

Wind, wave and tide can make country world giant in green energy

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By Jenny Haworth Environment Correspondent
what Saudi Arabia is to oil, an international conference will hear today.

SCOTLAND has the pote

Professor Ali Sayigh, chairman of the World Renewable Energy Congress, thinks Scotland could lead the world in the research and development of renewable energy sources.

Alex Salmond, the First Minister, will tell the same conference that Scotland is on track not just to reach its renewable energy targets but to beat them.

Speaking to The Scotsman ahead of the conference, which is taking place at the Scottish Exhibition and Conference Centre in Glasgow all week, Dr Sayigh said: "The Scottish Government wants to be the Saudi Arabia equivalent of renewable energy in the world. They can be that.

"With the wind and wave and solar in Scotland, they could be leading in Europe."

He said Scotland's position globally in this field was one reason why Mr Salmond was invited to make one of the opening speeches at the congress.

And he thinks it will be by harnessing the potential of wave, tidal and wind power that Scotland, and the rest of the UK, can "carve a niche" in the renewables sector. As well as ambitious plans for renewable energy, the Scottish Government has set itself tougher emissions targets than any other country in the world.

At least 31 per cent of its electricity demand will be generated from renewable sources such as wind and wave power by 2011, and at least 50 per cent by 2020.

In the Scottish Climate Change Bill later this year it will pledge to cut emissions by 80 per cent by 2050.

Mr Salmond is expected to tell delegates that the country is on course to go further than these targets.

At one of the opening speeches at the conference, the First Minister will say: "

I am delighted to tell you today that we are not only on course to reach these ambitious targets but to exceed them."

There is almost three gigawatts of installed renewable energy capacity in Scotland, mainly in the form of hydropower and wind energy, and almost another gigawatt that has been approved but is yet to be built.

This means Scotland is more than two-thirds of the way towards meeting the target of 31 per cent of energy from renewable sources by 2011 – which would require an estimated five gigawatts.

And with planning applications lodged, or expected to be lodged soon, for seven gigawatts more, Scotland is well on track to meet its ambitions.

Mr Salmond thinks Scotland has about a quarter of Europe's tidal and offshore capacity, and 10 per cent of its potential in wave power, as well as opportunities in hydro-power, onshore wind, biomass and solar power.

"Scotland has vast potential in renewable energy, unrivalled in Europe," he will say.

"All in all, we have the potential to generate more than 60 gigawatts from renewables – enough to meet Scotland's peak electricity demand more than ten times over.

"So it's fair to say that Scotland has won the natural lottery for a second time.

"My government is working in partnership with business and academia to develop and commercialise key technologies, to ensure that Scotland has a truly world-leading renewable energy sector."

He said in order for the country to harness its renewable energy potential, it will need to have the necessary infrastructure in place.

He hopes Scotland will be able to share its technology and expertise in renewables, to help the EU meet its targets of generating 20 per cent of energy from renewable energy by 2020.

The tenth World Renewable Energy Congress, taking place at the Scottish Exhibition and Conference Centre in Glasgow, is expected to attract hundreds of delegates from all over the world.

Subjects scheduled to be covered at the week-long conference, include renewable energy technologies from small scale solar panels in Africa to wave machines in the North Sea, energy policy, low energy architecture, and the social and gender issues of investing in appropriate renewable technologies in developing economies.

Climate at threat from 'carbon bomb' if wetlands are destroyed

THE world's wetlands – threatened by development, dehydration and climate change – could release a planet-warming "carbon bomb" if they are destroyed, ecological scientists said yesterday.

Wetlands contain 771 billion tonnes of greenhouse gases, one-fifth of all the carbon on Earth and about the same amount as is now in the atmosphere, the scientists said before an international conference linking wetlands and global warming.

If all the wetlands on the planet released the carbon they hold, it would contribute powerfully to the climate-warming greenhouse effect, said Paulo Teixeira, co-ordinator of the Pantanal Regional Environment Programme in Brazil.

"We could call it the carbon bomb," Mr Teixeira said. "It's a very tricky situation."

Some 700 scientists from 28 nations are meeting this week at the International Wetlands Conference at the edge of Brazil's vast Pantanal wetland to look for ways to protect these endangered areas.

Wetlands are not just swamps; they also include marshes, peat bogs, river deltas, mangroves, tundra, lagoons and river flood plains.

Together they account for 6 per cent of the Earth's land surface and store 20 per cent of its carbon. They also produce 25 per cent of the world's food, purify water, recharge aquifers and act as buffers against violent coastal storms.

Historically, wetlands have been regarded as an impediment to civilisation. About 60 per cent of wetlands worldwide have been destroyed in the past century, mostly due to draining for agriculture. Pollution, dams, canals, groundwater pumping, urban development and peat extraction add to the destruction.

"Too often in the past, people have unwittingly considered wetlands to be problems in need of a solution, yet wetlands are essential to the planet's health," said Konrad Osterwalder, UN Under Secretary-General and rector of United Nations University, one of the hosts of the meeting.

Source: The Scotsman