

Industrial Energy Efficiency Trainee

Location: Malaysia (Kuala Lumpur)

Starting date: April 2024

Expected Internship Duration: At least 10 weeks to 24 weeks

Our Company

Headquartered in Paris, TERAQ is a global consulting and engineering company involved in energy efficiency and green building engineering for 25 years. Founded on 1993, with currently 50+ team of multidisciplinary engineers, TERAQ is one of the pioneers of energy-saving and sustainable buildings, and also a leading independent engineering company with worldwide presence (South-East Asia, China, Africa, and Latin America).

TERAQ operates on the whole building life cycle, from design (green building specifications, energy efficiency design and calculation, etc.) to operation and maintenance (energy audits, certifications in operation, ...).

TERAQ capabilities include the following:

- Energy Audits level 1/2/3
- Energy efficiency projects implementation
- Commissioning missions
- Energy management (ISO 50 001, IPMVP, energy monitoring, etc.)
- Building Simulations (Energy/Thermal Modeling, Daylight Simulations, CFD, etc.)
- Sustainable Design Solutions for new constructions and renovations
- Low-carbon design (Carbon Footprint Study, LCA, sustainable materials)
- Environmental Certification Management for new construction and existing buildings (LEED, Greenmark, BREEAM, WELL, GreenRE, GBI etc.)

Position overview:

As an Industrial Energy Efficiency trainee at TERAQ Asia, you will be assisting Project Manager in designing, implementing, and managing energy efficiency projects for our industrial clients. Your expertise will be essential in identifying opportunities to reduce energy consumption, lower greenhouse gas emissions, and enhance overall sustainability within our clients' facilities.

Job responsibility:

Under the responsibility of Malaysia and Singapore Operation Manager and Project Manager, the Industrial Energy Efficiency trainee participates in TERAQ projects in Asia, with focus on industrial facilities. Throughout the internship programme, the trainee will be closely guided by the Project Manager on work executions.

The main tasks include:

- **Energy Audits and Analysis:** Conduct comprehensive energy audits and assessments of industrial facilities to identify energy-saving opportunities and potential improvements.
- **Data Analysis:** Analyse energy consumption data, process data, and equipment performance to develop tailored energy efficiency solutions.

- **Recommendations:** Provide feasible recommendations and strategies for improving energy efficiency, including equipment upgrades, process optimization, and renewable energy integration.
- **Project Management:** Supporting the project management role. Assisting in communication with clients, tracking schedules and deliverables, producing or delegating as needed to get the work done, and integrating diverse knowledge to provide insightful information to both PM and clients.
- **Performance Monitoring:** Assist in implementing energy monitoring systems and track the performance of implemented solutions to ensure sustained energy savings.
- **Communication:** Assist in preparing logically organized, technically accurate, and clearly presented emails, memos, and reports
- **Research and Specialist Sourcing:** Search for multiple vendors/suppliers in the market for potential collaboration in introducing energy efficiency solutions to clients. At the same time, conduct detailed technical research on the emerging energy efficiency solutions in the market with support from the external vendors in the market.

Requirements

Qualifications

- Studying on Mechanical Engineering, Electrical Engineering, or a related field
- Bonus with A Level / STPM with Physics, Mathematics, and Chemistry as Pre-University courses.
- Current CGPA above 3.5 / course score above 80, or equivalent.

Skills

- Good command of English (spoken and written). Chinese will be bonus.
- Strong knowledge of industrial processes, HVAC systems, compressed air systems, motors, thermodynamics and fluid mechanics, heat transfer, heat recovery, refrigeration cycle, Combined Heat and Power (CHP) and energy-efficient technologies
- Knowledge of energy management practices, familiarity with ISO 50001 standard

Abilities

- Proactive, and able to work independently with minimal supervision.
- Technical aptitude with the ability to quickly learn and integrate new concepts and tools
- Strong writing, verbal communication, presentation, interpersonal, training, and analytical skills
- Strong judgment and critical thinking to challenge assumptions and solve problems
- Strong organizational, time and project management skills
- Willing to travel (together with Project Manager) for client site visit across Malaysia and Singapore.

Software

- Proficient with Microsoft Office Suite (including Word, Excel, PowerPoint)
- Experience with Energy Modeling software (DesignBuilder, IES-VE, Ansys Fluent, etc.) or Mechanical, Electrical and Plumbing (MEP) design software is a plus

If you are interested, please send your resume to: mdesbrieres@teraoasia.com and zrang@teraoasia.com