



Road map 2: Enhancing the value of local renewable generation

The five conditions

- Energy
- Social/cultural
- Regulatory/policy
- Commercial
- IT/data

	2016	2018	2020
<p>DOING</p> <p>Things to do now for impact now</p>	<ul style="list-style-type: none"> <li style="border-bottom: 1px solid black; padding: 5px 0;"> Commission public art to reveal city's renewable energy production and real time electricity demand <li style="border-bottom: 1px solid black; padding: 5px 0;"> Large scale trial of storage linked to local renewable generators <li style="padding: 5px 0;"> Establish portal within Bristol data commons initiative for households and businesses and local generators to share and visualise their energy data 	<ul style="list-style-type: none"> <li style="border-bottom: 1px solid black; padding: 5px 0;"> Peak alert apps to encourage load shedding and 'use now' alerts to improve matching of demand with local generation output <li style="border-bottom: 1px solid black; padding: 5px 0;"> Pilot Power Matching City (or equivalent approach) <li style="border-bottom: 1px solid black; padding: 5px 0;"> Tests of commercial sector and domestic DSR automation & ToU tariffs to reflect local generation availability <li style="border-bottom: 1px solid black; padding: 5px 0;"> Trial new distribution charging methodology to reflect better the distance between generator and supply customer <li style="padding: 5px 0;"> Local smart electricity system design blueprint, incl. generation, demand management, storage options 	<p>Bristol Smart Energy City up and running</p>
<p>PREPARING</p> <p>Things to do now to prepare for action and impact in 1-2 years</p>	<ul style="list-style-type: none"> <li style="border-bottom: 1px solid black; padding: 5px 0;"> Enlist larger local loads and local renewable generators (eg City Council, Triodos Renewables, Ecotricity etc) to create group sharing data and exploring opportunities for aggregated demand response and local system balancing <li style="border-bottom: 1px solid black; padding: 5px 0;"> Prepare for pilot of Power Matching City (or equivalent approach) <li style="border-bottom: 1px solid black; padding: 5px 0;"> Engage with National Grid on how city-scale system balancing can feature in their planning <li style="border-bottom: 1px solid black; padding: 5px 0;"> Put funding bid together for local experiments and market innovation <li style="border-bottom: 1px solid black; padding: 5px 0;"> Spec out framework for data capture and analysis for city-scale initiative, including consent and access requirements <li style="padding: 5px 0;"> Explore new distribution charging methodology which reflects local supply initiatives which reduce system use (learning from WPD project SYNC) 	<ul style="list-style-type: none"> <li style="border-bottom: 1px solid black; padding: 5px 0;"> Establish governance and a commercial model for Bristol Smart Energy City <li style="border-bottom: 1px solid black; padding: 5px 0;"> Map out compliance requirements <li style="padding: 5px 0;"> Commercial viability modelling for 2020 operation 	
<p>EXPLORING</p> <p>Creating conditions which make impact possible in future</p>	<ul style="list-style-type: none"> <li style="border-bottom: 1px solid black; padding: 5px 0;"> Engage with Ofgem and DECC on market rules and governance and opportunity to carve out 'space to experiment' for Bristol <li style="border-bottom: 1px solid black; padding: 5px 0;"> Review Power Purchase Agreement and financing terms with local renewable generators to understand potential for changing future supply arrangements <li style="border-bottom: 1px solid black; padding: 5px 0;"> Articulate a clear purpose for Bristol Smart Energy City <li style="padding: 5px 0;"> Knowledge tracking (e.g. learning from Low Carbon Network Fund projects) and R&D opportunities – both with academics and market innovators. 		

Background against which events on this timeline are taking place

DCC goes live and domestic smart meter mass roll-out starts

ToU tariff trials

CADs widely available

Smart Energy GB engages with local partners

New Supplier Obligations in place

'Next day' supplier switching goes live

Energy Settlement to half-hourly

Plans for RIIO-ED2 emerging

Rollout complete

