

# CLEAN ENERGY FINANCE CORPORATION

## **SOLAR PROJECT FINANCING: Case Studies & Emerging Market Trends**

Rory Lonergan, Director – Corporate and Project Finance



### **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

# Solar Project Financing Agenda

1. Overview of the CEFC
2. CEFC case studies
3. Emerging Market Trends
4. How can we help?



# About the CEFC

## Working with businesses to improve energy productivity

- Independent, Australian Government institution that operates like a traditional financier
- Finance for energy efficiency, low-emissions and renewable energy projects
- Has access to \$10 billion over 5 years
- Tailors finance terms to accommodate specific company and project needs
- Can work on projects that are smaller, 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 solutions



## CEFC's role in the solar sector

Cornerstone investor for new solar technologies

- E.g. Sundrop Farms solar thermal greenhouse



New financing models, setting a precedent for the financial market

- E.g. Sun Edison, ET Solar solar residential PPA financing



Finance for smaller utility-scale projects

- E.g. \$13m for 5.1MW Uterne PV plant in NT



Financing merchant solar, when needed

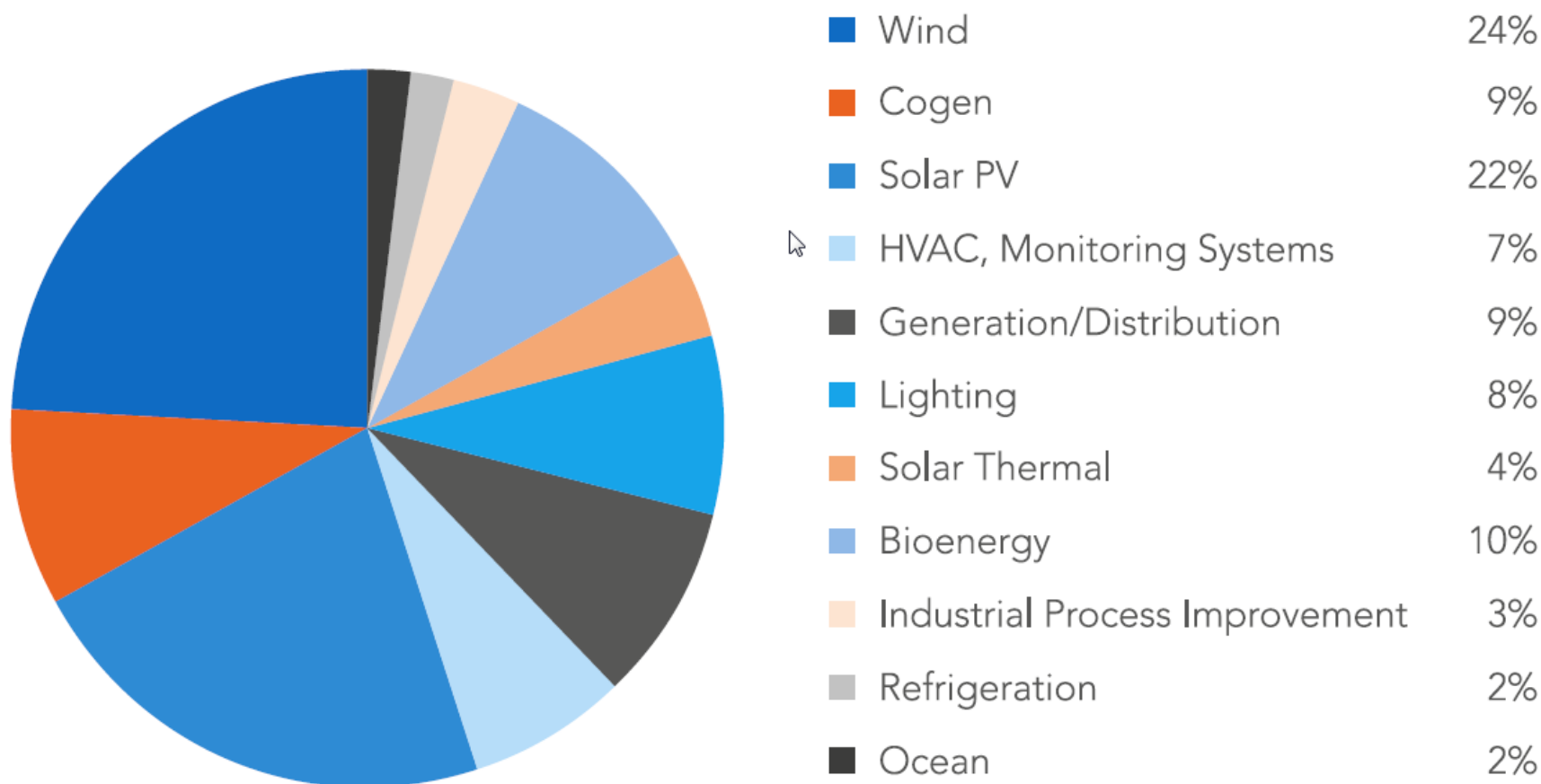
- E.g. 56MW Moree Solar PV Farm



**Helping to catalyse more investment into the solar sector**

# Technology mix across the portfolio

**CEFC portfolio by sector type (CEFC AUD\$ funded in %)**



## CEFC Key Deal Characteristics

- Quality sponsor with equity arrangements in place
- Project well developed in terms of permits etc.
- EPC arrangements well defined and well advanced
- Quality offtake in place/under discussion with sufficient tail to the proposed debt package
- Minimum loan size circa. \$20m
- At least one other lender subject to deal size





# Solar Project Financing Agenda

1. Overview of the CEFC
- 2. CEFC case studies**
3. Emerging Market Trends
4. How can we help?



## Case Study: Remote utility scale solar

### Solar PV for Northern Territory

#### Action:

- \$13m in finance for a portfolio of 5.1MW of solar PV in the Northern Territory, including the construction of the new 3.1MW Uterne 2 solar power plant in Alice Springs

#### Outcomes:

- CEFC offered specialized solution for a project too small to appeal to commercial project finance market
- Uterne 2 utilises solar tracking technology that increases daily energy production by up to 30%
- Will power over 800 homes



Image courtesy of SunPower



# Case Study: Remote utility scale solar

## Solar PV for Northern Territory

- Economics for remote solar can stack up without grant funding, particularly where solar is being used to replace diesel or gas
- There is a gap in the Australian commercial banking sector market to cater for small scale project finance for solar PV projects
- Small scale project financing still has similar issues to large scale project financing i.e. Complex documentation, High cost of execution (legal advice, due diligence, etc.), Time to execute



Image courtesy of Epuron

# Case Study: On-grid utility scale solar

## Moree Solar Farm

- One of the first utility scale Solar PV developments in Australia
- \$48m for development and construction of 56 MW Moree Solar Farm
- CEFC **underwrote the senior debt**
- Investment will enable further development of **on-grid, large scale solar** (in particular **single axis tracking**)
- CEFC taking **merchant power price risk (pre RET review)** – lack of PPA had previously stymied efforts to secure funding
- Project has the benefit of substantial ARENA grant
- Targeting construction completion early next year



# Solar Project Financing Agenda

1. Overview of the CEFC
2. CEFC case studies
- 3. Emerging Market Trends**
4. How can we help?



# Emerging Market Trends



## Technology innovation (e.g. battery)

- Tesla announcement
- AGL announcement

## Electricity prices & demand forecasts

- What is happening demand?

## ARENA CEFC Partnership

- More efficient financing



## Offtakers (retailers, miners)

- Impact of the revised RET?

## RET review & policy environment (local & global)

## Input costs for solar

- Falling dollar and interest rates



## What we are seeing

- Project finance as it relates to renewables is changing rapidly i.e. fewer PPAs, more hybrid arrangements i.e. PPAs with shorter terms with the balance being merchant etc.
- Financing structures that were effective 12 months ago may no longer be relevant requiring continued innovation to drive down financing costs and increase efficiency
- Continued reliance on significant ARENA funding
- Renewables generally are of increasing interest to mainstream infrastructure investors who have substantial capital to invest in the sector from both domestic and offshore sources resulting in potential cost of capital benefits for the sector
- Commercial roof top take up continues to develop but not rapidly
- Off-grid opportunities continue to be of interest but are complex to deliver with long lead times



## What we are working on

**Pipeline of \$500m in potential CEFC investments** (total project value over \$1bn)

Typical opportunities include:

- Solar PV-diesel hybrid storage for off-grid mine sites & remote areas
- Utility scale solar PV & solar thermal with storage
- Solar leasing/PPA
- Asset finance/co-financing structures



# Solar Project Financing Agenda

1. Overview of the CEFC
2. CEFC case studies
3. Emerging Market Trends
- 4. How can we help?**



## Ability to Catalyse the Market

- 100% focused on the renewables market for over two years
- Continued focus on new technology developments such as storage etc.
- In-depth knowledge of all the key market participants resulting in the ability to promote alliances
- Deep experience in structuring all aspects of the financing of renewables transactions
- Ability to provide tenor and pricing
- Ability to cornerstone from a debt perspective



# CEFC Financing Products

## Debt Products

- Senior debt with multiple delivery strategies:
  - Project finance style lending
  - Solar leasing/PPA financing structures
  - Asset finance/co-financing driven structures
  - R&D credit backed structures



## Equity Products

- Cornerstone equity in Colonial First State managed fund
- Direct equity subject to scale, ownership and future pipeline requirements

**Visit our website for more information at:  
cleanenergyfinancecorp.com.au**

Follow us on  
Twitter **@CEFCAus**

Follow us on  
**LinkedIn**

Follow us on  
**YouTube**

