



In 2016-17, the Clean Energy Finance Corporation (CEFC) made more than \$2 billion in new investment commitments to 35 renewable energy transactions, which means they now have made cumulative investment commitments of more than \$5.8 billion to projects with a total value of \$16 billion.

Former NSW Premier and now NAB senior executive Mike Baird recently told the Sydney Morning Herald that the rapid growth in the sector had pushed renewables to a tipping point with forecasts indicating Australia will see trillions of dollars poured into renewables in the coming decades.

So with a market set for continued rapid growth what are the market forces driving investment and what are the opportunities?

Westpac Institutional Bank relationship manager - Infrastructure & Utilities Myles Walkington believes there are a number of factors contributing to sector growth.

“The first is a reduction in the levelised cost of energy being driven by a reduction in installation costs for renewable projects. This is a result of improved technology and increased scale, meaning both the size of the equipment and production levels. The outcome is new renewable energy being a cost competitive option for consumers and businesses.”

“Another significant factor is a desire by participants to improve their sustainability credentials and contribute to efforts to control emission intensity and deliver on

their commitments to transitioning to a lower carbon future,” said Walkington.

“The involvement of government also has an impact on the sector. We are closely watching the discussions around energy market policy and legislation for the period and beyond 2020, including the National Energy Guarantee, and are looking forward to a period of regulatory stability.”

“Westpac released a detailed Climate Change Position Statement and 2020 Action Plan in 2017, which sets targets to increase our lending exposure to climate change solutions and reduce the emissions intensity of our power generation portfolio.”

The CEFC say their investment commitments to the clean energy sector are debt offerings and while they have made various commitments across a range of industry sectors, they are less than 17% of the overall portfolio.

CEFC chief governance and strategy officer Kevin Holmes said: “Our investment strategy is to invest where we can achieve the biggest positive impacts in terms of carbon emissions reduction, pushing technology down the cost curve, and building investor confidence to increase the flow of finance into the clean energy sector. Even with the sector approaching the achievable 2020 Renewable Energy Target of 33,000 gigawatt hours, we are still seeing a number of wind and solar projects progressing on their commercial merits.”

“We have used equity to invest in leading property and diversified funds with the aim of influencing best practice energy efficiency and emissions reduction initiatives across

Significant institutional investors from all over the world are committing capital to Australian renewable energy projects.

Myles Walkington



**Above:** Myles Walkington, relationship manager Infrastructure and Utilities Westpac Institutional Bank.

## FINANCE

large-scale renewables, the property sector and infrastructure. Through the Clean Energy Innovation Fund, we have also made about \$44 million in equity investments to seven innovative companies with emerging technologies that have the potential to help shape Australia's transition to a more decentralised, decarbonised and digitised energy sector," said Holmes.

"In the past year, we have financed projects that are demonstrating the benefits of combining renewable energy generation and storage solutions. For example when fully operational, Kennedy Energy Park in Queensland will be Australia's fully integrated wind, solar and battery project. Kidston Renewable Energy Hub is already generating electricity from its large-scale solar project and is now working to harness two large dams at the former Kidston gold mine to develop a pumped hydro storage project to provide a combined solar, hydro and storage facility."

Westpac say they are typically funding projects at the larger end of the spectrum however Walkington says the bank supports climate change solutions more generally all the way down to the consumer level via working with major institutional customers.

"An example of this is the joint initiative between the Tasmanian government, Aurora Energy and Westpac in the Tasmanian Energy Efficient Loan Scheme."

Financial services company Flexigroup who provide end to end finance solutions say the increasing cost of energy it's rapidly making alternative sources more affordable with payback periods. These solutions

include solar and related technologies and the ability to utilise batteries, manage peak loads and voltage being taken from the grid.

"These bundled solutions together with effective financing structures are making large installations far more economically viable," said Flexigroup general manager commercial Ken Richards.

"The increasing amount of tender opportunities is also an exciting prospect. Larger scale systems are being tendered out to market resulting in significant growth in our Solar Vendors, which will see increased awareness of the solar product and thus drive growth rates even further. There is a clear defined trend in growth rates of Green Energy Storage Solutions and we anticipate this will drive the market and future growth."

"The ability to be able to harness energy produced naturally and store it for a longer time is an exciting prospect."

"The decreasing cost of manufacturing renewable energy product is also a key component to the industry's growth. More and more businesses and consumers are starting to see the true potential in renewable energy and with the decrease in production costs this will give our customer base the ability to make the change to renewables," said Richards.

The CEFC say they are seeing significant advances in renewable energy, energy efficiency and low emission technologies to improve the affordability, reliability and sustainability of clean energy.

"With solar's dramatic cost reduction and battery storage enabling fast responsiveness to grid volatility, we are seeing large-scale

solar farms being developed in new locations such as regional Victoria, whereas previously NSW and QLD had proved the most cost-effective locations for these projects," said Holmes.

"We are also seeing the 'next generation' of wind and solar farms incorporating technologies to help reduce generation volatility and increase system strength. Sponsors are building projects that are 'battery ready' so that storage can be added once the business case is suitably compelling."

Richards believes the sector has not reached a negative tipping point as the market is seeing increase interest in the industry and the market still seems to be growing rapidly month on month.

"The market is huge and the potential is enormous especially with R&D of new energy products that can complement an existing system."

In a 2017 European Environmental Agency report on renewable investments in Europe, the agency found investments had declined from 46% in 2005 to 17% in 2015, which the EEA suggests not only highlights Europe's pioneering role in developing renewable energy, but indicates global investment is spreading to other markets outside traditional European ones like Australia.

Walkington says international investors are keenly interested in the Australian renewable energy market, attracted by the relatively stable economic environment and industry fundamentals.

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Above: Kevin Holmes, chief governance and strategy officer CEFC.

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Ken Richards



Above: Ken Richards, general manager commercial Flexigroup.

The CEFC is seeing co-financing of large-scale projects in Australia and have worked to bring new international financiers into the sector to broaden the sector's investor profile.

"We have worked alongside both international and domestic financiers to facilitate increased flows to finance in the sector. The current high costs of gas and electricity when compared with international markets make Australia's renewable energy industry attractive to foreign companies, as does the relative stability of our broader economy. We see continued interest from international developers and financiers as a strong indicator for the continued growth of the clean energy sector," said Holmes.

"While we are seeing increased interest in renewable energy investment in Australia, projects with power purchase agreements are financed by the private sector more readily than those seeking finance on a merchant energy basis. Given the financing gap, we are continuing to support a measured approach to financing merchant energy price risk exposed projects and to encourage third party financiers to invest alongside us while building sector confidence."

Holmes says PPA's do provide a level of revenue certainty for investors in large-scale renewable energy projects, making it easier for the private sector to finance projects without the CEFC's involvement.

"In Australia, we are witnessing growing interest in corporate PPA's where big energy users are agreeing to purchase electricity directly from an energy

generator. Through the certainty these structured agreements provide PPA's are helping to remove roadblocks to financing and developing new renewable energy generators as well as helping deliver more renewable energy to the grid.

"Telstra, zinc refiner Sun Metals and Nectar Farms in Victoria are among companies that have announced their involvement in PPA's to source renewable energy supplies. Their actions reflect a global trend, with Apple, Amazon and Google among corporate giants locking in agreements to purchase renewable energy," said Holmes.

Investments in 2018 are already looking strong according to Walkington and look to remain so for the rest of the year.

"Whether or not activity in 2019 remains generally strong, will in part depend on how investors view the expected continued reduction in the cost of renewable energy components versus changes in the energy market. This in part is driven by where legislative outcomes ultimately land, which means projects become more bespoke with a focus to potentially be providing more stable outputs." <sup>eco</sup>

