

**Submission
No 24**

EMBEDDED NETWORKS IN NEW SOUTH WALES

Organisation: City of Sydney

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Mr Ray Williams
Chair
The Legislative Assembly Committee on Law and Safety
Parliament House
Macquarie Street
Sydney NSW 2000

Lodged online via Parliamentary website

Dear Mr Williams,

Embedded networks in New South Wales

The City of Sydney welcomes this opportunity to make a submission to the NSW Inquiry into embedded networks.

The City has endorsed a target for net zero emissions across the local area by 2035, and for at least half of the electricity to be from renewable sources by 2030.

More than 75% of our residents live in apartment buildings and many are renters. Affordable, fair, and inclusive options are needed if we are to achieve our targets.

Done well, embedded networks are an opportunity to provide cost-effective, renewable electricity at scale, and to support the electrification of buildings and precincts.

However, careful consideration is required to ensure that owners corporations have agency to choose the kinds of utilities infrastructure and contracts they engage in upfront, that cost benefits are equitably shared by customers, and customers are not locked into higher energy bills, particularly those experiencing vulnerability.

The City makes the following recommendations to the Inquiry's terms of reference:

The current legal framework regulating embedded networks.

Some developers install embedded networks to avoid the cost of individual electricity connections to each unit within an apartment building. This can lock Owners corporations and residents into long term, costly and inequitable circumstances in comparison to consumers in more conventional arrangements (please see further comments below).

Section 132A of the *Strata Schemes Management Act 2015*, limits utility supply contracts to a maximum of three years during the initial period for new apartment buildings, with the exception of electricity contracts¹.

¹ Department of Customer Service, 2021, *Report on the statutory review of the Strata Schemes Act 2015 and Strata Schemes Management Act 2015*. NSW Government, Sydney p. 46

Recommendations 119 and 120 of the [Report on the statutory review of the Strata Schemes Act 2015 and Strata Schemes Management Act 2015](#)² address section 132A of the Act with regards to embedded networks.

Recommendations

- The Inquiry should undertake comprehensive investigation of Recommendations 119 and 120 of the *Report on the statutory review of the Strata Schemes Act 2015 and Strata Schemes Management Act 2015*³.

The effect of embedded networks on NSW residents and businesses, including any health or safety concerns.

The practice by some developers of installing embedded networks into new apartment buildings can have adverse impacts on both owners and residents.

Owners corporations may effectively become energy network owners, locking them into costly ongoing operational expenditure avoided in conventional arrangements.

Embedded networks can also impact the ability of Owners corporations to make future changes. For instance, replacing or upgrading embedded network infrastructure to enable sustainability and resilience benefits can be expensive. This may reduce the likelihood of Owners corporations installing or accessing renewable energy to reduce electricity bills, complement electrification and reduce the environmental footprint of their buildings.

There may be cost incentives for developers to install gas embedded networks when an all-electric building would be significantly more energy efficient and healthy for residents. All electric buildings can reduce residents' energy bills through greater efficiency, reducing duplicative and increasing network and fuel charges as well as enabling access to renewables. There are also significant health benefits in avoiding toxic emissions in buildings.

Having stand-alone on-site renewable energy with batteries can also improve energy security (and therefore safety) for residents during extreme weather events, as these systems may be able to function for a period of time during grid outages.

As exempt sellers, Owners corporations with embedded networks have a range of obligations under a complex regulatory framework. Decision making can be challenging for Owners corporations without prior experience or clear understanding of their responsibilities and options.

Lack of understanding and/or clear accessible information can also hamper the ability of Owners corporations to access the most competitive bulk purchasing contracts, leaving them and their residents vulnerable to higher costs.

For residents, exiting these arrangements can be particularly difficult. Individual meters may not be 'discoverable', and retailers can be unwilling to navigate the processes required to enable streamlined billing. As a result, residents may pay twice for network charges⁴.

It is also essential clear, accessible information regarding pensioner concessions, hardship protections and so on is readily available in the same way it is to consumers of

² Department of Customer Service, 2021, *Report on the statutory review of the Strata Schemes Act 2015 and Strata Schemes Management Act 2015*. NSW Government, Sydney pp. 9-10

³ Department of Customer Service, 2021, *Report on the statutory review of the Strata Schemes Act 2015 and Strata Schemes Management Act 2015*. NSW Government, Sydney pp. 9-10

⁴ <https://www.aer.gov.au/consumers/information-for-electricity-consumers-in-embedded-networks> accessed 9/06/2022

conventional electricity retail arrangements to avoid compounding difficulty for residents experiencing vulnerability.

Recommendations 121-123 of the [Report on the statutory review of the Strata Schemes Act 2015 and Strata Schemes Management Act 2015](#)⁵ relate to these issues.

Recommendations

- The Inquiry should undertake comprehensive investigation of Recommendations 121-123 of the *Report on the statutory review of the Strata Schemes Act 2015 and Strata Schemes Management Act 2015*⁶.

Policy and legal solutions to address the effect of and concerns about embedded networks, including to address any gaps in the regulatory framework or safety concerns raised by NSW residents and businesses.

Please see comments above

Recommendations

Please see comments above

Any other related matters.

Embedded networks, done well, can facilitate greater uptake of cost-effective renewable electricity. This can be achieved by securing competitively priced renewable electricity via power purchase agreements (PPA) to supply individual residents in a building via an embedded network, in addition to the common areas.

For example, the strata management company, PICA Group⁷ recently secured a PPA to supply 100% renewable electricity to common areas of 64 apartments that saved each building a significant amount of money as well as reducing emissions. If there were an efficient and effective embedded network in operation, it would allow the individual apartments in those buildings to also go renewable and share in the cost savings of a large scale PPA, combined with commercial tariffs (lower than residential), and sharing of (reduced) network costs.

Emerging technologies such as block chain (for example Enosi, Voltio, Powerledger) may unlock opportunities for improved transparency and cost savings to distribute power and renewable energy (onsite and offsite) between customers within buildings and precincts compared with capital intensive metering and billing systems used by traditional embedded energy network operators.

Recommendations

- The Inquiry should investigate the potential to equitably and cost-effectively scale up and share renewable energy (onsite and/or delivered via the grid), beyond the common areas of buildings, to also supply residents who opt in.
- The Inquiry should investigate the opportunities for emerging technologies and providers to improve the transparency and cost-effectiveness of embedded energy networks.
- The Inquiry should identify and suggest ways to remove perverse or spilt incentives for developers to install embedded networks or gas connections in new developments when these are not in the best interests of the building occupants.

⁵ Department of Customer Service, 2021, *Report on the statutory review of the Strata Schemes Act 2015 and Strata Schemes Management Act 2015*. NSW Government, Sydney pp. 9-10

⁶ Department of Customer Service, 2021, *Report on the statutory review of the Strata Schemes Act 2015 and Strata Schemes Management Act 2015*. NSW Government, Sydney pp. 9-10

⁷ <https://news.cityofsydney.nsw.gov.au/articles/sydney-communities-are-negotiating-ground-breaking-power-agreements-they>

Should you wish to speak with a Council officer about this submission, please contact Anna Mitchell, Executive Manager Sustainability & Resilience on [REDACTED] or at [REDACTED].

Yours sincerely

A handwritten signature in black ink that reads "P. M. Barone". The letters are cursive and slightly slanted to the right.

Monica Barone
Chief Executive Officer