



August 2014

## Next meeting

We will hold our AGM for 2013/14 at 5:30 pm this Thursday 21st August, followed by our regular month meeting.

It will be at our new regular meeting place, South Wagga Public School, corner of Edward and Best streets. From the carpark entered off Edward St at the front of the school, head across the lawn away from the road. When you see the school canteen, head a bit left to a small building where we will have the lights on.

All welcome, whether you are a member or not!

## Report on recent activities

### **Riverina Community Solar Farms**

The fallout from attending the recent Community Energy forum in Canberra continues, with many ideas being thrown up and followed up over the last few weeks. More information will be available at the next meeting for anyone who is interested.

In the meantime here is a short description of the meeting and a picture of Jim and Neil while we were there (courtesy Embark).

The first Community Energy Congress was held in Canberra in mid June. With a sell-out total of 350 attendees, the participants gathered across 4 days to share, learn and build a strong movement for our emerging sector. The congress provided a beacon of hope in the midst of the political storm around renewable energy.



*The 350 participants at the congress*

A new [Draft National Strategy for Community Energy](#), launched at the Congress, articulates a plan for achieving the sector's full potential. The strategy addresses:

- facilitating community energy models
- funding and financing
- capacity building
- building community, government and industry support for community

- energy
- policy and regulatory reform

C4CE facilitates collaboration with the goal of creating a vibrant Australian community energy sector. If you'd like to get involved, please [register your interest](#) to become a member now and consider participating in a strategic working group

... and in other news

### **Ministers behaving strangely**

It was hard to choose from the abundance of news items this month. So much is happening in the area of climate science and renewable energy. But I cannot let the strange pronouncements of our Federal Ministers go past without reference to Greg Hunt, [Minister for Mines. Interviewed by Andrew Bolt](#), he said that, not only is the radical left “against electricity”, but that Australia has to continue to mine coal so that the starving poor of India can have power stations and power lines going everywhere. It was nice of him to worry but meanwhile, in India itself, the following was happening:

In Delhi last week, the Indian government committed to a plan to provide low-cost loans and grants to set up some of the world's largest solar PV parks across the country, each of them comprising as much as 20 gigawatts of capacity, about 10 times what India has built to date. (See [here](#) for more)

Separately, India also plans to auction 1,500MW of PV capacity in its biggest tender yet, the final guidelines of which will be issued this month.

India's new government, led by Narendra Modi, [plans to use solar power to bring electricity to the homes of 400 million people](#) who currently do not have access to it. This announcement comes after BJP's historic election win last week by securing clear majority.

## **Renewable energy policy**

[Analysts at investment bank UBS](#) have come up with a suite of policy suggestions that they say could put Australia at the cutting edge of a carbon light decentralised electricity grid.

If policy settings were designed to assist the transition to the “Nu-tility” world, where distributed energy takes over from centralised power – there would be:

- a carbon tax,
- subsidies for storage,
- incentives for rooftop PV,
- mandatory time of use meters and
- networks would be unregulated competitive businesses sharing the pain.

In fact, [we already have technically feasible scenarios to run the Australian electricity industry on 100% renewable energy](#) — without significantly affecting supply.

**Associate Professor Mark Diesendorf** from the University of NSW after a careful analysis of Australia's electricity use says:

"Using conservative projections to 2030 for the costs of renewable energy by the federal government's [Bureau of Resources and Energy Economics](#) (BREE), we found an [optimal mix](#) of renewable electricity sources. The mix looks like this:

- Wind 46%;
- [Concentrated solar thermal](#) (electricity generated by the heat of the sun) with thermal storage 22%;
- [Photovoltaic solar](#) 20% (electricity generated directly from sunlight)"
- Biofuelled gas turbines 6%; and
- Existing hydro 6%.

### **Can we get there?**

Denmark is aiming for 100% renewable energy by 2035, Germany for 80% by 2050, Scotland for 100% by 2020, [even Costa Rica is planning to get there by 2021.](#)

A geothermal project valued at \$958 million US dollars was approved by members of the Costa Rican Legislative Assembly within the last week.

A Costa Rican official, Teofilo de la Torre, said that when operational, the new geothermal plants could generate electricity at about five cents per kilowatt-hour. It has been reported that Costa Rica wants to be [carbon neutral](#) by 2021, so developing geothermal would help them achieve that goal.

### **South Australia is well on the way**

## **[South Australia wind energy jumps to 43% in July](#)**

South Australia's wind farms produced enough electricity to meet a record 43 per cent of the state's power needs during July, and on occasions during the month provided all the state's electricity needs.

The output was boosted by the addition of the 275MW Snowtown II wind farm earlier in the month. Before that, the state's 1,200MW of wind farms had provided around 28 per cent of the state's electricity demand in 2012/13.

### **And NSW is trying hard to catch up**

#### **[Renewable energy: NSW to be 'Australia's answer to California'](#)**

The Baird government says it plans to adorn as many of its buildings with solar panels as possible and ease the way for more wind farms.

"We are making NSW number one in energy and environmental policy," Environment Minister Rob Stokes told the Clean Energy Week gathering in Sydney.

### **Nationally, the Clean Energy Finance Corporation is doing what it can before it gets closed down**

#### **CEFC to provide \$120m to unlock Australia rooftop solar finance**

The Clean Energy Finance Corp has announced funding of up to \$120 million to help break down financing barriers to rooftop solar, and open up the market to renters and others by removing up front costs.

The commitments by the CEFC include \$70 million in senior debt finance to bring US solar giant SunEdison to the Australian market and open up a range of new finance products that include leases and power purchase agreements. Sun Edison will provide a further \$46 million.

The CEFC is also providing \$20 million to help Tindo Solar, Australia's only solar module manufacturer, offer similar products in concert with local groups Impact Management and Lighthouse Infrastructure

## Science and technology news

### [Climate models on the mark, Australian-led research finds](#)

A common refrain by climate sceptics that surface temperatures have not warmed over the past 17 years, implying climate models predicting otherwise are unreliable, has been refuted by new research led by James Risbey, a senior CSIRO researcher.

### [Scientists create new battery that's cheap, clean, rechargeable... and organic](#)

Scientists at USC have developed a water-based organic battery that is long lasting, built from cheap, eco-friendly components.

The [new battery](#) – which uses no metals or toxic materials – is intended for use in power plants, where it can make the energy grid more resilient and efficient by creating a large-scale means to store energy for use as needed.

The batteries could pave the way for [renewable energy sources](#) to make up a greater share of the nation's energy generation.

### [Australian solar breakthrough – 'giant step' in race against coal](#)

An ARENA-backed, CSIRO-developed solar thermal demonstration project has notched up a significant win for the technology, generating the highest temperature steam ever produced using energy from the sun.

“Instead of relying on burning fossil fuels to produce supercritical steam, this breakthrough demonstrates that the power plants of the future could instead be using the free, zero-emission energy of the sun to achieve the same result,” said CSIRO's energy director, Alex Wonhas.

## And, finally, two articles from the more speculative end of things

### **Safe, simple, small, and economical nuclear power**

#### [From the website](#)

NuScale Power has created a new kind of nuclear plant, a smaller, scalable version of pressurized water reactor technology, designed with natural safety features.

The NuScale plant uses natural forces to operate and cool the plant. This eliminates the need for many of the large and complex systems required in today's nuclear plants. This simplicity allows the NuScale Power Module to be factory-built and transported to site.

This makes NuScale plants faster to construct, and less expensive to build and operate.

**Go to the ant you sluggard. Consider its ways and be wise** ([Proverbs, 6:6](#))

[Ants May Boost CO2 Absorption Enough to Slow Global Warming](#)

Ants can speed up mineral reactions that capture atmospheric carbon dioxide so dramatically that they could one day be enlisted in the fight against climate change.

What if you could build a brick fence in your backyard that would offset a portion of your daily carbon dioxide emissions, such as those produced on your drive home from work?

Who knew. Click the link to read on.