

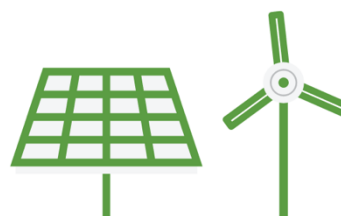


GREBE

Generating Renewable Energy
Business Enterprise



Northern Periphery and
Arctic Programme
2014-2020



POLICY & FUNDING MECHANISMS

SUMMARY REPORT OF THE RELEVANT POLICY INITIATIVES AND
SCHEMES IN EACH OF THE PARTNER REGIONS

WORK PACKAGE 3



The GREBE Project	3
What is GREBE?	3
Why is GREBE happening?	3
What does GREBE do?	3
 EXECUTIVE SUMMARY	 5
Introduction	6
 CATEGORISED POLICIES	 6
Finland	7
Iceland	8
Northern Ireland	8
Norway	9
Republic of Ireland	9
Scotland	14
 SCOT ANALYSIS	 15
Finland	15
Iceland	19
Norway	29
Northern Ireland	33
Republic of Ireland	29
Scotland	37
 SCOT REPORT	 44
Finland	44
Iceland	45
Northern Ireland	45
Norway	46
Republic Of Ireland	46
Scotland	47



The GREBE Project

What is GREBE?

GREBE (Generating Renewable Energy Business Enterprise) is a €1.77m, 3-year (2015-2018) transnational project to support the renewable energy sector. It is co-funded by the EU's Northern Periphery & Arctic (NPA) Programme. It focuses on the challenges of peripheral and arctic regions as places for doing business and helps develop renewable energy business opportunities in areas with extreme conditions.

The project partnership includes the eight partners from six countries: Western Development Commission (Ireland), Action Renewables (Northern Ireland), Fermanagh & Omagh District Council (Northern Ireland), Environmental Research Institute (Scotland), LUKE (Finland), Karelia University of Applied Sciences (Finland), Narvik Science Park (Norway) and Innovation Iceland (Iceland).

Why is GREBE happening?

Renewable Energy entrepreneurs working in the NPA area face challenges including a lack of critical mass, dispersed settlements, poor accessibility, vulnerability to climate change effects and limited networking opportunities.

GREBE will equip SMEs and start-ups with the skills and confidence to overcome these challenges and use place based natural assets for renewable energy to the best sustainable effect. The renewable energy sector contributes to sustainable regional and rural development and has potential for growth.

What does GREBE do?

GREBE supports renewable energy start-ups and SMEs:

- To grow their business, provide local jobs and meet energy demands of local communities.
- Supporting diversification of the technological capacity of SMEs and start-ups so that they can exploit the natural conditions of their locations.
- Providing RE tailored, expert guidance and mentoring to give SMEs and start-ups the knowledge and expertise to grow and expand their businesses.
- Providing a platform for transnational sharing of knowledge to demonstrate the full potential of the RE sector 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.
- 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.

For more information visit our website: <http://grebeproject.eu/>

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Follow us on Twitter: https://twitter.com/GREBE_NPA

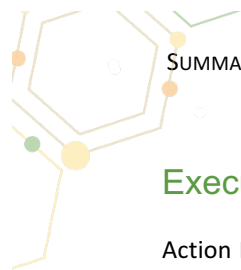
There are two key objectives of this Work Package:

1. To identify and promote opportunities for policy to provide an effective supporting framework for sustainable renewable energy business (both new and emerging);
2. To promote awareness and understanding of funding support mechanisms available to assist renewable energy businesses, micro enterprise and start-ups in NPA regions

The objectives will be achieved by undertaking four key activities.

The first activity is the review of current policy mechanisms, in each partner region, which relate to and promote entrepreneurship in the RE sector. Renewable Energy is a sector which is heavily influenced and reliant on a supporting policy framework. It requires policy stimulation to enact behavioural change, to incentivise the increased use of RE, to promote R&D in new technology adoption and to encourage investment in new disruptive technologies.

The policy development, nature of business development and Governmental structures are very different in each partner region. It is therefore likely that there will be a range of policy schemes and initiatives which are very dissimilar. This activity will seek to identify where policy has been effective in supporting new RE business enterprise and where and how, this could be replicated in other partner regions.



Executive Summary

Action Renewables are the lead partner within Work Package 3. The main objective of the Work Package is to review the impact of policy initiatives on business development and to develop new policy initiatives in different partner regions.

This report contains a list of various policy initiatives from each of the partner regions. These policy initiatives are examined and analysed and it was decided that the various initiatives should be categorised in order to make the process easier to follow. The policy initiatives have been categorised under the following groupings:

- Carbon Tax
- Communities
- Electricity
- Heat
- Liquid Biofuels
- Research & Development

Each partner region has provided a potential list of policy initiatives and from this several have been selected from each region to be taken forward to the next stage where a Strengths, Constraints, Opportunities & Treats (SCOT) analysis is carried out to examine both the internal and external influences that have an impact upon the policy. Multiple policies are examined for each region: fifteen policies from Finland; eleven from Iceland; six from Northern Ireland; four from Norway; thirteen from the Republic of Ireland; and eighteen from Scotland.

The SCOT analysis is carried out for each policy - grouped by country - and this analysis helps to identify policy barriers and facilitators for renewable energy enterprises. A key aim of this report is to assess all the information gathered and review the impacts of policy initiatives on business development and the development of new policy initiatives in different partner regions. This assessment, based on the SCOT analysis, allows the identification of policies from each region that could be best used or adapted for use in other partner regions and further afield across Europe. For example both Finland and the Republic of Ireland are identified as having a version of the Feed-In Tariff and this is identified as a policy that could be extended and adapted in other countries.

The work carried out in this report also feeds in to another document, 3.1.2 'Showcase examples of best practice policy initiatives'. The analysis contained within this report is further expanded upon in the showcase examples report.

Introduction

This work package is led by Action Renewables and will involve carrying out a comprehensive desktop review of the policy framework for all partner regions and collate and analyse information supplied by the partners.

This will seek to examine the impact and influence of policy initiatives in terms of how they support business development for RE entrepreneurship, established businesses in the RE, and emerging micro-enterprises and SME's looking to enter the RE market. The focus will be on entrepreneurial business activity which supports RE development, not incentives or obligations.

This work package is a fundamental part of identifying the existing policies that already exist in each partner region and assessing how effective these policies have been throughout their life span. The main aim of this work package is to identify new initiatives that will promote RE entrepreneurship in each partner region and to ensure that further positive interventions continue to be made.

The renewable energy sector is heavily influenced by and reliant on a supporting policy framework. It requires policy stimulation to enact behavioural change, to incentivise the increase of RE, to promote R&D in new technology adoption and to encourage investment. While all policies have broadly similar aims, the make-up of many of the initiatives and schemes are varied. This can be partly explained by the existence of different governance structures in each partner region.

Each partner has provided information on existing policies related to developing business opportunities in the renewable energy sector. This information will help ensure the work package objectives can be carried out successfully. A SCOT (Strengths, Constraints, Opportunities and Threats) analysis has been carried out on each policy initiative so that policy barriers and facilitators for RE enterprises are clearly identified. The policies have been carefully categorised into the following:

- **Emerging micro –enterprises & SME's looking to enter the RE market**
This will involve a business starting off within the renewable energy sector, which will be seeking advice/guidance and any additional assistance along the way.
- **Support business development for RE entrepreneurship**
A business within the renewable energy sector will be aiming at developing and implementing growth opportunities within and between organisations
- **Established businesses in the RE sector**
Established businesses include businesses which are currently in operation in the renewable energy sector. An established company will have extensive experience in that sector and will have a reputation throughout the field.

Based on the analysis and further research Action Renewables has created a report analysing which policy initiatives have been successful and why. It is important to recognise that the effectiveness of policies can be difficult to assess. Many policies aim to accomplish broad conceptual goals that are subject to different interpretations and are difficult to quantify. Policy assessment can also be challenging as many of the targets set can be overly ambitious and hard to achieve. Variations in natural resources from region to region will also have an impact on making a comparative analysis.

Source: Boundless. "Policy Evaluation." Boundless Political Science. Boundless, 17 Jun. 2016. Retrieved 22 Aug. 2016 from <https://www.boundless.com/political-science/textbooks/boundless-political-science-textbook/domestic-policy-15/the-policy-making-process-95/policy-evaluation-517-6176/>

Each of GREBE's partner regions has helped contribute to this report:

Action Renewables (Work Package Leader) - Northern Ireland

Action Renewables support commercial renewable energy development throughout Northern Ireland. They also develop and support European Projects, offer quality assurance to the renewable energy industry (Micro-generation Certification Scheme MCS) and provide advice and information to Government.

Western Development Commission – Republic of Ireland

The Western Development Commission (WDC) is a statutory body that was set up to promote both social and economic development in the Western Region (Donegal, Leitrim, Sligo, Mayo, Roscommon, Galway and Clare) by:

1. Ensuring that government policy is directed at improving the social and economic situation in the region.
2. Developing projects in tourism, industry, marine, renewable energy, technology and organic agri-food.
3. Operating the €32 million Western Investment Fund (WIF) to provide loans and equity to business and local communities in the West.

Fermanagh & Omagh District Council – Northern Ireland

Fermanagh and Omagh District Council has been established as one of the eleven new NI councils introduced via the Local Government Reform Programme.

North Highland College UHI – Scotland

North Highland College provides further education and higher education in the north of Scotland through a network of learning centres and by distance learning. It is a constituent college of the University of the Highlands and Islands.

Natural Resource Institute – Finland

Researchers and specialists working in Luke provide new solutions towards the sustainable development of the Finnish bioeconomy and the promotion of new biobased businesses.

Narvik Science Park – Norway

Established in 2000 is a well-connected new business incubator that aims to grow and develop future technology companies with growth potential and create regional workplaces that will attract national and international investor capital.

Innovation Centre - Iceland

Innovation Center Iceland encourages innovation and promotes the advancement of new ideas in Icelandic economy by providing active participation and support to entrepreneurs and businesses.





Categorised Policies

On receipt of all feedback from the partner regions there were a total of 65 policy initiatives identified that help contribute towards supporting the renewable energy sector. The policies have been analysed and categorised under the following headings:

- **Carbon Tax**

A tax on fossil fuels, especially those used by motor vehicles, intended to reduce the emission of carbon dioxide.

- **Communities**

Supporting local communities and helping toward creating a better environment

- **Electricity**

Help promote the generation of electricity

- **Heat**

Contribution towards promoting heat from a renewable source.

- **Liquid Biofuels**

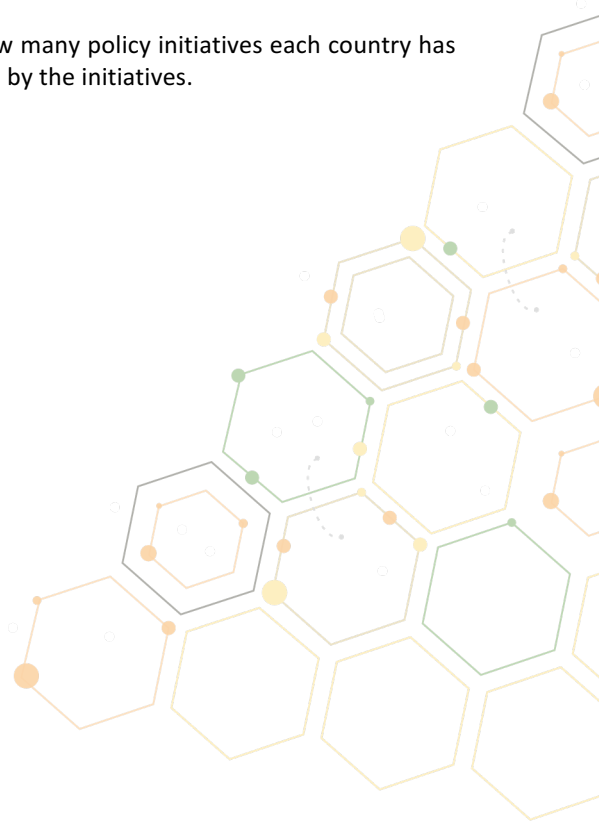
The most widely used liquid biofuels for transport are ethanol and biodiesel.

- **Research & Development**

Research and development (R&D) refers to the investigative activities a business conducts to improve existing products and procedures or to lead to the development of new products and procedures.

The advantage of this strategy is that we can see clearly how many policy initiatives each country has and which one of the categories is most and least supported by the initiatives.

Below we can see the result of the policy categorisation.



Finland

In Finland, electricity from renewable energy sources is primarily promoted through a premium tariff. The tariff applies to electricity produced from wind, biomass and biogas. Overall 28% of the energy mix in Finland is provided by renewable energy and the share of bioenergy is 20% of all primary energy consumption. Additionally, investments in RES are supported through state subsidies. Access to the grid by electricity produced from renewable energy sources follows the principle of non-discrimination and electricity produced from RES is not given priority. The main support mechanism for heat produced from RES, is a “heat bonus” allocated to CHP plants working on biogas and wood fuel. Finland is among the leading countries in the use of biomass in energy production with biomass providing around 22% of Finland’s Total Primary Energy Supply. 15 policies were selected falling under the following categories:

- **Communities**
 - Sustainable Public Procurements
<http://bit.ly/2afSXBj>
 - Climate and energy Programme of North Karelia
<http://bit.ly/29N6i0f>
 - Enterprise Finland Portal
<https://www.yrityssuomi.fi/en/home>
 - Energy Support (investment support)
https://www.tem.fi/en/energy/energy_support
 - Act on the Financing of Sustainable Forestry (KEMERA)
<http://www.mmm.fi/en/index/frontpage/forests/legislation.html>
- **Electricity**
 - Feed-in tariffs for renewable energy
https://www.tem.fi/en/energy/renewable_energy_sources/feed-in_tariff_of_renewable_energy
- **Carbon Tax**
 - Carbon neutral municipalities (HINKU)
www.hinku-foorumi.fi/en-US
- **Research & Development**
 - Energy Efficiency Agreement and Programme
<http://bit.ly/2ag6Rnr>
 - INKA (Innovative Cities)
<http://bit.ly/1di3ffR>
 - The Groove – Growth from Renewables programme (2010-2014)
<http://bit.ly/29LD5Gh>
 - Green Growth (2011-2015)
<http://bit.ly/2abOWv5>
 - BEST (Sustainable Bioenergy Solutions for tomorrow) Programme
<http://clcinnovation.fi/>
 - Growth open (Kasvu open)
<https://www.kasvuopen.fi/en>
 - Growth Channel
https://www.tem.fi/en/innovations/growth_entrepreneurship/growth_channel
 - Funding for the Finnish Growth entrepreneurship
<http://www.yrityssuomi.fi/en/palvelu/-/palvelu/growth-phase-financing>

Iceland

Iceland is recognised for its geothermal heat but as this is not readily available for all partner regions, it could not be selected. After further research it was discovered that the policy programmes in Iceland are successful and that there is need for more investment (especially in the geothermal heat fund). It is notable that the Icelandic market for energy is small.

11 policies were selected falling under the following categories:

- **Carbon Tax**
 - Carbon tax.
(https://ec.europa.eu/energy/sites/ener/files/documents/dir_2009_0028_action_plan_iceland_nreap.pdf p.16)
- **Communities**
 - Energy exchange in transport
<http://www.atvinnuvegaraduneyti.is/media/Acrobat/150413-Graena-orkan---SKYRSLA.pdf>
 - Green Energy
<http://www.orkustofnun.is/orkustofnun/rad-og-nefndir/orkusjodur/>
 - Frumkvoolasjaoour Islandsbanka
"master plan for utilisation of renewable energy"
(https://ec.europa.eu/energy/sites/ener/files/documents/dir_2009_0028_action_plan_iceland_nreap.pdf ; p.19)
- **Electricity**
 - Iceland Geothermal
www.icelandgeothermal.is
- **Heat**
 - Geothermal heat Fund
https://ec.europa.eu/energy/sites/ener/files/documents/dir_2009_0028_action_plan_iceland_nreap.pdf (p.16)
 - Grant for district heating
<http://www.os.is/orkustofnun/umsoknir/eingreidslur/>
- **Liquid Biofuels**
 - Act of Renewable fuel in transport
<http://www.althingi.is/altext/stjt/2013.040.html>
- **Research & Development**
 - Start-Up Energy
<http://www.startupenergyreykjavik.com/en/>
 - Rannís
www.rannis.is
 - Energy Fund
<http://www.atvinnuvegaraduneyti.is/media/Acrobat/150413-Graena-orkan---SKYRSLA.pdf>

Northern Ireland

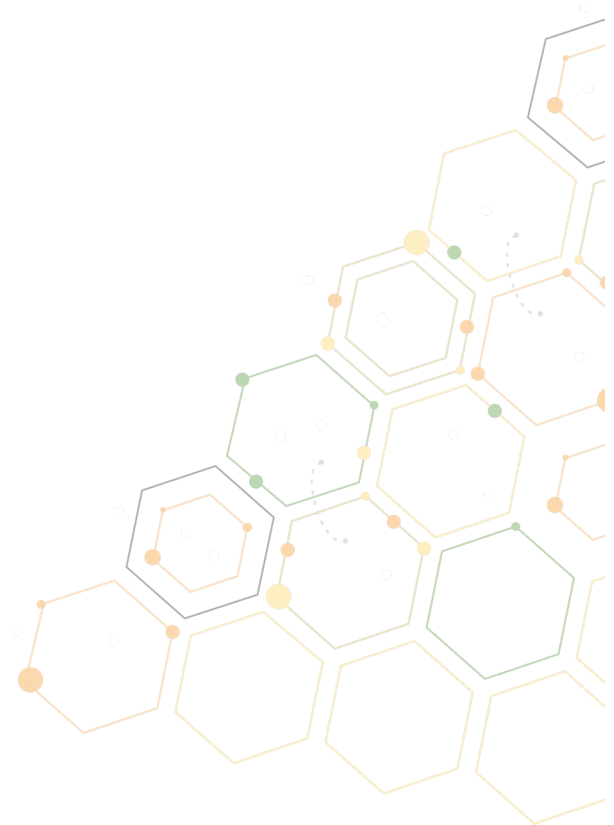
The Northern Ireland renewable energy industry is mainly promoted through incentives. However recent government financial austerity has led to cuts that have caused a decrease in renewable sector incentives.

There are two main incentives which have promoted the renewable energy industry within Northern Ireland.

The Renewable Heat Incentive (RHI) is no longer valid as it came to a close at the end of February 2016. The Renewable Obligation Certificate (ROCs) is still ongoing however this is due to close in March 2017.

6 policies were selected falling under the following categories:

- **Carbon Tax**
 - Carbon Trust
<https://www.carbontrust.com/home/>
- **Electricity**
 - UK targets
<https://fullfact.org/economy/uks-renewable-energy-target/>
 - Renewables Obligation (NIRO)
<https://www.ofgem.gov.uk/environmental-programmes/ro>
- **Heat**
 - Renewable Heat Incentive (RHI)
<https://www.ofgem.gov.uk/environmental-programmes/non-domestic-renewable-heat-incentive-rhi/about-non-domestic-rhi/northern-ireland-renewable-heat-incentive>
- **Research & Development**
 - Invest NI
<https://www.investni.com/>
 - Northern Ireland Renewables Industry Group
<http://www.ni-rig.org/>

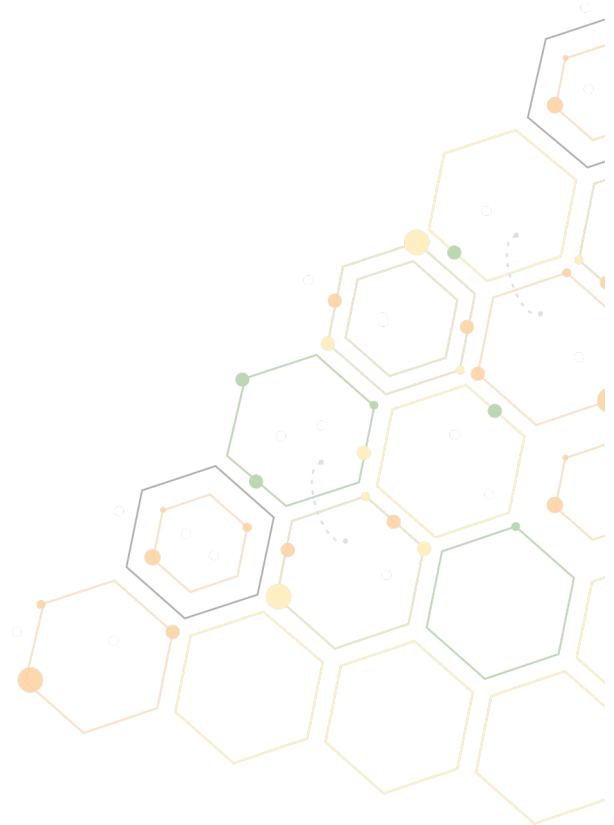


Norway

Norway has extensive experience within the renewable energy sector, mainly due to good resources in hydropower. Over 99% of electricity production in mainland Norway is covered by hydropower plants. In 2012 Norway produced 1.6 GWh of wind power electricity. The Norwegian government aims to triple its current capacity of ca.700 MW to 2GW by 2020. In the transport sector the share of renewables increased from 1.3% to 4% between 2005 and 2010 and Norway currently has one of the highest numbers of electric cars per capita in the world.

4 policies were selected falling under the following categories:

- **Communities**
 - REGIONAL – RENEWABLE ENERGY POLICY
<https://www.iea.org/countries/membercountries/norway/>
- **Electricity**
 - NORWEGIAN – NATIONAL RENEWABLE ENERGY POLICY
https://ec.europa.eu/energy/sites/ener/files/documents/dir_2009_0028_action_plan_norway_nreap.pdf
 - Green Battery Strategy
<http://www.greentechmedia.com/articles/read/Norway-Could-Provide-20000-MW-of-Energy-Storage-to-Europe>
- **Research & Development**
 - Centres for Environment-friendly Energy Research
<https://www.ntnu.edu/research/centres-for-environment-friendly-energy-research>



Republic of Ireland

In Ireland electricity from renewable sources is primarily promoted through a feed-in-tariff scheme (REFIT). There is also a tax relief scheme for corporate investments in projects generating electricity from renewable sources (solar, wind, biomass, and hydro). Renewable Energy sources for heating purposes have two main support schemes: a €800 grant to homeowners for the installation of solar thermal installations and a tax return to Irish companies of 100% of the purchase value of certain energy efficient equipment. The main incentive for renewable energy use in transport is a quota system.

Access to the grid for electricity generated from renewable sources shall be granted according to the principle of non-discrimination and renewable energy plants are connected under the “Group Processing Approach” (GPA). Regarding the use of the grid, operators are obliged to provide an offer for use to every operator of an (renewable) energy plant. Grid operators are generally obliged to develop the grid system. However individual plant operators do not have the right to demand grid expansion.

13 policies were selected falling under the following categories:

- **Carbon Tax**
 - Carbon Tax
http://www.citizensinformation.ie/en/money_and_tax/tax/motor_carbon_other_taxes/carbon_tax.html
<http://www.revenue.ie/en/tax/excise/solid-fuel-carbon-tax/index.html>
- **Communities**
 - Better Energy Communities
http://www.seai.ie/Grants/Better_Energy_Communities/
- **Electricity**
 - Electric Vehicles Supports
<http://www.dcenr.gov.ie/energy/en-ie/Renewable-Energy/Pages/Electric-Vehicles.aspx>
http://www.seai.ie/Grants/Electric_Vehicle_Grant_Scheme/
 - Renewable Electricity Supports
- **Heat**
 - Forest Road Scheme
https://www.agriculture.gov.ie/media/migration/forestry/grantandpremiumschemes/2012/Road_scheme070212.pdf
 - Bioenergy Scheme
<http://www.agriculture.gov.ie/bioenergyscheme/>
 - Afforestation Grant & Premium Scheme
<https://www.agriculture.gov.ie/media/migration/forestry/grantandpremiumschemes/2015/AfforestationSchemeEd2190315.pdf>
- **Liquid Biofuels**
 - Biofuels Obligation
<http://www.dcenr.gov.ie/energy/en-ie/Renewable-Energy/Pages/Biofuels.aspx>
- **Research & Development**
 - Green Procurement opportunities
<http://www.greenpublicprocurement.ie/about/what-is-gpp/>
 - Local Authority Renewable Energy Strategy
http://www.seai.ie/Publications/Renewables_Publications_/Wind_Power/Methodology-for-Local-Authority-Renewable-Energy-Strategies.pdf
 - Ocean energy Prototype Development Fund
www.seai.ie/Grants/Ocean-Energy-Prototype-Development-Fund/#sthash.uD1zTpK0.dpuf
 - Micro generation
www.electricireland.ie/residential/help/micro-generation/electric-ireland-micro-generation-pilot-scheme
 - SEAI's Energy Advice and Mentoring programme
http://www.seai.ie/Your_Business/

Scotland

Scotland's policies have been carefully structured with regards meeting their renewable energy targets; this success is based upon smart government bodies and the policy instruments that have been created. Scotland has tremendous wave and tidal energy resources and the potential exists to generate more electricity than we currently need from the waters around the Scottish coast. It was one of the first countries in the world to harness electricity from its waters. However the past few years' onshore wind power has recently overtaken hydro power as the most common form of renewable energy in Scotland.

18 policies were selected falling under the following categories:

- **Communities**
 - Community And Renewable Energy Scheme (CARES)
 - Community Energy Scotland (CES)
<http://www.communityenergyscotland.org.uk/index.asp>
 - Local Energy Challenge Fund
 - Local Energy Scotland
<http://www.localenergyscotland.org/funding-resources/funding/local-energy-challenge-fund/>
 - Enterprise Investment Scheme. This can fit into any section, apart from carbon tax, as it is a form of tax relief that is designed to help small high risk trading companies.
<http://communitysharesscotland.org.uk/resources/handbook/enterprise-investment-scheme>
- **Heat**
 - RHI
<https://www.ofgem.gov.uk/environmental-programmes/non-domestic-renewable-heat-incentive-rhi/about-non-domestic-rhi/northern-ireland-renewable-heat-incentive>
- **Liquid Biofuels**
 - Advanced Biofuel Demonstration Competition
<https://www.gov.uk/government/speeches/advanced-biofuels-demonstration-competition-grant-award>
- **Electricity**
 - Marine Energy Parks (can also belong slightly in R&D and communities)
<http://www.hi-energy.org.uk/what-does-marine.htm>
 - Contracts for Difference
<https://www.gov.uk/government/collections/electricity-market-reform-contracts-for-difference>
 - Feed-in tariff
<https://www.gov.uk/feed-in-tariffs/overview>
- **Research & Development**
 - Waters funding
<http://www.hie.co.uk/about-hie/news-and-media/archive/latest-round-of-waters-funding-announced.html#sthash.8KO4XHcj.dpbs>
 - Scottish innovative Foundation Technologies fund SIFT
<http://www.scottish-enterprise.com/services/develop-new-products-and-services/sift/overview>
 - UK Green Investment Bank plc (GIB)
<https://www.gov.uk/government/organisations/uk-green-investment-bank>
<http://www.greeninvestmentbank.com/about-us/>
 - The Scottish investment Bank
 - Scotland's International Technology of Renewable Energy Zone (ITREZ)
<http://www.scottish-enterprise.com/services/develop-new-products-and-services/itrez/overview>
 - SMART Scotland
<http://www.scottish-enterprise.com/services/develop-new-products-and-services/smart-scotland/overview>
 - Renewable Energy Investment Fund (Scotland). This can also go in electricity, heat and communities.
<http://www.scottish-enterprise.com/services/attract-investment/renewable-energy-investment-fund/overview>



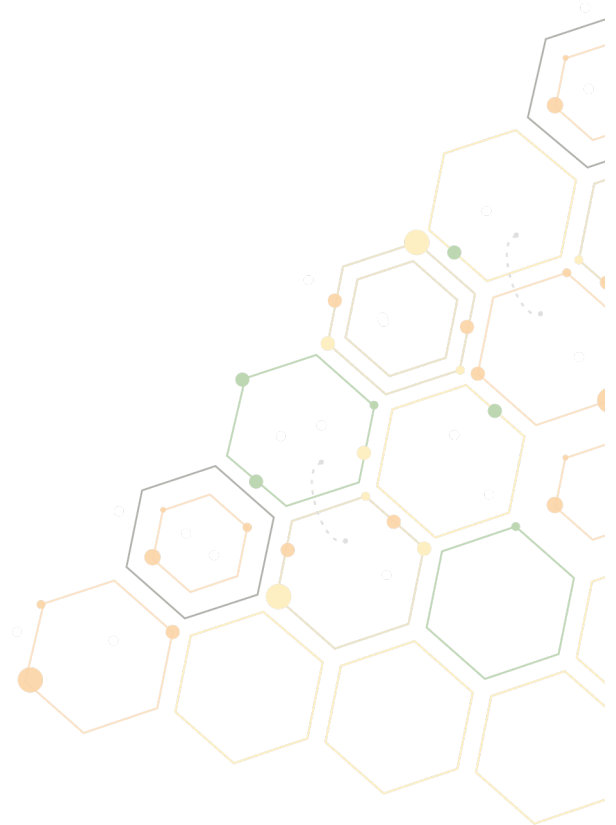
Scot Analysis

A SCOT analysis (Strength, Constraints, Opportunities and Threats) will be developed for each partner region so that policy barriers and facilitators for Renewable Energy enterprises are clearly identified. This is a method used in the strategic planning process to evaluate the Strengths, Constraints, Opportunities and Threats around an organization and its parts.

Strengths and challenges study factors internal to the organization, while opportunities and threats are of an external nature.

Following from this is to highlight showcase examples of best practice policy initiatives.

The overarching aim of this report is to develop and share support for renewable energy as a viable business sector for SMEs / microbusiness as a response to the unique natural environment of the northern peripheral area.



Finland

Emerging Micro-enterprises and SME's looking to enter the RE market

Growth Channel (part of Team Finland), national-level initiative by the Ministry of the Employment and the Economy

https://www.tem.fi/en/innovations/growth_entrepreneurship/growth_channel

S trengths	<ul style="list-style-type: none"> SME's may receive development and financing solutions which will help them succeed on a national scale. This programme is now open to enterprises from all categories. With plans to last several years this will increase chances of success.
C onstraints	<ul style="list-style-type: none"> It may be difficult to determine prerequisites for rapid growth and internationalisation which SME's must fall into before they are engaged in this programme.
O pportunities	<ul style="list-style-type: none"> SME's will have long term development and financing solutions which will help them really succeed in their industry.
T hreats	<ul style="list-style-type: none"> Not all businesses may benefit from this service.

Support business development for RE entrepreneurship

Policy and/or business development initiatives:

Public Sector

Carbon neutral municipalities (HINKU)-A project coordinated by the Finnish Environmental Institute involving municipalities committing into 80% CO2 emission reduction from the level 2007 by the 2030. This project complements the SEAP (Sustainable Energy Action Plan) commitments established mainly in the main cities and regional capitals.

<http://www.hinku-foorumi.fi/en-US>

S trengths	<ul style="list-style-type: none"> Collaboration between authorities, businesses and local residents will enrich the outcomes of solutions and projects. Working on finding solutions both within households and elsewhere will ensure better results in reducing carbon emissions.
C onstraints	<ul style="list-style-type: none"> It may be difficult to carry out solutions throughout each municipality effectively. Solutions may be costly and in some cases not economically viable.
O pportunities	<ul style="list-style-type: none"> With municipalities making a commitment there is an opportunity for experts and authorities to see widespread change towards reducing greenhouse gas emissions.
T hreats	<ul style="list-style-type: none"> It could drain a lot of resources in the country with such high targets to be achieved by 2030.

Support business development for RE entrepreneurship
Emerging Micro-enterprises and SME's looking to enter the RE market

Sustainable Public Procurements- The Finnish government set in April 2009 targets that encourage all public actors to adopt sustainable procurement the central government, regional governments and the municipal sector.

<http://bit.ly/2afSXBJ>

S trengths	<ul style="list-style-type: none"> • Collaboration between authorities, businesses and local residents will enrich the outcomes of solutions and projects. • Working on finding solutions both within households and elsewhere will ensure better results in reducing carbon emissions.
C onstraints	<ul style="list-style-type: none"> • It may be difficult to carry out solutions throughout each municipality effectively. Solutions may be costly and in some cases not economically viable.
O pportunities	<ul style="list-style-type: none"> • With municipalities making a commitment there is an opportunity for experts and authorities to see widespread change towards reducing greenhouse gas emissions.
T hreats	<ul style="list-style-type: none"> • It could drain a lot of resources in the country with such high targets to be achieved by 2030.

Support business development for RE entrepreneurship

INKA (Innovative Cities)-The aim of the programme is to create internationally attractive innovation clusters in Finland based on top-notch talent. Innovation clusters include companies aiming for growth that are capable of creating brand-new products and services for the international market.

<http://bit.ly/1di3ffR>

S trengths	<ul style="list-style-type: none"> • This will offer new innovative technology to be available on a much larger market and could benefit climate targets on a much larger scale.
C onstraints	<ul style="list-style-type: none"> • International markets are competitive and new technologies and services could be expensive and it might be difficult to expand into other countries.
O pportunities	<ul style="list-style-type: none"> • If things go well on an international scale this could allow other counties to meet climate change targets and may mean further development of more products and services within the innovative clusters.
T hreats	<ul style="list-style-type: none"> • Successful companies in Finland might not necessarily be successful on an international scale.

Support business development for RE entrepreneurship
Emerging Micro-enterprises and SME's looking to enter the RE market

The Groove – Growth from Renewables programme (2010-2014) - The main objective of the programme is to enhance the business capabilities of Finnish small and medium-sized companies working with renewable energy by improving their international competitiveness.

<http://bit.ly/29LD5Gh>

S trengths	<ul style="list-style-type: none"> • This will boost smaller businesses within the RE sector who's business might otherwise decline because of larger organisations. • This will help the RE sector develop on an international scale and boots services available elsewhere.
C onstraints	<ul style="list-style-type: none"> • The growth target of 20 – 30% may be very ambitious as the renewable energy market is constantly changing due to policies and market forces within other countries.
O pportunities	<ul style="list-style-type: none"> • Research and development funding is important in what is still quite a new industry. • Could lead to new technological developments and better options within the markets.
T hreats	<ul style="list-style-type: none"> • Working in collaboration with the countries financial networks might be a risk. • These small businesses aren't certain to succeed with greater international competitiveness

Support business development for RE entrepreneurship
Emerging Micro-enterprises and SME's looking to enter the RE market

Green Growth (2011-2015)- The aim of the Green Growth programme is to identify potential new growth areas for the sustainable economy business, which are essentially based on lower energy consumption and sustainable use of natural resources

<http://bit.ly/2abOWv5>

S trengths	<ul style="list-style-type: none"> • This is an excellent strategy as it focuses on energy and material efficient reducing consumption from the start to the end of a products life cycle. • Business have evidently taken the idea on board.
C onstraints	<ul style="list-style-type: none"> • It may be hard for this idea to develop in all business types. • The programme focuses on new business models, already established businesses may find it difficult to adapt.
O pportunities	<ul style="list-style-type: none"> • This may change operations in a lot of businesses and has the potential to reduce consumption of fossil fuels and natural resources by focusing on energy efficiency and recycling and recovering materials.
T hreats	<ul style="list-style-type: none"> • None apparent.

Support business development for RE entrepreneurship

Growth open (transl. Kasvu open) – This is the largest project for sparring eager to grow companies with growth experts in Finland. Throughout the competition every eager to grow company has an opportunity to present own growth plan to a great number of experts free of charge.

<https://www.kasvuopen.fi/en>

S trengths	<ul style="list-style-type: none"> • This is a free service to help companies have a realistic growth plan and will help them really make way in each of their respective industry. • It will help businesses solve problems with expert advice.
C onstraints	<ul style="list-style-type: none"> • With this being open to all businesses the programme might get saturated with eager to grow organisations and this will leave less expert time for each participating business.
O pportunities	<ul style="list-style-type: none"> • Businesses will have the potential to make growth plans that will have a very good chance of becoming a reality with problems being solved by the experts involved in the programme and continuous feedback. • Finland could see thriving businesses in the coming future.
T hreats	<ul style="list-style-type: none"> • Not all businesses will meet the growth targets and this might discourage other businesses from joining the programme.

Support business development for RE entrepreneurship

Enterprise Finland Portal: National portal supporting entrepreneurship and establishment of new enterprises; very good coverage of the supporting materials/services.

<https://www.yrityssuomi.fi/en/home>

S trengths	<ul style="list-style-type: none"> • Provides information on the obligations towards public authorities that need to be taken into account when setting up an enterprise and acting as an employer
C onstraints	<ul style="list-style-type: none"> • Specialise in the following sector <ul style="list-style-type: none"> ○ establishing a business ○ special public funding ○ accounting, taxation and auditing ○ employer obligations and the rules of working life
O pportunities	<ul style="list-style-type: none"> • Giving businesses the support that they need. • Helping to create employment and also expansion of businesses.
T hreats	<ul style="list-style-type: none"> • None apparent.

Support business development for RE entrepreneurship

Feed-in tariffs for renewable energy: “The Act on Production Subsidy for Electricity Produced from Renewable Energy Sources lays down provisions on a feed-in tariff system for which power plants fuelled with wind, biogas, forest chips and wood-based fuels meeting the prescribed preconditions could be approved.”

https://www.tem.fi/en/energy/renewable_energy_sources/feed-in_tariff_of_renewable_energy

S trengths	<ul style="list-style-type: none"> This will encourage more people to become part of renewable electricity generation.
C onstraints	<ul style="list-style-type: none"> This has the potential to become very costly for the government to fund and difficult to run long term, especially if market prices are to increase.
O pportunities	<ul style="list-style-type: none"> This has the potential to drastically increase the number of small scale renewable energy generators. This may even bring energy prices down as generation increases.
T hreats	<ul style="list-style-type: none"> People may take advantage of this scheme as it's a financial incentive.

Support business development for RE entrepreneurship

Energy Support (investment support): Based on its assessment of the project in question – This is a discretionary support available to enterprises and organisations such as municipalities and is granted according to the continuous submission scheme.

https://www.tem.fi/en/energy/energy_support

S trengths	<ul style="list-style-type: none"> Offers investment to support not only business but communities too. This will mean this scheme has the potential to work on a larger scale. In addition it's not closed off to just one area of environmental investment, it supports energy efficiency, RE generation and reducing environmental hazards.
C onstraints	<ul style="list-style-type: none"> Investment support decisions are processed by local Centres for Economic Development and applications may take a long time to approve. It may be difficult to set out assessment guidelines as there may be a wide range of projects applying for this financial support.
O pportunities	<ul style="list-style-type: none"> This allows groups from various backgrounds invest in new ideas and technology with a lower risk. This scheme is open to projects of any size which will increase the number of companies, organisations and communities making climate and environment investments. This may even bring energy prices down as generation increases.
T hreats	<ul style="list-style-type: none"> People may take advantage of this monetary support. People may not have much knowledge of the renewable energy sector or in reducing environmental hazards, making it difficult to make a good case to get funding.

Support business development for RE entrepreneurship

Funding for the Finnish Growth entrepreneurship: Finnish Industry Investment Ltd. is a government-owned investment company. They promote Finnish business, employment and economic growth through venture capital and private equity investments.

<http://www.yrityssuomi.fi/en/palvelu/-/palvelu/growth-phase-financingn>

Strengths	<ul style="list-style-type: none"> • Before financing a loan or an equity investment the significance of each project with regard to Finnish industry technological expertise and employment is assessed and therefore is likely to be a good investment for the economy. • This financing is for growing innovative companies and could really benefit the technological development within Finland.
Constraints	<ul style="list-style-type: none"> • It may be difficult to assess the growth opportunities and the company's market outlook of the field before any investment is made. • The same applies for the significance of each project with regard to Finnish industry, technological expertise and employment. • Investment in growing innovative companies does not guarantee success.
Opportunities	<ul style="list-style-type: none"> • This scheme will allow companies to grow with not only with financial investment but with access to expertise and networks to enable growth. • Therefore there is real opportunity for successful investment.
Threats	<ul style="list-style-type: none"> • Not all companies will succeed.

Support business development for RE entrepreneurship

Act on the Financing of Sustainable Forestry (KEMERA). Government subsidies

Established businesses in the RE sector

<http://www.mmm.fi/en/index/frontpage/forests/legislation.html>

Strengths	<ul style="list-style-type: none"> • Sustained long-term process • Ensuring the sustainability of timber production, maintaining the biological diversity of forests, forest ecosystem management projects and other measures in support of the activities referred to here before
Constraints	<ul style="list-style-type: none"> • Only available for sustainable wood production, maintenance of forest biodiversity and improvement of the health of forests.
Opportunities	<ul style="list-style-type: none"> • Farmers who do not have suitable land for any livestock – may consider this strategy. • Land Use • Creation for all biodiversity
Threats	<ul style="list-style-type: none"> • Schemes taking advantage of forestry not planted to standard.

Support business development for RE entrepreneurship

BEST (Sustainable Bioenergy Solutions for tomorrow) Programme- The BEST program makes the best of today's Finnish bioenergy know-how to build new critical competences for tomorrow.

<http://clicinnovation.fi/>

S trengths	<ul style="list-style-type: none"> • Joint research programme and therefore will have more expertise on board. • Building a solid common understanding of the future bioenergy business opportunities as well as the necessary now how and capabilities of seizing them. • This will create potential for new investment and business centred on bioenergy.
C onstraints	<ul style="list-style-type: none"> • It may be difficult the future of bioenergy as a business and to understand how well it will do within the renewable energy market that already exists. • CHP (combined heat and power) generation is already extremely competitive in Finland.
O pportunities	<ul style="list-style-type: none"> • If bioenergy is considered to have real potential in the market this will create another alternative to fossil fuels and help build a sustainable energy system. • This energy concept could be exported to new markets.
T hreats	<ul style="list-style-type: none"> • It may not have success in the RE market as the CHP sector in Finland is particularly competitive.

Established Business in the RE

Support business development for RE entrepreneurship

Energy Efficiency Agreement and Programme- the main objectives of the Energy Efficiency Agreement scheme is to encourage continuous improvement of energy efficiency. Companies that have joined the agreement scheme set their own targets for improving their energy use.

<http://bit.ly/2ag6Rnr>

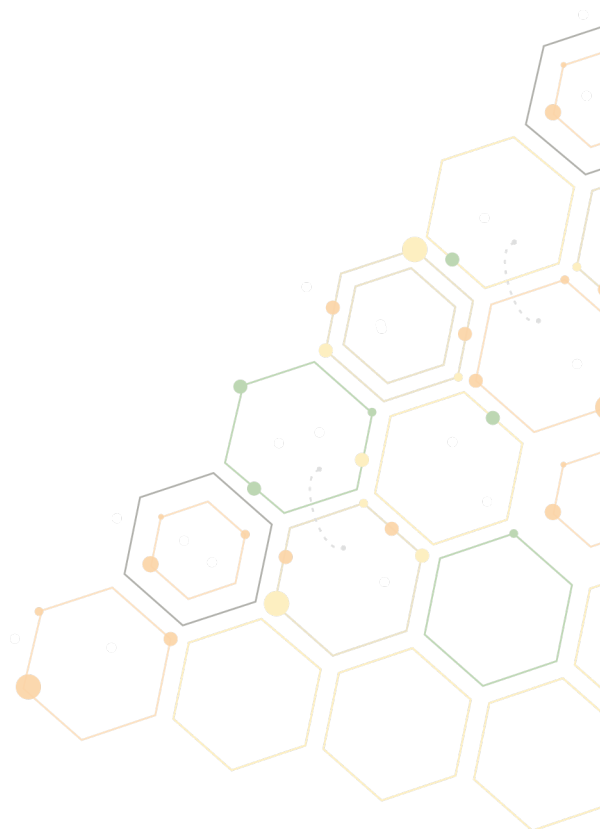
S trengths	<ul style="list-style-type: none"> • As the energy efficiency programme targets larger municipalities (with a separate energy programme for smaller ones) and it means that the 9% energy saving target will be of a greater value. • Although this is a voluntary scheme it promotes the economic benefits of using renewable energy that is highly efficient which will encourage populations to meet targets.
C onstraints	<ul style="list-style-type: none"> • Promoting the use of renewable energy may be difficult. Economically some municipalities may benefit but it will be hard to predict to what extent.
O pportunities	<ul style="list-style-type: none"> • There is a great opportunity to develop the renewable energy sector, this may provide new jobs and will increase the energy efficiency of the municipalities. • Not only will this aid energy savings but it will in turn reduce greenhouse gas emissions.
T hreats	<ul style="list-style-type: none"> • The renewable energy sector will need to develop and improve quickly to deal with the energy needs of the various municipalities, this may not be viable and could be extremely costly.

Established Business in the RE

Climate and energy Programme of North Karelia- The core objective is to mitigate the climate change and decrease the CO2 emissions in the region. There are 8 categories, where the actions are needed, including energy saving, energy efficiency and renewable energy production & use.

<http://bit.ly/29N6iOf>

S trengths	<ul style="list-style-type: none"> • This plan aims to develop strategies to not only mitigate climate change but to adapt to climate change. • Targets set out in the programme aim far beyond 2020 which will be much more beneficial to this region.
C onstraints	<ul style="list-style-type: none"> • It can be difficult to foresee future climate change outcomes that this region may need to adapt for. • With a sparsely located population the transport emissions may be difficult to combat. • Additionally this will leave it hard to reach a carbon neutral North Karelia.
O pportunities	<ul style="list-style-type: none"> • Great opportunities to move away from using fossil fuels and improving the RE sector in this region. • Will help mitigate climate change by managing waste better and maintaining the rich forestry in the region. • Better energy efficiency within homes through better construction will help this region become carbon neutral.
T hreats	<ul style="list-style-type: none"> • Targets may be too ambitious and the region may need to prepare to adapt to climate change outcome more than planned for.



Iceland

Emerging micro-enterprises and SME's trying to enter the RE market

Energy Fund - Provides funding for specific projects in the field of efficient energy use, including for education and informative projects. The fund also provides funding for projects that promote the use of domestic energy instead of fossil fuels and strengthen international cooperation in such projects.

<http://www.orkustofnun.is/orkustofnun/rad-og-nefndir/orkusjodur/>

Strengths	<ul style="list-style-type: none"> Provides different types of funding for specific projects. Projects which promote the use of domestic energy instead of fossil fuels. This is the type of investment which micro-enterprises and SME's need to try and enter the RE market.
Constraints	<ul style="list-style-type: none"> The only issue with regards Energy Fund is that it is funding for specific projects. Therefore this may have an impact on micro-enterprises and SME's that may have a different project in place.
Opportunities	<ul style="list-style-type: none"> Educational strategy for that sector which you require and an informative project. Companies to train their staff to a high standard
Threats	<ul style="list-style-type: none"> Many could use this opportunity to get funding and perhaps have no intention of completing the project, so therefore time and money is spent.

Businesses development for RE entrepreneurship

Act of Renewable fuel in transport – the objective of this act is to increase the share of RE in land transport and reduce greenhouse gas efficiently and effectively.

<http://www.althingi.is/altext/stjt/2013.040.html>

Strengths	<ul style="list-style-type: none"> Energy sources that are not fossil fuels but by renewable sources, whether organic or inorganic is used to fuel transport, this promotes a reduction in the intensive use of fossil fuel in the transport section.
Constraints	<ul style="list-style-type: none"> However, imported fossil fuels are still used for road transport and fishing vessels, which is a big concern for an achievement of the vision due to the CO2 emission from vehicles and ships.
Opportunities	<ul style="list-style-type: none"> Icelandic government has been focusing on sustainability with many approaches. Such as a Transition plan from imported fossil fuels to green energy in transportation.
Threats	<ul style="list-style-type: none"> Still around 20% of Iceland's energy sources come from imported fossil fuel that is used for fishing and transportation

Businesses development for RE entrepreneurship

Carbon Tax –a tax on fossil fuels, especially those used by motor vehicles, intended to reduce the emission of carbon dioxide..

https://ec.europa.eu/energy/sites/ener/files/documents/dir_2009_0028_action_plan_iceland_nreap.pdf
p.16)

Strengths	<p>To promote the use of environmentally</p> <ul style="list-style-type: none"> • friendly cars, • energy saving, • reduce greenhouse gas • emissions, etc.
Constraints	<ul style="list-style-type: none"> • Carbon dioxide tax on all fossil fuel. Act No 129/2009. Act regarding Environmental and resource taxes.
Opportunities	<ul style="list-style-type: none"> • Opportunities for businesses, Industries and Power Plants to help make these changes. This will lead to; • Creating a green image • Publicity • Helping the environment etc
Threats	<ul style="list-style-type: none"> • Price on tax per tonne

Established Businesses in RE sector

Iceland Geothermal - is a platform where you can access all general information about geothermal energy in Iceland and leads you to the right coordinator if you are building up infrastructure or business in relation to the resource of geothermal.

Iceland Geothermal is a non-profit organisation that was established in February 2013. IG is an industry driven cluster cooperation partnership which focuses on the field of geothermal energy. The Iceland Geothermal Cluster Initiative was founded by 43 diverse members, including companies, associations and institutions.

www.icelandgeothermal.is

Strengths	<ul style="list-style-type: none"> • Icelandic geothermal power is a reliable base load and a low cost option for electricity generation. • Geothermal plants now account for approximately one-quarter of all electricity generated and consumed in Iceland. • Geothermal power plants in Iceland have a total capacity of 575 MW and generate approximately 4,500 GWh annually
Constraints	<ul style="list-style-type: none"> • Some cold regions do not have access to geothermal energy for heating. • Financial support required for energy efficiency, geothermal surveys and increased subsidies for households that heat with electricity.
Opportunities	<ul style="list-style-type: none"> • New geothermal power stations are being built • The share of geothermal electricity in Iceland's overall energy production is expected to grow substantially.
Threats	<ul style="list-style-type: none"> • Promote the utilisation of geothermal energy in areas where geothermal heat has not yet been detected, often referred to as "cold areas".

Established Businesses in RE sector

Green energy - Is a cluster initiative with an aim to increase the share of domestic green energy in transport sector at the expense of imported carbon fuel. Green energy was founded by 60 diverse members, including companies, associations and institutions.

www.graenaorkan.is

S trengths	<ul style="list-style-type: none"> • Provide a flexible power plant solution with high scalability • Quick payback on investment • Hydro and geothermal sources meet 81% of Iceland's primary energy requirements for electricity, heat, and transportation
C onstraints	<ul style="list-style-type: none"> • The translocation of energy intensive industries to locations with abundant renewable energy resources has become an important task • Cannot be achieved without international cooperation
O pportunities	<ul style="list-style-type: none"> • Drive the technological progress in the industry • It is estimated that the energy from geothermal wells can be multiplied by drilling up to 4 – 5000 meter wells • Two times deeper than at present.
T hreats	<ul style="list-style-type: none"> • Wind Energy has not yet been used for electricity on the island • Higher cost in comparison with hydro- and geothermal resources.

Established Businesses in RE sector

Grant for district heating – For convenience grants and support are divided into those that help support the purchase, installation or development of equipment, those that support the fuels supply chain, and those that provide consultancy and advice. Subsidies for using green energy i.e heat pumps with the objective to save energy and improved energy efficiency of house heating.

<http://www.os.is/orkustofnun/umsoknir/eingreidslur/>

S trengths	<ul style="list-style-type: none"> • About 70% of the energy used for district heating comes from low temperature geothermal fields • The other from high temperature geothermal resources.
C onstraints	<ul style="list-style-type: none"> • There are no international standard methods for calculating primary energy. • In Iceland, primary energy has been calculated as the energy extracted by cooling the water to 15°C
O pportunities	<ul style="list-style-type: none"> • The financial benefits of utilizing the geothermal energy source are immense. • Less of a pollution to the environment
T hreats	<ul style="list-style-type: none"> • None apparent.

Established Businesses in RE sector

Geothermal heat fund -The main purpose of the fund is to promote the further use of geothermal energy for heating in the country with the aim of improving living conditions and increasing access to the quality and potential of geothermal entail and to reduce the use of fossil fuels for heating and reduce the cost of the subsidies (from the government) for heating in cold areas.

<http://www.orkustofnun.is/orkustofnun/umsoknir/styrkir-til-jardhitaleitarataks/>

S trengths	<ul style="list-style-type: none"> • Successful as The National Energy Fund (NEF) • Provides risk insurance by reimbursing up to 80% of cost of unsuccessful drillings. • Grant support for geothermal development and enhancing them
C onstraints	<ul style="list-style-type: none"> • Only applied for Geothermal and Hydro technology projects • May cause issue for many business developments that intend to apply other technologies.
O pportunities	<ul style="list-style-type: none"> • The National Energy fund sponsors projects aimed at promoting the use of alternative fuels to replace fossil fuels
T hreats	<ul style="list-style-type: none"> • People may take advantage of the system and abuse it

Established Businesses in RE sector

Startup Energy Reykjavik - is a mentorship-driven seed stage investment program with focus on energy related business projects.

<http://www.startupenergyreykjavik.com/en/>

S trengths	<ul style="list-style-type: none"> • Mentorship from successful entrepreneurs to the member companies • Experienced investors, industry experts, and connectors • Help them strategize, prioritize, and expand their networks.
C onstraints	<ul style="list-style-type: none"> • Only Accepting a limited number of companies
O pportunities	<ul style="list-style-type: none"> • Actively adding premium mentors to the list that can help Startup Energy accelerate. • Mentors will be visiting teams nearly every day of the program, debating and advising the companies.
T hreats	<ul style="list-style-type: none"> • Also limited amount of fund that is awarded

Established Businesses in RE sector

Frumkvöðlasjóður Íslandsbanka - Grants for projects in the renewable energy and sustainable fisheries. The goal is to support innovation in this sector.

<https://www.islandsbanki.is/um-islandsbanka/samfelagsleg-abyrgd/frumkvodlasjodur/>

S trengths	<ul style="list-style-type: none"> • Íslandsbanki makes it a priority to work in harmony with the environment • Reflected on the management and investments of the bank. • It has developed specific expertise in the seafood, energy, and offshore service vessel industries domestically and in the North Atlantic region.
C onstraints	<ul style="list-style-type: none"> • N/A
O pportunities	<ul style="list-style-type: none"> • The bank also supports investments that promote sustainability • The bank plays a pro-active role in the promotion of eco-friendly solutions and technologies that reduce pollution • Energy consumption and support sustainable fisheries.
T hreats	<ul style="list-style-type: none"> • Auction services only offered to private investors

Established Businesses in RE sector

Rannís. The Icelandic centre for research— Rannís administers the main public competitive funds in the fields of research, innovation, education and culture in Iceland. Rannís coordinates and promotes Icelandic participation in European cooperation programmes, such as Horizon 2020, Erasmus+ and Creative Europe, as well as other international programmes.

www.rannis.is

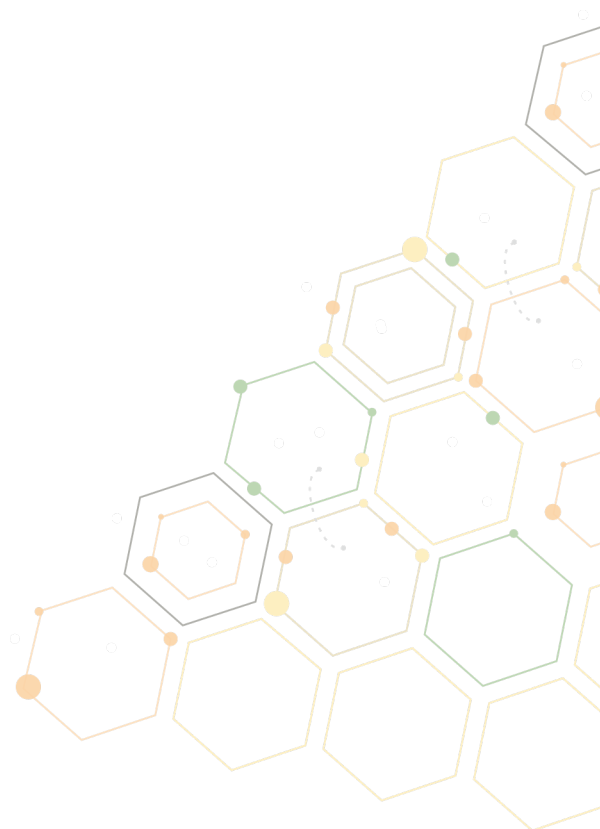
S trengths	<ul style="list-style-type: none"> • Receive a grant of about 2 million Euros from the European Union to support the development of Geothermal in Europe. • • Competitive funds available in the fields of research, innovation, education and culture in Iceland
C onstraints	<ul style="list-style-type: none"> • Limited cooperation, only for 4 years.
O pportunities	<ul style="list-style-type: none"> • Promote the use of geothermal and how their plans would go hand in hand with the goal of the European Union to reduce emissions of carbon dioxide.
T hreats	<ul style="list-style-type: none"> • Transportation issues might arise

Established Businesses in RE sector

Energy exchange in transport – a policy which aims to increase the share of domestic green in transport sector at the expense of imported carbon fuels.

<http://www.atvinnuvegaraduneyti.is/media/Acrobat/150413-Graena-orkan---SKYRSLA.pdf>

S trengths	<ul style="list-style-type: none"> • A transport policy that is active in incorporating incentives for green energy for transport. • For instance free parking for low emission vehicles, a purchasing policy, support for public transport, walking and bicycling routes.
C onstraints	<ul style="list-style-type: none"> • Only applied in large municipalities and not covered within a national level.
O pportunities	<ul style="list-style-type: none"> • Promotion of public transport within a 10-year pilot project • Double the share of public transport for all trips in the metropolitan area • Taking into consideration the use of renewable energy sources with the promotion of public transport
T hreats	<ul style="list-style-type: none"> • One major Impact this has is that only available in some parts of the country



Norway

Emerging Micro-enterprises and SME's looking to enter the RE market

Centres for Environment / friendly Energy Research - The objective of the scheme for Centres for Environment-friendly Energy Research (FME) is to establish time-limited research centres which conduct concentrated, focused and long-term research of high international calibre in order to solve specific challenges in the field.

<https://www.ntnu.edu/research/centres-for-environment-friendly-energy-research>

Strengths	<ul style="list-style-type: none"> • long-term initiative • Generate solutions to climate and energy • Promote industrial development • Raising energy efficiency in Norwegian Industry
Constraints	<ul style="list-style-type: none"> • Main Focus is on: <ul style="list-style-type: none"> - Co2 – capture, transport and storage - Develop Hydropower technology for the future - New solutions for utilising flexible hydropower - Develop technology for second-generation biofuels - Achieve 30 per cent reduction in production cost - Modernisation of the electricity grid (Flexibility, Efficiency) - Enable the grid to handle interactions with renewable energy - Solutions for zero-emission zones in smart cities - Renewable energy benefit for local environment
Opportunities	<ul style="list-style-type: none"> • Achieve valuable results in the field of energy and climate research • The long-term initiative is designed an build upon: <ul style="list-style-type: none"> - Long-term Perspective - Stable financial framework - Outstanding research environments - Industrial actors - Public administration - Cooperation between research, Industry and public administration
Threats	<ul style="list-style-type: none"> • None apparent.

Support business development for RE entrepreneurship

REGIONAL – RENEWABLE ENERGY POLICY – including local planning, managing water resources, protected areas and Natural Diversity

<https://www.iea.org/countries/membercountries/norway/>

Strengths	<ul style="list-style-type: none"> County Governor ensures municipalities take adequate account for climate change in their decisions and communicates national climate policy to local communities and ensures that steps are taken to implement it. In addition inspections are carried out to be sure of this. Therefore making environmental issues higher on policy agenda regionally. Regions are responsible for water management; protected areas and natural diversity, ensuring a wide range of environmental issues are addressed.
Constraints	<ul style="list-style-type: none"> It may be difficult to assess environmental impacts whilst decisions are being made in each municipalities as they may lack the right expertise and resources. Responsibility for such a wide range of environmental issues may mean some get over looked by the County Governor.
Opportunities	<ul style="list-style-type: none"> Creating a monitoring body will increase standards of policies and actions carried out to improve environmental standards. Dividing the responsibility of different environmental issues among regions will improve the integration of these across all decision making.
Threats	<ul style="list-style-type: none"> Different municipalities may not have the resources to deal with a wide range of environmental issues. Dealing with a diverse range of areas might result on some being over looked.

Support business development for RE entrepreneurship

Green Battery Strategy- Norway is hoping to become the “green battery of Europe” by using its hydropower plants to provide instant extra electricity if production from wind and solar power sources in other countries fade. Without building any new power stations, engineers believe they could use the existing network to instantly boost European supplies and avoid other countries having to switch on fossil fuel plants to make up shortfalls.

<http://www.greentechmedia.com/articles/read/Norway-Could-Provide-20000-MW-of-Energy-Storage-to-Europe>

Strengths	<ul style="list-style-type: none"> It will dramatically increase renewable electricity production in the country and develop Norway’s RE sector. This will benefit Norway Economically in the long run after initial network costs are paid for.
Constraints	<ul style="list-style-type: none"> The customers who already exist in Norway will have to pay the bill for new lines connecting Norway to other counties. This will initially raise costs and may deter small scale generators from entering the RE market in Norway.
Opportunities	<ul style="list-style-type: none"> This is an excellent opportunity for enterprises in Norway to grow and develop on a much larger scale. Additionally this will aid other countries in reaching their renewable electricity targets set by the EU.
Threats	<ul style="list-style-type: none"> Other EU countries may rely too heavily on Norway’s reserve of renewable energy and may not invest and develop their own RE sector.

Emerging Micro-enterprises and SME's looking to enter the RE market
 Support business development for RE entrepreneurship
 Established Business in the RE

NORWEGIAN – NATIONAL RENEWABLE ENERGY POLICY

Nearly all of Norway's electricity production is based on hydropower.
 Norway has a share of renewable energy that is much higher than in all EU countries.

https://ec.europa.eu/energy/sites/ener/files/documents/dir_2009_0028_action_plan_norway_nreap.pdf

S trengths	<ul style="list-style-type: none"> Established a joint Norwegian – Swedish electricity certificate market developing renewable electricity production in both countries focusing on wind, water and bio energy increasing the RE market. Constantly carrying out grid developments improving the transmission grid both domestically Helping ensure energy efficiency.
C onstraints	<ul style="list-style-type: none"> N/A
O pportunities	<ul style="list-style-type: none"> Programmes for development of knowledge and technologies for renewables energy, energy efficiency and environmental solutions have been strengthened and have the potential to continue to develop further. Enova/Energy fund is aimed at increasing energy efficiency and renewable energy carriers in the industry and therefore will increase the RE sector.
T hreats	<ul style="list-style-type: none"> Norway is financing 50% of the certificates, regardless of the production location, which could be very costly.

Northern Ireland

Established Businesses in RE sector

UK targets - The UK's targets for renewable energy consumption come from agreement at European Union level. For an example The Climate Change Act established a target for the UK to reduce its emissions by at least 80% from 1990 levels by 2050. This target represents an appropriate UK contribution to global emission reductions consistent with limiting global temperature rise to as little as possible above 2°C

<https://fullfact.org/economy/uks-renewable-energy-target/>

Strengths	<ul style="list-style-type: none"> Overall 2020 target of 15% of its energy consumption coming from renewable sources. UK can meet this legally binding target, including counting energy generated elsewhere towards its total.
Constraints	<ul style="list-style-type: none"> 15% of energy consumed in the UK should come from renewables by 2020
Opportunities	<ul style="list-style-type: none"> For companies to create business ideas that can help and contribute towards meeting these targets. Create employment Benefit the economy
Threats	<ul style="list-style-type: none"> With regards generating energy else were, this system could be abused. Depending on other countries within the UK to meet these targets

Businesses development for RE entrepreneurship

Renewables Obligation (NIRO) - The Renewables Obligation (RO) is a mechanism designed to support large-scale renewable electricity generation. Through the RO, the Government places an obligation on all licenced electricity suppliers, like us, to source a proportion of the electricity we supply to customers from renewable energy sources.

<https://www.ofgem.gov.uk/environmental-programmes/ro>

Strengths	<ul style="list-style-type: none"> Boosted renewable energy generation in NI from 4 per cent in 2005 to 14 per cent in 2012. Cheaper energy Additional income
Constraints	<ul style="list-style-type: none"> 15% of energy consumed in the UK should come from renewables by 2020
Opportunities	<ul style="list-style-type: none"> It will be possible to reach the target of 40 per cent electricity consumption from renewable sources by 2020 Create Employment
Threats	<ul style="list-style-type: none"> NIRO scheme is planned for closure to new applications in 2017.

Emerging micro-enterprises and SME's trying to enter the RE market

Invest NI - As the regional business development agency, Invest NI's role is to grow the local economy. They do this by helping new and existing businesses to compete internationally, and by attracting new investment to Northern Ireland.

Invest NI are part of the Department for the Economy and provide strong government support for business by effectively delivering the Government's economic development strategies.

<https://www.investni.com/>

Strengths	<ul style="list-style-type: none"> • Free Advice & support • Provide grants • Loans • Help create business plan • Contacts – people in the same industry
Constraints	<ul style="list-style-type: none"> • Main Focus is on Start-up businesses.
Opportunities	<ul style="list-style-type: none"> • Give start-up businesses the courage and support that they need. • With the help of new businesses means more employment and our economy will benefit. • Invest NI will support all types of business; however they are very interested in businesses linked to improving the environment.
Threats	<ul style="list-style-type: none"> • Creating a successful business idea that meets the criteria. • Competition • Businesses just in for the grant money.

Businesses development for RE entrepreneurship

Renewable Heat Incentive (RHI) is a UK Government scheme set up to encourage uptake of renewable heat technologies amongst householders, communities and businesses through financial incentives.

<https://www.ofgem.gov.uk/environmental-programmes/non-domestic-renewable-heat-incentive-rhi/about-non-domestic-rhi/northern-ireland-renewable-heat-incentive>

Strengths	<ul style="list-style-type: none"> • Department of Enterprise, Trade and Investment set the policy and tariff rates, with payments being made for 20 years.
Constraints	<ul style="list-style-type: none"> • Eligible for only renewable heat technologies <ul style="list-style-type: none"> -Biomass boilers -Solar thermal - Ground to water heat pumps - Air to water heat pumps
Opportunities	<ul style="list-style-type: none"> • It is the first of its kind in the world and the UK Government expects the RHI to contribute towards the 2020 ambition of 12% of heating coming from renewable sources. • Great new employment with the RE sector.
Threats	<ul style="list-style-type: none"> • One major impact this has is that clients may abuse the system. • This system has now closed due to financial overspend.

Emerging micro-enterprises and SME's trying to enter the RE market

Northern Ireland Renewables Industry Group - The Northern Ireland Renewables Industry Group (NIRIG) is the voice of renewables in Northern Ireland. With over 20% of Northern Ireland's electricity needs now coming from renewable sources, our economy is seeing significant and widespread benefits.

<http://www.ni-rig.org/>

S trengths	<ul style="list-style-type: none"> NIRIG represents a significant and positive step forward for the renewable energy industry in Northern Ireland, representing the wind, wave and tidal sector. Reach the target of 40 per cent electricity consumption from renewable sources by 2020.
C onstraints	<ul style="list-style-type: none"> Main aim is representing towards the wind, wave and tidal sector.
O pportunities	<ul style="list-style-type: none"> Helping sectors in this industry. Expert advice Business expansion Create more employment
T hreats	<ul style="list-style-type: none"> May not suit all renewable companies e.g. Solar thermal Solar PV

Businesses development for RE entrepreneurship

Carbon Trust - One of the main barriers to businesses implementing energy efficiency or renewable energy projects is the availability of finance. The Carbon Trust, with funds provided by Invest NI, can help to overcome that hurdle by providing interest free, unsecured loans from £3,000 to £400,000.

<https://www.carbontrust.com/home/>

S trengths	<ul style="list-style-type: none"> Provides technology development and innovation support. Will deliver an extensive array of training courses focused on developing a skilled workforce in renewable energy in Northern Ireland.
C onstraints	<ul style="list-style-type: none"> Development & Innovation support
O pportunities	<ul style="list-style-type: none"> Current R&D under the Carbon Zero NI programme will position Northern Ireland as an international player in the sustainable development and clean energy sectors Courses developed under the Carbon Zero NI programme will address the ever increasing need for skills and knowledge in the area of clean energy development in Northern Ireland.
T hreats	<ul style="list-style-type: none"> None apparent.

Republic of Ireland

Emerging micro - enterprises and SMEs entering the RE market

Better Energy Communities - 9th December 2015, Minister for Energy Alex White, TD announced €20 million in grant offers for local communities under the 2016 Better Energy Communities scheme. The scheme, which is administered by the Sustainable Energy Authority of Ireland (SEAI), has supported 260 community energy efficiency projects over the last four years. As a result over 12,000 homes, community, private and public buildings have received energy efficiency upgrades, supporting several hundred jobs each year

http://www.seai.ie/Grants/Better_Energy_Communities/

Strengths	<ul style="list-style-type: none"> • This scheme has supported 260 community energy efficiency projects over the last four years. • Successful scheme increasing local demand for re technologies • one of the more significant RE policies in place over the last few years
Constraints	<ul style="list-style-type: none"> • Main object and target is towards projects which can deliver energy efficiency.
Opportunities	<ul style="list-style-type: none"> • €20 million in grant offers for local communities under the 2016 Better Energy Communities scheme. • Providing opportunities for local business to provide the products and services.
Threats	<ul style="list-style-type: none"> • Communities could argue that they deserve more grant money than others. • When homes, community, private and public buildings have energy efficiency upgrades are they are not kept maintained.

Emerging micro - enterprises and SMEs entering the RE market

Ocean energy Prototype Development Fund - The main focus of the programme is on stimulating the development and deployment of Ocean Energy (OE) devices and systems.

www.seai.ie/Grants/Ocean-Energy-Prototype-Development-Fund/#sthash.uD1zTpK0.dpuf

Strengths	<ul style="list-style-type: none"> • Funding available for Research + Development • Full support provided
Constraints	<ul style="list-style-type: none"> • Main focus is only based on Ocean energy
Opportunities	<ul style="list-style-type: none"> • Potential for the increase in Ocean energy. • Create employment • Develop and test wave and tidal energy capture devices and systems – therefore making ocean energy more successful. • Project work/management
Threats	<ul style="list-style-type: none"> • Wave / Tidal energy have not been very successful • Can be very expensive • Many people are against this type of technology as it may have an impact of the marine life. • The cost of developing the innovations

Emerging micro - enterprises and SMEs entering the RE market Businesses development for RE entrepreneurship

Local Authority Renewable Energy Strategy – To meet the challenges of climate change and agreed European targets. To develop a methodology to assist local authorities in the preparation of their Local Authority Renewable Energy Strategies (LARES) document.

http://www.seai.ie/Publications/Renewables_Publications/_Wind_Power/Methodology-for-Local-Authority-Renewable-Energy-Strategies.pdf

Strengths	<ul style="list-style-type: none"> • To identify and design areas suitable for renewable energy projects • LA involvement • Improved coherence of planning at this level • To support local authorities in the development of specific policies and objectives in their Development Plans
Constraints	<ul style="list-style-type: none"> • Main focus and aim is towards developing methodology to assist local authorities.
Opportunities	<ul style="list-style-type: none"> • To facilitate the generation of a comprehensive LARES this can be used as a vehicle to attract local development and investment. • This will lead to the potential of new businesses and creating employment.
Threats	<ul style="list-style-type: none"> • With regards the planning this may cause issue to get projects such as wind farms, as planning can be quite difficult. For example objections, scenic area and also find the correct location.

Businesses development for RE entrepreneurship

Electric Vehicles Supports (ROI)- Government incentives for plug-in electric vehicles have been established by several national and local governments around the world as a financial incentive for consumers to purchase a plug-in electric vehicle. The amount of these incentives usually depends on battery size and the vehicle all-electric range, and some countries extend the benefits to fuel cell vehicles, and electric vehicle conversions of hybrid electric vehicles and conventional internal combustion engine vehicles.

<http://www.dcenr.gov.ie/energy/en-ie/Renewable-Energy/Pages/Electric-Vehicles.aspx>
http://www.seai.ie/Grants/Electric_Vehicle_Grant_Scheme/

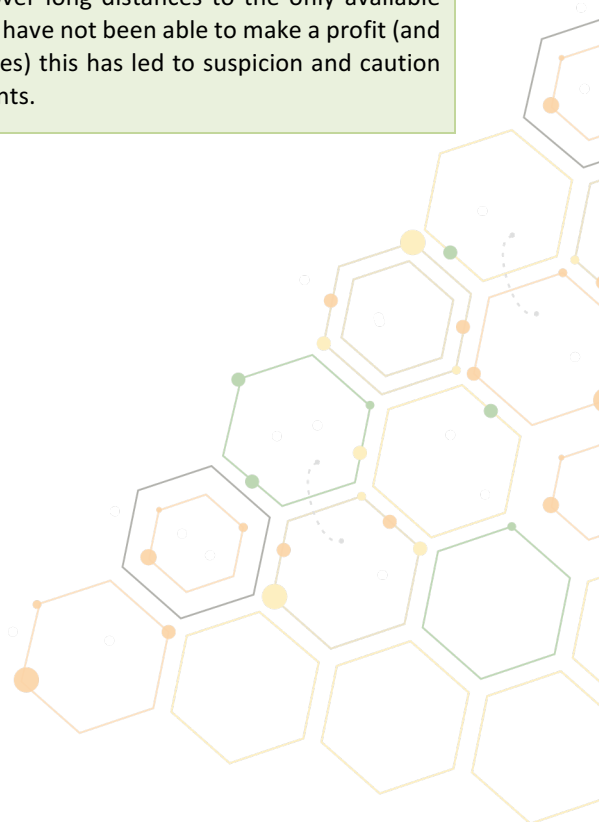
Strengths	<ul style="list-style-type: none"> • Save money (cheaper than fuel) • No Emissions • Cost Effective • Reduced Noise Pollution
Constraints	<ul style="list-style-type: none"> • Stigma attached to electric vehicles compared to diesel or petrol vehicles (battery life) • Mileage from charges is a legitimate concern and there are also risks regarding maintenance and lack of experience of providers in this as well as requirement to change driving style/habits.
Opportunities	<ul style="list-style-type: none"> • To reduce the reliance on fossil fuel consuming vehicles and reduce associated emissions of the transport sector
Threats	<ul style="list-style-type: none"> • Lack of electric vehicle 'experts' regarding breakdown of the cars. • Programme does not seem to be delivering what was expected, behind targets.

Businesses development for RE entrepreneurship

Bioenergy Scheme – The Bioenergy Scheme provides establishment grants to farmers to grow willow for the production of biomass suitable for use as a renewable source of energy. The Scheme aims to increase the production of willow in Ireland and to encourage alternative land use options. It is open to applicants who are landowners or have leasehold title to the land and have responsibility for farming the land on which it is proposed to carry out the plantation.

<http://www.agriculture.gov.ie/bioenergyscheme/>

Strengths	<ul style="list-style-type: none"> The benefit of this scheme is to provide an increase in the production of willow in Ireland. This will benefit our environment by help building a sustainable future and to encourage alternative land options.
Constraints	<ul style="list-style-type: none"> Lack of demand and a lack of established supply chain which means there is no clean market for the product is the most serious constraint. The scheme only focuses on willow plantation no other plantation – Forestry - Short rotation forestry
Opportunities	<ul style="list-style-type: none"> This is a huge opportunity for farmers that do not have suitable ground for livestock. Therefore the ground can become useful Helping the biomass sector and also wildlife. This will also allow the farmer to make a small income Perhaps create a new business strategy in the biomass sector.
Threats	<ul style="list-style-type: none"> An issue maybe the farmer takes full advantage of this scheme plants all the ground and then does not maintain the crop. Current lack of demand and established market structures has meant that farmers who are in this scheme have often ended up harvesting and having to transport the fuel over long distances to the only available market which means that they have not been able to make a profit (and in many cases have made losses) this has led to suspicion and caution among other potential applicants.



Businesses development for RE entrepreneurship

The Afforestation Grant and Premium Scheme 2014-2020 - supports the planting of new forests and offers a range of planting options designed to accommodate a variety of sustainable timber production and ecological objectives.

<https://www.agriculture.gov.ie/media/migration/forestry/grantandpremiumschemes/2015/AfforestationSchemeEd2190315.pdf>

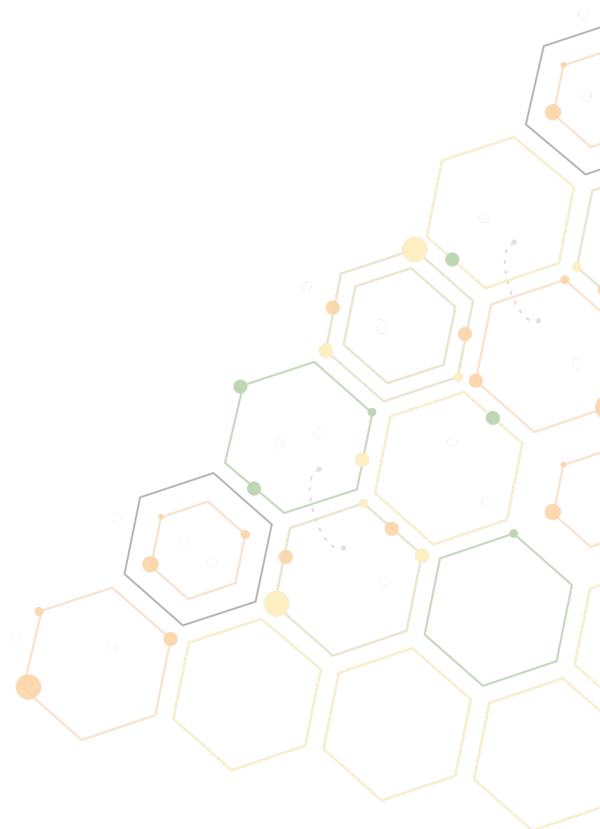
Strengths	<ul style="list-style-type: none"> • The primary objective of the Scheme is to increase Ireland's forest estate and, in doing so, to make progress towards the achievement of the following objectives: • Increase Ireland's forest cover to 18% ; • Establish 10,000 ha of new forests and woodlands per annum (subject to the availability of funds and land); • To provide at least 30% of the national area afforested with broadleaved • Species during the programme period; • Increase the average area of forests, with greater access to the public road network.
Constraints	<ul style="list-style-type: none"> • In order to qualify for payment of afforestation grants and premiums, the Applicant must own, lease or be in joint management of the lands proposed for planting. • This scheme is only eligible for forestry and no other plantation
Opportunities	<ul style="list-style-type: none"> • The potential for thinning to become available for fuel. • Meeting the required targets • Promote the biomass economy.
Threats	<ul style="list-style-type: none"> • Forest Fires • Damage • Abuse the scheme take full advantage of the payments and perhaps do not maintain the land. • Lack of an established market for thinning's and brash and the lack of strong functioning supply chains.

Businesses development for RE entrepreneurship

Forest Road Scheme – This scheme provides opportunities to forest owners to improve access to Forests. Forest roads provide additional biodiversity opportunities in the forest by increasing open spaces and forest edge effect.

<https://www.agriculture.gov.ie/media/migration/forestry/grantandpremiumschemes/2012/Roadscheme070212.pdf>

Strengths	<ul style="list-style-type: none"> Increased light levels on the forest floor contribute to the development and enhancement of ground floor native plants. The interface between the forest edge and the forest road provides many opportunities for biodiversity enhancement throughout the rotation.
Constraints	<ul style="list-style-type: none"> The main focus of the scheme is for forest owners to improve access to their forest. Therefore this is only eligible for clients within the forestry sector.
Opportunities	<ul style="list-style-type: none"> This scheme provides opportunities to forest owners to improve access to forests. Facilitate forest management and the harvesting of timber Facilitating thinning which can open up the canopy
Threats	<ul style="list-style-type: none"> Building over species habitats. Poor construction work, short cuts are made to save money and perhaps the road is not constructed to its full potential. This may lead to further costs in the near future with regards repairing the lanes/roads.

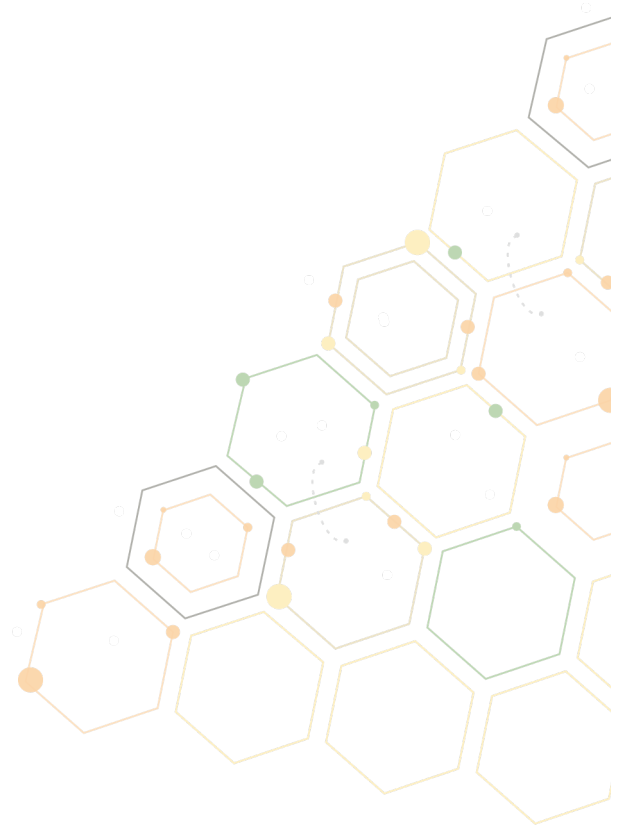


Businesses development for RE entrepreneurship

Renewable Electricity Supports – The Renewable Energy Feed in Tariff (REFIT) schemes/supports are funded by the Public Service Obligation (PSO) which is paid for by all electricity consumers. The REFIT schemes have been designed to incentivise the development of renewable electricity generation in order to ensure Ireland meets its goal of 40% of electricity coming from renewable sources by 2020.

<http://www.dcenr.gov.ie/energy/en-ie/Renewable-Energy/Pages/Refit-Schemes-Landing-Page.aspx>

S trengths	<ul style="list-style-type: none"> • Supports local communities • Creates jobs • Creating cleaner & more reliable future • Incentive
C onstraints	<ul style="list-style-type: none"> • The REFIT schemes have been designed to incentivise the development of renewable electricity generation
O pportunities	<ul style="list-style-type: none"> • Multiple RE Sources, CHP, Multiple RE Sources, Power, Wind, Onshore, Hydropower, Bioenergy, Biomass for power, Bioenergy, Biomass for heat. • This will lead to more work and employment in these areas of instalment. • If invested you are helping towards cutting emissions and also making a small profit from the incentive.
T hreats	<ul style="list-style-type: none"> • The REFIT scheme will only last for a period of time. • If the client invests in technologies that are eligible for the REFIT the next issue is planning. • High investment cost to install such technologies as wind turbines.



Businesses development for RE entrepreneurship

Established Businesses in RE sector

Biofuels Obligation Supports - To meet our EU obligations the Government has introduced a biofuel obligation scheme to ensure that a proportion of the transport fuel used in the state consists of environmentally sustainable biofuels.

<http://www.dcenr.gov.ie/energy/en-ie/Renewable-Energy/Pages/Biofuels.aspx>

Strengths	<ul style="list-style-type: none"> • Focuses on reducing emissions in one of the most polluting sectors (transport). • Strict guidelines implemented in relation to the GHG emissions reduction that the biofuel must achieve to avoid suppliers taking advantage of low grade, cheap biofuels. • Policy requires improved management of waste and residues in Ireland which aids in the fraction of waste sent to landfill.
Constraints	<ul style="list-style-type: none"> • As targets increase under the obligation it may become increasingly difficult for suppliers to meet the obligation. • Due to high costs associated with biofuel production and lack of bio-refineries in Ireland hence a need for imported biofuels. • Once introduced led almost immediately to an increase in imported fuel and a squeezing out of local production.
Opportunities	<ul style="list-style-type: none"> • The increasing targets may actually promote the production of biofuel throughout Ireland. • Additional research and development will be required regarding the production and economic viability of second and third generation biofuels.
Threats	<ul style="list-style-type: none"> • Potential to set targets that are too high for the current Irish biofuel market to meet. • Potential public opposition, 'food vs fuel' debate and associated increased food prices.

Businesses development for RE entrepreneurship

Established Businesses in RE sector

Carbon Tax – In 2010 a carbon tax was introduced in Ireland. The carbon tax applies to kerosene, marked gas oil, liquid petroleum gas, fuel oil, natural gas and solid fuels.

The rate of tax, with effect from 1 May 2013, is based on a charge of €10 per tonne of CO₂ emitted by the fuel concerned. The rates will increase to €20 per tonne with effect from 1 May 2014.

http://www.citizensinformation.ie/en/money_and_tax/tax/motor_carbon_other_taxes/carbon_tax.html

<http://www.revenue.ie/en/tax/excise/solid-fuel-carbon-tax/index.html>

Strengths	<ul style="list-style-type: none"> Environmentally and economically, the new taxes have delivered results. It will continue to benefit economically and environmentally if it is kept in place
Constraints	<ul style="list-style-type: none"> The carbon tax applies to kerosene, marked gas oil, liquid petroleum gas, fuel oil, natural gas and solid fuels.
Opportunities	<ul style="list-style-type: none"> The revenue of the carbon tax would perhaps be best used for policies that deliver increases in net wages without adversely effecting labour costs and, thus, competitiveness. Use the money to promote RE, fund other RE policy and implement changes in energy use in the public sector.
Threats	<ul style="list-style-type: none"> The only threat is the potential increase on price per tonne of CO₂.

Established Businesses in RE sector

Green Procurement opportunities - Green tenders 2012 put in place a national green public procurement policy.

<http://www.greenpublicprocurement.ie/about/what-is-gpp/>

Strengths	<ul style="list-style-type: none"> A process whereby public authorities seek to procure goods, services and works with a reduced environmental impact throughout their life cycle when compared to goods, services and works with the same primary function that would otherwise be procured
Constraints	<p>However the Green Procurement only covers a variety of sectors:</p> <ul style="list-style-type: none"> Road transport vehicles and services Energy Construction Food and Catering services Cleaning products and Services Textiles and Uniforms Office IT Equipment Paper
Opportunities	<ul style="list-style-type: none"> This procurement can be a major driver for innovation, providing industry with real incentives for developing green products and services.
Threats	<ul style="list-style-type: none"> The perception that GPP <ul style="list-style-type: none"> costs more, annual budget constraints, lack of support for GPP from senior management, Risk of legal challenges, complexity of verification, the effect of central procurement frameworks, and lack of resources.

Established Businesses in RE sector

Micro generation - Tax based incentive for the development of renewable energy technologies

www.electricireland.ie/residential/help/micro-generation/electric-ireland-micro-generation-pilot-scheme

Strengths	<ul style="list-style-type: none"> • Money invested in the development of renewable energy • Helping to cut down on emissions and helping towards meeting our targets
Constraints	<ul style="list-style-type: none"> • Micro generation scheme is mainly focusing on the following technologies: <ul style="list-style-type: none"> - Wind turbine - Photovoltaic panels (also known as solar electric panels) - Micro-hydro (scaled down version of hydro-electricity station) - Micro-CHP (fuelled by biofuels or fossil fuels)
Opportunities	<ul style="list-style-type: none"> • To carry out addition research and development on renewable energy technologies. • To try and promote the use of these technologies and make them become more efficient.
Threats	<ul style="list-style-type: none"> • Important that the money is invested in a new project. • No point investing money in a project that already has being invested and failed.

Established Businesses in RE sector

SEAI's Energy Advice and Mentoring programme - SEAI provides free, one-to-one advice and mentoring to private-sector SMEs from one of our specialist energy advisors. These advisors help and motivate SMEs to assess their own energy use, to identify opportunities for savings and to take action to realise these savings.

http://www.seai.ie/Your_Business/

Strengths	<p>Providing one-to-one advice and mentoring with a specialist energy advisor at no cost.</p> <ul style="list-style-type: none"> • SEAI helps ensure that your organization reaches its goals with a minimum of effort.
Constraints	<ul style="list-style-type: none"> • Main objective of this programme is to promote business of all sizes become energy efficient.
Opportunities	<ul style="list-style-type: none"> • Start-up business to get the advice that they need. • Save money • Becoming more efficient • The extra money that they save through energy efficiency they can reinvest in the company.
Threats	<ul style="list-style-type: none"> • Companies using the programme and wasting the mentor's time. • Perhaps getting all the advice and not using it.

Scotland

Emerging micro-enterprises

SME's trying to enter the RE market

Community Energy Scotland (CES) – CES is a Scottish registered charity that provides support throughout the process of community renewable energy developments. The charity is member based and facilitates knowledge transfer through partners.

<http://www.communityenergyscotland.org.uk/index.asp>

Strengths	<ul style="list-style-type: none"> This charity helps protect the needs of community RE projects at a policy level. It offers independent support which is essential for people joining a developing industry.
Constraints	<ul style="list-style-type: none"> Main objective is pending towards RE Projects.
Opportunities	<ul style="list-style-type: none"> Opportunity for independent business to join a developing industry. Assists new entrants to the area through advice about technologies and how to go about getting funding. As a knock on effect it creates employment opportunities.
Threats	<ul style="list-style-type: none"> None apparent.

Emerging micro-enterprises and SME's trying to enter the RE market (to a lesser extent)

Businesses development for RE entrepreneurship & Established Businesses in RE Sector

UK Green Investment Bank plc (GIB) – created by the UK Government mainly to attract private sector investment in areas relating to environmental preservation.

<https://www.gov.uk/government/organisations/uk-green-investment-bank> and
<http://www.greeninvestmentbank.com/about-us/>

Strengths	<ul style="list-style-type: none"> Investments help fund the creation of new, modern, green infrastructure across the UK. Backing large projects with a capital expenditure of more than £1bn and small projects of £2m.
Constraints	<ul style="list-style-type: none"> GIB considers there are a number of additional sectors where it could make an important impact if it was not so constrained (for example in the area of low carbon transport)
Opportunities	<ul style="list-style-type: none"> GIB's implementing a new Special Share to ensure protection for GIB's green purposes following its move into the private sector. The special share will provide a lock over green purposes by an independent third party, in place of the current protections provided through the 2013 Enterprise and Regulatory Reform Act.
Threats	<ul style="list-style-type: none"> The distinction is that in such sectors, it is the market concerned that is subject to regulation, rather than specific companies who choose to operate within the regulatory constraints that apply to the sector.

Emerging micro-enterprises and SME's trying to enter the RE market (to a lesser extent)

Businesses development for RE entrepreneurship & Established Businesses in RE Sector

The Scottish Investment Bank – an investment fund that is designed to drive the growth of renewable energy, Building Scotland's international competitiveness through innovation, internationalisation, investment and inclusive growth

Strengths	<ul style="list-style-type: none"> Invested £66.5 million - more than double on the previous year by helping over 400 companies prepare for investment.
Constraints	<ul style="list-style-type: none"> Legal constraints as funding supports companies and needs to comply with EU state aid rules, which means that there is a legal cap on the funding that can be provide.
Opportunities	<ul style="list-style-type: none"> Welcomed nine new partners, seven of which were from outside of Scotland. Produced economic benefits for Scotland, their portfolio companies contribute over 3,500 jobs to the Scottish economy.
Threats	<ul style="list-style-type: none"> A risk of discontinued support if companies do not comply with EU and Scottish public procurement rules.

Emerging micro-enterprises and SME's trying to enter the RE market (to a lesser extent)

Businesses development for RE entrepreneurship & Established Businesses in RE Sector

Marine Energy Parks (MEPs) are a UK government initiative that brings together local and national government, Local Enterprise Partnerships, technology developers, academia and industry for the development of the marine energy sector, with the aim of creating a supportive business environment for accelerating the commercialisation of wave and tidal technology. MEPs should help provide an arena where SMEs can provide their services to this growing sector.

<http://www.hi-energy.org.uk/what-does-marine.htm>

Strengths	<ul style="list-style-type: none"> A platform from which to promote the region, the leading role it has world-wide in the development of the marine energy sector, and for further positioning of Scotland's continuing commitment to the leading of the commercialisation of the industry.
Constraints	<ul style="list-style-type: none"> Only promoting three types of renewable energy: <ul style="list-style-type: none"> Off Shore wind Wave Tidal Limited SMEs will be able to offer services for this initiative. Is a soft support scheme and may not offer enough incentives
Opportunities	<ul style="list-style-type: none"> Opportunity to develop new tidal and wave technologies through local enterprise partnerships. Potential to commercialise this sector and reduce the reliance on fossil fuels.
Threats	<ul style="list-style-type: none"> Investment in this technology cannot guarantee success in the market, due to the dangers of industry immaturity.

Emerging micro-enterprises

SME's trying to enter the RE market

Feed-in tariff - If an application is successful a set amount for each unit (kWh) of electricity generated is paid. The rates vary depending on:

- the size of system
- technology type
- when the system was installed
- and for house hold project how energy efficient the house is

The feed-in tariff is the main support mechanism for renewable projects under 5 MW in size.

<https://www.gov.uk/feed-in-tariffs/overview>

S trengths	<ul style="list-style-type: none"> • Different banding for different renewables. • The tariff also guarantees income for a set period, for most renewables 20 years (for solar PV 25 years for systems installed before 1st August 2012 and micro-CHP 10 years).
C onstraints	<ul style="list-style-type: none"> • Only for schemes up to 5 MW, beyond this the competitive CfD mechanism must be used.
O pportunities	<ul style="list-style-type: none"> • In the past it promoted a very high level of entrepreneurship, particularly in the solar PV industry. • Even at its reduced level the tariff still makes renewables more profitable than they would otherwise be, making renewables more attractive than with no subsidy..
T hreats	<ul style="list-style-type: none"> • Large reductions in the feed-in tariff has reduced deployment, this has in turn led to many SMEs (particularly in the solar industry) going out of business. • The sudden huge changes were not part of the original scheme so this will undoubtedly

Emerging micro-enterprises

SME's trying to enter the RE market

The Local Energy Challenge Fund - was launched in August 2014 to demonstrate the value and benefit of local low carbon energy economies. The fund is currently closed to applications.

<http://www.localenergyscotland.org/funding-resources/funding/local-energy-challenge-fund/>

S trengths	<ul style="list-style-type: none"> • To demonstrate the value and benefit of local low carbon energy economies
C onstraints	<ul style="list-style-type: none"> • The main focus of this fund is on large-scale low carbon demonstrator projects which show a local energy economy approach linking energy generation to energy use.
O pportunities	<ul style="list-style-type: none"> • Projects looking to develop innovative energy distribution and storage solutions that have an overall aim of creating more local value and benefit.
T hreats	<ul style="list-style-type: none"> • None apparent.

Emerging micro-enterprises

SME's trying to enter the RE market

Enterprise Investment Scheme (EIS) - was introduced in 1994 to encourage equity investment in small unlisted enterprises carrying on a qualifying trade in the UK.

<http://communitysharesscotland.org.uk/resources/handbook/enterprise-investment-scheme>

S trengths	<ul style="list-style-type: none"> Eligible enterprises can use the Scheme to attract up to £5m of equity investment in any 12 month period. It provides tax relief for individuals (not corporate bodies) and is worth 30% of the cost of the shares, to be set against the individual's income tax liability for the tax year in which the investment is made.
C onstraints	<ul style="list-style-type: none"> EIS is primarily targeted at private companies limited by shares
O pportunities	<ul style="list-style-type: none"> £5 million of equality investment available. The maximum amount of individual tax relief that can be claimed in any one tax year is currently £300,000.
T hreats	<ul style="list-style-type: none"> Enterprises engaged in non-trading activities, such as investment deals or property rental, are not eligible for EIS

Business Development for RE Entrepreneurship

SMART Scotland- Provides grants to SMEs to help undertake technical feasibility studies and research and development (R&D) projects that have a commercial endpoint.

<http://www.scottish-enterprise.com/services/develop-new-products-and-services/smart-scotland/overview>

S trengths	<ul style="list-style-type: none"> Offer assistance regarding the protection of Intellectual Property for applicant. Grants are provided on a discretionary basis. Enables increased activity and or investment in research and development and innovation.
C onstraints	<ul style="list-style-type: none"> Charities, companies limited by guarantee awarded charitable status for tax purposes, trade/ business associations and re-search and technology organisations are not eligible for sup-port. The fund is not exclusively for renewables so there is significant competition for the funding. Single company sup-port scheme, therefore joint ventures are not supported.
O pportunities	<ul style="list-style-type: none"> SMART Awards – winners presented at an awards ceremony designed to promote them to the business and financial investment communities.
T hreats	<ul style="list-style-type: none"> Competition from similar organisations.

Businesses development for RE entrepreneurship

Renewable Heat Incentive (RHI) is a UK Government scheme set up to encourage uptake of renewable heat technologies amongst householders, communities and businesses through financial incentives.

<https://www.ofgem.gov.uk/environmental-programmes/non-domestic-renewable-heat-incentive-rhi/about-non-domestic-rhi/northern-ireland-renewable-heat-incentive>

Strengths	<ul style="list-style-type: none"> Department of Enterprise, Trade and Investment set the policy and tariff rates, with payments being made for 20 years.
Constraints	<ul style="list-style-type: none"> Eligible for only renewable heat technologies <ul style="list-style-type: none"> -Biomass boilers -Solar thermal - Ground to water heat pumps - Air to water heat pumps
Opportunities	<ul style="list-style-type: none"> It is the first of its kind in the world and the UK Government expects the RHI to contribute towards the 2020 ambition of 12% of heating coming from renewable sources. Great new employment with the RE sector.
Threats	<ul style="list-style-type: none"> One major impact this has is that clients may abuse the system. This system has now closed due to the fact of financial reason.

Businesses development for RE entrepreneurship

Waters funding – it's a scheme that provides funding for companies to test and develop their technologies in Scottish waters

<http://www.hie.co.uk/about-hie/news-and-media/archive/latest-round-of-waters-funding-announced.html#sthash.8KO4XHcj.dpbs>

Strengths	<ul style="list-style-type: none"> Awards have been made to the marine energy sector to support total project costs of £14.8 million for the development of new wave & tidal prototypes.
Constraints	<ul style="list-style-type: none"> The one-off cost of completing the legal and financial work of a transaction into public benefit corporation would be substantial, running into millions of pounds.
Opportunities	<ul style="list-style-type: none"> Funds were made to even further develop testing of new wave and tidal energy prototypes in the seas around Scotland. WATERS fund in collaboration with Highlands & Islands Enterprise are to contribute in the fund for launching a tremendous potential world's first grid-connected semi-submerged turbine in Scottish waters.
Threats	<ul style="list-style-type: none"> There is a risk that Government, interest groups or the parliamentary process introduces requirements or constraints over the structure or the nature of members or Directors which could fundamentally affect the operations and stability of the entity over the long term.

Businesses development for RE entrepreneurship

Established businesses in RE sector

Scottish innovative Foundation Technologies fund SIFT– the objective of this fund is the help drive down the cost of energy and develop the offshore wind sector in Scotland through innovation in deep-water offshore wind foundation design and installation.

<http://www.scottish-enterprise.com/services/develop-new-products-and-services/sift/overview>

S trengths	<ul style="list-style-type: none"> SIFT can contribute grant funding towards capital and operational costs associated with research, development and demonstration activities in eligible projects. Encourage manufacture of next generation offshore wind foundation prototypes in Scotland.
C onstraints	<ul style="list-style-type: none"> In case of a subsequent commercial use of demonstration or pilot projects, any revenue generated from such use must be deducted from the eligible costs.
O pportunities	<ul style="list-style-type: none"> SIFT has up to £15 million available to help fund projects which deploy their prototype foundations at depths of over 30 metres by July 2019. With a condition of having a secured testing site (which does not necessarily have to be in Scottish waters) or be in advanced negotiation with site developers.
T hreats	<ul style="list-style-type: none"> Possibility of a lack of progress for successful projects and technologies towards commercial exploitation after they receive their funds.

Businesses development for RE entrepreneurship

Established businesses in RE sector

Advanced Biofuels Demonstration Competition - The Department for Transport launched the £25 million Advanced Biofuels Demonstration Competition to support the development of a domestic advanced biofuel industry in December 2014.

<https://www.gov.uk/government/speeches/advanced-biofuels-demonstration-competition-grant-award>

S trengths	<ul style="list-style-type: none"> 3 projects were selected for investment totalling £25 million over 3 years. Supports the work the Department for Transport is doing to set the UK's long term strategy for biofuels in order to meet EU targets, which includes considering a sub target for advanced biofuels.
C onstraints	<ul style="list-style-type: none"> No long available The 3 companies that won the competition were: <ul style="list-style-type: none"> - Celtic Renewables Limited £10,925,000 - Advanced Plasma Power Limited £10,958,194 - Nova Pangaea Limited £ 3,000,000
O pportunities	<ul style="list-style-type: none"> The projects will use the capital grants awarded, supported by significant private sector investment, to construct 3 demonstration-scale advanced biofuel plants in: <ul style="list-style-type: none"> - Swindon - Tees Valley - Grangemouth.
T hreats	<ul style="list-style-type: none"> No longer available as the competition is over

Emerging micro-enterprises

SME's trying to enter the RE market

Established Businesses in RE Sector

Community And Renewable Energy Scheme (CARES) – The scheme is aimed at renewable projects that offer significant community engagement and benefit, providing loans towards the high risk, pre-planning consent stages of renewable energy projects.

Strengths	<ul style="list-style-type: none"> Offering loans for the initial stages of investing in renewables technologies and promoting shared ownership will encourage more members of the public to get involved in the RE sector. Also with support and advice available people will be less apprehensive.
Constraints	<ul style="list-style-type: none"> Offering loans for the initial stages of investing in renewables technologies and promoting shared ownership will encourage more members of the public to get involved in the RE sector. Also with support and advice available people will be less apprehensive.
Opportunities	<ul style="list-style-type: none"> Offering loans for the initial stages of investing in renewables technologies and promoting shared ownership will encourage more members of the public to get involved in the RE sector. Also with support and advice available people will be less apprehensive.
Threats	<ul style="list-style-type: none"> With offers of loans and no security required the scheme could be taken advantage of. Collaboration with new technology developers who are essentially using schemes to fund test devices has in the past led to conflicts of interest.

Established Businesses in RE Sector

Scotland's International Technology of Renewable Energy Zone (ITREZ) – The project aim is to bring business and academia together by stimulating co-location, innovation, and investment in Scotland's offshore renewable energy sector.

<http://www.scottish-enterprise.com/services/develop-new-products-and-services/itrez/overview>

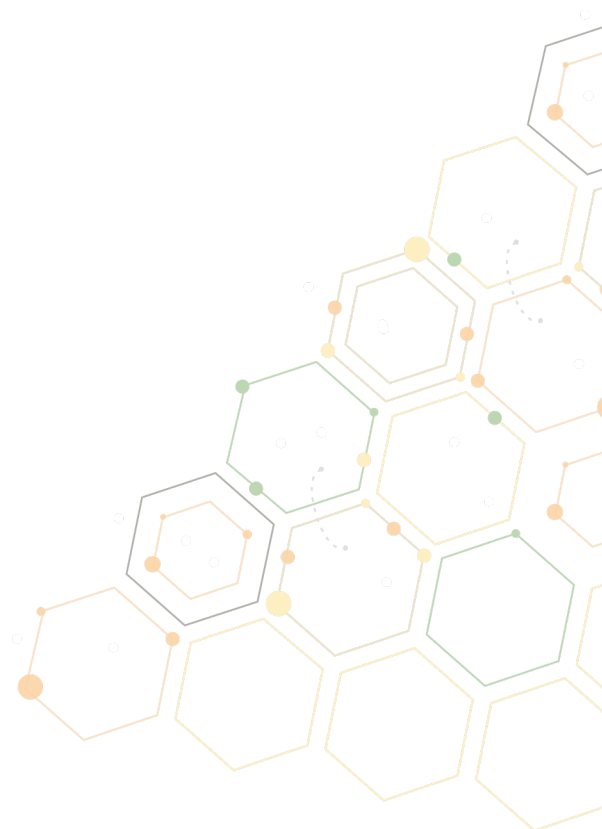
Strengths	<ul style="list-style-type: none"> Collaborating a large number of experts in the RE sector will increase the chances of successful projects and offshore technologies. Being an established 'Zone' will draw in SMEs and further develop the industry.
Constraints	<ul style="list-style-type: none"> This is solely focused on offshore technology and even with such a large collaboration and investment the technologies can only be developed as far as surrounding environments will allow for, e.g. coastal conditions and potentially planning permissions.
Opportunities	<ul style="list-style-type: none"> Opportunity to explore the full potential of offshore renewables and drive the technological progress whilst developing business within and close to the ITERZ
Threats	<ul style="list-style-type: none"> Encouraging investment in Scotland's offshore renewable energy sector doesn't mean there will be huge success. There are still depending factors to be considered when developing projects and technologies as mentioned in constraints.

Established Businesses in the Renewable Energy Sector

Renewable Energy Investment Fund (Scotland)-The investment fund is designed to drive the growth of renewable energy in Scotland through supporting businesses and community organisations to develop their own local renewable projects.

<http://www.scottish-enterprise.com/services/attract-investment/renewable-energy-investment-fund/overview>

S trengths	<ul style="list-style-type: none"> Designed to support the uptake of renewables and the overall renewable energy sector in Scotland. (Allocated to renewable sector alone). No minimum or maximum deal values.
C onstraints	<ul style="list-style-type: none"> Scheme closes in March 2016, there does not appear to be a replacement. Mainly focused on marine, wave and tidal, district heating and community renewable projects, although not restrictive. (Could also be a strength depending on the applicant as the fund is tailored to renewables, eliminating competition from further fields) Research and Development projects are not eligible for this funding mechanism.
O pportunities	<ul style="list-style-type: none"> Promotes community projects, success may be recognised and reduce the stigma attached to certain types of renewable technologies which are opposed by community groups. Hence the opportunity for wider public acceptance and involvement.
T hreats	<ul style="list-style-type: none"> None apparent.



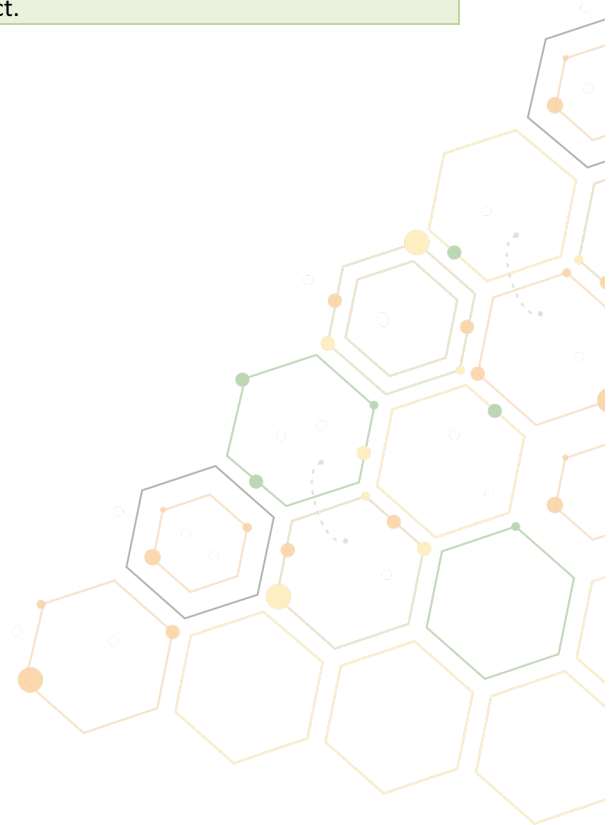
Established Businesses in the Renewable Energy Sector

A Contract for Difference (CFD) - is a private law contract between a low carbon electricity generator and the Low Carbon Contracts Company (LCCC), a government-owned company. A generator party to a CFD is paid the difference between the 'strike price' – a price for electricity reflecting the cost of investing in a particular low carbon technology – and the 'reference price' – a measure of the average market price for electricity in the GB market.

To win a contract for difference renewable schemes have to bid against each other.

<https://www.gov.uk/government/collections/electricity-market-reform-contracts-for-difference>

Strengths	<ul style="list-style-type: none"> Once the contract is secured the low carbon project is guaranteed a specific subsidy for 15 years (35 years in the case of nuclear). The bidding process is meant to provide value for money for funders of the subsidy (i.e. bill payers).
Constraints	<ul style="list-style-type: none"> The bidding process means there is no guaranteed subsidy for projects so before process like securing grid connection are undertaken CfD will need to be secured by the developer. This could foreseeably lead to bottlenecks in the development process. It makes no energy security judgements, purely based on the best value per MWh.
Opportunities	<ul style="list-style-type: none"> Different renewables have a different level of subsidy, which helps more expensive renewables to be cost competitive. It also should encourage the most cost effective schemes for each renewable.
Threats	<ul style="list-style-type: none"> As the process is competitive there is no guarantee of funding, this uncertainty. Having to bid means projects need to be part of the way through the development (e.g. planning but not construction) process before they are likely to be given a CfD. This means projects have an upfront cost at risk whilst not being guaranteed the subsidy which is often vital for the project.

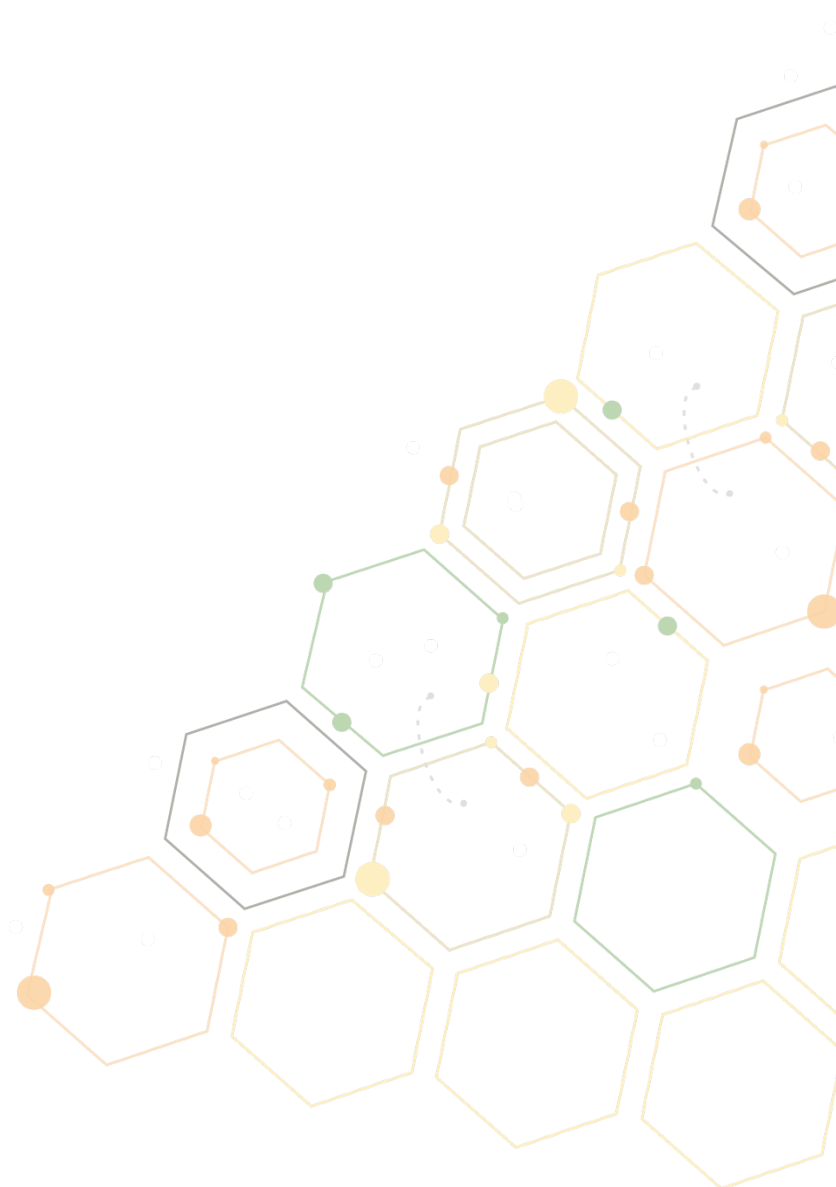




SCOT REPORT

3.1.1 –Summary report of the relevant policy initiatives and schemes in each of the partner regions

Based on the above SCOT analysis (Strengths, Constraints, Opportunity, and Threat) here follows a review of each partner region clearly identifying the policy barriers and facilitators for RE enterprises.



Finland

Finland is among the leading countries in the use of biomass in energy production: the share of bioenergy is 20% of all primary energy consumption and, therefore, the second highest in the EU. Substantial forest resources and availability of biomass crops in Finland help to explain the high share of biomass in Finnish energy production. Biomass is widely used as a fuel in electricity production, CHP plants and district heating, often mixed with other fuels especially peat. Finland is among the world leaders in the use of CHP

Electricity from renewable energy sources is mainly promoted through a premium tariff. The feed-in tariff scheme for electricity has been designed to increase the use of renewable energy sources in electricity production

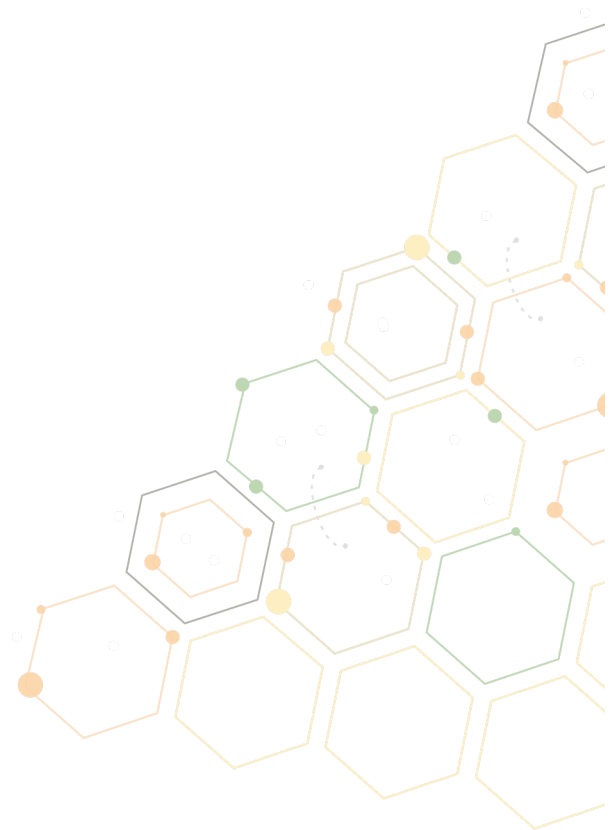
Finland developed a programme called BEST (Sustainable Bioenergy Solutions for tomorrow). The aim of this programme is for the professionals within the bioenergy field to answer the critical research and development needs of tomorrow.

On the other hand funding for the Finnish Growth entrepreneurship - Finnish Industry Investment Ltd has being another successful contribution towards helping local businesses. This is a government-owned investment company. They promote Finnish business, employment and economic growth through venture capital and private equity investments.

The following policies may be used or adapted and developed within other partner regions:

- Feed-in- Tariff
- BEST (Sustainable Bioenergy Solutions for tomorrow)

More information can be found on these policies in 3.1.2 '**Showcase examples of best practice policy initiatives'**



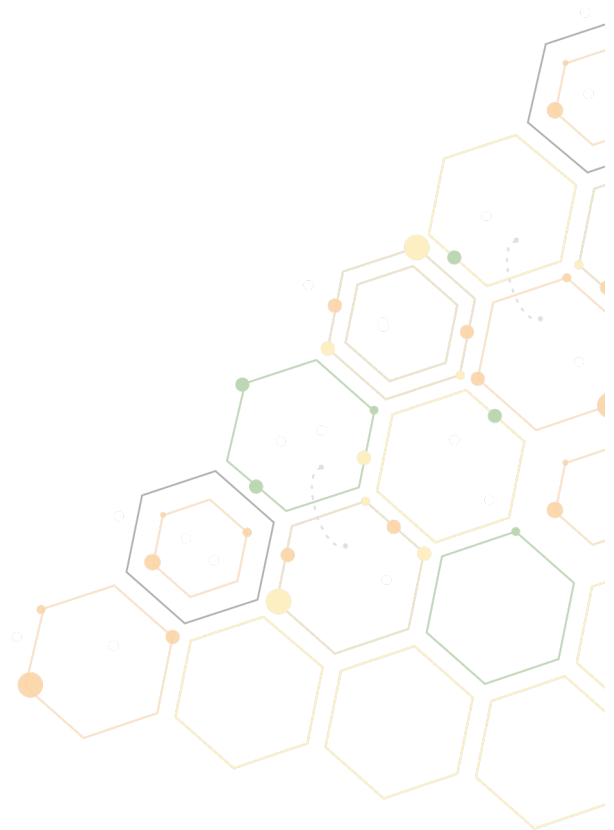
Iceland

Iceland is a highly volcanic island with 26 high temperature geothermal fields, and over 250 low temperature areas. In total over 600 natural hot springs have been found in Iceland. Iceland today generates 100% of its electricity with renewables: 75% of that from large hydro, and 25% from geothermal. Equally significant, Iceland provides 87% of its demand for hot water and heat with geothermal energy, primarily through an extensive district heating system.

Geothermal energy is very popular within the country. With regards support in the geothermal area Iceland created a platform called 'Iceland Geothermal'. Iceland Geothermal is a non-profit organisation that was established in February 2013. This is where you can access all general information about geothermal energy in Iceland and leads you to the right coordinator, if you are building up infrastructure or business in relation to the resource of geothermal.

Iceland created an Energy Fund which will provide funding for specific projects in the field of efficient energy use, including for education and informative projects. The fund also provides funding for projects that promote the use of domestic energy instead of fossil fuels and strengthen international cooperation in such projects.

With Iceland's main focus towards geothermal, it would be difficult to for their policy initiatives to be used in other regions across Europe.



Northern Ireland

Northern Ireland's new energy strategy sets a target of 40% of electricity to come from alternative energy sources by 2020. The strategy aims to reduce reliance on fuels such as coal, gas and oil. Less than 10% of NI's electricity is currently generated from alternative energy, mainly land-based wind farms. Energy policy is devolved to Northern Ireland, with the Department of Enterprise, Trade and Investment (DETI) taking lead responsibility. This has changed recently and a new department, the Department for The Economy has taken over responsibility for Energy Policy. See <https://www.economy-ni.gov.uk/>

In Northern Ireland there were two main incentives which help promote the renewable energy industry. The first incentive was the Renewable Heat Incentive (RHI). This was a UK Government scheme set up to encourage the uptake of renewable heat technologies amongst householders, communities and businesses through financial incentives. This was a very popular incentive amongst the biogas industry and promoted the usage of biomass boilers.

However this incentive no longer exists as it was cut on the 29th February 2016.

The second successful incentive was the Renewable Obligation Certificate (ROCs). This is the main support mechanism for encouraging increased renewable electricity generation in Northern Ireland. This incentive is still currently active but however is due to close in March 2017.

However in Northern Ireland there have being other successful schemes which have contributed towards the success of the renewable energy in Northern Ireland. Invest NI have helped towards this success. Invest NI is the regional business development agency; Invest NI's role is to grow the local economy. They do this by helping new and existing businesses to compete internationally, and by attracting new investment to Northern Ireland.

Invest NI are part of the Department for the Economy and provide strong government support for business by effectively delivering the Government's economic development strategies.

The following policies may be used or adapted and developed within other partner regions:

- Renewable Heat Incentive
- Renewable Obligation Certificate

More information can be found on these policies in 3.1.2 '**Showcase examples of best practice policy initiatives'**

Norway

Norway produces about 56% of its energy requirements, including energy for transport, from renewable energy sources. The power market, however, is dominated by hydroelectric power. Over 99% of the electricity production in mainland Norway is covered by hydropower plants. The Electricity in Norway is also generated from solid biofuels/waste, wind, solar and geothermal installations.

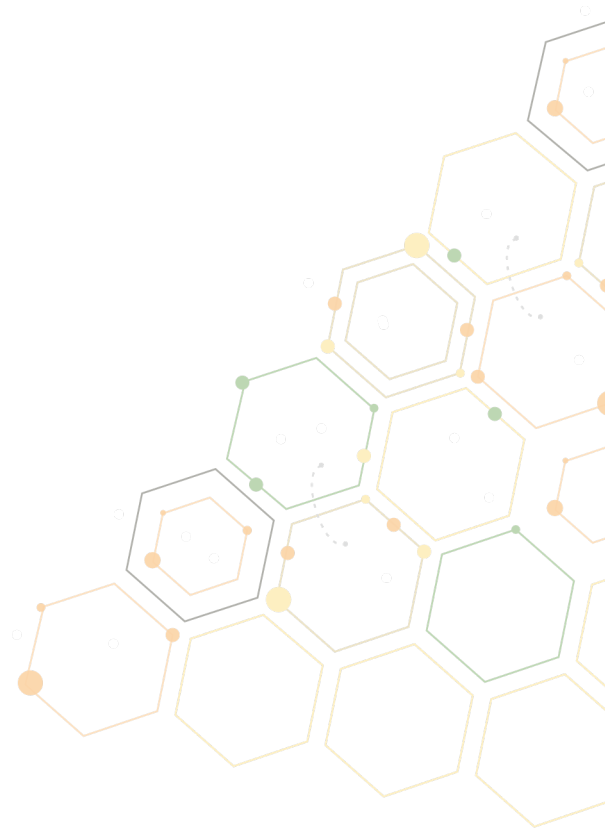
Norway have achieved this success through there Centres for Environment / friendly Energy Research - The objective of this is to establish time-limited research centres which conduct concentrated, focused and long-term research of high international calibre in order to solve specific challenges in the field.

Norway are already aiming towards making a brighter future by creating a .Green Battery Strategy- This will involve using its hydropower plants to provide instant extra electricity if production from wind and solar power sources in other countries fade. Without building any new power stations, engineers believe they could use the existing network to instantly boost European supplies and avoid other countries having to switch on fossil fuel plants to make up shortfalls.

The following polices may be used or adapted and developed within other partner regions:

- Green Battery Strategy
- Centres for Environment / friendly Energy Research

More information can be found on these policies in 3.1.2 '**Showcase examples of best practice policy initiatives'**



Republic Of Ireland

In Ireland, electricity from renewable sources is mainly promoted through a feed-in-tariff scheme (REFIT). Renewable energy sources for heating purposes are promoted through a grant and a tax return. The incentive for renewable energy use in transport is a quota system

The REFIT scheme was very popular within Ireland. The guaranteed support price under the government's Renewable Energy Feed in Tariff (REFIT) will range from 15 cent per kilowatt hour to 8.5 cent per kilowatt hour depending on the technology deployed. The technologies supported include Anaerobic Digestion Combined Heat and Power, Biomass Combined Heat and Power and Biomass Combustion, including provision for 30% co-firing of biomass in the three peat powered stations.

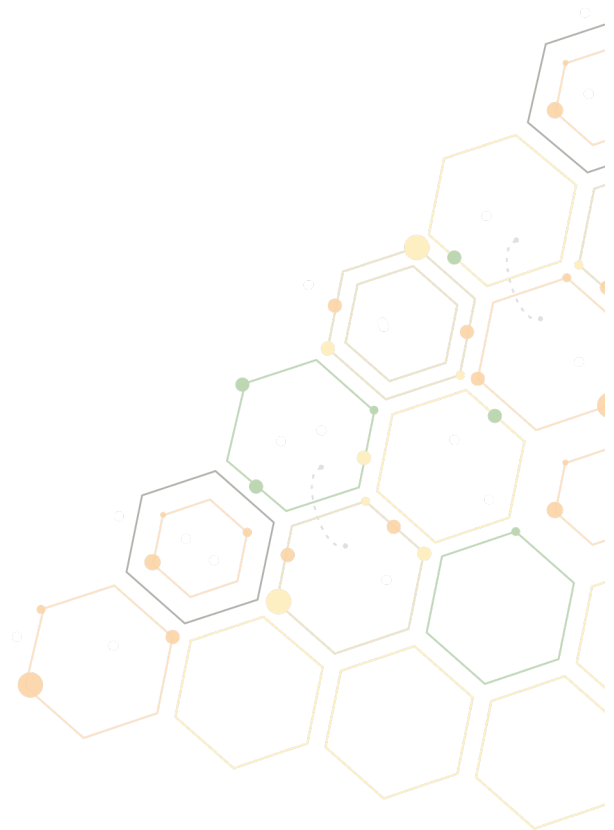
The republic of Ireland developed SEAI's Energy Advice and Mentoring programme – which will provide free, one-to-one advice and mentoring to private-sector SMEs from one of their specialist energy advisors. These advisors help and motivate SMEs to assess their own energy use, to identify opportunities for savings and to take action to realise these savings.

Another popular initiative in the Republic of Ireland was the Bioenergy Scheme – The Bioenergy Scheme provides establishment grants to farmers to grow willow for the production of biomass suitable for use as a renewable source of energy. The Scheme aims to increase the production of willow in Ireland and to encourage alternative land use options. It is open to applicants who are landowners or have leasehold title to the land and have responsibility for farming the land on which it is proposed to carry out the plantation.

The following policies may be used or adapted and developed within other partner regions:

- REFIT – Feed in tariff

More information can be found on these policies in 3.1.2 '**Showcase examples of best practice policy initiatives**'



Scotland

Scotland is well regarded for its successful renewable energy strategy. This is due to the fact that the Scottish Government is committed to promoting the increased use of renewable energy sources. This commitment recognises renewables' potential to support economic growth. Renewable energy has a central role to play in Scotland's transition to a low carbon economy - representing a safer, more secure and cost-effective means of electricity generation than new nuclear plants; reducing our dependence on carbon-intensive fuels; and offering significant economic opportunities.

The Community and Renewable Energy Scheme (CARES), was very popular throughout Scotland especially if it involved involving the local community. The scheme is aimed at renewable projects that offer significant community engagement and benefit, providing loans towards the high risk, pre-planning consent stages of renewable energy projects.

The scheme will offer loans for the initial stages of investing in renewables technologies and promoting shared ownership will encourage more members of the public to get involved in the RE sector. Also with support and advice available people will be less apprehensive.

Scotland developed a SMART programme which was very successful and appropriate in amongst the business. This programme will provide grants too Small to Medium Enterprises (SMEs) based in Scotland. The grant helps you undertake technical feasibility studies and research and development (R&D) projects that have a commercial endpoint.

The following policies may be used or adapted and developed within other partner regions:

- Community & renewable energy scheme
- SMART Scotland

More information can be found on these policies in 3.1.2 'Showcase examples of best practice policy initiatives'

Action Renewables would like to take this opportunity to thank everyone who has assisted and contributed towards Work Package 3 – Policy & Funding Mechanisms



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Project Partners

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



About GREBE

GREBE is a €1.77m, 3-year (2015-2018) transnational project to support the renewable energy sector. It is co-funded by the EU's Northern Periphery & Arctic (NPA) Programme. 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.

