CLEAN ENERGY FINANCE CORPORATION

Presentation to Bioenergy Australia Conference
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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

"A guide to the financing issues & requirements for successful bioenergy projects"

Outline

1. Role of the Clean Energy Finance Corporation
2. Examples of CEFC finance for bioenergy projects
3. Making bioenergy projects bankable
4. Summary

CEFC's role – partnering with the private sector to encourage investment

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Dedicated resources

- Private sector finance expertise with public purpose – to pursue energy efficiency and renewable energy across the economy
- Invest the time and resources to understand the project, technology, the potential wider impact and develop innovative financing structures

Flexible and persistent

- Loans can be tailored to suit business and life of project
- Can work on projects that are smaller, more complex or new to the Australian market

Paving the way for others

- Operate as a co-financer to encourage greater bank participation in the sector

Types of bioenergy projects the CEFC finances

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LOCAL COUNCILS
Municipal waste- to-energy & landfill gas

MINING
Bioenergy to power mine sites using crops & waste-water

MANUFACTURING
Biogas using meat-processing waste & processed food

AGRICULTURE
Biogas in piggeries & poultry using waste products

TRANSPORT
Biofuels for trucks and commercial vehicle fleets

Project finance

- **Project Finance:** for larger scale renewable projects as well as smaller projects that have specific features that may make them harder for commercial banks to finance alone
- Example is the new waste-to-energy plant in the Pilbara utilising Australian gasification technology. Capacity of 16.6MW, saving 135,000 tonnes of CO2-e p.a.
- We are also considering using project finance for a number of large-scale biofuel production projects that we are looking at

Corporate finance

- **Corporate Loan:** for creditworthy corporates that may have one or more clean energy or efficiency projects of various sizes
- Examples include:
- Garden products supplier Richgro is turning organic food waste into energy through a $4m anaerobic digestion plant with a capacity of up to 2MW
- Bindaree Beef is using a $15m corporate loan facility to install a biodigester and energy efficient rendering facilities
- JBS is using corporate loan of $4.4m to generate biogas from waste from its meat processing operations and use it to power its gas boiler plant

Build, own, operate model (BOOM)

- We also provide **aggregation funding:** to provide finance for a number of smaller projects in conjunction with commercial banks or other service or finance providers

- This could be in the form of a build-own-operate financing model. E.g. at Darling Downs Fresh Eggs, where Quantum Power built, owns and operates an anaerobic digester using poultry waste from Darling Downs. Darling Downs purchases the energy from Quantum at a lower price that grid-supplied electricity

Key factors influencing bankability of bioenergy projects

1. Technology
2. Construction, operation & maintenance risks & contract regime
3. Source of feedstock, cost/revenues, risk
4. Offtake and supply contracts for the bioenergy & location of customer
5. Quality of counterparties and sponsors (sufficient equity)

How the technology impacts on financing

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- A lot of the bioenergy market (particularly biogas and biofuel) are in earlier stage of development than some other renewable technologies like wind & solar PV
- The technology can be complex and the conversion of source to energy can be up to 7-step process
- Limited projects developed in Australian market compared to overseas (e.g. biofuel market in US and Brazil, waste-to-energy in Europe)
- Technology and fuel source differ substantially from application to application

How the feedstock producer impacts on financing

- Commercial viability of project dependent on feedstock cost/revenue and exposure to price fluctuations
- Favourable conditions where project uses waste-feedstock and where avoided waste-gate fee revenue can supplement project
- Ideal conditions for a financier where partnership between feedstock provider, bioenergy producer and end user with each dependent on one another for products

How the off-taker/PPA impacts on financing

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- As fuel is a commodity, long-term offtake agreements will generally lock in volume but not price
- If there is no contracted price, leaves financier exposed to market price and fluctuations
- This exposes financier to price risk and means significant market due diligence and generally lower gearing
- For an electricity or gas generation project, a power purchase agreement (PPA) makes it much more likely that a project will attract finance
- However, difficult to obtain long-term off-take contract (i.e. 5+ years) or renewable energy PPA at the moment

Quality of project counter-parties

- The bankability of a project is closely correlated with the quality of the parties involved and their ability to execute their roles
- All parties must be highly experienced and clearly financially viable
- The involvement of each party must be secured by a comprehensive set of binding long term contracts (eg. construction contractor, feedstock supplier, power offtaker and operator / equity
- These are critical risk mitigating elements for financiers
- Ideal conditions if at least some of the equity is contributed by the feedstock supplier and the end user

How the CEFC can assist bioenergy projects

- Providing finance for a project or corporate loan to enable the roll-out of a number of bioenergy projects
- Providing technical advice around structuring finance
- Building a consortium and bringing in new co-financiers to partner with the CEFC
- Helping to attract and work with equity partners
- Finance to support R&D
- Share learning with other financiers

Summary of factors financiers consider

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Risk Factor	Low Risk → High Risk
Technology	Commercially deployed in Aus e.g. anaerobic digestion, landfill gas vs Not commercially deployed e.g. pyrolysis, gasification
Feedstock	Long contract for supply & no cost e.g. waste that provides gate-fee revenue vs Paying for feedstock & uncontracted
Offtake	Guaranteed customer e.g. 10+yr contracted offtake vs Commodity exposure
Equity	Substantial equity from quality sponsor vs Non-investment grade equity sponsor e.g. high net worth
Construction	Fixed price EPC with LD regime with significant balance sheet vs Non-fixed price contract
O&M	Experienced operator with significant balance sheet vs No experience

Closing Remarks

- Project bankability and viability is critically dependent upon the quality of a multitude of parties involved - each with a different role
- To be successfully realised, a project must be anchored by a supportive and mutually beneficial partnership structure between these parties with the ability to leverage their respective market positions
- There is a large portfolio of potential bioenergy projects in Australia. As yet there are very few bankable partnerships supporting these projects
- Unlocking the potential of the bioenergy market in Australia, requires this shortcoming must be addressed as a priority
- CEFC is here to work with the industry to help make this happen

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