

CLEAN ENERGY FINANCE CORPORATION

CEFC Finance for Energy Efficiency **Presentation by Jillian Broadbent AO, Chair, CEFC** **to the** **Energy Efficiency Council National Conference 2013**



4 December 2013

CEFC's mission

- The CEFC's mission is to 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.

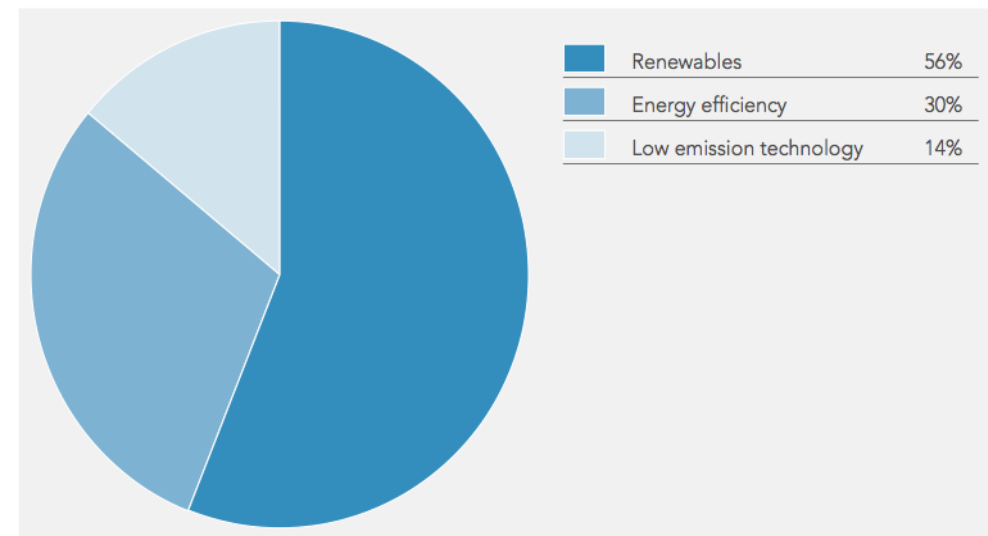


CEFC and energy efficiency

Under the CEFC Act, up to 50 per cent of CEFC's funds are for investment in energy efficiency and low emissions technologies

As at 20 August, the portfolio comprised:

- 30% energy efficiency
- 14% low emissions technology
- 56% renewables



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

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

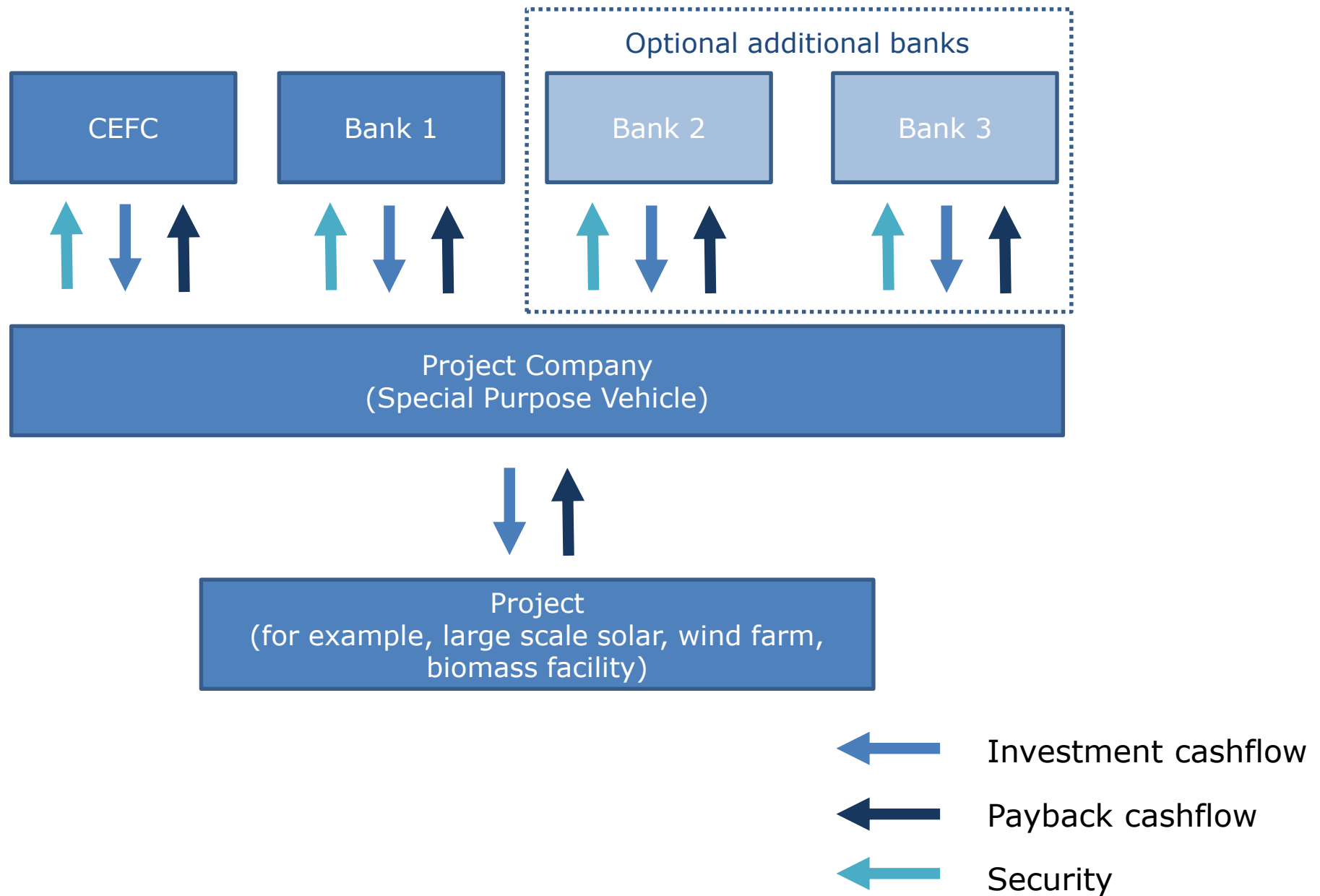
Low emissions

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

CEFC is addressing market barriers

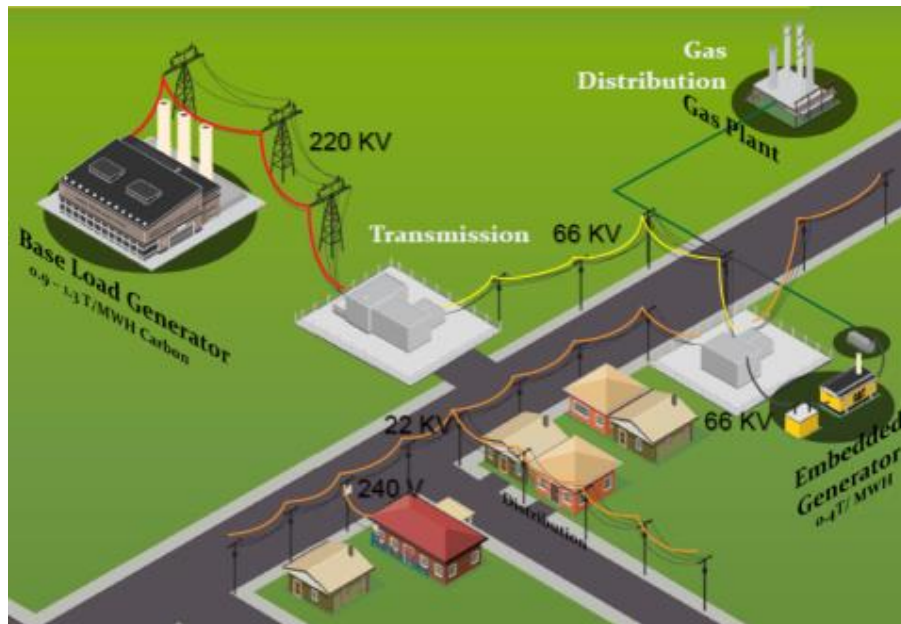
- Capital constraints and investment priorities
- Complexity and internal decision making, split incentives
- Transaction costs may be too high for some businesses
- Construction requires long project lead-times which in turn requires patient capital
- Scale and depth of the clean technology industry
- Cumbersome approval processes in the public sector

Project finance funding structure

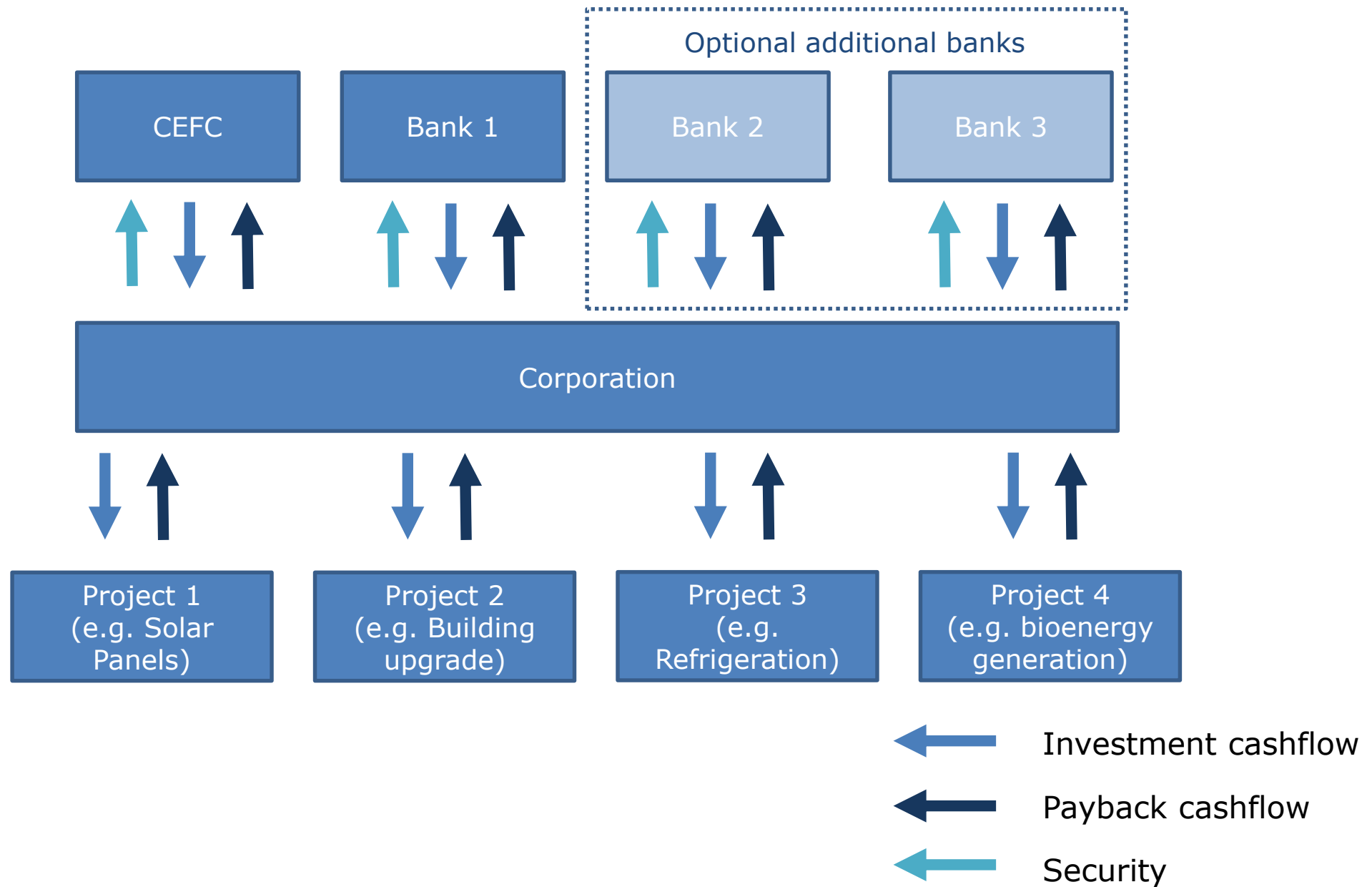


Low emissions distributed generation pilot - NovaPower

- \$11m, 10MW gas peaking plant connected to the electricity distribution network (Latrobe Valley)
- NovaPower's high-efficiency Caterpillar® gas-fired engines provide a cleaner electricity than traditional coal-fired power directly to the network during peak demand periods
- Defers need of the distributor to upgrade a constrained area of the network
- The project was co-financed by ANZ and Low Carbon Australia, now CEFC

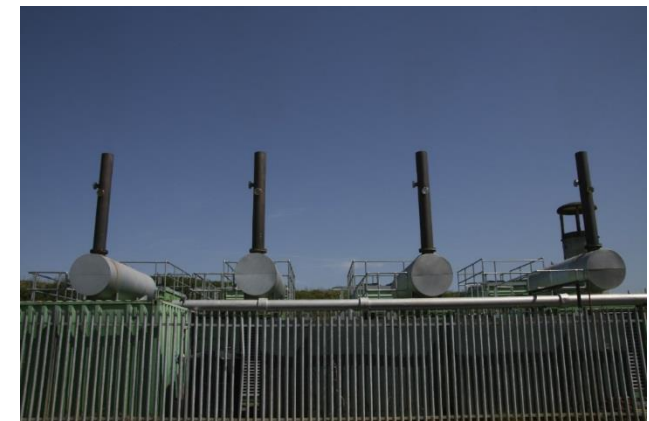


Corporate funding structure



Corporate funding structure - low emissions generation

- CEFC is providing \$75 million to Energy Developments Limited (EDL) - Australia's leading remote energy producer :
 - Loans is for investment in new projects generating low emissions energy
 - Captures landfill gas, waste coal mine gas or mine vent air methane to generate electricity, replacing use of coal-fired power
 - Remote hybrid renewables projects
- CEFC fully commercial loan meets 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**



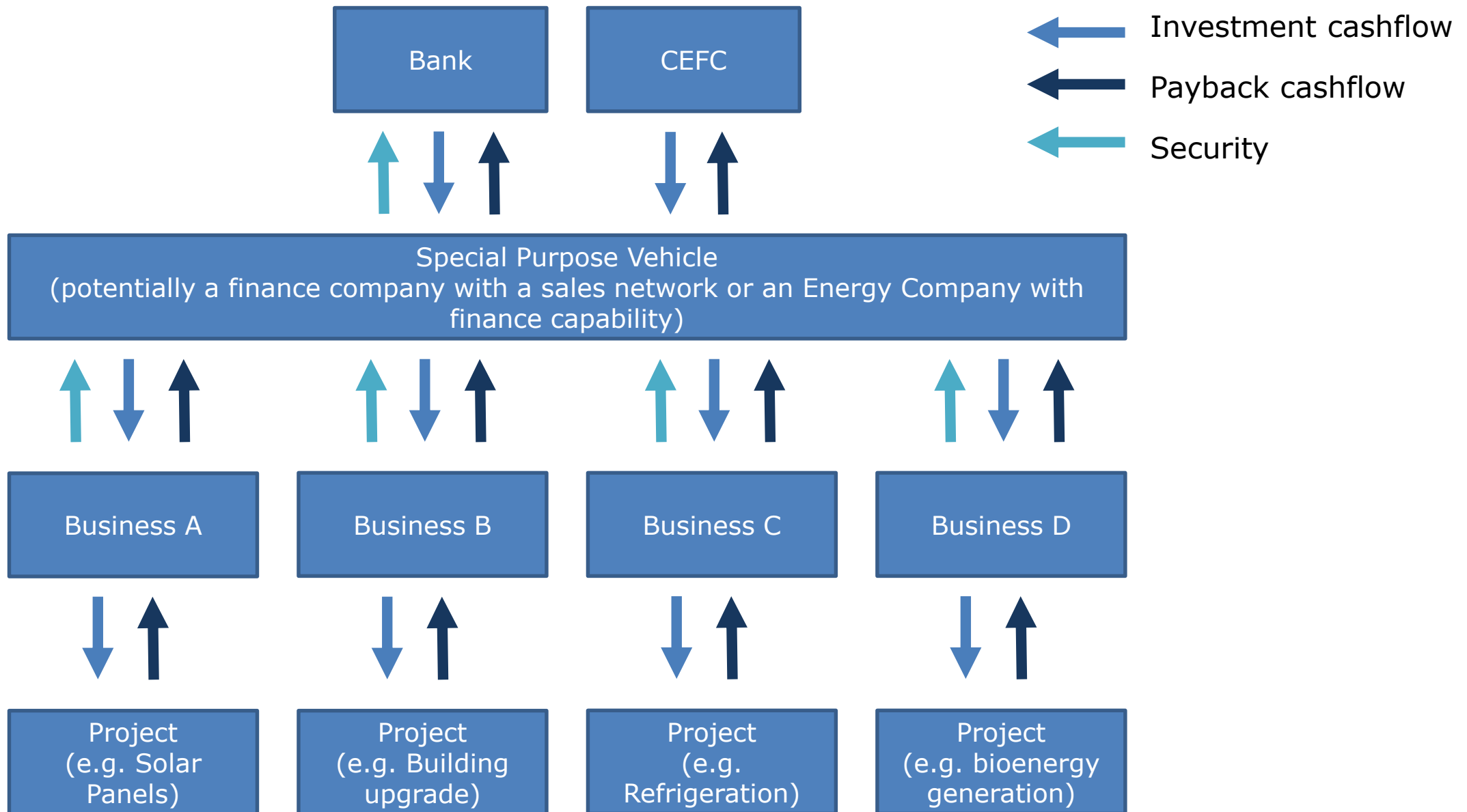
Corporate finance for solar installations

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**



Aggregation funding structure (direct)



Energy Efficient Loans for businesses

CEFC and Commonwealth Bank (CBA) have a \$100 million co-financing arrangement to fund mid-size businesses' energy efficiency and small-scale renewable projects

- **Energy Efficient Loans** will typically range between \$500,000 and \$5 million, or upwards
- Loans available from CBA nationwide at market competitive terms
- 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

Energy efficiency gains for labeller

- Label printing services business for well-known consumer brands
- Installed three new energy efficient presses costing \$5.3 million, operate at twice the speed and use half the energy

Coolstores reduce energy costs

- Major Goulburn Valley supplier of apples and pears to Coles
- New ammonia-based refrigeration system reduces costs and carbon emissions by about 25%



Trigeneration savings for food manufacturer

- A large regional abattoir and rendering operation
- Installed a natural-gas trigeneration plant to generate electricity that will save on energy costs and reduce carbon emissions by over 30 per cent

Energy Efficient Loans for governments and not-for-profits

CEFC and CBA have a \$100 million co-financing arrangement to fund energy efficiency, low emissions technology and small-scale renewable projects for local government, education sector and not-for-profits

Technologies and projects targeted under this program will be:

- Street lighting upgrades
- Building upgrades including lighting, building monitoring systems, heating, ventilation and air conditioning systems
- Building and aquatic centre cogeneration and trigeneration
- Waste management systems upgrades including waste-to-energy systems

Energy Efficient Loans for governments and not-for-profits – case studies

- Richmond Valley Shire (NSW) is replacing 1,000 street lights with more energy efficient lamps, reducing carbon emissions by about 435 tonnes p.a.
- Mount Alexander Shire Council in the Victorian gold-mining town of Castlemaine is upgrading the heritage-listed School of Mines and saving about 40 per cent on the building's energy bills and reducing its emissions by about 65 tonnes a year
- The Gold Coast's Burleigh Bears Rugby League Football Club reduced its lighting bills by 65% using Flexigroup Energy Smart Finance to cover the upfront costs of the \$40,000 installation
- The Kingborough Council in Tasmania upgraded lights in its civic centre, cutting the building's lighting energy costs by 75%

On-bill financing – a complete turnkey solution

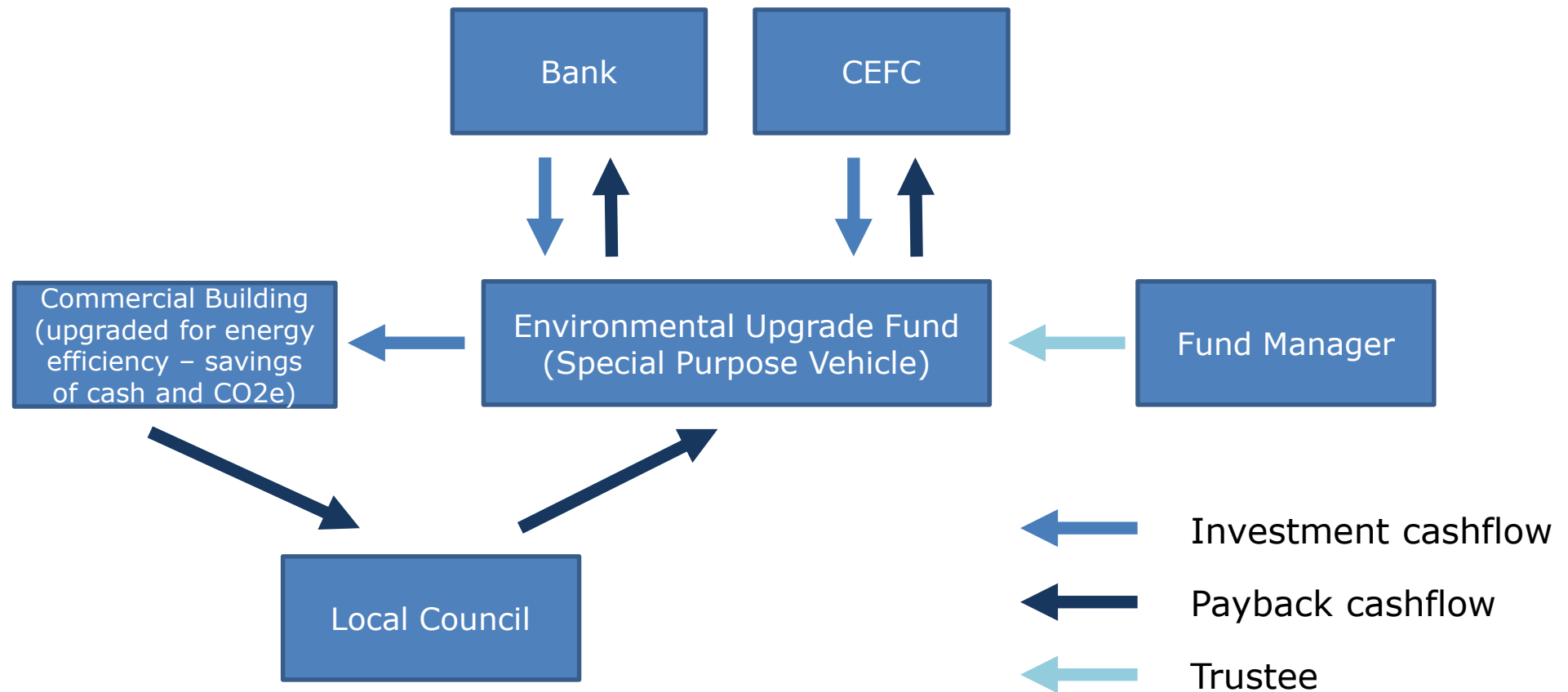
- Customers across any business can access energy saving equipment without upfront capital expenditure
- Structured repayments lower the cost for business of energy efficiency technologies
- Repayments made through energy bills
- Guaranteed energy savings and technologies

Case studies

- Central Coast Youth Club (CCYC) near Gosford, NSW reduced its energy use by over 60% through a \$50,000 lighting upgrade using Origin on-bill finance
- Boral Ltd cut the energy costs of a major shared service facility by more than 25% through a lighting upgrade using Origin on-bill finance



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 enables EUAs for the \$2 billion City of Melbourne **1200 Buildings** program and for all NSW
 - Sydney, Parramatta, North Sydney, Newcastle, Lake Macquarie offer EUAs
 - EUAs in planning for Penrith and Wollongong; South Australia is establishing the business model and Brisbane has proposed an investigation
- A \$1.3 million EUA-financed energy efficiency upgrade to the 1960s high-rise building at 123 Queen Street, Melbourne, is delivering energy cost savings greater than 50 per cent and savings of \$180,000 p.a.

EUA case study - trigeneration provides onsite power at landmark Sydney development

- A two-megawatt trigen plant providing low-carbon thermal energy, heating and cooling for Central Park, a major new residential and commercial development in Sydney
 - Powering a 5.8 hectares precinct, including 14 new buildings (3,000 apartments, 900 student accommodation units, 50,000 sq metres of commercial office space and 25,000 sq metres of retail space)
- Financed via a \$26.5 million EUA involving Low Carbon Australia, now the CEFC, and ANZ
- The tri-gen plant will reduce GHG emissions by over 190,000 tonnes over its 25-year design life



What have we learnt

- Financier momentum continues to build but there are still significant market barriers
- Financial hurdles and preferred financial structures differ significantly between industries
- Not a case of 'build it and they will come' – market requires significant education
- Remains a role for government participation on 'least generous terms'
- CEFC advocacy is needed to get some viable deals done
- CEFC financing terms can help improve the capital structure for projects

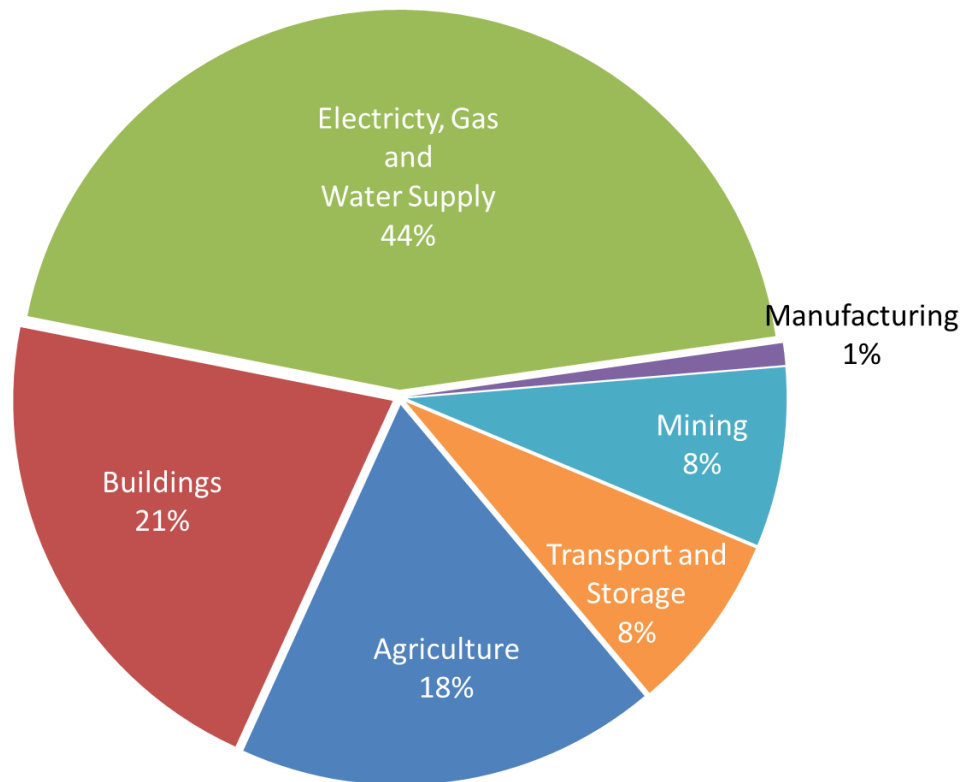


Key project success factors

- Connecting projects and companies with financiers
- Tailoring financial solutions as there is no "one size fits all"
- Building implementation and management capability



What's next – the pipeline



- Strong pipeline of energy efficiency and emissions reduction opportunities
- Received proposals seeking \$3.4 billion investment, with total project costs of nearly \$11.5 billion
- \$1bn for energy efficiency in buildings, manufacturing and other commercial sectors
- \$800m for large scale remote renewable energy generation
- \$200m for community renewable projects
- \$300m for solar PV projects and aggregation funding
- \$270m for the mining sector
- \$850m from gas & infrastructure, transport & storage and renewables sectors

What's next? Future finance areas

The CEFC is developing a number of innovative approaches including:

- Investing in community renewable projects
- Creating a green residential mortgage product
- Expanding EUA loan offerings
- Working to facilitate competitiveness in a lower carbon world
- Developing a listed ungeared vehicle for pension funds and retail investors
- Supporting remote generators to reduce dependence on diesel generators
- Encouraging demand management
- Developing financing options for rooftop residential and commercial solar
- Further supporting the expansion of utility scale solar where feasible
- Expanding co-finance vehicles to target smaller to mid-sized projects

Future of the CEFC

- The CEFC (Abolition) Bill has passed the House of Representatives and is currently before the Senate
- The CEFC will continue to invest responsibly and commercially to carry out its statutory purpose and functions until Parliament repeals the CEFC Act
- The Government has committed to honour all payments that are necessary as part of meeting CEFC contractual obligations to committed investments
- The CEFC is focused on getting on with business, continuing to perform our statutory investment function by progressing new investments.

Conclusion

- CEFC is demonstrating its value as a policy tool to reduce emissions
- As a focused fund, the CEFC overcomes market barriers to investment
- CEFC has been able to leverage private sector funding into emissions reduction projects
- CEFC represents a positive cost-benefit outcome for Australian taxpayers, businesses, the economy and the environment



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cleanenergyfinancecorp.com.au

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