

GLOBAL OPPORTUNITIES

Global Opportunities for UK Companies in Remediation and Reclamation of Land

The Environmental Industries Sector Unit (EISU) is the sector team within UK Trade & Investment and is responsible for providing support to the UK environmental industry in international markets. **LOUISE COLWELL**, Project Manager (Asia Pacific) at EISU, picks out a few international markets that may prove to be fruitful over the next 12 months.



The UKTI's Environmental Sector Advisory Group is made of industry leaders from across the sector and has identified target markets where UKTI's support can add real value to the UK EGS sector. It is in these markets that EISU helps UK businesses to win business and provide influence in the area of policy and regulatory framework development. The markets in 2008/09 strategy include: **Priority Markets** – China, India, Brazil, Mexico, Turkey, Saudi Arabia and South Africa; and **Opportunity Markets** – S Korea, Hong Kong, Vietnam, Indonesia, Taiwan, UAE, Romania, Bulgaria; and **Regional markets** – Malaysia, Thailand and the Philippines, Lithuania, Latvia and Estonia plus Ecuador, Colombia and Peru.

Contaminated land and remediation is an area of growth in international markets in which UK companies are well placed to exploit a number of emerging business opportunities. A number of specific opportunities for the UK industry to take advantage of exist in the following countries:

BRAZIL

In Brazil, specific legislation does not exist for the contaminated-land sector. However, the existent environmental legislation offers a base referring to different aspects of the problem. For instance, the areas that approach the environmental quality preservation and recovery, the legal instruments such as environment national and state politics and pollution-control guidelines and standard procedures. There are also specific laws that establish specific legal instruments to subsidise the control of contaminated land and the use of urban land.

Recent official estimates put the number of contaminated sites in Brazil at 15,000. In November 2007, CETESB – the Environmental Agency in São Paulo State – identified the existence of 2,272 contaminated sites in the state. As 77 per cent of the contaminated areas in São Paulo are due to pollution from petrol stations, the potential for the UK industry remains in industrial areas where big companies, either local or foreign, are looking for new solutions to comply with local legislation.

The local market is well supplied with technical capacity and equipment dealing with remediation of land contaminated by petrol stations, but there is a serious need for expertise in project management, risk assessment, monitoring strategies and data management, as well as cost-effective solutions for remediation of land contaminated by industrial activities, such as remediation technologies (air sparging and bioventing, anaerobic/aerobic processes for degradation of contaminant organic compounds, bioremediation, etc), on-land and ground-water remediation, especially in the areas of LNAPL, DNAPL, MTBE, PCBs, dioxins, pesticides, metals and others. Partnerships with Brazilian consultancies should prove fruitful.

TAIWAN

The Soil and Groundwater Remediation Act implemented in February 2000 has become one of political key issues for the central government. It opens up significant new areas of business opportunity for the relevant contaminated-land remediation engineers, technology and equipment suppliers.

Since the implementation of the Remediation Act, the Soil and Groundwater Protection Remediation Fund of the Environmental Protection Administration, Executive Yuan has allocated NT\$300M (approximate £4.6M) annually to conduct pollution surveys to estimate the

costs of the remediation works, within the relevant areas. There will be an increase of the allocation in the future when the An-shuen Plant of China Petrochemical Development Corporation and RCA Taoyuan Plant land are included in the plans for remediation. The estimated cost of the remediation work for these two plants would be over billions of New Taiwan Dollar.

In addition, the Taiwanese government has announced a budget of £35M to promote national urban regeneration across Taiwan. The central government will also issue international tenders for ten pilot projects for major cities in Taiwan. The total worth of the business investment in urban regeneration is up to £3.6bn in the next five to ten years. An estimated £21M will be spent on land remediation plans over next three years.

The opportunities lie in planning and analysis, survey, feasibility studies and site remediation – especially for illegal disposal sites, industrial-site pollution, gas-station pollution and farmland heavy-metal pollution.

CHINA

China is now considered one of the most seriously eroded countries in the world. As well as water, wind erosion and desertification, a large number of cities are facing the consequences of heavy industrial development and relocation – contaminated land. With the economic expansion and urbanisation, local authorities moved manufacturing facilities (mostly in the chemical and steel industry) out of the city only to find the land left behind heavily contaminated. China has a number of environmental challenges to address as part of its 11th five-year plan, and although contaminated land has not been highlighted as the immediate priority, the UK industry is ready to position itself as soon as the market shifts to remediate what is potentially one of largest areas in the world.

Other countries offering up-coming contaminated land and remediation projects include Mexico and also markets across Central and Eastern Europe where EU cohesion funds are being utilised by municipal authorities to clean up land.

For further information on opportunities in Central and Eastern Europe email: Shaluki Perera, shaluki.perera@ukti.gsi.gov.uk For Latin America, Middle East and South Africa contact: Garry Poole email: garry.poole@ukti.gsi.gov.uk