Alternative energy already a rich return seam

The next boom on listed markets is tipped to be driven by alternative energy sources, whether it's the commercialisation of renewables or a big ramp-up in demand for less carbon-intensive options like coal-seam gas or gassified coal. But on the unlisted side, institutional investors are already positioning themselves and, as MICHAEL BAILEY discovers, in some cases enjoying boom-like returns.

Tim Hughes needs no convincing about the potential for coal-seam gas.

The chief investment officer of Victoria's Catholic Super fund was an early investor in ANZ Infrastructure Services' Energy Infrastructure Trust (EIT), which in turn was a prescient early backer of the Queensland Gas Company (QGC), a provider of the emerging energy source known as coal seam gas.

"We see coal seam gas as a major transitional technology in a carbonconstrained world," Hughes says.

"It's got about half the carbon emissions of black coal and one-third the emissions of brown coal."

QGC's share price has soared off the back of proposals like its Queensland to Hunter Gas Pipeline. In the words of Lachlan Douglas from ANZ Infrastructure's placement agent, Principle Advisory, this pipeline will "recast the power market on Australia's Eastern seaboard."

The project definitely has something of the visionary about it.

"To get gas from Queensland to Sydney at the moment, it has to go out via Moombah in [South Australia's] Cooper Basin, a very round-about route. The direct pipeline through the Hunter Valley will halve the price of gas," Douglas says.

In addition to its 5.6 per cent stake in QGC, the coal seam gas company has granted ANZ IS's EIT the first and last rights of refusal to develop and own two gas-fired power stations in Queensland based on its coal seam methane reserves.

"ANZ IS identified coal seam gas as an attractive energy source in early 2005, and our strategic alliance with QGC has not only been rewarding at a QGC share level, but we have also co-developed projects with QGC that have been valuable for both parties," says ANZ IS managing director, John



Clarke

Just how "rewarding" is evidenced by the EIT's internal rate of return (IRR), which is probably enough to bring tears to the eyes of investment committees who've missed out.

"Since inception [February 2003] to 30 June 2008, EIT has earned a pre-tax IRR, post management fees, past performance fees and all operating costs, of 32.4 per cent. On a post 15 per cent tax basis, the IRR is 27.4 per cent," Clarke says. "ANZ IS seeks superior risk adjusted rates of return by seeking proprietary deals, rather than competitive auctions, as well as investing in carefully de-risked development projects... My definition of a pioneer is a man with nine arrows in his back. We make sure our technology providers are tried and true, and can produce energy that's viable in a competitive marketplace."

It's a sign of changing times in energy investment when what Clarke calls "de-risked development projects" include a biodiesel production plant and wind farms, within a portfolio which is carbon neutral overall.

QGC is not the only gas company in the mix, either, with other EIT holdings including the Esperence Energy project, a 50 per cent shareholding in a project to construct a 336km gas transmission pipeline and 33 megawatt gas-fired power station in Esperence, Western Australia.

"ANZ IS sees gas as an important transition fuel for the next 20 to 30 years until a new dominant technology emerges, be that clean coal, hydrogen, nuclear or other," Clarke says.

"The reason for our view on gas is that there is growing supply from coal seam gas, it is easily transported to fuel decentralised generation - hence avoidANZ IS sees gas as an important transition fuel for the next 20 to 30 years until a new dominant technology emerges, be that clean coal, hydrogen, nuclear or other.

ing additional transmissions lines - it generates only 40 per cent of the emissions compared to coal and with improvements in turbine technology, uses very little water. Of equal importance is recent cost modelling that indicates gas fired generation is now equal in cost or cheaper than coal generation, without taking into account carbon cost differences."

The cost catch-up with coal is related to the fact that coal seam gas tends to be extracted from very deep seams of coal – those that have not been exploited in the traditional way before now because of the costs involved.

Even with a relatively modest carbon cost of \$19 a tonne, as has been foreseen in some early Australian futures contracts, Clarke believes new coal is simply uncompetitive. As for carbon capture and storage, the process championed by advocates of clean coal, he says the technology is too early in development to know if it will ever be viable.

What infrastructure investors really need for assurance on viability is guaranteed uptake agreements, and these have been rare for alternative energy sources in Australia, especially when compared to Europe.

For instance Paul Foster, AMP Capital Investors' head of infrastructure, says a recent hydroelectric investment in Hungary by his specialist Europe fund would not have been possible without a long term contractual uptake agreement from the country's central energy authority. That body is incentivised to back sources like hydro because of Europe's established carbon trading system.

Gas, again, is currently AMP's

major source of energy infrastructure opportunity in Australia – its Dampier to Bunbury pipeline is anchored by agreements from producers who've agreed to ship via the pipeline for at least 15 years.

"We look for distribution and transmission investments rather than power generators, and we certainly won't take any merchant power risk," Foster says.

The manager says there is too much uncertainty about where the likes of geothermal, solar and wind power will fit in energy's future, particularly in places like Australia which still lack a national carbon trading system, and have state-based green energy' targets of a relatively modest size (for example the NSW regime of '10 per cent renewable energy by 2010').

Alternative energy's elephant in the room is, of course, nuclear.

The return of this most controversial of carbon-neutral technologies is inevitable, according to John Buehler, a managing partner at Energy Investors Funds out of San Francisco.

There have been no new nuclear power stations in the US for 30 years, since the Three Mile Island disaster. Only existing stations have been relicenced in that time. However, Buehler believes this will probably change within 10 to 15 years, as a way of making up the shortfall between the carbon emission targets set by public utility commissions (26 states in the US have renewable energy portfolio standards, with California being the most ambitious) and the ability of emerging renewable technologies to develop capacity.

If Energy Investors Funds can be persuaded that a new nuclear power station is safe and energy efficient, the manager has no idelogical problem with backing it.

"We need the technology to be tested before we'll invest. But once things are proven, we are technology agnostic," Buehler says.

The manager's willingness to back new sources of energy is illustrated by its recent investments in projects converting landfill gas to pipeline-quality natural gas, and its backing of the Hot Sulphur springs geothermal power plant in Nevada.