

All fired up over gas

THE now downscaled Canberra Technology City development is still controversial and at long last our city is having a serious debate about how and from where we should source our electricity.

Canberra is small, landlocked and sub-alpine and the challenges this forces us to confront aren't easy. This is because apart from tiny amounts of electricity we generate using mini-hydro we are almost totally reliant on the national power grid to supply the 600 megawatts we need to keep our lights on.

What's wrong with relying on the national grid is that except for the limited green power we source from wind farms in SA and biomass plants in Nowra in NSW, we have little option but to buy the rest from high greenhouse-gas emitting, coal-fired power stations.

For a city like Canberra with its aim to become sustainable and be as environmentally neutral as possible, this is almost embarrassing. Ironically, it's part of why our city has one of Australia's largest carbon footprints.

Needing to find 600 megawatts might not sound like much compared to the 14,000 megawatts NSW needs to find every hour to satisfy peak demand, but doing it sustainably is where it gets complicated.

The Snowy Hydro scheme, which rarely runs at full strength and is highly dependent on reasonably full dams, is too unreliable for our baseload needs.

Which brings us to wind power and solar.

Many of us have seen the wind farms in nearby Blayney or Crookwell and wondered

GAS

By Alex Dunnin



why we don't do the same here. The answer is because the 15 wind turbines at Blayney produce only 10 megawatts of electricity and the eight wind turbines at Crookwell produce only five megawatts.

Against this, solar must surely be the better option. But its low-output capacity, at this stage anyway, makes it really only an option for highly localised applications such as individual houses and schools.

With these difficulties of wind and solar in Canberra it's no wonder ActewAGL turned its attention to the 210-megawatt gas power option as probably the only viable alternative big enough to seriously reduce our reliance on the coal-fired power stations underpinning the national grid.

However, the consortium has had a late change of plan of reducing the power generation capacity to 28 megawatts.

The near-zero greenhouse gas emissions of gas power makes it even more attractive, especially with Australia soon to launch a national emissions trading system.

ActewAGL still has to complete its community consultations but given the potential for Canberra to generate one-third of its electricity carbon neutrally and claim Australia's sustainability crown it's hard to argue with the strategy.

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