



TECHNICAL MANAGER – SHANGHAI

Our Company

TERAO is an international engineering company committed for over 30 years to the energy efficiency and environmental impact of buildings and cities. Today, we are specialized in a comprehensive and multidisciplinary approach to the building industry, namely:

- As a Sustainable Development PMO on a Building scale or an Urban Planning scale, TERAO provides a wide range of expertise in consultancy and engineering for buildings and sustainable cities.
- As Environmental Engineering PMO and Sustainable Operations Manager, TERAO supports the stakeholders in design and operations to integrate high environmental quality and energy efficiency measures into private market projects, as per Public Procurement Contracts, and throughout the life cycle of buildings.

Since 2022, ATIXIS (a technical and multidisciplinary engineering firm) is the majority shareholder of TERAO, to provide complementary expertise. A development synergy is created between TERAO's China, Vietnam, Singapore, Malaysia, Morocco and Colombia subsidiaries.

Job Responsibility:

Under the responsibility of the China Managing Director, the Technical Manager supervises TERAO projects deliverables in China and South-East Asia, with a focus on industrial facilities, and covers the following main tasks :

Quality Assurance & Quality Control for Building Simulations and Technical Studies

- Review deliverables and ensure alignment with contractual clauses as well as client expectations.
- Supervise the preparation of building simulations and technical studies through the use of professional software tools (DesignBuilder, IES-VE, OneClick LCA, etc.), including preliminary and detailed building energy models, daylight analyses, dynamic thermal simulation, computational fluid dynamics (CFD) simulations, LCA carbon footprint calculations, and data analytics in support of several types of technical studies:
 - o Building envelope and MEP systems evaluation for new building projects or campus-scale development with specific building environmental performance and construction budget goals;
 - o Thermal studies to assess indoor operating conditions for occupant health, safety, and comfort, and the durability of stored goods or operated equipment;
 - o Indoor lighting and daylighting studies to assess visual comfort and use of natural daylight to reduce artificial lighting usage;
 - o Energy audit services requiring performance impact estimates of proposed energy efficiency measures in existing buildings (heat recovery, etc.) using spreadsheet calculations and software tools;
 - o Monitoring-based commissioning services requiring data visualization to spot faulty operations in HVAC operational trends; Operation optimization and energy management services (ISO 50001, etc.);
 - o Clean energy studies services (Solar PV, wind power, etc.)
 - o Low carbon consultancy services combining operational and embodied carbon footprint evaluation, and associated environmental impact lowering measures and remedies;
 - o Cost and return-on-investment analysis of energy efficiency or 1arbone missions reduction measures.

Expertise & Training Management

- Consolidate and manage the technical expertise at the company level.
- Define research and tools development goals of the operational team.
- Identify training needs and establish training plans.
- Establish or improve efficiency enhancing tools and procedures.

Business Development Support

- Refine the standard scope of work for the whole set of existing services
- Actively participate to the scope of work definition of new services.
- Participate to key client meetings to support the Business Development team.



Requirements

Academic Background and Professional Expérience

- Master of Engineering (M.Eng.) / Master of Science (M.S.) or equivalent education in Mechanical, Electrical, Civil Engineering or related majors (previous coursework in HVAC and building simulation preferred)
- Minimum 10 years of energy efficiency or related mechanical engineering professional experience (previous building simulation, energy auditing, commissioning and industrial facilities experience preferred)

Skills and Abilities

- Solid knowledge of mechanical and electrical systems and principles; including HVAC, lighting, motors, thermodynamics, fluids, and heat transfer
- Hands-on experience with mechanical, electrical, and control systems
- Familiarity with ASHRAE Level-1 / Level-2 energy audits (Level-3 experience is a plus)
- Technical aptitude with ability to quickly learn and integrate new concepts and tools
- English Fluency is required.
- Strong writing, verbal communication, interpersonal, training, and analytical skills;
- Strong judgment and critical thinking to challenge assumptions and solve problems
- Strong organizational and management skills

Software

- Proven proficiency in Energy Modeling software (DesignBuilder, IES-VE, etc.)
- Proficient with Microsoft Office Suite (including Word and Excel)
- Experience with OneClick LCA is a plus