

Victorian Renewable Energy Auction Scheme

Consultation Paper

New Energy. New Jobs.

25% renewable energy by 2020.

40% renewable energy by 2025.

4000 jobs.



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Introduction

On 15 June 2016 the Victorian Government announced the establishment of ambitious renewable energy targets. These targets seek to ensure that 25 per cent of the State's electricity generation comes from renewable sources by 2020, rising to 40 per cent of generation by 2025.¹ The Government has set these targets to create jobs, stimulate economic development and reduce greenhouse gas emissions.

To support the achievement of the targets, the Government has committed to implementing a renewable energy auction scheme aimed at incentivising significant new renewable energy investment in Victoria.

Investment in the Victorian renewable energy industry has been limited recently due to uncertainty in the Federal Renewable Energy Target and an inability to secure long-term future revenue to enable the attainment of project finance.

This scheme will assist industry to overcome these barriers by providing support to renewable energy projects financially on a cost effective basis. In addition to this, the Government also intends to use the scheme to drive industry development and job creation in Victoria.

Using the scheme, the Government will hold a series of auctions which will call on industry to bring forward bids requesting support to build new renewable energy capacity in Victoria. Funding will be awarded via long-term contracts, between the scheme administrator and successful parties, for projects demonstrating the greatest value for money to the State.

It is expected that the Government will continue to auction off capacity in this way over the life of the scheme in order to draw a level of investment that will result in the State meeting its renewable energy generation targets for 2020 and 2025. Based on current generation and demand forecasts, this would involve the Government auctioning up to 5,400 megawatts (MW) of additional capacity over the life of the scheme.

To ensure the scheme meets its objectives it is important that it is appropriately designed to:

- Attract sufficient market interest to participate in the auctions and allow Government to meet its targets;
- Minimise scheme costs;
- Drive industry development and jobs in the State; and
- Ensure ease of administration.

With this in mind, the Department of Environment, Land, Water and Planning (the Department) is seeking stakeholder views on the following elements of the scheme's design:

- *Scheme structure* – how auction rounds will be designed and the scheme's interaction with other Federal policies
- *Payment structure* – how funding will be awarded under the scheme
- *Contracting elements* – proposed terms and conditions for long-term contracts executed under the scheme

¹ Please note for the purposes of meeting the target, total electricity generation is defined to include estimated generation resulting from rooftop solar.

- *Scheme administration and cost recovery* – Who will administer the scheme and how scheme costs will be recovered
- *Auction evaluation principles* – How auction bids should be assessed and successful projects determined

Submissions are invited on the key issues set out in this document and any other matters that stakeholders consider relevant. Feedback received will be used to evaluate different policy design options, influencing the future direction of the scheme.

In addition to the stakeholder feedback being sought through this consultation process, the Department is also seeking legal and commercial advice on the scheme. This advice, as well as the stakeholder feedback received in response to this paper, will be drawn upon in finalising the ultimate scheme design. As a result, proposed positions outlined in this paper should be viewed as initial policy positions only.

Timelines

5 August – Consultation period opens

22-26 August – Consultation workshops held

31 August – Consultation period closes

Scheme Structure

The scheme will involve a series of tranching auctions for renewable energy capacity. Important considerations for these auction tranches will be how they are staged, what renewable energy technology will be auctioned and how auctioned capacity interacts with the Federal Large-scale Renewable Energy Target (RET).

Auction staging

A number of staged auctions will be held in the years to 2025. The volume of generation capacity auctioned and contracted under this approach will be set at a level deemed necessary to achieve Victoria's renewable energy generation targets for 2020 and 2025.

The Department understands that it is important that sufficient certainty is provided to industry to ensure that an adequate pipeline of projects is available to meet the targets. It also recognises that the requirement to provide industry with sufficient notice of upcoming auctions will need to be balanced against the need to maintain some flexibility for the Government to adjust the scheme where the market changes significantly.

The Government intends to address these issues by regularly committing to a pipeline of auctions with defined capacity amounts, with the first commitment to be the auction schedule to 2020.

Technology split

The majority of auctions are proposed to be renewable energy technology neutral. Based on current technology costs, this would see wind as the dominant technology under the scheme. The Government intends to auction a proportion of capacity for large-scale solar projects.

While there is estimated to be a small additional cost in targeting large-scale solar for selected auctions, there are also a range of potential benefits. Due to differences in the location of Victoria's best wind and solar resources, a large-scale solar 'split' would help spread projects and the resulting jobs and economic activity across a greater breadth of the State.

The construction of significant large-scale solar capacity in Victoria would also develop the Victorian solar industry, which would grow its capabilities to supply specialist skills and components for solar projects.

Diversification of Victoria's renewable energy portfolio would also help security of supply from the emerging generation mix in the wholesale market.

The Government is currently considering that 20 per cent of generation contracted through the auction scheme will be from large-scale solar. This proportion would seek to balance the slightly higher costs of solar and the transmission constraints in high-solar resource locations with the many benefits of technology diversification.

Interaction with Federal policies

The Government's intention is that the scheme will allow projects commissioned by 2020 to be 'complementary' to the Federal RET – i.e. projects would be eligible to create Federal large-scale generation certificates (LGCs) to acquit Federal RET obligations. LGCs will be either traded by successful project proponents or included within the auction process to be resold by Government. Projects that are complementary to the Federal RET will be able to trade LGCs until 2030, in line with Federal RET legislation.

This complementarity is intended to overcome persistent uncertainty around the Federal RET and difficulty in securing power purchase agreements. The value obtained from LGCs is expected to reduce the costs that need to be recovered under the scheme.

Projects commissioned after 2020 will be 'additional' to the Federal RET and will have to surrender any LGCs created to the Victorian Government. The proposed 2020 cut-off is based on an assumption that the capacity needed to meet the Federal RET will have been commissioned by that point in time, and that the Victorian Government will want to avoid oversupplying the LGC market.

Questions for stakeholders

How can the Department ensure that a pipeline of projects will be ready to meet the Government's targets for 2020 and 2025 while maintaining appropriate flexibility for Government to adjust the scheme where required?

How much notice should be provided to industry of upcoming auctions?

Should capacity be auctioned in consistent capacity tranches (e.g. 200MW etc)?

At what frequency should auctions be held?

What proportion of scheme generation should be dedicated to solar projects?

Should the proportion of solar be different pre and post 2020 to allow a solar pipeline to develop and technology costs to come down?

Are there any other matters the State should consider when setting the scheme's technology split?

What is the best way to treat LGCs under the scheme to enable successful proponents to secure project finance, ensure scheme costs are minimised and ensure adequate market interest from industry to participate in the auctions is attracted?

What are stakeholders thoughts about complementarity/additionality if the Federal RET were extended/expanded?

Payment Structure

Funding under the scheme will be awarded via long-term contracts between the scheme administrator and successful project proponents. There are a number of ways that funding payments can be made under the scheme to successful generators.

In selecting an appropriate payment structure, it is important that the structure balances the need to ensure sufficient revenue certainty to allow project proponents to seek finance for their projects, as well as the need to minimise scheme complexity and scheme administration costs. The payment structure should also appropriately allocate risk between the Government and project proponents.

Proposed payment structure –Contract for Difference (CfD)

To achieve the above objectives, the Department proposes to award funding under the scheme on a Contract for Difference (CfD) basis. A similar scheme design is being used currently by the Australian Capital Territory (ACT) Government through its renewable energy reverse auction process.

Under this payment structure, project proponents would be asked to put forward auction bids for funding based on a 'strike' price per megawatt hour (MWh) of generation. This strike price would reflect the cost of investing in a particular renewable energy technology. Projects offering the lowest strike price (as well as meeting other criteria) would then be awarded funding under the scheme in the form of a feed-in-tariff for the difference between the strike price and a reference price for electricity sold in the wholesale National Electricity Market (NEM) (as well as potentially the sale of LGCs).

In guaranteeing a set price for generation, a CfD payment structure secures a large percentage of a project's revenue stream. This gives certainty and stability of revenue to proponents by reducing their exposure to volatile wholesale electricity prices, thus allowing project financing at lower cost.

For the purposes of calculating the payment made paid to generators, a NEM reference price will need to be determined. At this stage, the Department is considering basing the reference price on a monthly average NEM price as opposed to the half hourly NEM price used in the ACT scheme. It is expected that basing the reference price on a monthly average will ensure projects continue to receive price signals from the NEM, improving the correlation between generation under the scheme and market demand.

Where a half hourly reference price is used, a NEM floor price may be employed for the purposes of calculating scheme payments. This may be set at a value equal to zero to effectively cap scheme costs and ensure the scheme does not distort the NEM significantly by incentivising generators to dispatch electricity even where NEM prices are negative in a given time period (this is particularly applicable where payments are made on the basis of a half-hourly NEM price period).

It is proposed that scheme revenue under this payment structure would be paid to the generator each month or quarter in arrears in one lump sum based on generation over the previous period. It is also proposed that generators will earn the strike price for energy *delivered* from their generators. Energy delivered will be defined for the purposes of paying generators as the MWh of electricity dispatched from a generator's site multiplied by the project's marginal loss factor (and distribution loss factor where a generator connects directly to the distribution network) as set by the Australian Energy Market Operator. This is intended to ensure proponents are appropriately incentivised to locate their projects in parts of the network that minimise line losses.

Alternative payment structure options

The Department is aware that there are alternative payment structures that could be used under the scheme. One example would be to award funding using a fixed payment contract.

Under this option, successful proponents would receive funding based on completing construction of new renewable capacity, irrespective of the level of generation dispatched by the generator thereafter. This funding would be in the form of a fixed payment each period over a number of years, with the level of the fixed payment to be determined through the auction process. Generators contracted under the scheme would then source further revenue outside the scheme by selling electricity to the NEM, and potentially generating and selling LGCs.

Preliminary analysis of this option, however, suggests that it is unlikely to directly address the barriers faced by project proponents in relation to difficulty in attaining finance for projects at reasonable costs. As this option would not secure as large a portion of a project's revenue stream as a CfD structure, it is expected that financing costs under this option would be greater due to the increased price risk exposure of projects, which would be subject to NEM price volatility. Given these higher financing costs, the Department believes bids proposed through the auction process using this option would be less likely to offer value for money to the State, driving up overall scheme costs.

Questions for stakeholders

Do stakeholders agree with the proposed CfD payment structure approach?

If a CfD payment structure is used, on what basis should a NEM reference price be set? (e.g. monthly average, half hourly NEM price)?

What would be the impact of adding a floor price to cap the total payment applicable in any one period?

Do stakeholders agree that payments should be made under the scheme based on energy delivered as defined above? Are there other ways that stakeholders consider are possible to provide locational signals to projects to ensure they are appropriately sighted on the network?

Do stakeholders consider that any alternative payment structures could be employed for the scheme, such as a fixed payment approach? If so, what are the relative advantages and disadvantages of these options?

Do stakeholders agree that a fixed payment approach would be less likely to address the barriers faced by project proponents in relation to attaining project finance, resulting in lower value for money bids?

Contracting elements

Contracts will be designed to provide certainty to project proponents and to establish a clear allocation of obligations between parties, including contingencies for unplanned events.

Contract terms

Key contract terms are expected to be provided to auction participants prior to bidding. This would enable contracts to be agreed and signed directly following the auction process.

Contract counterparty

The contract counterparty to successful project proponents will be determined by the final configuration of the scheme administration and cost recovery mechanism. This may be the State, a statutory agency, an electricity distribution business, or an electricity transmission business.

Contract length

Contracts awarded under the auction scheme are proposed to run for between 10 and 20 years. This seeks to provide the long-term certainty needed for projects to attain competitive financing, which will lower the total cost of the scheme to consumers.

Payment terms and frequency

To correctly incentivise project proponents to promptly construct and commission their projects, payments will be made once a project has started generating even though contract tenure will begin with the signing of contracts. Payment frequency is proposed to be on a monthly or quarterly basis in arrears. This would aim to balance monitoring and transaction costs for Government and other parties with the cash flow needs of successful project proponents.

Where scheme funding is awarded under a CfD approach, it is proposed that the contract would be based on a two-way CfD, requiring successful proponents to pay the scheme administrator where the NEM reference price exceeds the agreed strike price.

Termination clauses

To prevent protracted delays to projects, appropriate contract termination clauses would be included in the contracts.

Generation requirements

The Department is also considering including scheme contract elements which require the delivery of a minimum volume of electricity from participating generators. Where projects fail to do so, penalties would apply to compensate the State. A cap on the maximum volume that can be generated by a project under the scheme is also being considered to ensure scheme costs remain appropriate.

Questions for stakeholders

Are the above contract elements broadly appropriate?

Within the contract range of 10 to 20 years, is there an ideal duration, particularly with the aim of minimising project financing costs?

What would be an appropriate project delay threshold for contract termination clauses?

Would quarterly payments have a significant impact on financing costs compared to monthly payments?

What are the implications of a two-way CfD?

What do stakeholders think about the generation requirements being considered? Where maximum and minimum generation volumes are contained in scheme contracts how should these be set?

Are there any other contract elements that should be considered?

Are any of the elements likely to lead to perverse outcomes?

Scheme administration and cost recovery

It is proposed that scheme costs will be recovered via either electricity distribution businesses, the State's privatised transmission business, or electricity retailers, and ultimately passed through to customers' bills.

To enable this, a regulatory obligation will be levied on one of the above parties. Examples of such requirements that have been used in the past include the:

- Legislative obligation under the *Electricity Industry Act 2000* for electricity distribution businesses to pay customers a credit for electricity exported to the grid from small-scale solar systems; and
- Legislative obligation for distribution businesses to undertake and pay for a state-wide roll out of smart meters.

Where a regulatory obligation is placed on a distribution or transmission business subject to regulation by the Australian Energy Regulator (AER), scheme legislation placing the requirement on the party would be designed to allow the businesses to pass on the costs associated with complying with the requirement to their customer base.

In deciding on the most appropriate cost recovery and scheme administration design, the Department's objectives are achieving:

- Administrative simplicity;
- Flexibility to vary the amount recovered as scheme costs increase/decrease over time;
- Transparency (in relation to how cost recovery has been undertaken); and
- Minimised monitoring and compliance costs.

While a final position on the mechanism used to recover scheme costs will be dependent on legal advice being sought by the Department, the Department considers that cost recovery through electricity distribution charges is most likely to achieve the above objectives.

If scheme costs were recovered through electricity distribution charges, it is anticipated that scheme costs would be apportioned across the five Victorian distribution business network areas based on their relative loads.

The following table demonstrates the Department's assessment of each of the cost recovery options against the Department's design objectives as set out above.

Cost recovery mechanism	Administrative simplicity	Flexibility in amounts recovered	Transparency	Minimising costs of monitoring & compliance
Legislative obligation on distribution businesses (DBs)	✓ There are only 5 DBs with a fixed number of customers. This will result in administrative ease where scheme costs are spread based on the relative loads of each business	✓ DBs can adjust network tariffs on a 6-monthly or annual basis in line with changing scheme costs (requires AER approval)	✓ DBs are regulated by the AER and are required to submit a breakdown of costs which must be approved by the AER before they can be passed on to customers	✓ A framework for monitoring compliance with regulatory requirement cost pass throughs is already in place
Legislative obligation on electricity retailers	x The customer bases of different retailers are constantly changing due to switching, making it very hard to calculate each retailers liability under the scheme based on the load of their customers. New retailers are also continuously entering the market, with others leaving.	✓ Victorian retailers are not subject to price regulation and therefore will be able to pass on scheme costs as they change over time.	x Retailers currently operate in a market free from price regulation. There would be no requirement on them to disclose how scheme costs were passed on to customers.	x Monitoring of cost recovery practices would require a new compliance framework to be established to undertake this role. With more than 15 active retailers currently in the market the costs of doing so are likely to be significant.
Legislative obligation on the State's one transmission business	✓ As noted there is only one transmission business in Victoria, also with a fixed customer base. This would make calculating scheme liabilities based on relative customer loads very simple.	✓ AusNet Services can adjust its network tariffs on a 6-monthly or annual basis in line with changing scheme costs (requires AER approval)	✓ AusNet Services as the transmission network operator is regulated by the AER and required to submit a breakdown of costs which must be approved by the AER before they can be passed on to customers	✓ A framework for monitoring compliance with regulatory requirement cost pass throughs is already in place

Scheme administration

The Department is currently considering a number of options in relation to how the scheme will be administered.

The options being considered include requiring one of the following parties to administer the scheme on behalf of the Government:

- A statutory Victorian Government agency (either existing or newly created for this purpose);
- Victorian electricity distribution businesses; or
- The State's privately owned transmission business.

The role of the administering body would include forecasting future scheme costs, paying generators awarded contracts under the scheme on behalf of the State, and managing any under or over recovery of scheme costs.

Where responsibility for scheme administration is required of distribution or transmission businesses, the legislation empowering the scheme would be created to allow appropriate pass through of costs associated with undertaking this role.

Questions for stakeholders

What are the relative advantages and disadvantages of the different scheme administration and cost recovery options listed above?

Is there another mechanism for recovering scheme costs the Government should consider that would result in better outcomes?

The Department's proposed position is currently to exempt emission intensive trade exposed companies (as defined under the Federal Government's RET scheme) from paying scheme costs. Do stakeholders agree with this approach? Are there any other parties Government should consider exempting from scheme costs? If so, how should this occur?

Auction evaluation principles

The Department is developing the structure of auctions under the scheme and will consult further on their design.

An important element in auction design will be the evaluation principles that should be considered when assessing auction bids. The Department proposes the following evaluation principles will be considered in setting final evaluation criteria (and relative weightings) through the auction process:

Evaluation principle	Factors expected to be assessed
Value for money	This will include the project costs and auction price bid, with lower bids helping to minimise scheme costs for Victorian consumers.
Economic development	The ability of projects to contribute to Victorian economic development will also be viewed favourably. In particular, the contribution of projects to Victorian jobs, development of supply chains (including services and manufacturing capability), maximising local content, promotion of local industry competitiveness, regional development and broader economic benefits (such as headquarter siting) will factor into auction evaluation.
Electricity transmission network interactions	Consideration will be given to a project's progress towards attaining a network connection, and the direct and indirect costs of doing so, such as required transmission line augmentation. Where appropriate, greater weighting will be attributed to projects that assist with grid stability and result in lower overall network augmentation costs to being passed on to Victorian electricity consumers.
Wholesale market participation	Projects will be expected to be NEM metered, rather than operating 'behind the meter' or off-grid.
Timely construction and operation	Achieving Victoria's targets by 2020 and 2025 will require the selected projects to be completed in a timely manner. The ability of projects to complete construction and begin full operation within a specified timeframe will be a crucial part of auction evaluation. This will include consideration of a project's financial and planning status as well as the capability and capacity of the proponent to successfully implement the project.
Contribution towards Victoria's targets	The ability of a project to support the achievements of the Government's targets will be crucial. For example, a project with a high capacity factor (the average output for a given amount of installed capacity) would make a greater contribution to Victoria's targets than an equivalently priced project with a lower capacity factor.
Community engagement	Projects will be expected to demonstrate best-practice community engagement. This is expected to include engagement activities undertaken in the planning stage of project development, as well as plans for ongoing community engagement during project construction and operation. Further guidance on community engagement practices is expected to be provided to participants in the period before the auction process.

Questions for stakeholders

What do stakeholders think of the proposed evaluation criteria set out above?

Do stakeholders have views on how evaluation criteria might be weighted?

Are there other evaluation criteria/principles that the Government should consider to ensure the scheme meets its objectives?

Are the costs associated with developing a proposal to bid into the scheme based on addressing the above criteria effectively likely to be prohibitive?

What would be appropriate minimum project sizes (both in general and for large-scale solar)?

Would there be benefit in asking proponents to submit expressions of interest to participate in the auctions to ensure only more advanced projects proceed to the full evaluation round and that costs are minimised for project proponents where possible?

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