



How can mining catalyse bold deployment  
of solar energy?  
*DeGrussa Solar Project*

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# AUSTRALIAN RENEWABLE ENERGY AGENCY

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Independent Statutory Authority of the Commonwealth, established in 2012

## PURPOSE

Accelerate Australia's shift to **secure, affordable and reliable** renewable energy

## PORTFOLIO

**\$1 billion** funding committed to support over **270 projects**

## PIPELINE

**\$800m** grant funding to support renewable energy projects  
**\$200m** Innovation Fund (run by CEFC & ARENA) loans for clean energy projects

Knowledge sharing | Collect, analyse, interpret and disseminate



## REGIONAL AUSTRALIA'S RENEWABLES INITIATIVE

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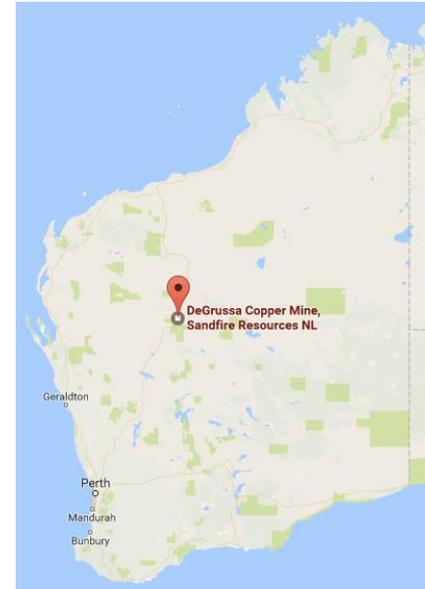
- Regional Australia's Renewables (RAR) Initiative Comprised two programs: an Industry program and Community program
- Launched in July 2013, applications closed December 2013
- Up to \$400m in funding available across both programs, aiming to construct 150 MW by 2018
- Objectives of RAR Initiative:
  - Demonstrate a portfolio of renewable energy solutions, including hybrid and integrated systems in Australian off-grid and fringe-of-grid areas
  - Ensure knowledge is produced and disseminated regarding the deployment of renewable energy solutions in remote areas catalysing further renewable energy uptake
  - Remove roadblocks, leading to greater deployment of renewable energy solutions in off-grid and fringe-of-grid areas.
- ARENA provides grant funding which seeks to fill the gap between the actual project cost and a bankable project



## DEGRUSSA SOLAR PROJECT - OVERVIEW

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- 10.6 MW (DC) solar PV with single-axis tracking system
- 6 MW / 1.81 MWh battery to provide support and spinning reserve
- Hybrid solution integrated with existing 19 MW diesel plant
- High penetration – approximately 20% of critical mine load
- Power Purchase Agreement for 6+ Years
- Commissioned in August 2016
- 20 hectares of land
- 5 million litres of diesel saved per year



(Source: Google 2017)



## DEGRUSSA - PHOTOS

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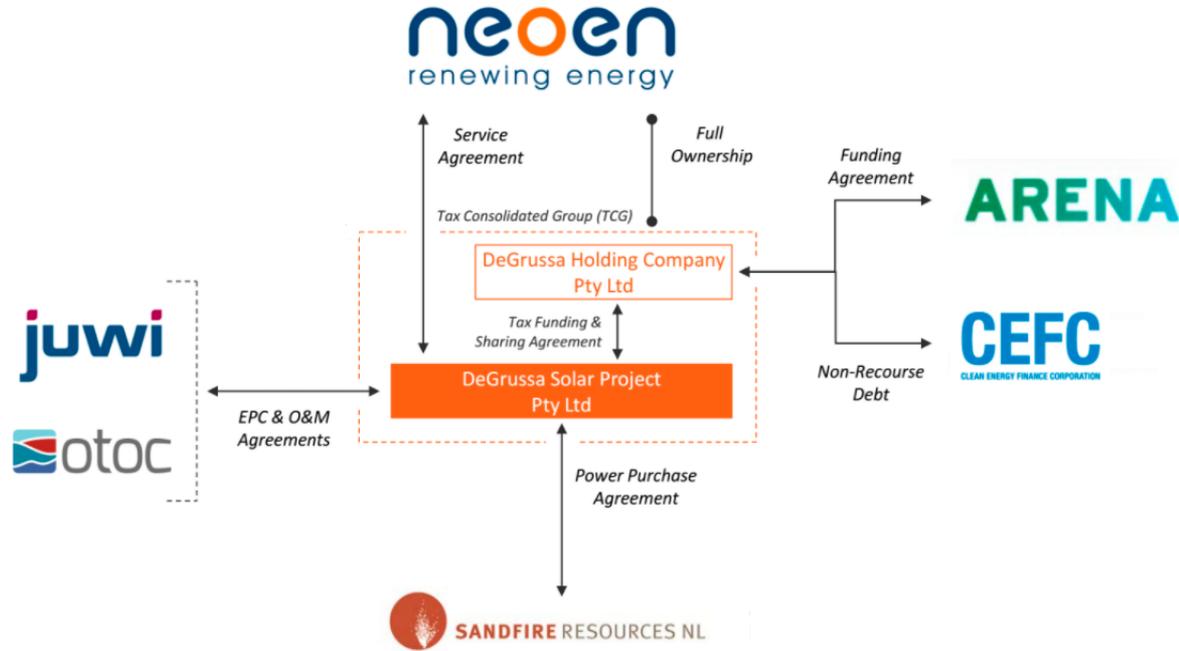
(Source: neoen 2017)



Australian Government  
Australian Renewable  
Energy Agency

**ARENA**

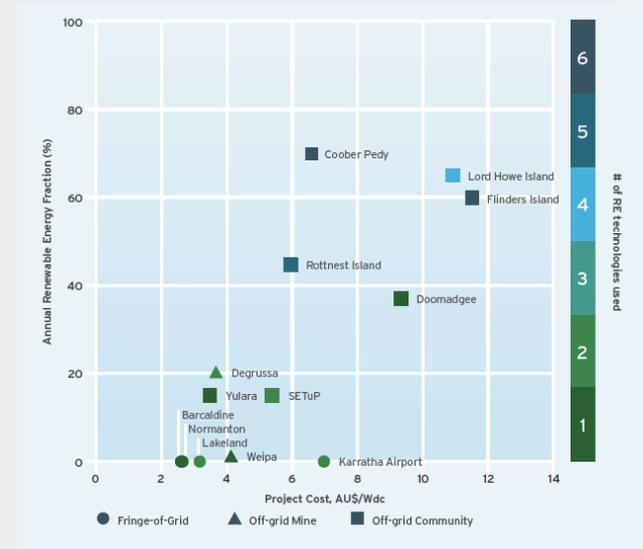
# DEGRUSSA – COMMERCIAL STRUCTURE



(Source: neoen 2017)

## LESSONS LEARNT – RAR PROGRAM

- Two key observations:
  - no two projects are alike
  - adding renewables to a remote or off-grid system requires more fine tuning to meet the needs of the site being powered than its grid-connected equivalent.
- Unique traits of remote and off-grid renewable projects make up the ‘remoteness premium’.
- Remoteness premium is not yet quantified
- Working to build a better understanding of the components that comprise the remoteness premium, and driving these down over time.



Thank you

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Contact us at [offgrid@arena.gov.au](mailto:offgrid@arena.gov.au)

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