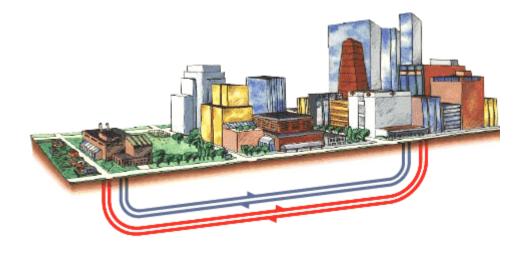
## IDEA Kickoff Workshop 26<sup>th</sup> January 2018



District Heating in Ireland, Donna Gartland

Proposal for IDEA, David Connolly PhD

Discussion: Future Role of IDEA





## District Energy in Ireland: Current Status and Outlook

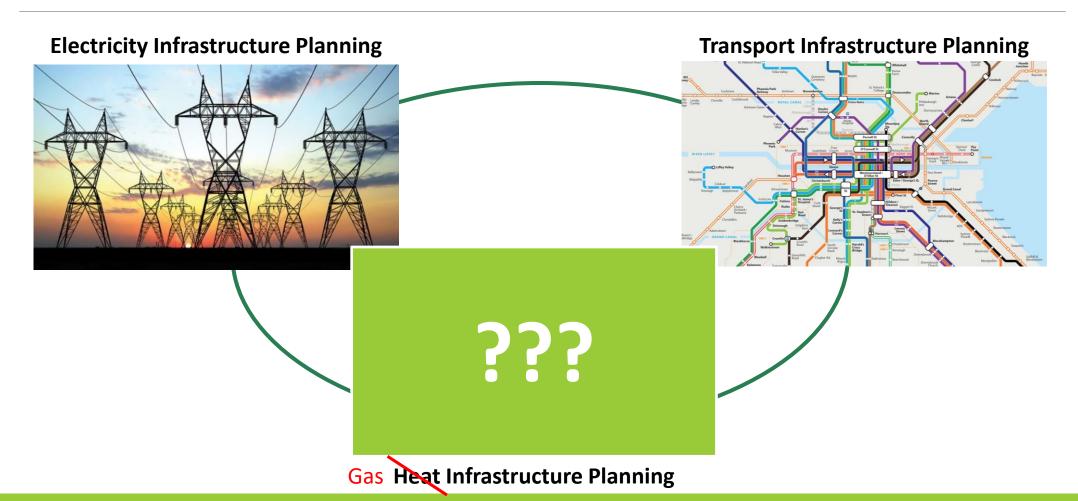
**DONNA GARTLAND** 



#### Why do we need a DH Association?



#### Energy Planning in Ireland





#### Current DH Policy

Supports (In-direct)

RHI – biomass and grant for HPs

CHP

**Barriers** 

No support for Waste Heat use

No regulation – higher risk

**BER** issues

No planning policy

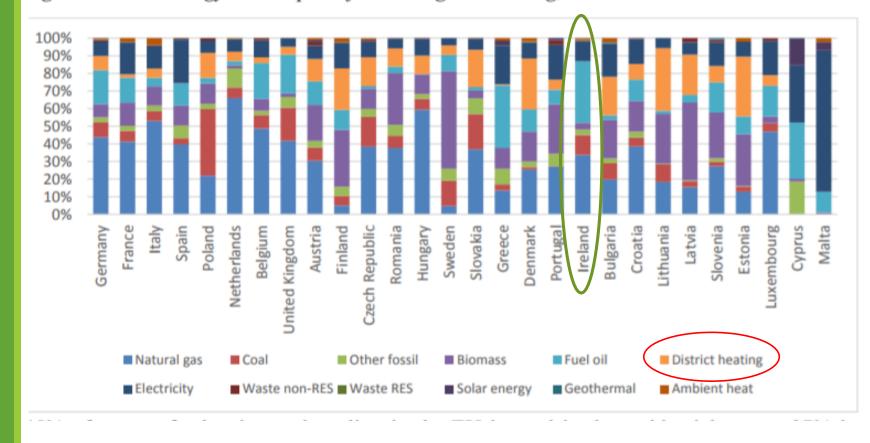
Low carbon tax

No Heat Plan

## Contribution of DH in EU

- EU Countries with little or no DH:
  - Ireland
  - Cyprus
  - Malta
  - Greece
  - Spain

Figure 2: Final energy consumption for heating and cooling, 2012



Source: Eurostat



#### Ireland

By Donna Gartland, last updated May 2017

<0.8%

of heat demand is covered by district heating

25

CHP units used for district heating

35

District heating systems in Ireland

#### Contribution of DH in Ireland









# DH at EU level



#### DH Research in Ireland











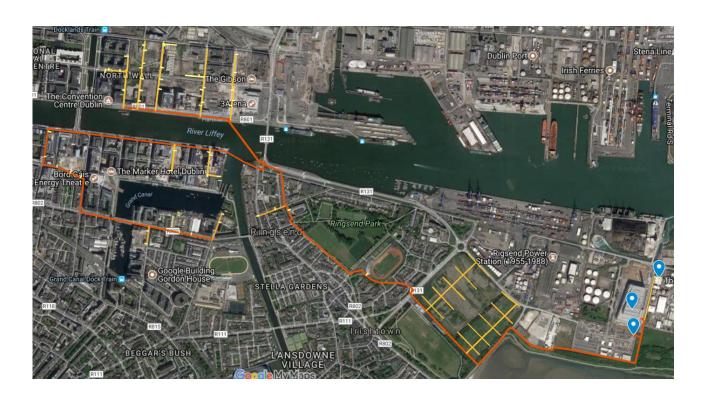
#### Upcoming Policy

- •DCCAE Working Group on District Heating "To develop a policy framework to support DH"
  - Policy & Regulation
  - Planning & Building Regulations
  - Financing
- DHPLG BER issues & Planning
- EMRA Regional Strategy consultation

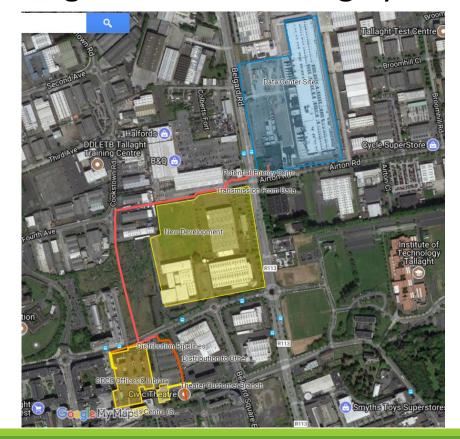
#### Examples of Upcoming Largescale Projects



#### **Dublin District Heating System**



#### Tallaght District Heating System





#### IDEA!

- Ideal time to come together to form the Irish District Energy Association
- Influence policy, stay informed, networking
- Work together to develop successful DH industry in Ireland

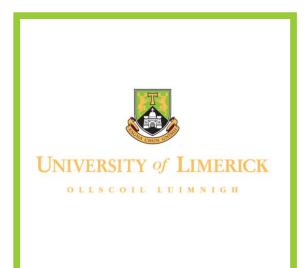


### Overview of IDEA

DAVID CONNOLLY

#### About Me

- 2003-2011:
  - B.Eng in Mechanical Engineering
  - PhD in Energy Modelling, University of Limerick
- 2011-2017:
  - Assistant/Associate Professor, Aalborg University
  - Coordinator of the Heat Roadmap Europe Project
- 2017-Present:
  - Head of Policy, Irish Wind Energy Association









#### Heat Roadmap Europe Key Recommendations for the Heat Sector

#### Everywhere

**Heat Savings** 

Balance Savings vs. Supply

30-50% Total Reduction

#### **Urban Areas**

District Heating Networks

High Heat Density
Areas

Supply ~50% of the Heat Demand

#### **Rural Areas**

Primarily Electric
Heat Pumps

Smaller Shares of Solar Thermal & Biomass Boilers

Remaining ~50% of the Heat Demand

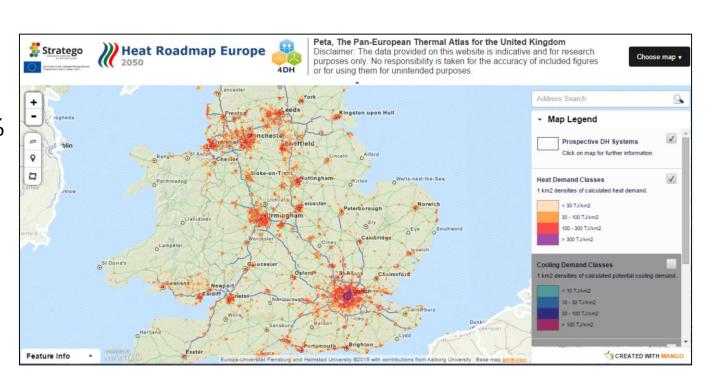






#### Example of Results for Each Country: UK

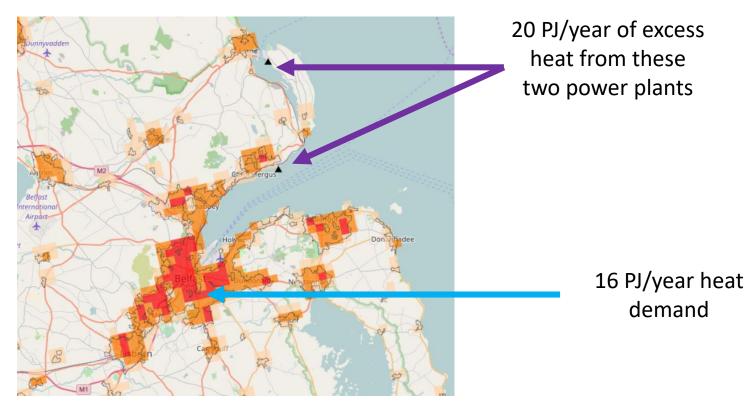
- 480 TWh: Total heat demand in buildings
- 410 TWh: Potential Excess Heat Available (excluding nuclear)
- 65 TWh: Renewable Heat Potential in DH areas (excluding biomass)
- Heat Savings can cost-effectively reduce the demand by 40% (estimate)
- District heating can provide 70% of the heat demand, due to high heat densities (>100 TJ/km²), compared to <5% today</li>
- Can reduce:
  - Cost: -10%
  - Demand: -20%
  - CO2: -25%
- Can Increase:
  - Renewables
  - Jobs





## Why Am I Here?

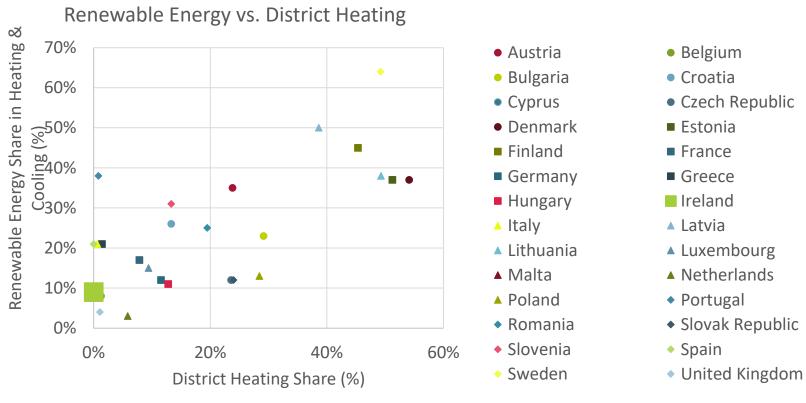
## 1) I believe Ireland has a Huge District Heating Potential District Heating in Belfast







#### 2) Renewable Heat vs. District Heating





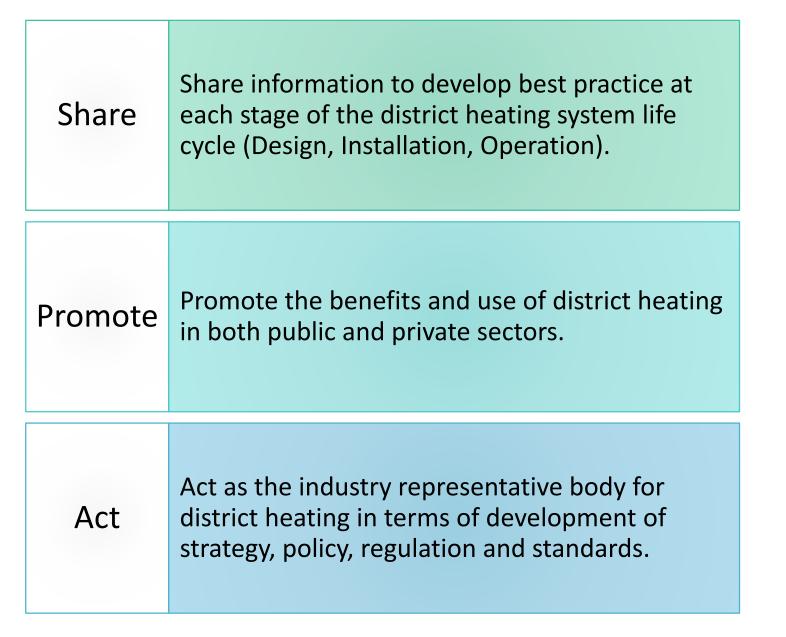
This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No. 695989.



### IDEA

IRISH DISTRICT ENERGY ASSOCIATION

## Aims & Objectives



### Structure

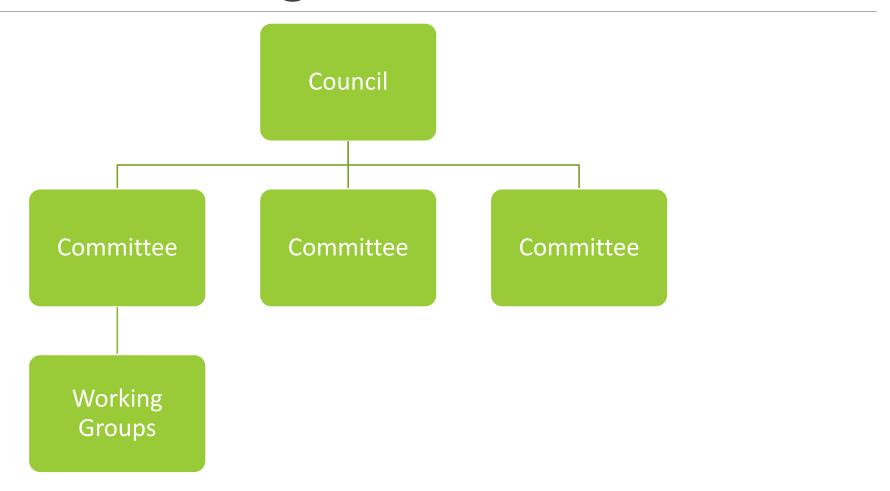
## Governance Code for Community and Voluntary Organisations (CVC Code)



- 1. Ensure effective leadership (strategy, business, structures)
- 2. Exercise control over the association (legal, financial, risks)
- 3. Be Transparent & Accountable
- 4. Work Effectively as a Collective (clear decision-making & understanding of roles)
- Behaving with Integrity

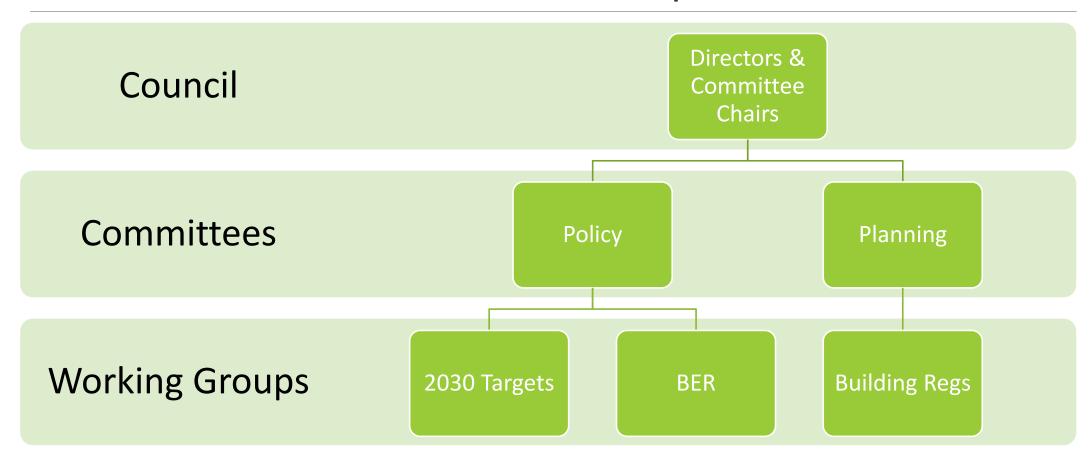


#### IDEA Structure: High-Level





#### IDEA Structure with Examples



#### Membership

#### Corporate

Influence Strategic
 Direction of IDEA

#### Associate

• Informed & Invovled

#### Ordinary

 NGOs/Community Groups/Individual/Academic

#### Council

#### MEMBERS & MEETINGS

- Directors & Committee Chairs
- Chairs are elected by Committee Members:
  - First preference for Corporate Members up to Revenue share
- Propose 2 Meetings/year
  - Jan = Review year gone by and prepare for upcoming year
  - June = Performance Review and Aligned with AGM

#### RESPONSIBILITIES

- Define Strategy
- Monitor Progress
- Resolve Contentious Issues
  - Majority Rule, Chairperson Casting Vote
- Create and dissolve Committees

#### Directors

- Current Directors:
  - David Connolly (Chairperson)
  - Donna Gartland

- Responsibilities:
  - Financial & Legal of IDEA
- Proposal:
  - No additional directors until IDEA is established
  - Council in time is likely to become the 'Board of Directors'



#### Committees

#### Chair:

- Elected by Committee Members for 2 years
- Corporate Members are Prioritised (until revenue share is exceeded)
- Reports to and Attends Council Meetings
- Arranges and Coordinates Committee meetings e.g. agendas, conference calls, meetups, minutes

#### Members:

- All members are eligible to one seat
- Must attend and participate in calls

#### Working Groups (if necessary):

- Established on an Ad Hoc Basis to Deal with Specific Issues
- For example, a consultation response
- Chair of the Committee can nominate a Chair of the Working Group

#### Policy

Planning

**Economics** 

Technology & Standards

Proposed Committees: Aligned to National Framework

### 

## Proposed Objectives for 2018 (1 of 2)



- Establish IDEA as an organisation
  - Members, governance, strategy

- Biannual Newsletter/ Industry Updates
  - News/policy/ongoing work



- Euroheat & Power: potential to host conference in 2021
- Commercial entities looking to establish/grow in Ireland



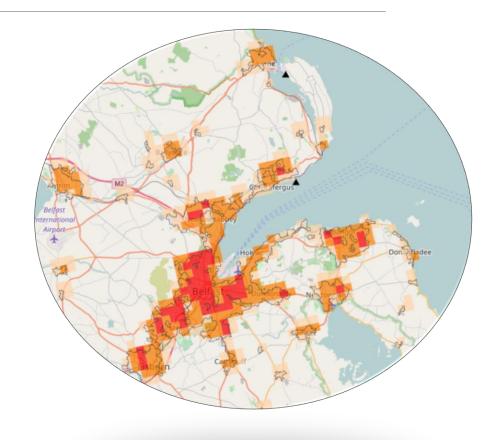
## Proposed Objectives for 2018 (2 of 2)



- Create an Online Profile:
  - Update website, including forum for members
  - Promote IDEA on Social Media e.g. Twitter

Develop an Irish Heat Atlas for Members

- Provide Input to Relevant Consultations:
  - National Framework for District Heating
  - 2030 Energy Targets





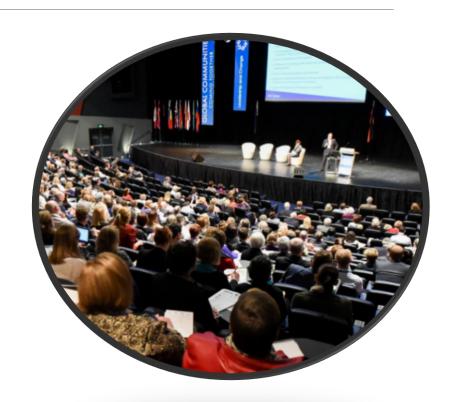
#### Proposed IDEA Events in 2018

Kick-off workshop – January 2018

Annual Conference

Biannual Council Meetings

Ongoing Committee Conference Calls



## Funding = Membership

#### Membership

#### Corporate

Influence Strategic
 Direction of IDEA

#### Associate

• Informed & Invovled

#### Ordinary

 NGOs/Community Groups/Individual/Academic

## Type & Cost of Membership (excluding VAT)



- Corporate:
  - >20 employees, >1 MW<sub>el/th</sub>, >€1 Million Revenue: €2000
  - Public Institutes for additional benefits
- Associate:
  - Commercial: <20 employees, <1 MW<sub>el/th</sub>, <€1 Million Revenue: €500</li>
  - Public Institutions
- Ordinary: NGO/Individual/Academic: €200



#### Proposed Membership Benefits

IDEA Membership Benefit		Corporate	Associate	Ordinary*
INFLUENCE	Can Apply to Committees & Working Groups	✓	✓	✓
	Can Apply to Council/Chair of Committee	✓	✓	
	Vote at AGM	✓	✓	
	Priority to become Committee Chairs	✓		
NETWORK	Conference Fees Covered	4	1	1
	Access to Online Forum	✓	✓	✓
	Discounted Rates for Conference Exhibition Stands	✓		
INFORMED	Biannual Newslettter/Industry Update	✓	✓	✓
	Access to Member Area of IDEA Website	✓	✓	✓
	Update on Tenders	✓	✓	
	Access to IDEA Heat Atlas (if developed)	✓		
MARKETING	Listed on IDEA Website	✓	✓	✓
	First Invite for Speakers at Workshops*	✓		
	First Invite for Sponsorship*	✓		
	First Invite for Communication Contributions*	✓		

# 

#### Three easy steps for your audience to join in



Event Number: #Z906



### Questions?