Energy Data and Energy Customers
MARKET OPPORTUNITY
Making flexibility work for building operators

The most valuable commodity in the 21st Century energy system is: FLEXIBILITY

Flexibility creates value for building operators in many ways:
- £3.1bn cost & CO₂ savings
- £2bn market for DSR
- ~50% of consumer bill by 2020

Smart energy management no longer about how much energy you use. It’s about when you use it
Customer trust and experience

“Consumer empowerment is set to take another step forward as customers obtain more detailed information about their actual energy consumption. Inevitably, empowering technology will reshape the relationship between customers and suppliers...creating new options for customers.”
MARKET FAILURE

Conventional approaches to flexibility are not working for building operators

Over 70% of commercial building operators do not currently participate in flexibility services

Over 80% of commercial building operators would participate in flexibility services if it didn’t compromise their operational performance

Building operators’ key reasons for not currently participating in flexibility services

- No transparency on impact of flexibility on operational performance: 40%
- Lack of trust with 3rd party control of assets: 33%
- Conflict with carbon reduction strategy: 12%

Energyst 2018 DSR report
New assets
Internal conditions
External conditions
Generation mix
Supplier imbalance
Wholesale market
DNO/DSO
Cost goals
Comfort goals
Carbon goals
Data-driven exchange of information and value across the meter
The shape of things…
Data value stack

Value co-creation

Personalisation

Share to many (aggregate)

Share to few

Measurement / insight
Location data value stack

Measurement / insight

Where am I?
Location data value stack

Share to few
Measurement / insight

How do I get there?
Location data value stack

Share to many (aggregate)
Share to few
Measurement / insight

What’s the traffic like?
Location data value stack

Personalisation
Share to many (aggregate)
Share to few
Measurement / insight

What’s my fastest route?
<table>
<thead>
<tr>
<th>Location data value stack</th>
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</thead>
<tbody>
<tr>
<td>Value co-creation</td>
</tr>
<tr>
<td>Personalisation</td>
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<td>Share to many (aggregate)</td>
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<td>Measurement / insight</td>
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</tbody>
</table>

Let’s work together
Energy system data value stack

Value co-creation
Personalisation
Share to many (aggregate)
Share to few
Measurement / insight

Prosumer, Peer-to-Peer, V2G
T.o.U. tariffs, Demand-shaping
U-Switch, DSR services
Suppliers & Brokers
Smart / sub meter data
Disruptive value co-creation and consumer empowerment has happened really quickly in other sectors.
<table>
<thead>
<tr>
<th>WANTS</th>
<th>NEEDS</th>
<th>GETS</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Fair reward for flexibility</td>
<td>• A way of unlocking flexibility in their assets</td>
<td>• Opaque unknown revenue share</td>
</tr>
<tr>
<td>• Control</td>
<td>• A route to monetization</td>
<td>• Loss of control</td>
</tr>
<tr>
<td>• Trust asset performance is not compromised</td>
<td></td>
<td>• Comfort compromise</td>
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</tbody>
</table>

**Grid Edge**
Thank You:

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