Foster + Partners

Role Definition

Job title: **Senior Sustainable Energy Engineer**
Reporting to: **Head of Sustainability**

The Sustainability Group offers a wide range of skills to our projects at city, master-plan, building and product scale. You will focus on viable, practical and evidence based energy solutions that transform our projects at all scales through sustainable design, procurement, construction and operational practice, now and into the future.

Responsibilities

- Recommend sustainable and viable energy features, systems and network design for projects, quantify the energy and carbon flows and impacts of design options for projects
- Working with the group to produce, technical information, prototypes, digital and physical models, and energy maps, relating to low carbon systems and networks
- Support the development of analytical frameworks of the economic, environmental and social issues in cities and large area masterplans
- Develop data on energy and energy cost information, and tools, and apply them to our projects
- Conduct research into existing and new low energy and low carbon sustainability techniques and procurement and integrate the results into our projects
- Keep up to date with developing trends, practices and legislation at global scale
- Run project energy workshops, and seminars, regarding sustainable design
- Contribute to group leadership
- To have thorough knowledge of and compliance with Foster + Partners procedures and standards
- To contribute, or otherwise assist, as required

Qualities and Skills required

Essential

- Applying supply and demand side energy management to projects
- Applying low carbon design, commercialisation and procurement techniques
- Understanding of smart electricity grids, innovative transport systems, energy storage, climate change resilience and energy security
- Understanding of economic practices and theories of energy and electricity markets
- Knowledge of engineering aspects of electricity grids, power generation, smart grid and technologies and application of ICT to the energy sector.
- Knowledge of regulations and future direction of national and international regulations on energy
- Having proven negotiation skills
- Ability to communicate complex technical information in a non-technical manner
- Guiding and assisting with the training of junior members on the team
- Being inventive, resourceful, pro-active and enthusiastic about sustainability in design
- An ability to illustrate your ideas in creative ways using a variety of techniques
- Having a flexible attitude and able to build good relationships at all levels, internally and externally
- Having excellent organisational skills and the ability to work remotely from the group
- Qualified as a Chartered Engineer with an excellent and relevant degree
- Legally able to work in the country in which the position is based

Desirable

- Risk analysis (Monte Carlo and similar)
- An awareness of software such as Energy Plus, Energy Pro, IES, Wind Pro, MatLab, Hevacomp

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.