CLEAN ENERGY FINANCE CORPORATION

Australian Institute of Energy AGM



26 November 2013

CEFC



- > A statutory Corporation which invests in clean energy to mobilise capital investment in renewable energy, low-emission technology and energy efficiency in Australia
- Access to \$10 bill in funds legislated to the CEFC Special Account as \$2 billion per annum from 2013 to 2017 inclusive
- Commenced investing from 1 July 2013
- > Operates commercially with a public policy purpose, with investment decisions made by experienced private sector board, independently of Government
- Invests responsibly and manages risk to achieve its target rate of return and achieve financially self-sufficiency before 2016

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 the clean energy sector



2018 Target Portfolio

50% Renewable Energy diversified across:

Wind

Solar PV, Thermal,

Biomass and bioenergy

Geothermal, Tidal and Other

- On grid, off grid and behind the meter
- Diversified across Australia and by borrower
- Direct and indirect financial participation
- Creative and innovative structures to reduce the cost of capital
- Enabling transactions in energy storage and transmission
- "Market first" joint transactions with ARENA

50% Low Emissions & Energy Efficiency diversified across:

Manufacturing & **Transport**

Commercial buildings & Government

Retail

Mining & Agriculture

- Diversified across Australia and by borrower
- Balanced between low emissions and energy efficiency transactions
- Direct and indirect financial participation
- Creative and innovative structures to reduce the cost of capital



The CEFC role is to enable Australian Renewable Energy and Low Emissions projects

The CEFC can:

- Catalyse the opening of new markets
- Provide global best practice in finance terms in Australia
- Facilitate the required scale to lower costs

Emerging market opportunities and innovative models:

- Project Financing: Wind, solar, biogas and waste-to-energy, precinct level distributed generation
- Corporate Loans: energy efficiency and low emissions projects (food processing and manufacturing facilities replacing equipment with more efficient low emissions technologies, building upgrades to increase efficiency; transportation upgrades for energy efficient operations)
- Fund Strategies/ Co-Financing Models: Residential Solar PV financing models, Environmental upgrade of properties, council street lighting, BOOM financing for distributed generation



Why is the CEFC needed?

Catalysing private sector investments by:

- Providing liquidity
- Catalysing transactions
- Assisting Australian industry and jobs
- Facilitating commercial bank participation in the sector
- Matching financing to the asset life
- Changing the risk profile
- Enabling projects without a PPA
- Lower required returns
- Aggregation funding







CEFC is addressing key financing barriers

CEFC is seeking to address the key barriers faced by financiers in renewable and low emissions projects:

- **Power Purchase Agreement (PPA)** CEFC accepting merchant risk
- Term CEFC can provide longer term financing which better matches the asset life of renewables transactions
- **Liquidity** CEFC brings more financing to the industry
- **International interest** CEFC is encouraging international interest in participating in transactions
- **New technologies** CEFC is undertaking innovative deals that will open up new technologies
- Catalysing small projects through aggregation funding



What has CEFC achieved so far?

- CEFC investment has catalysed over \$2.2 billion of investment into clean energy, energy efficiency and low emissions projects, including \$536 million from the CEFC
- CEFC investments are responsible for 3.88 million tonnes of carbon abatement
- Emissions reduction is generated at a negative cost (net benefit) of \$2.40 per tonne of CO2e abated
- CEFC committed investments to date are earning an average return of approximately 7% which is 4% above the 5 year government bond rate
- The CEFC has a **strong pipeline** of emissions reductions proposals that support current government policy and a **dedicated and experienced team** ready to execute these transactions



Future electricity price uncertainty

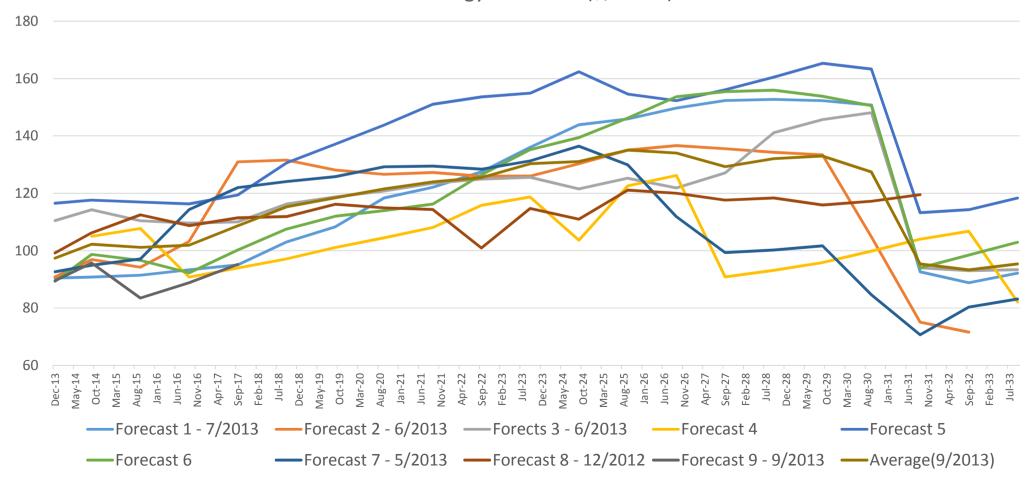
- Regulatory uncertainty renewable energy targets, licensing, NSP regulatory regime
- > Falling electricity demand record high electricity prices and falling demand
- Decentralisation rooftop solar, commercial & industrial scale renewables
- Demand management whilst this has barely begun in Australia, demand management could significantly change electricity prices in the future
- Energy efficiency measures
- Newer players in the market make some PPAs less bankable



Predicting future energy prices

> We are seeing highly variable forecasts for future energy prices

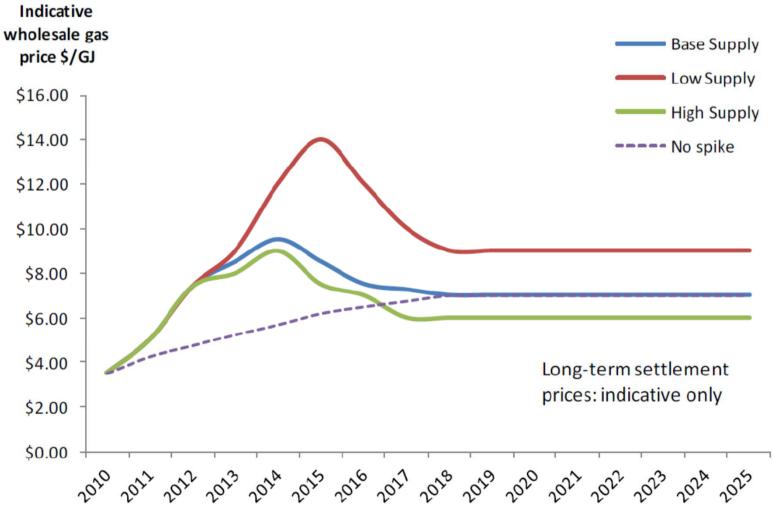
All-in Energy Forecasts (\$/MWh)





Potential gas price bubble or new normal?

LNG prices are forecast to spike and then fall



Source: ACIL ALLEN

Note: Prices are illustrative only - not based on modelling



What has the CEFC financed?

Wind

- \$37.5m of senior debt finance for the construction and operation of the Taralga Wind Farm
- \$50m towards the refinancing of Macarthur Wind Farm
- \$70 million in debt financing for Pacific Hydro's Portland Wind Farm

Solar

- \$40m of senior debt to co-finance a major solar greenhouse development near Port Augusta
- \$60.0m of senior debt for Moree Solar Farm

Energy Efficiency

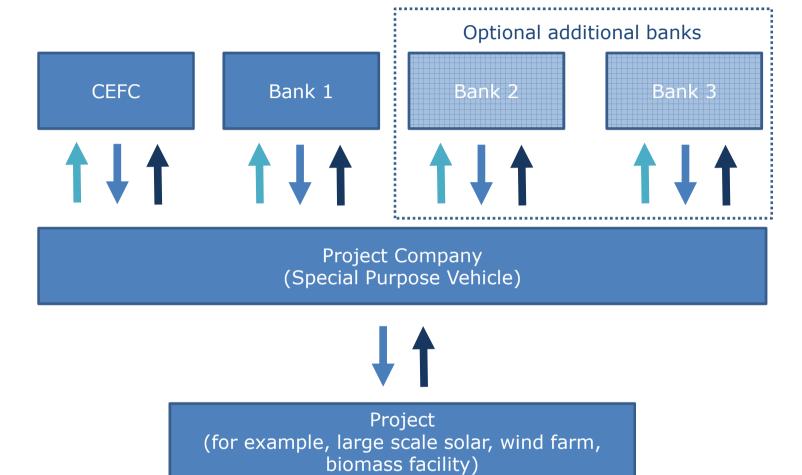
- \$50m funding for CBA Energy Efficiency Loans for businesses
- \$50m funding for CBA Energy Efficiency Loans for not-for-profits
- \$550,000 loan to Baw Baw Shire Councils to upgrade street lights
- > \$7.0m of on-bill financing for Origin Energy customers

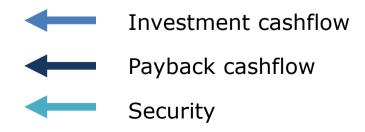
Low Emissions

\$75 million corporate loan to EDL for waste to energy projects

Project Finance Funding Structure









CEFC finances world leading solar-thermal technology for greenhouses

Financing for Sundrop farms to build sustainable greenhouses

- The CEFC and Sundrop Farms have an in-principle agreement for CEFC to cofinance a world leading greenhouse development near Port Augusta
- ➤ The 20 hectare sustainable greenhouse is the first of its kind using solar thermal technology to provide irrigation from desalinated seawater, and heating and cooling for the greenhouses
- > The project will be a worldwide **demonstration of sustainable horticulture**practices that address growing food security, water and clean energy challenges
- The greenhouse facility will use renewable power and a sustainable water source to produce over 15,000 tonnes of tomatoes a year for metropolitan markets across Australia. The project should be completed by mid-2015
- CEFC's participation has encouraged major international equity and financiers (new entrants to the Australian market) to invest in this globally significant project



Aggregation Funding Structure (Direct)





CEFC

Investment cashflow
Payback cashflow
Security

Special Purpose Vehicle (potentially a finance company with a sales network or an Energy Company with finance capability)









Business A



Project (e.g. Solar Panels) Business B



Project (e.g. Building upgrade) **Business C**



Project (e.g. Refrigeration) **Business D**



Project (e.g. bioenergy generation)



Energy Efficient Loans for Businesses

A \$100 million co-financing arrangement with CBA to fund mid-size businesses energy efficiency projects

- The CEFC and Commonwealth Bank (CBA) are co-financing *Energy Efficient*Loans for energy efficiency, low emissions technology and small-scale
 renewable projects, tailored for businesses wanting to save on energy costs
- Energy Efficient Loans will typically range between \$500,000 and \$5 million, or upwards
- Loans available from CBA nationwide at market competitive terms for project opportunities which meet CEFC eligibility criteria
- > The CEFC commitment is \$50 million-matched by funding from CBA
- The CEFC is close to concluding comparable deals with other leading financial institutions in order to scale up energy efficiency offerings across many market segments



Energy Efficient Loans - Case Studies

Labelmakers

- Labelmakers provides label printing services for some of the nation's best known consumer brands and printing labels for its own wine division.
- Labelmakers installed three new energy efficient presses costing \$5.3 million, which operate at twice the speed, using half the energy of the company's old presses

Coolstores

- Family owned and operated business Radevski Coolstores is a major Goulburn Valley supplier of apples and pears to Coles supermarkets
- A new ammonia-based refrigeration system services its 16 cool rooms and reduces costs by over \$140,000 a year, and carbon emissions by about one quarter





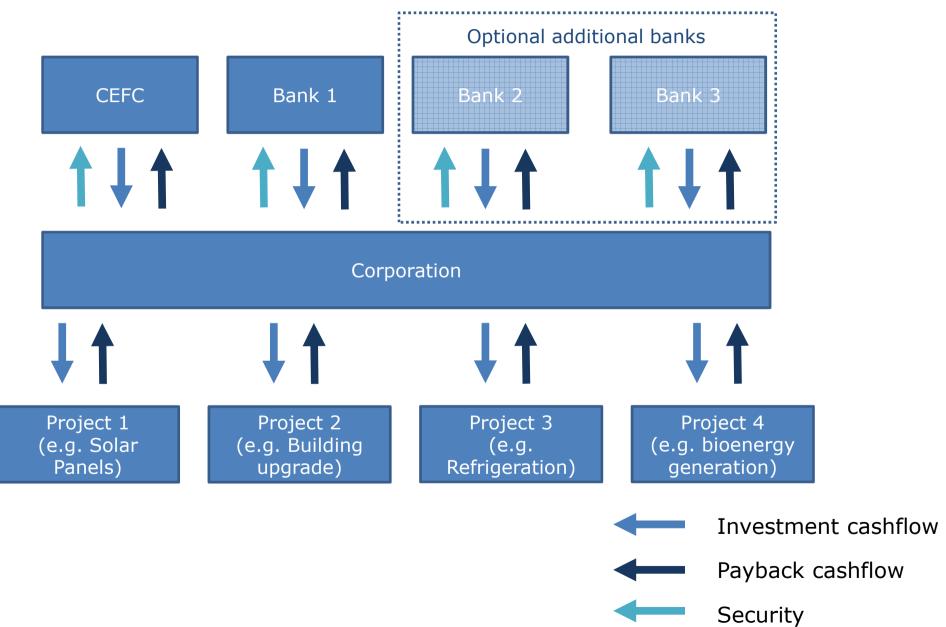
Abattoir biogas-to-boiler project

- Demonstrates the ability of CEFC to fund innovative technology and work with other government programs
- Largest abattoir in Australia processing1,675 head of cattle a day
- \$8.8M project to build new covered anaerobic lagoon to capture the biogas for use in a boiler
- 50% Clean Technology grant, 50% CEFC finance
- > \$1.1 million annual saving in energy costs
- 45,000tCO2e abatement per annum



Corporate Funding Structure



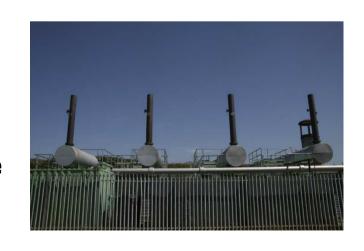




CEFC finances low emissions generation

\$75 million senior-secured corporate loan from CEFC

- Providing \$75 million to Energy Developments Limited (EDL) (Australia's leading remote energy producer, provider of over 280MW over 32 sites) for investment in new projects generating low emissions energy:
 - capture of landfill gas, waste coal mine gas or mine vent air methane to generate electricity
 - remote hybrid renewables projects
- Capturing coal mine and landfill fugitive emissions to generate electricity that replaces use of coal-fired power is a double win for the environment
- CEFC fully commercial loan meeting a financing gap enables EDL to meet its continued growth trajectory
 - Demonstration of CEFC's unique role and of the way it is positively impacting across diverse economic sectors







On-bill financing – a complete turnkey solution

Customers can access energy saving equipment without upfront financing without upfront capital expenditure

Structured finance and repayments to lower the cost for business of energy

efficiency technologies

Repayments through their energy bills

- Guaranteed energy savings and technologies
- Available to all businesses and industries
- The Central Coast Youth Club (CCYC) on the northern outskirts of Gosford, NSW reduced its court energy use by over 60% through a \$50,000 lighting upgrade through Origin on-bill finance
- Boral Ltd cut the energy costs of a major shared service facility by more than one quarter, through a lighting upgrade using on-bill finance through Origin





CEFC finances solar installations

Solar PV for AACo will reduce emissions by 30 percent

- ➤ CEFC and NAB are co-financing Australia's largest beef company, Australian Agricultural Company Limited (AACo), in a \$990,000 project for installation of solar photo voltaic (PV) units across 15 grid-connected sites in Queensland
- CEFC involvement achieves a number of strategic objectives:

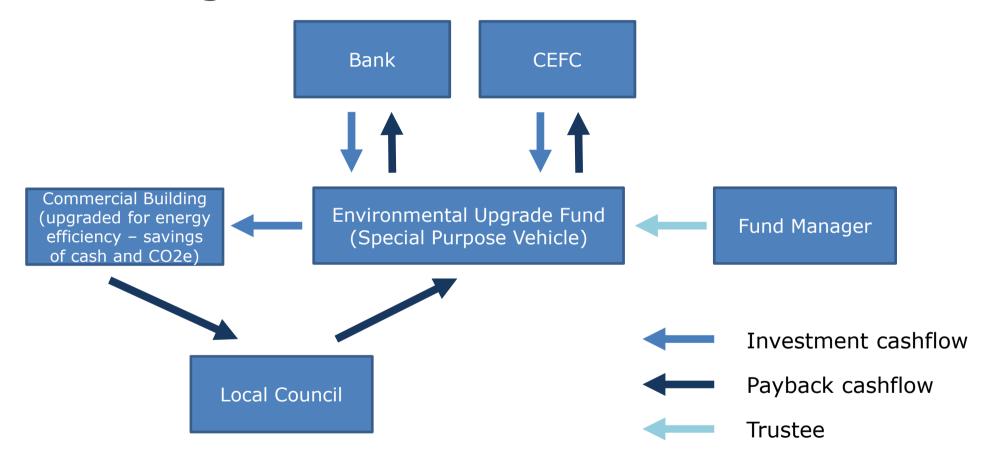
Increase distributed PV take up across residential, SME, corporate and government

- Bring globally successful business models to Australia
- Catalyse and increase capital to fund market and reduce finance costs of both shorter-term bank funding and long-term investors





EUA Funding Structure









EUAs – CEFC, NAB and Eureka Funds Management

- ➤ CEFC & NAB are jointly funding EUAs for buildings via The Australian Environmental Upgrade Fund managed by Eureka Funds Management
 - TAEUF Fund supports the energy efficiency retrofit of non-residential buildings
- Legislation enabling EUAs is in place for the \$2 bill City of Melbourne 1200 Buildings program and for all of NSW
 - Cities of Sydney, Parramatta, North Sydney, Newcastle and Lake Macquarie now offer EUAs, with more on the way
- Potential for this type of financing to be implemented in major centres Australia-wide. South Australia is next to introduce
- ➤ A \$1.3 million energy efficiency upgrade (financed by an EUA) to the multi-use 1960s high-rise CQ building at 123 Queen Street, Melbourne, is delivering energy cost savings greater than 50 per cent and creating savings of \$180,000 a year



Summary

- The CEFC is demonstrating its ability to help get viable deals done
- The CEFC is an efficient structure to assist with financing of renewable energy, low emissions and energy efficient projects
- CEFC can provide financing with terms that improve the capital structure for projects
- CEFC involvement is leveraging private sector funding into clean energy projects





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