

## Global Markets & Opportunities

# A Study of Emerging Markets in the Environmental Sector 2006



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In 2002, a groundbreaking report was published by the DTI's Joint Environmental Markets Unit (JEMU) looking at the health and prospects of the UK's emerging environmental goods and services (EGS) sector.

Five years on, sector specialist UK CEED was commissioned by JEMU's successor, the joint DTI/Defra Environment Industries Unit (EIU), to update the much-quoted report and project market growth forward to 2015.

The resulting report presents an on-going story of British success. The EGS sector is hugely diverse, dynamic and growing rapidly year-on-year. The sector plays the key role in delivering solutions to both our global and more local environmental challenges, as well as enabling us to meet our climate-change obligations. With the right support and investment, the report suggests the UK can become an established world leader in key technologies and services.

### A Significant Global Business

The global EGS sector was estimated to be worth \$548bn<sup>1</sup> in 2004, with the EU, US and Japan accounting for around 94 per cent of that - *see Chart 1*. The sector is expected to grow by 45 per cent by 2015 - *see Chart 2*.

In the EU, many new Member States require substantial investment in basic environmental infrastructure, such as water supply and waste management. This is opening up exciting opportunities for UK EGS companies, although competition is already strong, notably from German and Scandinavian companies. But without doubt, some of the greatest potential opportunities are likely to be found in China and India.

The size of the countries and the scale of the challenges mean that these two markets are predicted to have the fastest growing EGS markets. The speed at which China and India are developing – and the

resources they have available – means that they are already looking to move beyond basic service demand and are looking to invest in cleaner technologies, renewable energy and more sophisticated approaches to environmental management – some of the key strengths of the UK's EGS sector.

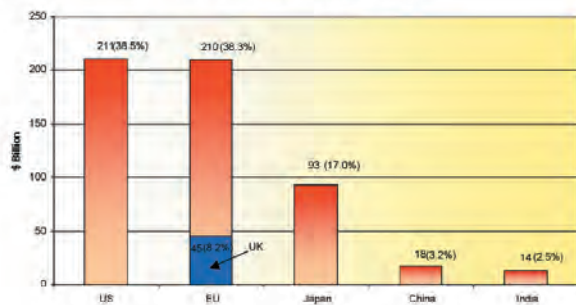
The competition is fierce though, both from other developed nations and from within the countries themselves. Indigenous environmental sectors are growing quickly in these countries, with large numbers of graduate engineers working on new environmental technologies. Indeed, technologies from China and India, particularly in the renewable-energy sector, are already appearing as imports into Europe, North America and Japan.

### The UK Industry

The UK environmental industry is well established, vibrant and diverse. The report shows annual turnover ▶

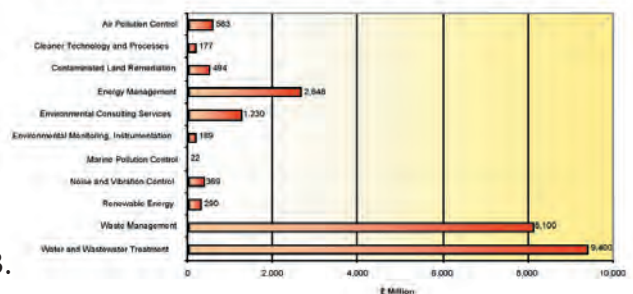
#### Charts 1-4

Chart 1: Environmental Goods and Services Market by Country 2004



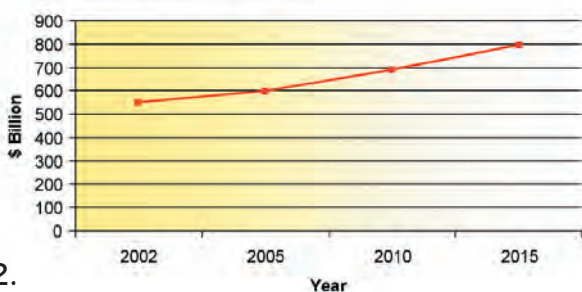
1.

Chart 3: UK Environmental Goods & Services Market by Sub Sector 2005



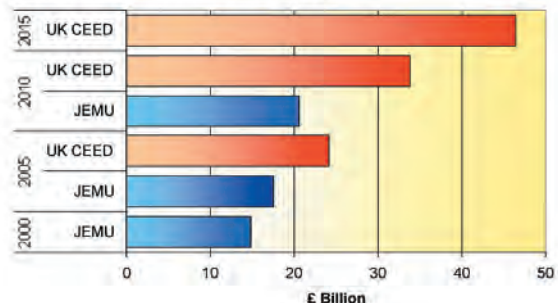
3.

Chart 2: World EGS Markets to 2015



2.

Chart 4: Projected Market Growth for UK EGS Sector



4.

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► in the sector of around £25bn in 2005. It employs approximately 400,000 people in 17,000 companies.

The dynamism of the sector is illustrated by UK CEED's Envirodaq index<sup>2</sup> of UK-listed EGS companies. The index covers both established and newly listed companies on FTSE and AIM that derive at least 60 per cent of their value from EGS activities and is based on the same indexing methodology as the FTSE index. Between August 2006 and May 2007, the index grew from 50 companies to 100 as new companies listed and existing companies increased their exposure to the EGS market. During the same period, the baseline index grew by 20 per cent in value, compared to the FTSE 100's growth of 10 per cent over the same period.

Although industry strengths vary from region to region, the EGS market is particularly strong in the East of England, the South East, London and the North West. Nationally, water/wastewater treatment and waste management sub-sectors are by far the largest, representing 39 per cent and 34 per cent of the industry respectively - see *Chart 3*. This reflects the global picture, where demand for waste management and water and wastewater treatment services accounts for 72 per cent of the market.

These sectors, with their associated expertise in engineering, consulting and laboratory services, have already spawned a number of market-leading multinational companies in the UK. Other fields where the UK has a strong international reputation include noise-abatement technologies, hydro-power, metal recycling, energy management and marine-pollution control.

## UK Market Growth

The original JEMU study forecast market growth in the UK to 2010 and has been quoted widely as illustrating the strong growth prospects for the sector. However, UK CEED's research has shown that, if anything, the JEMU forecasts were on the conservative side. By comparing the JEMU market size forecasts for 2005 with the actual position for the same year, it shows that UK market growth has outstripped JEMU predictions. The report predicts that: "the UK EGS market will grow to £34bn in 2010 (42 per cent growth from 2005) and on to £46bn by 2015." The projections represent a near doubling of the market size between 2005 and 2015 as illustrated in *Chart 4*.

## UK Sector Strengths

*Chart 5* provides a breakdown of UK EGS growth by sub-sector for the period 2005-2015. It shows that waste management and water/wastewater treatment remain the largest sectors, but that some of the greatest growth potential is in smaller, but fast growing sectors such as energy management, renewable energy, environmental consulting services, and contaminated land remediation.

Undoubtedly, the most concerted policy activity centres on responses to the challenge of climate change.

Consequently, the energy management sector is expected to grow at double-digit rates over the next five to ten years, spurred on by policy drivers such as: the Energy Review 2006; high fuel prices; public R&D funding; grants programmes and industry/consumer demand.

Renewable energy offers both large domestic and global market opportunities with estimates of over \$1 trillion to be invested in non-hydro renewable technologies worldwide by 2030<sup>3</sup>. In the UK, it is forecast that £15-19bn of capital expenditure will be required to meet 2020 targets for renewables<sup>4</sup>. The UK has a rapidly growing skills base for wind, wave and tidal power project management, although many of the technologies themselves tend to be imported. The UK is also strong in areas such as hydro engineering, landfill gas utilisation, biofuel/biomass development. A growing number of investment vehicles, both private and public/private joint ventures, are being established to invest in the UK renewable-energy sector, something which is likely to spur growth in start-up activity.

The market for contaminated land remediation is strong and growing in the UK, with prices for brownfield sites rising steadily. At the same time, a number of large-scale regeneration projects are gathering pace, such as the London Olympics, Thames Gateway, and Growth Corridors; while in the North, markets are boosted by the ongoing renaissance of major northern cities such as Liverpool, Manchester, Leeds and Newcastle. These provide clear opportunities at home.

Increasing commodity prices and tightening regulations are continuing to provide opportunities in the waste-management sector, particularly in the area of recycling. In the latter area, there are challenging targets to be met to bring the UK up to the level of some of its EU neighbours and this continues to provide opportunities, not just for the large vertically integrated companies that dominate the sector, but also from smaller companies introducing innovative technologies. Forecasts suggest that £20bn of investment is required in the sector to meet legislative requirements by 2010<sup>5</sup>. This scale of investment and the opportunities for sector growth is spurring increasing investor and M&A activity in the sector.

The global water and wastewater treatment market is forecast to grow by 33 per cent to 2025. The major opportunities over the next five to ten years are likely to be in the developing economies, where the priority is the supply of basic water and wastewater treatment infrastructure. Nevertheless, capital investment of £18.9bn is forecast for England and Wales between 2005 and 2010 and a further £2.25bn for Scotland between 2006 and 2010.

## Market Drivers & Way Forward

Globally, market growth is driven primarily by legislation, whether at the international or national level, particularly in the more mature markets of the US, EU and Japan. In recent years, rapidly rising resource and commodity prices, as well as the growing scarcity of resources like clean water and energy, have also become increasingly critical catalysts for growth. As well as stricter regulation, growth in the US, Japan and Western Europe is driven by innovation in existing technologies and the development of new step-change technologies. But the rate of development within these markets is far from uniform.

In the UK, the environmental policy framework driving demand for the EGS sector originates both from the EU and from national strategies and policies, which nevertheless reflect international agreements and EU policy. By ensuring that the most appropriate policy framework is in place, the government has a vital role to play in helping UK companies to thrive at home and abroad. The report suggests that by: "Adopting EU legislation early, the government can help give UK companies a competitive advantage. Equally, delays in implementing regulations can have the opposite effect."

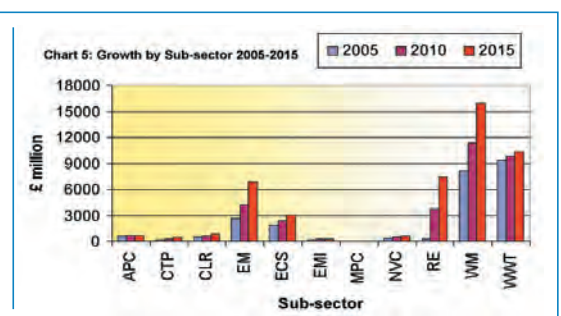
Central and local Government can also help stimulate growth in the EGS sector through leading by example in procurement (public-sector procurement accounts for 13 per cent of GDP), introducing supporting fiscal measures, providing regional support through Regional Development Agencies and stimulating investment in R&D (both centrally and regionally) ●

*The full report – A Study of Emerging Markets in the Environmental Sector 2006 – is available online at: [www.ukceed.org](http://www.ukceed.org)*

Chart 5

### Key:

- APC: air pollution control;
- CTP: cleaner technology and processes;
- CLR: contaminated land remediation;
- EM: energy management;
- ECS: environmental consulting services;
- EMI: environmental monitoring and instrumentation;
- MPC: marine pollution control;
- NVC: noise vibration control;
- RE: renewable energy;
- WM: waste management;
- WWT: water/wastewater treatment.



Footnotes - 1. EBI 2004a 2. The daily updated index can be found at [www.envirodaq.com](http://www.envirodaq.com) 3. World Energy Council, 2006 4. DTI, 2004 5. Institution of Civil Engineers, 2004