



Green Matters – UK's Renewable Energy Plans

“30 -35% of all electricity generated in the UK will need to come from renewable resources to meet 2020 targets” The Guardian, June 2008

The UK government's vision for a green energy revolution sets out an ambitious plan to enable the UK to meet its target of generating 15% of all energy (including heat and transport), and specifically 30-35% of electricity, from renewable sources by 2020.

According to a recently released government Consultation Paper, this will require a ten-fold increase in the level of renewable generation and use in the UK over the next 12 years.

The primary mechanism for meeting the renewable energy targets across the UK is a Renewables Obligation (RO) on suppliers. The RO is 'technology blind', meaning it does not favour one renewable technology over another.

The result is that major energy consumers and producers, such as electricity supply companies will tend to choose the most cost-effective technologies.

This provides potential opportunities for Australian companies active in any area of renewables, including geothermal, hydro, solar, wind, wave/tidal, bioenergy and microgeneration (excess energy generated from things like solar powered homes and released back into the power grid).

However, given some of the UK's natural resources and activities, the main focus areas are likely to be wind and wave/tidal power, biomass and methane recovery (from landfill or coalmines). In addition, as the Government looks at various legislative changes and incentives affecting home-owners, microgeneration is expected to emerge as a strong new opportunity area with new technologies needed for heat and electricity generation in homes.

Opportunities exist for both big and small businesses

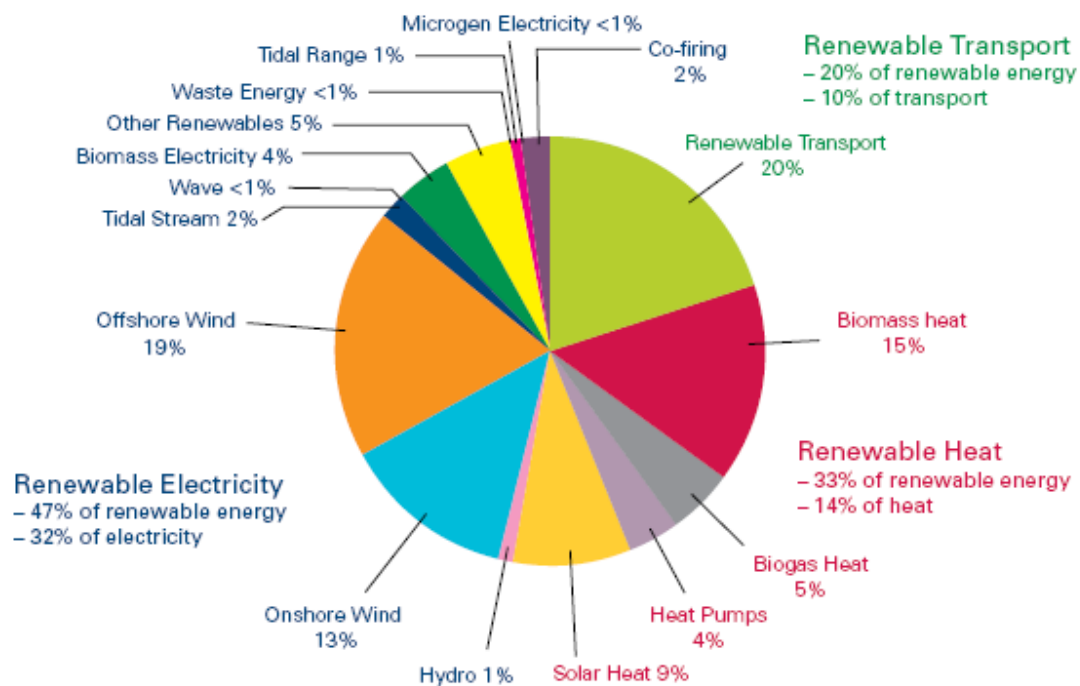
The UK Government estimates that the shift to a low carbon economy is likely to cost in the vicinity of around £100 billion over twelve years. But this cost also reflects new opportunities and an estimated 160 000+ new jobs in the UK alone.

For example, tidal and wind projects tend to be large scale infrastructure projects and with more than 3 500 wind turbines forecast to be installed across the UK over the next 12 years, this is a big-business opportunity area.

However, at the other end, there is also a forecast need for 1 in every 4 homes to have a solar hot water system.

To illustrate how diverse some of the opportunity areas are, the pie chart below outlines the government’s current thoughts on which sectors of renewables might contribute to the UK’s energy plans. This forecast is based on current understanding of the commercial effectiveness of current technologies. Thus as new technologies and solutions continue to emerge, this pie chart is likely to change significantly.

Figure 2: Illustrative renewable technology breakdown to reach 2020 target



Source: Redpoint et al (2008), NERA (2008), Department for Transport estimates.³



So what about private-sector led trends?

Although there is still great uncertainty about how the move to a low-carbon economy will effect business, either positively or negatively, there is no doubt that early-movers will be better prepared and/or able to respond to new opportunity areas.

In the UK, this is being seen in the drive to “Reduce, Re-Use or Recycle”.

For business this means an initial focus on trying to optimise the carbon/energy efficiency of existing operations: infrastructure (buildings, utilities, factories), supply chains (sourcing, packaging, transporting) and finished goods (white goods, electronics). This represents an immediate opportunity area and includes a wide range of goods and services that are not necessarily Renewable Energy focused.

After this first wave the focus moves to new technologies and solutions which will create fundamental shifts in business models and radical changes in key industries. This is the area of medium to longer term opportunities, with many more ‘unknowns’ than ‘knowns’. *(For the effect on the Green push on consumer-oriented sectors please see some of the earlier Fact Sheets in this series.)*

And while UK businesses appear much more preoccupied at present in finding ways to recalibrate their operations to reduce energy demand, we are seeing emerging and growing interest in also trying to identify ways to generate their own renewable or clean energy sources.

This is particularly true of the construction sector and the corporate sector, where there is a strong emphasis on reducing a working building’s impact on the environment by using Green Building Technologies.

The demand for Eco-Homes, Carbon Zero cities and office blocks that generate more power than they consume is growing on an almost daily basis. This demand is being fuelled not only by social conscience and the Climate Change Agenda but by real commercial incentives. The commercial case for ‘Green’ buildings is stronger than ever. Quite simply, buildings with low running costs are now much more attractive and the positive brand-association of working in or owning a “green” building is increasing each day.

Australian companies with expertise in the design, build or fit-out of eco-buildings and homes, as well as suppliers of technologies that can assist with microgeneration (solar, wind, waste /biofuel) should move quickly to explore market opportunities.

What next?

This paper is intended to provide a brief overview of the opportunities posed by the UK’s Renewable Energy Consultation Paper (http://renewableconsultation.berr.gov.uk/consultation/consultation_summary). We hope that it will stimulate further debate amongst the Australian exporter community and we will be issuing further ‘green’ updates on specific topics in the coming weeks and months. We value your contribution to the debate, and your feedback on our briefings. Please do not hesitate to contact Kylie Hargreaves or Amit Aggarwal in the Austrade London office via kylie.hargreaves@austrade.gov.au or amit.aggarwal@austrade.gov.au.