

# CEFC

CLEAN ENERGY FINANCE CORPORATION



# Financing Bioenergy in Australia

# CEFC

CLEAN ENERGY FINANCE CORPORATION

BIOENERGY AUSTRALIA 2015  
NOVEMBER

Paul McCartney  
Executive Director

# Agenda

1. About the CEFC
2. Our portfolio
3. Growth potential for bioenergy
4. Financing bioenergy
5. Australian Bioenergy Fund



# About the Clean Energy Finance Corporation

- Independent, Australian Government institution that operates like a traditional financier
- Private sector expertise with public purpose - Finance for energy efficiency, low-emissions and renewable energy projects and programs across the economy
- Access to \$2 billion a year over 5 years
- Commercial return on investment (debt or equity)
- Projects that are smaller, more complex or new to the Australian market
- Operates as a co-financier to encourage participation in the sector from private sector financiers



We invest in projects, programs and funds to extend our reach



ENERGY EFFICIENCY EQUIPMENT, CLEAN ENERGY INFRASTRUCTURE, BUILDINGS,  
ENERGY FROM WASTE AND BIOENERGY, VEHICLES, SOLAR AND STORAGE

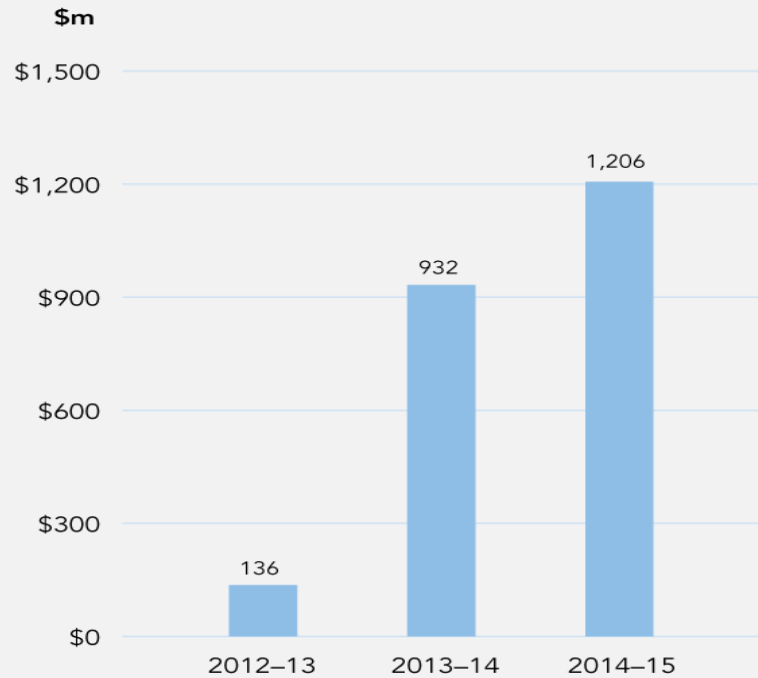
**Indirect CEFC financing programs**



**LARGER LOANS / MAJOR  
PROJECTS**

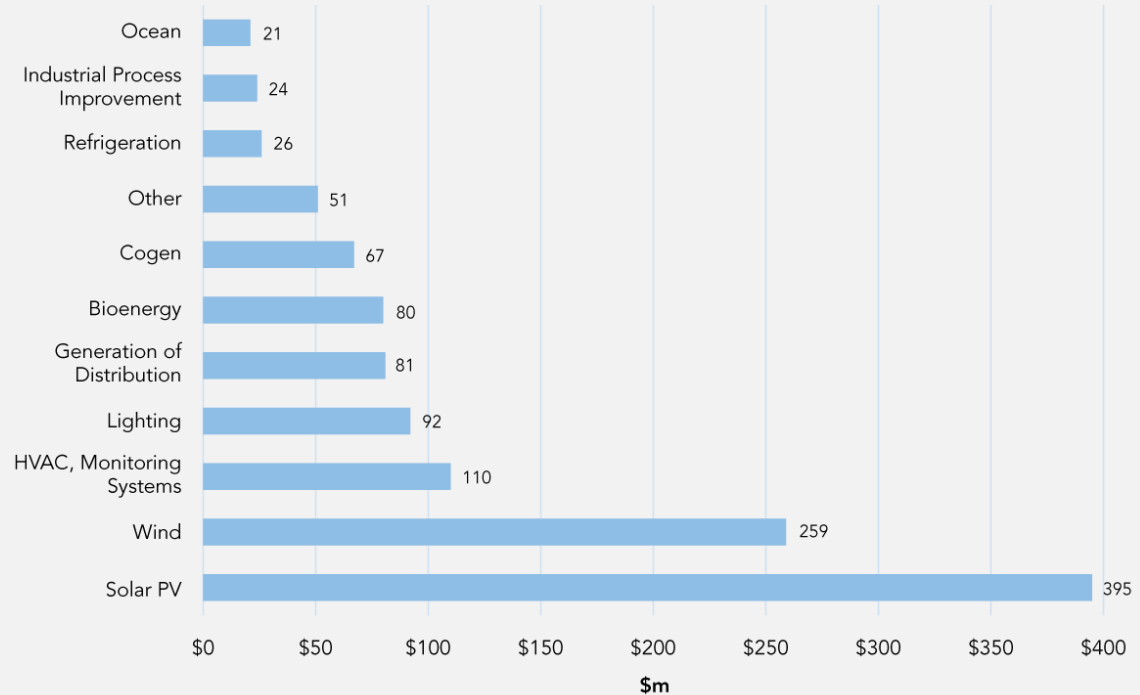
**Direct CEFC  
investments**

# A growing portfolio of clean energy

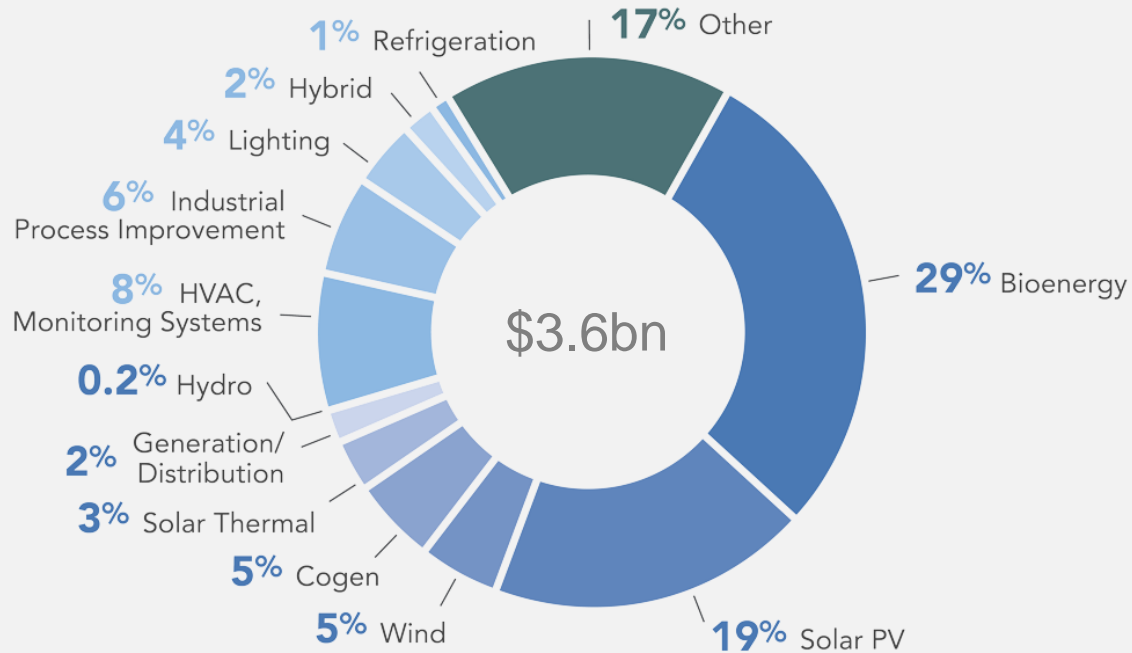


# The CEFC has a diverse portfolio of investments

At June 30 2015, bioenergy made up \$80 million or nearly 7% of our total portfolio of commitments



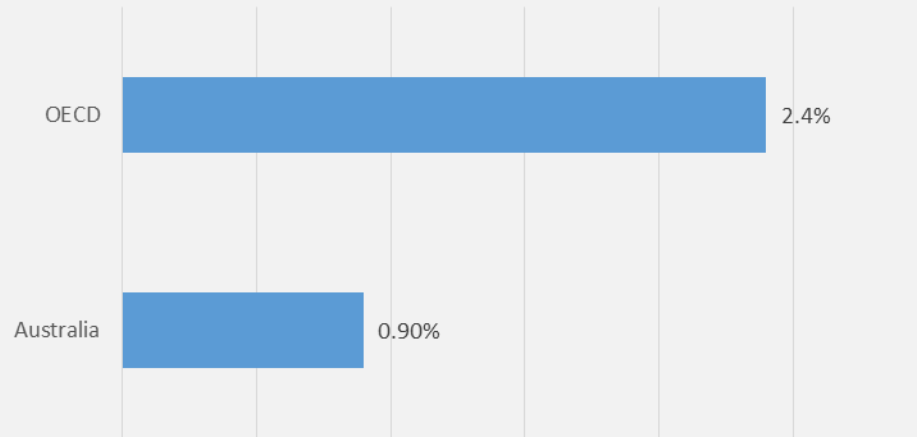
# Bioenergy is a major area of opportunity for CEFC





# CEFC bioenergy and energy from waste market review

Bioenergy share of electricity generation (% of total electricity generation)



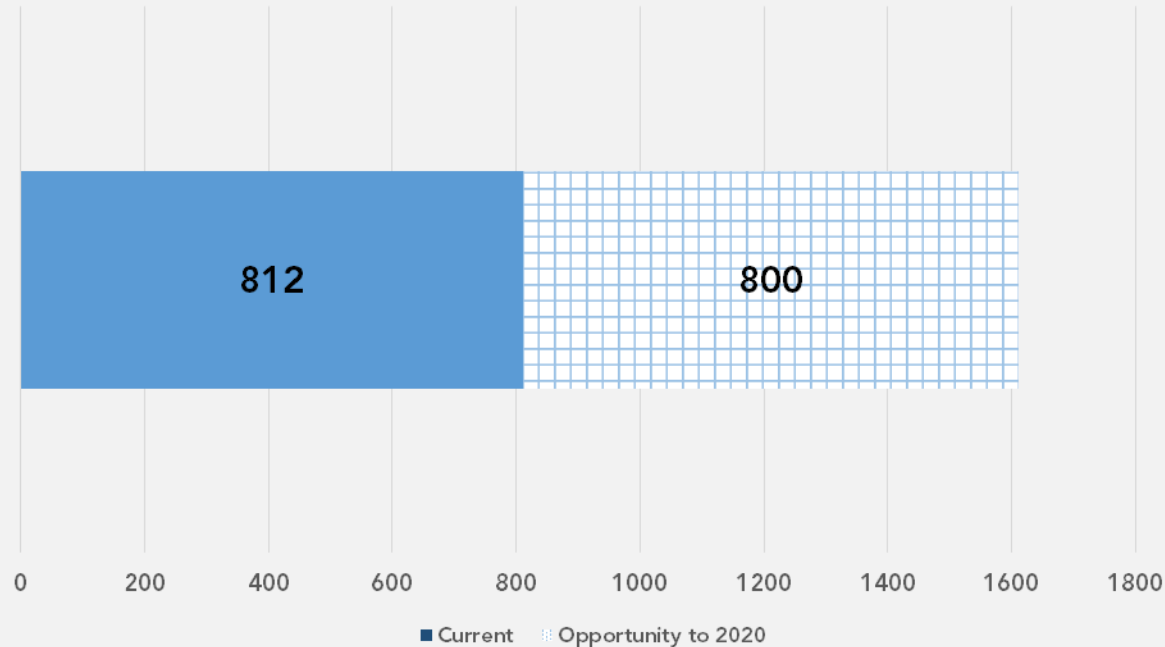
## The Australian bioenergy and energy from waste market

A market report by the  
Clean Energy Finance Corporation

November 2015

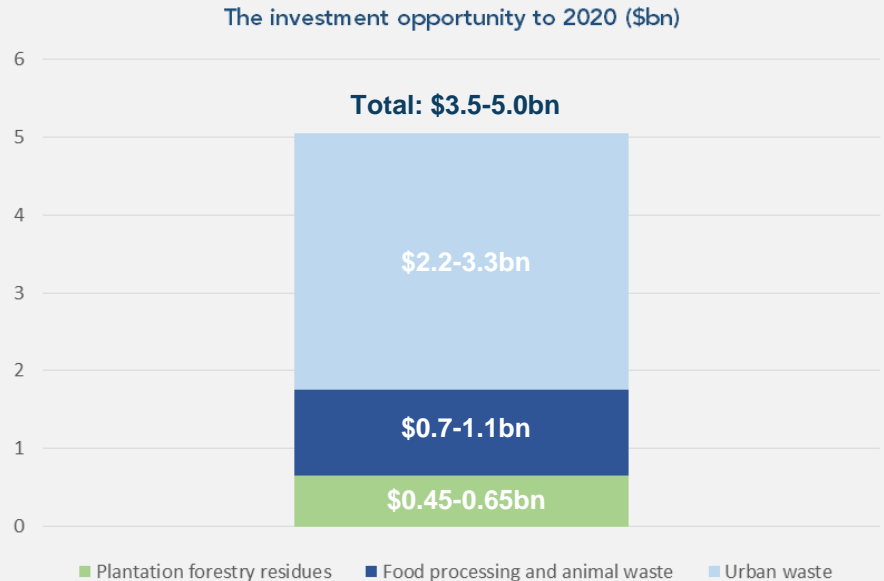
# By 2020, Australia could double its installed bioenergy electricity capacity

Australia's installed bioenergy capacity and potential to 2020 (MW)



# Doubling Australia's bioenergy electricity capacity is a \$3.5-5.0bn investment opportunity

- An additional 800MW of new bioenergy generation capacity will require \$3.5-5.0bn of investment
- Opportunities in urban waste, food processing and animal waste, and plantation forestry residues.
- This could potentially avoid more than 9 million tonnes of CO<sub>2</sub>-e emissions each year



# The challenges of financing bioenergy projects

- Capital availability: equity and debt
- A lot of the bioenergy market (particularly urban waste and biofuel) in earlier stage of maturity
- Bioenergy technology more complex conversion process of source to energy
- Limited projects developed in Australian market compared to overseas (e.g. biofuel market in US and Brazil, energy from waste in Europe/UK)
- Complexity of the project & the number of parties involved
- Different sizes of projects



# What is the CEFC doing

<b>DEBT</b>	<b>EQUITY</b>	<b>AGGREGATION PARTNERS</b>
Direct debt financing through the CEFC (for amounts greater than \$10m)	Indirectly through a cornerstone commitment to the Australian Bioenergy Fund	For smaller projects, through banks and other financiers the CEFC is working with:  NAB Energy Efficiency Bonus CommBank Energy Efficient Loans



## Cornerstone commitment into bioenergy-focused equity fund

- Cornerstone commitment of \$100m from the CEFC
- Establish a dedicated Australian bioenergy and energy from waste fund
- Targets deployment of new bioenergy and energy from waste capacity
- Equity investments in project vehicles and companies

CEFC COMMITMENT  
**\$100 million**

TOTAL FUND SIZE  
**\$200 million+**



# CEFC

CLEAN ENERGY FINANCE CORPORATION

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