



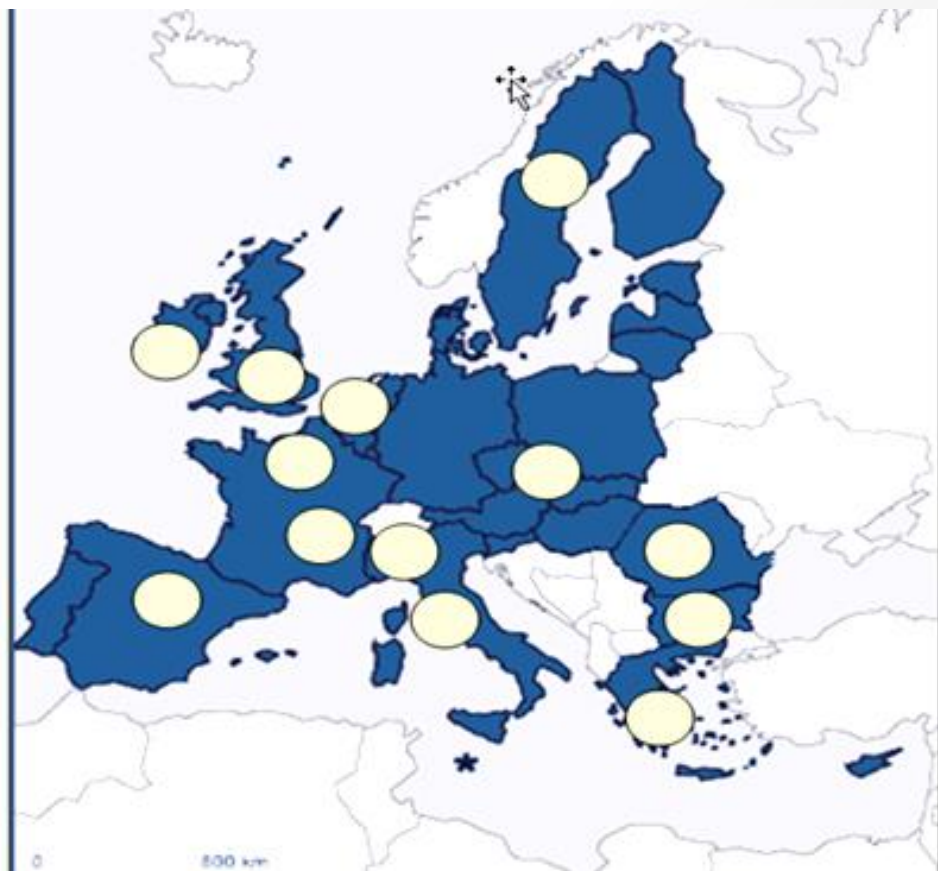
Collaborating in energy data exchange

Paddy Phelan,  
Carlow Kilkenny Energy Agency  
03<sup>rd</sup> June 2015



Co-funded by the Intelligent Energy Europe  
Programme of the European Union

# 12 Member States, 14 Partners



- ▶ Rhônalénergie-Environnement - FR
- ▶ Kent County Council - UK
- ▶ Energetická Agentura Zlínského Kraje - CZ
- ▶ Infrastrutture Recupero Energia Agenzia Regionale Liguria - IT
- ▶ Conseil Régional Nord-Pas de Calais - FR
- ▶ Norrbottens Energikontor - SE
- ▶ Agentia Locala a Energiei Alba - RO
- ▶ Ente Vasco de la Energia - ES
- ▶ IHOBE - Spain
- ▶ Provincia di Torino - IT
- ▶ Energy Agency of Plovdiv - BG
- ▶ Carlow Kilkenny Energy Agency - IE
- ▶ Energy Environment Local Development SA - EL
- ▶ FEDARENE - BE

DATACTION



Co-funded by the Intelligent Energy Europe Programme of the European Union

# Introduction -DATA4ACTION

- ▶ **IMPROVE** public authorities' access to energy data for a better design and monitoring of SEAPs;
- ▶ **MOBILIZE** public authorities and energy data providers in a win-win partnership;
- ▶ **FACILITATE** their collaboration through establishing or further developing Regional Energy Observatories;
- ▶ **DEMONSTRATE** energy data exchange collaboration models 'in action' in the twelve European partner regions;
- ▶ **SUPPORT** knowledge transfer and replication in other European regions.



Co-funded by the Intelligent Energy Europe  
Programme of the European Union

# Energy Data - Why do we need it?

- ▶ Energy data is crucial for identifying trends and priority sectors
- ▶ Gives measures to target in terms of energy efficiency improvement and transition towards renewable energy sources.
- ▶ Inscribed in the municipal and regional Sustainable Energy Action Plans (SEAPs)



Co-funded by the Intelligent Energy Europe  
Programme of the European Union

# Energy Data

- ▶ Lacking at the local level;
- ▶ Issues with the quality of data;
- ▶ Issues regularity of data,
- ▶ Commercial sensitivity, data privacy,

DATA4ACTION aims to set up regional “one-stop-shop” centres for the exchange, collection and processing of local energy data.



Co-funded by the Intelligent Energy Europe  
Programme of the European Union

# Definition - Sustainable Energy Action Plans

- ▶ Written document which sets out how the area intends to achieve it's its reduction target by 2020;
- ▶ It uses the results of the Baseline Emission Inventory to identify the best fields of action and opportunities for reaching the local authority's CO<sub>2</sub> reduction target.
- ▶ It defines the activities and measures set up to achieve the targets, together with time frames and assigned responsibilities.





# Definition - Regional Energy Observatories

- ▶ Regional energy and GHG emissions Observatories are supporting structures assisting public authorities in gathering, assessing, processing and modelling energy data
- ▶ Established for better sustainable energy planning at regional and local levels.
- ▶ Design and implement win-win collaboration agreements with energy data suppliers
- ▶ **“one-stop-shop” data services** to public authorities within one geographical area therefore optimising the efforts in data gathering and processing data for SEAPs.
- ▶ Most Observatories are governed by a local consortium gathering at least several public authorities and energy data suppliers. Typically governed by a local consortium



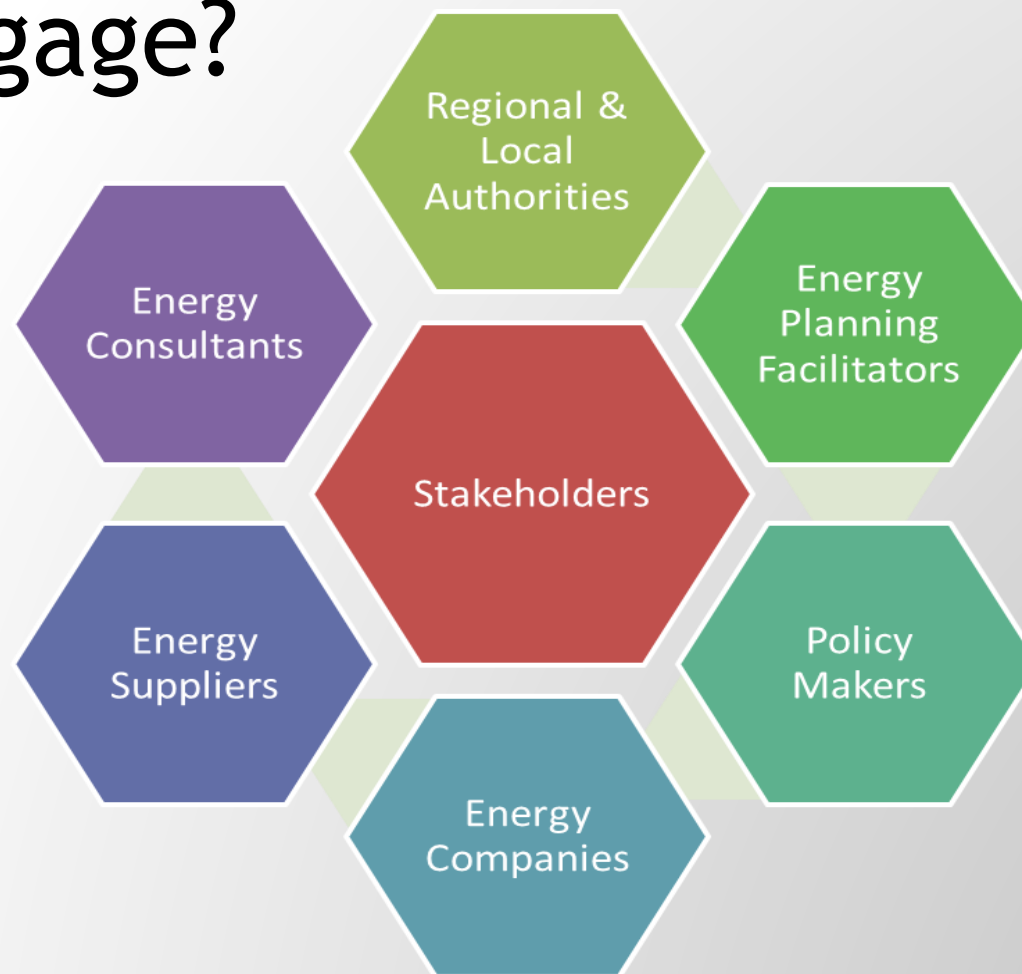
Co-funded by the Intelligent Energy Europe  
Programme of the European Union

# Regional Energy Observatory

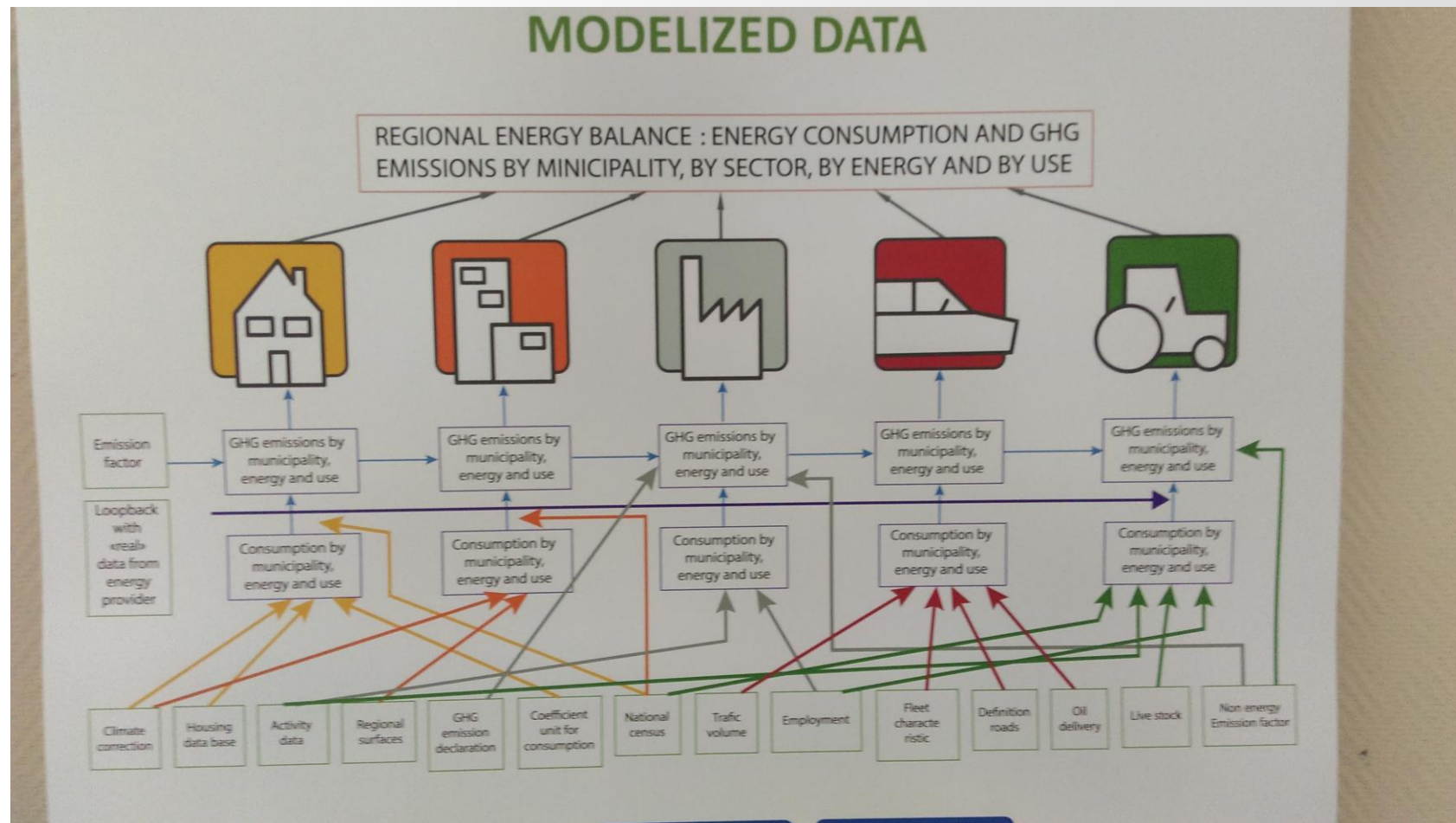




# Who Can Engage?



# Data Model



# Peer Learning -Nenet

- ▶ Held Skpye Call, 17<sup>th</sup> Febraury 2014
- ▶ Topic 1: Engaging/ specifying with technical solutions companies to provide a useable tool for our Regional Energy Observatory.
  - ▶ CKEA had reviewed the other existing REOs and created a table of pros/cons;
  - ▶ With regards to Nenets Energy Loupe, the platform they had in place offers a simple user friendly interface;
  - ▶ Energy Loupe have two contractors at present, one for the front end “User Interface” and one for the backend “data”;
  - ▶ Nenet advised CKEA to have a clear target audience for the their REO; Nenet have local and regional authorities, as their target audiences;



Co-funded by the Intelligent Energy Europe  
Programme of the European Union

# Peer Learning -Nenet

- ▶ Topic 2: In setting up the REO, CKEA want to ensure that the end product is simple and effective - CKEA tend to run-away with our thoughts of what the tool can offer, so what is the best approach to manage our expectations of the tool.
  - ▶ Follow the Covenant of Mayors rules and work with the minimum requirements set out in this:
    - ▶ Energy Consumption by Sector & Energy Source
    - ▶ CO2 or CO2 equivalent
  - ▶ Can build from there with benchmarking as REO expands
  - ▶ Review regularly every year/ two years
  - ▶ Nenet advised that energy Loupe was only used by a select few - the benefit of the observatory needs to be supported by Political decisions and Energy Plans - write the Energy Observatories into the creation of emissions inventory/ monitoring if feasible.

# Peer Learning -Nenet

- ▶ CKEA obviously want to maximise our budget within this space - so would you advise more budget be orientated towards particular activities of the REO.
  - ▶ Nenet advised that before CKEA start review tools on EU Market available as outlined by ICLEI at Bilboa
  - ▶ Take it step by step - spend the internal time in developing the requirements of the REO
  - ▶ May be easier (and cheaper) to adapt existing tools



# Collaboration with PBs & Utility Companies

- ▶ To date we have Memorandums of Understanding from our two regional Local Authorities, Carlow & Kilkenny County Council;
- ▶ Both are providing electricity utility data on a month by month basis, and also annual non-metred utilities;
- ▶ Through a Credit Union Energy Efficiency program, we are in the process of gathering a data set around private houses - directly with home owner - who have availed of energy efficiency upgrades;
- ▶ Progressive meetings have been held with some of the larger providers in Ireland, Airticity, Bord na Mona, Electric Ireland, Energia.



Co-funded by the Intelligent Energy Europe  
Programme of the European Union



# Establishing Regional Energy Observatory

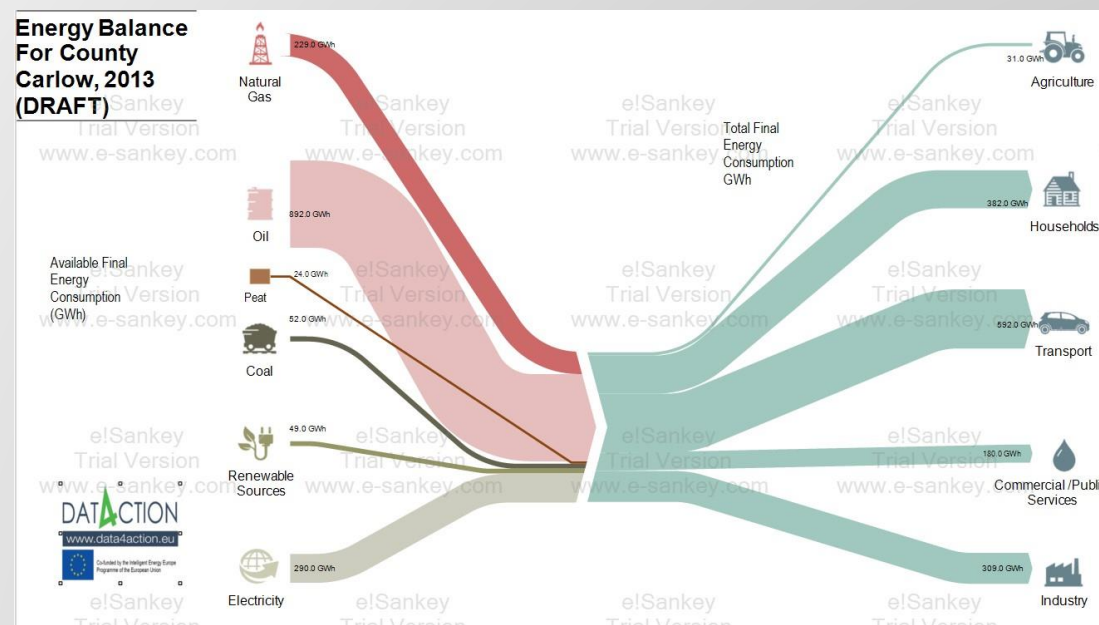
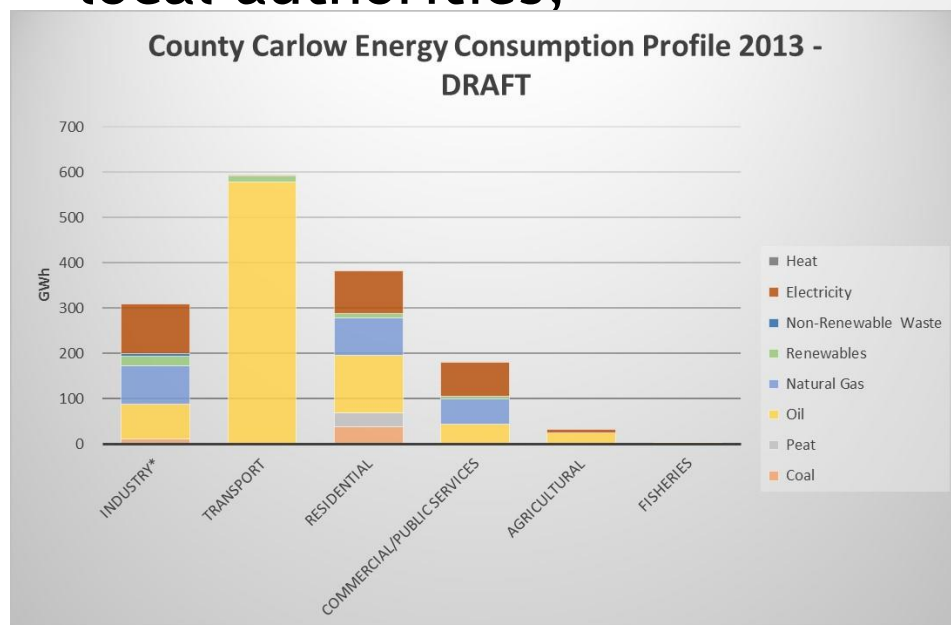
- ▶ DRAFT Technical specification underway - to be issued for tender in the upcoming weeks. This was done based on advice from Nenet and also some Irish technical experts for back end / data analytics tools;
- ▶ Our proposed mechanism is to bring it to the market as a product that we want and let the contractor provide the solution.
- ▶ Kilkenny County Council are signatories Covenant of Mayors and it is expect that Carlow County Council will join shortly;
- ▶ Internally, we have a number of staff recruited to focus on the business aspect of the REO and also the technical advancement of the work already done from a national level.
- ▶ In conversation with Kent County Council, and will share specification once complete - opened up another discussion around Co-Openergy and a collaboration exchange with Kent County Council, focusing on Social housing



Co-funded by the Intelligent Energy Europe  
Programme of the European Union

# Establishing Regional Energy Observatory

Top -Down Analysis and Data is available in house and to the local authorities;



# Regional Roundtable

- ▶ The Regional Roundtable will be held on 03<sup>rd</sup> June 2015;
- ▶ Upcoming Event - Energy Info Day, promoting SEAP, using Covenant of Mayors Structure following;
- ▶ We hope to continue the collaboration with Nenet;
- ▶ Support required to do peer review our observatory once established.



Co-funded by the Intelligent Energy Europe  
Programme of the European Union

# How Can You & Your Organisation Contribute?

- ▶ Actively Participate in Regional Energy Observatories;
- ▶ Assist in the Exploration of Ways to Improve Data Collection;
- ▶ Assist in the mobilization of the Energy Data Providers and Public Authorities;
- ▶ Be part of the demonstration of collaboration models



Co-funded by the Intelligent Energy Europe  
Programme of the European Union

# Why Engage?

## ► Learn from Others

Through Regional Energy Observatories, there will be an opportunity to meet with other stakeholders to actively engage and learn how other stakeholders gather and use data.

## ► Better Data Access & Improved Data Quality

The creation of Regional Energy Observatories will assist in the creation of “One-Stop Shop” Data Centres, which will allow open access to information. The supply of data will be real time and usable.

## ► Development of Relationships

The project promotes the cross-sectorial interaction required to ensure quality of data sharing and development of actionable Sustainable Energy Action Plans

## ► Improved Sustainable Energy Action Plans

The improved data can be used to create renewed and real-time Sustainable Energy Action Plans.



Co-funded by the Intelligent Energy Europe  
Programme of the European Union

# DATA4ACTION Key Results

Improvement of Access to Energy Data for Better Implementation and Monitoring of Sustainable Energy Action Plan

Mobilise Public Authorities & Energy Data Providers and facilitate their co-operation

Demonstrate Data Exchange collaboration models "in Action"

Support Knowledge Transfer and Replication

Promote European Policies



Co-funded by the Intelligent Energy Europe Programme of the European Union



# Thank You!

- ▶ For Further Information and support:

- ▶ [www.data4action.eu](http://www.data4action.eu)

- ▶ Your local contact for Data4Action is

- ▶ Paddy Phelan

- ▶ 056 7790857

- ▶ pphelan@ckea.ie



Co-funded by the Intelligent Energy Europe  
Programme of the European Union