



Northern Periphery and  
Arctic Programme  
2014-2020



EUROPEAN UNION

Investing in your future  
European Regional Development Fund



# GREBE

E-ZINE  
ISSUE 1

Generating Renewable Energy  
Business Enterprise



[www.greberenewableenergyblog.wordpress.com](http://www.greberenewableenergyblog.wordpress.com)





## INTRODUCTION & AIMS

'Generating Renewable Energy Business Enterprise' (GREBE) GREBE is a €1.77m, 3-year (2015-2018) transnational project to support the renewable energy (RE) sector. It is co-funded by the EU's Northern Periphery & Arctic (NPA) Programme and is led by the Western Development Commission (WDC). It will focus on the challenges of peripheral and arctic regions as places for doing business, and help develop renewable energy business opportunities provided by extreme conditions.

The project partnership includes the eight partners from six countries, Western Development Commission (ROI), Action Renewables (NI), Fermanagh & Omagh District Council (NI), Environmental Research Institute (SCO), LUKE (FI), Karelia University of Applied Sciences (FI), Narvik Science Park (NOR) and Innovation Center Iceland (ICE).

GREBE will support renewable energy start-ups and SMEs:



To grow their business, to provide local jobs, and meet energy demands of local communities.



By supporting diversification of the technological capacity of SMEs and start-ups so that they can exploit the natural conditions of their locations.



By providing RE tailored, expert guidance and mentoring to ensure SMEs and start-ups have the knowledge and expertise to grow and expand their businesses



By providing a platform for transnational sharing of knowledge to demonstrate the full potential of the RE sector and by showcasing innovations on RE technology and strengthening accessibility to expertise and business support available locally and in other NPA regions.



To connect with other renewable energy businesses to develop new opportunities locally, regionally and transnationally through the Virtual Energy Ideas Hub.



By conducting research on the processes operating in the sector to improve understanding of the sector's needs and make the case for public policy to support the sector.

This edition of the GREBE e-zine places a spotlight on the international launch of the project, which took place in Ballina, County Mayo, Ireland in February 2016. We will look at each of the project partners, the renewable energy sector in their region and activities in the project.

If you would like to learn more about any of the initiatives highlighted in this edition, or if you would like further information on the GREBE project, please visit <https://greberenewableenergyblog.wordpress.com/>



## GREBE PROJECT LAUNCH & RENEWABLE ENERGY SEMINAR

FEBRUARY 2016

On February 24th Mr. Paddy McGuinness, Chairperson of the Western Development Commission officially launched the GREBE project and renewable energy seminar in Ballina, Co. Mayo. The launch and seminar provided us with great opportunities to share experiences of renewable energy development in the project area, and meet with some of the renewable energy entrepreneurs in the Western Region.

The activities of the GREBE Project were outlined by the project co-ordinator Pauline Leonard, who added that "GREBE will equip SMEs and start-ups with the skills and confidence to overcome these challenges of their location and use place based natural assets for renewable energy to sustainable effect. The renewable energy sector contributes to sustainable regional and rural development and has potential for future growth".



**Pauline Leonard**, GREBE Project Co-ordinator with the Western Development Commission welcomed the attendees and outlined the details of the GREBE project, how it was developed and the work which will be carried out over the three years.



**Michael Doran** of Action Renewables in Northern Ireland, outlined renewable energy policy and funding mechanisms and how the GREBE project will progress this area.



**Peter Wide** of Narvik Science Park and **Arna Lara Jonsdottir** of Innovation Center Iceland discussed the influence of environment conditions and climatic challenges which the partner regions face.



**Neil James** of the Environmental Research Institute in Scotland presented linking renewable energy technology and resources in the partner regions.



**Lasse Okkonen** of Karelia University of Applied Sciences and **Una Porteous** of Fermanagh & Omagh District Council presented details on renewable energy opportunities and business development support which will be available through the GREBE project.



**Lauri Sikanen** from the Natural Resources Institute (LUKE) in Finland, presented details on the renewable energy sector in Finland and the benefits of knowledge and technology transfer and sharing.

Presentations from the project launch and renewable energy seminar are available to download from the GREBE Blog '<https://greberenewableenergyblog.wordpress.com/2016/03/10/presentations-from-the-grebe-project-launch-renewable-energy-seminar/>'





## WESTERN DEVELOPMENT COMMISSION

PROJECT CO-ORDINATION, COMMUNICATIONS  
AND FUNDING MECHANISMS.

### PARTNER ORGANISATION



The Western Development Commission (WDC), which is an independent state agency that is concerned with promoting the social and economic development in the Western Region (Donegal, Leitrim, Sligo, Mayo, Roscommon, Galway and Clare).

In promoting economic development, a major policy area of the WDC is energy infrastructure, particularly renewable energy. The WDC is working to ensure that the regions significant natural resources are used sustainably by renewable energy enterprises, providing jobs and bringing investment, as well as providing competitive local energy sources and keeping energy spending within our region and our country.

Since 2008, the WDC has been awarded European Union funding to develop a partnership to stimulate growth in the renewable biomass sector. We developed, with partners unique and innovative programmes that have made a huge difference to the region.

The WDC were lead partners on the NPP funded projects, **RASLRES** and **BioPAD**, whose aims were to increase the deployment and uptake of locally produced renewable energy and developing applications targeting the whole process from supplying fuel to producing energy. The WDC were a project partner in the FP7 project **ROKWOOD** which focused on the targeted production on wood biomass in short rotation plantations for local energy use.

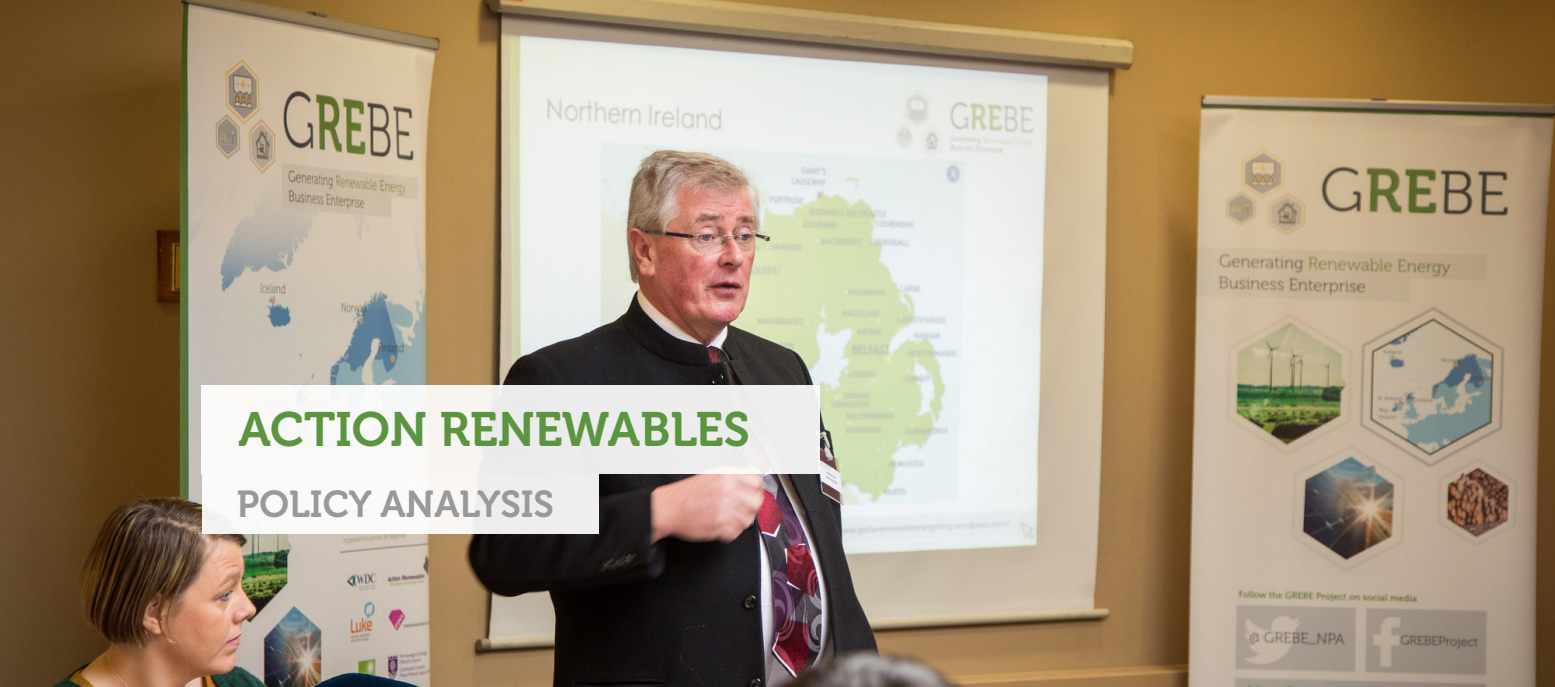
The WDC have also been involved in a number of other NPP projects, including Creative Edge, and a new creative project 'Creative Momentum' was approved in the first call of the Northern Periphery and Arctic Programme. The WDC is also a partner in the NPA funded FREED project.

The WDC will act as lead partner and is responsible for Work Package 1 Project Co-ordination and Work Package on Communications. The WDC will contribute to all the other work packages and are leading on Activity 3.2 on RE business support and funding mechanisms.



Attendance at GREBE Project  
Launch in Ireland





## ACTION RENEWABLES

### POLICY ANALYSIS

#### PARTNER ORGANISATION



Michael Doran presenting at the  
Action Renewable Awards



Action Renewables (AR) is the leading authority on renewable energy in Northern Ireland. The company is a not for profit organisation and is highly regarded as being impartial and independent. The company is also known for its level of expertise in all energy related matters, with a deep understanding of communities and experience of projects functioning across EU regions. AR has 20 full time staff with expertise in all areas of energy efficiency, climate change issues, CO2 emission reduction, renewable energy, financing issues, community groups and regions within the NPA area. AR works with both the public and private sectors and understands how disparate they both are and has the necessary expertise to manage the triple helix type partnership with the unique issues that can bring.

AR also specialise in the following sectors; feasibility studies, wind monitoring, ROC trading, energy management, renewable heat incentive, Microgeneration Certification Scheme (MCS) and also project management.

The climate in Northern Ireland is characterised by equability, a consequence of the moderating effects of the Atlantic Ocean - bringing relatively mild winters and cool summers. Across NI the average wind speed ranges of 6.68 metres per second. With regard to our unbalance climate in Northern Ireland we are seeing a significant amount of rainfall which is causing high flooding and becoming a huge issue.

With the Northern Ireland Renewables Obligation (NIRO) scheme closing on 31st March 2017, the renewable energy market in Northern Ireland is facing an uncertain future. At present, the industry together with system operators have achieved the 2015 target of 20 per cent of our energy supply being generated by renewable sources. Over a fifth of our electricity is now coming from renewables, yet concerns around new developments continue. It should be noted that thanks to the NIRO existing projects will continue to enjoy 20 years of support.

# FERMANAGH & OMAGH DISTRICT COUNCIL

## ENTREPRENEUR ENABLER SCHEME

Fermanagh and Omagh District Council is one of 11 new Council areas created following the Review of Public Administration in Northern Ireland. It represents the largest geographical Council area and brings together two legacy councils. We have a population of around 114,000 people and have approximately 7,340 businesses, employing some 38,500 people. The area is a scenic landscape with a mix of tranquil lakelands, heather clad mountains, ancient bog lands, forest parks and has a rich cultural heritage. The Council provides the following services:

Business Support	Arts and Culture
Community Support	Community Support
Environmental Health	Facilities Management
Building Control	Tourism
Planning	

The Council funds the provision of such services to the local community through the collection of rates payments from householders and business owners. One of the Council's stated aims is to make the area a place 'where people choose to live and work'.

The Council's role in GREBE emanates from our Economic Development role and builds on our previous experience of providing businesses within our area with support tools to enable them to survive in tough economic climates and to grow and prosper with new high growth potential business opportunities. We have a number of local businesses operating within the Renewable Energy sector, representing a range of areas of involvement including installation businesses, energy efficiency advisors, technology manufacturing and renewable energy producers.

Specifically the role that the Council will undertake within the GREBE project is the development of business mentoring focussing on innovative Renewable Energy and energy storage technologies and the piloting of a business mentoring model through the delivery of the Entrepreneurial Enabler Scheme. This will involve delivering mentoring support to 12 businesses across our region and developing a model of best practice for the provision of mentoring to RE businesses and those endeavouring to enter this market sector. This model will then be shared across the partner organisations within the programme, each of whom will roll out their own business support provision.

### PARTNER ORGANISATION



### Entrepreneur Enabler Scheme Launch





## ENVIRONMENTAL RESEARCH INSTITUTE

LINKING RENEWABLE ENERGY TECHNOLOGIES AND  
RESOURCES IN NPA PARTNER REGIONS

### PARTNER ORGANISATION



#### Renewable Electricity



The Environmental Research Institute in North Highland College are the Scottish GREBE partner. They are situated in Thurso, on the shores of the dynamic waters of the Pentland Firth.

The main aim of the ERI is to address contemporary environmental issues and advance understanding of the sustainable use of the Earth's natural resources. We aspire to excellence in all that we do and to provide dynamic leadership and education.

The ERI has successfully exploited its geographic advantage to play a dynamic and leading role in the development of research and educational provision in support of the renewable energy sector and in particular the emergent marine energy sector.

ERI wishes to leave a legacy of open source research and development to improve lives and socio economics of the Highlands and Islands. This will give the project a strong regional presence in the renewable energy sector.

This expertise identified will allow ERI to effectively lead Work Package 5 and undertake a substantial amount of the work in WP2.



## NARVIK SCIENCE PARK

### THE INFLUENCE OF ENVIRONMENTAL CONDITIONS IN NPA AND ARCTIC REGIONS

Narvik Science Park (NSP) is a non profit making body that is committed to development of new business from technological research:

- Specialist in Technological innovation
- Specialist in Business Development
- Specialist in commercialization of research results

NSP, which was established in 2000, has competence within mergers and muliti-level financing of start-ups and provides all necessary assistance and facilities for new business enterprises. Target areas:

- Arctic Technology
- Environmental Technology
- Renewable Energy

The competence and experience of NSP are aligned with the aims of WP4 – The influence of environmental conditions in NPA and arctic regions – in analyzing the challenges and the implications of harsh operating conditions on technologies and business models in remote areas of the NPA region and presenting best practice solutions to adress these challenges.

#### PARTNER ORGANISATION



FORSKNINGSPARKEN I NARVIK



Technological Innovation in Arctic Regions





## KARELIA UNIVERSITY OF APPLIED SCIENCES

### BUSINESS MODELS AND BUSINESS DEVELOPMENT SUPPORT

#### PARTNER ORGANISATION



Sustainable Uses of Natural Resources in Finland

Finnish GREBE partner Karelia University of Applied Sciences (Karelia UAS) provides higher education for the needs of changing national and regional industry, commerce and other working life. Karelia UAS also develops and offers research and development services and enhances regional development, especially in North Karelia and Eastern Finland. The strategic focus areas of Karelia UAS include sustainable energy and materials, and modern welfare services.

The GREBE project includes business development activities of renewable energy and energy efficiency in northern peripheral context. In GREBE, Karelia UAS has the lead of work package 6 "Business Models and Business Development Support" and activities especially for developing business growth strategies for SMEs and start-ups and improving the market access of renewable energy and energy storage technologies.

A business growth survey was launched in April 2016 in order to analyse the opportunities of RE business growth, and to identify the current business support needs. At the end, this will result in Growth Strategy Guideline for the use of business enterprises in the sector. The RE business growth and start-ups will also be supported through the developed GREBE service, Entrepreneurship Enabler Scheme (EES). It is expected to provide international and innovative mentoring support for the RE and energy storage industries.





## NATURAL RESOURCES INSTITUTE (LUKE)

### KNOWLEDGE & TECHNOLOGY TRANSFER AND BUSINESS DELIVERY

The Natural Resources Institute Finland (Luke) leads work package 7 on "Knowledge & Technology Transfer and Business Delivery".

The Natural Resources Institute Finland is a research and expert organisation that works to advance the bioeconomy and the sustainable use of natural resources. Researchers and specialists working in Luke provide new solutions towards the sustainable development of the Finnish bioeconomy and the promotion of new biobased businesses. Together with partners Luke will build a society based on bioeconomy. Sustainable use of natural resources calls for advances in know-how and new business models – as well as close collaboration. Luke brings together experts in natural resources and sustainable food production.

The region of North Karelia in Eastern Finland is known for its vast forest resources and fairly harsh climate conditions. The use of chopped firewood, pellets or wood chips is very common in the rural parts of Finland. Larger scale combined-heat-and-power (CHP) plants cover the heating of large cities through district heating systems. In 2014, 66 % of the total energy consumed in North Karelia was produced with renewable energy, the share of wood energy from the total energy use of the region was 51%. The renewable energy sector creates approximately 1350 person-years of employment regionally and generates annual revenue of around 160 million euros (Regional Council of North Karelia).

The GREBE project includes knowledge & technology transfer and business delivery activities of forest energy, renewable energy and energy efficiency aspects in the northern periphery area. In GREBE, Luke is working especially on activities for knowledge and technology transfer such as developing a "Online training and networking platform", establishing a "Proof of RE-Concept for technology transfer" and creating a virtual space where micro-businesses from different regions across the NPA area can share technology ideas in the form of a "Virtual Energy ideas Hub".

#### PARTNER ORGANISATION



Sustainable Uses of Natural Resources in Finland





## INNOVATION CENTER ICELAND

### PARTNER ORGANISATION



Innovation Center  
Iceland



Harnessing Geothermal  
Power in Iceland

Innovation Center Iceland (ICI) encourages innovation and promotes advancement of new ideas in the Icelandic economy by providing active participation and support to entrepreneurs and businesses. Innovation Center Iceland belongs to the Ministry of Industry and Innovation and operates according to the Act on Government Support for Technology, Research, and Innovation and receives revenue from both the public and private sectors.

The main emphasis of ICI is to promote additional knowledge, expertise and general development of the Icelandic economy through innovation, technological development, research and knowledge transfer in a chosen areas e.g. in renewable energy and business development.

ICI offers a free of charge counselling on various issues that may arise with entrepreneurship and businesses. The role of the ICI is to respond to the needs and wishes of customers in regard to the courses it offers, as well as taking the initiative towards new solutions in the education and innovation sectors. Innovation Center Iceland specialists work with individuals, businesses and institutions all over the country. ICI headquarters are in Reykjavik but ICI has also five other work locations spread across Iceland.

Over 80% of Iceland's energy demands are met with local sustainable energy resources. This record breaking achievement consists of geothermal energy and hydroelectric sources.

Even though only 20% of Iceland's energy needs, mostly in the transport and fisheries sectors, are met by fossil fuel, Icelandic authorities and local companies already have several innovative programs up and running to create a totally clean energy future. The government of Iceland supports innovative companies in clean energy, energy efficiency, and clean technology and offers Iceland as a laboratory for solutions aiming at a clean energy future.

Iceland is rich in terms of renewable energy but there are regions in Iceland that are dependent on importing energy from others parts of the country and which makes it more important to generate more entrepreneurs and innovation solutions within in the RE sector.



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## Visit

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## Project Partners

GREBE will be operated by eight partner organisations across six regions:



## About GREBE

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