



ROSCOMHEAT® – *Roscommon Community Heating Initiative*

An insight into seeking to develop District Heating in Ireland in 2013

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Introductions

- Michael Spellman
- Greengrove Wood Energy
 - Established 2005
 - Woodfuel Producer and Supply
- Greengrove Biofuel Co-Operative Society Ltd
 - Established 2010
 - 74 Members – various size forestry holdings
- Alpha Biomass
 - Established 2011
 - Development of Wood Energy Opportunities



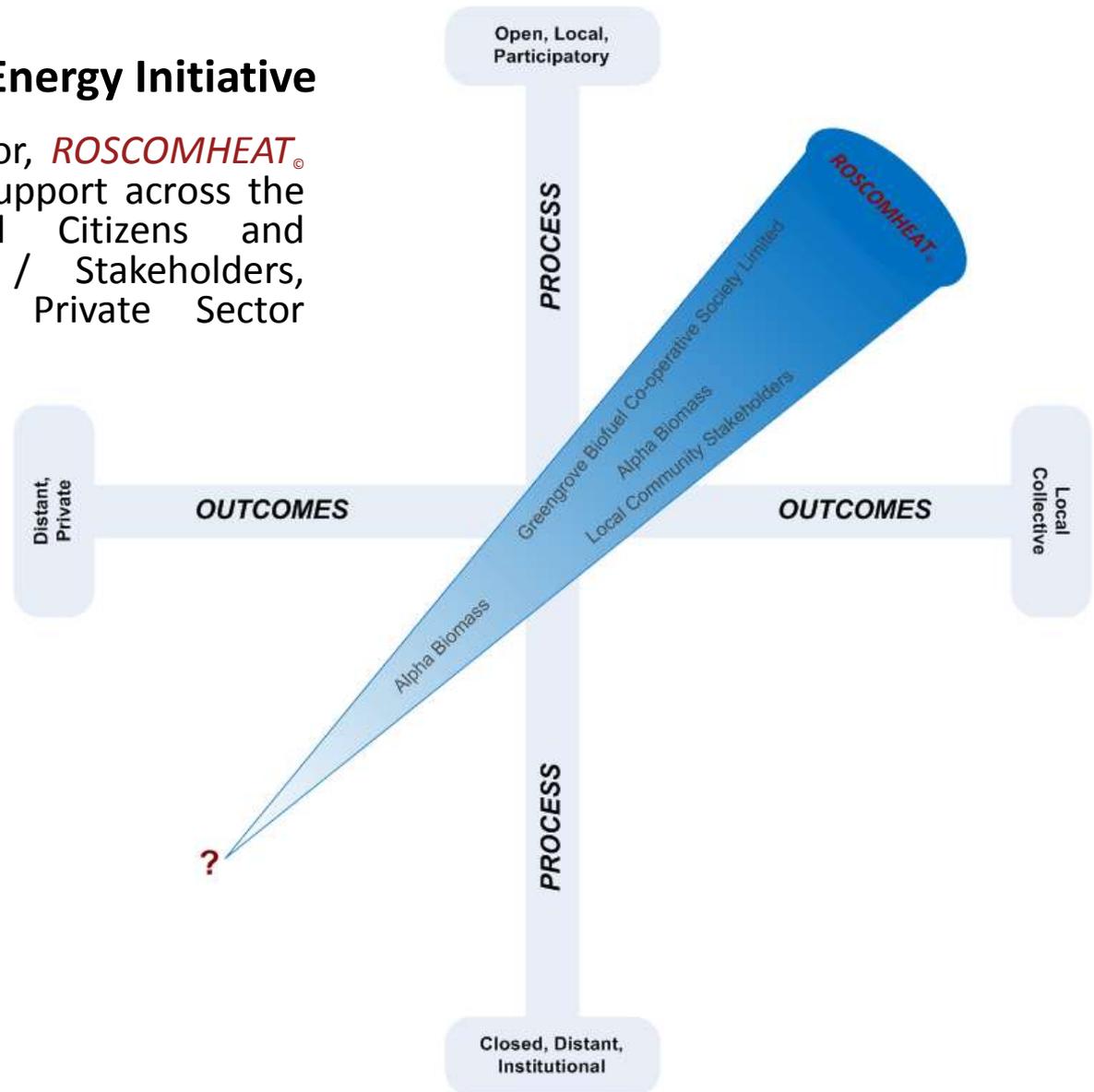
Overview

Established	2010 (Renamed ROSCOMHEAT[®] 2012)
Current Stakeholders	<ul style="list-style-type: none">- Greengrove Biofuel Co-Operative Society Limited- Alpha Biomass
Offering	To provide a 'Cost Competitive Renewable Heat Solution to Roscommon Town
Strengths	<ul style="list-style-type: none">- Community Buy-in- Local Fuel Source already established- Local Supply Infrastructure already established- Proven Technology- Reduced reliance on imported fossil fuels- Local Employment and positive financial benefits locally
Challenge	<ul style="list-style-type: none">- Establishing Long Term Fuel Supply Arrangements with Key Stakeholders.

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Structure – A Community Energy Initiative

Originating in the Private Sector, *ROSCOMHEAT*® has evolved to achieve wide support across the Community, including Local Citizens and Community Representatives / Stakeholders, including both Public and Private Sector Organisations



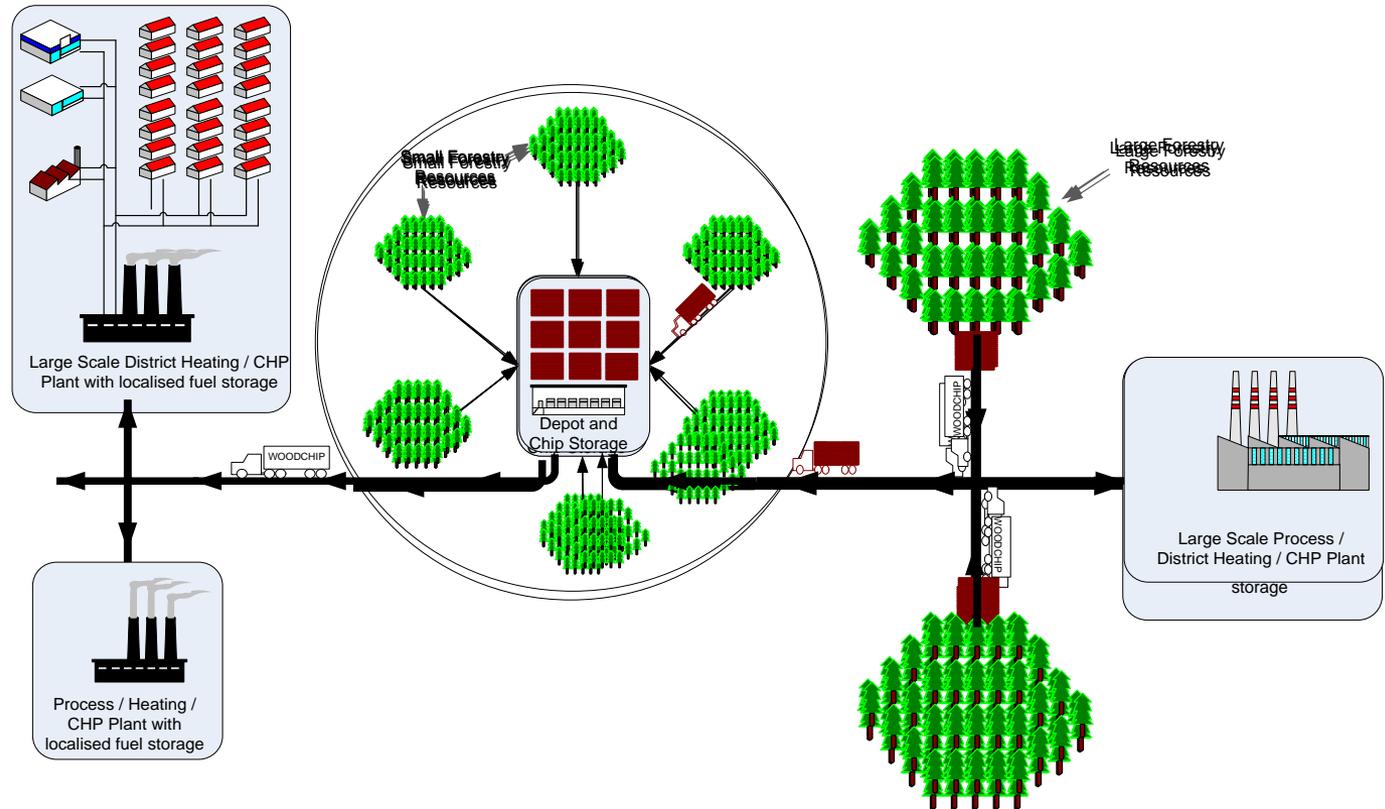
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Indicative Approach

- ***ROSCOMHEAT***® - Special Purpose Vehicle (SPV)
 - Inclusive Structure
 - Local Community buy-in
 - Local Resource, serving the local community, employing in the local community



Established Fuel Source and Supply Chain Infrastructure



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Technology

- Seek to work with proven Technology
- Ability to use a variety of feedstock – 10% to 60% Moisture
- Ability to use a variety of sizes – up to P250
- Ability to modulate to align with load (down to 10%) if required



Indicative Timeline

- Following commitment from Key Client Stakeholders, **ROSCOMHEAT[®]** plan to be operational, providing Sustainable, Local Energy, to Roscommon Town in October 2014, providing real employment and financial benefits to the local economy, whilst supporting National Energy and Economic objectives.



Opportunity

- Benefits for prospective **ROSCOMHEAT** Clients
 - Reduced Energy Expenditure
 - Reduced exposure to Fuel Price Volatility
 - Cost directly linked to heat consumed, not heat generated
 - Estimated typical Seasonal Efficiency of existing oil boilers circa 65%
 - Redirection of future (Boiler related) capital expenditure back into core services
 - Reduced operating and maintenance costs
 - Positive economic benefit to the Local Community in Roscommon
 - Support National Objectives to reduce Carbon Emissions and reliance on imported fossil Fuel



Challenges

- *Inception and Feasibility*
 - *To enable the ‘Vision’ of implementing a viable and sustainable [Biomass] District Heating Scheme to Roscommon Town to become a reality, a number of Public Sector bodies will need to engage in the ‘Vision’ at all levels and for the long term*
 - *The viability of the project will hinge on a number of large energy users (Particularly the Hospital, Care Home, Large Office Buildings, etc.) committing to procuring thermal energy from the Scheme (subject to a number of pre-determined criteria).*
 - *Public Procurement challenges will need to be overcome to enable the scheme to be developed in a manner which facilitates the aspirations of ‘Private Sector’ Stakeholders (Project Sponsors and others), whilst enabling ‘Public Sector’ Stakeholders to engage fully and benefit from the Scheme, whilst ensuring compliance with Public Procurement requirements.*



Challenges

- *Funding:*
 - *To enable the feasibility process to progress, the Project Sponsors plan to make an application to the European Energy Efficiency Fund (EEEF) for ‘Technical Assistance’ funding. “This Technical Assistance Facility supports its European Commission grants for up to 90 % of the total costs and subject to a later financing by EEEF”.*
 - *“If the envisaged project does not realize, and the beneficiary can prove that he did not act with gross negligence the technical assistance does not need to be paid back”.*
 - *Clarification is required as to what would constitute ‘gross negligence’ to mitigate risk to the project sponsors in relation to the potential repayment of the Technical Assistance funding.*



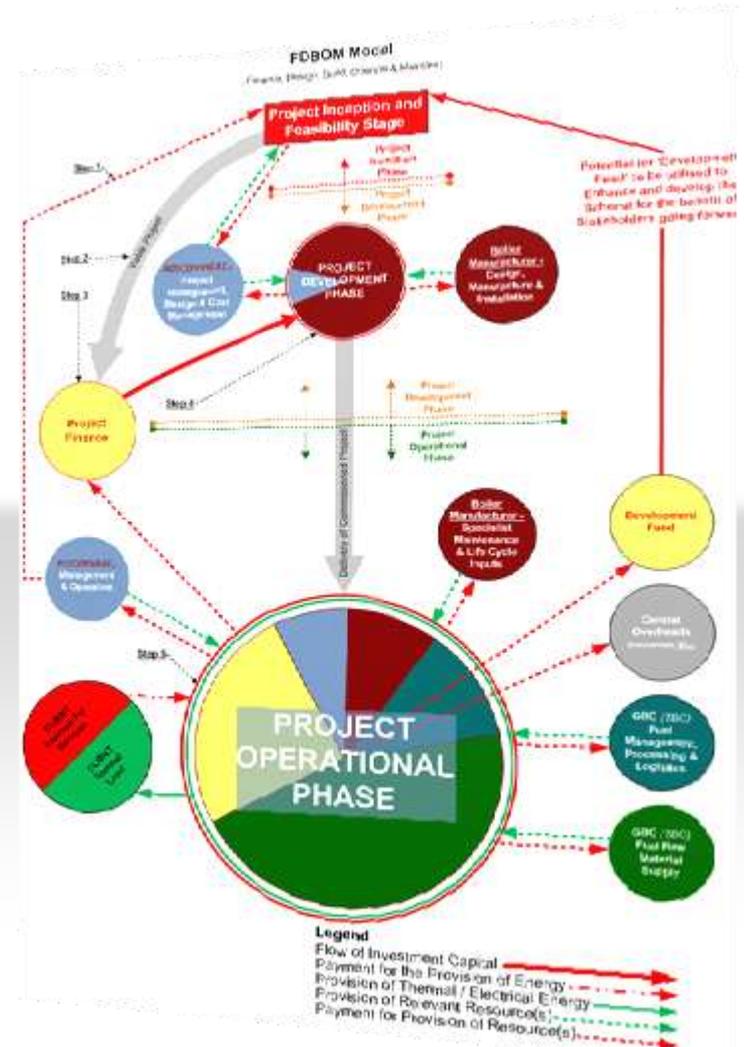
Challenges

- *Legal Entity*
 - *To date, no formal decision has been taken with regards what legal structure Roscomheat should take, and also whether the principle elements should exist in a single legal entity / multiple entities;*
 - *District Heating Infrastructure*
 - *Heat Source (Heating Plant)*
 - *The EEEF website defines “The final beneficiaries of EEEF are municipal, local and regional authorities as well as public and private entities acting on behalf of those authorities such as utilities, public transportation providers, social housing associations, energy service companies etc.”*
 - *If the EEEF are to be the principle source of funding, the ‘final beneficiaries’ as detailed above must be factored in when finalizing the legal structures around the ‘entity / entities’ put in place to progress this project.*



Going Forward

- *Project Elements / Phases*
 - *The Project Model (see image), whilst not necessarily the model which will be used to progress the project provides some insight into the likely elements / stages of the Project*
- *Step 1 – Project Inception and Feasibility*
- *Step 2 – Establishing the viability, buildability and operability of the project, through the complete project lifecycle*
- *Step 3 – Project Finance*
- *Step 4 – Project Development Phase*
- *Step 5 – Steady State Operation*



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Thank You

