

Wind power dominates the renewable energy landscape in South Australia, but carbon pricing should give other sources of clean power a fighting chance, write **CLARE PEDDIE** and **VALERINA CHANGARATHIL**.

**M**OST electricity made in SA comes from natural gas and coal, but wind's contribution has grown from zero to 18 per cent in less than a decade.

While we are investing in other sources of renewable energy, such as geothermal, solar, biomass, biodiesel and wave power, wind really blows everything else out of the water.

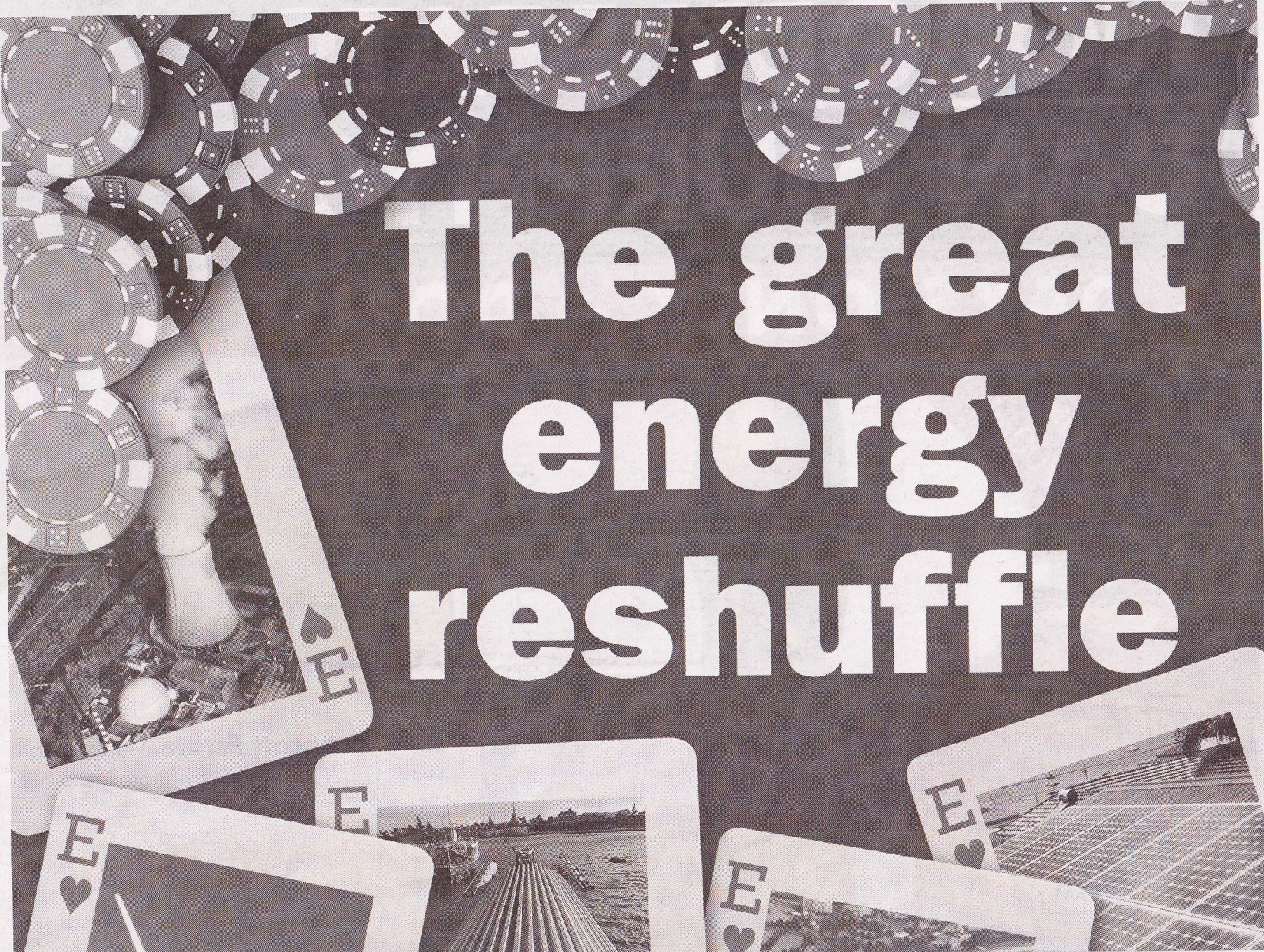
The installed wind capacity is 1018MW. RenewablesSA Commissioner Tim O'Loughlin says solar (photovoltaics) is about 100MW, "installed or about to be installed". That's up from 27.5MW in November last year.

But the green scene is about to get a whole lot more interesting. Mr O'Loughlin says biomass is promising, solar is becoming more competitive, geothermal is "very exciting" and wave power is a big unknown.

He's looking forward to the day when Professor Ross Garnaut's price on carbon gives renewable energy a competitive advantage over fossil fuels, especially coal.

"Garnaut's arguments about getting going early and having a significant carbon price of course provide the investment environment which is conducive to development of clean energy," he says.

Some of the money from carbon pricing will fund new low-emissions technology under the plan recommended to the Federal Government



# The great energy reshuffle



The *Garnaut Climate Change Review Update 2011* refers to a package of short- to medium-term measures for innovation in low-emissions technologies, including a funding pledge that increases over time to \$2 billion to \$3 billion a year.

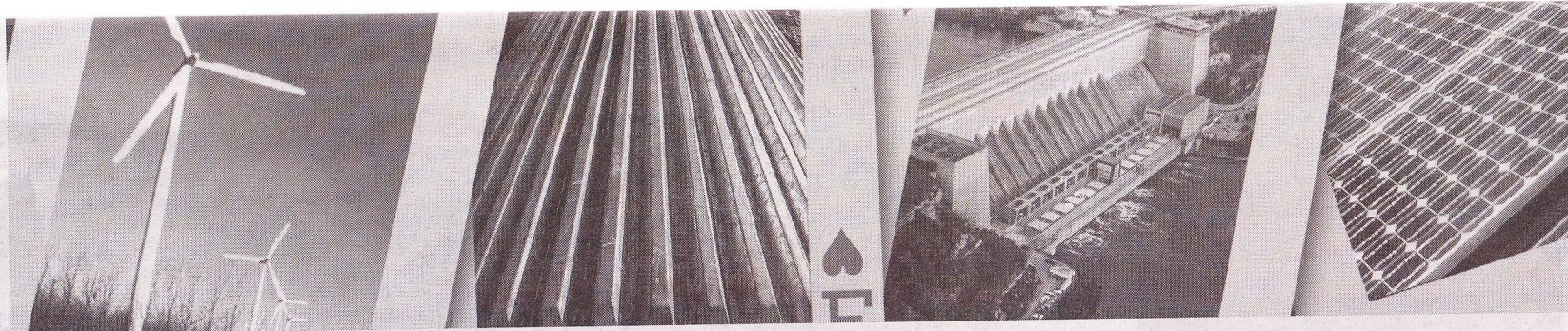
Prof Garnaut believes the Renewable Energy Target and feed-in tariffs should be phased out, because they made green power more expensive and supported only well-established technologies.

"Unlike economy-wide carbon pricing, the Renewable Energy Target does not necessarily encourage the lowest-cost means of reducing emissions," he writes. "Nor does it encourage innovation: It favours the lowest-cost established technologies that are eligible within the scheme."

Greens MP Mark Parnell agrees. "Renewable energy can easily compete with dirty fossil fuel energy if all the costs are taken into account," he says.

"Putting a price on carbon is a key element in levelling the playing field."

"Our natural advantages in terms of wind, solar and geothermal should give us a head start over other states pro-



vided we invest in innovation and also in upgrading the electricity grid to cope with a different energy mix."

Wind has been the green power of choice in SA because it is investor-friendly, with capacity for growth and competitive advantage.

John O'Brien, member of Premier Mike Rann's Climate Change Council, says wind is the current winner "due to its mature technology that has a risk profile understood by the investment community and because it is currently the cheapest form of proven and well-demonstrated renewable energy".

"Money is not the problem. If policy and infrastructure issues are resolved, then there is plenty of investment money to deliver projects," he says.

"But, currently, there are many challenges - the regulatory framework is critical in this to ensure that investors understand how the projects will be treated over their economic life and rapid changes at the state and federal levels only serve to dent confidence of potential investors."

Supporting infrastructure can also be an issue, he says.

"In SA, we have plenty of wind on the Eyre Peninsula but no way of getting it to the east coast where it is needed," Mr O'Brien says.

But both wind and solar are variable energy sources - and power retailer Origin Energy believes geothermal and hydroelectric generation are likely to be more viable sources of baseload power generation.

## BUY GREEN POWER

**Green power is renewable energy sourced from wind, solar, hydro and biomass - bought by suppliers on behalf of customers. It's audited and accredited by a National Green Power Accreditation Steering Group.**

- Origin Energy is the largest green energy retailer with more than 500,000 customers electing to pay a premium for green power.
- Green power is still more expensive to generate than coal and gas.
- A green power compliance audit for 2009, published in May this year, shows only 88,757 households and commercial premises in SA used green power.
- An average household using 6840 kWhs of electricity per annum would pay about \$1 per week if it chose to have 25 per cent of its supply as green power.

## OR GROW YOUR OWN

**Another way to green your electricity supply is to install solar panels.**

- Across South Australia, 41,883 households have panels connected to the grid, a total of 65MW installed capacity.
- Many more households (26,789) are waiting to be connected and start generating 43MW.
- The State Government wants to change the feed-in tariff, currently 44 cents per unit of electricity (kilowatt-hour, kWh). Under a bill before parliament this would increase to 54 cents per kilowatt hour for those who are already involved but would close to new entrants on October 1.
- Federal Government rebates were scrapped but people still can earn money for generating solar power by selling Renewable Energy Certificates.

**TELL US** How do you save money on electricity costs? [adelaidenow.com.au](http://adelaidenow.com.au)

# Health, not age, is the key to a man's sex drive

SCIENTISTS have discovered what Playboy founder Hugh Hefner already knows: Old age does not lower a man's sex drive.

If you are middle-aged and your libido is not what it was, it's more likely to be the result of declining health, researchers say.

That is not news to 85-year-old Hefner, who is preparing to marry

24-year-old model Crystal Harris.

"If you're in good health, age is just a number," he says.

Previous theories suggested that as men aged, their testosterone levels fell, leading to a loss of libido that went on to affect health.

But a study by Australia's University of Sydney, found the reverse was true.

It found testosterone levels did not fall unless there was a decline in general health.

The findings in the *Healthy Man Study* will be presented to a conference in the US next week.

Researchers tested hormone levels in blood samples of 325 men aged 40-plus over a period of three months. Those in good health

showed no signs of falling testosterone. Levels were more likely to fall as a result of obesity or heart disease rather than ageing, said researcher David Handelsman.

He said: "Some researchers believe age-related testosterone deficiency contributes to the deteriorating health of older men and causes non-specific symptoms,

such as tiredness and loss of libido.

"We had originally expected age to have an effect on blood testosterone, so the findings were a bit of a surprise," he said.

Researchers at the University of Chicago found this week a lack of sleep also had a profound effect on male sex drive.

Daily Mail, London