

A Tale of Two Pipedreams

As the internet turns 40, the Australian government has proposed an investment of more than \$40 billion to install a National Broadband Network to deliver content at up to 100 Mps to every home and business in the nation.

The coal seam gas industry in the Surat and Bowen basins of Queensland and northern NSW is younger than the internet but the investments mooted to harvest this resource come close to matching the cost of the National Broadband Network.

Similarities between these evolving technologies don't stop there. They both involve pipes, belligerent competitive providers, and government regulation.

Australia has already wasted billions of dollars duplicating a network of optical fibre pipes in its capital cities. The owners provide content on those networks as well as charging other content providers for access.

It's an inefficient arrangement and chronically contentious in operation. Which is why the government is intent on establishing a national network to provide access to all providers on equal terms.

Meanwhile five consortia are planning to build separate networks to pipe coal seam gas from thousands of small wells to the port of Gladstone. They all have substantial rights over total reserves estimated by CSIRO at around 250

trillion cubic feet, almost double the known liquefied natural gas reserves on the north-west shelf.

All five are proposing to build plants at Gladstone to process the gas, which is generally at least 90% methane, into a form that can be loaded onto LNG tankers for export. For a range of reasons, landholders and local authorities are not keen on having five networks of gas pipes riddling their landscape.

The Queensland government is pressuring the consortia to agree on sharing easements, processing plants and other infrastructure, but so far to no avail. Consolidation of effort in this game is likely to be just as difficult to achieve as it has been in telecommunications.

Both projects also tout their greenhouse-friendly implications. From Minister Stephen Conroy down, the National Broadband Network is predicted to reduce carbon emissions by making telecommuting and other energy-saving behaviours more viable. The gas industry promotes its environmental credentials by stressing its lower carbon/joule ratio compared with coal.

But powering all the data centres and computers required to justify the National Broadband Network investment will inevitably increase the IT sector's carbon footprint. Predictions that this will be more than offset by energy savings elsewhere are hopeful spin from



Cover Story

A double pulsar system is enabling astronomers to make precise measurements that test Einstein's General Theory of Relativity to unprecedented levels (see p.14).

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an industry whose current carbon balance sheet is impossible to accurately assess.

And the coal seam gas proponents foresee total exports of liquefied natural gas exceeding 12 million tonnes per year by the middle of the next decade and doubling by the early 2020s, all to be burnt soon after shipping.

Any ideas that both will contribute to reducing global carbon emissions are mere pipedreams.

Simon Grose is a Director of Science Media (sciencemedia.com.au).

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EDITOR/PUBLISHER: Guy Nolch

conSCIENCE EDITOR: Peter Pockley

WRITERS: Stephen Luntz, Peter Pockley, Simon Grose

CARTOONS: Simon Kneebone

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EDITORIAL CONTACTS

Control Publications P/L, Box 2155, Wattleree Rd PO, VIC 3145, Australia
Phone: (03) 9500 0015 Fax: (03) 9500 0255
E-mail: science@control.com.au
Web: australasianscience.com.au

ADVERTISING: Joanna Dettl
Phone: (07) 3511 6246 Fax: (07) 3511 6427
Email: advertise@control.com.au
Rates are at australasianscience.com.au

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