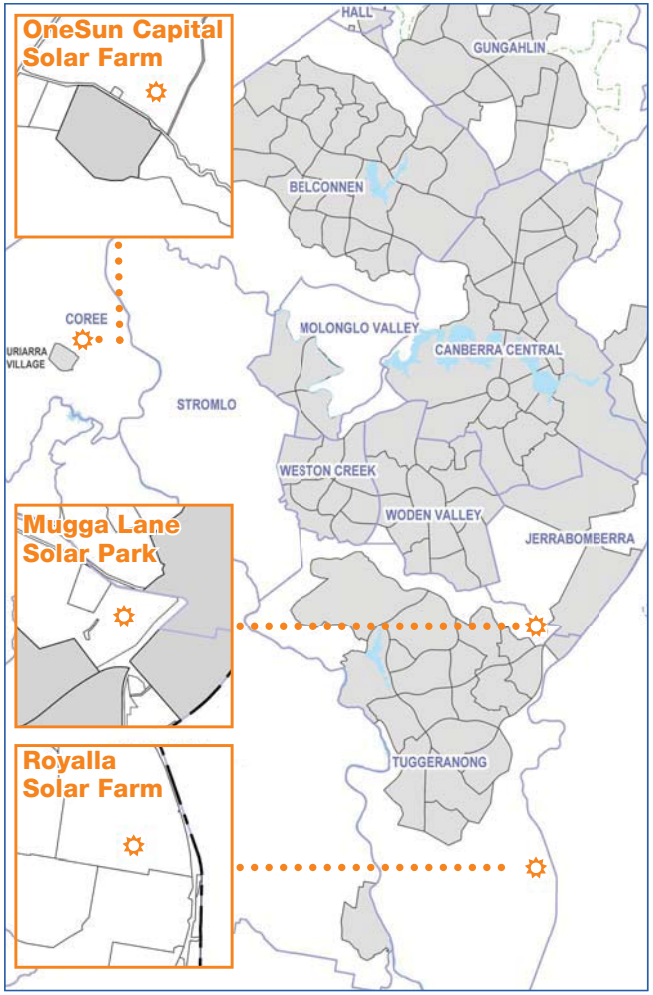
ACT Government
Environment and Sustainable Development

How Canberra is becoming the solar capital of Australia

Canberra is on track to become the solar capital of Australia and the nation's most climate-friendly city. It's all part of the ACT's climate change strategy which seeks to reduce the Territory's greenhouse gas emissions by 40% by 2020.



For more information

Visit: www.environment.act.gov.au/climate_change

Big Solar

Big Solar is a key part of the government strategy for renewable energy with 40 megawatts of large-scale solar renewable energy generating capacity coming online by mid 2015.

The ACT Solar Auction

The ACT's Solar Auction has proved a simple and effective way of attracting large solar projects to the Territory. It runs like a tender process whereby companies compete for the right to a feed-in tariff (FiT), with proposals evaluated in terms of their overall value-for-money. The two-stream process has been completed with FRV awarded a grant of entitlement in the fast-track stream and Zhenfa and OneSun joint winners in the regular stream.

Costs and benefits of Big Solar

The ACT's Big Solar facilities will produce GreenPower™ meaning real emission reductions above and beyond national pollution targets. In fact, enough GreenPower™ will be produced to supply around 10,000 Canberra houses, reducing greenhouse gas emissions by 1,400,000 tonnes over 20 years.

Having three of the largest solar power facilities in Australia will underpin Canberra's emergence as a renewable energy investment hub and support the continuing growth of our clean technology industries.

The Solar Auction process has delivered solar power at the lowest possible cost. The average FiT price is around $183 per megawatt hour with the Territory paying the difference between this price and prevailing wholesale electricity prices. Importantly the FiT rate is fixed over 20 years, so it declines in real terms and as wholesale energy prices rise over time.

Costs to households are expected to peak in 2016 at around $0.45 per week and decline to around $0.27 per week in 2021. This decline will continue over time.

A big future for rooftop solar

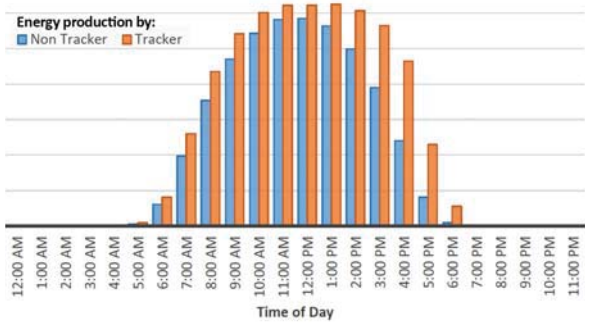
ACT homes and businesses continue to install roof-top solar, supported by falling solar costs and attractive discounts on energy bills offered by electricity retailers. As of 30 June 2013 there were 13,224 solar systems installed in the ACT. Roof-top solar is forecast to continue to grow to 2020.

FRV's Royalla Solar Farm

When completed in mid 2014 the Royalla Solar Farm, at 20 megawatts, will be the largest photovoltaic power station in Australia, producing approximately 38,000 megawatt hours of zero-emission renewable energy each year. The 20 megawatt solar generator will comprise approximately 83,000 fixed photovoltaic modules. Fotowatio Renewable Ventures (FRV) is a European-based company specialising in the complete management of solar generation assets.

Zhenfa's Mugga Lane Solar Park

The Mugga Lane Solar Park, due to be completed in late 2014, is a 13 megawatt solar farm, including half a megawatt of panels attached to ground-mounted tracking units. The use of single axis trackers will demonstrate this innovative technology that increases electricity output by tracking the sun over the course of the day. Zhenfa is a Chinese-based company that specialises in photovoltaic system designs, supply of materials, contracting and project finance.

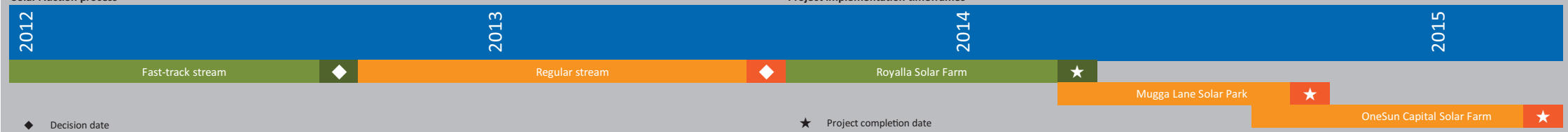


OneSun Capital Solar Farm

The OneSun Capital Solar Farm, due to be completed in mid 2015, is a 10 megawatt facility with 7 megawatts eligible for large-scale feed-in tariff support. The facility features a mono-pile frame system which will minimise disturbance to the landscape allowing for easy assembly and disassembly and allow the site's primary purpose, sheep grazing, to continue. The project will also fund the augmentation of the electricity network that runs from the Cotter Pump Station to Uriarra. Elementus Energy Pty Limited, the project developer, is an Australian-owned and operated company.

Solar Auction process

Project implementation timeframes



◆ Decision date

★ Project completion date