

# EV infrastructure in the U.K.

PRESENTED BY:

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> HEAT & SHIFT Conference Expo Cambridge, 2 December 2010 <a href="http://cir-strategy.com/events/">http://cir-strategy.com/events/</a>

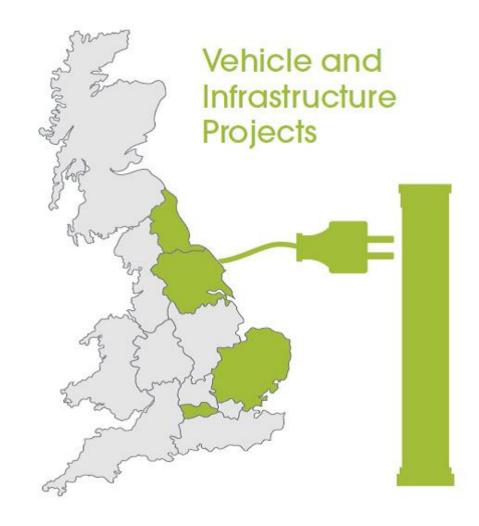
#### Introduction to FTS

Electric vehicle infrastructure consultants

- Technical
- Commercial
- Social
- Integration & transition

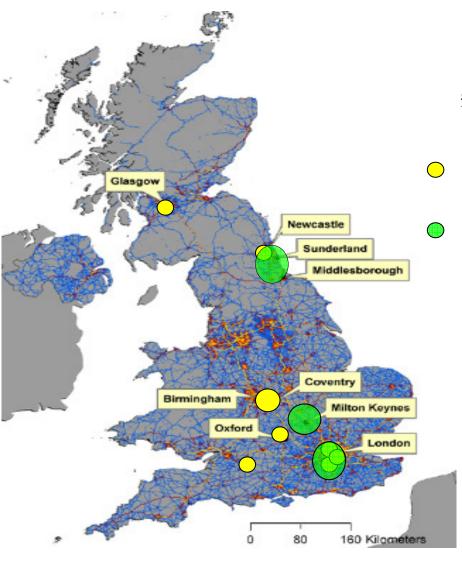
Switch EV trial NE England EValu8 PiP bid East of England North Yorks and Humberside PiP M4 renewable energy EV corridor

Enevate European programme – Interreg IVBNWE project - European network on electric vehicles and transferring expertise





# **UK Infrastructure - the story so far**



ETI Joined Cities £11m

- TSB Low carbon demonstrator programme £25m
- OLEV PiP phase 1 £8.2m

OLEV PiP phase 2 £20m

National infrastructure



### What is EValu8?

- Vision: to install operationally effective EV charging network across EoE, using it as test bed to build upon region's significant innovation capabilities & catalyse new EV economy
- Cities 45-65 miles apart: EVs & plug-in hybrids
- Natural stepping stone: London & M. Keynes
- Sustainable network: 9% renewable energy
- 2 year delivery: ~1200 charging points across EoE
- Proximity to mainland Europe: UK gateway for EVs
- Incentivises switch to ultra low carbon transport





#### Where?

#### Initial focus on 8 key nodes supported by wider charging infrastructure:

- Bedford
- 2. Cambridge
- 3. Ipswich
- 4. Norwich
- 5. Peterborough
- Luton and Hertfordshire (including St Albans, Stevenage and Watford)
- 7. Thames Gateway South Essex (including Basildon, Harlow, Southend-on-Sea, Thurrock, Chelmsford and Colchester)
- 8. London Stansted airport





## Coverage

EValu8 - East of England's Plugged in Places network

Bedford: day commute using actual road network with fully charged EV

London Stansted airport: maximum range using actual road network with fully charged EV Peterborough Norwich Bedford Suffol Southend

Norwich: day commute using actual road network with fully charged EV

Integrated transport nodes (varying colours)



Travel boundaries represent all locations where it's possible to reach integrated transport node, assuming: a) Commuter range (Norwich & Bedford) defined as 70 miles and relying on vehicle charging during working hours prior to commuters return journey); b) London Stansted: range defined as 100 miles relying on full charge prior to return journey



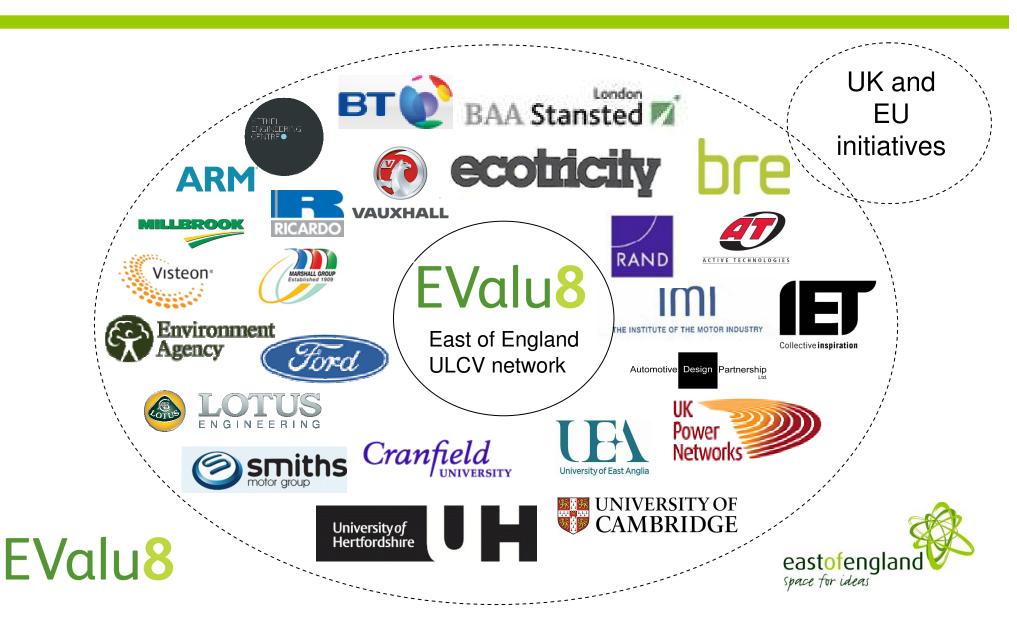
## The Technology

- 600 double headed smart charging posts
- Mixture of 3kW BS1363 and 7kW EN62196-2 (specification tbc)
- 250-500 Home-charge installations
- 500 EV Eco-home 'EV ready' installations
- 8 x 50kW DC/415v 3ph Rapid chargers
- High band-width innovation engine linked throughout the network

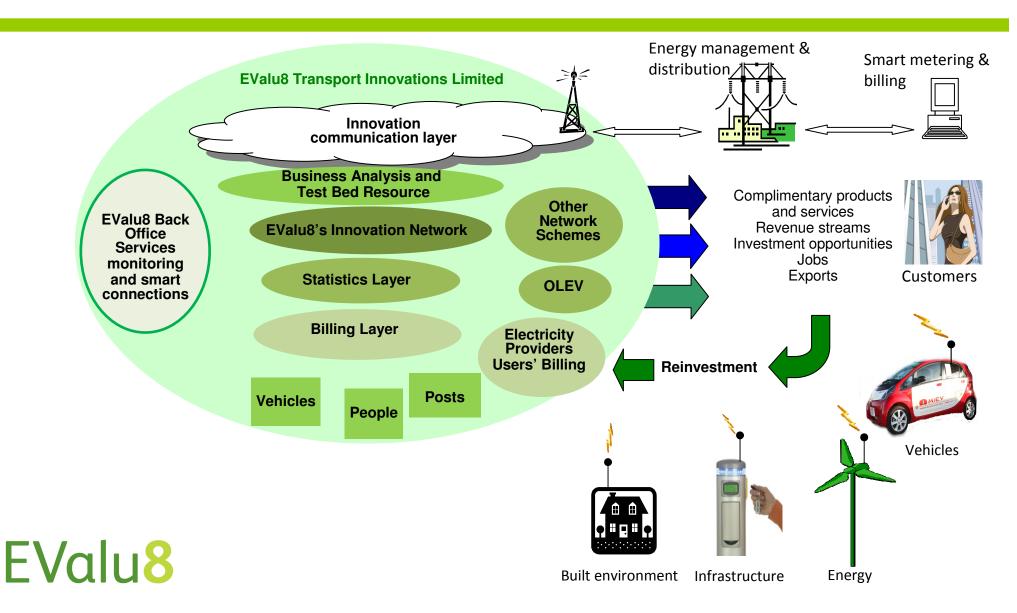




## The Innovation network



# **Commercial opportunity - innovation network**



#### **Contact details**

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# Thank you



