

The IEA has warned that if world economies do not implement bioenergy measures within the coming few years, it may be forced to live with unreliable fossil fuel in the future

IEA: action required

by **Carmen Allan**

The International Energy Agency (IEA) has released its annual World Energy Outlook for 2011, sending a strong message to those that attended the Climate Change Conference in Durban, South Africa.

The IEA warns the world is locking itself into a system that is becoming more and more reliable on fossil fuels and if new policy measures are not put in place within the next two years then the Earth's temperature has the potential to rise by 2°C.

Matthew Kennedy, the vice chair of the International Energy Agency Renewable Energy Technology Deployment Implementing Agreement, says governments around the world could learn from other countries about how better to develop renewable energy in their own regions.

There are a few areas that are hindering the development of clean energy, according to Kennedy, including economic systems, innovation and policy development.

'We need to look at our economic systems and consider what has successfully worked in other countries and so replicate those measures in our own countries. For example, China, South Korea and Denmark have good systems that the rest of the world could

follow,' says Kennedy.

In China the government has formed national joint research and development programmes within their renewable industries. It could not come sooner for a country that burns nearly half of all the coal on the planet. Although as the third largest producer of biofuels after the US and Brazil and with biomass generating about 10% of energy consumption each year, China is a country to learn from.

Under the China Renewable Energy Program, China has set itself the target of having 15% renewable energy by 2020. The programme produces reports, provides grants for bioenergy projects to get off the ground, and organises workshops to further educate the industry.

In South Korea, a national scheme has been created to provide financial support for exports. As well as this, 2% of the GDP is plugged into green deals.

Denmark is recognised for its low carbon strategies and some cities within the country are even aiming to become carbon neutral.

Initiatives could also be learnt from the UK: 'The Green Investment Bank in the UK has proposed a number of financial measures that could accelerate renewable technology deployment and this model could be applied in other

countries,' says Kennedy.

The Green Investment Bank was set up by the UK government in a world first banking programme to focus on funding green investments whilst sustaining long-term growth.

The idea was born when the British government realised £200 billion (€240 billion) would be needed for the energy initiatives to sustain themselves up until 2020.

The government plugged £3 billion into the bank to help it finance and speed up green projects, as well as to gain additional private financing for these developments.

With renewable technology mandatory in many regions around the world so that they can meet their 2020 targets, perhaps these governments should look to initiatives such as the Green Investment Bank, although Kennedy says that often it is a 'chicken and egg' scenario.

'It's a catch-22 because access to capital is a problem and governments are under intense pressure to kick start renewable energy projects. And yet the mechanics of stimulating are difficult and the government needs to provide leadership and also tap into new avenues of finance that haven't yet been applied to renewable energy technologies,' says Kennedy.

However he adds that green projects cannot always be

funded by the government so they need to become self-sufficient, and yet often if they do not receive this initial funding then private companies do not want to invest in them themselves.

'You need leadership to show there is an alternative funding and use that type of capital to stimulate renewables,' he adds.

The IEA predicts there is a three to five year window in which countries have the opportunity to scale up their renewable infrastructure: 'Because after this a lot of companies will be locked into fossil fuel infrastructure,' says Kennedy.

With the price of oil tipped to hit \$120 (€92) a barrel by 2035, and with the demand for it rising from 87 million barrels a day to 99 million barrels, renewable energy looks comparatively more viable and cost effective.

Between now and then it is estimated \$38 trillion is needed in investment into energy supply infrastructure across the world. About one third of this is from countries within the OECD.

The IEA says fixing the renewable energy situation is an issue that cannot be taken lightly. For every \$1 that is saved from not investing in renewable technology at present, a further \$4.30 will need to be spent after 2020 to compensate for the rise in emissions. ●