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## **Submission on the Energy Green Paper 2014**

### **Introduction**

1. Vector Limited ("Vector") welcomes the opportunity to make this submission on the Department of Industry's *Energy White Paper - Green Paper 2014*, dated September 2014.
2. We generally agree with the objectives of the Australian Government's Energy White Paper process, including this consultation on the Green Paper, which "focuses on deregulation, competition and productivity". We agree that this would, in turn, "encourage efficient markets, holding down costs for consumers".
3. In particular, we support the Green Paper's theme of "driving regulatory and market reform to . . . increase competition and consumer choice". Our main interest is in seeing greater competition in Australia's metering market, which would incentivise investments in smart meters that are critical to achieving efficiency and productivity improvements in the energy sector.
4. No part of this submission is confidential and we are happy for it to be made publicly available.
5. Vector's contact person for this submission is:

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### **Vector's businesses**

6. Vector is one of New Zealand's largest listed companies and the country's largest electricity distribution network, supplying the Auckland region. Vector also provides

gas distribution network services in more than 20 towns and cities in New Zealand's North Island. It further provides gas supply and treatment, electricity and gas metering services, and fibre optic broadband communications networks in Auckland and Wellington.

7. Our metering business, Advanced Metering Services ("AMS"), is New Zealand's leading smart meter provider, with approximately 42% market share. AMS is almost three-quarters of the way through the rollout of approximately 840,000 smart meters that we have been contracted to supply to retailers in the New Zealand electricity market. We aim to install a million smart meters nationwide by 2015.
8. Vector is in a unique position as the only electricity distribution company in New Zealand that has also successfully contracted with retailers to roll out smart meters on a national basis. The main metering provider on Vector's distribution network, however, is Metrix, another New Zealand provider. This reflects the competitive nature of the New Zealand metering market, and allows us to see metering issues from more than a single market dimension.
9. While Vector's current market is limited to New Zealand, we are seriously considering commercial opportunities in the Australian smart metering market and are in the process of applying for accreditation from the Australian Energy Market Operator.

### **The benefits of a competitive metering market**

10. We support the Green Paper's statement (page 1) that "[c]ompetition encourages innovation, leading to better products and services. It also encourages better prices. Competition is best enabled through a deregulated environment".
11. We agree with the Green Paper (page viii) that:

More flexible pricing can lower electricity use during times of peak demand, by imposing higher prices when electricity is most costly to deliver. Spreading use more evenly in this way lowers the cost of supply. However, flexible pricing only works when consumers have adequate information about their use, and the cost of, electricity. This **requires more advanced residential electricity meters** than those currently in most houses" [emphasis added].
12. In a related development, we welcome the NSW Government's recent policy announcement of adopting a market-led rollout of smart meters to promote competition and a "voluntary model" to ensure consumer choice.<sup>1</sup>

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<sup>1</sup> <https://www.businessspectator.com.au/news/2014/10/28/energy-markets/nsw-back-voluntary-smart-meter-rollout>

13. We consider the introduction of competition in the metering market to be in the long-term benefit of consumers. Electricity consumers in Australia would benefit through:

- the entry of multiple providers, which would exert downward pressure on prices over time. We note the rule change request by the Standing Council on Energy and Resources (now the Council of Australian Governments Energy Council), which is intended to provide competition in metering and data services in the National Electricity Market ("NEM").<sup>2</sup> This implies that metering will eventually be provided not only by distributors but also by retailers, meter owners, or even end users;
- better services, as competing metering service providers make more attractive offers to obtain the vote of consumers. Less regulation and greater competition incentivise service providers to focus on improving services to their customers that differentiate themselves from other providers, rather than focusing on regulators and regulatory compliance;
- greater choice for consumers, who will have the choice of alternative service providers. Consumers face better tariff choices, and can choose a service that most closely suits their unique circumstances and gives them greater control over their energy expenditure. In a competitive market, consumers can easily switch providers or 'vote with their feet', incentivising metering providers to improve their services to retain the loyalty of their customers or attract new customers;
- incentives to invest in the metering market. A more open, dynamic and competitive market would attract interested parties who believe they can provide better offerings than those existing in the market. This supports one of the Green Paper's key themes, which is "attracting investment"; and
- product and service innovation – Metering markets internationally, including in New Zealand, are undergoing rapid change due to the extensive deployment of smart meters which enable more innovative services (including more innovative retail tariffs). A competitive metering market allows the entry and application of various technologies that meet the varying requirements of consumers.

### **The benefits of smart meters**

14. The Australian Energy Market Commission ("AEMC") and the Australian Energy Regulator ("AER") are considering regulatory arrangements for metering services in

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<sup>2</sup> <http://www.scer.gov.au/workstreams/energy-market-reform/demand-side-participation/smart-meters/metering-services/>

the NEM for the next regulatory control period (2014/15/16 – 2018/19/20), taking the advent of smart meters into account.

15. We welcome the Green Paper's recognition of the benefits of smart meters for industry and consumers (pages 28-29). While there are differing views on the magnitude of the benefits and when they are realised, there is widespread recognition that smart meters deliver:

- *Energy efficiency gains*

As reported by the Energy Retailers Association of Australia, "[s]tudies have shown that smart meter programmes (with communications technology that provides clear feedback to consumers) have delivered savings of 5 to 15 per cent and sometimes even as high as 20 per cent".<sup>3</sup>

Time-of-use tariffs, enabled by smart meters, provide consumers with near real-time information about their technology consumption. This allows consumers to alter their consumption patterns to reduce energy expenditure, for example, by consuming more electricity during off-peak times when it costs less.

- *Greater consumer choice*

Consumers have greater ability to control their consumption behaviour to suit their particular energy demands or to obtain better value for money. This also facilitates "demand side participation" in the electricity market.

- *Reduced costs*

Smart meters enable meter providers to read consumers' consumption remotely and in near-real time, reducing operational costs and billing inaccuracies which are all too common under periodic meter readings.

- *Cost reflective prices*

Under existing arrangements, "[t]hose consumers who have lower energy use during peak times, and therefore lower impact on network costs, are subsidising those that have higher peak energy use" (page 28 of the Green Paper). By enabling more accurate and timely measurement of energy consumption, smart meters can facilitate initiatives to minimise, if not avoid, cross-subsidisation among consumers - a more efficient and fairer outcome.

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<sup>3</sup> [http://eraa.com.au/wp-content/uploads/ERAA\\_WP1-Benefits-of-smart-meters.pdf](http://eraa.com.au/wp-content/uploads/ERAA_WP1-Benefits-of-smart-meters.pdf), page 3

- *Network and public benefits*

Smart meters enable intelligent/smart grids by enabling two-way communication between the meter and the network's central system. This provides distribution networks the capability to detect faults more accurately and in a timely manner. Quick outage recovery increases networks' ability to reduce repair costs or defer costly new network investment.

The increased ability of networks to respond quickly to outages or emergency callouts also has positive implications for public health and safety.

- *Emissions reduction*

The capability of consumers to make more energy efficient consumption decisions could facilitate reduction in carbon emissions.

### **The competitive provision of smart meters**

16. New Zealand is successfully deploying smart meters through market mechanisms. The provision of metering services is predominantly achieved through commercial arrangements between metering providers and retailers, who are responsible for measurement and provision of electricity consumption data. This market-led model has seen the rapid rollout of approximately 1.1 million smart meters across the country over the past few years.
17. Vector's metering business, AMS, has installed more than 675,000 smart meters nationwide. We have done this with only (approximately) 1% customer refusal rate, 0.05% customer complaints, and no serious injuries.
18. The impact of the rollout on New Zealand consumers has been benign, requiring only minimal engagement with them. Because the benefits to retailers outweigh the costs of the meters, consumers do not have to pay more for their smart meter. Retailers are able to address consumer complaints directly, as they have direct relationships with consumers. As such, New Zealand consumers have not suffered problems similar to those experienced by consumers in Victoria, where a mandated rollout resulted in cost blowouts and consumer backlash.
19. We believe the value of smart meters is best delivered under a competitive metering market. The discipline of the market enables multiple market participants with varying commercial offerings and deploying different technological innovations to come into play to deliver the best services for consumers. Those that offer inferior services risk losing customers and market share, and therefore would have strong incentives to improve their services.

20. In addition, the competitive provision of smart meters means that meter owners, rather than consumers, face investment risks and the risk of poor technology choice. Meter owners picking the wrong technology are likely to suffer from higher metering charges (to recoup higher costs) and would become less competitive, lose market share or exit the market.
21. While we recognise that transitions to new technologies can be challenging and are not costless, the New Zealand experience highlights that it is possible to have competitive market arrangements and positive business cases that meet consumer expectations at the same time.
22. We therefore support a market-based approach to any proposal to introduce smart metering in Australia, preferably led by retailers. We do not believe a mandated rollout would achieve the objectives of the Green Paper and White Paper.
23. A mandated rollout can result in higher costs for consumers and transfers technology risks from metering providers to consumers. This approach does not focus on or unlock the primary smart meter benefits available to retailers; hence, the costs are unnecessarily borne by consumers.

### **Regulatory principles**

24. To ensure that reforms in the metering services market would result in a more efficient market and greater productivity in the energy sector, we suggest that regulators adhere to the following guidelines in the development of any smart metering policy:

- *Uphold competitive neutrality*

Smart metering services should be able to be provided by various parties, possibly including retailers, distributors, independent meter owners, or even end users.

- *Eliminate barriers to competition*

Mandating specific functions, or the addition of new functions to the meter, could be costly for consumers who may not want or need those functions.

Barriers could also be created by imposing costs on new entrants, for example, by charging "exit fees" for the replacement of legacy meters with smart meters. The imposition of exit fees and cost recovery by distributors of the residual value of their legacy meters are being considered by the AER (for the NEM states).

- *Avoid harm to consumers*

Consumers should not pay higher charges for smart meters. If any rollout is on a commercial/voluntary basis, and consumers do not have to pay higher charges for the upgrade or displacement of their meter, then issues around consumer acceptance should not be as prominent as they have been in Victoria.

- *Ensure technological neutrality*

Market competition could be stifled by highly prescriptive technological standards that lock out from the market parties that do not use, or intend to use, the same standards. Regulators should avoid picking technological winners or prescribing smart metering functionalities. Picking technology winners is best left to those who take the investment risks, rather than consumers bearing the cost of poor technology choice by their providers or by regulators.

We do not have any issues with the setting of minimum levels of metering service standards, which protect and benefit consumers. However, mandating the use of specific technological/technical standards or functionalities could result in inefficient outcomes that do not benefit anyone. For example, this could result in the provision of services that do not keep pace with technological developments or that consumers do not need or value.

We prefer the development of guidelines rather than mandated technical standards or functionalities. Meter functionality should be driven by retailer innovation and the incentive to attract new consumers or consumers from competitors. This, in turn, would deliver benefits to consumers through lower prices, greater choice and better services.

## **Concluding comments**

25. We believe that the reforms in relation to metering services should focus on ensuring that barriers to commercial rollout and competition in the provision of smart meters are minimised. As competition develops in the metering market, the need for regulation should fall away.
26. Importantly, the reforms should ensure that consumers are not disadvantaged during the transition process.

27. We are happy to discuss with Department of Industry officials any aspect of this submission.

Yours sincerely

A handwritten signature in blue ink, appearing to read 'I. Ferguson', written in a cursive style.

Ian Ferguson  
**Regulatory Policy Manager**