Electricity Retailing in Victoria

Is there a role for local government?

February 2018

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Executive Summary

Introduction

The Australian electricity market is undergoing a rapid transition, shifting away from fossil fuels to renewable energy sources such as wind and solar. This transition is creating pressures for existing market operators, such as generators, distribution businesses, retailers and regulators, as they struggle to address what is commonly termed the 'energy trilemma':

- *security of supply* (energy is an essential service - security and reliability are related yet distinct concepts[1]);
- *affordability* (as an essential service, energy must be accessible and affordable to all, often termed energy equity); and
- *sustainability* (environmental concerns must be incorporated, to ensure that energy is compatible with a sustainable future).[2]

The retail market in Victoria is characterised by disproportionately high costs[3]; the Australian Energy Market Operator (AEMO) has raised concerns over future risks to the security and reliability of the Australian energy system[4]; and the pressures of climate change require a much more rapid uptake of renewable energy than is currently the case in Australia.[5]

With regard to the last point, Victorian local governments are also questioning what additional role they should play to encourage a speedier transition to renewables, and whether resuming a role as an electricity retailer would achieve that objective.

The Northern Alliance for Greenhouse Action (NAGA) has commissioned this research to explore the potential involvement of Victorian local governments within the electricity retail market, inform local government decision making, and identify barriers and opportunities. It seeks to answer two primary research questions:

1. Should local governments in Victoria should become involved in the electricity retail market?
2. If yes, how that might be achieved?

Key Findings

- Energy is an essential service, and its generation has important implications for the climate and sustainability. Local governments are interested in retailing electricity due to:
    - rising retailer costs (partly as a result of poor industry practices);
    - promotion of renewable energy; and

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[1] Climate Change Authority & AEMC 2017, *Towards the Next Generation: Delivering Affordable, Secure & Lower Emissions Power,* viewed 13 Oct 2017, http://www.aemc.gov.au/getattachment/e75f27f9-cabc-48dc-9cb3-40706260dd64/AEMC-and-CCA-joint-report-Towards-the-next-generat.aspx.

[2] World Energy Council & Oliver Wyman 2016, *World Energy Trilemma: Defining Measures to Accelerate the Energy Transition,* viewed 13 Oct 2017, https://www.worldenergy.org/wp-content/uploads/2016/05/World-Energy-Trilemma_full-report_2016_web.pdf; the Australian Government has expressed its commitment to addressing this trilemma: Department of the Environment & Energy 2017, *Review of climate change policies: Discussion paper,* Commonwealth of Australia: Canberra, p.4.

[3] Thwaites, J., Faulkner, P. & Mulder, T. 2017. *Independent Review into the Electricity & Gas Retail Markets in Victoria*, Victoria State Government: Melbourne.

[4] AEMO 2017, *Electricity Statement of Opportunities for the National Electricity Market,* viewed 19 Oct 17, http://www.aemo.com.au/-/media/Files/Electricity/NEM/Planning_and_Forecasting/NEM_ESOO/2017/2017-Electricity-Statement-of-Opportunities.pdf.

[5] Finkel, A., Moses, K., Munro, C., Effeney, T. & O'Kane, M. 2017. *Independent Review Into the Future Security of the National Electricity Market: Blueprint for the Future*, Commonwealth of Australia: Canberra.

- potential income generation.

- Internationally, municipalities are involving themselves in the provision of public services, such as the supply of energy and water. There have been a variety of approaches with municipalities largely acting as market participants such as distributors, as has been particularly the case in Germany. Local governments in Australia have pursued different actions in the energy market (for example, the bulk purchasing model detailed in section 3.4). Energy retailing would be a more significant step, and would be in line with actions taken by several local authorities in the UK.
- Whether local governments have both the appetite and the scope to undertake this project, given the risks of energy retailing, is important to consider. The scope for such activity is restrained by the *Local Government Act 1989* (Vic), and a risk assessment report, along with Ministerial approval, would be necessary. The *Local Government Act 1989* (Vic) is currently under review. The Local Government Bill Exposure Draft 2018 does not raise Ministerial approval in s 149 and s 150, in relation to beneficial enterprise. However, s 150 does concern itself with risk in relation to beneficial enterprise, and restrictions apply in relation to risk exposure and management.
- Interviews revealed that while some Councils have an appetite for the risk, on balance with the potential benefits of electricity retailing, others were more cautious. As electricity retailing does carry risk as to the success of the enterprise, this has attendant risks to reputation. A fuller discussion of this consideration can be found in section 5.8: Risk.
- Interviews conducted for this research and discussions with NAGA revealed that the rationale for pursing electricity retailing varies across stakeholders. Different models have the potential to achieve different goals and to varying extents. The multiple paths local governments could pursue also have their own attendant risks and barriers. This is discussed in further detail in section 6. This key finding feeds into one of the recommendations of this report: goals must be clearly articulated and coordinated, to ensure the most appropriate model is pursued.

Recommendations

1. Clear understanding & co-ordination of goals

The goals councils wish to pursue will determine which model will be most suitable to their needs. As such, a clear identification and articulation of goals – from all stakeholders – will allow for suitable decision-making.

2. The importance of early ground work

International experience highlights that the decision regarding participation in electricity retailing can be complex, and that extensive analysis should be undertaken regarding the feasibility of an electricity retail business (see section 3.3). International experience also highlights the importance of calculating the costs and benefits of public ownership and operation, prior to the expiration of contracts (for example, procurement contracts).[6] This allows sufficient time for decision-making. Early ground work allows councils to decide what their goals are for electricity retailing; the best form to pursue to achieve these goals; and ensures that if councils wish to lobby for any regulatory or legislative changes, there is sufficient time to do so.

[6] Hall, D. 2012. *Re-municipalising municipal services in Europe*, Public Services International Research Unit, University of Greenwich: London.

3. A need to build support

Local governments do not operate in a vacuum. In seeking to reposition its role, local governments must build support and awareness for the actions they wish to undertake. This needs to be done through stakeholder engagement with local communities (here defined as those falling within Council's Municipal District, as per the *Local Government Act 1989* (Vic)), retail market incumbents and other levels of government.

Approval from the Minister and potentially the Treasurer would also be necessary, under the *Local Government Act 1989* (Vic) s 193(5C)(b), given the significance of such an enterprise (the financial outlay will likely exceed thresholds for Ministerial approval, and could necessitate approval from the Treasurer). This trigger requiring Ministerial and Treasurer approval may be removed if the Local Government Bill Exposure Draft 2018 passes in its current state. The Essential Services Commission (ESC) provides for a consultation process in relation to the issuing of new licences. This ensures that local government has support for its actions.

4. Financing

Financial modelling was not within the scope of this report, but will be a determining factor in electricity retailing progressing. Electricity retailing will require significant upfront and working capital.

It is problematic for this capital to come from the State Government of Victoria, given its dual role in setting the policy direction for the electricity market, and in providing funds for local governments. A financing mechanism available to local government, such as the Local Government Funding Vehicle, would be a more viable solution. This is discussed in section 5.6.

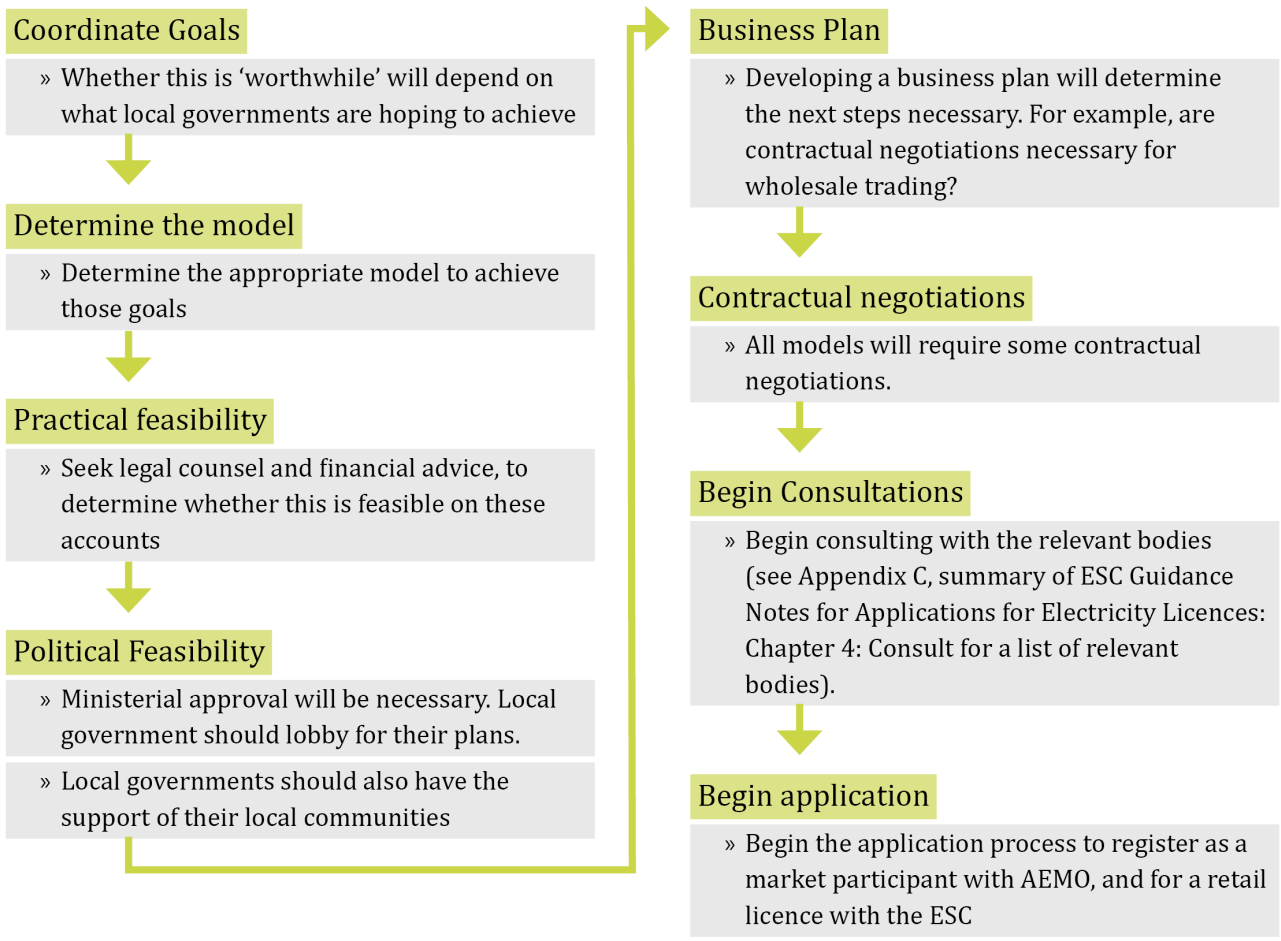
5. Legal Counsel

If Councils decide to pursue energy retailing, legal counsel should be sought. There is scope within the *Local Government Act 1989* (Vic) for enterprise to be pursued in line with achieving Council objectives (see s 193) - and as per s 3E (2), this does not restrict action outside of its municipal district. The Local Government Bill Exposure Draft 2018, as per s 149, allows for beneficial enterprise in line with the purposes of Council fulfilling its role, and as per section 7 (4) this does not restrict action outside of its municipal district. While NAGA has been informally advised that there would be scope for such an enterprise (electricity retailing) this report cannot advise on legality, and as such legal counsel should be sought before any action is taken.

Moreover, the *Local Government Act 1989* (Vic) – on which advice was sought - here only relates to the enterprise local governments can pursue. Legislation relating to the type of enterprise pursued and regulating the electricity market (here, see Appendix A for an indicative list) must also be adhered to.

1.3 Stepwise Implications

Figure 1: Stepped Approach to Electricity Retailing



Sustainability and Affordability

Victoria has a competitive electricity market, with Victorian households and small businesses able to access approximately 25 electricity retailers depending on their location. Given this, why is local government considering entering this space? Interviews with local government stakeholders and a review of the literature highlights renewable energy uptake and cost reduction as the primary rationale for interest in electricity retailing and reveals the potential for revenue raising through retailing as a secondary rationale.

Climate Change and Local Government

Climate change will have a profound impact on our natural, built, and social environments, both internationally and in Australia.[7] While some of the worst of the impacts of climate change will be felt in our urban centres – our cities, towns and shires – these centres also hold enormous potential for mitigating greenhouse gas emissions.[8] Urban populations are responsible for nearly three-quarters of the worlds greenhouse gas emissions, and are increasingly driving the global economy. This potential has seen leadership and climate change initiatives taking place on the local level.[9] Councils in Australia demonstrate this leadership, with one in five councils surveyed by the Australian Climate Council stating ambitions to walk away from fossil fuel energy generation and/or greenhouse gas emissions entirely.[10] However, the pace of change is not apace with the necessary reductions, particularly if Australia is to meet its international commitment of a 26 to 28 per cent reduction on 2005 levels of greenhouse gas emissions by 2030.[11]

Energy

Electricity generation represents the largest component of Australia's greenhouse gas emissions profile.[12] Here, "[e]missions are the result of fuel combustion for the production of electricity both on-grid and off-grid."[13] While changes in the electricity sector are taking place, they are "gradual," and a rapid shift in the source of electricity generation is not forecast in Australia's projections to 2030.[14] More must be done to facilitate the transition from electricity generated by fossil fuels, to electricity generated from renewable sources.

Current electricity retailers could better utilise their role to promote the uptake of renewable energy and reduce overall emissions, such as the purchasing of GreenPower[15] and the use of well-designed feed-in-tariffs

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[7] IPCC 2014. Summary for Policy Makers. *Climate Change 2014: Impacts, Adaptation and Vulnerability - Contributions of the Working Group II to the Fifth Assessment Report*, Cambridge University Press: Cambridge, UK, & New York. pp.1–32.

[8] Stock, P., Rice, M., Hughes, L., Steffen, W., Pearce, A., Hussey, K., Flannery, T. 2017. *Local Leadership: Tracking Local Government Progress on Climate Change*, Climate Council of Australia. Available at: https://www.climatecouncil.org.au/cpp-report.

[9] Bulkeley, H. & Betsill, M.M. 2013. Revisiting the urban politics of climate change. *Environmental Politics*, 22(1), pp.136–154.

[10] Stock et al. 2017, as above n.10, p.iii.

[11] Department of the Environment and Energy 2017, as above n.1, p.9.

[12] Department of the Environment and Energy 2016, *Australia's Emission Projections 2016,* Commonwealth of Australia: Canberra. p.9.

[13] Department of the Environment and Energy 2016, as above n.15, p.9.

[14] Department of the Environment and Energy 2016, as above n.15, p.11.

[15] GreenPower "is a government managed scheme that enables Australian households and businesses to displace their electricity usage with certified renewable energy, which is added to the grid on their behalf." Greenpower Accredited Renewable Agency, *What is GreenPower?* viewed 13 Oct 2017, http://www.greenpower.gov.au/About-Us/What-Is-GreenPower/.

to promote distributed generation, such as solar photovoltaics (PV), as it would "guarantee a set payment per unit of electricity generated and thus limit investors' exposure to low market prices."[16]

Some retailers are experimenting with new approaches to facilitate the uptake of renewable energy. For example:

- Origin Energy is trialling peer2peer trading, facilitated through Perth-based Power Ledger, and is trialling demand response with large customers in partnership with Tempus Energy.[17]
- In Melbourne, AGL partnered with IBM and Marchment Hill Consulting, to explore peer2peer trading, in a trial backed by the Australian Renewable Energy Agency (ARENA).[18]
- Enova Energy, a community-owned retailer based in NSW, offers generous feed-in-tariffs, and also offers a peer2peer trading scheme.[19]
- Greensync offers software options to electricity retailers, to facilitate new energy markets (for example through demand response).[20]

Costs

While Victoria has a competitive retail market for energy, the market structure has failed to deliver a drop in prices.[21] The Grattan Institute estimates that if the profit margin for electricity retailers fell into line with that of other retail businesses, Victorians would save approximately $250 million per year.[22] Compared to other markets, both in Australia and abroad, Victorian energy prices are "unusually high."[23] The 2017 AEMC Retail Energy Competition Review found that gross margins for retailers are higher in Victoria than in other Australian jurisdictions, but noted that a "more meaningful assessment of profitability would involve measuring a risk adjusted net margin, which also accounts for the return of and on a retailer's capital."[24]

Concerns over retailer practices and pricing have prompted an ACCC Inquiry, and in 2017 the ACCC was granted powers to investigate and report on retail electricity prices.[25] The preliminary report for this Inquiry found that the complexity of the retail market is difficult for consumers to navigate and electricity is

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[16] Devine, M.T., Farrell, N. & Lee, W.T., 2017. Optimising feed-in tariff design through efficient risk allocation. *Sustainable Energy, Grids and Networks*, 9, pp.59–74; also see Ramírez, F.J., Honrubia-Escribano, A., Gómez-Lázaro, E. & Pham, D. T., 2017. Combining feed-in tariffs and net-metering schemes to balance development in adoption of photovoltaic energy: Comparative economic assessment and policy implications for European countries. *Energy Policy*, 102, pp.440–452; Antweiler, W., 2017. A two-part feed-in-tariff for intermittent electricity generation. *Energy Economics*, 65, pp.458–470.

[17] Origin Energy 2017, *Origin to trial demand management with large customers,* viewed 13 Oct 2017, https://www.originenergy.com.au/about/investors-media/media-centre/origin-to-trial-demand-management-with-large-customers.html.

[18] ARENA 2017, *Power trading between neighbours trialled in new pilot,* media release, 24 May, Australian Government: Canberra.

[19] Enova 2017, *Leading the Way – Enova Community Energy becomes a renewable generator,* viewed 13 Oct 2017, https://enovaenergy.com.au/renewable-generator/.

[20] GreenSync 2017, *Electricity Retailers,* viewed 13 Oct 2017, https://greensync.com/audiences/electricity-retailers/.

[21] Thwaites et al. 2017, as above n.2, pp.viii-ix.

[22] Wood, T., Blowers, D. & Moran, G. 2017. *Price shock: is the retail electricity market failing consumers?*, Grattan Institute: Melbourne. p.3.

[23] Thwaites et al. 2017, as above n.2, p.ix.

[24] AEMC 2017a, *AEMC Retail Energy Competition Review*, FINAL, 25 July, AEMC: Sydney, p.vi.

[25] ACCC 2017a, *ACCC given powers to investigate and report on retail electricity prices,* media release, 27 Mar, viewed 13 Oct 2017, https://www.accc.gov.au/media-release/accc-given-powers-to-investigate-and-report-on-retail-electricity-prices.

increasingly unaffordable within the National Electricity Market (NEM).[26] However, the preliminary report suggests more modest profit margins than other reports have estimated. The final report to government is due in June 2018.

Market Failure

In the wake of concerns over retail competition in Victoria, the bipartisan Independent Review into the Electricity and Gas Retail Markets in Victoria has found that market failure was leading to disproportionately high energy prices. The primary contributing factors are:

- the costs of competition (retailers spending money to compete with one another and passing costs onto consumers);
- the structure of the market, whereby the big three (Origin, AGL, and EnergyAustralia) have a market advantage over smaller retailers, due to their generation capacities. As such, smaller retailers cannot undercut the prices set by these retailers, and downward pressure on prices is not taking place; and
- industry practices, whereby the retail market is difficult to navigate on behalf of consumers, the best prices on the market are difficult to access, and fixed charges on energy bills are rising.

High retailer costs make up a significant portion of energy prices in Victoria (approximately 30 per cent).[27] For many households in Victoria, the retail charge comprises a larger charge than for producing or distributing electricity.[28] Moreover, "there is no constant trend that can explain the significant increase in retail prices."[29]

Retailers could be more transparent in their charges and their offers. This would allow customers to manage their costs through lowering their electricity consumption. Cost reflective network tariffs could also be adopted, which would allow for different tariffs to be structured around peak demand and could provide electricity consumers with a further avenue to control their electricity costs.[30]

Revenue

Local governments currently fund their activities through rates and grants from state and federal governments.[31] While rates represent the largest source of revenue for councils, rate-capping limits the revenue available to local governments. Electricity retailing represents an opportunity for local governments to generate their own revenue.

For example, this has been the case with Bristol Energy in the UK, an electricity retailer owned by Bristol City Council and profits generated through this business are re-invested within the city (also see Appendix B: Intowork, for a related example of municipal enterprise).[32]

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[26] ACCC 2017b, *Retail Electricity Pricing Inquiry: Preliminary Report*, 22 Sept, viewed 20 Oct 2017, https://www.accc.gov.au/system/files/ACCC%20Retail%20Electricity%20Pricing%20Inquiry%20-%20Preliminary%20Report%20-%2022%20September%202017.pdf.

[27] Thwaites et al. 2017, as above n.2, p.ix.

[28] Thwaites et al. 2017, as above n.2, p.ix.

[29] Thwaites et al. 2017, as above n.2, p.7.

[30] In Victoria, cost-reflective network tariffs are opt-in. AER 2016, *Tariff Structure Statement Proposals: Victorian electricity distribution network service providers – CitiPower, Powercor, Ausnet Services, Jemena Electricity Networks and United Energy,* final decision, Commonwealth of Australia: Canberra.

[31] State Government of Victoria 2015a, *Guide to Councils,* viewed 13 Oct 2017, http://knowyourcouncil.vic.gov.au/guide-to-councils/finance-and-planning/council-funding.

[32] Bristol Energy 2015a, *Our Mission*, viewed 13 Oct 2017, https://www.bristol-energy.co.uk/about-us/our-mission.

Summary

Local governments could pursue electricity retailing to:

- promote renewable electricity generation, ensuring a sustainable future for their communities;
- deliver low-cost electricity, through ensuring fair retailer charge; and
- generate income, which could be reinvested within local communities.

Background

Historical Context

Early electrification in Victoria - throughout the last decades of the 19th century - saw significant uses of electricity overlap with public function (such as street lighting).[33] This overlap saw early generation and distribution of electricity carried out by councils, private companies under their franchise, and public-private entities.[34]

Advancements in transmission in the 1920s enabled larger scale projects closer to energy sources to develop, and state governments became involved in the electricity industry.[35] In Victoria, the State Electricity Commission of Victoria (SECV), established in 1921, developed a centralised model and largely took on the role of generation, transmission and distribution within the state, while local governments acted as retailers.[36]

Reforms throughout 1993 and 1994 allowed for the creation of the National Electricity Market (NEM), which covers the Eastern seaboard, including Tasmania, and South Australia. Reforms included unbundling services, requirements for competition, non-discrimination, and inter-state and intrastate trade.[37] While these reforms largely aligned with privatisation, some mix of public and private provision of generation and network services persists within the NEM.[38] These micro-economic reforms changed the nature of energy provision in Australia, with the role of Government in energy shifting from that of 'provider' to 'regulator.'[39]

The Contemporary Role of Government

The policy direction for the NEM is set by the Council of Australian Governments (COAG) Energy Council. The COAG Energy Council is comprised of State and Territory Energy & Resource Ministers, with overarching policy direction for climate change set by the Federal Minister.[40] While decisions are made collectively, States and Territories must enact legislation in their own jurisdictions for decisions to take effect, and can opt out of collective decisions through derogations.[41] The COAG Energy Council is supported by a Senior Committee of Officials (SCO), with several bodies (AEMC, AEMO & AER) responsible for the day-to-day operation of the market, as in Figure 2:

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[33] Abbott, M. 2006. The performance of an electricity utility: The case of the state electricity commission of Victoria, 1925-93. *Australian Economic History Review*, 46(1), pp.23–44.

[34] Abbott 2006, as above, n.38.

[35] Abbott 2006, as above, n.38.

[36] Abbott 2006, as above, n.38.

[37] Roarty, M. 1998. *Electricity Industry Restructuring: The State of Play,* Parliamentary Library Research Paper 14, Parliament of Australia, viewed 16 Oct 17, https://www.aph.gov.au/about_parliament/parliamentary_departments/parliamentary_library/pubs/rp/rp9798/98rp14#Major.

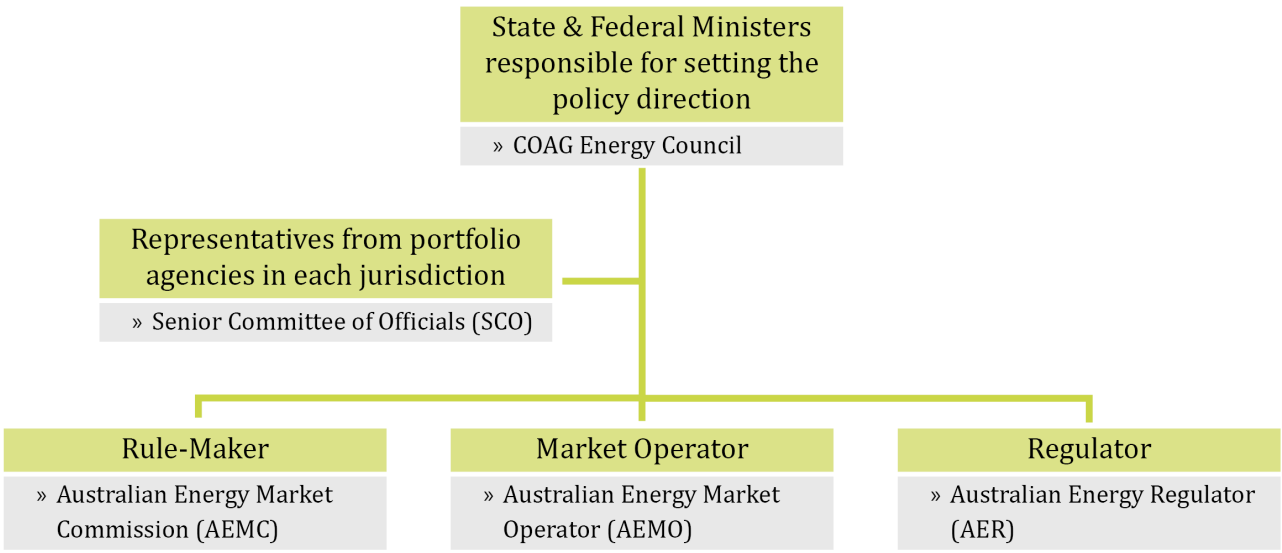
[38] Productivity Commission 2013, *Electricity Network Regulatory Frameworks,* Report No. 62, vol. 1, Australian Government: Canberra.

[39] Kallies, A. 2016. A Barrier for Australia's Climate Commitments? Law, the Electricity Market and Transitioning the Stationary Electricity Sector. *UNSW Law Journal*, 17(1), pp.1547–1582. p.

[40] Vertigan, M., Yarrow, G. & Morton, E. 2015, *Review of Governance Arrangements for Australian Energy Markets,* Commonwealth of Australia: Canberra.

[41] Vertigan et al. 2015, as above, n.54.

Figure 2: Governance structure of the National Electricity Market (NEM)



The AEMC is responsible for setting the National Electricity Rules, which are given force under the National Electricity Law.[42] These Rules provide the regulatory framework for the wholesale and retail markets within the NEM, as well as network services of transmission and distribution.[43]

International Context

Micro-economic reform in the electricity industry in Australia forms part of a broader privatisation movement globally. However, as promised benefits have stalled or failed, privatisation has faced resistance and push-back. In some circumstances, this has been characterised by public services, such as water and energy utilities, waste services and public transport, being viewed as best owned and operated in public, not private hands.[44] These moves to re-insert public ownership are often dubbed 're-municipalisation,' given the prominent role played by local governments in this trend.[45]

Reasons for re-municipalisation centre on: failures and performance problems experienced under the private sector; efficiencies and costs; achieving public service objectives; the transaction costs of tendering and monitoring; costs of capital and profits; and revenue streams from profits.[46] The expiry of many contracts held with private companies has provided a window of opportunity in which many of these shifts have occurred

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[42] AEMC 2017b, *National Electricity Rules,* viewed 13 Oct 17, http://www.aemc.gov.au/energy-rules/national-electricity-rules/current-rules; the *National Electricity Law* is schedule to the *National Electricity (South Australia) Act 1996* (SA), and Victorian implementing legislation is the *National Electricity Victoria Act 2005* (Vic).

[43] AEMC 2017b, as above, n.53.

[44] See for example Hall, D., Lobina, E. & Terhorst, P., 2013. Re-municipalisation in the early twenty-first century: water in France and energy in Germany. *International Review of Applied Economics*, 27(2), pp.193–214; Rocholl, N. & Bolton, R. 2016. Berlin's electricity distribution grid: an urban energy transition in a national regulatory context. *Technology Analysis & Strategic Management*, 28(10), pp.1182–1194.

[45] Hall 2012, as above, n.6.

[46] Hall 2012, as above, n.6.

(e.g. water utilities in Paris, and electricity network provision in Berlin returned to municipalities upon the expiry of contracts).[47]

Re-municipalisation has also been pursued with explicit aims, including political goals. For example, in Berlin and Hamburg in Germany, as well as in Boulder, Colorado buying back the grid on behalf of the municipalities was done with the explicit aim of promoting the uptake of renewable energy.[48] Munich has stated that private provision, with a narrow-focus on economic efficiency, cannot provide for long-term public goals.[49] On this argument, the significant outlay of capital for investment in order to achieve public goods such as emissions reductions, subsequent environmental sustainability, and attendant improvements in health and wellbeing, necessitates public involvement in energy provision.[50]

Within the UK, several municipalities have established their own energy retailers. Nottingham City Council has established a not-for-profit energy retailer (Robin Hood Energy);[51] and Bristol City Council has established a retailer (Bristol Energy) with all profits reinvested in the local community to achieve service objectives and promote local sustainable energy projects.[52] Bristol Energy also supports a local charity, Caring in Bristol, which offers homelessness services.[53] Both Robin Hood Energy and Bristol Energy are motivated by delivering a fair price for power and addressing fuel poverty; both also offer affordable renewable energy options. Our Power, a retailer in Scotland, is owned through several local authorities and housing associations, and is focused on delivering low-cost energy, with any profits being reinvested in customers and communities.[54]

London Mayor Sadiq Khan campaigned on a promise to establish a municipal energy company, Energy for Londoners, however this has not eventuated. In 2017, a consultant examined a "detailed options appraisal on three energy supply company options."[55] In relation to the delay in establishing Energy for Londoners, Khan has stated "It is potentially a significant undertaking and so rigorous feasibility and business modelling will be carried out to determine the most appropriate structure and functions of the company in order to achieve the overarching objectives of reducing carbon dioxide emissions and alleviating fuel poverty in London."[56] This indicates the necessity for similar rigorous analysis in the Australian context.

The Greater London Authority (GLA) has however, applied for a 'Licence Lite' – a retail licence available in the UK with fewer licencing requirements than a full retail licence. Through this arrangement, the GLA intends to purchase locally generated energy to sell to Transport for London, with a view to expand to "others

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[47] Hall 2012, as above, n.6.

[48] Fei, C. & Rinehart, I. 2014. *Taking Back the Grid: Municipalization Efforts in Hamburg, Germany and Boulder, Colorado*, viewed 13 Oct 2017, Available at: http://us.boell.org/sites/default/files/fei_rinehart_taking_back_the_grid.pdf; Rocholl & Bolton 2016, as above n.50.

[49] Reiter, D. 2011. Welcome address to 10th Munich Economic Summit, transcript, 19 May, viewed 13 Oct 17, http://www.cesifo-group.de/DocDL/Forum-3-2011.pdf

[50] Reiter 2011, as above, n.65.

[51] Robin Hood Energy N.D., *About Us,* viewed 13 Oct 17, https://robinhoodenergy.co.uk/about/.

[52] Bristol Energy 2015a, *Frequently Asked Questions,* viewed 13 Oct 17, https://www.bristol-energy.co.uk/frequently-asked-questions#t26n398.

[53] Bristol Energy 2015b, as above n.35.

[54] Our Power 2017, *About,* viewed 13 Oct 17, https://our-power.co.uk/about.

[55] Greater London Authority 2017a, *DD2077 Energy for Londoners Not for Profit Supply Company,* Director's Decision, 17 Jan, viewed 10 Oct 17, https://www.london.gov.uk/decisions/dd2077-energy-londoners-not-profit-energy-supply-company.

[56] Laville, S. 2017, Sadiq Khan criticized for backtracking on pledge for London Public Energy Company, *The Guardian,* 12 Aug, viewed 20 Oct 17, https://www.theguardian.com/environment/2017/aug/11/sadiq-kahn-criticised-for-backtracking-on-pledge-for-london-public-energy-company.

like the Metropolitan Police, the NHS, and the private sector."[57] Commenting on privatisation reforms in the UK, Bob Thorp & Simon Marvin note that "[p]rivatisation neither prescribed nor proscribed a role for local authorities in the new market-based system."[58]

The re-insertion of political goals, particularly in relation to energy, is significant. The rapid transformations that will be required of the energy sector over the coming decades are likely to see much re-negotiation in the sector to try and achieve the necessary energy transition.

Local Government Action in Australia

In their role as a key responder to climate change, Australian local governments have increasingly experimented in projects that intertwine energy provision with environmental and social goals.[59] With regard to the provision of renewable energy for the communities they serve, the City of Darebin's *Solar Savers* program has sought to deliver solar to a neglected segment of the market, low income households, through a scheme in which participating households were able to avoid up-front payment for the installation for solar panels and instead pay off the cost of the panels over time at a rate which provided ongoing financial benefit to the consumer.[60]

In the corporate space, the Melbourne Renewable Energy Project (MREP) led by the City of Melbourne has organised a large-scale purchasing agreement for renewable energy over a ten-year period, which will reduce Melbourne's carbon emissions by 138 600 tonnes per year.[61] Moreover, an agreement of this size could enable the development of new renewable energy projects, through providing stability in the investment market.

Summary

- The provision of electricity has always been an important role for government.
- The nature of this role has shifted throughout the decades, as different aims, including political and public aims, have been emphasized.
- Widespread economic reform in the 1990s stressed the role of government as a regulator.
- However, there is an increasing resurgence of public ownership and operation of utilities and public services globally, as promised gains from privatisation are not realized or considered too narrow in scope.
- Political and public goals have re-emerged as rationales for public ownership of utilities, particularly in Europe, and in the case of energy, particularly in Germany.[62]
- Australian local governments are currently exploring new roles providing renewable energy both for their own operations as well as for the communities they serve.

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[57] Greater London Authority 2017b, *Energy Supply,* viewed 13 Oct 17, https://www.london.gov.uk/what-we-do/environment/energy/energy-supply.

[58] Thorp, B. & Marvin, S., 1995. Local authorities and energy markets in the 1990s: Getting back into power? *Local Government Studies*, 21(3), p. 461.

[59] Stock et al. 2017, as above n.9.

[60] Slezak, M. 2017, Renewables Roadshow: how the 'nonna effect' got Darebin's pensioners signing up to solar, *The Guardian,* 22 Mar, viewed 13 Oct 2017, https://www.theguardian.com/environment/2017/mar/22/renewables-roadshow-how-the-nonna-effect-changed-darebins-approach-to-solar.

[61] City of Melbourne 2017, as above n.74.

[62] Hall 2012, as above n.6.

Methodology

The multi-method, qualitative research for this project: a literature review, examination of primary documents and semi-structured interviews with key stakeholders.

The literature review explored why local government may want to pursue energy retailing, the historically contingent nature of the contemporary role of local government in Australia's energy market and examined potential lessons from remunicipalisation, internationally.

Primary documents included relevant legislation (as listed under 'Legislation Cited' and Appendix A at the end of this document), guidance notes and other information from regulatory bodies (the ESC and the AER), and current retail licences in Victoria.

This research utilised semi-structured interviews, to provide insight into the functioning of local government, energy retailing and local government goals in this space.[63] . Interviewees were selected on the basis of their knowledge and expertise of relevant aspects of this research. Semi-structured interviews also allowed for the incorporation of experiential insights.

The interviews were conducted in line with the National Statement on Ethical Conduct in Human Research (2007), and compliance was ensured through the RMIT College Human Ethics Advisory Network. Participants included: two Councillors; a Senior Sustainability Office; a Sustainability Officer; as well as an individual with a background in environmental finance and experience applying for an electricity retail licence in Victoria. Advice was also sought from various stakeholders with expertise in local government law and the Australian energy market.

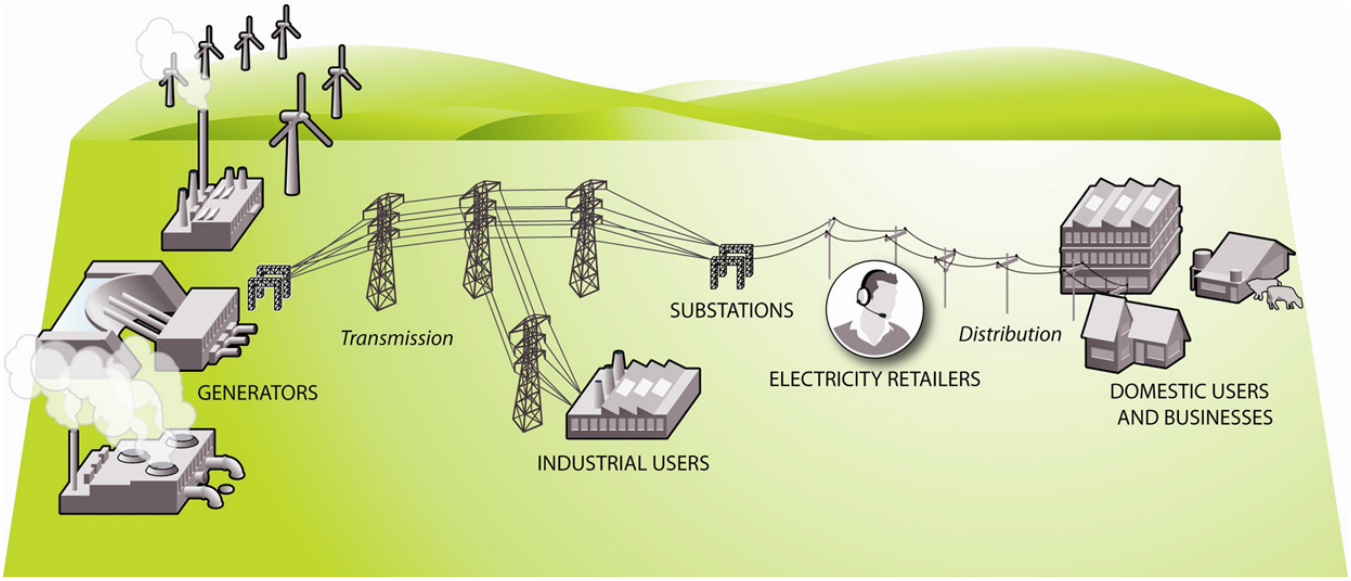
[63] Galletta, A., 2013. *Mastering the Semi-Structured Interview and Beyond: From Research Design and Analysis to Publication*, New York & London: NYU Press.

Electricity Retailing in Victoria

Energy Market Structure

Electricity generators create electricity, which is delivered through to end users through transmission and distribution networks (poles and wires) while retailers are responsible for the sale of energy, as set out in Figure 3:

Figure 3: The structure of the energy market (MBIE n.d.)



Retailer functions include:

- aggregating costs: the retailer buys electricity from generators and pay costs to the transmission and distribution companies;
- hedging: retailers enter into hedging contracts to ensure that price volatility (highs and lows in the wholesale market) is not passed onto consumers; and
- customer service: retailers remain the point of contact for consumers in the energy market.[64]

Victorian Electricity Retail Licencing Arrangements

Electricity retailers in Victoria are licenced under a Victorian framework and registered as a national market participant.

Electricity retailers must register as a market participant with AEMO. Market participants within the NEM are subject to the National Electricity Rules. Under Chapter 6B of the National Electricity Rules, a retailer who buys electricity in the spot market must register as a market customer with AEMO.

Applicants should allow up to three months to prepare their application.[65] AEMO provides information on this process through their website (https://www.aemo.com.au/-

[64] Wood et al. 2017, as above n.28, p. 14.

[65] AEMO 2016a, *How to Register to Participate in AEMO's Energy Markets,* guide, viewed 13 Oct 17, https://www.aemo.com.au/Electricity/National-Electricity-Market-NEM/Participant-information/New-participants/How-to-register.

/media/Files/Electricity/NEM/Participant_Information/New-Participants/How-to-register-to-participate-in-AEMOs-energy-markets.pdf)

Registration as a market participant confers responsibilities as per the National Electricity Rules. For example, Chapter 3 (Section 3.3) details the prudential requirements of market participants.

Electricity licences in Victoria are granted by the Essential Services Commission (ESC). The ESC provides procedures and guidelines for electricity licence applications, available through their website (http://www.esc.vic.gov.au/applications/how-to-apply/).

Major legislation to be aware of in applying for an electricity licence includes the Electricity Industry Act 2000 (Vic), the National Electricity (Victoria) Act 2005 (Vic) and the Victorian Energy Retail Code V.11 2015. The Victorian Government has stated its intention to adopt the National Electricity Retail Law in Victoria, which will have consequences for future energy retail applications.[66] A more extensive list of the legislation with bearing on the application and operation of an electricity licence can be found in Appendix A.

Registration with both the ESC and AEMO incurs licencing/registration fees - see Appendix D.

Who Can Hold an Electricity Licence?

The National Electricity Retail Law, to which Victoria is not yet party though intends to adopt, grants a licence on a national basis, and allows for the sale of electricity across "all participating jurisdictions and to all contestable classes of customers."[67] In Victoria, as outlined in the ESC Guidance Notes for Applications for Electricity: "An application for a licence may be made by any legal person including, without limitation, individuals, partnerships, incorporated associations, unit and other forms of trusts and corporations."[68]

As statutory bodies, Victorian local governments are classed as legal persons. While the Electricity Industry Act 2000 (Vic) seemingly does not restrict local government establishing a retailer through this personhood, legal advice should be sought, as other legislation may serve to restrict this.

Other forms of legal personhood may also be established by local government. Establishing a municipal enterprise is within the scope of local governments to perform any function or exercise any power under the Local Government Act 1989 (Vic), or any other Act. Functions (s 3E) and powers (s 3F) are defined under Part 1A of the Local Government Act 1989 (Vic). Functions and powers also relate to the objectives (s 3C), also defined under Part 1A. In interviews conducted for this research, electricity retailing was considered to relate to achieving the objectives of council through ensuring environmental sustainability and protecting community health and wellbeing.

Under the Local Government Bill Exposure Draft 2018, local government may participate in beneficial enterprise in order to fulfil its role. The role of a council is defined under s 7, and as with the *Local Government Act 1989* (Vic), beneficial enterprise may be pursued to "provide good governance in its municipal district for the benefit and wellbeing of the municipal community." As per s 7 (2), good governance is defined at s 8, which defines overarching governance principles. Several of these principles may be relevant, however the governance principle most aligned with the motivations identified for pursuing electricity retailing in this research relate to s 8 (c), which states: "the economic, social and environmental sustainability of the municipal district, including mitigation and planning for climate change risks, is to be promoted."

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[66] State Government of Victoria 2017, *National Energy Customer Framework,* viewed 13 Oct 17, https://www.energy.vic.gov.au/legislation/national-energy-customer-framework/the-national-energy-customer-framework-in-victoria.

[67] AER 2014, *Retailer Authorization Guideline,* V.2, Commonwealth of Australia: Canberra, p.5.

[68] ESC 2006, *Guidance Notes for Applications for Electricity Licences and the Transfer of Existing Licences,* ESC: Melbourne. p.3.

Under s.193 of the *Local Government Act 1989* (Vic), Local Government may form partnerships, unit and other forms of trust, corporations and other bodies. As per the Local Government Bill Exposure Draft 2018, s 149 (1)(a)(b), "A Council may …become a member of a corporation, trust or other body; acquire shares in a corporation, trust or other body." See Appendix B for examples of municipal enterprise.

Obtaining an Electricity Retail Licence in Victoria

In assessing applications for electricity retail licences, the ESC must consider (amongst other things) whether the granting of the licence will enhance competition, prevent monopoly and non-transitory market power, and "ensure users and consumers (including low-income or vulnerable customers) benefit from the gains from competition and efficiency."[69] Consequently, local governments must consider how their actions will enhance competition in the electricity retail market.

Local government could enter the market as a participant. This is similar to the model used in other competitive retail energy markets, such as in the UK (see section 3.3). While local governments have a public role, the proposal here is not to re-regulate the electricity retail market, nor to operate as a monopoly. There would be no requirement on the part of potential customers to utilise the council-established retailer. While the ultimate model adopted may be a not-for-profit, this would not mean that profits could not be generated, but that they would be reinvested in services, customers and their communities. As such, a viable business model may deliver low-cost energy, but this is not necessarily at the expense of other market participants. Therefore, a low-cost publicly-oriented retailer should work to drive down prices in the Victorian retail electricity market.

Councils must carefully consider their practices in this space, and ensure they are operating competitively. Failure to do so could lead to an undermining of trust in participating local governments and sanction by the ACCC.

An interview undertaken with a research participant, who has previously applied for an electricity retail licence with the ESC, noted that the ESC was very helpful in navigating the application process. While the ESC does not have a licence application form, Schedule 1 of the Guidance Notes for Applications for Electricity Licences details the information typically expected. Any Council considering an application should thoroughly read through this schedule, as it will provide an indication of areas Council may have strengths (for example in customer service and billing) and where they may have areas in need of improvement and/or further consideration.

Financial Considerations

Applicants for an electricity retail licence must demonstrate their financial viability. Registration as a market participant confers prudential requirements under the National Electricity Rules (mentioned above at section 5.2). The ESC also evaluates financial viability and this process will typically inform the registration process with AEMO.[70]

There is no "definitive test" for what financial viability is and the ESC may exercise discretion in determining financial viability.[71] The commission will consider "whether the applicant will, if granted a licence, have access to sufficient financial capital and establish a sustainable business in order to satisfy the interests of its customers."[72]

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[69] ESC 2006, as above n.86, p.1.

[70] ESC 2006, as above n.86, p.7.

[71] ESC 2006, as above n.86, p.7.

[72] ESC 2006, as above n.86, p.7.

From the interviews conducted in this research, the capital required for establishing a small public-facing retailer would be approximately $3 million. This number was given as covering upfront and working capital. This is indicative of the cost of establishing a small retailer, and cannot provide guidance for the actual costs of local government establishing a retailer. Nonetheless, this number is useful for understanding that certain processes would be required: under the *Local Government Act 1989* (Vic), s 193 (5C), this outlay would require Ministerial approval. Approval from the Treasurer would also be necessary if the outlay exceeds AUD$5 million. Requirements for ministerial and Treasurer approval do not appear in the current draft of the Local Government Bill Exposure Draft 2018, though this bill could pass in a different form to the current public draft.

An interviewee who had previous experience of the electricity retailer application process in Victoria noted that costs for retailing can be broadly understood as falling under three categories:

- risk management (particularly trading in the spot market);
- back-of-house costs (such as customer service); and
- marketing (such as customer acquisition and retention).

It is possible that some of the costs would be minimised for local governments depending on the model of retailing pursued.

Back-of-house costs, such as establishing billing systems and customer service could be reduced as much of this infrastructure is already in place for local governments, and would need to be expanded, as opposed to being established. If the retailer is not public facing (i.e. marketed towards municipal services and buildings, and not domestic and small business users), this would also minimize the marketing and back-of-house costs.

One interviewee also suggested that even if the retailer were publicly facing, local governments have a pre-existing relationship with communities, and as such this could minimize marketing costs. This is because a level of trust already exists, and customer acquisition and retention could be easier. However, this also carries reputational risk, discussed below (section 5.8: Risk). However, it is important to note that the costs of competition and marketing are higher for smaller retailers ("as a share of their overall retail costs").[73] The most significant consideration for local government is likely to be risk management, and the risks associated with wholesale trading.[74] Interviews revealed that beginning negotiations with traders and risk managers would be helpful for local government in understanding these costs.

A major consideration relates to how an electricity retailer would be financed. One interviewee noted that they knew of investors that are interested in financing this project, if it moves forward. Debt financing is also a potential option, and the Local Government Funding Vehicle (LGFV) provides low-cost debt to Victorian local governments.

The LGFV is a funding vehicle established by the Municipal Association of Victoria, which "provides funding directly from capital market investors including super funds, insurers and asset managers, removing the middle man and has the capacity to issue green bonds and support social initiatives."[75]

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[73] ACCC 2017a, as above n. ., p.74.

[74] One interviewee suggested that pursuing options behind-the-meter, as opposed to a conventional wholesale trading model, could be pursued. This is explored in section 6, in the discussion on Distributed Retailing.

[75] MAV 2017, *Local Government Funding Vehicle,* viewed 13 Oct 17, http://www.mav.asn.au/policy-services/procurement/projects/Pages/local-government-funding-vehicle.aspx.

Technical Capacity

Applicants for an electricity retail licence in Victoria must demonstrate their technical capacity in accordance with the *Electricity Industry Act 2000 (Vic) s 19(4)*. If local governments do not have the immediate technical capacity, there is a period in which to obtain this capacity and there are provisions to meet these requirements through external contracts. A licence can still be granted if:

- the activities specified in the licence are not likely to commence or be carried out within the 12 month period after the licence has been granted, or
- the Commission grants the application subject to such conditions as decided by the Commission relating to the further approval of the applicant's technical capacity or the approval of future facilities necessary for the carrying out of such activities.

(ESC 2006, p. 8.)

Technical capacity generally falls in two categories:

- the capacity to operate and manage the relevant electricity business; and
- the capacity to comply with the applicable regulatory requirements (ESC 2006, p.8).

The applicant must "provide supporting documentation, amongst other things, that demonstrates that:

- it has the business skills, knowledge, personnel, systems and the ability to operate the relevant electricity industry business;
- it has the capacity to manage risk and to operate an effective and functional risk management and compliance system consistent with the relevant Australian Standards (for example (AS – 3806 of 2006); and
- it has the capacity to comply with regulatory requirements as specified in the EI [Electricity industry] Act, the licence and applicable codes, procedures and guidelines.
(ESC 2006, p.8)

Applicants may meet aspects of their technical capacity through contractors. If this is the case, finalised contracts must be provided to the ESC (though these can be kept confidential through commercial in confidence provisions). Wholesale trading is a significant aspect of electricity retailing, and must be done effectively to ensure the business remains viable. Contractual arrangements should be considered, unless local governments have personnel with sufficient expertise in this area. Interviews undertaken for this research indicated that these contracts could be difficult to negotiate, but are a central concern to the viability of an electricity retail business.

As technical capacity is assessed against the applicants "capacity to comply with the applicable regulatory requirements."[76] Electricity retailers must be compliant with regulations concerning:

- health and safety - *Electricity Safety Act 1998 (Vic).*
- protections for hardship customers - *Electricity Industry Act 2000 (Vic) s 43.*
- environmental schemes, such as:
    - The Victorian Energy Efficiency Target. See the Victorian Energy Efficiency Target Regulations 2008 (Vic) (VEET Principal Regulations)
    - Minimum feed-in-tariffs. The ESC determines minimum feed-in-tariffs in Victoria, as per amendments made in Feb 2017, through the passing in Parliament of the Energy Legislation Amendment (Feed-in Tariffs and Improving Safety and Markets) Bill to the Electricity Industry Act 2000 (Vic).

[76] ESC 2006, as above n…., p.8.

- The Renewable Energy Target. See the *Renewable Energy (Electricity) Act 2000* (Commonwealth).
- Potential obligations under the National Energy Guarantee.[77]

This list is not exhaustive of the necessary regulatory requirements. See section Appendix A for a fuller list of relevant legislation, guidelines and codes. Legal advice should be sought, for a fuller understanding of these requirements.

Further Considerations

Political Environment

Given that local government involvement will be both in a market and public capacity, this is potentially problematic. While on the one hand, local government could be viewed as just another market entrant, on the other hand, their goals will likely align with other public motivations, such as delivering least-cost power to its constituents/own services (depending on the model pursued). Local governments operate in a political space, and the ways in which they must balance concerns of a public role in a market environment will need to be addressed and managed. As such, it is necessary for councils to build political support for their actions, prior to pursuing action on this matter.

This is particularly the case as this action is likely to require ministerial approval (see below: Risk). State Government support is therefore important. Furthermore, State Energy & Resource Ministers determine the policy direction for the NEM, and therefore likely have established relationships with market incumbents. If market incumbents see the role of local government as problematic in what (in Victoria) is a largely privatised market, then State Government will need to consider their concerns, and whether this move provides benefits on balance with any potential drawbacks for consumers. Local government should lobby on the grounds of these benefits, if they pursue electricity retailing. This is another reason goals must be clearly articulated and coordinated, as per the recommendations of this report.

Risk

As noted in the executive summary, the scope and appetite of risk for local government should be considered.

In relation to scope, as per the Local Government Act 1989 (Vic) s 193(5A), local governments must comply with s 193(5A) & 5(C) before exercising entrepreneurial powers. This requires an assessment of the total risk exposure 5(A), and given the size of the investment, under 5(C) would require a "risk assessment report (including appropriate reporting arrangements from an appropriately qualified person); and obtain the approval from the Minister." Potentially, the Treasurer would also need to approve the proposal (as noted above in section 5.6).

The Local Government Bill Exposure Draft 2018 does not place mechanisms for Ministerial and Treasurer approval, though different restrictions apply to risk. As per s 150 (1)(a), a Council must ensure the total risk exposure does not exceed the total investment. Section 1 places other restrictions on risk, including regard for risk, the establishment of risk management arrangements, and the management of risks that may arise as a result of changes to a beneficial enterprise.

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[77] Turnbull, M. 2017, *National Energy Guarantee to Deliver Affordable, Reliable Electricity,* media release, 17 Oct, viewed 20 Oct 17, https://www.pm.gov.au/media/2017-10-17/national-energy-guarantee-deliver-affordable-reliable-electricity.

In relation to risk appetite, the interviews provided mixed findings. For some, the need to act in the best interests of the community required a shift away from the status quo, while others expressed caution in relation to pursuing electricity retailing. The latter noted that councils are typically risk averse. This is a result of councils' responsibility to their communities both in terms of not wanting to risk ratepayer and taxpayer money as well as not wanting to raise rates and place unnecessary financial strain on constituents. There is also reputational risk to consider. If the retailer is publicly-facing, reputational risk is more acute, as customers will be more aware of, and be impacted by, retailer failure.

The model chosen will also impact the level of risk in pursuing electricity retailing. For example, high wholesale prices would necessitate passing those costs onto consumers. If a retailer is established to serve municipal services and buildings, there will likely be an understanding that the retailer costs are fair and relate to operational costs. With a publicly-facing retailer, there may be less understanding of the level of control local government has over electricity prices, and a rise in prices could result in an undermining of trust in local government.

Business and Retail Models

This section will examine models that could be pursued for business structures as well as potential models for electricity retailing. Considerations should be given to different aspects of relevant legislation, and the implications this may have for pursuing each model. Legal advice should be sought, to advise on these considerations.

Business Structures

Sole trader, trusts, partnerships and companies are the most common business structures in Australia.[78] Sole traders will not be discussed, as this business structure is not suitable for local government.

Trusts[79]

Under a trust, an individual or business manages an asset on behalf of beneficiaries. Trusts are complex to establish, and it is advised to consult a licenced professional. A trustee can be an incorporated body or a person, and is responsible for everything in the trust.[80] Trusts provide asset protection and limited liability. A trust is not a legal entity though "are treated" as such for "tax administration."[81]

Partnerships[82]

A partnership is between two or more people. Between them, they share ownership, income and losses. They are not a separate legal entity from the individuals. Partnerships are relatively easy and cheap to set-up and

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[78] ATO 2016, *Choosing your business structure,* viewed 13 Oct 17, https://www.ato.gov.au/Business/Starting-your-own-business/Before-you-get-started/Choosing-your-business-structure/.

[79] See *Trustee Act 1958* (Vic).

[80] Department of Industry, Innovation and Science 2017a, *Business Structure,* viewed 13 Oct 17, https://register.business.gov.au/helpmedecide/businessstructure/helpbusinessstructure.

[81] ATO 2017, *Trusts,* viewed 20 Oct 17, https://www.ato.gov.au/General/Trusts/.

[82] See *Partnership Act 1958* (Vic),

run and have minimal reporting requirements.[83] Drawbacks include a risk of losing personal assets if the business goes into debt and that sometimes sharing business decisions can cause disputes.[84]

Limited partnerships have at least one general partner (who is responsible for day-to-day management, and has unlimited responsibility for losses) and at least one limited partner (who is not responsible for day-to-day management, and has limited responsibility for losses, tied to their contribution to the partnership). A limited partnership must be registered in Victoria.

Under the Partnership Act 1958 (Vic) s 5(1), a partnership is defined in relation to a view to profit, and would not suit a not-for-profit structure.

Companies[85]

Companies are "a separate legal entity from you … is owned by its shareholders and run by its directors"[86] and have limited liability, when compared with trusts and partnerships. This structure is more suitable for medium and large businesses. They are complex and expensive to establish and run, and have more "reporting and other requirements under Australian company law."[87]

Public companies "can have an unlimited number of non-employee shareholders and [and unlike proprietary limited companies, can] raise money from the public by selling shares. A public company must have at least one shareholder, one secretary, and three directors."[88]

Under the Corporations Act 2001 (Commonwealth), private companies owe duties to its shareholders. If local government foresees any conflict between generating dividends, and social and environmental goals, specific provision for any goals should be stated in the Company Constitution.

Not-for-Profit Structures

Incorporated Bodies[89]

An incorporated body offers limited liability for individuals. Restrictions apply to operations across states, which is problematic in this instance, given the national structure of the NEM.

Companies Limited by Guarantee

Subject to the Corporations Act 2001 (Commonwealth) cannot pay dividends, and profits are re-invested within the organisation. They do not have shareholders, and cannot raise money by selling shares. Members of the company act as guarantors, in the event of the winding up of the company. Under the Local Government Bill Exposure Draft 2018, any beneficial enterprise undertaken be a council will require that "the corporation is a limited corporation," as per s 150 (1)(b).

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[83] Department of Industry, Innovation and Science 2017b, *Business Structure,* viewed 13 Oct 17. https://register.business.gov.au/helpmedecide/businessstructure/partnershiporcompany.

[84] Department of Industry, Innovation and Science 2017b, as above n.95.

[85] See *Corporations Act 2001* (Cth).

[86] Department of Industry, Innovation and Science 2017b, as above n.95

[87] Department of Industry, Innovation and Science 2017b, as above n.95

[88] Department of Industry, Innovation and Science 2017b, as above n.95

[89] See *Associations Incorporation Act 1981* (Vic).

Different Retailing Structures

The different models examined in this report represent a mix of risks, costs, and benefits, which must be weighed against each other in deciding which model to pursue. The following table represents a stylised representation of these considerations. The table is represented as a traffic light system (green, amber & red) and follows these conventions. This table has been adapted from a report completed by the Institute for Public Policy Research, examining electricity retailing opportunities for local authorities un the UK energy market.[90] This report also informs the following discussion.

Table 1: Risks and Benefits of Different Retail Models

	FULL RETAIL BUSINESS	RETAILER FOR MUNICIPAL BUILDINGS & SERVICES	PARTNERSHIP	JOINT VENTURE	EMBEDDED NETWORK RETAILER	DISTRIBUTED RETAILING
EASE OF SET-UP						
START-UP COSTS						
OPERATIONAL COMPLEXITY						
RISKS						
REVENUE POTENTIAL						
CONTROL						
ABILITY TO PROMOTE LOCAL GENERATION						
REQUIRES REGULATORY CHANGES						

[90] Platt, R., Straw, W., Aldridge, J. & Williams, J., 2014. *City Energy: A new powerhouse for Britain*, Institute for Public Policy Research, London.

The different retailing structures here relate to potential options for retailing. These models reflect those which various stakeholders expressed an interest in pursuing throughout this research, and also dominant models for electricity retailing.

Full retail business

A full retail licence would see local governments establish a conventional retail business, catering to a range of customers. This would see sole responsibility for the establishment, operation, and ongoing viability of the retail business rest with local government.

Retailer for municipal buildings and services

NAGA has noted interest in a retail model that would see local governments establishing a retailer, with the express aim of retailing back to local governments through municipal services and buildings. Internationally, the closest comparison here is the model pursued by the Greater London Authority (GLA) (section 3.3). The GLA is pursuing a 'Licence Lite' arrangement, which would see the GLA working as a junior supplier (retailer) to a senior supplier (Ofgem). As such, the licencing requirements are slightly less burdensome than a full retail licence. This model does not have an equivalent in Australia (although a partnership model would achieve a similar reduction in the burden placed in local government).

In Victoria, to achieve similar goals, a full retail licence could be pursued. The resulting retailer could market itself to municipal services and buildings. This could attract municipal customers seeking to source their electricity through a retailer they feel is aligned with their values, and will deliver a service that best serves their interests (and deliver on best value principles,[91] requiring local governments to have consideration of quality and cost). As the majority of councils in Victoria "purchase their electricity through either Procurement Australia (PA) or the Municipal Association of Victoria's (MAV) group tendering processes,"[92] these bodies (PA and MAV) should be directly engaged with regarding their current procurement practices, contracts, and potential willingness to engage with a council-established retailer.

Some participants in this study raised the possibility of coordinating action across councils to act as a large end-user. Some large industrial users participate directly within the NEM.[93] Registered market customers with AEMO, who do not also hold a retailer authorisation include: Tomago Aluminium Company Pty Ltd; Rio Tinto Alcan Yarwun Pty Ltd; Rio Tinto Aluminium (Bell Bay) Limited; Adelaide Brighton Cement Ltd.[94] This list indicates that direct participation in the NEM requires economies of scale. Most large commercial and industrial customers still operate through a retailer.[95] While financial modelling is beyond the scope of this study, previous research suggests that there are benefits to large commercial and industrial users acting through a retailer.[96]

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[91] *Local Government Act 1989* (Vic), s 208b.

[92] Victorian Greenhouse Alliances 2017, *Electricity procurement in the Victorian Local Government Sector: Aligning Council Money with Council Values*, Victorian Greenhouse Alliances: Melbourne. p.6.

[93] AEMC 2017c, *How the spot market works*, fact sheet, viewed 13 Oct 17, http://www.aemc.gov.au/getattachment/39b5132e-735d-4dee-83ee-6bb6a701181f/How-the-spot-market-works.aspx.

[94] AEMO 2016d, *AEMO Current Registration and Exemption Lists,* viewed 19 Oct 17, https://www.aemo.com.au/Datasource/Archives/Archive141.

[95] Healy, S. & Macgill, I. From smart grid to smart energy use, in Sioshansi, F.P. (ed) 2013, *Smart Grid: Integrating Renewable, Distributed and Efficient Energy*, Elsevier: Amsterdam; Boston; Heidelberg; London; New York; Oxford; Paris; San Diego; San Francisco; Singapore; Sydney; Tokyo. P.51

[96] Seed Advisory 2013, *Market Risks for Large Customers,* AEMC: Melbourne. pp. 7-8

Partnership

Councils, working in conjunction with an existing electricity retailer, could establish a retail business. This would see shared responsibility for the establishment, operation, and ongoing viability of the retail business.

Joint Venture

Councils, alongside one or more third parties, could establish a retail business. This would see shared responsibility for the establishment, operation, and ongoing viability of the retail business rest with local government and relevant third parties. Throughout this research, NAGA has been informally advised that other organisations are looking at establishing electricity retail businesses. This sharing of risk, costs (though also benefits) could make electricity retailing more attractive to risk-averse councils.

Embedded Network Retailer

One participant highlighted an interest in exploring a model similar in infrastructure and customer base to WinEnergy. WinEnergy cater to "large customers such as shopping centres, large commercial building or high rise towers."[97] WinEnergy operate embedded networks, and a retail licence facilitates the on-selling of electricity, and enables WinEnergy to cater to clients who are not part of these networks.[98]

> Embedded networks are private electricity networks which serve multiple premises and are located within, and connected to, a distribution or transmission system through a parent connection point in the National Electricity Market. Common examples of embedded networks include shopping centres, retirement villages, caravan parks, apartment blocks and office buildings.
>
> AEMC 2015

The function of pursuing this would be to facilitate the uptake of solar PV and other local generation for multi-tenanted environments, with the potential for local electricity generation on such sites currently underutilised.

This would see sole responsibility for the establishment, operation, and ongoing viability of the retail business rest with local government. Operating embedded networks will confer responsibilities through the National Electricity Rules, and the AEMC is currently undertaking a review of the regulatory arrangements for embedded networks, with a Draft Report released 12 September 2017.[99]

Distributed Retailing

Distributed retailing here refers to a form of retailing which moves away from the conventional retail model, and towards a model more reflective of distributed generation and behind-the-meter opportunities. This model was again proposed by a research participant. The model proposed here was one in which local governments would facilitate peer2peer and business2business trading, and look to small-scale generation and on-selling, as opposed to participation in the wholesale market.

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[97] Winenergy 2012, *Application for Electricity Retailer Authorisation*, viewed 13 Oct 17, http://www.esc.vic.gov.au/document/energy/25928-winenergy-pty-ltd-licence-application/.

[98] Winenergy 2012, as above n.106.

[99] AEMC 2017d, *Review of the Regulatory Arrangements for Embedded Networks,* Draft Report, 12 Sept, Sydney.

This model has appeal for facilitating the generation and sale of small-scale renewable energy, in-turn generating local employment and income; positive social and environmental outcomes; and plays to the strengths of local government through employing local networks and capacity building, as opposed to wholesale trading. It also provides a niche role for local government, as it would be fulfilling a role currently lacking within the electricity market.

Ease of Set Up

A full retail business, retailer for municipal buildings and services and an embedded network retailer model would mean that local government would navigate this process itself, and the set-up process will be complex. A joint venture would share this burden, though additional processes such as negotiating the contractual arrangements, would be required.

A partnership model would mitigate some of the set-up complexity. Negotiations relating to contractual arrangements with the retailer will be necessary. However, the retailer will have an existing licence, a prior relationship with the ESC, AEMO, and other bodies, and billing and metering arrangements in place.

Distributed retailing would require a regulatory change to set-up, and therefore would be complex. However, there is potential for this model to have a relative ease of set-up, once regulatory changes take place.

Start-Up Costs

Start-up costs for a full retail business; retailer for municipal buildings and services; and an Embedded Network Retailer model will be high. Under a joint venture model, these costs will be shared.

Under a partnership model, these costs will be mitigated, due to existing infrastructure and technical capacity.

Costs for distributed retailing have the potential to be low. Smart metering is already in place in Victoria,[100] meaning that much of the necessary infrastructure and technology to facilitate action behind-the-meter is in place. An unknown here is the way in which the regulatory environment will change to accommodate such a model.

[100] State Government of Victoria 2015b, *Smart Meters: End of rollout,* fact sheet, viewed 19 Oct 17, http://www.smartmeters.vic.gov.au/about-smart-meters/end-of-rollout.

Operational Complexity

All models are likely to require contractual arrangements.[101] Responsibility for monitoring these arrangements will rest solely with local government under a full retail business, embedded network retailer model, retailer for municipal services and buildings, and distributed retailer; will be shared under a joint venture model; and will likely be weighted towards the partner in a partnership model (particularly if a limited partnership is pursued).

A full retail business would have the highest attendant operational complexity, as all aspects of the operation would be the responsibility of local government.

It is possible that marketing burdens would be lessened under embedded network retailer model, as there will likely be fewer (though larger) customers. However, customer retention and acquisition will still be important for the success of the business. Fewer marketing and customer service requirements will be necessary for retailing to municipal services and buildings, lowering the operational complexity for this model.

A partnership model would likely have the lowest operational complexity, as it could build on existing capacity, such as compliance measures and marketing strategies.

Distributed retailing would remove wholesale trading, a significant complexity of retailing.

Risks

Risks will be greatest with a fully licenced retailer, and similar for an embedded network retailer model. This is because there is not only the risk of business failure, but there is also the potential for significant reputational risk and an undermining of trust in local government (see section 5.8). Under a joint venture these risks are shared. Under a retailer for municipal buildings and services, there is still financial risk, but reputational risk is likely to be lower (while it may undermine trust generally in municipal enterprise, trust is more likely to be undermined if constituents and external businesses are direct customers of a retail business).

While a partnership model shares risk, prior experience with electricity retailing, and successful establishment of a business, reduces these risks. A limited partnership would also mitigate the financial risk. It is possible that reputational risk is less likely under such a model. Such a model is more risk-averse, and this caution on behalf of local government could mitigate perceptions of how responsible local government is for failure. Financial risk is also mitigated under a partnership model, as the partner's experience in trading will be valuable.

Distributed retailing removes the risk of wholesale trading. However, there are risks relating to its 'newness'- as an untested business model, previous experience cannot be drawn upon, and new circumstances and risks are likely to arise.

Revenue Potential

A full retail licence would be the largest business, and would have the greatest potential for revenue. An embedded network model will likely be smaller, with attendant smaller profits, although it also holds good potential for revenue. Under a joint venture and a partnership, profits would be shared. However, a partnership model potentially offers greater value for money than a smaller business model, as economies of scale in wholesale trading could keep costs down.

Retailing to municipal services and buildings has potential to generate revenue. However, costs would need to be kept low for council buildings and services. Many of the concerns over high retailer costs relate to

[101] Platt et al. 2014, as above n.100, p.36.

domestic and small business customers.[102] Local governments have group procurement practices, which already deliver lower electricity prices than is typically provided to retail customers. Therefore, the extent to which an electricity retailer by and for municipalities could generate revenue is potentially limited.

Distributed retailing would see profits go solely to local government. This model is likely to be smaller in scale (at least initially), meaning that profits will stay within local government, though might be modest until the model achieves greater scale.

Control

Control is greatest under models of sole ownership, where the sole responsibility for the retail business rests with local government.
Under a joint venture and partnership model, this control is shared. Considerations to manage this are contractual arrangements. Dispute resolution may be necessary, if there is disagreement over business decisions.

Ability to Promote Local Generation

As noted in section 2.1, a retailer can employ multiple methods to encourage the uptake of renewable energy. This is possible under all models. The embedded network and distributed retailer models present unique opportunities, as discussed in section 6.2. These models were proposed by research participants specifically for the role they could play in promoting the uptake of renewable energy. The amount of control could determine the role measures such as energy efficiency and demand response play in the retailer's behaviour. This is because council imperatives of social and environmental benefit may need to be balanced against the priorities of third parties, partners, and potential attendant shareholders.

Requires Regulatory Changes

The only model to require regulatory changes would be distributed retailing. While it is possible, under different models, to facilitate different levels of distributed generation – for example, through feed-in-tariffs and demand response – the model as articulated is not possible under the current market structure. If local governments decide to pursue this model, they could lobby for changes to make such a model possible.
The Local Government Act 1989 (Vic) is currently under review, presenting an opportunity to lobby for specific provisions. Federal legislation governing renewable energy - for example, the Renewable Energy (Electricity Act) 2000 (Commonwealth) - could also potentially provide for such a model, subject to legislative changes.

Conclusion

For ease, the above discussion treated each model as distinct. However, there is potential to combine aspects of different models, for example, an embedded network retailer, operated as a joint venture. It is evident that different models will work towards achieving different visions for electricity retailing. For example, retailing to municipal services and buildings guards against reputational risk. It would 'cut out the middle man' so to speak, and provide greater control and transparency around the local government electricity supply.

However, retailing solely to municipal services and buildings also limits the potential range of benefits which could result from electricity retailing: by not delivering low-cost energy to the public, fuel poverty is not addressed. The income potential of this model is also limited, as local governments have cheaper (than typical) electricity through current procurement practices. Lower income generation potential means that the potential to re-invest profits within the community is also limited.

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[102] Thwaites et al. 2017, as above n.3.

As such, a recommendation of this report is that: goals must be clearly articulated and coordinated, so an appropriate model to achieve such goals can be pursued.

Limitations

Financial and Economic Evaluation

This study does not speak to the financial and economic aspects of the project. Analysis should be pursued by councils to examine the financial viability of pursuing energy retailing. Previous research in New South Wales (NSW) suggests that often the expertise of local government environmental officers and managers lies in "technical aspects and performance of alternative energy generation projects, [and] they might not have equal expertise with regards to the financial evaluation of such projects."[103]

In light of this, Cheung et al. (2016) recommend the development of a financial tool to assist environmental officers and managers, or greater integration of financial staff within council in decision making. This imperative is of particular importance, given the limited finances available for such projects within local government.

Small Sample Size

Due to time constraints, the sample size was strategically selected, though small. Further research could engage with local government staff from all councils that comprise NAGA as well as draw on local governments from other Victorian greenhouse alliances, to ensure that their values and aims align with the participants interviewed in this study.

Community Engagement

While stakeholders were consulted within this study, community engagement should be undertaken to ensure any project moving forward is robust and reflective of community wants and needs. Such engagement could work to both inform the community about their council's rationale for pursuing energy retailing (if councils decide to pursue such a path) and could allow the community to participate directly in the decision-making process.

[103] Cheung, G., Davies, P.J. & Trück, S., 2016. Financing alternative energy projects: An examination of challenges and opportunities for local government. *Energy Policy*, 97, pp.355.

Conclusion

The reasons to pursue electricity retailing, revealed through the literature and through the interviews conducted for this research relate to climate change, costs and potential revenue. Local government retailing could facilitate the uptake of renewable energy and reduce emissions through supportive tariffs and regulations, costs could be decreased through the adoption of lower fixed charges and cost-reflective network tariffs and there is potential for councils to generate revenue through a retail business, to reinvest in local renewable energy projects and other projects serving to benefit the local community.

Internationally, municipalities are playing an increasing role in the delivery of public services. In the case of energy, German municipalities have become actively engaged in energy markets and energy retail businesses have been successfully established by local authorities in the UK. International experience highlights that local governments can use retailing to achieve public aims (such as delivering affordable renewable energy), within a competitive energy market.

Electricity licences in Victoria are granted by the ESC. The ESC must have consideration of an applicant's contribution to the retail market (will their entry benefit consumers?), their financial viability and their technical capacity. Retailers must also register as a market participant with AEMO, which requires a separate application process. Local governments should consider the ways in which they are contributing to competition, their financial viability and technical capacity, their scope and appetite for risk and the political environment in which they are operating.

There are a variety of ways in which local government could become involved in electricity retailing. Different models will best serve different risk appetites, and different desired outcomes. An understanding of goals is vital to any consideration of whether local government should pursue electricity retailing. If, for example, the cost of power for municipal services and buildings is the driving factor, then an energy efficiency audit of municipal buildings and services could be a more effective way to address this. If industry practices are the driving factor, the outcomes of the Thwaites review, and particularly the upcoming ACCC Inquiry, should be taken into consideration. If reform comes about as a result of these processes then this factor (poor industry practices) may be largely mitigated. The interviews and discussions conducted for this research revealed that different priorities exist across and within councils.

This report has highlighted some of the opportunities (such as delivering low-cost renewable energy) and also some of the barriers (such as financial and reputational risk, and high regulatory burdens) to electricity retailing for local governments.

This report is intended to provide local governments in Victoria a fuller understanding of their options within electricity retailing to inform future decision making.

Recommendations

Early ground work can work to ensure that local governments are in the best position possible to make a decision.

For example, an understanding of financial considerations and potential financing mechanisms are best examined as soon as possible. A fuller understanding of all considerations can allow for measured and informed decision making.

Clear articulation and coordination of goals. This will ensure that decisions are made in line with the outcomes councils wish to achieve.

Financial Consideration & Legal Counsel: Practical constraints will also determine the feasibility of electricity retailing. Financial advice should be sought, as well as professional and specialized legal counsel. Legal counsel should be prioritized, as it will determine whether local governments can progress within the current regulatory environment, or if regulatory change is necessary.

Build Support: Political support will be necessary, if councils wish to pursue electricity retailing. This support will be necessary from local communities and from other levels of government. Formal approval from the Minister and potentially the Treasurer will be required. The ESC considers the results of public consultations in the granting of electricity licences, further highlighting the necessity of political support.

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Appendix A: Legislation, Codes and Guidelines Relevant to Electricity Retailing

This list should be considered as a guide only, and is not exhaustive

Australian Consumer Law, as per Schedule 2 of the Competition and Consumer Act 2010 (Cth)

AMI see Advanced Metering Infrastructure

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Fair Trading Act 1999 (Vic)

National Electricity (Victoria) Act 2005 (Vic)

Privacy Act 1988 (Cth)

Renewable Energy (Electricity) Act 2000 (Cth)

Victorian Energy Efficiency Target Regulations 2008 (Vic) (VEET Principal Regulations)

Victorian Energy Efficiency Target Act 2007 (Vic)

Appendix B: Examples of Municipal Enterprise

Some examples of municipal enterprise established through various Victorian Local Governments include (but are not limited to):

Intowork: Intowork is a not-for-profit business operating within a competitive corporate environment. Intowork was established 30 years ago by the City of Darebin, City of Moreland and City of Yarra Councils. Since then, IntoWork Australia has expanded significantly, and is now "the parent body for a group of businesses providing workforce solutions across Victoria, New South Wales, Queensland, South Australia and Tasmania."[104] Profits are reinvested into expanding and improving Intoworks services, and the Inner North Community Foundation. This Foundation helps "disadvantaged people find their way into work."[105]

Citywide: Citywide is a wholly owned subsidiary of the City of Melbourne. Since establishment, Citywide has expanded, and now delivers services "across four Australian states."[106] Physical services provided by Citywide include those related to: infrastructure; environment (including for example, waste management services); and open spaces (including for example, irrigations services).[107]

Moreland Energy Foundation (MEFL): MEFL was established by the City of Moreland, and is an independent not-for-profit organization. MEFL aims to tackle climate change through programs of energy efficiency, energy reduction, and assisting the uptake of renewable energy.[108] MEFL established Positive Charge in 2013, a not-for-profit social enterprise, which aims to "reduc[e] carbon emissions at scale across a number of local government areas."[109]

Some examples of incorporated bodies currently established through various Victorian Local Governments include (but are not limited to):

Central Victorian Greenhouse Alliance (CVGA): CVGA is an incorporated body, coordinating the climate action, strategic planning and advocacy work of 13 local councils within Victoria. The CVGA is the largest greenhouse alliance in Victoria.[110]

South East Councils Climate Change Alliance (SECCA): SECCCA is an incorporated body, coordinating the mitigation, adaptation and carbon sequestration efforts across nine local Councils in the south-east of Melbourne.[111]

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[104] Intowork n.d., *About Us,* viewed 13 Oct 17, http://intowork.com.au/about-us/

[105] Intowork n.d., *Supporting the Community,* viewed 13 Oct 17, http://intowork.com.au/about-us/supporting-the-community/

[106] Citywide 2013, *About Us,* viewed 13 Oct 17, http://www.citywide.com.au/about

[107] Citywide 2013, *Our Services,* viewed 13 Oct 17, http://www.citywide.com.au/our-services

[108] MEFL n.d., *The MEFL Story,* viewed 13 Oct 17, https://www.mefl.com.au/about-us/the-mefl-story/

[109] MEFL n.d., as above n.116.

[110] CVGA 2017, *Central Victorian Greenhouse Alliance,* viewed 13 Oct 17, http://cvga.org.au/.

[111] SECCCA 2017, *The South East Councils Climate Change Alliance,* viewed 13 Oct 17, http://www.seccca.org.au/.

Appendix C: Summary of some Key Considerations from the Guidance Notes for Applications for Electricity Licences

THE FOLLOWING PROVIDES A SUMMARY OF SOME OF THE CONSIDERATIONS IN CHAPTER 2 OF THE GUIDANCE NOTES FOR APPLICATIONS FOR ELECTRICITY LICENCES:

Chapter 2 discusses the general background information for electricity retail licence applications.

FORM OF THE APPLICATION: Chapter 3 and s 18(2) of the Electricity Industry Act 2000 (Vic) outline the information required in retail licence applications. The ESC may also require further information.

Applications must contain a statutory declaration, "confirming the accuracy and completion of all information provided in the application."[112]

LICENCE FEES: Annual licence fees are determined by the Minister for Finance and paid to the ESC. While no application fee is prescribed at the time of writing, this should be confirmed with the ESC (see Appendix D for ESC licence fees, for the period 2008-16).

REQUIREMENTS OF HOLDING A LICENCE: Various codes, guidelines and procedures must be complied with. See Appendix A for an overview of some of the relevant codes, guidelines and procedures. Legal counsel should also be sought, as per the recommendations of this report.

TRANSFER OF LICENCE: If for any reason, Councils wish to transfer a licence, there are provisions for this to take place, subject to ESC approval and public consultation.

USE OF SYSTEM AGREEMENTS: Use of System Agreements must be negotiated with all "licensed distributors whose geographic areas include any of the retail licence holder's customers or intended customers. In effect, this also involves the negotiation of credit support facilities with the licensed distributor. Credit support arrangements refer to the commercial arrangements that an electricity retailer enters into with an electricity distributor to manage the risk exposure of the distributor to the non-payment of its distribution charges (which are collected by retailers on the distributor's behalf)."[113]

REGISTER AS A MARKET PARTICIPANT: Applicants must register with AEMO as a market participant.

THE FOLLOWING PROVIDES A SUMMARY OF SOME OF THE CONSIDERATIONS IN CHAPTER 3 OF THE GUIDANCE NOTES FOR APPLICATIONS FOR ELECTRICITY LICENCES:

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[112] ESC 2006, as above n.86, p. 3.

[113] ESC 2006, as above n.86, p.6.

Chapter 3 considers financial viability; technical capacity; and whether the applicant is a fit and proper person to hold a retail licence. Schedule 1 details obligations for demonstrating financial viability and technical capacity.

FINANCIAL VIABILITY: Applicant must demonstrate their financial viability.

TECHNICAL CAPACITY: Applicants must demonstrate technical capacity

REVOCATION OR SURRENDER OF LICENCE: There are provisions for this to take place.

THE FOLLOWING PROVIDES A SUMMARY OF SOME OF THE CONSIDERATIONS IN CHAPTER 4 OF THE GUIDANCE NOTES FOR APPLICATIONS FOR ELECTRICITY LICENCES:

Chapter 4 considers the licencing process.

TIME: The usual processing time for a licence application is 8 to 10 weeks.

DRAFT: Applicants are encouraged to submit a draft application to the ESC.

CONSULT: The ESC recommends consulting with other relevant parties, such as AEMO, the Department of Health and Human Services, EnergySafe, the Energy and Water Ombudsman of Victoria, and distributors.

PUBLICATION OF THE LICENCE APPLICATION: The ESC will publish a notice of the application in a daily newspaper in general circulation in Victoria (and also a local paper, if deemed necessary), in order to allow for submissions to be made to the ESC. The application will be published on the ESC website.

COMMERCIAL-IN-CONFIDENCE INFORMATION: As this may form a part of the application, commercial-in-confidence information will not be made public, but can make up a separate, confidential part of the application.

SUBMISSIONS: Submissions will be made to the ESC, relating to the licence application. Copies of published submissions and summaries of unpublished submissions will be provided to the applicant, to allow for a response to, or clarification of any issues raised.

FINAL DECISION: Applicants will be notified in writing of the ESC's decision, and it will be published on the ESC website and in the Victorian Government Gazette. In the case of a refusal, the applicant will be notified of the reasons for refusal, though these reasons are not typically published.

Appendix D: Fees incurred through registration with AEMO and Licence Fees incurred through the ESC

As per Chapter 2, s 2.11, of the National Electricity Rules, registered participants within the NEM are subject to fees payable to AEMO.

TABLE 2: SCHEDULE OF REGISTRATION FEES FOR MARKET CUSTOMERS[114]

Year	2013-14	2014-15	2015-16	2016-17	2017-18
Schedule of Registration Fees for Market Customers: AUD$	7,600	8,800	10,000	10, 000	10,000

As per the Electricity Industry Act 2000 (Vic) s 22, fees and charges payable to the ESC are determined by the Minister for Finance.

TABLE 3: ANNUAL ELECTRICITY LICENCE FEES[115]

Year	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16
Electricity Retail Licence Fee from: AUD$	7,200	7,200	7,200	7,310	7,500	7,500	7,500	7,500

[114] AEMO 2016b, *AEMO Fees and Charges,* viewed 19 Oct 17, https://www.aemo.com.au/Datasource/Archives/Archive143; AEMO 2016c, *Energy Market Budget and Fees,* viewed 19 Oct 17, https://www.aemo.com.au/About-AEMO/Energy-market-budget-and-fees.

[115] ESC 2016, *Licence Fees,* viewed 1 Aug 17, http://www.esc.vic.gov.au/corporate/corporate-publications/licences-and-fees/; OShanassy, C. 2017, personal communication, 25 August.