Greater Adelaide Regional Plan

SA

Chris Lehmann & Georgia Holmes

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MASTER ELECTRICIANS AUSTRALIA

Master Electricians Australia (MEA) is the industry association representing electrical contractors and recognised by industry, government and the community as the electrical industry's business partner, knowledge source and advocate. You can visit our website at www.masterelectricians.com.au

MEA commends South Australia's (SA) success in positioning itself "at the forefront of change, with the highest per-capita percentage of rooftop solar photovoltaic installations"[1]. It is essential for South Australia to build on this success by implementing solar PV policies that continue to support their widespread installation in the ongoing development of the Greater Adelaide Region.

Consumer Energy Resources (CER) align with the strategies outlined in Energy and Climate Change sections of the Greater Adelaide Regional Plan (the Plan). With abundant sunlight throughout the year, SA is ideally positioned to harness solar PV electricity, providing a resilient, flexible, and affordable energy supply system. By allowing generation and consumption on-site, solar PV eliminates the need for large, costly infrastructure, presenting an environmentally friendlier and cheaper renewable alternative. Additionally, solar PV reduces grid demand by allowing electric vehicles (EVs) to charge using solar power, while EV batteries can store excess energy for future use or export back to the grid, enhancing access to charging facilities.

MEA advocates for increased government focus on providing funding and support for electrification at the household and small business level to achieve successful electrification of building developments in the Greater Adelaide Region in pursuit of strategies outlined in the Plan. We also emphasise the urgent need to address the skills shortage currently affecting the electrical industry to secure a sustainably skilled workforce capable of installing and maintaining these assets.

TRANSPORT & INFRASTRUCTURE: Energy

Consumer Energy Resources (CER)

CER is changing how the traditional National Energy Market (NEM) operates as households and businesses essentially become wholesalers in the energy supply chain. Infrastructure and policy upgrades are vital to ensure CER benefits can be fully realised by consumers and the economy.

Solar PV

As of September 2024, "more than 411,000 systems have been installed in [SA], which only has a population of around 1.8 million"[2], positioning SA "at the forefront of change, with the highest per-capita percentage of rooftop solar photovoltaic installations in Australia"[3]. While this is a commendable achievement to date, there is still significant opportunity to increase the ratio of pre-existing households installed with solar and ensure the development of the Greater Adelaide Region continues pursuing SA's position of per-capita leaders in solar installations.

Battery Energy Storage Systems

It is widely recognised that increasing energy storage capacity within the NEM is essential for reliable renewable energy operations. This will improve consumer experiences with CER and help alleviate the hosting capacity constraints faced by Distributed Network Service Providers (DNSPs).

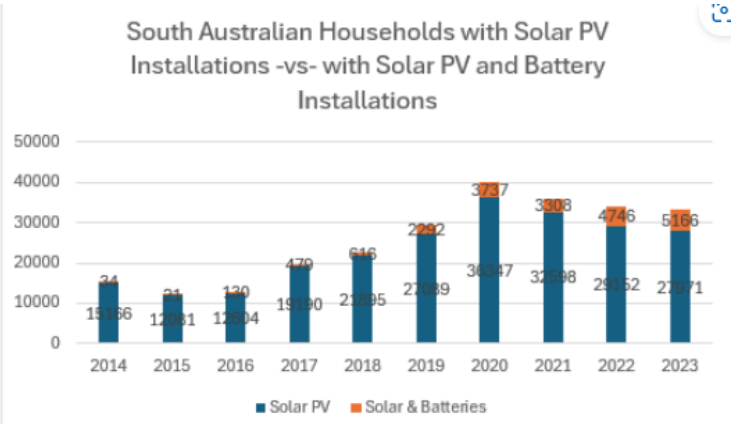
[1] State Planning Commission "GREATER ADELAIDE REGIONAL PLAN" *South Australian Government* [September 2024], at 194 <Greater Adelaide-standardized (1).pdf>
[2] Michael Bloch "See A Flexible Solar Exports Dial-Down In Action" *SolarQuotes Blog* [27 September 2024] <See A Flexible Solar Exports Dial-Down In Action (solarquotes.com.au)>
[3] State Planning Commission "GREATER ADELAIDE REGIONAL PLAN" *South Australian Government* [September 2024], at 194 <Greater Adelaide-standardized (1).pdf>

Achieving increased energy storage requires widespread adoption of Battery Energy Storage Systems (BESS) by households and businesses. These enable consumers to store self-generated energy (from Solar PVs) and either soak, be self-consumed during peak evening periods, or send excess BESS capacity back to the grid during peak demand times.

Instead of relying on large, centralised storage, BESS is installed across towns and cities within the built environment, utilising distribution infrastructure. This removes the single points of failure, and increases network resilience, whilst at the same time incrementally and progressively increasing system storage capacity with each individual system installed.

While SA has been progressive in household electrification through solar PV panels and having "one of the highest uptake of residential batteries in Australia"[4] , there is a significant lack of installation of household batteries based on the statistics MEA derived from the Clean Energy Regulator.

	Solar PV	Solar & Batteries
2014	15166	34
2015	12081	21
2016	12604	130
2017	19190	479
2018	21895	616
2019	27089	2292
2020	36347	3737
2021	32598	3308
2022	29152	4746
2023	27971	5166

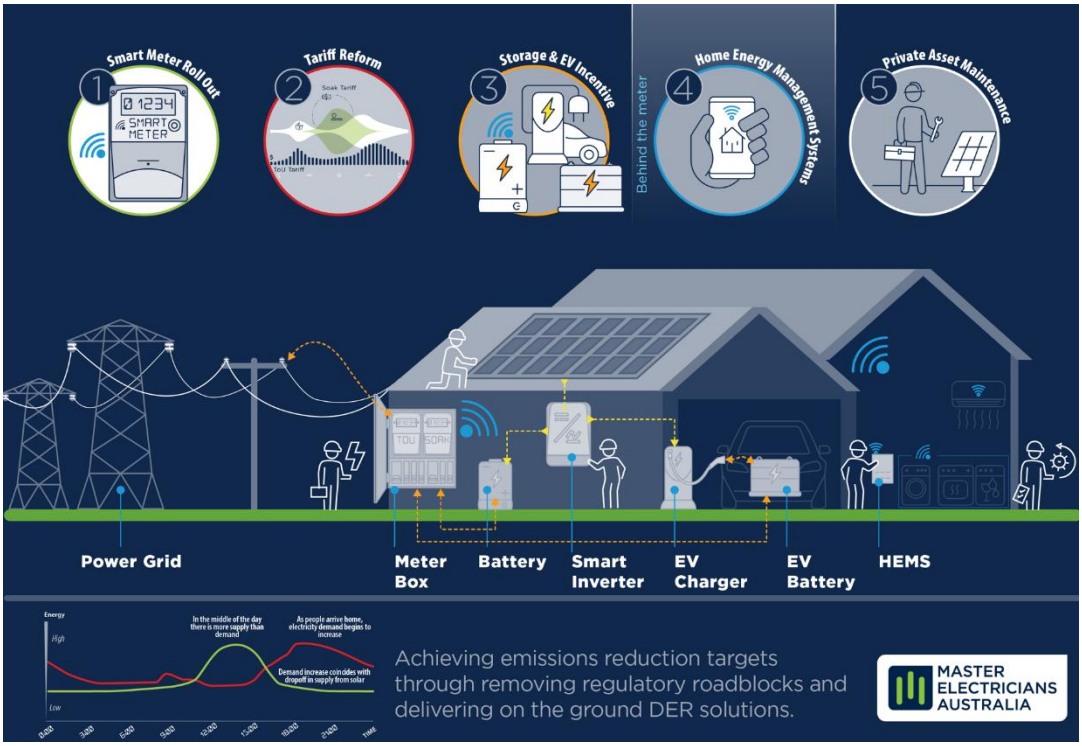


Data derived from the Clean Energy Regulator[5]

This not only limits households' ability to manage their energy consumption and costs effectively and maximise the advantages of CER, but it also fails to reduce the strain on grid demand from households that do not have battery installations. These consumers cannot rely on stored energy when solar PV systems are inactive (e.g., at night). Additionally, it prevents CER from supporting the grid through alleviating hosting capacity issues caused by excess solar energy being fed back into the grid during peak generation periods with nowhere for the excess energy to be stored.

It is crucial for the SA Government to implement fiscal policies that incentivise and support the installation of private batteries as part of future building developments outlined in the Plan. The high capital costs associated with private batteries can render them inaccessible or unappealing for many households. However, with appropriate financial assistance, we can anticipate a substantial increase in private battery adoption, similar to the growth witnessed with solar PV installations. Schemes offering a rebate for purchase of small-scale renewable technology have proven effective. We recommend a scheme whereby a rebate is available to households and businesses with pre-existing solar PV panels already installed, to allow equitable access to battery installations.

[4] Department of Energy and Mining "Leading the green economy" *South Australian Government* <Leading the green economy | Energy & Mining (energymining.sa.gov.au)>
[5] Clean Energy Regulator "Small-scale installation postcode data" *Australian Government* [26 September 2024] <Small-scale installation postcode data | Clean Energy Regulator (cer.gov.au)>



Time-of-Use (ToU) Tariffs

Appropriately designed time-of-use tariffs designed to reward consumers for utilising CER through positive price-signals encouraging solar energy to be utilised during periods of peak demands are to be supported. However, SA must be cautious to avoid financially burdening solar households and businesses through export tariffs.

Increasingly referred to as sun-tax, MEA claims a two-way tariff "punishes consumers for doing the right thing, strips away incentives to invest in solar, and risks giving renewable energy a bad name at a time when we must roll out more rooftop solar"[6]. Two-Way Time-of-Use (TWToU) tariffs disincentivises rooftop solar installations as it is seen as a punishment for following Government encouragement to install and utilise Solar PV. Imposing TWToU tariffs is a step backward during Australia's energy transition. We should strengthen incentives for solar investment, not weaken them, to support grid contributions from households and businesses.

To avoid the need for future TWToU tariffs, the SA Government should reduce grid constraints by making private household and business battery storage systems more affordable and accessible. These measures will help prevent grid overload by enabling households and businesses to better manage and store excess solar energy.

South Australians currently rely on the Federal Government's recently released Household Energy Upgrades Fund for financial support in installing household batteries which have payback periods and interest rates attached.[7] However, we believe that defined repayment terms and interest rates reduces the electrification incentive for households that are already financially burdened. We therefore support Rewiring's proposed $2.8 billion "Electrify Everything Loan Scheme" (EELS) policy, where loans for solar panels and batteries are secured against the property and repaid only upon the sale of the house. This approach would

[6] Kate Raymond "Sun tax to put further heat on households" Master Electricians Australia [27 June 2024].

[7] *"A LOAN TO HELP MAKE YOUR HOME MORE SUSTAINABLE" Westpac <Sustainable upgrades home loan | Westpac> & "A LOAN TO HELP MAKE YOUR HOME MORE SUSTAINABLE"* Westpac <*Sustainable upgrades home loan | Westpac*>
"Household Energy Upgrades Fund (HEUF)" *Plenti* <HEUF Discounted Green Loans from Plenti>

enhance access to clean energy resources, particularly for low-income households and renters.

Solar and battery package rebates (as proposed above under Battery Energy Storage Systems) and zero-interest loans repayable upon hose sale, are likely to significantly boost the adoption of household and business batteries. This would address concerns about grid destabilisation caused by increased decentralisation[8], eliminate the need for backstop mechanisms similar to those recently introduced in Victoria[9], avoid justification for imposing a sun-tax on consumers, and overall help address hosting capacity constraints of the grid.

Digital Smart Meters

Digital smart meters will be increasingly valuable, offering real-time measurement and control of energy use. Unlike traditional meters, they enhance consumer choice and efficiency in energy delivery.

"All new electricity meter installations must now be advanced or 'smart' meters under national rules that apply to South Australia"[10]. To ensure efficient and timely installation of smart meters in the development of the Greater Regional Adelaide region, the SA Government must ensure that adequate initiatives are implemented to cultivate a well-resourced, skilled pool of licensed electrical workers to install the digital smart meters.

Electric Vehicle (EV) Bi-Directional Charging

DNSPs currently view EVs as a threat to the grid, but with updated policy and regulation, EVs will instead become an invaluable asset. The widespread adoption of EVs will increase energy demand, but home rooftop solar PV can help ease grid pressure. Additionally, EVs serve as significant reservoirs for excess solar energy storage. With an average battery capacity of 72.1 kWh[11], EVs can store far more energy than a typical home battery, which holds 5-15 kWh, and can be dispatched when needed.[12]

Increased network stability is expected as EV infrastructure is installed in households and businesses, especially when integrated with Home Energy Management Systems (HEMS) in residential buildings and Building Management Systems (BMS) in commercial buildings.

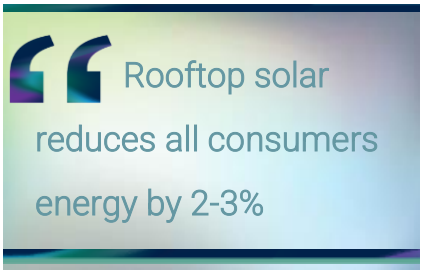
[8] State Planning Commission "GREATER ADELAIDE REGIONAL PLAN" *South Australian Government* [September 2024] < Greater Adelaide-standardized (2).pdf>
[9] Department of Energy, Environment and Climate Action "Victoria's emergency backstop mechanism for solar" *Victorian Government* [11 September 2024] <Victoria's emergency backstop mechanism for solar (energy.vic.gov.au)>
[10] Department of Energy and Mining "Installation of new smart meter and meter isolator" *South Australian Government [13 January 2021]*<https://www.energymining.sa.gov.au/__data/assets/pdf_file/0003/813846/Smart-Meter-Customer-Information-Booklet.pdf>
[11] "Useable battery capacity of full electric vehicles" Electric Vehicle Database < https://ev-database.org/cheatsheet/useable-battery-capacity-electric-car>
[12] Jarvis Robins "THE ULTIMATE GUIDE TO CHOOSING YOUR SOLAR BATTERY SIZE" *Static Electrics* [12 December 2023] < The Ultimate Guide To Choosing Your Solar Battery Size (staticelectrics.com.au)>

Benefits

Economy

Household and Business Energy Costs

"Adding more rooftop solar into the system delivers consumer benefits. Customer energy costs are 2-3% lower, not only for those who have solar but also for those who [do not]"[13]. There is a clear macro-economic benefit to further enhancing the scale of CER into SA's existing renewable energy network and integrating it into further developments under the plan.



Reduced energy expenses can be achieved by households and businesses producing, storing, and trading surplus energy during peak demand periods. This boosts households' disposable income and businesses' net profit, thereby fostering a sustainably strengthened macroeconomy through reliable and affordable energy. SA should prioritise the integration of CER into the Plan to empower households and local businesses with greater control over their energy consumption and reduce energy costs.

Resilience & Grid Security

Risks

Although SA "generates more than 70% of its electricity from renewable sources"[14], the State remains vulnerable to many of the traditional risks associated with grid supplied energy. This is because wind and hydro-generated energy rely on centralised hubs and transmission lines to distribute power to consumers, whereas solar energy is produced and consumed directly on-site. Traditional risks include -

- *Climate events*, such as bushfires and cyclones, can disrupt energy distribution infrastructure. CER offers a resilient solution, allowing consumers to continue using solar energy and stored surplus even when grid supply infrastructure is compromised.

- *Cyber-attacks* are becoming increasingly threatening as digitalisation advances. Ukraine's 2015 grid cyber-attack, which shut off power to 80,000 customers, is just one example of this.[15] Solar-generated and stored energy eliminates the need for a centralised energy centre for flexible loads, thereby reducing exposure to cyber risks.

"South Australia has been isolated from the national grid on many occasions … in 2022, 2020, 2019 and 2018, and … 2016,"[16] highlighting the risks associated with the traditional one-way energy supply system, where consumers depend solely on grid-supplied energy. Specifically, "on 28 September 2016, a catastrophic weather event sent the entire state into system black. Around 4pm, some 850,000 homes and businesses lost power as supercell thunderstorms and destructive winds – some travelling up to 260km/h – crumpled transmission towers, causing three major power lines to trip."[17] Solar PV could likely have mitigated the impact of this weather disaster by enabling households and businesses to continue generating and using energy, even with transmission lines damaged, thanks to its decentralised and resilient design.

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[13] "The Time is Now Getting smarter with the grid" *Energy Networks Australia* [6 August 2024], at 26 <Leveraging the Distribution Grid in support of the Energy Transition (energynetworks.com.au)>

[14] State Planning Commission "GREATER ADELAIDE REGIONAL PLAN" *South Australian Government* [September 2024], at 194 <Greater Adelaide-standardized (1).pdf>

[15] 'Hackers behind Ukraine power cuts, says US report', BBC News [26 February 2016] <https://www.bbc.com/news/technology-35667989>

[16] Jenny Wiggins & Angela Macdonald-Smith "$2.3b energy project faces cost blowouts" *Australian Financial Review* [08 July 2024] <EnergyConnect: $2.3b project faces cost blowouts (afr.com)>

[17] Lenore Taylor, "South Australia is aiming for 100% renewable energy by 2027. It's already internationally 'remarkable'" *The Guardian* <South Australia is aiming for 100% renewable energy by 2027. It's already internationally 'remarkable' | Environment | The Guardian>

Progress

"On New Year's Eve 2023, rooftop solar met 101.7% of South Australia's energy needs for 30 minutes."[18] This demonstrates it is possible for SA households and businesses to rely on solar PV generated energy and would go a long way to combatting traditional network risks. MEA advocates for robust incentivisation and installation policies for electrification assets in future building developments under the Plan. Currently, the only electrification financial assistance available to SA households and businesses comes from the Federal Government's Household Energy Upgrades Fund, which requires short-term repayments with interest. MEA encourages the South Australian Government to introduce rebate programs similar to Queensland's recently offered Battery Booster Program and Victoria's currently available Solar Panel Rebate Scheme in addition to Rewiring's proposed $2.8 billion "Electrify Everything Loan Scheme" policy.

Grid Demand

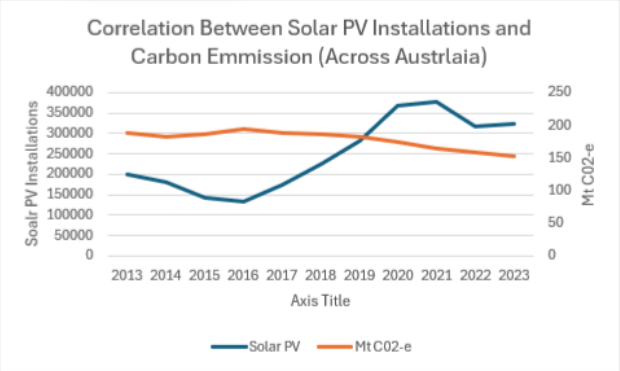
The Greater Adelaide Region's population of 1.56 million people is predicted to increase to between 2-2.2 million people.[19] Additionally, it is anticipated 63-97 per cent of vehicles will be electric across Australia.[20] With this anticipated rise in population and electric vehicles, the stability and reliability of the traditional NEM grid will become increasingly jeopardised.

CER helps mitigate this by reducing peak grid demand and allowing consumers to either supply excess energy back to the grid during undersupply periods or store it in batteries for later use.

Environmental

CER has significant potential to help SA achieve its net zero targets by providing an alternative to traditional fossil fuel energy sources. Notably, "a typical solar panel will save over 900kg of CO^2 per year.[21]"

MEA sourced solar PV installation rates from the Clean Energy Regulator[22] and analysed the decade-long trend in comparison with emissions data from the Department of Climate Change, Energy, the Environment, and Water[23]. While other renewable energy sources also contribute to the declining trend in emissions, there is a clear and significant positive correlation between solar PV installations and carbon emissions. Notably, when solar PV installations decreased between 2014-2016, the downward trend in carbon emissions levelled off slightly, with a minor increase before resuming its decline as solar PV installations rose again. This correlation highlights the key role solar PV installations play in helping to reduce carbon emissions.



[18] Lenore Taylor, "South Australia is aiming for 100% renewable energy by 2027. It's already internationally 'remarkable'" *The Guardian* <South Australia is aiming for 100% renewable energy by 2027. It's already internationally 'remarkable' | Environment | The Guardian>
[19] State Planning Commission "Greater Adelaid Regional Plan Draft" *South Australian Government* [September 2024] <Digital Regional Plans>
[20] "Renewables up almost 40% of Australia's electricity" *Energy Source & Distribution* [May 2024], at 10 <ENERGY - MAR/APR 2024 (calameo.com)>
[21] Janet Richardson & Richard Burdett-Gardiner "Solar Photovoltaics - Cradle-to-Grave Analysis and Enviromental Cost" *The Renewable Energy Hub UK* [29 September 2024] <Solar Photovoltaics - Cradle-to-Grave Analysis and Environmental Cost (renewableenergyhub.co.uk)>
[22] Clean Energy Regulator "Small-scale installation postcode data" *Australian Government* [26 September 2024] <Small-scale installation postcode data | Clean Energy Regulator (cer.gov.au)>
[23] *Department of Climate Change, Energy, the Environment and Water* "National Greenhouse Gas Inventory Quarterly Update: March 2023" *DCCEEW* <National Greenhouse Gas Inventory Quarterly Update: March 2023 - DCCEEW>

Priority Areas

Increasing Availability of Renewable Energy Sources in SA

The costs of renewable resources can be a barrier to household and business electrification. MEA acknowledges there are vulnerable groups who are at greater disadvantage from being able to access CER. The initial capital cost of CER is expensive, however, as CER gains traction and becomes more developed, "the CSIRO have modelled rooftop solar PV costs falling from $1,505/kW in 2024 to between $513/kW and $702/kW in 2055."[24]

Below are the identified vulnerable groups in directly accessing CER and our proposed policy solutions:

Group	Issue	Policy Solution
Low-Income Households	Cost of assets and installation are unaffordable	SA Government to offer rebates incentivising a package installation of both solar PV and batteries, reducing the upfront costs of these assets.
Tenants	Landlord bears cost of installation without benefit.	Incentives for landlords which could include a national approach via tax deductions to encourage landlords to install a package installation of both solar systems and batteries.
High-Rise Complex Dwellers	Body corporate decides outcome of building projects.	Implement regulations to prevent body corporates from rejecting proposals for CER installations unless there is an objectively and reasonably justification. This would align with recent updates in the ACT.[25]

Supporting Households and Businesses in the Greater Regional Adelaide Region Homes and Businesses to Transition to Renewable Energy Alternatives & Improve Energy Efficiency

To support households and businesses in the Greater Adelaide Region households transition to renewable energy, we advocate the following support:

- *Battery Rebates* – incentivising battery installation for properties with existing solar panels, allowing equitable battery access for those not covered by new developments under the Plan.
- *Financial Incentive for Package Installation* – incentivise installation of solar panels together with battery for households and businesses, particularly targeting new developments under the Plan.
- *ToU Tariffs* – commitment to permanent oversight of time-of-use tariffs and ensure households are not charged for exporting energy to the grid, while applying low-cost usage periods to encourage uptake of battery solutions.

[24] "Pathways Review - Built Environment" *Climate Change Authority, at 8* [2024] <2024SectorPathwaysReviewBuilt Environment.pdf (climatechangeauthority.gov.au)>

[25] The ACT will soon be legislating "changes to the Unit Titles (Management) Act 2011 (through the Unit Titles Legislation Amendment Act 2023) have made it easier to obtain consent from an owners corporation to install energy and water saving devices. Additional work will be undertaken to ensure legislation is fit-for-purpose, including addressing barriers for electric vehicle adoption and installation of charging infrastructure in unit titled properties" "Integrated Energy Plan" *ACT Government* [2024], a 31 <Integrated Energy Plan 2024-2030 (act.gov.au)>

- *Low-Cost Loans* – introduce a State Loan Scheme reflective of Rewiring's proposed *Electrify-Everything-Loan-Scheme* repayable only upon sale of the house. This approach enables homeowners to use capital gains to cover installation costs while equitably easing the financial burden on households.

NATURAL RESOURCES & LANDSCAPE: Climate Change

The "South Australian planning system aims to promote climate change mitigation and adaptation … By undertaking both mitigation and adaptation solutions, we can deliver tangible climate change outcomes as well as many co-benefits including cost savings, energy conservation and improved community connection."[26]

As discussed throughout this submission, CER provides a resilient and adaptive solution to climate change in 'master planned neighbourhoods and new investment in existing neighbourhoods. It reduces carbon emissions while allowing households and businesses to continue generating and utilising independently produced energy during times of climate disasters which impede distribution infrastructure during climate events and continued disruptions in the aftermath.

MEA encourages the SA Government to prioritise policies and initiatives which incentivise, and make accessible, CER in building developments under the plan. Through Solar PV's ability to produce energy independently of the grid and respond to price signals through time-of-use tariffs, consumers can control their energy consumption and costs.

WORFORCE: Electrical Industry Skills Shortage

Workforce Shortage

A robust private market of licensed electrical contractors is poised to play a key role in the installation and maintenance of CER systems. These skilled professionals are equipped to handle the complexities of integrating solar PV, energy storage, and other renewable technologies. Their involvement will not only ensure efficient, high-quality installation and ongoing support but also contribute significantly to job creation and economic growth in the Greater Adelaide Region.

However, it is critical the SA Government promptly implement schemes addressing the electrical skills shortage crisis ensuring the State has a sufficient skilled labour to facilitate the installation and maintenance of CER. Initiatives the SA Government should promptly consider to reduce demand skill pressures include –

- *Electrotechnology Senior School Subject*

  MEA proposes introducing an 'Electrotechnology' course into the Secondary School Curriculum, as both an ATAR scaled subject and offering partial Cert III qualification recognition (introductory units). The course would include Cert III Block 1A units, the initial requirement for electrical apprenticeships, giving students a head start in their Electrotechnology careers. The benefit of this proposal is that students would not need to decide a 'VET or university' pathway as the subject would be suitable for both pathways and would expose more young people including girls and those from diverse background to the electrotechnology sector including renewables. MEA sees this as the pivotal role in actioning societal, structural and systemic change of negative perceptions towards construction trade careers compared to higher education career pathways. This is particularly important as we rapidly enter an era of electrification.

[26] State Planning Commission "GREATER ADELAIDE REGIONAL PLAN" *South Australian Government* [September 2024], at 154 < Greater Adelaide-standardized (2).pdf>

- *Financial Incentives*

To improve apprenticeship commencement and retention and completion, the SA Government should offer financial incentives such as:

  - Employee Apprentice Retention Grant – Providing 50 per cent of the grant to the apprentice at the beginning of their apprenticeship and the remaining 50 per cent upon its completion. This structure ensures that the grant supports long-term commitment and reduces the risk of misuse, while the initial payment helps offset any deterrent from waiting for the full funding at the end of the four-year apprenticeship.

  - Employer Apprentice Retention Grant – Provide incentives to employers who hire and obtain apprentices for a certain period. This will likely encourage employers to improve recruitment practices and working conditions to attract and retain employees, growing the pool of labour in the sector rather than competing over a limited pool.

- *Poaching*

As the skilled electrical worker shortage becomes more pronounced, there is a greater tendence for larger companies including those working on large projects to 'poach' workers and more senior apprentices from small contractors. Such behaviour disincentivises small entities from hiring apprentices, impeding the number of apprenticeships and undermining the development of a sustainably resourced electrical workforce. This, in turn, affects the efficient rollout of CER, as household and business clients often rely on small electrical contractors for their needs, while also increasing the likelihood of dangerous unlicensed electrical work in Tasmanian homes.

Larger businesses should be bringing new entrants into the industry as first year apprentices, expanding the qualified electrical workforce.

MEA commends SA's 'Transfer Fee' and have been advocating for other States do adopt this policy. MEA expects this scheme to encourage SMEs to continue training apprentices, despite the risk of them being poached as their competency develops. We encourage the SA government to aggressively assert this policy and mandate it across the construction industry.

Conclusion

South Australia has achieved impressive solar generation results but has yet to fully capitalised on all the CER opportunities, which offers unique benefits for households and businesses, as well as the ability to enhance grid reliability by generating and using energy independently of a centralised hub. We encourage the Greater Adelaide Regional Plan to prioritise policies that support private electrification for energy production, with a focus on providing financial incentives for private solar and battery installations, as well as implementing regulatory oversight to prevent export charges on excess solar energy sent to the grid.

As the population and adoption of EVs are expected to rise in the coming decades, it is crucial for SA to capitalise on this opportunity to enhance grid stability and maximise electricity savings for consumers through solar energy. In contrast, costly and environmentally less favourable hydro-energy projects are susceptible to climate disasters and cyber-attacks due to their reliance on extensive high-voltage transmission infrastructure from a centralised hub. Moreover, hydro-energy does not offer the same level of energy independence or cost-saving benefits that CER provides.

Public concern is growing over the potential implementation of 'sun-tax' through Two-Way Time-of-Use (TWToU) tariffs, which would penalise consumers for exporting excess solar energy back to the grid. This move could undermine confidence in private electrification and contradict Government efforts to promote solar energy, particularly for those without affordable battery storage. MEA strongly opposes TWToU pricing and urges the SA Government to provide regulatory oversight to prevent its implementation supported by fiscal initiatives to drive greater private battery adoption.

To alleviate financial pressures for individuals struggling with cost-of-living and other debts while still making CER financially accessible, MEA encourage the SA government to implement the following financial policies:

- Household and business electrification zero-interest loans, repayable upon sale of the house (as proposed by Re-Wiring).
- Rebates for installation of Solar PV panels and private batteries.

Australia's electrical industry is facing a severe skills shortage that requires immediate action to ensure a sufficient workforce is available to install and maintain CER. The SA Government should consider policies such as introducing an Electrotechnology senior school subject, providing apprenticeship retention grants and supporting small businesses engage apprentices. A skilled electrical labour force is crucial for a sustainable and successful electrification process, but without swift intervention, there may not be enough skilled labour to support the efficient and even adoption of CER assets.

SA has the opportunity to lead in electrification supported by a committed electrical industry eager to facilitate its success. However, it is up to the SA Government to enact actionable policies that encourage widespread adoption of CER and address the industry's skills shortage.