



Biomass energy register  
for sustainable site development for  
European regions

## **BEn - Biomass energy register for sustainable site development for European regions**

**<http://www.BEn-project.eu>**

*Grant Agreement: IEE/07/595/SI2.499697*

*Project Duration: 1/11/2008 - 31/10/2011*

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**Intelligent Energy**  Europe

# Project Summary / Administrative Details

- Acronym: BEn
- Title: Biomass energy register for sustainable site development for European regions
- Action line: Bio Business Initiative
- Budget: 1.4 million Euro
- Project duration: 3 years
- Partners from UK, Poland, Italy, Austria and Germany
- Website: [www.ben-project.eu](http://www.ben-project.eu)



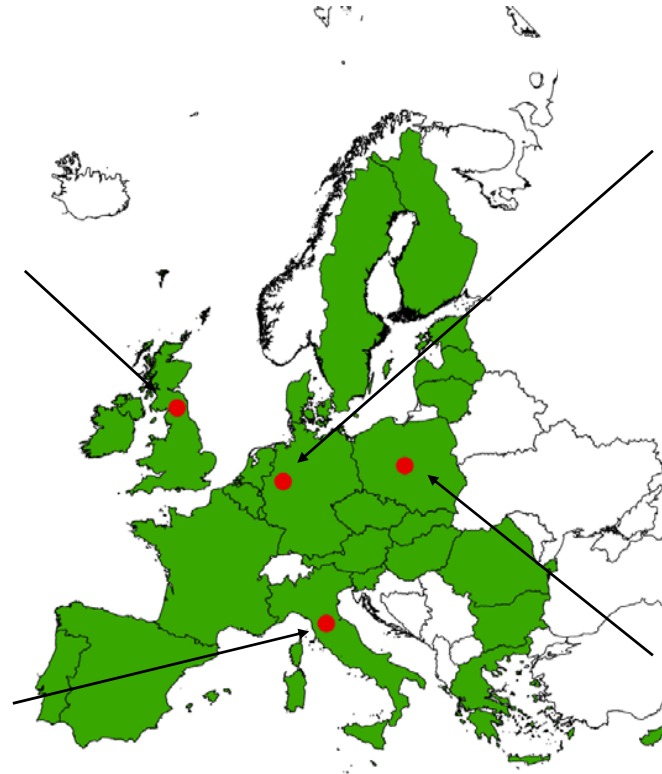
# Project Model Regions



North East England



Umbria



Emscher-Lippe



Gostynin Lake District

Image 1: Photos from the model regions [ben-project.eu]

# Main Objectives

## **Creation of regional networks**

Creation and developing of self-sustainable local bioenergy stakeholder networks.  
Engagement and participation of relevant local actors involved in bioenergy development

## **Set-up of an energy register for bioenergy site planning**

Set-up an energy register with data on biomass availability and energy sinks,  
as starting point for integrated bioenergy planning in the 4 participating regions

## **Identification and implementation of energy actions for the partner regions**

Agreement on at least 2 bioenergy actions in each regions with local actors

## **Creation of biomass energy master plans for European regions based on the biomass energy register**

Developing strategic energy master plans in 4 European regions in close collaboration with the local bioenergy stakeholder networks. Ideally these bioenergy master plans are officially recognised and endorsed.

# Background

## EU-Targets:

- 20 % of the EU final energy consumption is due to come from renewable sources by 2020.
- Currently, the EU meets about 4 % of its energy needs from biomass. Main objective of the Biomass Action Plan is to double this share by 2010 -> implemented by national Biomass Action Plans (eight action plans are ready (UK, Netherlands, Germany, Estonia, Lithuania, Finland, Ireland and Spain))
- INSPIRE (infrastructure for spatial information in Europe), harmonising of geodata
- Lisbon goals (focus on growth and employment)

# Background

## Challenges:

- Know-how on regionally adapted technologies is not widely disseminated
- Energy “sinks” for biomass in the region are not well known
- Single energy-related projects are implemented, but due to missing comprehensive strategies in the regions, these projects are often contradictory and impede sustainable concepts
- Site planning and planning of new sites (e. g. industrial or trade areas) do often not consider utilisation of renewable resources
- The “matchmaking” between the right partners is difficult. Lacking knowledge on how to cooperate effectively in the regions (flagship function)

# Work Programme

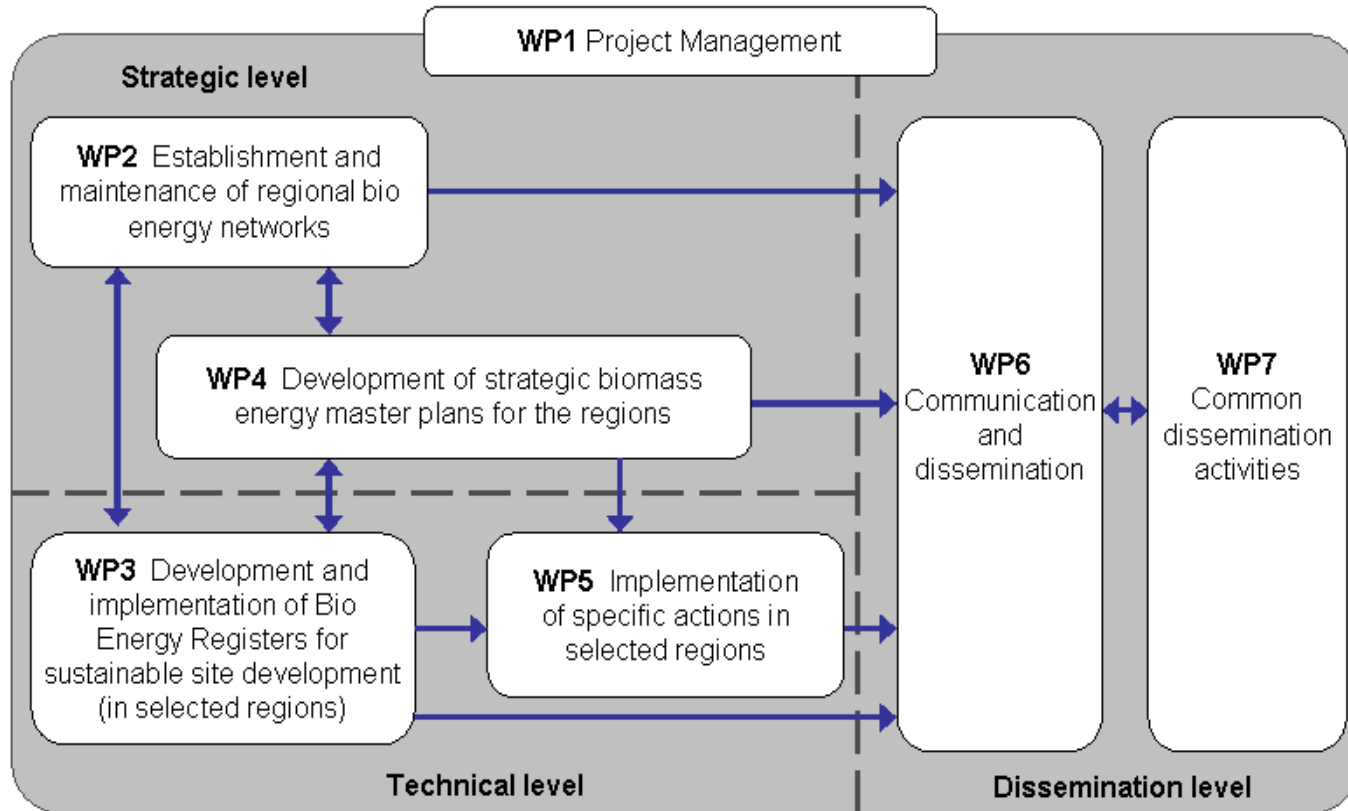


Image 2: Pert Chart [ben-project.eu]

# Biomass Energy Register

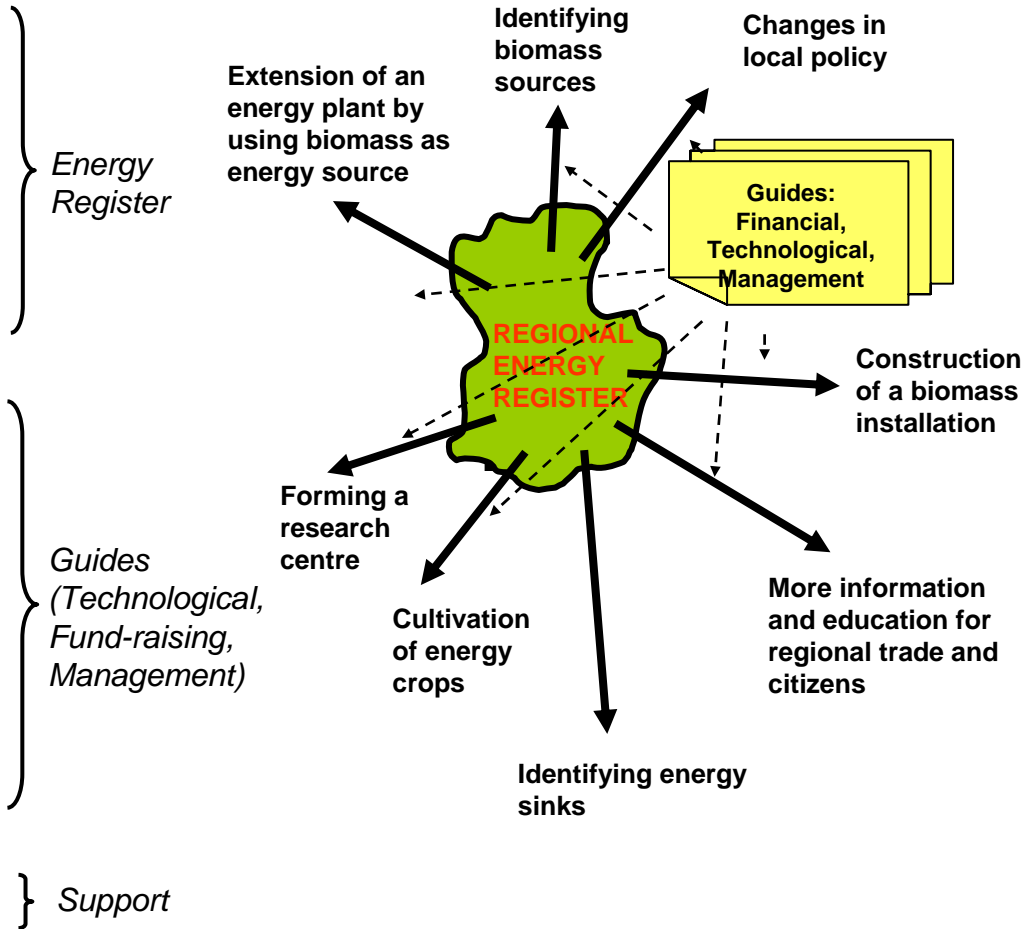
The register is fed , e.g.

- *with geographical data*
- *with energy sinks (e.g. survey on biomass sources to be conducted by the regional partner)*
- *Logistic aspects*
- *Legal aspects*
- *Network actors*

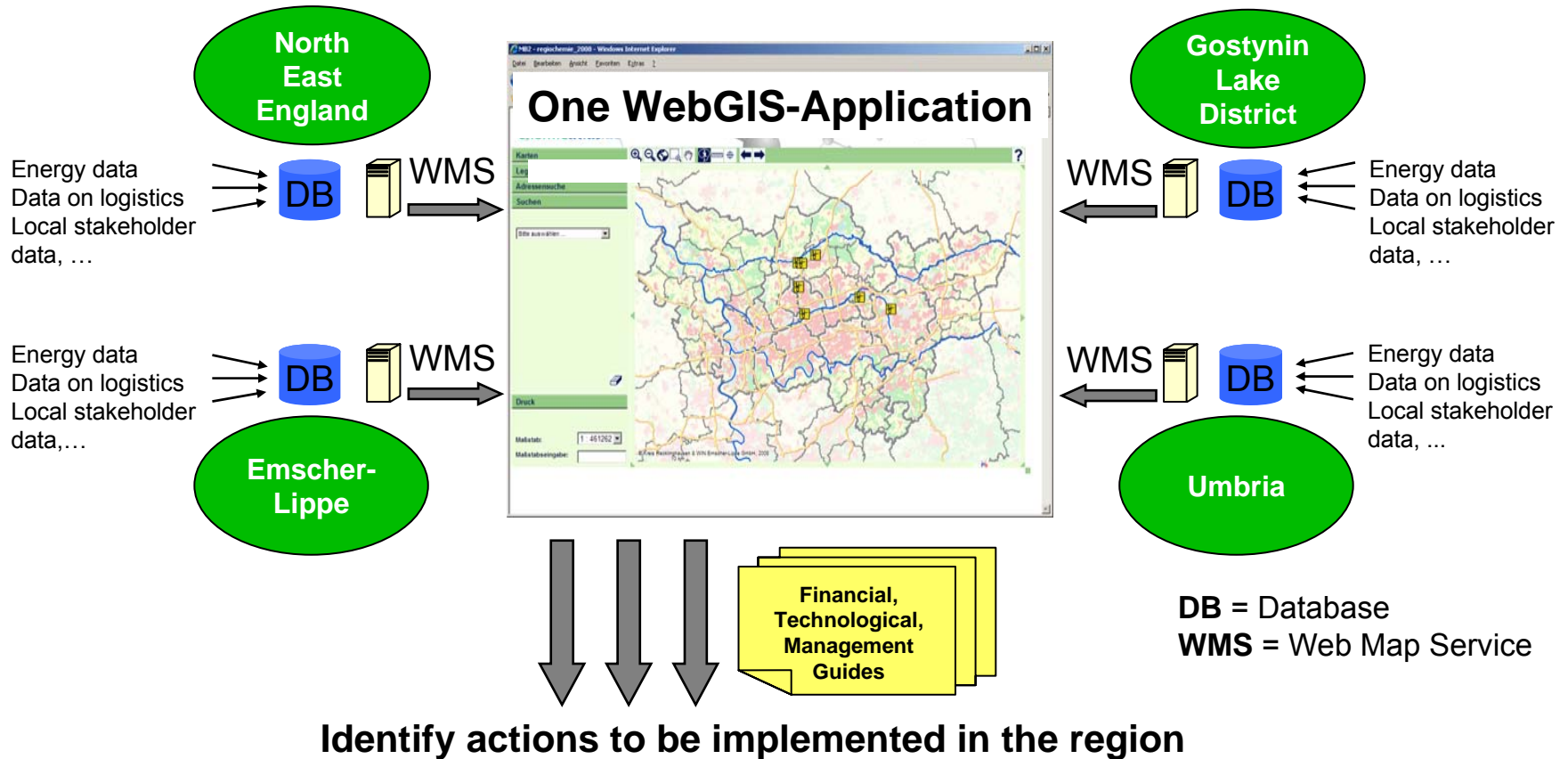
Possible handling:

- *start from the energy sinks (e. g. cooling houses, hospitals etc.)*
- *help find the right places for energy conversion installations*
- *help find the biomass resources (wood, agricultural biomass, bio-waste)*
- *help to identify the rights actors*
- *and lead to the best decisions*

Implementation of selected actions



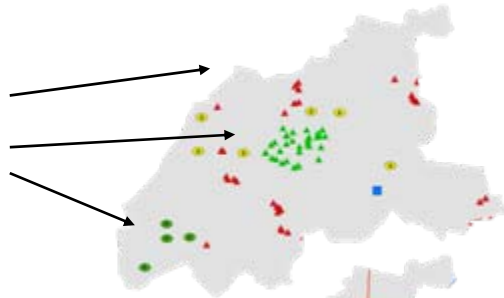
# Web GIS Architecture



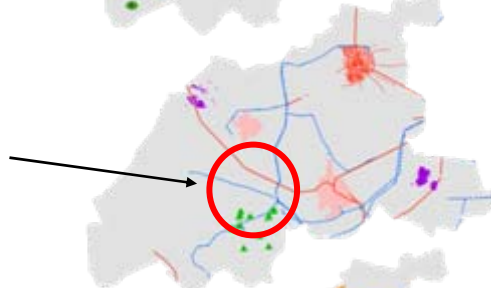
# Inquiries Examples

## *Inquiries to biomass energy register*

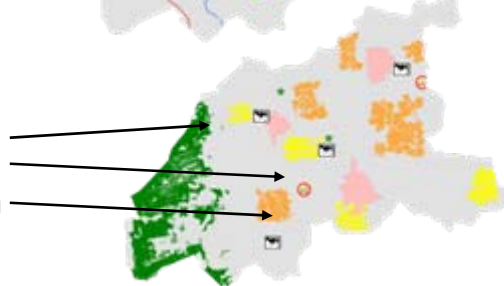
Show all stakeholders in the region



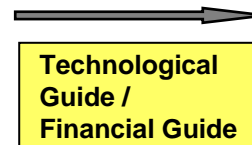
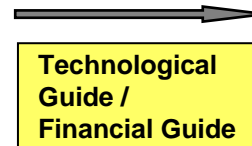
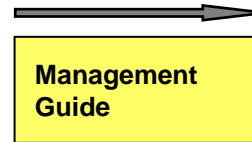
Show all biomass installations from point XY in a radius of 5 km



Show all biomass sources in the region



**Online Guides**  
(management, technological, financial)



**Actions**

**Creation of thematic actor clusters**

**Competing biomass demand is known in 5 km radius -> set-up of plant**

**Change the energy source for fossil hospital heating e. g. to wood boiler/heating**

# Expected Results

- 1 web-based energy register portal equipped with and applied for each model region (4 EU regions: located in DE, IT, UK, PL)
- 1 transferable regional biomass energy master plan structure, 4 adapted regional biomass energy master plans
- Agreement and first implementation steps of at least 2 biomass actions in each participating region
- Establishment of self-sustainable local bioenergy networks in the 4 model EU regions
- Financing, management and technological guides for bioenergy installations



# Project Partner – Main Roles

Participant	Region	Country	Population	Area (km <sup>2</sup> )	Main Role in Consortium
RDI	North-East	UK	2.5 million	8500	Regional Leader / WP4 leader
WiN	Emscher-Lippe	D	1.027 million	966	Regional Leader / WP6 leader
CRB	Umbria	IT	872 967	8456	Regional Leader / WP5 leader
StowGmin	Gostynin Lake District	PL	88 429	1543	Regional Leader
IETU		PL			Technical (GIS) Developer / WP2 leader
EEE		AT			Technical advisor / Communication manager between IEE projects
Fraunhofer		D			Coordinator / Technical (GIS) Developer / WP1, 3 and 7 leader

# Project Partners and Contact

- **EEE** - Europäisches Zentrum für Erneuerbare Energie Güssing GmbH
- **RDI** - Rural Development Initiatives Ltd.
- **IETU** - Instytut Ekologii Terenów Uprzemysłowionych
- **WiN** - WiN Emscher-Lippe Gesellschaft zur Strukturverbesserung mbH
- **CRB** - Centro Ricerca Biomasse
- **StowGmin** - Stowarzyszenie Gmin Turystycznych Pojezierza Gostynińskiego
- **Fraunhofer** - Fraunhofer Institute for Environmental, Safety and Energy Technology UMSICHT Osterfelder Strasse 3, 46047 Oberhausen, Germany;

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# Thank you for your attention!

For more information please  
have a look on

[www.BEn-project.eu](http://www.BEn-project.eu)

