

CLEAN ENERGY FINANCE CORPORATION

Disruption & the Energy Industry
Ted Dow, Chief Investment Officer
September 2015



CEFC Mission

Accelerate Australia's transformation towards a more competitive economy in a carbon constrained world, by acting as a catalyst to increase investment in emissions reduction

Agenda

- 1. About the CEFC**
- 2. What does disruption mean for investors?**
- 3. Case studies**
- 4. What's next?**

For investors who get it right, disruption is a good thing!



About the CEFC

Facilitating increased flows of finance into clean energy markets

- Australian Government-owned corporation that operates like a traditional financier
- Finance for renewable energy, energy efficiency, and low-emissions technologies
- Access to \$2 billion a year over 5 years.
- We take a commercial approach and expect a return on investment.
- Finance terms for projects that are more complex or new to the Australian market
- Facilitate the participation of private sector banks by sharing our expertise, acting as a co-financier and pioneering new financing structures.



\$1.4bn in capital committed across 89 investments

Clean Energy Finance Corporation

Helping drive Australia's push to a competitive clean energy economy

CEFC HIGHLIGHTS

\$1.4b

**TOTAL CEFC
COMMITMENTS**

\$3.5b

**TOTAL
PROJECT VALUE**

55

**DIRECT
INVESTMENTS**

34

**PROJECTS
CO-FINANCED**

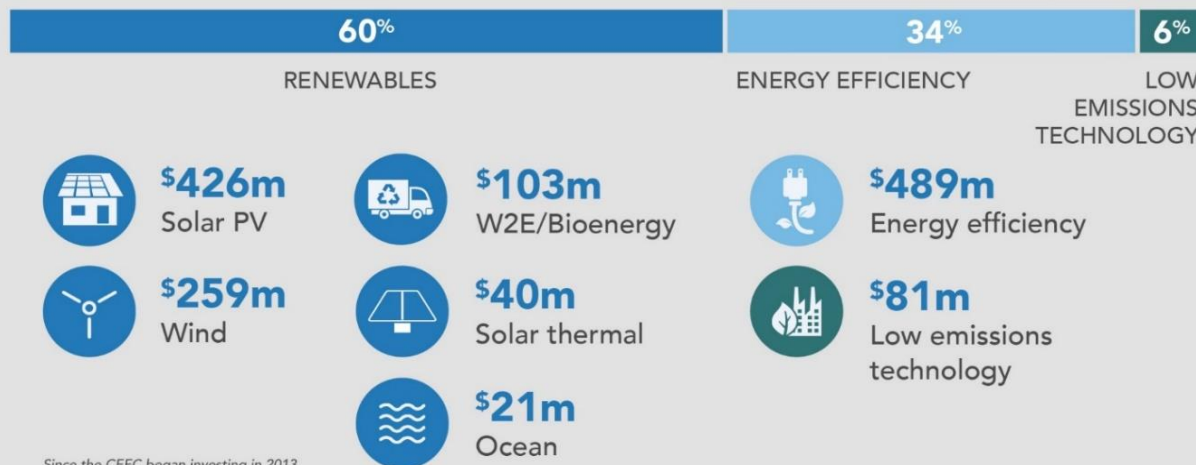
Since the CEFC began investing in 2013

Diversified across technologies

Clean Energy Finance Corporation

Helping drive Australia's push to a competitive clean energy economy

DIVERSE INVESTMENTS



Since the CEFC began investing in 2013

CEFC direct and indirect investment programs

We invest directly into individual projects and indirectly through opportunity-focused funds to increase flows of finance into clean energy.



**Clean energy
infrastructure**



Building upgrades



Building upgrades



Solar and storage



Solar



**Energy efficient equipment,
vehicles, solar and storage**

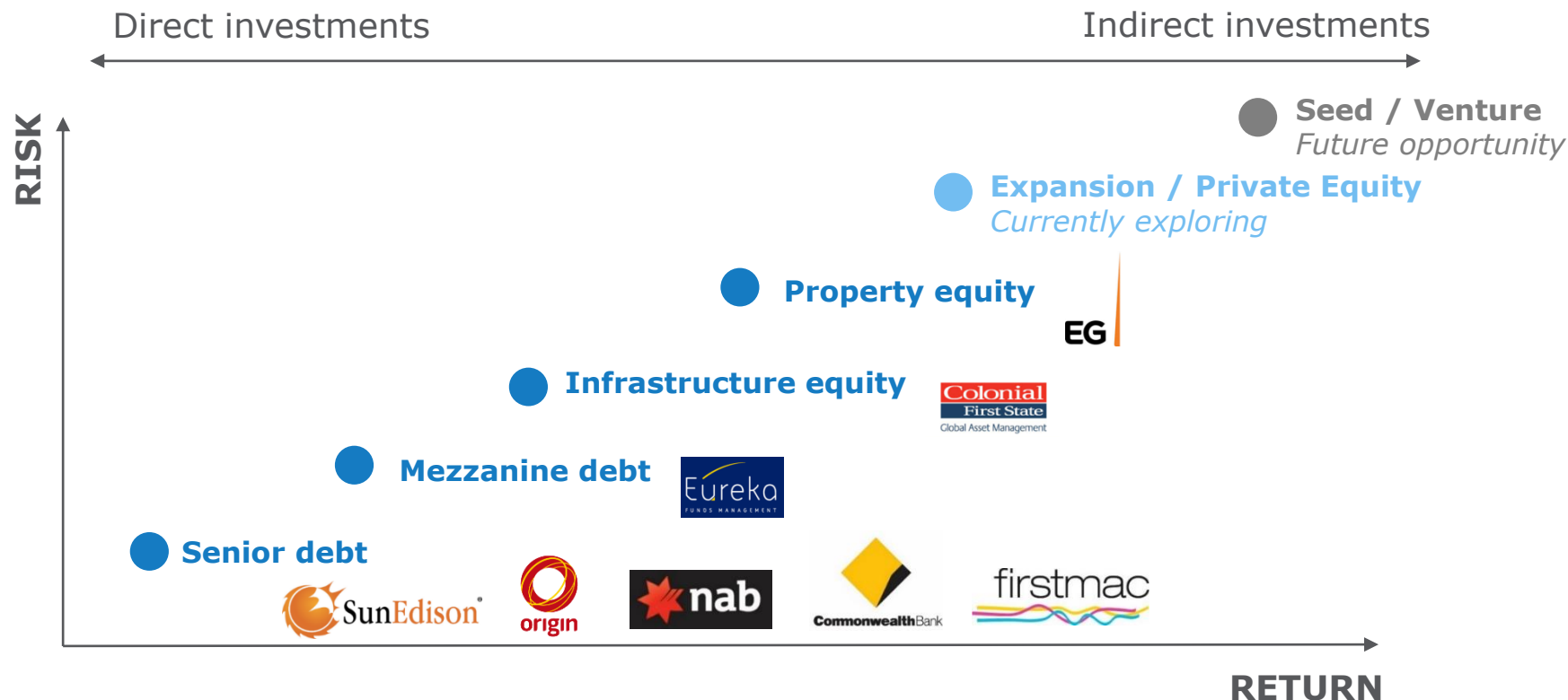


**Energy efficient equipment,
vehicles, solar and storage**

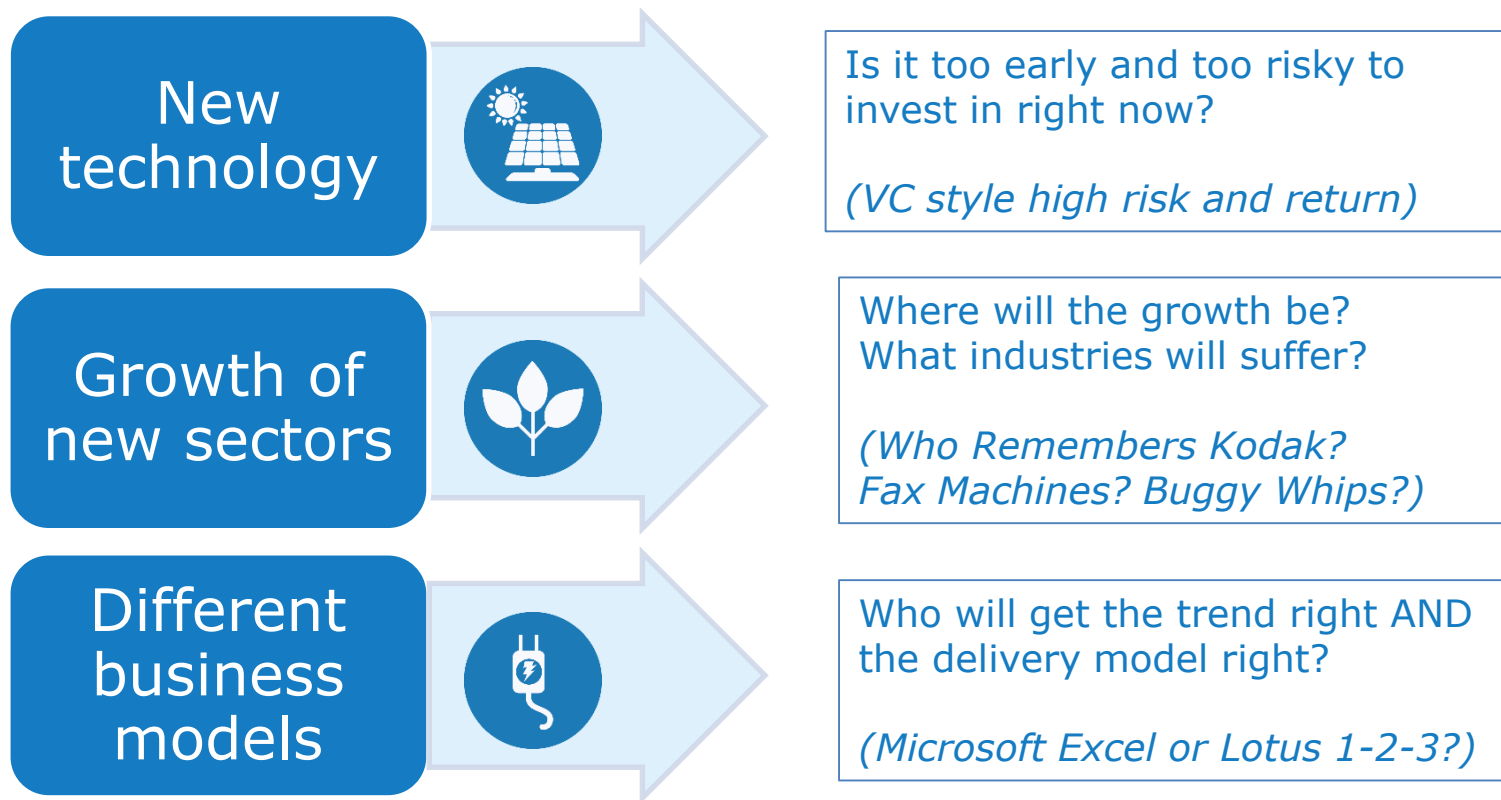


**Energy efficient equipment,
vehicles, solar and storage**

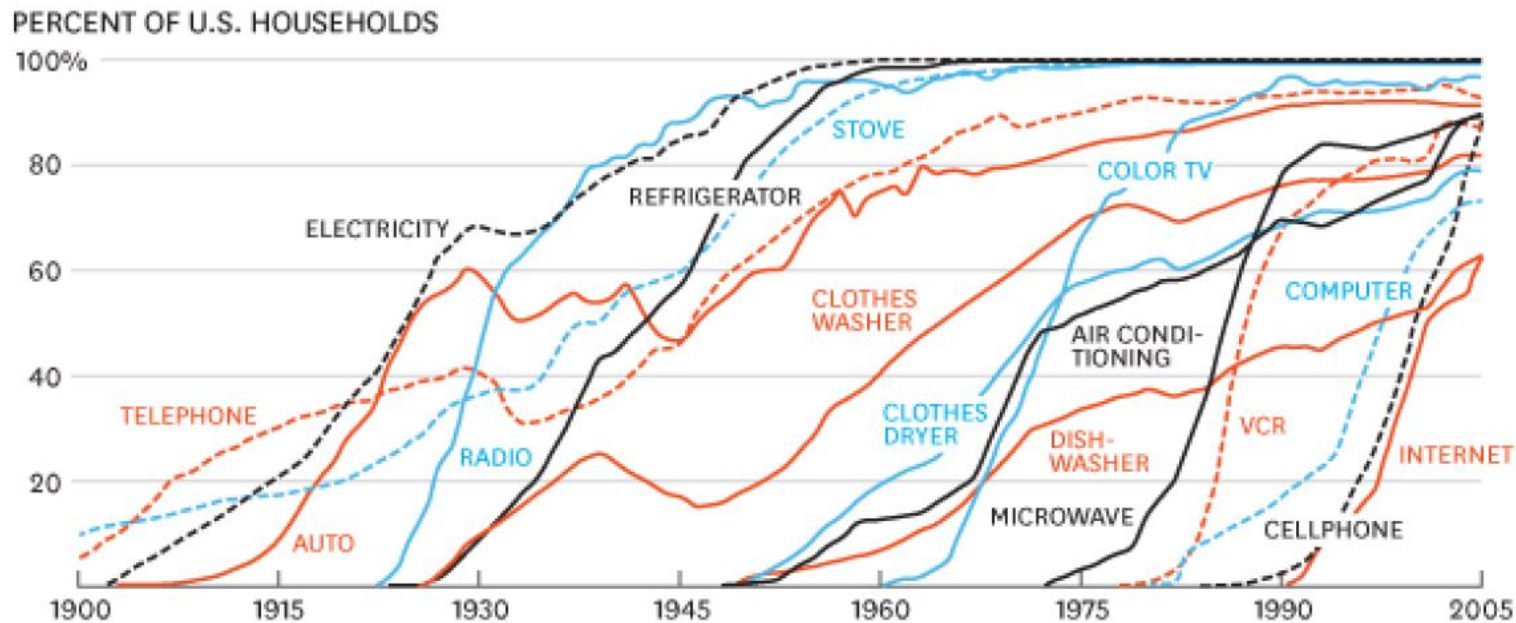
Risk appetite across the capital structure



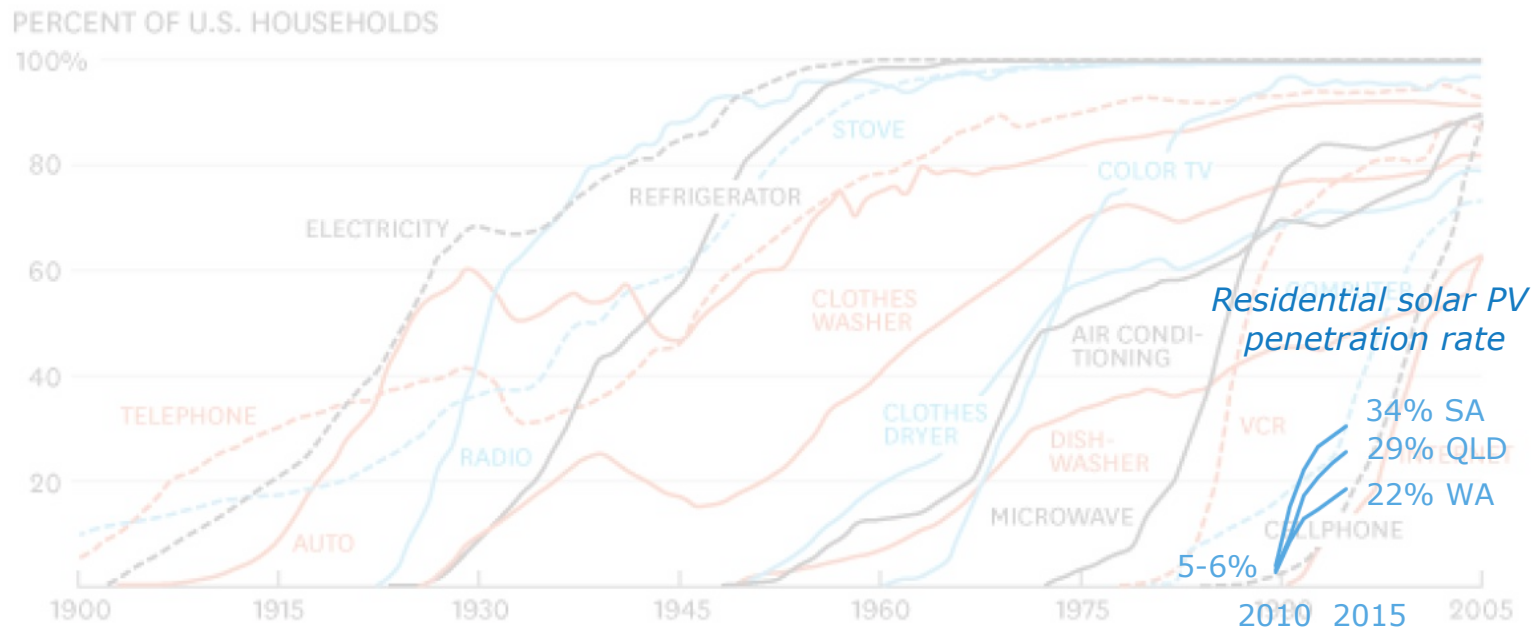
Disruption: What questions arise for investors?



New Technology: Historical market penetration rates

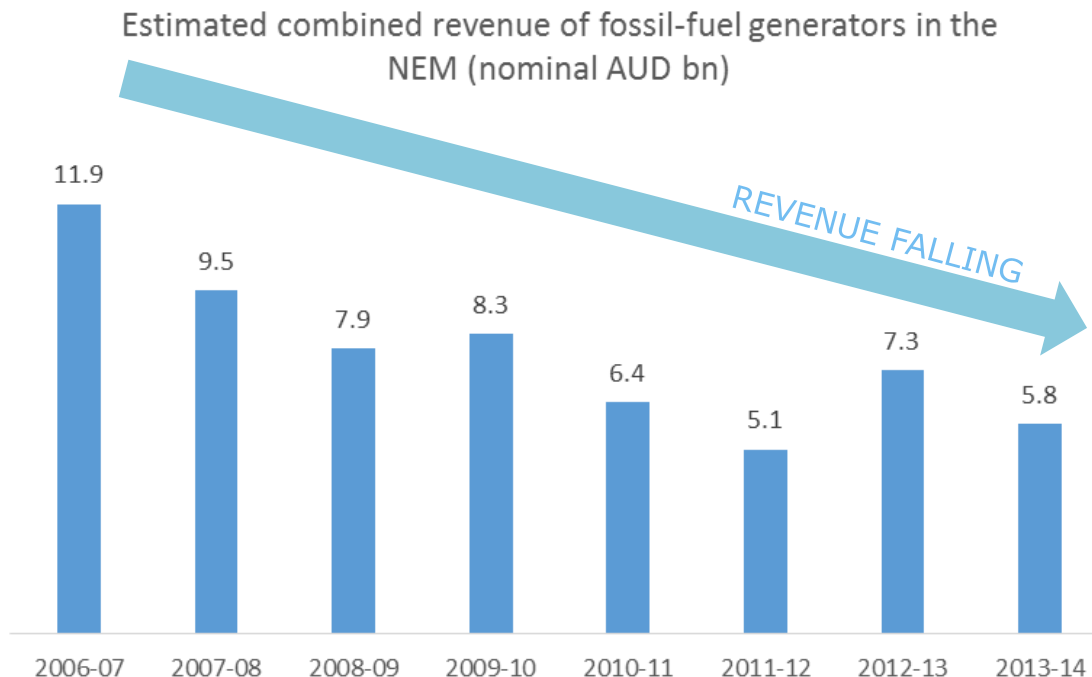


New Energy Technology: Small scale solar PV in Australia



Disruption: Australian energy markets

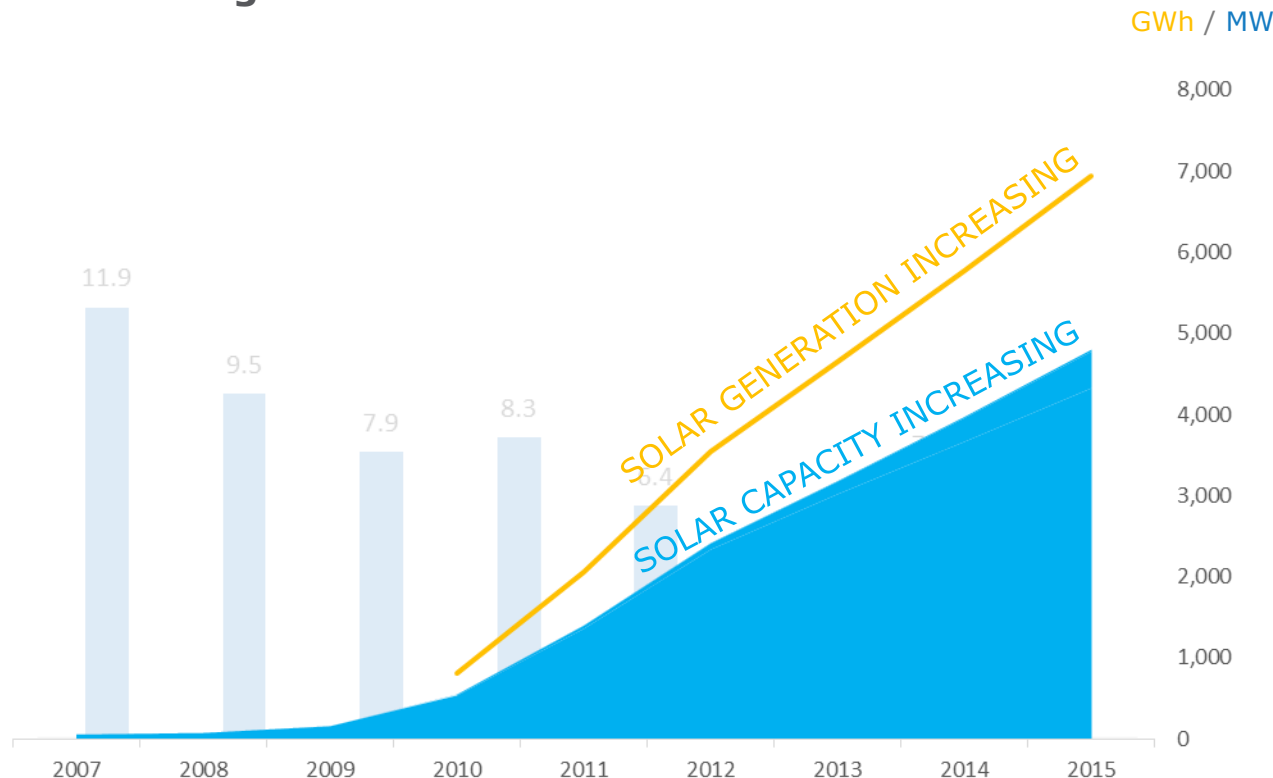
Since 2006, fossil fuel generator NEM revenue has fallen by 50%



Source: Australian Energy Regulator, Australian Energy Market Operator, Bloomberg New Energy Finance (BNEF)

Disruption: Australian Energy Markets

Since 2010, installed small-scale solar PV capacity and generation have increased at an average annual rate of 61%.



Sandfire Resources: DeGrussa Copper Mine

Financing for Australia's largest PV solar & storage Project

Project Finance

- **\$15m in debt supporting a \$40m project.**
- Invested alongside a \$21 million **grant from ARENA**
- **34,000 panel, 10.6MW solar PV array with 6MW of battery storage** – integrated with existing diesel-fired power station.
- Designed to **provide majority of DeGrussa's daytime electricity** requirements
- Will **offset around 5m litres of diesel fuel** per annum, abating over 12,000 tonnes of CO2-e annually

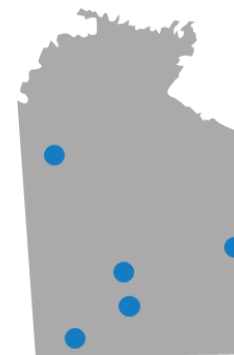


Epuron Solar: Uterne and TKLN

Financing for off-grid solar PV & storage portfolio

Corporate Loan / Project Finance

- **\$17.7m in debt** to expand a portfolio of solar PV sites to **6.9 MW** and **total capital value of ~\$27m**
- Projects feature a mix of **fixed** and **single axis tracking solar PV arrays** and **energy storage**
- **Replaces gas & diesel generation** in remote Australia.
- **Hybrid corporate loan and project finance structure** - too complex / small to appeal to the commercial banks.
- **Financing demonstrates the potential** for this type of finance to be used in similar, smaller and complex but scalable portfolios of renewable energy projects.



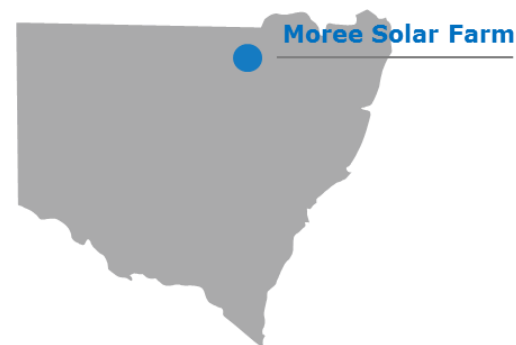
Remote solar projects
across the NT

Moree Solar Farm

Financing for grid connected merchant solar facility

Project Finance

- **\$46m in debt supporting a ~\$166m project**
- Investment supports innovative 56 MW **on-grid, large scale solar** with **single axis tracking** to increase performance
- Project features 100% **merchant power price risk.**
- **Employing 150 people currently** in construction including 50 locals and benefiting **~40 local businesses**
- Once completed will be **one of Australia's largest solar PV power facilities**



A new \$250 million large-scale solar financing program

To date, our single largest debt financing commitment to large-scale solar in Australia.

**Available for
merchant and
contracted projects**

**Eligible across the
NEM, SWIS and off-
grid**

**Senior debt that is
fixed-rate and long-
dated**



OUTCOMES

1. Help develop the Australian supply-chain for large-scale solar
2. Bring large-scale solar down the cost curve
3. Substantially increase installed large-scale solar capacity in Australia



You Tube

