



REWIRED Episode 6 - Twin Hills.

Emu Downs Solar farm podcast transcript

SOURCE	CONTENT
COURTNEY CARTHY	<p>Hi, it's Courtney jumping in here to say thanks for listening. It's been quite a trip and we really hope you've enjoyed it as much as we have!</p> <p>This episode we're getting out and about across to the other side of Australia to the tiny town of Badgingarra in WA. It's a relatively new town thanks, in part, to its poisonous plants. Local Don Williams knows about that, but we'll get to it in a minute.</p> <p>Since the start of this series we've come along way, much like Australia's solar energy infrastructure, progressively adding up as we've journeyed through regional towns. We've seen some of the biggest newest most advanced and efficient solar generators underway thanks to funding from ARENA and the Clean Energy Finance Corporation and the work of course, of Renewable Energy Innovators like Neoen, Genex Power and the APA Group.</p>
COURTNEY CARTHY	<p><i>SFX - aeroplane...</i></p> <p>A quick 'Hello' to our international listeners by the way! Quite a few of you have downloaded ReWired in New Zealand, the US, the UK, Italy, France, Spain, Qatar, Singapore, Denmark, Barbados, Japan, the Phillipines and Indonesia. You're just over there across our northern horizon, among other countries.</p>

	<p>We'd also love to hear what you think no matter where you are! Please leave a review. If you're using Apple's podcast app just search for ReWired, even if you've already subscribed to find the link.</p> <p>Or let us know on Facebook! Search for Australian Renewable Energy Agency and send us a message.</p> <p>If this is your first time listening, I recommend starting at an episode called "Mining the Sun" It's about a solar farm in the rural town of Kidston, Queensland, and how it'll work with an open cut gold mine to create a massive kinetic battery.</p> <p>Starting there, let's have a look back on where we've come.</p>
KIDSTON CLIP	<p>Kidston - it feels like we're sort of coming up to the crest of a pretty big view.</p> <p>Thank goodness. Here we are.</p> <p>Oh! Wow... this is incredible.</p> <p>What surprises people is the scale of this place. You think oh yeah it's a hole in the ground...</p>
COURTNEY CARTHY	<p>We then headed south to Griffith New South Wales - a huge wine region.</p>
GRIFFITH CLIP	<p>And just outside of my shop here a train goes past each day with 70 20-foot containers of wine a day, 7 days a week, all year round.</p>
COURTNEY CARTHY	<p>Up the highway to Parkes, home of the Elvis festival.</p>
PARKES CLIP	<p>When I first got a cab from the airport they didn't even know what job I was doing, the taxi driver's talking about the festival. It's something that brings everyone</p>

	together, it brings so much expenditure to the town, really well needed dollars.
COURTNEY CARTHY	Further up to Nyngan - home to the the biggest solar farm in Australia.
NYNGAN CLIP	<p>(Buzzing)</p> <p>The landscape's just sort of turned black because they're all... and then, popping out each couple of hundred metres there's one of these sort of platforms with these boxes on it. Wow. Does the weather affect them at all?</p> <p>Nah, the weather's good, the rain cleans the panels, washes it, so...</p> <p>Oh! Really?</p> <p>Yeah, so that's good.</p>
COURTNEY CARTHY	Then onto the two new solar farms around Dubbo and a story about how it ended up with the Zoo.
DUBBO CLIP	And the funny story is, the local member here who's now passed away, but the local member Tony McGrane used to tell the story that he was involved with National Farmers Association and they wanted the National Farmers to write to the NSW Government to say they didn't want a zoo in prime farm land around Wellington because they were worried about lions escaping from the zoo and going and taking all their livestock
MUSIC	THEME FADE UP
COURTNEY CARTHY	And now, the sandy plains two hours north of Perth where two renewable energy sources will be working side by side.
MUSIC	THEME

<p>COURTNEY CARTHY</p>	<p>Welcome to ReWired, a look at new large scale solar farms under construction around Australia.</p> <p>The Australian Renewable Energy Agency, also known as ARENA on behalf of the Australian Government last year announced around \$90 million in funding for 12 large scale solar projects following a competitive round. After years of planning, construction is underway.</p> <p>The Emu Downs solar farm is being built in the tiny town of Badgingarra, 2 and a bit hours north of Perth.</p> <p>Running east-west through the town is the Bibby Highway, renewable energy High Street equivalent in these parts, already home to an 80 MW wind farm, with a 20 MW solar farm going in next door.</p>
<p>DALE PARK</p>	<p>Dale Park, I'm a local farmer, I'm a neighbour on the other side on the south side of the wind farm.</p>
<p>COURTNEY CARTHY</p>	<p>Dale says the local climate, like parts of New South Wales we've visited, and as it is across the south west of WA, it can best be described as Mediterranean.</p>
<p>DALE PARK</p>	<p>So, wet winters and dry summers, that's what it used to be over the last 10 to 15 years we've seen things change slightly. We're getting less rain in the winter and more in the summer.</p>
<p>COURTNEY CARTHY</p>	<p>It's sandy. It all looks like a rich brown beach with scrub and the odd tree around but Dale assures me there's noticeable differences in the countryside, millions of years ago the hill where the turbines are propped up on was the coast line. 30 kilometres out into the prehistoric sea is the shore these days with the towns of Cervantes and Jurian Bay.</p>
<p>DALE PARK</p>	<p>And this is a relatively new area, so the land around Badgingarra was only opened up in the 60s so before that it was basically bush.</p>

<p>COURTNEY CARTHY</p>	<p>Tough bush too, one of the last frontiers in white Australian settlement in WA. So while you'll find farms here now, they're not the generational properties of the Eastern States, like the solar and the wind farms, they're a relative newcomer to the industry.</p> <p>It wasn't that the area was unknown, back in the 1880s surveyors found the local flora too poisonous for farm animals on the Plateau.</p>
<p>DON WILLIAMS</p>	<p>There are a couple common name of Hill River Poison, Champion Bay Poison are plants that are toxic to introduced animals like sheep, cattle, goats, pigs and horses but are not poisonous to the animals that live here.</p>
<p>COURTNEY CARTHY</p>	<p>This is Don Williams, he lives about 30 mins further north.</p> <p>Don knows the area as well as anyone, he authored one of the few books about it describing 520 native plant species.</p>
<p>DON WILLIAMS</p>	<p>The area here, the hill river area was the last frontier in Western Australia even though it's now only two and a bit hours drive north of Perth. This is because the area is Kwongan, is the name of the vegetation. it's short, prickly vegetation and kwongan is an Aboriginal word roughly translated means a bloody prickly no-go area.</p>
<p>COURTNEY CARTHY</p>	<p>Doesn't sound so good but it is quite picturesque. The hills take enough time to rise that you can often see for kilometres in any direction, the short scrub borders the horizon without getting in the way and the sky stretches wide enough it's probably more appropriate referring to it as "the earth's" atmosphere.</p> <p>Among this vista is the seemingly odd circumstance of a solar farm going up next to a wind farm. I take a drive into Jurian Bay and meet Adam Pegg, he's the head of</p>

	environmental development at the APA Group, owner of the solar and wind farm.
ADAM PEGG	My role mainly entails looking for opportunities that come from climate change policy and I look after all our wind and solar farm projects.
COURTNEY CARTHY	So you're the one reading through the government papers and then wondering how you can apply that to the landscape around the country?
ADAM PEGG	Yeah, I've spent a few years reading a lot of papers and putting submissions into quite a few policy changes.
COURTNEY CARTHY	The Emu Downs solar farm here in WA is a cost effective opportunity recognised by APA.
ADAM PEGG	We had really two wind resources, it blew in the morning and dipped a bit during the day, and it blew in the evening. We were able to squeeze in a 20 megawatt solar farm without augmenting or increasing our connection point.
COURTNEY CARTHY	Wind dies down, solar fills the existing pipeline.
ADAM PEGG	Wind and solar are really complementary in working together to provide our off-taker a flatter, somewhat more certain, profile.
COURTNEY CARTHY	Australian is by no means the only country warming to solar. Others have taken it much further already. Amanda McKenzie is CEO of the Climate Council and I caught up with her outside her office in a busy Melbourne street.
AMANDA MCKENZIE	The thing that surprises me is that a cloudy country like Germany is so far ahead of where Australia is. And you know, we're the sunniest country in the world, we've got a huge opportunity, and we've got a lot of space, a

	<p>lot of sun, there's so much we could do, we just need to get out of our own way.</p>
COURTNEY CARTHY	<p>Closer to Australia, China is putting its deserts to work too.</p>
AMANDA MCKENZIE	<p>So a recent trip I did to China was really mind boggling. We went to a town called Germu, and when I say a town, it's basically in the centre of China in the desert and it's there to facilitate lots and lots of renewable energy.</p> <p>The government basically gives companies the land for free and says build as much energy as possible, which is the sense I got.</p> <p>One of these solar arrays that I went to was 12 kilometres by 12 kilometres. You stand on the top of the overlook and as far as you can see in every direction is solar panels. It really was amazing and you think a country like Australia; we've got so much desert, space, we could do a whole lot of that here too.</p> <p>And it's absolutely feasibly possible, you can install large scale solar almost like lego blocks. You can do it quickly and you can do it in lots of different areas. But we have a lot of flat desert, there's a lot of opportunity, and you know some of that flat desert is far away from existing transmission lines but there's a lot of opportunity near existing transmission infrastructure too.</p>
COURTNEY CARTHY	<p>Helping to invest in the large scale solar industry, among other renewable sources, is Gloria Chan, director in the investments team at the Clean Energy Finance Corporation. She says we're at a tipping point.</p>
GLORIA CHAN	<p>I think a tipping point probably has been reached. So I think it was very significant in basically saying to industry that Australia is interested in having a pipeline of large scale solar projects. And it sent a signal to sponsors and developers that there is a real pipeline of opportunities.</p>

MUSIC / SFX	
COURTNEY CARTHY	Back across the sandy plateau and outside the wind farm office I meet a Badgingarra local employed here to help administer the farm as the turbines rotate above.
JANINE ACKLAND	My name's Janine Ackland.
COURTNEY CARTHY	Janine wasn't always a local.
JANINE ACKLAND	Oh, I married a farmer... (laughs)
COURTNEY CARTHY	That TV show's been going longer than I thought.
JANINE ACKLAND	I was a city girl and met a farmer, a farmer's son, and ended up in Badgingarra.
COURTNEY CARTHY	The head office for APA, owners of the solar and wind farm are based on the other side of the country, so different time zone.
COURTNEY CARTHY	Do the eastern states, do they forget the time difference over here?
JANINE ACKLAND	No, no it's pretty good. I do remind them when we're having public holidays because they don't always match eastern state's public holidays.
COURTNEY CARTHY	Many other people around here feeling the benefits of having a project this big come in?
JANINE ACKLAND	I think the will, as it gets underway. Badgingarra is the local community and it's rather a small town. A lot of the people that are involved, the contractors or the labour force, are actually from the coastal towns - Cervantes and Jurian Bay - we've got a couple of local earthworks and the water is coming from a local farm.
SFX	Car noise

COURTNEY CARTHY	Down one driveway and up another to the solar farm site.
COURTNEY CARTHY	Ok. I don't know how the trucks do it. The roads aren't very wide. There's just absolutely minimum width. UGL? That's good enough for me. Some really big levelling machine. And there's the trademark fence.
COURTNEY CARTHY	With a couple of the project managers from the construction company we wave down a big truck that's been watering the internal roads.
COURTNEY CARTHY	What's that going past us now, Darryl?
DARRELL VAN BRUCHEM	Water cart. They were just settling down our roads. Just settling the dust and gives us compaction on our roads.
COURTNEY CARTHY	Allison hops out and wanders over.
ALLISON WYBROW	I didn't realise that's what you were doing while I'm busy backing up with my reverse beeper. I'm Allison Wybrow I'm a part owner of Ashley's Earthmoving in Badgingarra.
COURTNEY CARTHY	I think Jan mentioned your name.
ALLISON WYBROW	Jan may have mentioned my name yeah, she asked if I'd pop into the office at lunchtime. I said I'd have to fake a breakdown because Darryl would be watching.
COURTNEY CARTHY	Well, I won't keep you long. When you say local, how local are you?

ALLISON WYBROW	50 kms that way is my house and I've lived here all my life. I was actually born here. My parents work her on this farm.
COURTNEY CARTHY	The solar farm?
ALLISON WYBROW	Well no, it wasn't a solar farm then it was just a farm, but yes, my parents were working for a bloke that owned that, only 21 years ago.
COURTNEY CARTHY	You're probably working hundred of solar projects around here. This is just one of many?
ALLISON WYBROW	Ah, no. This is the very first solar project that Badgingarra has and it's quite a novelty to be involved in it. Although we're not very involved in the solar side we're more the gravel side.
COURTNEY CARTHY	Like the Nyngan solar farm, the wind farm out here has a viewing platform that draws tourists in through the area and provides a bit of information about the renewable energy generation.
ALLISON WYBROW	<p>Yeah, that's a big tourist spot, I think it would be well worth putting on here as well. There's a lot of tourists come up, less now that the coast road has gone in but the tourists come out of Perth and go to the Pinnacles at Cervantes and they, this Bibby Road is the main access across from the Brand Highway and there's always hire cars and foreign tourists taking photos so, and the signs at the wind farm, they've got the signage explaining what it is, when it was built, it's very informative and it's very good.</p> <p>For some people they would never have an opportunity to see a wind farm in their own country and I certainly have never seen a solar farm so I hope you put some signs up here.</p>

COURTNEY CARTHY	What do people ask Allison about working on the solar farm?
ALLISON WYBROW	Can they get a job? That has been the biggest ask. It's a great place for a solar farm because sun is something we have a lot of. As is the wind farm - a very good thing to have!
COURTNEY CARTHY	<p>It's been pretty incredible to travel round to these six large scale solar farms and see how far they've come since funding was announced in Spring 2016.</p> <p>ARENA, like we've said throughout the series contributed about \$90 million. What the \$90 million got was an unlocking of about \$1 billion in investment. So, 10% of what it cost to construct these 12 large scale solar farms around Australia has unlocked 90% from investors and renewable energy innovators.</p> <p>It's been an incredibly positive thing to see, not so positive was my choice in hire cars for regional or rural areas. I should've splashed out on a four wheel drive, but the growth and development contributing to a future for Australia where the rain can clean some of the infrastructure contributing to the national grid is impressive.</p>

<p>COURTNEY CARTHY</p>	<p>Thank you so much for listening to this series of <i>ReWired</i>. Do subscribe to the podcast if you haven't already. While this is the last episode in this series we may have another one in the works and that way you'll be the first to get it.</p> <p>And if you'd like more information about the work that ARENA does, please go to their website, www.arena.gov.au</p> <p>If you haven't listened to the other episodes please do. Each one is a slice of an Australian town who just happens to be in a great spot to capture solar rays and convert them into electricity that'll light our lights, charge our phones or plug away offsetting emissions.</p> <p>Credits for this series, and there are many - large scale solar farms and podcasts don't just happen - they can be found online at www.ARENA.gov.au/podcast</p> <p>I'm Courtney Carthy, you've been listening to this series ReWired on large scale solar farms around the country.</p> <p>Thanks again.</p>
<p>MUSIC</p>	<p>THEME</p>