

# BRCT submission on the Evolving electricity technologies consultation (Electricity Authority)

2<sup>nd</sup> Feb 2016

Submissions
Electricity Authority
PO Box 10041, Wellington 6143

### Submission on the Implications of evolving technology for pricing of distribution services

Submitters' Names: Blueskin Resilient Communities Trust (attention: Scott Willis)

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#### 1 About Us

Thank you for this opportunity to submit on the Evolving technologies consultation.

The <u>Blueskin Resilient Communities Trust</u> (BRCT) is a registered charitable trust formed in 2008 to support sustainability and transition initiatives in a planned and structured way. We work as a legal body to provide a public benefit and achieve the long-term objective of building community resilience, particularly in the context of our changing climate. Our headline work is our community wind development through our company <u>Blueskin Energy Ltd</u> and our core activity areas are in energy (Cosy Homes, solar advice), climate change action, and provision of community services. We offer support to number of community groups working in the field of sustainability. Jeanette Fitzsimons is our patron.

#### 2 Our Submission

We agree that attempting to retain the status quo is no longer viable. Smart, interactive technologies promise an internet based peer to peer grid and a 21<sup>st</sup> century distribution system.

We can't tell exactly how new technologies will alter the electricity distribution system, and we need to pilot community scale innovation and evaluate impacts of evolving technologies on the market and on consumer or prosumer behaviour. Post the Paris Climate Deal of 2015 momentum on replacing fossil fuels with renewables has increased in pace and prominence. By embracing lessons learned elsewhere and harnessing our existing potential in renewables with interactive technologies, we can move to 100% renewable electricity with security of supply.

Understandably, the long established and dominant market participants seek to maintain the status quo. However those seeking to stem the tide of technology and change may unwittingly



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create disfunction in our electricity distribution system, in their efforts to retain market dominance.

Real time pricing, we suggest, will reduce peak demand and thus reduce the burden on distributors, while also stimulating further innovation and increase in interactive technologies. Ultimately, this will lead to a more resilient national network supported by a spider's web of distributed generation and storage (solar and wind power primarily, with battery banks and EVs) supporting the national grid.

#### We recommend:

- Replace current pricing with real time pricing to stimulate uptake of technologies which will also improve the integration of solar in the distribution system and reduce peak load;
- 2. Prepare a pilot study of the impact of new technologies in one or more communities where there is an existing high level of distributed generation (i.e. Blueskin Bay, near Dunedin).

We thank you for your attention to this submission

Yours sincerely,

Scott Willis Manager

Blueskin Resilient Communities Trust

### **Appendices**

- Roinn Cumarsáide, Fuinnimh & Acmhainní Nádúrtha (2016), *Ireland's Transition to a Low Carbon Energy Future 2015 2030*. Department of Communications, Energy and Natural Resources.
- Mark Dyson, James Mandel, and Amory Lovins (2015), 3 ways wind and solar can continue to grow in a 21st-century grid. Rocky Mountain Institute
   [http://reneweconomy.com.au/2015/3-ways-wind-and-solar-can-continue-to-grow-in-a-21st-century-grid-99867]
- Matthew Crosby & Dan Cross-Call (2015). New York and California are building the grid of the future. Rocky Mountain Institute [http://reneweconomy.com.au/2015/new-york-and-california-are-building-the-grid-of-the-future-28258].