The UN has declared 2012 as the International Year of Sustainable Energy for All and a growing demand for professionals within the energy and environmental sectors supports this.

In this article, Vicky Kenrick at International Sustainability Recruitment Specialists, Allen & York, explores recruitment trends within the energy and environment sector, specifically identifying how these global trends lead to growth areas, including; renewable energy, energy engineering, energy management, carbon and climate change, water engineering and waste management, where job opportunities are increasing.

The Energy Context

Our global energy production is undergoing a pivotal transformation, particularly in terms of energy development and resource management. The Earth’s 7 billionth participant was born on the 31st October 2011, which has emphasised the importance of creating a sustainable future that can handle our growing population. Achieving the global aim of 30% of the world's energy mix being provided by renewable energy sources by 2050, set out in the Sustainable Energy Trade Agreement (SETA), is core to ensuring future generations are equipped with sustainable energy. This target assumes a very rapid growth rate in renewable energy development; that will in turn require significant effort and sustained investment. It is by having the appropriate skilled professionals in place that can ensure this happens. Within this article, we take a look at who these people are, the skills they possess and the job opportunities across the sustainability industry.

With the seventeenth Conference of Parties (COP 17) taking place 28 November - 9 December 2011, the future of the Kyoto Protocol will soon become clear and as carbon management and climate change is given more focus and corporations increasingly become aware of the effects of climate change, there will be even more pressure on them to reduce and monitor their carbon emissions and adapt to certain mechanisms and processes to do so. This article will identify the professionals that play an integral role in this and evolving job opportunities in light of this development.

The Environment Context

Within the Environmental sphere, the UN calls for urgent action to slow climate change, following their recent report presented by Danish Prime Minister , Helle Thorning-Schmidt on November 3rd 2011, which argues that human development is intricately linked to environmental sustainability.

According to the UN, between now and 2025, the world population will increase by 20% to reach 8 billion inhabitants.

As the world becomes more densely populated and with a global financial downturn facing everyone, there is inevitable pressure on waste management systems, and with predicted changes to the waste composition, making a clear greenhouse gas challenge for waste management, there is a definite need for strategic and planned waste management systems throughout the globe, being managed by an increasing number of waste professionals. In addition, the strain of population growth also puts pressure on worldwide water usage and management. Water is used to produce nearly all forms of energy and with demands on energy production increasing the subject of water engineering is becoming increasingly important globally for the future of humankind, not only for the development of energy but as a vital resource within for food, land use and mining.

Career Trends within the Energy Sector

Energy and environmental legislation, cost savings and desire for public environmental credentials are a driving force in the industry. There is sufficient oil supply for another 50 years, according to a research report by HSBC senior global economist Karen Ward, and gas for another 100-200 years. However, with demand for oil and gas increasing, the cost of extraction rising and greater emphasis on the preservation of our natural environment, the industry faces a challenging future, with the focus on renewable energy to secure sustainable energy for all, in the long term. Meanwhile, some of the world's leading organisations are actively promoting and investing in the production of renewable energy. In fact, global investment in renewable energy has increased by 30% between 2009 and 2010, reaching levels of $243 billion. This growth is attributable, not only to the utility companies seeking to comply with carbon emission reduction requirements, but also to corporate organisations' sustainability efforts. It is clear that renewable energy is increasingly becoming an integral part of corporate sustainability, many companies are choosing to examine their supply chains and procure from renewable energy sources. Also, excitingly, there is an increased trend for larger corporations to become part of the growing global renewable energy revolution themselves and invest in or build their own wind farms.

At Allen & York, we are seeing the growth of renewable energy and its place within the modern company's energy portfolio and corporate business plan; hence the number of renewable energy positions within corporations is in on the increase. The European wind job market is positively responding to targets set by EU to increase renewable energy provision to 20% by 2020 – according to RenewableUK (the trade and professional body for the UK wind and marine renewables industries) it is expected that there will be strong growth within the European wind

energy sector over the next decade, with over 250,000 new jobs created, and at Allen & York we are experiencing a demand for candidates within the wind industry sector.

Specifically, there are a growing number of job opportunities for Project Managers in the UK due to a rise in wind farm sites being identified and with the number of wind sites increasing; the grid transmission sector is increasingly playing a central role in wind farm development. At Allen & York, we are keen to hear from rare and highly valued candidates for the roles of Grid Connection Development Engineer and the role of Principal Consultant in Transmission and Distribution; where salaries of up to £90,000 can be obtained.

In addition, Allen & York are seeing an increased demand for Environmental Impact Assessors / Project Developers to find suitable sites, undertake the audits, carry out the environmental impact assessments and so forth, required pre-project. This is a growing technical area and skilled professionals in social impact assessment, within renewable energy in particular are rare and in demand on a global scale.

Key drivers, in the development of renewable energy are climate change and carbon management, in which the anticipated role of the ‘Climate Change Reversal Specialist‘ is expected to deliver the greatest environmental benefits according to research by Fast Future Research, 2010.

How corporations manage their carbon emissions and reduce their impact on their environment, will become their competitive advantage and with the corporate environmental sustainability strategy being embedded within the culture of the organisation, forming part of their triple bottom line. Hiring specialist climate change and carbon management professionals will form an important part in securing a competitive and sustainable business future. As recently as 8th November 2011, The Environment Agency unveiled, a new league table ranking 2,000 organisations according to how they manage energy use under the Carbon Reduction Commitment. "The Performance League Table will help organisations compare performance with competitors as well as gain recognition for their efforts from consumers and investors" says a spokeswoman for the Department of Energy and Climate Change (DECC). In addition, James Ramsay, Head of CRC at Carbon Clear, said the results show there is still "huge room for improvement". The results of the league table show that 40%– including many big brands– failed to score a single point; this is a clear indicator that Energy Management and Monitoring of Data is not being carried out as efficiently as it should be, opening up job opportunities for Carbon and Energy Managers. Specifically, at Allen & York, our Energy Services Recruitment team are witnessing an increased demand for Carbon Consultants, Energy/Carbon Managers and Directors, all of which are at the frontline of providing expertise and delivering solutions to major energy users from industry, commercial and public sectors; with Account Director level roles carrying salaries of up to £80,000.

Career Trends within the Environment Sector

Making a transition to more sustainable renewable energy production may, unfortunately, not be

enough to reverse climate change and we could instead be presented with a lost battle against climate change, the International Energy Agency (IEA) has warned.

The central problem, resulting in this warning by the IEA, is that most of the industrial infrastructure already in existence around the world – the fossil-fuelled power stations, the factories and inefficient transport and buildings – are already contributing to the current high level of emissions and will continue to do so for decades to come. Meanwhile, the growth of the global population places intense pressure on the demand for resources such as water, which is another area in which the demand for highly skilled professionals is on the increase. Increasing agricultural farming, global mining activities and energy production all put a strain on our limited water supply. New roles are arising with the aim to better manage the global water supply; Allen & York's specialist Engineering Consultants are recognising a growth in water engineering job opportunities.

Integration of water management is not only key in effecting environmental, but also economical factors in business. It is no surprise that water management is becoming a key focus in managing a sustainable business.

Industrial and domestic water supply is coming under increasing pressure from demographic and climatic changes and it is the treatment processes and water engineering activities which are playing a key role in delivering safe, reliable water supplies to; households, industry and agriculture and in safeguarding the quality of water in rivers, lakes, aquifers and around coastal areas. Well educated, skilled and experienced water engineering professionals are required, more than ever, to operate and manage vital water and wastewater treatment services. The demand for such professionals is already high and will only increase over coming years, as environmental standards for water quality increase and pressures on our water supplies continue to grow. Specifically, at Allen & York we have a number of Water Engineering, Flood Modeling and Hydrologist career opportunities available. In particular, leading technical organisations are rapidly recruiting water engineers who have experience within water and waste water treatment projects, with salaries of up to £50,000, there are excellent prospects for such specialist candidates.

The waste management sector is another to receive an injection of job opportunities based on a number of up and coming trends, including the increase in the population in any given area and secondly, our consumption patterns – which are controlled by the evolution of Gross Domestic Product per Capita (GDP/c). Obviously, both the increase of the population and the remarkable growth of global GDP/c will drive an increase in waste volumes - using macroeconomic data from the 30 Organisations for Economic Cooperation and Development (OECD) it has been estimated that a 1% increase in national income creates a 0.69% increase in solid waste amount. Moreover, our changing culture will mean that it is expected that by 2050 the demand for agricultural goods will rise by 70% and the demand for meat will double. Besides the serious issues related to food production and sustainability, these changes will alter the waste composition in a large part of the world. In addition, the rapidly growing stream of electronic waste (WEEE) will become a major challenge of future waste management. This combined with the controversial nature of exporting waste outside of the EU, into China and Asia, all leads to a focus and need for a better and more efficient waste management infrastructure. At Allen &

York, our Waste Recruitment team is seeing a rise in waste management roles; specifically within Waste & Resource Efficiency, Energy from Waste (EfW) and Waste Engineering. Improving waste management operations, water minimisation and EfW processes are all key to these roles and this is an area in which new technologies within Anaerobic Digestion and Biogas production are offering new and challenging job prospects within the waste industry.

To conclude, although the recession has impacted the global jobs market; the sustainability industry is possibly not suffering as much as others may be – job creation in the expanding sectors described within this article could also help the global economic recovery. Sustainability and specifically the discipline of renewable energy is a sharply rising trend which create more sustainable job opportunities. The increase in the world population points towards a greater stress on our resources and the vital need to address sustainable energy development, water management and waste infrastructures for our future generations; all of which require rare, technically skilled and specialist professionals.

Allen & York are a leading International Sustainability Recruitment Consultancy, specialising across the environmental, renewable energy, engineering, energy services and health & safety markets. For the latest job opportunities in these sectors please visit www.allen-york.com