



# Project SCENe at Trent Basin

Charles Bradshaw-Smith, CEO SmartKlub  
Local Supply – York - June 2017



# Project SCENe at Trent Basin





# SMARTKLUB

Empowering Cities Together

## Vision:

To transform how communities power themselves

## Mission:

Switching cities onto collaborative ways of achieving their energy needs, with best partners, for social good





# SmartKlub is changing Business Models all over UK

## Current innovations:

- Developing CAPE platform in Milton Keynes
- Supply chain co-opetition in Leeds
- Supporting ICP, UK-GBC and Smart Cities Institute
- Recently opened SmartKlub Scotland



# Project SCENe: Sustainable Community Energy Networks

- Blank sheet of paper: Nottingham's **Trent Basin**
- Collaboration partners with expertise in the energy supply chain
- Novel consumer engagement tools
- Test business models for use by any developer
- Energy system and ESCO relevant to Housing Association retrofit
- Accelerates adoption of Community Energy Systems



# Project SCENe: Sustainable Community Energy Networks

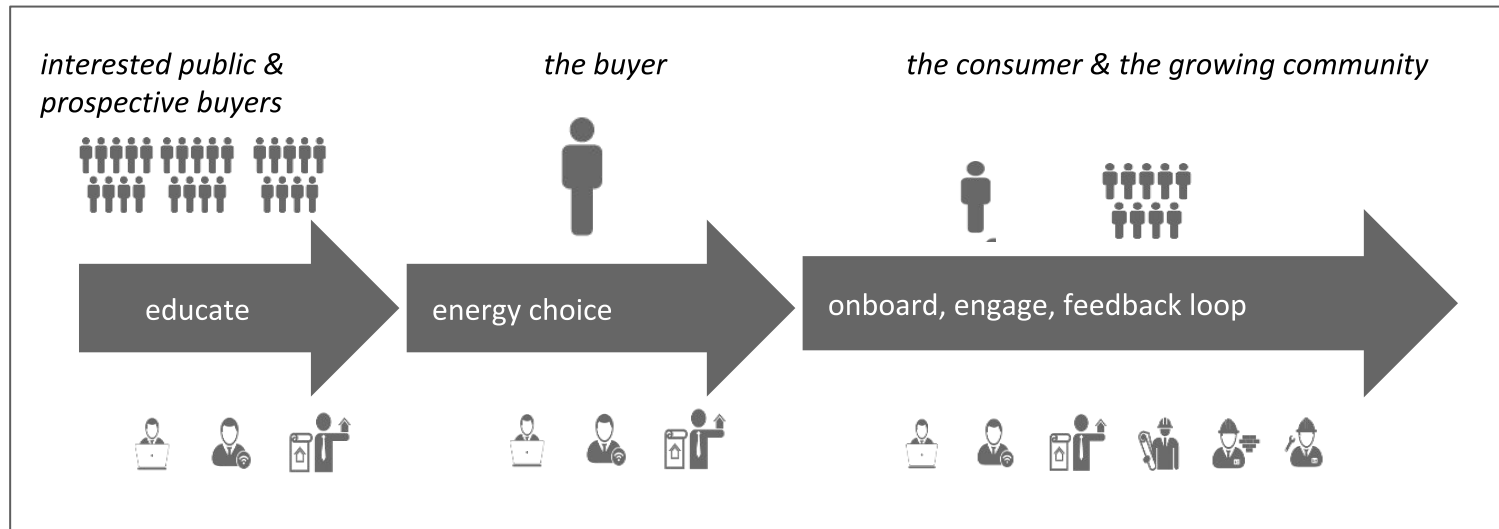
- Asset and customer management via an Energy Services Company (ESCo)
- Benefits are reduced cost and CO2 via capital efficient use of renewables
- Key innovation: hassle free for developer/consumers with financial stability
- Or put another way:

**“how to do Eco pragmatically”**



# Community & buyer engagement essential

Market issue: ECO v mainstream development



Project issue: R&D v commercial targets

# Project SCENe orientation numbers

- Phase 1 – 45 homes – built and occupied - PV panels to be retrofitted – Q4 2017
- Phase 2 – 35 in planning – PV plus ground source heat system – Q1 2018
- Phase 3/4/5 – further c300 homes - PV and possibly water source heat
- 2.1MWh battery with 500kW power
- 428kWp of PV including solar farm
- 80 homes with in-home monitoring
- Community centre portal (picture)
- Current project runs to June 2018



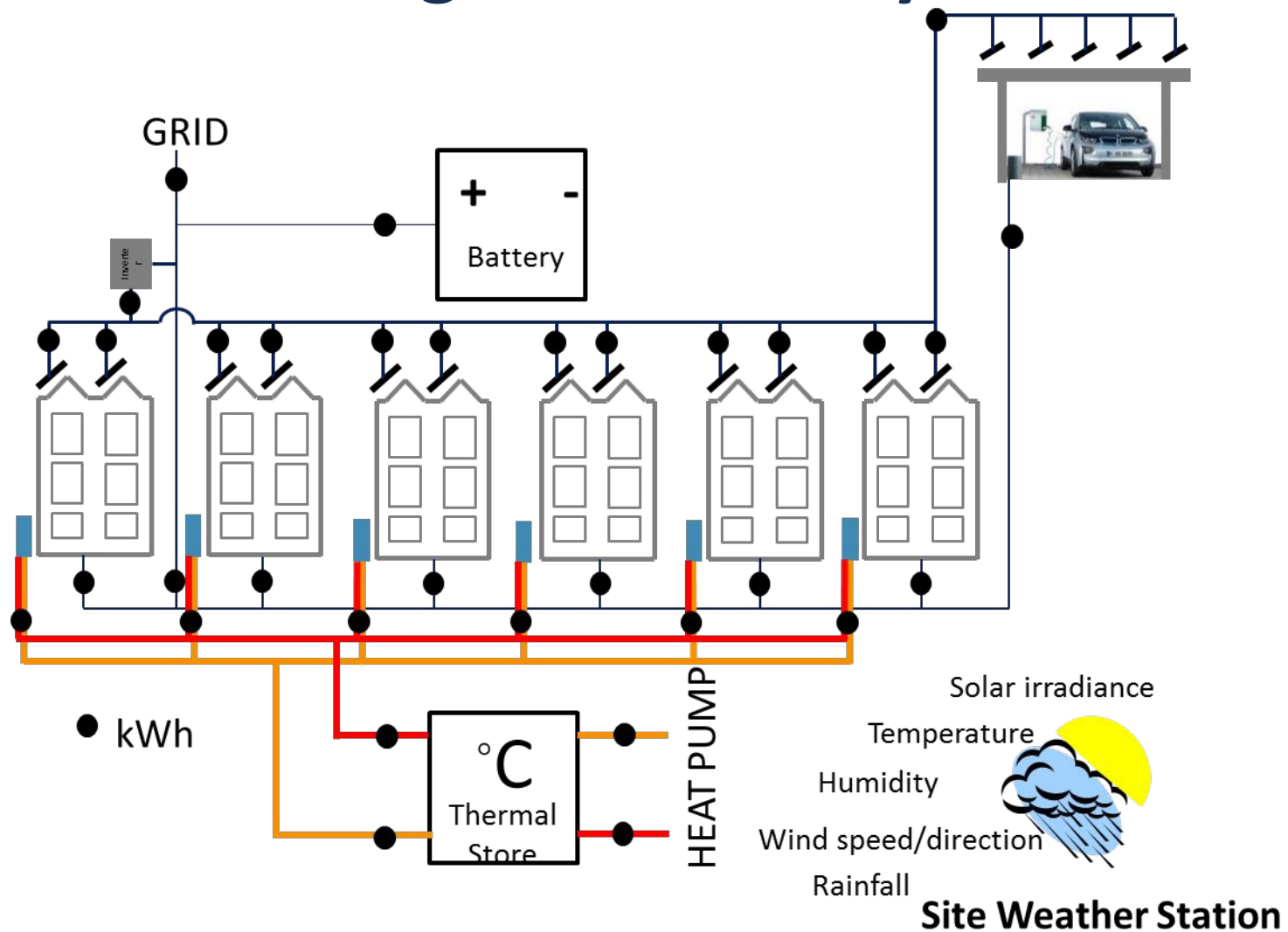


# Pragmatism rules all aspects of the project

- No lock in for customers to private wires
- Customers free choose their own supplier
- Energy Centre simplicity
- Income increases as we optimise system



# Data Monitoring - Community



# Data Monitoring - Home

Temperatures

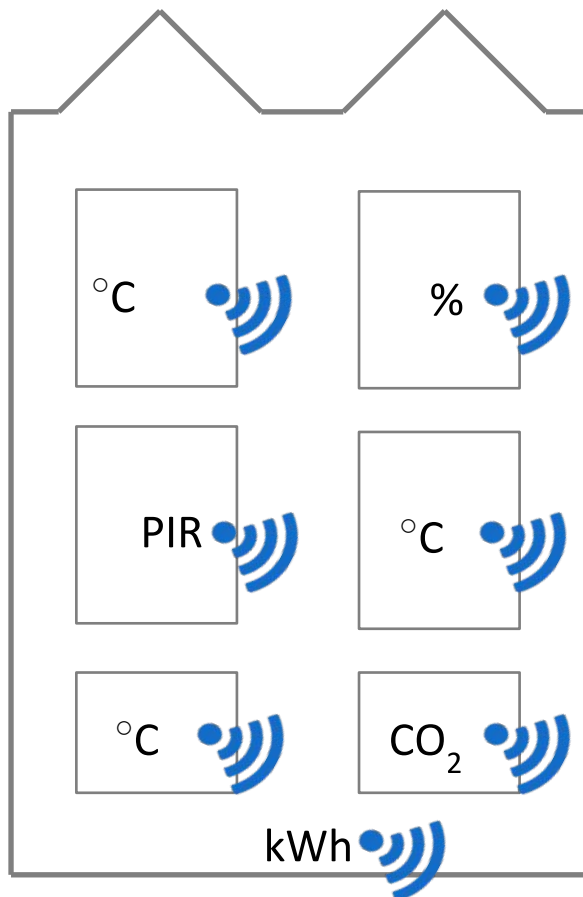
Relative Humidity

Carbon Dioxide

Occupancy

Electrical Energy

Thermal Energy



CLOUD SERVER



GSM

HUB

# Bold vision for the ESCO component

“To enable community housing to embrace renewables to lower energy costs & carbon footprint without the hassle for the homeowner or developer”

- For the community this means:
  - No - finance, installation, O&M or admin
  - Yet - flexibility to join, have a say, get returns
- For the developer this means:
  - No - finance or disincentive to homebuyer
  - Yet - installation via main contractor under NHBC



**SmartKlub's role: to innovate & manage the ESCO**



# The ESCO offer to residents is compelling

“In exchange for lending us your roofs, walls, carports & communal ground space, we flood the area with green electrons while discounting your energy costs”

- Advantages: scale, higher returns, best practice, guarantees
- Community say: target setting, scope steering, surplus share, investment
- Journey: extensible to many measures e.g. EVs
- Customer service - via a 24x7 app. Min cost, Max quality



**Innovative business model and service platform ensures the ESCO's affordable and meets local needs**

# Each ESCO can evolve with its community

“As each community gains confidence in the ESCO’s potential, members can shape its direction, invest or expand its scope, all within clear boundaries to protect the investors and residents”

The model evolves with residents only taking responsibility they want:

- Underwriter investor - fixed return
- Local investors - fixed return
- Resident Community - no equity, just surplus share



ESCO starts by resident community voting & sharing

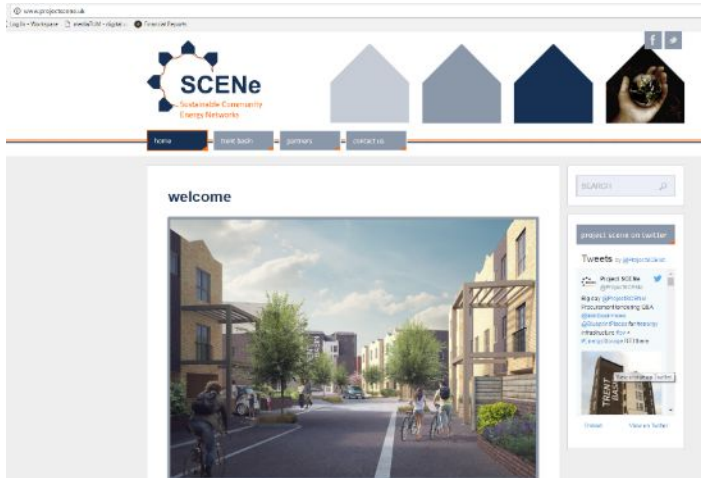
# Nottingham Trent Basin ESCO goes live in Q4 2017



# Thank you for listening. Any Questions?

Check out SCENe blogs:

[www.projectscene.uk](http://www.projectscene.uk)



[@ProjectSCENe](https://twitter.com/ProjectSCENe)



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