# Working together for renewable, affordable, reliable energy for all Victorians.

# Strategic Plan

# 2023-2035

## Acknowledgement of Country

We acknowledge and respect Victorian Traditional Owners as the original custodians of Victoria’s land and waters, their unique ability to care for Country and their deep spiritual connection to it. We honour Elders past and present whose knowledge and wisdom has ensured the continuation of culture and traditional practices.

We are committed to genuinely partner, and meaningfully engage, with Victoria’s Traditional Owners and Aboriginal communities to support the protection of Country, the maintenance of spiritual and cultural practices and their broader aspirations in the 21st century and beyond.

## Our partnership with First Peoples

We are committed to Aboriginal self-determination and have been working with Traditional Owner Corporations to develop a set of principles to guide our operations and relationship with Victoria’s First Peoples.

The five guiding principles are:

* Recognising, prioritising and embedding the unique knowledge and wisdom of Traditional Owners, which includes caring for and speaking for Country.
* Establishing a renewed relationship with First Peoples in Victoria to ensure that First Peoples can share in the benefits of Victoria’s renewable energy transformation.
* Empowering Traditional Owners and Victorian Aboriginal communities to identify their evolving aspirations and determine their relationship with the SEC.
* Embedding governance principles, policies and processes to ensure the collective support and decision-making of First Peoples.
* Ensuring Victoria’s energy transition preserves, restores and strengthens the rights of Traditional Owners and does not diminish the rights that have been secured to date.

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## Message from the Premier

Victoria has set some of the most ambitious renewable energy, emissions reduction and storage targets in the country – and the world:

* a 75 to 80 per cent lowering of emissions by 2035
* ninety-five per cent renewables and at least 6.3 GW energy storage by the same year
* net zero by 2045
* ending our reliance on coal – for good.

We’re already making strong progress, with Victoria currently generating 38 per cent of its energy from renewables. But we have a way to go, and not a day to waste.

That’s why the SEC’s 10-year Strategic Plan sets out three key areas of focus: supply, homes, and people.

We will invest in renewable energy generation and storage, as a market participant. We will support households to switch to all-electric. And we will build the renewables workforce needed to drive the transition. Importantly, the SEC will help create 59,000 jobs – including 6,000 trainees and apprenticeships – in solar, wind, storage, and other emerging energy sectors.

Coordinating this workforce will be central to building, maintaining and operating the energy assets we need for Victoria’s renewable energy transition. Because to deliver the projects, we need to secure the workforce.

So, my pitch to anyone considering their next steps is this:

The investment and the projects are there – so there will always be work. The training and support are there – so you can navigate your path through. You might be among the first Victorians to work their whole career in renewable energy jobs.

These are the jobs of the future – and the chance to be part of something big.

The chance to say “I was there. I helped build that.” The chance to change our state – and our planet – for the better.

Premier of Victoria

## Message from the Minister

Electricity powers every part of our lives and economy. It’s essential to everything we do. But Victoria’s dependence on coal-fired power increases our carbon emissions and threatens the reliability and affordability of our power supply.

We must and will end our reliance on coal. That’s why we’re taking decisive action to achieve Victoria’s nation-leading renewable energy targets of 95 per cent renewables by 2035, and economy-wide net zero emissions by 2045.

Through close engagement with communities and industry, we are bringing the best ideas to the fore and making significant progress.

As of July 2023, our renewable energy policies and programs have driven our State to achieve:

* 5,258 megawatts (MW) of commissioned large-scale wind and solar capacity
* 4,030 MW of small-scale rooftop PV capacity
* 537 MW of commissioned battery storage capacity.

But we need to do more. We need to accelerate. To be bolder and move faster.

Achieving our targets will require seamless coordination across industry and government.

As a government-owned renewable energy company, the SEC will play an important role. It will partner with industry to invest an initial $1 billion towards new renewable energy generation and storage as coal-fired power stations continue to close.

Through its actions, the SEC will build industry confidence and attract more investment in renewables to accelerate the energy transition and help create 59,000 new jobs to construct, maintain, and operate renewable energy assets. Also, by increasing the supply of low cost, renewable electricity, it will put downward pressure on our energy bills.

The SEC is for everyone. Families are feeling the pressure of high energy bills and cost of living more broadly. We are committed to ensuring Victorians remain at the heart of the transition.

Victorians want a renewable energy future, and the new SEC will support households by developing products and solutions to help them switch to electric and bring down their energy bills.

Bringing back the SEC will give Victoria more control of our power supply – powering Victoria for Victorians.

The Hon. Lily D’Ambrosio MP Minister for the State Electricity Commission

## Message from the Treasurer

As Victoria’s Treasurer, it’s my responsibility to create value for Victorians. To invest wisely and do what matters: creating jobs, driving economic growth, building a better future.

By bringing back the SEC we are investing in Victoria’s renewable energy future, creating lasting value for current and future generations.

As well as helping achieve Victoria’s nation-leading renewable energy targets, the new SEC will support the creation of 59,000 jobs and increase Gross State Product by about $9.5 billion through the energy transition.

It will help decarbonise our economy, attract billions in investment and create rewarding, well-paid jobs and training opportunities that underpin our prosperity.

We’ll train thousands of workers to play their role in providing cheaper, renewable energy to all Victorians, helping combat the rising cost of living.

By re-establishing government-owned energy and investing in essential renewable and storage assets, we will drive economic growth and increase investment from interstate and overseas.

We will leverage and catalyse private investment from a wide range of co-investors to fast-track and deliver projects that would not have been delivered at the same speed, or at all, without the SEC’s involvement.

We will partner with the energy sector to develop, build and manage these projects, drawing on the sector’s deep expertise.

We will create new local jobs and put downward pressure on energy prices, so all Victorians share in the benefits of our energy transition.

And as a government-owned renewable energy company, we will reinvest our returns into Victoria’s renewable energy future on behalf of all Victorians.

Tim Pallas MP

Treasurer

## SEC Commitments – an update

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|  |  |  |
| --- | --- | --- |
| VICTORIAN GOVERNMENT ACTIONS | WORK TO DATE (OCTOBER 2023) | WORK TO COME |
| 1.Bringing back the SEC to deliver affordable, reliable renewable energy for Victoria.  The new SEC will become an energy market proponent under a 10-year plan, with profits invested back into the energy system. | 1. Established the SEC Implementation Office tasked with setting up the SEC. 2. Established SEC Victoria Pty Ltd. 3. Appointed a highly credentialled Expert Advisory Panel to guide development of the SEC’s strategic plan. 4. Worked with Traditional Owners to develop engagement principles. 5. Listened to stakeholders from across the energy sector, the education and training sectors, and from across industry to help inform SEC’s strategic direction. 6. Released the SEC strategic plan. 7. Commenced search for the SEC board of directors. | Appoint an independent board and build the SEC team to deliver the strategic plan.   * 1. Deliver the SEC strategic plan, focused on:   2. -Investing to accelerate the energy transition   3. -Supporting the switch to all-electric households   4. -Building a renewable energy workforce   5. Educate and engage industry and households on the options and benefits of home electrification, including how they can access trusted resources to support their energy decisions.   6. Pilot household solutions to reduce energy costs with the view to rolling out to more households over time. |
| 2. Invest an initial $1 billion towards delivering 4.5 GW of renewable energy. | Released a Pioneer Investment Mandate and conducted a market search and assessment to identify the first investment.  Received and assessed more than 100 registrations of interest in response to the Pioneer Investment Mandate, including more than 30 GW of storage and 24 GW of generation. | Announce pioneer investment by end of 2023.   1. Invest initial $1 billion towards 4.5 GW of new renewable generation and storage. 2. Build pipeline of potential assets and technologies aligned with short and long-term supply strategy. 4. SEC to take responsibility for Victorian Renewable Energy Target (VRET 1 & 2) and Bulgana contracts from 2025. 5. SEC to begin servicing Victorian Government 6. energy requirements from 2025. |
| 3. Incorporate renewable energy into the VET Delivered to School Students (VDSS) Core Offering.  4. Develop renewable energy into the vocational education and training (VET) certificates and other qualifications that will deliver world-class training and career pathways for Victorians. | The Department of Education (DOE) created a new ‘Clean Energy and Engineering Pathway’ in the VDSS Core Offering  Existing VDSS Core Offering certificates that are related to work in renewable energy have been included in the new Clean Energy and Engineering Pathway.  The DOE undertook extensive consultation with key stakeholders including Clean Energy Council, TAFEs, schools, students, industry representatives, and other government departments, when determining what certificates should be included in the new pathway.  The Department of Jobs, Skills, Industry and Regions (DJSIR) began planning to develop new renewable energy certificates, informed through consultation and engagement activities undertaken with industry and at the SEC Energy Jobs and Skills Forum. | DJSIR to continue working with industry and the training sector to identify new training needs and inform the development of relevant certificates and training products by 2026.  The DOE will work closely with the Victorian Curriculum and Assessment Authority to ensure that any new certificates developed are assessed for suitability for senior secondary students and for incorporation into the VCE-VET programs and VDSS Core Offering.  SEC to support the DOE and DJSIR to promote the above initiatives through ongoing engagement with students at schools, career days and events. |
| 5. Help create 59,000 new renewable energy jobs as part of the energy transition, including 6,000 new apprentices and trainees.  6.Establish the SEC Centre of Training Excellence to coordinate courses in renewable energy, connecting with TAFEs, registered training organisations, unions and industry. | Hosted the SEC Energy Jobs and Skills Forum with more than 300 experts and stakeholders to help shape the Victorian Energy Jobs Plan and inform development of the SEC Centre for Training Excellence.  Engaged with Traditional Owners, industry, schools, TAFEs, universities, and industry-based registered training organisations to gather insights and discuss needs and opportunities.  Contributed to the Victorian Energy Jobs Plan, which will identify skills and training needed to support renewable energy industries, including offshore wind and solar.  Began developing a business case for the SEC Centre of Training Excellence. | Continue engagement with stakeholders and complete the business case for the SEC Centre of Training Excellence, with implementation beginning from mid-2025.   1. Promote local workforce opportunities through pioneer investment. |
| 7. Raise awareness of career opportunities in renewable energy through ongoing engagement with students at career days and events.  8. Visit government schools and career nights to promote career opportunities in renewable energy. | 1. Engaged with more than 300 secondary school students through the Gippy Youth New Energy Summit in Sale. 2. Engaged students and future workforce through SEC Energy Jobs and Skills Forum, and events such as the Gippsland New Energy Conference, Melbourne Royal Show, and the Careers for Net Zero Fair. 3. Commenced discussions with the Department of Education to explore collaboration opportunities and most effective methods for reaching schools.   Planning underway to engage more students through career nights and events, including through tech schools. | 1. SEC to attend career nights and events from late 2023 to engage thousands of students to build awareness of career opportunities in renewable energy. This will scale up by 2025. 2. Identify more avenues to engage and excite students about renewable energy careers through the SEC Centre of Training Excellence business case. |
| 9. Establish an SEC presence in the Latrobe Valley. | 1. Secured office space in Morwell. 2. Confirmed all advertised SEC roles to be based in Melbourne or Morwell. | 1. Recruitment for SEC roles to begin in November 2023. Roles to be based in Melbourne and/or Morwell. |
| 10. Enshrine the SEC in Victoria’s Constitution | 1. Started drafting a Bill to amend the Constitution Act 1975 to enshrine the SEC into the Victorian Constitution. | 1. Constitutional Enshrinement Bill to go before Victorian Parliament in 2023. |

## Message from our interim CEO

The SEC was first established in 1918 to free Victoria from its reliance on imported coal and provide electricity to power our economy.

More than 100 years later, we’re re-establishing the SEC to free Victoria from its reliance on fossil fuels and unlock the opportunities of our renewable energy transition.

Getting the SEC’s strategy and operating model right has been a critical first step. Our Expert Advisory Panel, comprising some of Australia’s most credentialled business and energy leaders, has supported us to ensure the SEC delivers the benefits of the energy transition to all Victorians.

Our purpose is to create renewable, affordable, reliable energy for all Victorians, and we have a clear strategy to achieve it. This includes investing in renewable energy generation and storage; supporting households to go

all-electric; and helping build the renewables workforce needed to drive the transition.

These are big goals, and we must all work together to achieve them. The SEC is engaging with industry, training and education providers, Traditional Owners,

communities and other parts of government, to inform our approach.

Our pioneer investment received more than 100 Registrations of Interest. We have assessed these proposals and will announce our first investment by the end of the year.

The SEC Energy Jobs and Skills Forum in June was a great example of coming together around a shared purpose. The forum attracted more than 300 people to discuss the opportunities and challenges our energy transition will bring.

There has never been a more exciting time to be part of Victoria’s energy sector. The SEC team is ready to help drive Victoria’s renewable energy transition and bring our strategy to life.

## Who we are

Here at the SEC, we are working together to deliver renewable, affordable, reliable energy for all Victorians.

We are a government-owned renewable energy company, focused on:

* Investing in renewable energy and storage projects that accelerate the transition and deliver commercial returns
* Supporting households to go all-electric to reduce their energy bills
* Building the renewable energy workforce our energy transition requires.

We are partnering with industry to transform the energy sector, driving further innovation and investments in renewables. This includes an initial $1 billion towards delivering 4.5 GW of new renewable energy and storage projects – the equivalent replacement capacity of coal-fired power station Loy Yang A, which is set to close in 2035.

We will play an important role in helping Victorian households to reduce their energy bills and emissions by offering simple and practical solutions to help them switch to all-electric.

The energy transformation will create thousands of jobs. We will help address the need for new skills in solar, wind, storage, small-scale energy solutions and emerging technologies, by working with schools, TAFEs and other educational institutions to support the development of training and skills to build the renewable energy workforce of the future.

Our work will help build a more reliable, affordable, renewable energy future and ensure Victorians can access the benefits of the transition.

## Expert Advisory Panel

The SEC was established with support and advice from an Expert Advisory Panel, which brought together some of Australia’s most prominent energy sector and business leaders.

* John Bradley, Secretary of the Department of Energy, Environment and Climate Action and Chair
* Audrey Zibelman, former Managing Director and CEO of the Australian Energy Market Operator
* Anna Skarbek, Climateworks Centre CEO
* Andrew (Andy) Penn AO, former Telstra CEO
* Dr Alan Finkel AC, former chief scientist, neuroscientist and engineer
* Jo Benvenuti, an experienced executive, board member and consultant specialising in consumer engagement and energy and water policy

Each Panel member brought specific expertise to guide the SEC’s strategic focus and establish the foundations that will help accelerate Victoria’s energy transition.

The Panel guided the design of the SEC’s legal form, governance, strategy and investment search to maximise the benefits of public energy ownership for all Victorians. Dr Finkel concluded his work with the Panel as it reached the end of its initial term in June 2023.

The remaining panel members continued to work with the SEC to finalise and endorse the Strategic Plan, concluding their work in October 2023. A board of directors will now be appointed to oversee the SEC’s ongoing operations and the delivery of the Strategic Plan.

## Our guiding principles

The SEC’s activities are underpinned by three guiding principles:

**Public purpose**

Provide broader benefits to the Victorian community and consumers, including:

* Improving energy affordability and reliability
* Delivering more equitable access to benefits of the energy transition and better outcomes for consumers
* Creating local jobs and maximising local capability
* Supporting underserved and vulnerable customer cohorts
* Building relationships with Victoria’s First Peoples, ensuring the SEC recognises the rights and authority of Traditional Owners.

**Market enablement**

Operate in a way that accelerates the energy transition, by:

* Maintaining private investor confidence in the Victorian energy market
* Catalysing private sector investment
* Supporting the development of a workforce equipped with required skills
* Sharing lessons learned where appropriate.

**Sustainable financial returns**

Earn a financial return across the portfolio that:

* Enables the SEC to generate cash flow to sustain itself (i.e., meet its own costs) within an acceptable timeframe
* Meets appropriate hurdle rates of return, enabling the government to reinvest returns into the system on behalf of the Victorian people.

## Our strategy

### Our purpose

Working together for renewable, affordable, reliable energy for all Victorians.

### Our vision

Accelerate Victoria’s transition to an affordable, reliable, equitable and zero-emissions electricity system that enables decarbonisation across the economy, in partnership with Traditional Owners, the private sector and in coordination with government initiatives.

### Our strategic pillars

#### Invest to accelerate the energy transition

Invest in new renewable energy and storage projects that accelerate the transition and help deliver affordable, reliable energy for Victorians, while achieving sustainable financial returns.

#### Support the switch to all-electric households

Supply Victorians with simple and effective solutions that help them to reduce their energy costs and emissions, starting with the electrification of their homes.

#### Build a renewable energy workforce

Support the attraction, training and retention of a skilled renewable energy workforce, including through the SEC Centre of Training Excellence.

### Our values

#### Uniting

We’ll accelerate an orderly energy transition, bringing together Traditional Owners, investors, public and private sectors, and all Victorians.

#### Nimble

We’ll be open-minded, pragmatic and value agility in our partnerships, investments and operations.

#### Fair

We’ll share openly and honestly, earning the trust and support of our partners and the community, and ensuring equity and integrity in what and how we deliver for Victorians.

### Our guiding principles

#### Public purpose

Ensuring more Victorians benefit from the renewable energy transition.

#### Market enablement

Unlocking opportunities and increasing market investment to address system needs.

#### Sustainable financial returns

Investing Victorians’ money wisely to deliver sustainable returns.

## Addressing Victoria’s energy market needs

The SEC will address Victoria’s energy market needs across the value chain, from generating renewable power to helping households and job seekers benefit from the transition.

As coal-fired electricity generators continue to close, Victoria must increase its renewable energy generation and storage capacity to maintain affordability and reliability for households and businesses.

By investing in renewable energy generation and storage, we aim to help consumers reduce their exposure to high, volatile prices and offer firmed, renewable electricity solutions to help government and smaller commercial and industrial (C&I) businesses meet their decarbonisation goals.

More Victorians are becoming aware of the benefits of home electrification, but the complexity and upfront costs can be barriers to switching.

We will encourage more households to switch by offering simple pathways and solutions to help.

The transition to net zero presents significant opportunities for workforce upskilling and reskilling. We’ll keep working with industry and education providers to deliver the future energy workforce Victoria needs.

|  |  |  |
| --- | --- | --- |
| SEC FUNCTION | WHAT THE SEC WILL DELIVER | HOW IT HELPS TO ADDRESS VICTORIA’S ENERGY MARKET NEEDS |
| Invest to accelerate the energy transition | Invest in new renewable energy and short duration commercial storage to improve reliability and market certainty New renewable energy and capacity is needed in the market as coal exits to maintain reliability and affordability | Invest in new renewable energy and short duration commercial storage to improve reliability and market certainty New renewable energy and capacity is needed in the market as coal exits to maintain reliability and affordability |
|  | Develop options for future investment in long duration assets and offer capacity products in the market | Reduces retailers’ and C&I customers’ exposure to high, volatile prices through the offering of capacity products |
|  | Combine existing renewable projects with new storage assets and offer 100% renewable energy products | Supports customers, including government, to achieve their renewable energy and decarbonisation goals |
|  | Serve C&I customers with firmed energy supply agreements, helping them achieve their goals | Small C&I customers are currently unable to access power purchase agreements to meet their cost and decorbonisation goals |
| Support the switch to all-electric households | Offer electrification solutions to Victorians, solving challenges like high upfront costs and complexity | Provision of new energy solutions to help reduce household bills and carbon footprint |
| Build a renewable energy workforce | Be an employer, drive attraction and support training in the sector, and advocate for sector-wide workforce development | Helps overcome renewable energy sector skilled workforce challenges and reduces risks to project development |

## Invest to accelerate the energy transition

By 2035 Victoria will need 25 GW of new renewable energy and storage capacity. The SEC will contribute 4.5 GW to this by investing in new renewable energy generation and storage.

Our work will ensure Victorian households and businesses continue to have the power they need as we transition to renewable energy. This includes working with the industry to invest in wind and solar electricity generation and energy storage.

By focusing our investments on opportunities such as storage, we can address critical system gaps and help catalyse investment in wind and solar to replace assets such as ageing coal-fired power stations.

We will leverage Victorian Renewable Energy Target auctions and the Bulgana Green Power Hub (VRET 1 & 2 and Bulgana) to help the Victorian Government meet its pledge of using 100 per cent renewable electricity across all its operations, facilities and services by 2025.

We will also seek ways to provide competitive 100 per cent renewable energy products to C&I customers so they can achieve their decarbonisation commitments. Finally, we will continue to explore investment opportunities in new and emerging technologies that improve efficiency and will help Victoria maintain reliable and affordable energy long-term.

### Key actions

1. First investment in renewable energy generation or storage announced by end of 2023
2. Begin servicing Victorian Government electricity requirements from 2025
3. SEC to take responsibility for VRET 1 & 2 and Bulgana contracts by 2025
4. Build pipeline of potential assets and technologies aligned with short and long-term supply strategy.

## How we invest

The SEC’s investment decisions will be assessed against investment criteria that enable us to navigate market uncertainty while remaining anchored to our guiding principles.

The criteria will ensure our investments work to achieve sustainable returns and provide broader benefits to the Victorian public, while accelerating the energy transition.

Through this approach we will build up a minimum 51 per cent equity interest across our portfolio over time.

In assessing and prioritising investment opportunities, we will balance the following considerations:

ENDURING INVESTMENT CRITERIA

|  |  |  |
| --- | --- | --- |
| Public purpose | Market enablement | Sustainable financial returns |
| Local jobs and capabilities Extent to which local jobs are directly and indirectly created | System value Extent to which investments support a reliable, renewable energy electricity system | Sustainable financial returns Expected risk-adjusted financial returns |
| Price pressure Impact SEC will have on the cost of energy to consumers | Additionality Extent to which investments are additional to what the market would otherwise provide |  |
| Equity Extent to which the SEC promotes equitable access to renewable energy and alleviates energy-related challenges for vulnerable populations | Deliverability Scale of renewable generation and storage capacity enabled by the SEC |  |

## Investment decision making cycle

The SEC will be agile and flexible in decision-making, assessing market needs, and working to address challenges and opportunities as they arise.

We will adapt future investment decision-making to meet emerging needs by monitoring and learning from the performance of our existing assets and market changes.

We will work closely with the Victorian Government to ensure our work benefits all Victorians, delivering sustainable returns that can be reinvested in renewables and initiatives to accelerate the energy transition.

#### Investment decision making cycle

1. Assess energy market needs
2. Monitor portfolio performance
3. Apply investment criteria aligned to guiding principles
4. Implement suitable investments

## Our role as a market participant

The SEC will complement the growing renewable energy market by working with industry to identify investments that will deliver renewable energy, jobs and value for Victorians.

By focusing on opportunities such as storage, we will address system gaps and help build confidence for the industry to invest in projects that will accelerate the energy transition.

In the near term (2024–2028), we will focus on addressing existing market opportunities, such as supplying government and smaller C & I customers with firmed renewable energy supply to meet their energy and decarbonisation needs.

The SEC will invest in both renewable energy generation (wind and solar) and commercial storage in order to supply these customers with affordable, reliable renewable energy.

Over time, we will focus on developing long-term options, such as securing rights for long duration energy storage (LDES), and other renewable firming capabilities.

In addition, the SEC will explore opportunities to increase benefits offered to C & I customers through options such as strategic behind-the-meter assets and partnering in the development of renewable industrial hubs.

Our flexibility means we can pivot to meet emerging industry needs and take advantage of new technologies in the renewables market.

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| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | | **Near-term strategy** | | | | **Longer-term strategy** | | | | |
| Market context | Energy Market Milestones | 2026 Humelink, EnergyConnect | 2028 Western RE Link | 2028 VNI West | | By 2029-31 Marinus link | | | | |
|  | Market Needs | Need for short-duration storage capacity and additional interconnection to enable further renewable generation investment | | | | Need for storage capacity and additional interconnection to provide firming as coal exits and more renewables enter | | | | |
|  |  |  | | | |  | | | | |
| SEC Strategy |  | Well defined near-term strategy | | | | Options for longer-term strategy to respond to market needs | | | | |
| Renewables & Storage | VRET (existing) + New renewable energy + Commercial storage (2-4 hr) = ~2.6GW | | | + | Illustrative future technology options to deliver 4.5GW+ | | | | |
| Short-duration storage | New renewables | | LDES | Renewable firming |
| Customer | Government and small C&I with firmed energy supply agreements | | | + | Future customer and product options | | | | |
| Continue and extend C&I and govt, firmed renewable energy supply, including exploring opportunities for renewable industrial hubs | | Sell capacity products to retailers to replace products sold by coal assets | | |
|  | Portfolio Optionality | Develop long-term options and/or secure development rights in LDES renewable firming by acquiring sites, permitting, etc. | | | + | Strategically deploy longer-term portfolio options | | | | |

## Our immediate focus —by 2028

In the near-term, the SEC will invest an initial $1 billion in renewable energy generation and storage projects.

We will assess these investments in line with our guiding principles to accelerate the transition, achieve sustainable returns and provide broader benefits to the Victorian public.

We will invest in short duration (two-to-fourhour) battery storage and use the offtakes from government projects contracted through VRET 1 & 2 and Bulgana, to offer firmed energy products.

These products will help customers to reduce their exposure to high energy and volatile prices and achieve their decarbonisation goals, including the government’s pledge to have 100 per cent renewable electricity across all of its operations and facilities by 2025.

It will also enable us to service new market segments, such as smaller scale C&I customers who cannot access traditional power-purchase agreements.

This strategy will ensure we quickly secure a large customer book and a firmed renewable energy generation portfolio so we can scale faster and rapidly secure our role as a significant participant in the Victorian energy market.

This base will also support the growth of our strategic projects pipeline and allow us to expand quickly into supplying firmed energy products to commercial and industrial customers, further advancing the energy transition.

Proposed short-term SEC portfolio strategy (now – 2028)

###### **Short duration battery assets**

Investments in 2–4 hour duration batteries

###### **New generation + offtakes from existing projects**

VRET 1 & 2 and Bulgana contracts will be transferred to the SEC

Renewables generated through these projects will be combined with storage assets to create valuable, firmed products

**Firmed products**

Firmed products with hedging for sustainable returns giving customers access to affordable, renewable electricity

###### **Government and C&I loads**

Government will be the SEC’s foundational electricity customer, using VRET 1 & 2

and Bulgana to meet its 100% renewable electricity target.

## Support the switch to all-electric households

Victorians want a renewable energy future and have shown a strong appetite for moving to all-electric homes. But we still face challenges in reducing our home energy bills and emissions.

With around 80 per cent of households connected to gas, Victorians use more gas at home than any Australian state. Switching heating, hot water and other appliances to electric will help reduce emissions and energy bills. In fact, whole home electrification can lower household energy bills significantly.

The SEC will support households by developing products and solutions to help them switch to electric. There are challenges. Factors such as long lead times and price volatility affect supply chains.

Education and training are needed to ensure tradespeople, installers, and other industry practitioners have the knowledge and skills to support households to switch to energy-efficient appliances.

Cost and complexity can be barriers to switching, and many people don’t know about the services and technologies available or the longer-term financial benefits.

The challenges are even greater for tenants and those who live in apartments. The SEC will find solutions to help more Victorian households access renewable energy and improve their understanding of the support available to make the switch.

### Key actions

1. Pilot household solutions in 2024 with the view to roll out to more households over time
2. Educate and engage industry and households on the options and benefits of home electrification, including how they can access trusted resources to support their energy decisions

## Helping households

As a government-owned business, the SEC will ensure that more Victorians benefit from the renewable energy transition.

We will support households, including renters, to go electric by providing products and services that remove some of the barriers to switching.

We will focus on products that align with our guiding principles to accelerate the transition, deliver sustainable returns on the capital we are investing on behalf of Victorians and provide broader benefits to the Victorian public, such as local employment and lower power bills.

### Consumer challenges

1. Upfront costs
2. Complexity of market and lack of awareness
3. Process complexity

The SEC could address these challenges by designing products that:

* Help consumers more quickly realise financial benefits
* Streamline complicated, multi-stakeholder orchestration to create simple, seamless experiences for consumers
* Leverage its trusted brand to deliver credible information to customers on the benefits of new technologies and trusted providers.

### More affordable energy

Through our investments, the SEC will push more energy into the system, putting downward pressure on wholesale power prices and delivering benefits for all Victorians.

We will support Victorians to electrify their homes. Electrifying our homes can cut household energy bills by close to 60 per cent and remove the health impacts of gas cooking and heating.

**Indicative annual savings for average Victorian home from electrification\***

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  | Electrification savings | | | Solar savings | Total savings |
| $4390 Annual energy bill for dual-fuel home, no solar | -$780 Heating and cooling | -$250  Hot water | -$375 Cooktop (incl. fixed charge) | -$1,335  Solar | -$2740 (62%) |
| $1650 Annual energy bill after all electric + solar |
| \* based on an average existing detached dwelling | | | | | |

### A focus on where it matters most

We will focus on what matters most in supporting Victorians to electrify their homes.

This includes transitioning from gas heating, hot water and cooking to electric options such as reverse-cycle heating and air-conditioning, heat pump hot water, and induction cooktops.

Heating1

1.2m households

Gas, non-ducted

Gas, ducted

Hot water1

1.4m households

Gas, instant

Gas, storage

Cooking2

1.7m households

Gas

1. Switch and Save: How Gas is Costing Households, Climate Council of Australia, 2022
2. Energy Consumers Australia, 2022

## Case Study

### Energy upgrades deliver a feel-good bonus

When Claire Jefford bought her home in Clifton Springs eight years ago, she planned to stay for the long haul. Built in the 1970s, the single brick three-bedroom house wasn’t energy efficient, with poor insulation, gas heating, gas stovetop and instant-gas hot water.

So, Claire, who shares the home with her wife and two children, began upgrading to improve energy efficiency and lower their household bills.

The family has installed reverse-cycle air-conditioning and recently invested in a 6.6KW solar system. Soon, they will replace the instant gas hot water system with heat-pump hot water, which will be set to heat during the day to make the most of the energy they generate through their solar panels.

Passive solar improvements include replacing the damaged tiled roof with Colorbond and upgrading the insulation in the ceiling. Future improvements include upgrading the insulation in the walls and beneath the floor and installing double-glazed windows.

While Claire says they are still at the start of their efficiency journey, the savings will only grow.

“We’ve been talking to people who have gas heating, and our bills are much lower than theirs,” she says.

“Once we’ve switched over the hot water system and the stovetop, we can disconnect the gas. I’ve estimated that will save about $60 a month.”

Claire says while their motivation was to reduce their power bills, there have been other unexpected advantages. “I didn’t expect to have the feel-good factor,” she says.

“We were aiming for cost savings, but I didn’t expect to feel so good about it. It feels nice that we know we are using clean energy during the day. It’s also nice to know we are reducing our use of gas in the house, so there are health benefits, too.”

## Build a renewable energy workforce

Achieving the Victorian Government’s 95 per cent renewable energy target by 2035 requires a massive increase in energy and storage capacity and the skilled workforce to support it.

Building and operating the energy assets Victoria needs is expected to create more than 59,000 jobs, including 6,000 traineeships and apprenticeships.

The SEC will partner with industry to work with schools, TAFEs and universities as well as government and Traditional Owners to find the opportunities and address the challenges so we can build the workforce we need.

The SEC will support the attraction, training and retention of a skilled renewable energy workforce. This includes establishing the SEC Centre of Training Excellence. The SEC will also model best practice as an employer and contractor.

### Key actions

1. Engage with industry and Traditional Owners on the design of the SEC Centre of Training Excellence in 2023
2. Build awareness of career opportunities in renewable energy through ongoing engagement with students at school career nights and events from late 2023
3. Promote local content and workforce opportunities through pioneer and future investments from 2024 onwards
4. Contribute to the Victoria Energy Jobs Plan (led by DEECA) to be released in 2024
5. Complete the business case for SEC Centre of Training Excellence and begin implementation from 2025

## Workforce and skills to power transition

Victoria’s energy transition requires a large, highly trained workforce to deliver, operate and maintain renewable energy projects in storage, solar, wind and emerging renewable technologies.

The SEC will work closely with the sector and play a role in attracting, training and retaining a diversity of workers.

We will support the creation of thousands of jobs, traineeships and apprenticeships, in building, maintaining and operating energy assets.

### WORKFORCE CHALLENGES AND OPPORTUNITIES

|  |  |
| --- | --- |
| Challenges | Opportunities |
| The renewable energy transition will lead to an energy ‘Big Build’ | The SEC will play a key role in building new generation and storage assets.  The proliferation of smaller scale energy assets (solar, batteries and electrification products) at a household and business level will create more investment and job opportunities.  Workforce planning and development will be critical in delivering these investments. |
| The pipeline of projects will require a significant workforce to deliver | Building and operating the energy assets Victoria needs is expected to create more than 59,000 jobs, including 6,000 traineeships and apprenticeships. |
| The renewable energy sector faces challenges in securing workforce | There are competing demands across Australia and globally for workers.  Record low unemployment means that attracting workers to the industry, especially with the required skills, is increasingly difficult.  There is low awareness of opportunities and pathways in the renewable energy industry. |
| If we cannot secure the workforce, we cannot deliver energy projects | Without workers, key renewable energy projects will be at risk.  This creates uncertainty for developers and compromises their ability to support the renewable energy transition.  Concerted effort through the SEC and the Victorian Government, working with the training system (including TAFE), industry and the broader sector, is needed to support workforce development to attract, train and retain a new generation of renewable energy workers.  This will also enable broader industry development and growth. |

## Workforce development and attraction

The SEC will enable and support workforce development and attraction in three ways:

|  |  |  |
| --- | --- | --- |
| Role as an employer | Role in attraction and training | Role as an advocate for sector action |
| Overview | | |
| The SEC will be a direct or indirect employer of staff to deliver energy investments. The SEC’s workforce profile will look different from the legacy SEC, with jobs concentrated in construction rather than operations. | The SEC will help to develop a pipeline of skilled renewable energy workers and boost the profile of the sector to attract more people, including through the SEC Centre of Training Excellence. | The SEC will contribute to broader government efforts on sector-wide workforce development and attraction. |
| The SEC will work closely with unions, communities and industry to understand how it can leverage its role as employer for positive workforce outcomes. | The SEC will develop a business case for the Centre of Training Excellence. | As an active market participant, the SEC will advocate for and work with  other industry, unions and training sector partners to contribute to whole-of- sector actions. |
| Insights gathered during the pioneer investment process will help to inform the SEC’s approach. | The SEC will work through Victoria’s skills and training system, including the public TAFE system, to leverage and connect existing offerings. | Department of Energy, Environment and Climate Action (DEECA) will be the steward for energy workforce  development and attraction through the Victorian Energy Jobs Plan. |
| Activities | | |
| **Procurement levers:**  The SEC will provide opportunities to local businesses and workers by applying Victorian Government procurement policies,  or value-added conditions, such as inclusive employment targets. We will leverage the work of Apprenticeships Victoria to incentivise apprentices on contracted projects. | **Student engagement:** The SEC will deliver campaigns and engagement activities, including attending school career nights and events. The SEC will leverage its profile and position as a connector to inform students about renewable | **DJSIR will also work closely with DEECA** on renewable energy workforce development and be the steward for broader clean economy workforce development through implementation of the Clean Economy Workforce Development Strategy 2023-2033. |
| **Employment initiatives:** As it matures, the SEC will explore opportunities to create renewable pathways for more people, such as apprenticeships, graduate programs and work experience. | **Work-integrated learning:** The SEC may support hands-on learning experiences for students and apprentices, including on SEC projects. | **Inform government policies and investments:** The SEC will inform the development of the Victorian Energy Jobs Plan, implementation of the Clean Economy Workforce Development Strategy and the $50 million TAFE Clean Energy Fund, leveraging its role as a market participant and close links with  industry. The SEC will also provide input on broader challenges across government, such as migration and supporting women into energy. |
| **Model employer:** The SEC will help set standards for industry by acting as a model employer with regard to inclusion, diversity, flexibility and other conditions. | **Training alignment with industry needs:** The SEC may work with the training sector to bridge gaps in industry-specific training. The TAFE Network plays an important role in the development and delivery of the skills needed for the renewable energy transition.  These activities will be informed by the development of the SEC business | **Inform training sector action:** The SEC will help inform training sector efforts to boost enrolments in priority courses by providing market intelligence and support. |
| **Inform industry action:** The SEC will support industry to align on attraction initiatives and raise the bar on workforce standards. |

## Case study

### Developing the energy workforce of the future

The SEC Energy Jobs and Skills Forum welcomed more than 300 industry and community leaders to share their insights and expertise about the challenges – and opportunities – presented by Victoria’s renewable energy transition.

We heard from experts in the renewable energy industry, unions, employers, Traditional Owner groups, TAFEs, universities, technical schools, training providers and peak bodies – all helping to shape our renewable energy workforce.

Discussions focused on the need for a coordinated approach to meeting workforce demand; attracting and retaining workers to the energy sector; school pathways; opportunities for inclusive employment; jobs of the future; the skills and training models needed to build a strong pipeline into the energy workforce; and connecting a skilled workforce to regional Victoria.

The forum took an important step towards shaping Victoria’s future renewable energy workforce so we can deliver our nation-leading targets of 95 per cent renewable energy by 2035 and economywide net zero by 2045.

Insights gathered are being used to inform the Victorian Energy Jobs Plan and the design of the SEC Centre of Training Excellence.

## School engagement

The SEC will help build the workforce of the future by engaging students early and building interest in renewable energy careers.

By visiting career nights at government schools and other career events, we’ll improve student awareness of renewable energy jobs, career pathways and opportunities.

We’ll also help promote TAFE courses, connect students with government and industry programs and information, and emphasise the opportunities available in regional Victoria.

The SEC will identify avenues to engage students as part of the business case for the SEC, with targeted engagement activities already underway.

## Case study

### Connecting with students in Gippsland

The SEC is engaging with students on renewable energy pathways by attending career fairs, such as the Gippy Youth New Energy Summit in Sale.

On the day, over 300 Year 8-12 students from across Gippsland heard from more than 40 renewable energy sector experts.

The SEC facilitated interactive activities to encourage students to consider their career aspirations and how their interests could lead to a career in renewable energy, including the opportunities offered by vocational pathways.

Students displayed a strong community and environmental focus and were drawn towards practical jobs that required problem-solving.

The large majority noted the ability to help the environment and their community as a benefit of a career in renewable energy.

## SEC governance

The SEC will operate as a state owned company, SEC Victoria Pty Ltd, led by a chief executive officer with a board of directors to oversee ongoing business operations and delivery of our strategic plan.

The SEC will be a company incorporated under the Corporations Act 2001 (CTH) and declared a state-owned company under the State Owned Enterprises Act 1992 (VIC).

Our strategic plan outlines the scope, functions and objectives of the SEC and was developed under the guidance of an Expert Advisory Panel comprising some of Australia’s most credentialled energy experts.

It is one of a suite of documents that guides our operations to ensure they align with Victoria’s energy transition goals.

The SEC company constitution establishes rules for our operation, governing the relationship between the SEC Board, shareholders, the Minister for the SEC, and the company.

## Key governance mechanisms

|  |  |
| --- | --- |
| Corporations Act / State Owned Enterprises Act | Company constitutions |
| **Ministers** | |
| Shareholding ministers (2) | Portfolio minister |
| SEC VICTORIA | |
| Board of Directors | |
| **Statement of Principles**   * Issued by Government * Provides core principles for SEC’s operation * Guides board in how to conduct its commercial activities | **Business & investment planning**   * Regular corporate, business and investment plans prepared by SEC and approved by Government |

## Competitive neutrality

The SEC complies with the Victorian Government’s competitive neutrality policy, which requires us to ensure we compete fairly in the market.

Competitive neutrality principles are embedded in our structure, and we will monitor compliance as part of our operations and governance.

|  |  |
| --- | --- |
| Determine whether a net competitive advantage exists | Neutralise any net competitive advantage of government ownership to level the playing field |
| TO ENSURE ONGOING COMPLIANCE WITH COMPETITIVE NEUTRALITY PRINCIPLES, SEC WILL: | |
| Embed competitive neutrality into the structure and governance of the SEC   * Establishing the SEC as a separate legal entity promotes best practice competitive neutrality principles by establishing appropriate separation between the SEC and government * The SEC will operate commercially with full cost reflective pricing and appropriate financial arrangements for the allocation of profits consistent with the policy * The same regulations and taxes (or tax equivalent regime) will apply to the SEC as to private sector businesses | Undertake ongoing assessments of compliance and business functions   * Limited competitive advantages and disadvantages may emerge at the business activity level. Where they arise, they will be treated in accordance with the competitive neutrality policy to maintain competitive neutrality * Compliance monitoring will be conducted in accordance with the policy and an internal SEC compliance framework for competitive neutrality, including ongoing assessment of business activities and potential neutralising measures * Initial competitive neutrality assessments will be subject to continuous review by the SEC |

## Working in partnership

The SEC is just one part of Victoria’s energy transition story. We acknowledge the enormity of the transition and working in partnership is fundamental to our approach.

The Victorian Government’s Department of Energy, Environment and Climate Action takes a whole-of-system view.

The SEC works closely with public and private entities, including Offshore Wind Energy Victoria, VicGrid, Solar Victoria, Sustainability Victoria and Energy Safe Victoria.

We will work with the Department of Jobs, Skills, Industry and Regions and the Department of Education to develop the skilled workforce and supply chains required to successfully transition.

## Transition roadmap

|  |  |  |  |
| --- | --- | --- | --- |
| 2023 | Victoria powered by 38 per cent renewable energy  SEC Strategic Plan confirmed  SEC entity and board established  Constitutional Enshrinement Bill to go before parliament | SEC announces pioneer investment | SEC builds awareness of career opportunities in renewable energy through engagement with students at career days and events - ongoing |
| 2024 | New homes requiring a planning permit to be all-electric  SEC to pilot first household electrification offering | Electric vehicle charging stations to be installed across regional Victoria  SEC continues to build pipeline of potential assets and technologies aligned with short and long-term supply strategy | Victorian Energy Jobs Plan released |
| 2025 | SEC to begin servicing government electricity requirements  SEC to expand household electrification offering | SEC Centre of Training Excellence implementation  Achieve 28-33 per cent reduction in greenhouse gas emissions |  |
| 2028 | Yallourn Power Station to close |  |  |
| 2030 | Victoria powered by 65 per cent renewable energy  Achieve at least 2.6 GW of renewable energy storage capacity | Achieve 45 - 50 per cent reduction in greenhouse gas emissions |  |
| 2035 | Victoria powered by 95 per cent renewable energy  Achieve at least 6.3 GW of renewable energy storage | Generate 4 GW of capacity from offshore wind  Loy Yang A power station to close | Achieve 75-80 per cent reduction in greenhouse gas emissions  SEC target of 4.5 GW met |
| 2040 | Generate 9 GW of capacity from offshore wind | | |
| 2045 | Achieve economy wide net-zero greenhouse gas emissions | | |

### Thank you

A special thank you to all our partners.

Your continued support and advocacy is what makes the SEC possible.

Together, we’re seizing this historic opportunity to put power back in the hands of Victorians.

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