

Renewable energy in Australia

A guide to regulation

lawyers

**McCullough
Robertson**



© McCullough Robertson

Information contained in this publication
is current as at 16 June 2017.

All Rights Reserved.

Disclaimer

This publication has been prepared for general
information purposes only and should not be regarded as
legal advice or other professional advice. Further advice
should be obtained before taking action on any issue dealt
with in this publication.

About McCullough Robertson

McCullough Robertson is a leading independent Australian law firm with four offices across the country. For more than 90 years, major Australian and foreign owned corporations, financial institutions, governments, private enterprises and high net worth individuals have trusted our advice on their most critical legal challenges.

Our whole-of-project approach ensures seamless legal services are on hand from the project approval and development phase, through to project financing, operation and expansion. Our specialist lawyers bring expertise, experience and in-depth knowledge of the renewables industry, having worked on solar, hydro, wind, biomass and geothermal renewable energy projects in Australia and overseas.

Key highlights of our experience include:

- advising on the delivery of a solar power station at Alice Springs Airport in the Northern Territory for Ingenero;
- advising various wind farm operators, energy utilities and banks on the development of wind farms and on the regulation of the renewables and electricity industry;
- advising on the redevelopment of the abandoned Kidston Gold Mine by Genex into a hydropower facility for the northern Australian electricity market. The Kidston Project will be the first in the world to use two disused mine pits for hydroelectric power generation;
- advising on all aspects of the development and delivery of Mackay Sugar Limited's bagasse cogeneration facility at its mill in Mackay, Queensland;
- acting for Mackay Regional Council in relation to a landfill gas management and energy utilisation project at Hogan's Pocket and Bayersville landfill sites;
- acting for Ergon Energy to provide advice for the geothermal power station at Birdsville, Australia's only commercial geothermal power plant; and
- advising on market design and competition law issues in this space.

We understand the opportunities and challenges facing those in the renewables sector and provide commercial, outcomes focused advice on the full range of issues confronting participants in this field.

Note from **the editors**

The increasing global demand for energy presents both opportunities and challenges for Australia. Australia is well known for its abundance of renewable energy sources and has not fully capitalised on them to date. However, as renewable energy projects become more cost competitive, and local demand for renewable energy soars, domestic policy is developing to help drive local and international investment in renewable energy projects.

The Australian Renewable Energy Target (RET), for example, is a federal mandate to create a supportive environment for long-term investment in Australia's renewable energy industry. The RET has set a target of 23.5% of Australia's total power to come from renewable energy by 2020.

The Renewable energy in Australia three part series provides some insights into the issues you will face, and how best to overcome them, in proceeding with a renewable energy development in Australia.

It provides:

- an overview of the current state of the Australian renewable energy industry, its key players, trends and priority areas for future development;
- an examination of the challenges and opportunities in the renewable energy industry; and
- an in-depth guide to navigating the legal framework in Australia, including potential legal hurdles that investors face or are likely to face when doing business in the Australian renewable energy sector.

We will step you through the funding opportunities, structuring and corporate considerations, national electricity regulations and preferred project delivery methods.

While we cannot delve into every detail in this guide, please contact any of our experts should you have any specific queries – we would be more than happy to help.



REN NIEMANN

Partner

Construction and Project
Delivery Methods

t +61 7 3233 8770

e rniemann@mccullough.com.au



LOUISE HORROCKS

Partner

Structuring and Corporate Advisory

t +61 7 3233 8734

e lhorricks@mccullough.com.au



ADRIAN SMITH

Partner

Funding and Corporate Advisory

t +61 2 8241 5639

e adriansmith@mccullough.com.au



JOHN KETTLE

Partner

Funding and Electricity Regulation

t +61 7 3233 8962

e jkettle@mccullough.com.au



TIM HANMORE

Partner

Approvals and Planning

t +61 7 3233 8955

e thanmore@mccullough.com.au



DAVID GILHAM

Partner

Funding and Project Finance

t +61 2 8241 5611

e dgilham@mccullough.com.au

Introduction **to the regulators**



To obtain the required investment, research and infrastructure development in order to achieve the RET, the Federal Government created the CEFC and ARENA.

Traditionally, these two bodies performed complimentary functions, with the CEFC delivering project finance and corporate loans for renewable projects, while ARENA issued grants according to priority areas and funding criteria. However, the introduction of the Clean Energy Innovation Fund (CEIF) slightly altered the role these bodies play.

ARENA

ARENA was established in 2012 to accelerate Australia's shift to secure, affordable and reliable renewable energy.

ARENA funds projects across the innovation chain – from research to pre-commercial deployment. The funding is focused on finding and demonstrating first-of-a-kind renewable energy solutions, which reduce technical and commercial risks and grow Australia's renewable energy knowledge and expertise.

Renewable energy solutions include hybrid, related or enabling technologies. This means ARENA may fund solutions such as storage, demand response, energy efficiency, electrification and fuel switching, where they could help grow the supply of renewable energy in Australia.

ARENA's investment priorities are:

- delivering affordable low emission electricity solutions that keep the lights on;
- making solar PV more efficient and affordable through research and development;
- helping reduce energy cost and emissions in the transport, building and industry sectors; and
- creating new, scalable export value chains in renewable energy.¹⁷

CEFC

The CEFC is a statutory authority established under the *Clean Energy Finance Corporation Act 2012* (Cth) with a mandate to invest in renewable energy, energy efficiency and low emissions technologies.

The specialist clean energy financier has \$10 billion to invest (\$2 billion per year for five years from 1 July 2013).

The CEFC invests in industry sectors with the strongest potential to reduce Australia's carbon emissions.

Its investments are targeted toward:

- projects to support low carbon electricity, through the increased deployment of renewable energy technologies and energy storage;
- increased use of technologies to deliver ambitious energy efficiency, particularly in the electricity generation, transport, property, infrastructure, manufacturing and agribusiness sectors; and
- accelerated electrification and fuel switching, especially in the transport sector, to support the transition from fossil fuels to bioenergy and other low emissions fuel sources.

The CEFC's financing structures support increased private sector investment in clean energy.

The CEFC invests through:

- project finance: for larger projects, or smaller projects with specific features that may require individual financing solutions;
- equity finance: equity investments in the development of structured investments and new capital products such as climate bonds and equity funds;
- corporate loans: for corporates with one or more eligible project, of varying sizes; and
- aggregation funding: working with co-financiers to bring CEFC asset finance to a large number of individual projects, such as small businesses, manufacturers and agribusiness.

The CEFC invests in businesses and projects which develop and commercialise clean energy technologies, or are involved in the clean energy supply chain, focusing on projects and technologies at both the early and later stages of development.

CEIF

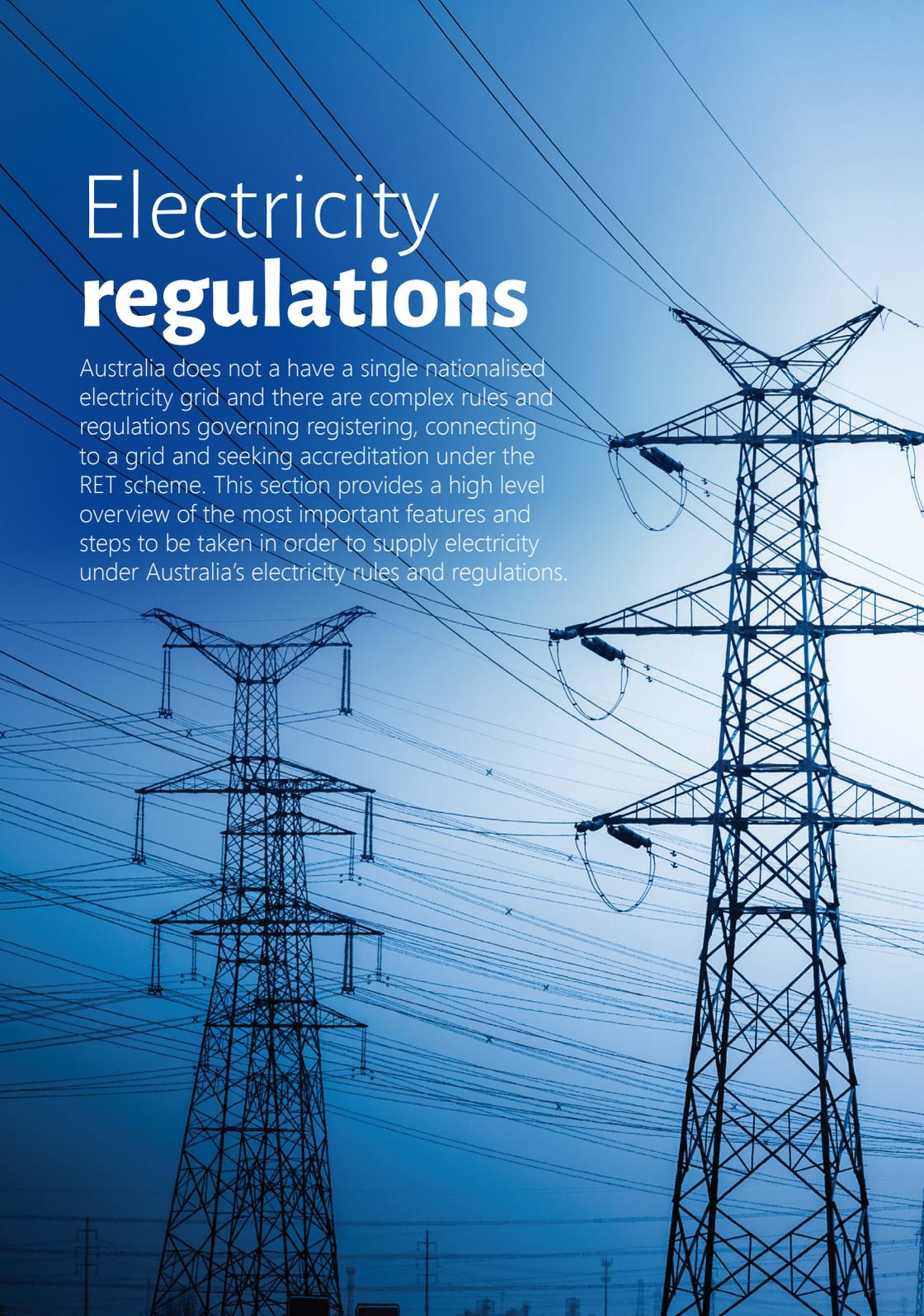
The CEIF is a \$200 million program supporting the growth of innovative clean energy technologies and businesses which are critical to Australia's clean energy transformation. The Innovation Fund targets technologies and businesses that have passed beyond the research and development stage, and which can benefit from early stage seed or growth capital to help them progress to the next stage of their development.

The Innovation Fund uses CEFC finance to invest in innovative clean energy companies and projects. It can provide debt and/or equity finance for innovative clean energy projects and businesses which support renewables, energy efficiency and low emissions technologies.

It is operated in consultation with ARENA, drawing on the complementary experience and expertise of the two organisations. Final investment approval is provided by the CEFC Board, which is responsible for all CEFC investment commitments made under the CEFC Act.¹⁸

Electricity **regulations**

Australia does not have a single nationalised electricity grid and there are complex rules and regulations governing registering, connecting to a grid and seeking accreditation under the RET scheme. This section provides a high level overview of the most important features and steps to be taken in order to supply electricity under Australia's electricity rules and regulations.



Electricity network

As electricity is not one of the powers vested in the Commonwealth, the States retain power as to its regulation and historically each State has developed its own system of electricity generation, distribution and regulation.

Queensland, New South Wales, Victoria, Tasmania, South Australia and the Australian Capital Territory are connected via the NEM. The National Electricity Law (**NEL**) governs the NEM and is incorporated into each participating jurisdictions' legislation.

Western Australia and the Northern Territory and currently connected to the NEM, primarily due to the distance between Western Australia and Northern Territory and other States, and they continue to have their own processes and regulations.

In Western Australia, there are two separate electricity grids, the North West Interconnected System (which mostly services mining companies in the north of the State) and the South West Interconnected System (which comes under the WEM).

The Northern Territory on the other hand consists of three small regulated systems covering the main populated areas with mini-grid systems covering many remote mining and Indigenous communities.

Registration process

Under the NEL, any person who owns, controls, or operates a generating system connected to a transmission or distribution network must register as a 'generator' in accordance with the National Electricity Rules (NER), unless exempt.

Exemptions may apply for certain generating systems under 5MW, or under 30MW with annual exports below 20GWh.⁵⁶

Chapter 2 of the NER sets out the registration requirements and eligibility criteria for each of the participant categories. Each registered generating unit must be classified as either 'market' or 'non-market':

- a market generator must sell all sent-out electricity through the market, and accept payments from AEMO for sent-out electricity at the spot prices applicable to its connection point. A generator must be classified 'market' unless all of its electricity output is purchased by a local retailer or customer at its connection point; and

- a registered generating unit may be classified as 'non-market' if the generator's output is purchased by a local retailer or customer at its connection point. A non-market generator is not entitled to receive payment from AEMO for any electricity sent out at its connection point, except for any electricity sent out in accordance with a direction issued by AEMO to a scheduled generator.

Each market and non-market generator must be further classified as either 'scheduled', 'semi-scheduled' or 'non-scheduled':

- a generator with an aggregate capacity of 30MW or more would be classified as 'scheduled', which means that it would participate in the 'central dispatch process' and be called upon to supply electricity based on real time demand and how much that generator has bid to supply their electricity. These bids are stacked in order of price and dispatched as demand requires. The scheduled generator would then receive payment based on their bid price of the electricity at the time of the particular electricity generation; and

- generators that are used for local use and are below the 30MW threshold would usually be classified as 'non-scheduled' and would not participate in the central dispatch process. However, AEMO can still impose conditions with which they must comply, typically for security reasons.

Intermittent generators (e.g. solar and wind farms) may be classified as 'semi-scheduled', meaning that at times AEMO would call upon them to supply electricity based on demand and subject to the central dispatch process, while at other times it may be allowed to supply electricity up to its maximum registered output.

New generation connection process

The generator connection process as set out below must be followed by any person seeking to connect a generating system to a transmission or distribution network.

The connection process is a crucial stage of any prospective renewable energy project and differs for small, medium and large-scale generation

projects. The connection process itself is highly technical and requires detailed legal and commercial input.

Chapter 5 of the NER sets out details of the connection process which have the force of law and set out the criteria for registration by anyone:

- engaged in the activity of owning, controlling or operating a generating system that supplies electricity to a transmission or distribution system; or
- who owns, controls or operates a transmission or distribution system, that is used to convey or control the conveyance of electricity to customers (wholesale or retail).

The regulation and registration of the NEM (and the operations of the South West Interconnected System) is overseen by AEMO. In Victoria, AEMO manages the entire application process for a potential generator connection to the NEM. In other jurisdictions connected to the NEM, there are local transmission network service providers (TNSP) who are the applicant's main point of contact.

The connection process is a crucial stage of any prospective renewable energy project and differs for small, medium and large-scale generation projects.

Regardless of the jurisdiction within the NEM, the grid connection process follows a six stage process:⁵⁷

- **pre-feasibility** – where a potential applicant can explore the feasibility of their electricity generation project with the relevant TNSP or AEMO, landowners and Government authorities that may be involved with local planning regulations;
- **enquiry** – submission of a connection enquiry to the TNSP or AEMO assists in determining the most suitable point of connection to the NEM and what information would be required for a formal application;
- **application** – submission of a connection application, which would include the proposed system designs and details regarding performance standards. Once performance standards are agreed, they become the performance standards for the relevant generating system. The level of technical data required depends on the system size, with generators below 30MW typically requiring a lower level of technical information;
- **contracts** – if the TNSP accepts the application, an offer to connect is prepared. AEMO is not a party to this contract (except in Victoria), however, its regulated performance standards would be included in the contract;

- **construction** – the applicant would undertake detailed design work and construct the electricity generator; and
- **completion** – once construction is finalised, AEMO is involved in the actual registration and commissioning of the generator after on-site testing is undertaken. Within three months of completing on-site commissioning, the applicant must submit a formal commissioning report demonstrating the ongoing compliance with agreed standards.

Small output electricity generators or those intending to supply exclusively to a local retailer or customer may be eligible for varying levels of exemptions from the applicable regulations. For example, a generator rated at less than 30MW would be allowed to supply a reduced set of test data to AEMO.⁵⁸

In addition to the requirements of the NEL and the NER, a range of Federal, State and local planning laws apply to electricity projects. These should be discussed with the relevant local planning authorities.

Accreditation

As discussed above, the RET allows for financial incentives in the form of Large-Scale Generation Certificates for the establishment or expansion of renewable energy power stations.

In order to be accredited to receive Large-Scale Generation Certificates, an application must be made to the CER who assesses the merits of the application against the criteria within the *Renewable Energy (Electricity) Act 2000* (Cth). Fundamental to this assessment is whether the generation of electricity comes from an approved source. These approved sources include well known renewable sources such as wind and solar, but also less familiar sources such as agricultural waste, landfill gas, food waste, bagasse and black liquor.⁵⁹

It is not necessary for all of the electricity produced to be from an approved source or for the electricity produced to be connected to the larger grid (rather than just a smaller grid or single business) for the power station to be eligible for Large-Scale Generation Certificates.⁶⁰ Small-Scale technology certificates also exist, although these are limited to relatively low output solar, wind and hydro systems rather than higher capacity generators.

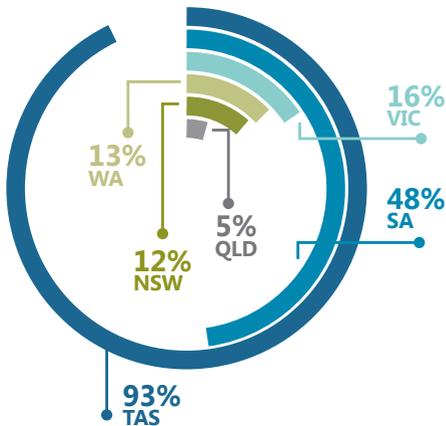
State and **Territory** overview

In addition to the RET set by the Federal Government, many States and Territories have implemented their own renewable energy targets. This has caused debate about the interaction of State targets with the national RET.



Overview of State-based targets

Penetration of renewable energy by state⁶¹



Source: Clean Energy Council, *Clean Energy Australia Report 2016 (May 2017)* – see [61]

It has been considered that the State-based schemes may create a decentralised approach to renewables and carbon emission reductions.⁶² As such, some opposition political parties have given their support to scrapping the State-based targets in preference for a single nationalised target applicable to each State and Territory. In light of its carbon emissions reduction commitment (26-28% below 2005 levels) the Federal Government is continuing its review of national climate change policies, which is set to be concluded later in 2017.⁶³

However, there appears to be growing sentiment that the State-based targets are more effective than the Federal Government's RET. RepuTex, a carbon consultancy group, released a report in January 2017 which suggested that the State targets were emerging as a key instrument in meeting emission targets and will possibly push Australia's renewable energy usage to 35% in 2030.⁶⁴ The present situation for each State and Territory is outlined here.

Australian Capital Territory (ACT)

The ACT has a legislated renewable energy target of 100% by 2020. The most successful initiative to meet this target has been a series of reverse auctions for the allocation of feed-in tariffs which has attracted new, large-scale wind and solar projects.⁶⁵

Expanded investment in wind power infrastructure is expected to generate enough electricity to power all Canberra residences by 2020 and the ACT Government is also supporting the roll-out of energy storage to more than 5,000 ACT residences and businesses between 2016 and 2020.⁶⁶

New South Wales (NSW)

In 2016, renewable energy generated approximately 12% of NSW's total electricity.⁶⁷

Australia's three largest solar plants are located in NSW at Nyngan, Moree and Broken Hill. The State also hosts the Snowy Mountains Hydropower Scheme, Australia's largest ever engineering project, which is currently the subject of a proposed major expansion, as announced by the Federal Government in March 2017.

The successful \$10.3 billion acquisition of transmission company, TransGrid, by a consortium of investors has prompted the NSW Government to call for expressions of interest in the State-owned Sydney power distributor AusGrid and electricity infrastructure company Endeavour Energy, which may create opportunities to increase renewable energy in the State.⁶⁸

Although the NSW Government base their policies towards meeting the national RET, it released a draft paper late in 2016⁶⁹ outlining a goal of being net zero carbon emissions by 2050, assisted by considerable spending to stimulate the transition towards renewable energy.

Northern Territory (NT)

The NT is isolated from both of Australia's largest energy markets, the NEM and the WEM. However, there are 5,242 domestic solar PV systems in NT, generating 25MW of capacity.⁷⁰

At present there is no legislated target for renewable energy but the governing Territory Labor Party has previously promised to adopt a renewable energy target of 50% by 2030 with plans to have a 'Roadmap to Renewables Report' before Parliament sometime in 2017.⁷¹

Queensland

In June 2017, the Queensland Government announced the \$1.16 billion Powering Queensland Plan (**Plan**) outlining the Government's strategy to deliver long-term electricity supply and transition to a clean energy economy.⁷²

The Plan outlined a number of initiatives, including reaffirming Queensland's commitment to a 50% renewable energy target by 2030 and facilitating a reverse auction for up to 400MW of renewable capacity (to commence in the second half of 2017).⁷³ It is anticipated that Queensland will benefit from \$6.7 billion worth of new investment as a result of these initiatives.⁷⁴

In addition to the above initiatives, the Queensland Government has, in conjunction with ARENA, committed to support up to 150MW of large-scale solar power generation under the Solar 150 investment program, providing added incentive for renewable energy investment.⁷⁵ The State-owned electricity retailer Ergon Energy also received more than 2,000MW worth of applications under its recent tender for 150MW of renewable energy capacity. Queensland has also seen a strong uptake of small-scale, rooftop solar PV, with over 1,500MW installed (the highest in Australia). This is expected to continue to grow towards providing one-third of the NEM's total generation capacity by 2035-36.⁷⁶

In February 2017, the Queensland Government also stated its intention to issue certified and independently verified green bonds to investors to help fund clean energy projects such as renewable energy generation.

South Australia (SA)

SA has a renewable energy target of 50% by 2025. According to AEMO, 48% of SA's power came from renewable energy in 2016.⁷⁷

Over 25% of households have installed solar PV capacity, with the installation rate in some suburbs as high as 65%. Wind generation is also particularly strong, where it represented 34% of the State's electricity requirements in 2015.⁷⁸ The SA Government's Low Carbon Investment Plan sets a net zero emissions target for 2050, seeking to make Adelaide the world's first carbon neutral city by 2025.⁷⁹

The SA Government announced on 14 March 2017 that it will implement a \$550 million energy plan, which will include the establishment of a \$150 million Renewable Technology Fund to store renewable energy and add stability to supply. The first project to be funded will be a grid-connected battery to provide the State with 100MW of storage. The Renewable Technology Fund will provide \$75 million in grants and \$75 million in loans, to eligible projects to support private companies and entrepreneurs.⁸⁰

Tasmania

Tasmania generates more renewable energy than any other State. Despite challenges to its hydro power network presented by recent historical low rainfall and an extended outage of the Basslink cable connection to the NEM, Tasmania successfully generated more than 90% of its energy from renewable sources in 2016.⁸¹ ARENA is leading a feasibility study into the upgrade and expansion of the Tasmanian hydro network, including the possibility of up to 2,500MW of pumped hydro storage.⁸²

Victoria

The Victorian Government has committed to a minimum generation target of 25% RET by 2020 and 40% by 2025.

These targets are supported by a competitive reverse auction scheme, which aims to bring on 1,500MW of new renewable energy generation by 2020 and up to 5,400MW by 2025. The Victorian Government aims to legislate the scheme in 2017.⁸³ Between February and March 2016, the Victorian Government tendered for at least 100MW of renewable energy projects, looking to invest approximately \$200 million. New legislation also allows solar companies to install solar power systems in rental properties, providing cheaper power for tenants at no cost to landlords. These proposals have addressed some of the shortcomings in Victoria's renewable energy policy, which had previously lagged behind other States despite excellent wind and solar resources. To assist with this, in mid-2016, the Victorian Government issued approximately \$300 million in green bonds to help fund environmentally friendly projects.⁸⁴

Western Australia (WA)

In 2015, WA generated 12% of its power from renewable energy. Australia's first large-scale solar PV project was established near Geraldton, in 2012, by Verve Energy with a 10MW capacity.

The Government-owned retailer Synergy has also tendered for approximately 500,000MWh of Large-Scale Generation Certificates to help it meet its obligations under the RET.

WA does not have its own State based target and is currently committed to the national RET. However, the current WA Labor Government has reconfirmed its commitment to developing renewable energy initiatives. This includes a promise to provide \$30 million in funding to support the establishment of a solar farm in Collie and a \$19.5 million pledge for a wave power project in the Albany region.⁸⁵

Foreign investment regulation

If you are an overseas investor looking to invest in a renewable energy project in Australia, you will need to be familiar with Australia's foreign investment framework to ensure that you comply with the law before undertaking your renewable energy project.



Foreign investment regulation

Foreign investment in renewables projects in Australia is regulated by the Federal Government through the Foreign Investment Review Board (FIRB), a non-statutory body which advises the Australian Treasurer and the Government on foreign investment policy and its administration.

FIRB examines proposals by foreign investors undertaking direct investment in Australia, and makes recommendations to the Treasurer and the Government on whether those proposals are suitable for approval under the Government's foreign investment policy.

FIRB also oversees the administration of the legislation governing foreign investment law in Australia – the *Foreign Acquisitions and Takeovers Act 1975* (Cth) and the *Foreign Acquisitions and Takeovers Regulation 2015* (Cth).

Foreign investment approvals

As a general rule, the Government, through FIRB, must be notified of all proposed foreign investment activity unless the value of the proposed investment is below the prescribed notification threshold applicable to that specific type of investment or if a specific exemption applies.

The types of activities by foreign investors that may require notification to FIRB include certain acquisitions of:

- Australian land (including agricultural land, commercial land, residential land and mining or production tenements);
- Australian assets;
- Australian businesses;
- shares in an Australian company;
- units in an Australian trust; and
- certain interests in offshore entities that hold direct or indirect interests in sensitive Australian assets (such as land).

Acquisitions of interests in renewables projects may be any one or a combination of the above types of acquisitions.

The notification thresholds that trigger the requirement for foreign investors to notify FIRB of their proposed investment differ according to the type of interest they are proposing to acquire and whether they are a Free Trade Agreement investor or foreign government investor.

Notification of the proposed investment is made through FIRB and must be supported by appropriate documentation detailing the nature and scope of the proposed renewables

FIRB examines proposals by foreign investors undertaking direct investment in Australia.

project (including the type of investment) and details of the investor, including ultimate ownership and control. It must also address national interest considerations including national security, competition, Government policies (including tax), impact on the Australian economy and community and the character of the investor.

FIRB recognises the commercial-in-confidence sensitivity of all applications and will extend appropriate security to information provided to it. It is best to lodge an application or consult with FIRB before a public statement relating to the proposed transaction is made. Where FIRB approval is required, any transaction documentation should be made conditional on obtaining FIRB approval and the transaction should not complete until that approval is obtained.

Critical Infrastructure Centre

In January 2017, the Australian Government launched a Critical Infrastructure Centre (**Centre**) to support FIRB by pre-emptively assessing national security risks for Australia's most critical infrastructure assets, particularly in the electricity, water and ports sectors.

The primary role of the Centre will be to maintain a critical assets register that will identify Australia's critical infrastructure. FIRB will collaborate with the Centre and have regard to the register in an effort

to streamline its assessment of foreign investment applications involving critical infrastructure. Investors should be aware that a renewable energy project may be classed as critical infrastructure, and subsequently attract national security scrutiny by FIRB.

Statutory decision period

Upon the submission of a foreign investment application the Treasurer, through FIRB, is generally required to make a decision on an application within 30 days of receipt of the application and respond to the applicant within a further 10 days.

However, if FIRB needs additional time to consider an application, it can seek the applicant's consent to an extension of time. If the extension is not agreed to, FIRB has the power to issue an 'interim order' preventing the investment for a period of up to 90 days while it further considers the application.

Interim orders are published in the Government Gazette, so it is common for investors to agree to extensions of the relevant time frame if requested by FIRB. It is important to note that if foreign investment approval is obtained for a specific transaction and that transaction does not proceed in a timely manner (usually 12 months) or if the parties enter into new arrangements, further approval will need to be sought for the transaction.

Fees

Foreign investors applying for foreign investment approval must pay an application fee to FIRB. FIRB will not begin assessing an application until the correct fee has been paid in full.

The fee payable by foreign investors differs according to the type of interest that a foreign investor is proposing to acquire under a transaction.

Acquiring Australian land

The acquisition of an interest in 'Australian land' will require FIRB approval if that acquisition meets the prescribed monetary threshold for the relevant category of land proposed to be acquired.

Acquisition of land includes, for example, the purchase of freehold land, entry into certain leases and profit sharing arrangements. The most common examples in the renewables sector is the acquisition of freehold land and the entry into leases.

Australian land is split into four categories: 'agricultural land', 'commercial land', 'residential land' and 'mining or production tenements'. Prior to the commencement of a renewables project, often the land type at the time of acquisition will fall under the definition of 'agricultural land'. For established renewables projects, this land will often be categorised as 'commercial land'. Each category has its

own rules and monetary thresholds.

Acquiring an Australian company or business

If a foreign investor acquires a substantial interest in an Australian company, trust or business undertaking renewables activities valued in excess of the prescribed monetary threshold (generally \$252 million), FIRB approval may also be required.

A substantial interest is taken to have been acquired where, following the transaction, the foreign investor (together with any associates) holds a 20% or more interest in the company, trust or business. The standard FIRB application fee for these types of transactions is approximately \$25,000.

Careful consideration

The Treasurer has significant powers to prosecute non-compliance and to prevent or unwind transactions. The penalties may include both criminal prosecution and civil penalty orders and, in certain circumstances, a forced divestiture of assets. Therefore, all foreign investors looking at investments in the renewables sector which involve Australian businesses, companies, trusts, assets or land in any way (including indirectly) should carefully consider the foreign investment notification and approval requirements.

Glossary

Definitions provided here are not comprehensive definitions and are only intended to assist the reader with the context of that term, which may be used in this guide.

ACCC	Australian Competition and Consumer Commission
ACCU	Australian Carbon Credit Units
ACL	Australian Consumer Law
AEMC	Australian Energy Market Commission
AEMO	Australian Energy Market Operator
AER	Australian Energy Regulator
ANZ	Australia and New Zealand Banking Group
APRA	Australian Prudential Regulation Authority
ARENA	Australian Renewable Energy Agency
ASIC	Australian Securities and Investments Commission
ASX	Australian Securities Exchange
BOOT	Build, own, operate and transfer
CBA	Commonwealth Bank of Australia
CCA	<i>Competition and Consumer Act 2010</i> (Cth)
CEC	Clean Energy Council
CEFC	Clean Energy Finance Corporation
CEIF	Clean Energy Innovation Fund
Centre	Critical Infrastructure Centre
CER	Clean Energy Regulator
CET	Clean Energy Target
CETO	Technological system to create electricity and desalinated water from ocean wave energy
COAG	Council of Australian Governments
Corporations Act	<i>Corporations Act 2001</i> (Cth)
DIBP	Department of Immigration and Border Protection
EKF	Denmark's Export Credit Agency
EPC	Engineer, procure and construct
EPCM	Engineer, procure, construct and maintain
ERF	Emissions Reduction Fund
ESB	Energy Security Board
ESI Companies	Early stage innovation companies
Finkel Review	Independent Review into the Future Security of the National Electricity Market delivered by a panel led by Dr Alan Finkel AO (9 June 2017)

FIRB	Foreign Investment Review Board
GST	Goods and Services Tax
GWh	Gigawatt hours
ICS	Integrated Cargo System
ILUA	Indigenous Land Use Agreement
ITAA 97	<i>Income Tax Assessment Act 1997</i> (Cth)
JV	Joint venture
Kyoto Units	Carbon equivalent emission units that are traded on international compliance markets established under the Kyoto Protocol
LGCS	Large-Scale Generation Certificates
LNG	Liquefied natural gas
LOCE	Lower levelised cost of electricity
MIS	Managed investment scheme
MW	Megawatt
NAB	National Australia Bank
Native Title Act	<i>Native Title Act 1993</i> (Cth)
NEG	National Energy Guarantee
NEL	National Electricity Law
NEM	National Electricity Market
NER	National Electricity Rules
NGO	Non-governmental organisation
PPA	Power purchase agreement
PPP	Public private partnership
PV	Photovoltaic
QIC	Queensland Investment Corporation
R&D	Research and development
RET	Renewable Energy Target
SDPWOA	<i>State Development Public Works and Organisation Act 1971</i> (Qld)
SPA	<i>Sustainable Planning Act 2009</i> (Qld)
SPV	Special purpose vehicle
STCS	Small-Scale Technology Certificates
TNSP	Transmission Network Service Provider
WEM	Wholesale Electricity Market (in Western Australia)

Key contacts

Projects



REN NIEMANN

Partner

t +61 7 3233 8770

e rniemann@mccullough.com.au



MICHAEL ROCHESTER

Partner

t +61 7 3233 8643

e mrochester@mccullough.com.au



GORAN GELIC

Senior Associate

t +61 2 8241 5659

e ggelic@mccullough.com.au

Commercial and Regulatory



JOHN KETTLE

Partner

t +61 7 3233 8962

e jkettle@mccullough.com.au



PAUL MCLACHLAN

Partner

t +61 2 8241 5606

e pmclachlan@mccullough.com.au



MELISSA HILL

Special Counsel

t +61 7 3233 8953

e mhill@mccullough.com.au



CHRISTIAN BALDOCK

Senior Associate

t +61 2 8241 5613

e cbaldock@mccullough.com.au

Finance



KRISTEN PODAGIEL

Partner

t +61 7 3233 8757

e kpodagiel@mccullough.com.au



DAVID GILHAM

Partner

t +61 2 8241 5611

e dgilham@mccullough.com.au



AMY TIN

Special Counsel

t +61 2 8241 5676

e atin@mccullough.com.au

Planning and Environment



STUART MACNAUGHTON

Partner

t +61 7 3233 8869

e smacnaughton@mccullough.com.au



TIM HANMORE

Partner

t +61 7 3233 8955

e thanmore@mccullough.com.au



PATRICK HOLLAND

Partner

t +61 2 8241 5610

e pholland@mccullough.com.au

Corporate



LOUISE HORROCKS

Partner

t +61 7 3233 8734

e lhorrocks@mccullough.com.au



ADRIAN SMITH

Partner

t +61 2 8241 5639

e adriansmith@mccullough.com.au

Tax, Stamp Duty and FIRB



HAYDEN BENTLEY

Partner

t +61 7 3233 8579

e hbentley@mccullough.com.au



DUNCAN BEDFORD

Partner

t +61 7 3233 8706

e dbedford@mccullough.com.au



TERESA DYSON

Special Counsel

t +61 7 3233 8950

e tdyson@mccullough.com.au

Native Title and Cultural Heritage



DOMINIC MCGANN

Partner

t +61 7 3233 8838

e dmcgann@mccullough.com.au



TIM HANMORE

Partner

t +61 7 3233 8955

e thanmore@mccullough.com.au



LIAM DAVIS

Senior Associate

t +61 7 3233 8764

e ldavis@mccullough.com.au

Intellectual Property and Competition



ALEX HUTCHENS

Partner

t +61 2 8241 5609

e ahutchens@mccullough.com.au



BELINDA BREAKSPEAR

Partner

t +61 7 3233 8968

e bbreakspear@mccullough.com.au

Real Estate



IAN HAZZARD

Partner

t +61 7 3233 8976

e ihazzard@mccullough.com.au



KRISTAN CONLON

Partner

t +61 7 3233 8848

e kconlon@mccullough.com.au



EVA VICIC

Special Counsel

t + 61 2 8241 5634

e evicic@mccullough.com.au



TRENT THORNE

Special Counsel

t +61 7 3233 8544

e tthorne@mccullough.com.au

Employment Relations and Safety



MICHAEL MOY

Partner

t +61 7 3233 8720

e mmoy@mccullough.com.au



CAMERON DEAN

Partner

t +61 7 3233 8619

e cdean@mccullough.com.au

Endnotes

1. Department of the Environment and Energy, The Renewable Energy Target (RET) Scheme <<http://www.environment.gov.au/climate-change/renewable-energy-target-scheme>>.
2. Clean Energy Council, 'Clean Energy Australia report 2016' (Report, May 2017) 12 <<https://www.cleanenergycouncil.org.au/policy-advocacy/reports/clean-energy-australia-report.html>>.
3. Ibid.
4. Ibid.
5. Geoscience Australia, Solar Energy <<http://www.ga.gov.au/scientific-topics/energy/resources/other-renewable-energy-resources/solar-energy>>.
6. Australian Energy Market Operator, 'Energy Update: June 2016' (May 2017) 9 <<https://www.aemo.com.au/publications/state-of-the-energy-market-reports/state-of-the-energy-market-may-2017>>.
7. Clean Energy Regulator, About the Renewable Energy Target: How the Scheme Works (29 March 2017) <<http://www.cleanenergyregulator.gov.au/RET/About-the-Renewable-Energy-Target/How-the-scheme-works>>.
8. Australian Energy Market Operator, The National Electricity Market Factsheet, 3 <<https://www.aemo.com.au/Electricity/National-Electricity-Market-NEM>>.
9. Cooperative Research Centre for Greenhouse Gas Technologies, Australian Power Generation Technology Report (Research Report, 2016), 9 <<http://www.co2crc.com.au/publication-category/reports/>>.
10. Ibid.
11. Australian Energy Market Commission, National Electricity Rules (at 30 May 2017) r 3.2; Australian Energy Market Operator, An introduction to Australia's National Electricity Market (Report, July 2010), 4 <http://www.abc.net.au/mediawatch/transcripts/1234_aemo2.pdf>.
12. Above n 8, 2.
13. Australian Energy Market Operator, 'An introduction to Australia's National Electricity Market' (Report, July 2010), 22 <http://www.abc.net.au/mediawatch/transcripts/1234_aemo2.pdf>.
14. Australian Energy Market Commission, What We Do (2017) <<http://www.aemc.gov.au/About-Us/About-the-AEMC/Our-role>>.
15. Australian Energy Regulator, Our role (2017) <<https://www.aereg.gov.au/about-us/our-role>>.
16. Council of Australian Governments, Our role (2017) <<http://www.coagenergycouncil.gov.au/about-us/our-role>>.
17. Australian Renewable Energy Agency, 'Innovating Energy: ARENA's Investment Plan 2017' <https://arena.gov.au/assets/2017/05/AU21397_ARENA_IP_Document_FA_Single_Pages_LORES.pdf>.
18. Clean Energy Finance Corporation <<https://www.cefc.com.au/where-we-invest/innovation-fund.aspx>>
19. Above n 3, 8.
20. Ibid 30.
21. Above n 6, 30.
22. Australian Energy Regulator, 'State of the Energy Market May 2017' (30 May 2017) 35 <<https://www.aereg.gov.au/publications/state-of-the-energy-market-reports/state-of-the-energy-market-may-2017>>.
23. Australian Energy Market Operator, 'National Electricity Forecasting Report' (Report, June 2016) 3 <https://www.aemo.com.au/-/media/Files/Electricity/NEM/Planning_and_Forecasting/NEFR/2016-2016-National-Electricity-Forecasting-Report-NEFR.pdf>.
24. Above n 9.
25. Clean Energy Regulator, 'Tracking Towards 2020: Encouraging renewable energy in Australia' (2016) 52 <<http://www.cleanenergyregulator.gov.au/About/Accountability-and-reporting/administrative-reports/tracking-towards-2020-encouraging-renewable-energy-in-australia>>.
26. Ibid 50.
27. Australian Energy Market Operator, 'National Gas Forecasting Report' (December 2015) 19 <<https://www.aemo.com.au/-/media/Files/PDF/2015-National-Gas-Forecasting-Report-v20--2-March-2016.pdf>>.
28. Above n 22, 40.
29. Ibid 37.
30. Above n 2, 6.
31. Ernst & Young, 'Meeting the Renewable Energy Target: Innovative approaches to financing renewables in Australia' (Report, 2016), 8 <<http://www.ey.com/au/en/industries/power---utilities/ey-meeting-the-renewable-energy-target>>.
32. Above n 2, 6.
33. Above n 22, 22.
34. Above n 25, 29.
35. Above n 2.
36. Department of Environment and Energy, 'Independent Review into the Future Security of the National Electricity Market' (9 June 2017) <<http://www.environment.gov.au/energy/national-electricity-market-review>>.
37. OECD, Renewable energy (indicator) (2015) <<https://data.oecd.org/energy/renewable-energy.htm>>.
38. Ernst & Young, 'Renewable energy country attractiveness index (RECAI)' (Report, Issue 47, May 2016) 10.
39. Above n 13, 3.
40. Clean Energy Council, 'Recommendations for the Reform of Australia's Energy System' (Report, August 2016), 11 <<https://www.cleanenergycouncil.org.au/policy-advocacy/reports.html>>.
41. Above n 36, 5.
42. Above n 2, 19.
43. Ibid.
44. IRENA, 'The power to change: solar and wind power cost reduction potential to 2025' (June, 2016) 10 <<http://www.irena.org/menu/?mnu=Subcat&PriMenuID=36&CatID=141&SubCatID=2733>>.
45. Origin Energy, '2017 Half Year Results: Half year ending 31 December 2016' (Report, 16 February 2017), 25 <<https://www.originenergy.com.au/content/dam/origin/about/investors-media/senate-submission-carbon-risk-disclosure-160331/Half%20Year%20Results%20Presentation.pdf>>.
46. The Honourable Mark Bailey, Minister for Energy, Biofuels and Water Supply, 'Queensland powers ahead with another renewable energy project' (Media Release, 31 January 2017).
47. EnergyAustralia, 'Agreements worth \$1.5bn to underpin renewables development' (Media Release, 6 February 2017).
48. Anita Stadler, 'Looking to hedge energy contracting risks in 2017? Consider a corporate renewable power purchase agreement (9 February 2017) Energetics' <<http://www.energetics.com.au/resources/latest-news/climate-change-matters/managing-energy-contracting-risks-in-2017-with-cor>>.
49. Commonwealth Bank of Australia, 'Transparently: Make transparent and balanced decisions' <<https://www.commbank.com.au/cr-report2016/cs-transparently.html>>.
50. AGL, 'Powering Australian Renewables Fund' <<https://www.agl.com.au/about-agl/what-we-stand-for/sustainability/powering-australian-renewables-fund>>.
51. Clean Energy Finance Corporation, 'CEFC Investment Policies' (Report) <<https://www.cleanenergyfinancecorp.com.au/media/40383/cefc-investment-policies.pdf>>.
52. Australian Renewable Energy Agency, 'General Funding Strategy 2015/16-2017/18' (Report) <<https://arena.gov.au/about/funding-strategy-investment-plan/>>.
53. Clean Energy Council, 'New renewable energy projects point to biggest year for industry since Snowy Hydro (11 February 2017)' <<https://www.cleanenergycouncil.org.au/news/2017/February/2017-renewable-energy-projects-snowy-hydro.html>>.

54. Queensland Government, Solar 150: Queensland's large-scale solar investment program (Fact Sheet, 2016) <<http://www.qldrepanel.com.au/about-the-study/documents/42575/download>>.
55. *Ibid.*
56. Australian Energy Market Operator, Participant categories in the National Electricity Market (2017) 2 <https://www.aemo.com.au/-/media/Files/Electricity/NEM/Participant_Information/Participant-Categories-in-the-NEM.pdf>.
57. Australian Energy Market Operator, Transmission and distribution in the NEM – process overview (2016) <<https://www.aemo.com.au/Electricity/National-Electricity-Market-NEM/Network-connections/Transmission-and-distribution-in-the-NEM--process-overview>>.
58. Australian Energy Market Operator, AEMO completion (2016) <<https://www.aemo.com.au/Datasource/Archives/Archive1260>>.
59. *Renewable Energy (Electricity) Act 2000* (Cth) s 17(1).
60. Clean Energy Regulator, Eligibility Criteria (31 October 2016) <<http://www.cleanenergyregulator.gov.au/RET/Scheme-participants-and-industry/Power-stations/Eligibility-criteria>>.
61. Above n 2, 9.
62. Mark Ludlow, 'State-based renewable schemes to push RET', Australian Financial Review (online), 29 January 2017 <<http://www.afrc.com/business/statebased-renewable-schemes-to-push-up-ret-20170127-gu077a>>.
63. Department of Environment and Energy, Review of Australia's climate change policies <<http://www.environment.gov.au/climate-change/review-climate-change-policies>>.
64. RepuTex Carbon, Industry to the fore? Meeting Australia's 2030 target without an emissions intensity scheme (30 January 2017) <<http://www.reputex.com/research-insights/industry-to-the-fore-meeting-australias-2030-emissions-target-without-an-eis/>>.
65. For further information on reverse auctions in the ACT, see Environment, Planning and Sustainable Development Directorate – Environment (ACT), How do the ACT's renewable energy reverse auctions work? <<http://www.environment.act.gov.au/energy/cleaner-energy/how-do-the-acts-renewable-energy-reverse-auctions-work>>.
66. Above n 2, 21. Climate Council of Australia, 'The Australian Renewable Energy Race: Which States are Winning or Losing?' (Report, 2014) <<http://www.climatecouncil.org.au/uploads/ee2523dc632c9b01df11ecc6e3dd2184.pdf>>.
67. Above n 2, 9.
68. Ernst & Young, Power transactions and trends: 2015 review and 2016 outlook (Report, 2015) <[http://www.ey.com/Publication/w/LUAssets/EY-power-transactions-and-trends-q4-2015/\\$FILE/EY-power-transactions-and-trends-q4-2015.pdf](http://www.ey.com/Publication/w/LUAssets/EY-power-transactions-and-trends-q4-2015/$FILE/EY-power-transactions-and-trends-q4-2015.pdf)>.
69. State of NSW and Office of Environment and Heritage, 'Climate Change Fund: Draft Strategic Plan 2017 to 2022' (Report, 2016) <<http://www.environment.nsw.gov.au/resources/climatechange/Environmentalfuturefundingpackage/draft-climate-change-fund-strategic-plan-160438.pdf>>.
70. Clean Energy Council, 'Clean Energy Australia report 2015' (Report, 2016) 15 <<https://www.cleanenergycouncil.org.au/policy-advocacy/reports.html>>.
71. Northern Territory Government, 'NT Government's Renewable Energy Panel holds first meeting' (Media Release, 16 December 2016) <<https://nt.gov.au/news/2016/december/nt-governments-renewable-energy-panel-holds-first-meeting>>.
72. Queensland Government – Department of Energy and Water Supply, 'Powering Queensland Plan' (5 June 2017) <https://www.dews.qld.gov.au/_data/assets/pdf_file/0008/1253825/powering-queensland-plan.pdf>.
73. *Ibid.* 5.
74. *Ibid.*
75. Above n 54.
76. Above n 22.
77. Above n 2, 23.
78. Above n 70, 50.
79. City of Adelaide, 'Carbon Neutral Strategy' 2015–2025' (2015) 5.
80. Government of South Australia, 'Our Energy Plan' (Report, March 2017) <<http://ourenergyplan.sa.gov.au/assets/our-energy-plan-sa-web.pdf>>.
81. Above n 2, 23.
82. *Ibid.*
83. Environment, Land, Water and Planning – Victorian State Government, Victoria's renewable energy targets <<https://www.energy.vic.gov.au/renewable-energy/victorias-renewable-energy-targets>>.
84. Daniel Andrews MP, 'Victorian Green Bonds an Australian and World First', (Media Release, Victorian Government, 20 July 2016).
85. Energy Matters, Western Australia's Election – What Now For Renewable Energy (13 March 2017) <<http://www.energymatters.com.au/renewable-news/western-australia-renewables-em5947/>>.
86. PwC, 'Construction, operation, regulatory and bankability issues for utility scale renewable energy projects' (Report, January 2017), 12 <<http://www.pwc.com.au/legal/assets/investing-in-infrastructure/iif-11-construction-operation-regulatory-feb16-4.pdf>>.
87. Utility Magazine, Utility scale solar takes off (17 February 2016) <<http://www.utilitymagazine.com.au/utility-scale-solar-takes-off/>>.