


# Connected Futures: Smart Energy Infrastructure for Cambridgeshire

## Connected Futures: Smart Energy Infrastructure for Cambridgeshire

Developing an innovative network of Smart Energy Grids along key routes to support the electrification of public transport and generation of renewable energy to sell locally.



### Vision

- Cambridgeshire Smart Energy Grids at St Ives & East Trumpington will support a wide range of energy uses along public transport routes to support the electrification of transport.
- The network will generate renewable energy, reducing the need for fossil fuels, and will help and allow for selling of energy to local businesses via Power Purchase Agreements (PPAs).

### Smart Energy Grids

- Smart Energy Grids generate renewable energy, battery storage, and charging infrastructure for electric and plug-in vehicles for sale to local customers.
- Smart Energy Grids will be built at the St Ives & East Trumpington and the Milton Smart Energy Grids during 2018.
- Planning is underway for Smart Energy Grids at Trumpington and Babraham (planned in conjunction with other smart infrastructure projects).
- Work is planned for North East Cambridgeshire once construction is complete.

### Supporting the Smart Cities Programme

- Smart Energy Infrastructure supports innovation and growth through the Smart Cities Programme, which includes:
  - Autonomous Electric Trains on southern section of the line.
  - Linking to East Mass Transit proposals.
  - Majority as a Service (MaaS) plan.

### Growing Technology and Life Science Clusters

- Autonomous Electric Trains - 40 trainsets in operation, employing 1,000 people, supporting the growth of the Smart Cities Programme.
- Cambridge Science Park - over 100 companies from start-ups and global products manufacturers. 100,000 sq ft of new office space by 2020.
- Granta Park - 20th life science company, employing 5,000 people, expected to begin by 2020.
- Cambridge Biomedical Campus - employing nearly 20,000 jobs at the campus every day from start-ups, academics and visitors.
- Wellcome Genome Campus - home to some of the world's foremost supercomputers, with 2,000 workers working in from a single area.

### Interval Bus Charging Infrastructure

- Interval charging along the Busway will be used to power the electric buses.
- A regenerative system of energy generation to support public transport.
- Renewable energy generated locally, helping to reduce the carbon footprint of energy at a local level.

