

Energy Services Companies - Models used by Nottingham City Council

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Robin Hood Energy Ltd.

About Nottingham City

- Qunitary authority with a population of 322,000 residents.
 - Central to a wider urban areas with a population of 730,000.
 - One of eight English members of the 'Core Cities Group'.
 - Contains significant energy infrastructure, including an EfW plant in the City Centre, other large-scale CHP and renewable generation.
 - UK's 'most energy self-sufficient city' 20% of the city's heat and power generated locally through CHP and renewables.
 - Involved in ESCo operations since the 1970s.



ESCo Model 1 Environment Sty Council enviroenergy



"Providing Greener Energy for Nottingham since 1972"



ESCo Model 1 Enwigher ading arm of Nottingham City Council

- Continuous operators of the city's district energy scheme since inception
- Board of 9 Directors also Nottingham Councillors
- Approx. 35 full time employees working 24/7, 365 days per year
- Employs approximately 35 personnel
- Generates a surplus for Nottingham City Council
- Overseen by Nottingham City Council's Energy Directorate
- Full in-house operation covering generation, distribution/network operations, metering and retail/billing



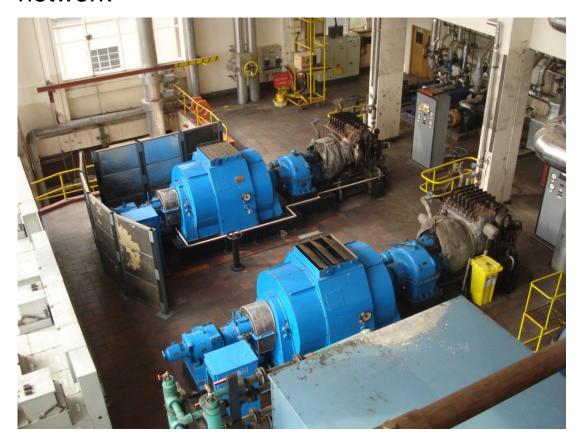
ESCo Model 1 Environmente Rowe (CAP) scheme





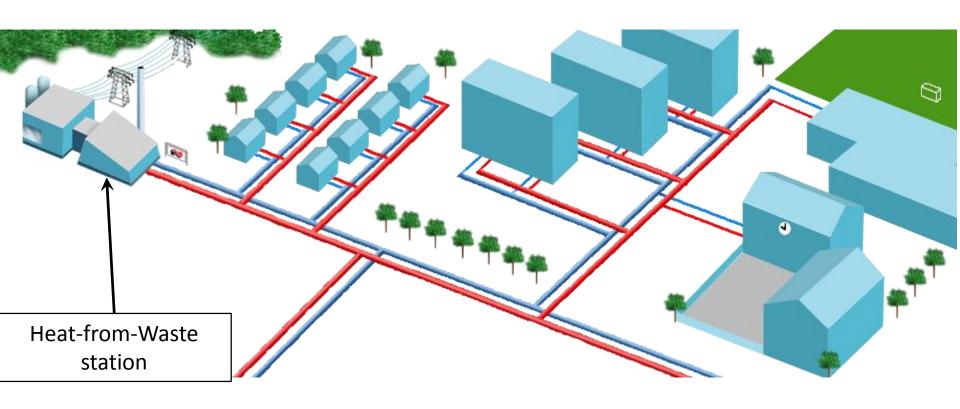
ESCo Model 1 -

E Power generation of up to 9 4 MW, supplying a private wire network





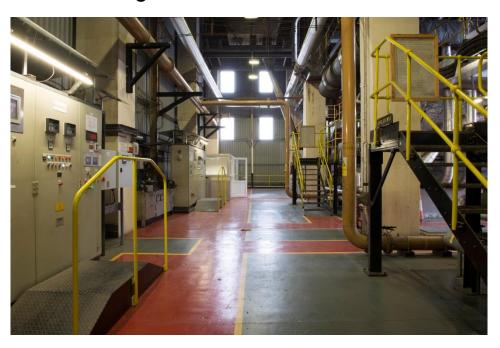
ESCo Model 1 -Enviroenergy





ESCo Model 1 -E<u>m</u>viroenergy

- 68km of pre-insulated pipework
- 4,900 domestic dwellings connected for the provision of space heating and hot water
- Over 3,000 domestic customers social housing tenants
- 115 commercial metering points
- 120,000 MWh annual thermal output
- Back-up provided by gas boilers
- Approximately 70% of heat units sold to commercial clients.





ESCo Model 1 Enviroenergy



NOTTINGHAM TRENT UNIVERSITY





















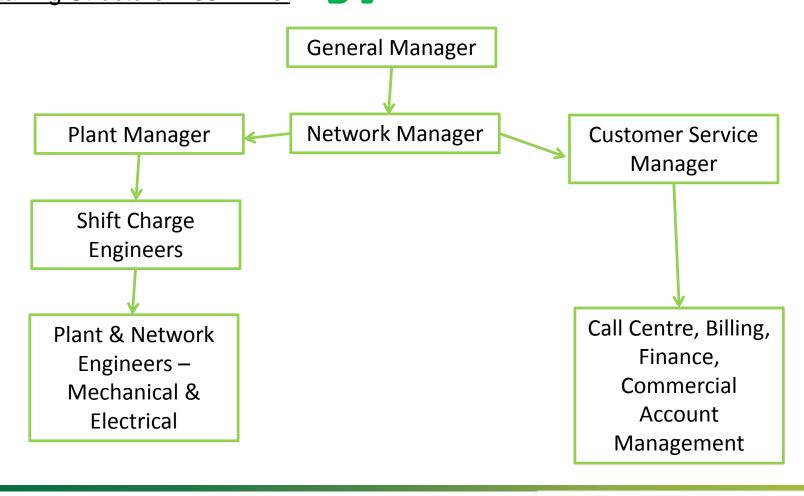








ESCo Model 1 Estation since espress r g y





ESCo Model 1 -Enverue opportunities: er gy

- Non-domestic heat
- Non-domestic power
- Domestic heat
- Export contract
- TRIADs
- ROCs
- REGOs
- Metering services



ESCo Model 1 -Engiroenergy

- Generates a surplus for Nottingham City Council
- Supports energy self-sufficiency and lower carbon generation
- Supports skilled jobs within the city
- Longevity of customer base
- Has the potential to support development

Risks and Restrictions

- Ageing, high-maintenance network requiring ongoing capital investment
- Limited scope for expansion
- High cost of expansion
- No direct benefits for most city residents



ESCo Model 2 - Gas and

Power



ESCo Model 2 - Gas and Power Retailer

Licence Lite

- A Sustainable approach
- Inclusive economic growth
- Management of risk
- Shareholder priorities

Fully Licensed Supply

- A Lean Operating Model;
- Flexibility;
- Social Value;
- Inclusive Economic Growth,
- Management of Risk;
- Shareholder Priorities

White Label

- A Lean Operating Model;
- A Cost-effective approach;
- A Sustainable approach;
- Flexibility;
- social value;
- Inclusive Economic Growth;
- Management of risk;
- Shareholder priorities.

Robin Hood Energy -Timeline

- ✓ 2011 Political manifesto commitment to create local energy company
- ✓ 2014 Options appraisal followed by business case development
- ✓ Nov 2014 Purchase of 'supplier in a box'
- ✓ Dec 2014 Dedicated premises sourced
- ✓ Jan & Feb 2015 Recruitment of initial management team
- ✓ May to Jul 2015 'Controlled Market Entry'
- ✓ Sept 2015 Domestic launch
- ✓ Nov 2015 Pre-payment launch
- ✓ Mar 2016 Non-domestic gas launch
- ✓ May 2016 First smart meter installation
- ✓ Sept 2016 First white label partnership
- ✓ Oct 2016 Non-domestic power launch

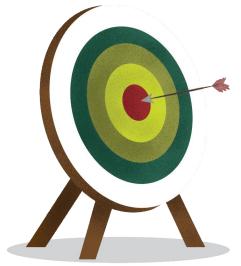
Robin Hood Energy -

Current Status

- ✓ Over 100,000 domestic customers now supplied by Robin Hood Energy, either through our own brand or through white labels
- √ 30% of customer base have pre-payment

✓ Tariffs consistently amongst the most competitive available

√ 8,000 smart meters installed





Key considerations

- Initial cost
- Working capital
- Credit requirements
- Staffing /recruitment
- Compliance
- Regulatory change
- Trading risks
- State Aid
- Procurement approach



Key procurement items

- Licence in a box/supply licence
- CRM and billing platform
- Data flow management software
- Metering
 - MAP/Asset Financing
 - MOP/MAM
 - DC/DA
 - DR
 - DCC Adaptor
- Outsourcing
 - Printing and fulfilment
 - Back office operations
 - Customer services

- Telephony
- Brand development
- Website
- Support services i.e. legal, finance, HR
- Energy trading
 - Strategic advice
 - Market insights
 - Forecasting software
 - Counterparties
- Gas shipping
- Debt collection

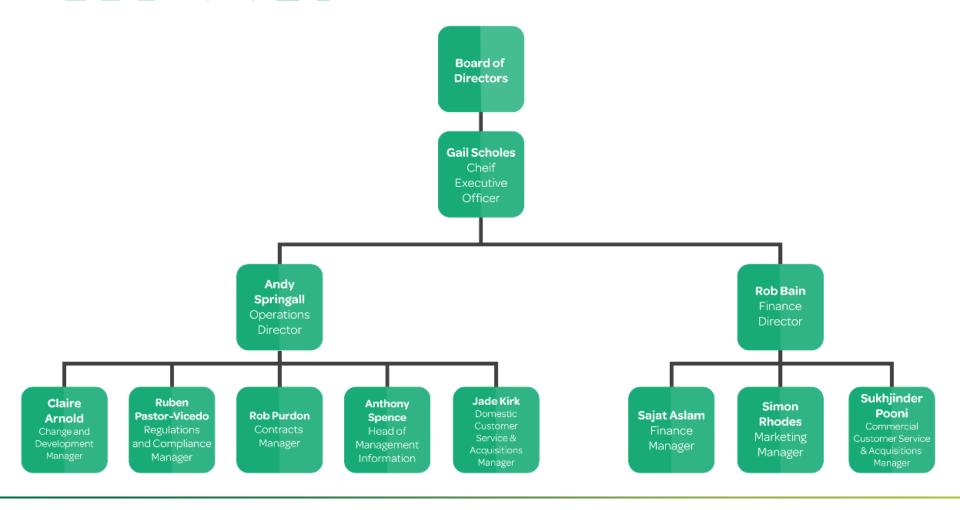


Other industry partners

- Transmission and distribution networks.
- Gas transportation.
- PEMS.
- Industry administrators e.g. Elexon, Xoserve, Mrasco, DCC.



Staffing Structure - 130 FTEs



Critical Success factors

- Clarity of Business Objectives
- Political and Corporate Support
- Management of Risk
- Skills and capacity
- Market understanding
- Innovation



Further Information

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