

Job title:	Thermal/Energy Engineer
Reporting to:	Discipline Lead on a day-to-day basis and ultimately to the Senior Partner
Objective:	To contribute to the Practice's sustainable large scale infrastructure engineering, planning, master planning, benchmarking and strategic sustainability output for projects

Responsibilities

- Advise and support design teams in the integration of sustainable infrastructure design concepts for various scales of masterplans with a focus on energy demand, alternative energy sources, thermal requirements and thermal design elements
- Support the delivery of conceptual and schematic dry utility infrastructure design for masterplanning projects within F+P.
- Conduct research to all relevant aspects of utility infrastructure including district thermal networks, energy demand calculations for various infrastructure plants i.e., water, wastewater, drainage, and district thermal systems.
- To provide design, research, and Analysis support to the integrated environmental and sustainable design of masterplans and projects.
- Liaise with other members of the team towards the integration of resource efficient solutions in shaping masterplans and guiding towards zero energy framework.
- Present analysis results in the form of reports and presentation to the clients and design teams internally.
- Thorough knowledge of and compliance with Foster + Partners procedures and standards.
- Contribute, or otherwise assist, as required.

Qualities and skills required

- Able to demonstrate ability to undertake the above responsibilities.
- Undergraduate degree in Engineering (electrical, mechanical, civil or similar) and/or master's degree in Engineering/Environmental Design/Sustainability.
- Minimum 2~3 years of experience in large scale masterplans, urban development and sustainable infrastructure applications.
- Enthusiasm to pursue sustainable infrastructure designer on large scale masterplans as the central part of the individual's career development
- Legally able to work in the country in which the position is based
- Technical knowledge and expertise in:
 - A good understanding on masterplan scales and land-use typologies
 - Renewable power generation options
 - District thermal distribution systems and associated renewable technologies i.e. cogeneration, lake and sea water cooling system, solar absorption.
- Broad understanding of multidisciplinary design process
- Good communication and presentation skills
- Able to demonstrate initiative and a proactive approach to daily tasks
- Able to work under pressure and to tight deadlines
- Excellent organisational skills
- Able to manage sensitive and sometimes confidential information
- Self-motivated and able to take responsibility
- Able to manage and prioritise tasks and time efficiently
- Good interpersonal skills and able to work independently and as part of an effective team
- Flexible attitude
- Able to build relationships at all levels, internally and externally

Desirable

- Qualified as a Chartered Engineer in the UK, or actively working towards.
- Experience on any large-scale masterplan design

- Experience in:
 - Digital networks (telecoms, IoT, etc.)
 - Smart infrastructure applications
- Very Good to Excellent Graphic skills
- Experience in the use of the following tools/ software packages: Photoshop, Illustrator, InDesign, Word, Excel, PowerPoint, PowerBI
- Professional accreditation preferred: LEED, BREEAM, Estidama, GSAS, CSH etc.

This description reflects the core activities of the role but is not intended to be all-inclusive and other duties within the group/department may be required in addition to changes in the emphasis of duties as required from time to time. There is a requirement for the post holder to recognise this and adopt a flexible approach to work. Job descriptions will be reviewed regularly and where necessary revised in accordance with organisational needs. Any major changes will be discussed with the post holder.

Applicants should forward a CV and portfolio of no more than 10 pages.

May 2022