

Delta Energy & Environment Ltd
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Microgrids – From niche to mass market

Microgrid 2017 Conference – Boston, MA

Wednesday, 8th November 2017

John Murray

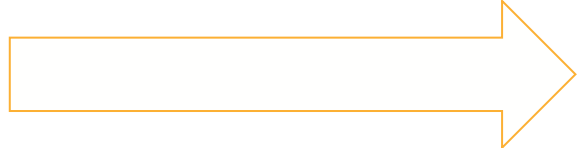
Principal Analyst

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Helping companies navigate the transition to a more distributed, customer centric, service-orientated energy future



Past

Centralised
Commodity sales
Meter points
Value is upstream

Advisory services to succeed in this transition

Future

Distributed
Service-orientated
Customer centric
Value is downstream



Three key takeaways...

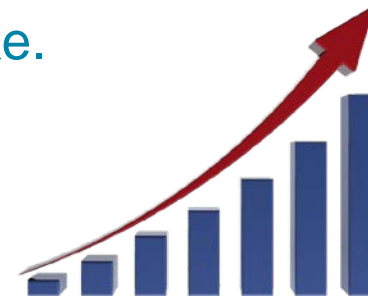
1. **Today**, North America is driving the microgrid movement.
Tomorrow, the opportunity is global.



2. Reduce the **risks**, reduce the cost of **finance**.



3. Standardisation key for mass market uptake.



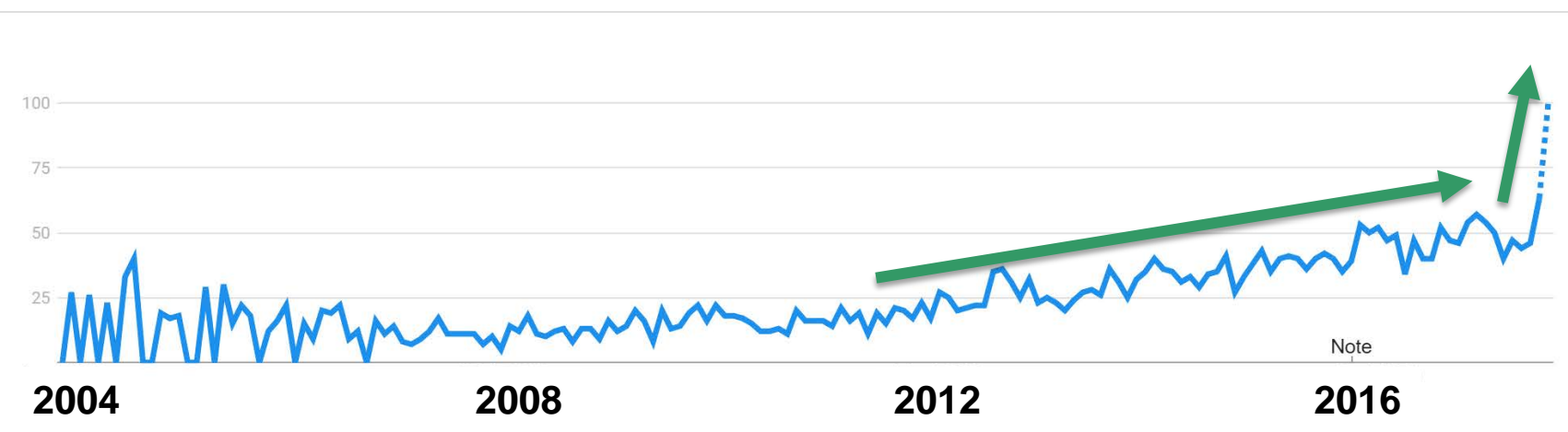
Google Trends – huge growth in interest

● **Microgrids**
Search term

+ Compare

Worldwide ▼ 2004 - present, Past 5 years ▼ All categories ▼ Web Search ▼

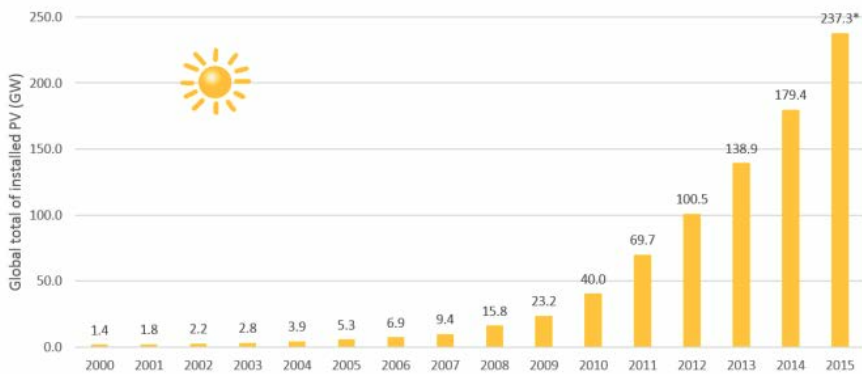
Interest over time ?



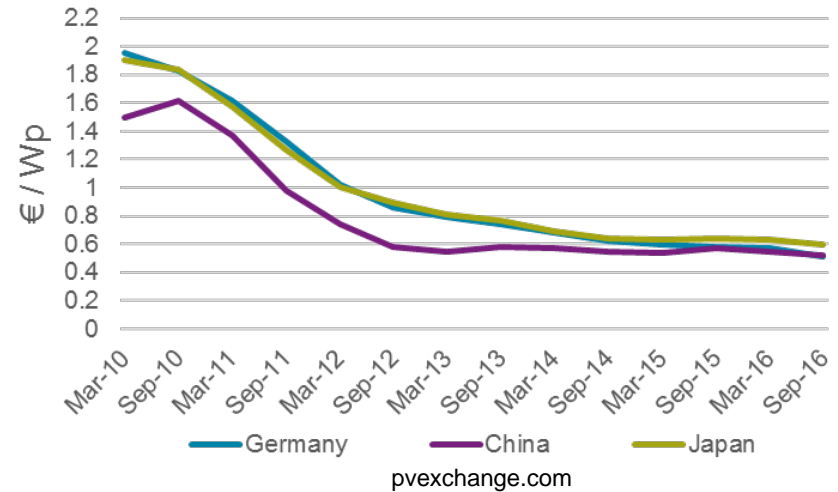
Why now for microgrids?

- Distributed energy resources growing exponentially
- Costs falling quickly
- Greater and more pressing demand for 'resiliency'
- More awareness

Cumulative installed solar PV globally



Falling Solar PV Module costs



Reduce the risks...

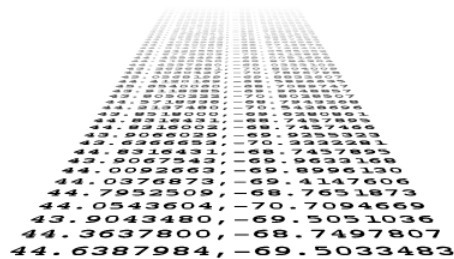
Cost of finance: related to the perceived 'risk' associated with the investment.

So how to reduce the risk?

1. Replicability:



2. Data:

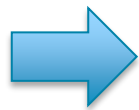


3. Revenue Streams: Solid & future-proof

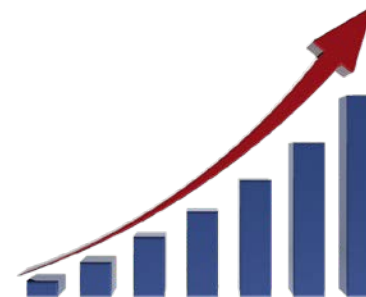


Standardization is key to microgrid market growth!

- Components
- Design philosophy
- Partners
- Regulations!



‘Modularity in design’



Three key takeaways...

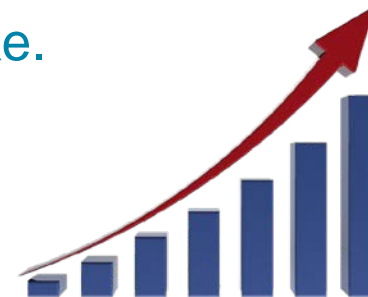
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Core Focus Areas:

1. Key Global Markets
2. Microgrid Applications & Case Studies
3. Player Landscape
4. Business Models & Value Chains
5. Microgrids: The Future

Key Subscriber Benefits:

This study will help subscribers to:

- ▶ Develop business models which maximise a) the value to you, and b) the appeal to your customers.
- ▶ Develop the right strategy for your company.
- ▶ Understand the size of the opportunity.
- ▶ Identify partnership opportunities with key players in the microgrid space.
- ▶ Determine where to develop microgrid propositions, and in which applications.

Timeline: The Study is published and available to purchase

Thank you!

E-mail me for a **copy of the presentation!**

We'd be delighted to talk with you by phone or in person – at our Edinburgh office, Cambridge office, Dutch office, Danish office, or at your offices...

For more information visit www.delta-ee.com

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