



REWIRED Episode 1 - Mining the sun. Kidston Solar farm podcast transcript

SOURCE	CONTENT
EARL	Oh well anything, anything it does in the way of helping the local people get employment.
COURTNEY CARTHY	That's Earl from Greenvale outside the Three Rivers Hotel bar... he's one of just 70 people in the Central north Queensland town 250 kms west of Townsville... about a hundred Ks further inland is a much smaller town... Kidston... and Earl hopes the construction of a large scale solar farm there will get the area going again...
EARL	There's people with trucks here that haven't worked here for three or four years, there's people that haven't worked in any of that sort of thing in five year, or six years - we need to have some industry up here, we need to have something done and this is the start of it I hope.
MUSIC	MUSIC
COURTNEY CARTHY	<p>I'm Courtney Carthy... and this is REWIRED.</p> <p>The Australian Renewable Energy Agency... also known as ARENA... on behalf of the Australian Government... announced just over \$90 million in funding for 12 large scale solar projects following a competitive funding round.</p> <p>Large solar farms in Australia - those over 5MW - they don't happen quickly. Sods weren't turned until months after the announcement.. there's years of work before you buy a shovel and hold a ceremony.</p>
TIM COUCHMAN	<p>The name's Tim Couchman, I'm a client manager here at ARENA. We look after contracted projects where our board has approved them, we have a funding agreement in place and money going out the door. We look after the funds from the ARENA side to ensure the projects get built, we troubleshoot issues as they come up, work with the proponent to make sure things go smoothly and generally do what we can do get the best value for the taxpayer.</p> <p>You can look at these solar farms, in terms of long term development, it's almost like planning your own wedding. You might have the day itself, the end point. Which in the case of solar is starting construction and getting the thing built. But there's a lot of work that has to go in before that day can happen.</p>

COURTNEY CARTHY	In this series we're we're going to visit preparations for the ceremony... solar farms under construction... generating jobs... improving roads... we'll talk to the people, businesses and communities getting the benefits from the quiet solar revolution... humbly growing renewable energy capacity across the country.
MUSIC	
COURTNEY CARTHY	Starting in Kidston, deep in Queensland's central north, we'll be travelling down into New South Wales before heading over to WA.... Around Kidston is beef cattle country... 300 kms inland as the crow flies from Townsville. It's barely a dot on the map where a retired old open cut gold mine rests and I meet John Lawlor.
SFX	CAR DRIVING IDLE CONVERSATION
COURTNEY CARTHY	John's the project manager on site working for Genex Power... Genex is an Australian company developing innovative clean energy projects here in Kidston. Before we head to the construction site, John shows me the place.
JOHN LAWLOR	This is just a house that Genex has purchased, and before there was any other infrastructure here it was just their home base, so me, being more to do with the construction, I'll move up to the site facilities and... (pointing) my room's there, that's where I live, home sweet home,
COURTNEY CARTHY	Is that the two caravans there with the roof strung between them?
JOHN LAWLOR	Yep, that's it. This is actually Kidston if was to be marked as a town on a map - this is it.
COURTNEY CARTHY	And there's a tractor, a car, and a couple of buildings...
JOHN LAWLOR	Alright, so, a shirt.
COURTNEY CARTHY	After I get a bit of safety kit on we jump in the car and head towards the old mine. Prospectors found gold in the late 1800s. The most recent incarnation of the mine site was from 1984 until only a couple of years ago.
JOHN LAWLOR	You can see, you'd hardly even know a lot of the times driving through here, the rehabilitation is quite good and you'd hardly know you're driving through a mine site that had been operating for 30-odd years.
COURTNEY CARTHY	And we're just driving through some cattle... Um, is this fairly standard? There must be 25 cows around us

JOHN LAWLOR	No, no it shouldn't be...
COURTNEY CARTHY	Cattle aside, we eventually found the mine. It does feel like we're coming up to the crest of a pretty big view.
JOHN LAWLOR	Ah, thank goodness, here we are.
COURTNEY CARTHY	Oh! Wow... this is incredible.
JOHN LAWLOR	What surprises people is the scale of this place.
COURTNEY CARTHY	A deep blue pool of water sharply cut into the flat country... as if a 500 metre wide finger had pushed its way into the earth... from the surface... the water fills a hole 250 metres deep...
JOHN LAWLOR	You think oh yeah it's a hole in the ground, we're going to pump it up the hill. But it's the scale of the pit that really brings home how big a project... how significant a project it is.
COURTNEY CARTHY	ARENA was there at the start to provide grant funding for stage one of the project... a 50 megawatt solar farm...currently under construction. 50 megawatts of solar generation means power to the equivalent of more than 26 thousand homes... off-setting 120 thousand tonnes of carbon dioxide a year... similar to taking about 33 thousand cars off our roads. That's just stage one. Stage two is where the water sitting in the old gold mine becomes a power source with the potential to generate 5 times the large scale solar farm under construction for stage one. Here's Tim Couchman again, from ARENA, explaining how the hydro element of Stage two in Kidston will work...
TIM COUCHMAN	In terms of the overall concept they have with a pumped hydro facility with a co-located solar farm, I believe that is unique in a global sense. The overall project that they are looking at there involves an initial stage of large scale solar... also an expansion that they are thinking of down the track that would enlarge the solar farm and on top of that you have the pumped hydro. So you could have a situation in the future where it acts as a giant battery where you can use excess solar energy or solar energy at the right time of day to charge the battery so to speak, the pumped hydro set up. Then after dark when the solar's not working you can turn on the pumps and the hydro electric scheme would work to generate power into the evening peaks.
COURTNEY CARTHY	Who gets to turn on the switch?

JOHN LAWLOR	I don't know.
COURTNEY CARTHY	Are you going to put your hand up for that?
JOHN LAWLOR	Ah, yeah, I think I'm far too junior to be given that honour.
COURTNEY CARTHY (VOICE OVER)	<p>On the Kidston project, for stage one, \$9 million from the ARENA was enough to get these renewable energy innovators going... less than 10% of the overall project cost.</p> <p>This was allocated in a competitive funding round from ARENA where 11 other large scale solar projects around Australia were successful in receiving a share of about \$90 million of public investment. This investment wasn't just money to be handed out... new solar farms were assessed to see how much of an extra push would get them under construction.</p> <p>It was enough to unlock a huge investment pool from other sources of over \$1 billion to get the solar farms built and on their way to generating clean electricity for the national grid.</p> <p>When up and running the solar farms will be helping Australia to reach the 23.5 per cent renewable energy generation target by 2020... collectively they'll contribute a tenth of the energy needed for the target.... and solar is only getting cheaper.... more immediately... the run-off benefits are felt by the local areas.</p> <p>Ali, a backpacker from St Louis, Missouri, is working at the Lynd Roadhouse. It's at the junction where you turn off the main highway to Kidston... one of those places with a sign that says 240 kms until the next petrol station...</p>
ALI	So I mean, mostly cattle out here and cattle farming, and then now it's everyone keeps talking about 'oh well, everyone's going to come out to work on the solar farm now', so that seems to be the newest boom. And then we'll get like a lot of construction workers and road workers come to stay for a few nights and do work around the area.
COURTNEY CARTHY (VOICE OVER)	Ali's boss has a little more history in the area... maybe three decades.
PAULINE ROYES	Hi I'm Pauline Royes, at the Lynd Junction... the Oasis Roadhouse at Lynd Junction North Queensland.
COURTNEY CARTHY	Pauline remembers the old mine site before Genex took it over.

(VOICE OVER)	
PAULINE ROYES	It was a terrible big ugly sight on the landscape up there. It's not used for anything else so to put that to use was a great thing as far as I can see. And hopefully with that project going ahead we're hoping that it will improve the roads out in this area.
KARLEY ROYES	My name's Karley Royes and I'm Pauline's daughter.
COURTNEY CARTHY	Karley, Pauline and I site outside the Lynd Roadhouse with Karley bouncing her new born baby, Charlotte, on her knee. So do you work here as well?
KARLEY ROYES	Yeah, yes. Oh, I haven't for a little while.
COURTNEY CARTHY	The maternity leave conditions are pretty good?
KARLEY ROYES	Yeah, yeah that's it. I just come and hover around and help out where I can really, or stuck in the office most of the time now.
COURTNEY CARTHY	One problem that keeps coming up is the irregular power supply ... blackouts are a common frustration here. But Karly is hopeful that the Kidston solar farm will make the local grid more secure and more reliable ... ensuring the Lynd Roadhouse fridges are always on and keeping the beer icy cold.
KARLEY ROYES	We're having troubles at the moment out here with all our power surges and power outages and everything, that's got nothing to do with who we're actually paying for the power, it's really difficult to get anything done. So it'll be interesting to see how this solar farm really affects us, I think anyway.
COURTNEY CARTHY	Do you ever speak to the cattle farmers? What do they say about the solar farm?
PAULINE ROYES	They think it's great. Yeah. As I said, anything, any project happening out this way benefits us. Any other projects, anything that happening they appreciate.
KARLEY ROYES	...bringing people into the country, into the shire... If you're bringing people you're bringing money, you're bringing support I suppose you can say for the rural people. Otherwise everything's just spent down on the coast, because that's where the population is... we get left behind a fair bit out here, really. Any big projects like this that they can bring out here is going to help us. Even you know just setting up this farm out here we're going to see the benefit of that

	because they're bringing money... young fellas coming back out to work, they'll call in and get a six pack to take home and stuff like that.
COURTNEY CARTHY	... do that 52 times a year... it add up...
KARLEY ROYES	Yeah, yeah, that's right... it's really good.
PAULINE ROYES	And the project over here is offering all the local farmers work in the project as well, so anyone that's a machinery operator, that sort of thing, they can all get work over here. So that's a really good thing for the locals.
COURTNEY CARTHY	Even to get to stage one... workers on the site, construction equipment rolling in and the local economy getting a bump from the activity... that can take years... for these 12 large scale solar projects it's been time worked through in partnership with ARENA as a fledgling industry gets off the ground. But it's a bump in the timeline of how long the Kidston solar farm... will appreciate a clear sunny day... much like the the local wildlife... I saw a snake coming up here... it had a black head and a brown body... do you know what that's called?
PAULINE ROYES	It's a black headed python, they're quite common in this area here and they're good to have around the place they get rid of rodents and that sort of thing, they're not venomous. Unless you interfere with them they stay away from you and leave you alone so they're quite good to have around.
MUSIC	
COURTNEY CARTHY	Next episode I'll be in Griffith New South Wales... like Kidston it's getting a solar farm built, but instead of pythons, gold mines and eucalypts... it's citrus trees, grapevines and rice fields that make the most of the abundant sunlight. And we'll meet Gloria... along with her husband John and son Clint... they own the land where the Griffith solar farm is about to be built.
GLORIA BADOCCO	Yeah, a lot of people have asked me if we're growing hemp. You know like controlled for the government or whatever it is. Yeah nah, a lot of people have asked us because they've seen the big fence go up, see.
COURTNEY CARTHY (VOICE OVER)	For more information on any projects funded by the Australian Renewable Energy Agency go their website.... www.arena.gov.au They're supporting renewable energy projects that are accelerating Australia's shift to a secure and reliable renewable energy future across the country.

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I'm Courtney Carthy, thank you so much for listening to *Rewired* and I'll talk to you from Griffith.