## Foster + Partners

Job title:Sustainable Infrastructure Engineer – Thermal NetworksReporting to:Discipline Lead on a day-to-day basis and ultimately to the Senior PartnerObjective:To contribute to the Sustainable Environmental Design +<br/>Analysis team's engineering, master planning, benchmarking<br/>and strategic sustainability output for projects within the<br/>Practice.

Foster + Partners is an integrated architectural + engineering practice, committed to delivering sustainable and environmentally responsive projects that reflect the targets of The Paris Agreement.

The Sustainable Environmental Design and Analysis Team are looking for an enthusiastic Infrastructure Engineer to join our growing Environmental Engineering team at Foster + Partners. In your role you'll have the chance to apply your expertise on masterplans and developments across the globe. Playing a pivotal part in delivering sustainable, liveable, and resilient cities of the future.

What You'll Do:

- Design and implement sustainable systems for heating and cooling, leveraging renewable energy sources to deliver enhanced energy efficiency.
- Integrate innovative thermal energy storage solutions, to balance energy demand and supply, improving the resilience of urban systems.
- Explore building and district level thermal energy management, seamlessly integrated with architecture and urban design.

## The Role:

- 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 (heating and cooling)
- Support the delivery of conceptual and schematic utility infrastructure design for masterplanning projects within F+P.
- Conduct research to all relevant aspects of utility infrastructure including district thermal networks (heating and cooling), 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, Skills + Experience:

- Able to demonstrate ability to undertake the above responsibilities.
- Undergraduate degree in Engineering (mechanical or similar) and/or master's degree in Engineering/Environmental Design/Sustainability.
- Minimum 2 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:
  - Masterplan development scales and land-use typologies
  - 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.
- Actively working towards Chartered Engineer qualification in the UK.
- Experience on any large-scale masterplan design.
- Experience in:
  - o Smart infrastructure applications
- Very good graphic skills.
- Experience in the use of the following tools/ software packages: Photoshop, Illustrator, InDesign, Word, Excel, PowerPoint.
- Professional accreditation preferred: LEED, BREEAM/ BREEAM Infrastructure, Estidama, GSAS, Mostadam, CEEQUAL, SITES etc.

Please apply with an up-to-date CV and a portfolio demonstrating your work experience.

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