

The Big Debate: Should the Gulf go nuclear?



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'Oil-rich' is a common prefix when referring to the Gulf states – yet 'energy-poor' is a less commonly used, but equally relevant phrase.

For while the region is sitting on over 30 per cent of global oil and around 8 per cent of gas reserves, GCC countries are struggling to meet domestic demand for electricity to fuel its booming residential, infrastructure and water desalination needs.

Saudi Arabia, the UAE, Oman and Bahrain are all looking at the possibility of building coal-fired power plants, but another solution is on the cards: nuclear. Earlier this week, it emerged that the UAE has invited tenders for the building of its first plant.

It's certainly an emotive subject. Building a nuclear plant generates huge quantities of greenhouse gases and produces toxic radioactive waste that must be isolated from the surrounding environment for up to 10,000 years. However, when in use the plants yield minimal carbon dioxide emissions making them, arguably, paradoxical friends to the environment.

As the oil price soars and the coffers abound with petrodollars, uranium – the raw requirement for nuclear plants – has shown relative price stability, and its usage has become an easier sell to global consumers as they become more educated about power alternatives.

Nuclear power is established technology and so it carries relatively little development cost; a single plant has the capacity to meet staggering levels of consumer demand.

But in many countries, industry regulations can delay the building of plants for up to 30 years, which means the nuclear option is anything but a quick fix. Given that the world's uranium supply will only last 30 to 60 years, depending on demand scenarios, the viability of nuclear power diminishes dramatically.