

- Embankment and concrete dams
- Hydroelectric facilities and feasibility studies
- Shallow and deep foundations
- Wharf and breakwater design
- Ground anchors and soil nailing
- Retaining walls and slope stabilization
- Blast monitoring
- Construction QA/QC inspection services

## **Decenter** Geotechnical Engineering

Meco provides comprehensive geotechnical services, including reconnaissance, preliminary and final investigations, and geotechnical modeling for foundations, slopes and embankments and including:

- Site investigations and soil characterization
- Soil and rock remediation
- Risk and hazard assessment
- Blast vibration monitoring and assessment
- Foundation design and recommendations
- Settlement analysis
- Rock slope engineering and slope stability
- Retaining wall design

#### ▷► Water Resources Engineering

Meco provides comprehensive hydrotechnical services for river, reservoir, water, wastewater and stormwater projects. Our services include:

- Flood frequency analysis
- River and reservoir routing analysis
- Fish ladders and channel design
- Resource management services
- Hydraulic design of concrete & steel structures
- Flood plain analysis
- Dam failure modelling
- Stilling basins, weirs and culverts

