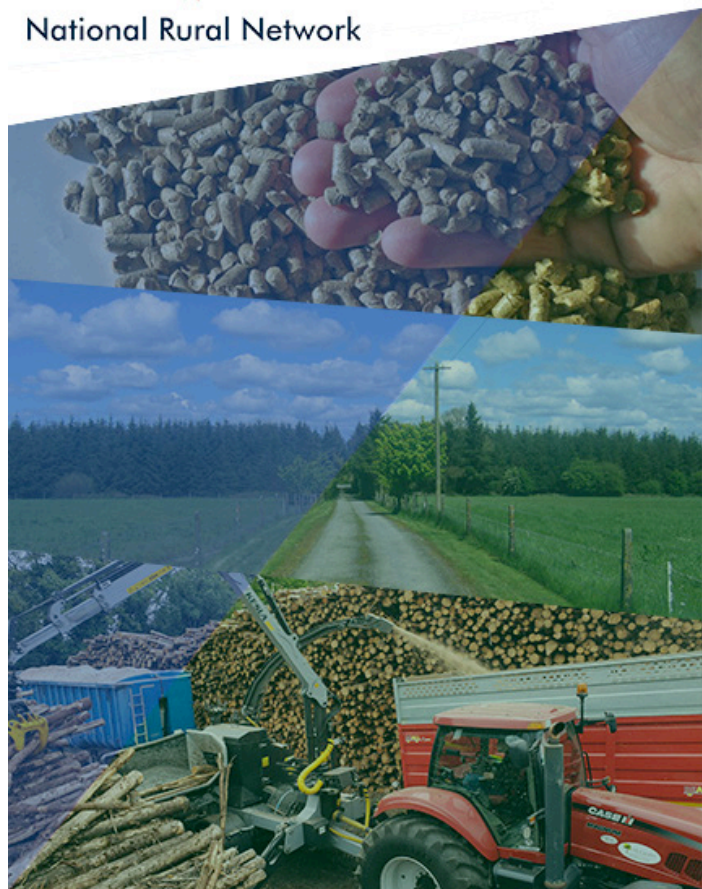


LEADER and the Bioeconomy

Examples of funded projects/initiatives



National Rural Network





The LEADER Programme



Rialtas na hÉireann
Government of Ireland



National Rural Network



Ireland's European Structural and
Investment Funds Programmes
2014-2020

Co-funded by the Irish Government
and the European Union



The European Agricultural Fund
for Rural Development:
Europe investing in rural areas

Booklet compiled by Dr Shane Conway and Dr Maura Farrell, Rural Studies Centre, NUI Galway, and Daniel Bennett, Irish Rural Link (IRL), on behalf of the National Rural Network (NRN), the Department of Rural and Community Development (DRCD) and the Department of Agriculture, Food and the Marine (DAFM).



LEADER Support for the Bioeconomy

This booklet, produced by the National Rural Network as part of Bioeconomy Ireland Week 2021, showcases 10 Bioeconomy projects/initiatives supported by the LEADER Programme 2014-2020 (extended to 2022) throughout Ireland. Bioeconomy Ireland Week is an annual week-long event held each October to highlight and raise awareness of Ireland's rapidly growing bioeconomy. The bioeconomy covers all sectors and systems that rely on biological resources (animals, plants, micro-organisms and derived biomass, including organic waste), their functions and principles. It includes and interlinks: land and marine ecosystems and the services they provide; all primary production sectors that use and produce biological resources (agriculture, forestry and fisheries); and all economic and industrial sectors that use biological resources and processes to produce food, feed, bio-based products, energy and services.

The LEADER Programme can play a key role in the development and enhancement of the Irish Bioeconomy through its locally-led, 'bottom-up' approach towards meeting the needs of rural communities and enterprises. Realising the true potential of the Bioeconomy in rural areas through innovative bio-based projects and initiatives, such as those showcased in this booklet, not only has the potential to assist Ireland's transition to a low-carbon economy, but could also greatly improve the quality of life for people who live and work in rural communities throughout the country through increased employment opportunities for example, as well as substantial environmental and socio-economic benefits. Indeed, this booklet's focus on the potential of rural based bioeconomy enterprises and initiatives supported by LEADER is now more important than ever as villages and towns throughout Ireland adapt, rebuild, redevelop and reenergise as part of their COVID-19 recovery response.

Straw Pelleting Facility



Ballycullane, Co. Kildare



Straw Chip Ltd is a family farm run operation based in Co. Kildare that has been engaged in the tillage sector for many years, supplying straw. They have developed a product that takes the dust particles and waste residues of straw to bind them together into a highly absorbent product called Straw Chip that can be used for bedding and feeding of animals. Straw Chip has mainly been used by the poultry, dairy, equine sectors as well as for small animals. The LEADER Programme supported Straw Chip Ltd to expand their processing capacity to develop pellet like 'straw cubes' that can be used in biomass heating appliances in domestic, commercial and industrial sectors.



Priority and Focus Area	Theme 3 - Rural Environment; Sub-theme: Renewable Energy
Local Action Group	Kildare LCDC
Implementing Partner	County Kildare LEADER Partnership
Promoter	Straw Chip Limited
LEADER Funding	€105,000.00

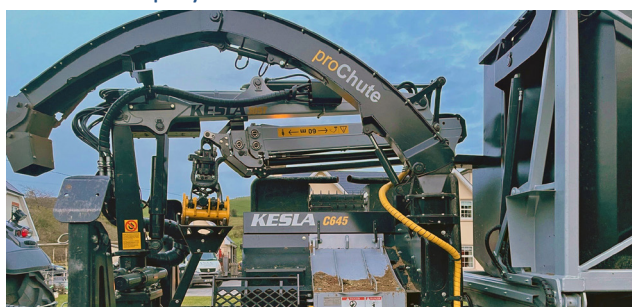
Conversion of Vegetation to Biomass Chip



Laragh, Co Monaghan



Tree Maintenance Services is a tree surgery company covering the Northeast of Ireland. The services they provide include tree felling, hedging, stump grinding, root investigation, hazard assessment, planting, wood chipping, forest thinning and consultancy. The LEADER Programme supported Tree Maintenance Services to purchase a professional grade high production biomass woodchipper with an attached chip container. This machine has enabled the business to perform various types of de-vegetation projects that they could not have previously taken on by converting local waste vegetation into saleable biomass woodchip. The increased production capacity and output made possible by this biomass chipper has also enabled the business to hire a new full-time employee.



Priority and Focus Area	Theme 1 - Economic Development, Enterprise Development & Job Creation; Sub-theme: Enterprise Development
Local Action Group	Monaghan LCDC
Implementing Partner	Monaghan Integrated Development CLG
Promoter	Shane Mulligan T/a Tree Maintenance Services
LEADER Funding	€ 107,000.00

Biomass Training



Cahir, Co. Tipperary



The LEADER Programme funded a four-day course provided by the Upper Austrian Energy Saving Association 'ÖO Energiesparverband', with design input from the Tipperary Energy Agency. The seminar took place in upper Austria, a region that contains one of the highest densities of small-scale automatic heating systems in the world. Attendees were provided with information and know-how on the technologies, economics and marketing of the entire biomass chain from experienced people working in this field through a dynamic mix of seminars, site visits and interactive exchanges. The seminars discussed biomass policies, boiler manufacture, combustion technologies and district heating, while the site visits on this trip provided attendees with technical information on district heating installations, pellet distribution chains and drying of wood chips.



Priority and Focus Area	Theme 3 - Rural Environment; Sub-theme: Renewable Energy
Local Action Group	Tipperary LCDC
Implementing Partner	North Tipperary Development Company
Promoter	Tipperary Energy Agency
LEADER Funding	€16,824.00

McMorrow Energy



Kilmore, Co. Leitrim



McMorrow Harvesting Ltd. specialise in timber harvesting and are also one of the leading timber hauliers in Ireland. The LEADER Programme supported the business to purchase a large commercial scale woodchipper to process their own timber and carry out commercial chipping to ensure continued supply of quality wood chip. This support has enabled the company to increase their work force and help secure existing jobs in the development of their wood chipping and processing end of the business.



Priority and Focus Area

Theme 1 - Economic Development, Enterprise Development & Job Creation;
Sub-theme: Enterprise Development

Local Action Group

Leitrim LCDC

Implementing Partner

Leitrim Development Company

Promoter

McMorrow Harvesting Limited

LEADER Funding

€200,000.00

Continuous Cover Forestry



Castlecomer, Co. Kilkenny



The LEADER Programme supported the purchase of a small scale, light weight tracked forestry machine to determine if a viable income could be generated from a Continuous Cover Forestry (CCF) plantation on sensitive upland soils of the Castlecomer Plateau, in Co. Kilkenny. This CCF has the potential to deliver an output of 28 tonnes per week of thinning material from the roadside plantations. This project also demonstrates a working model of how to mobilise increased timber output from small/mid-sized plantations and/or inaccessible sites. It also illustrated the machine's suitability in facilitating the conversion of small/mid-sized private forestry plantations from 'Clearfell Management' to CCF. Results from this project also have a wider application for hardwood plantations regionally.



Priority and Focus Area	Theme 3 – Rural Environment; Sub-theme: Renewable Energy
Local Action Group	Kilkenny LEADER Partnership
Implementing Partner	Kilkenny LEADER Partnership
Promoter	Eamon Mansfield
LEADER Funding	€15,221.25

Biomass Supply Chain Upgrade



Drumard, Co. Leitrim



McCauley Wood Fuels Ltd. is a biomass wood fuel business based in the North West of Ireland. The LEADER Programme has enabled the business to increase their processing capacity and flexibility through the purchase of a new mobile biomass woodchipper. The production of reliable and efficient wood chipping made possible by this new machine has allowed McCauley Wood Fuels to meet an ever-increasing demand for woodchip biomass, thus expanding their own market and client base, with knock on benefits to the broader local economy as it increases business to local hauliers who transport material for example. These developments have also boosted McCauley Wood Fuel's profile in the Irish forestry and biomass sector.



Priority and Focus Area	Theme 3 - Rural Environment Sub-theme: Renewable Energy
Local Action Group	Leitrim LCDC
Implementing Partner	Leitrim Development Company
Promoter	McCauley Wood Fuels Limited
LEADER Funding	€74,834.23

Coillte Sláintiúil



Kilnamartyra, Co. Cork



Údarás na
Gaeltachta



National Rural Network

Coillte Sláintiúil is a start-up enterprise based in the Muscraí Gaeltacht area, Co. Cork, providing a range of woodland conservation solutions, such as the containment of invasive species and diseases. Invasive species are a major threat to woodland biodiversity loss and the need to preserve Ireland's woodlands is both a local and national issue. The LEADER Programme assisted Coillte Sláintiúil to reach the next stage of their development by providing them with grant support to purchase new equipment. This has resulted in building Coillte Sláintiúil's reputation, networks and capacity to take on more complex conservation projects, providing important environmental needs in the woodland context. From a bioeconomy perspective, old timber cleared from sites can be used as firewood, for fencing or woodchip for agricultural or horticultural uses.



Priority and Focus Area	Theme 1 - Economic Development, Enterprise Development and Job Creation; Sub-theme: Enterprise Development
Local Action Group	Cork South LCDC
Implementing Partner	Údarás na Gaeltachta
Promoter	Coillte Sláintiúil
LEADER Funding	€20,000.00

Wood Chip Squeezer



Kiltrustan, Co. Roscommon



Greenlawn Horticulture Ltd. is a family-owned business in North Roscommon operating as a wood chip fuel supply business for over 15 years. The LEADER Programme supported the company to purchase a Wood Chip Squeezer, capable of mechanically removing approximately 50 per cent of the water from fresh wood chips for use in the biomass industry. This new specialised piece of equipment, developed in Germany in 2016, squeezes the moisture from the wood chip using a mechanical press. The resulting dryer chips have a higher calorific value and can be sold directly to renewable fuel users with the advantage of higher efficiency transportation due to the lower weight of the product. The Wood Chip Squeezer also guarantees a consistent uniform fuel leading to higher efficiency rates in wood chip boilers.



Priority and Focus Area	Theme 3 – Rural Environment; Sub-theme: Renewable Energy
Local Action Group	Roscommon LCDC
Implementing Partner	Roscommon LEADER Partnership
Promoter	Greenlawn Horticulture Limited
LEADER Funding	€178,500.00

Expansion of Wood Processing Business



Coolanoran, Co. Limerick



West
Limerick
Resources



National Rural Network

Liston Fuel Logs was formed in 2011 to supply quality dried timber-based fuel. The business specialises in harvesting timber from their own sustainably managed forestry plantation and processing it into dried timber logs suitable for stoves and conventional fireplaces. The logs have the benefit of being grown and processed locally and they are a cleaner heat source than peat or coal, much of which is imported. The LEADER Programme supported the business to expand their processing capacity by funding a new, more efficient electric wood cutting machine, as well as solar panels to provide clean renewable energy to run the machines, both reducing the costs to the business and its carbon emissions. These more efficient machines also produce a higher number of logs, which has enabled the producer to meet more of the market demand.



Priority and Focus Area	Theme 3 - Rural Environment; Sub-theme: Renewable Energy
Local Action Group	Limerick LCDC
Implementing Partner	West Limerick Resources
Promoter	Liston Fuel Logs
LEADER Funding	€32,500

Neufel Biomass



Derrygrath, Co. Tipperary



Neufel Limited provide high-quality production and distribution of wood chips throughout Ireland for the ever-growing biomass energy market. The LEADER Programme supported the business to develop its supply chain through the purchase of a woodchipper, walking floor trailers, weighbridge, a moisture measuring system, woodchip delivery equipment as well as marketing development and promotion materials. The enhanced supply chain made possible by this LEADER support has enabled Neufel Limited to realise the economic value and potential for forestry in the county by providing a market for timber from local suppliers. It is also helping to meet renewable energy and carbon targets as Ireland switches from non-renewable fossil fuels.



Priority and Focus Area	Theme 3 - Rural Environment; Sub-theme: Renewable Energy
Local Action Group	Tipperary LCDC
Implementing Partner	North Tipperary Development Company
Promoter	Neufel Limited
LEADER Funding	€175,246.50

National Rural Network (NRN)

The NRN provides up-to-date information, case studies, seminars and conferences to maximise the beneficial outcomes of Ireland's Rural Development Programme for rural stakeholders on behalf of the Department of Agriculture, Food and the Marine (DAFM) and the Department of Rural and Community Development (DRCD).



Local Action Groups (LAGs) & Implementing Partners (IPs) NRN Database

Interested in applying for LEADER funding, or learning more about accessing assistance under the LEADER Programme from those responsible for selecting and approving community-led local development projects in your county? An interactive map featuring all Irish LAGs and IPs can be found in the LEADER section of the NRN website: <https://www.nationalruralnetwork.ie/leader/>

LEADER Storyboard NRN Database

An interactive Storyboard database of over 100 projects funded under the three themes of the current LEADER Programme can also be found on the NRN website. These project examples highlight the impact of the LEADER programme on rural Ireland, including its economic, social, cultural and environmental value.

Bioeconomy

Glossary of Terms

BIOECONOMY - The Bioeconomy is the production of renewable biological resources from waste streams and other resources into value added products, such as food, feed, energy and bio-based products (European Commission 2012). The bioeconomy covers all sectors and systems that rely on biological resources (animals, plants, micro-organisms and derived biomass, including organic waste). It includes and interlinks land and marine ecosystems and the services they provide, all primary production sectors that use and produce biological resources (agriculture, forestry, fisheries and aquaculture) and all economic and industrial sectors that use biological resources and processes to produce food, feed, bio-based products, energy and services.

BIOMASS - Biomass is plant or animal material used for food, feed and energy production, and in various industrial bioprocesses as a raw substance. Bio-based chemicals, materials and fuels come from organic material such as harvest residues, crops and organic waste from our homes, businesses and farms.

BIO-BASED - Derived from biomass.

BIOBASED PRODUCT - Product wholly or partly derived from biomass.

BIOREFINERY- A biorefinery is a facility that integrates biomass separation and conversion processes and equipment to produce value added food, feed, chemicals, materials, fuels and power from biomass.

BIOBASED MATERIALS - Fibres that are made from materials of biological origin.

BIOBASED CHEMICALS - Chemical products that are wholly or partly derived from materials of biological origin.

Bioeconomy

Glossary of Terms

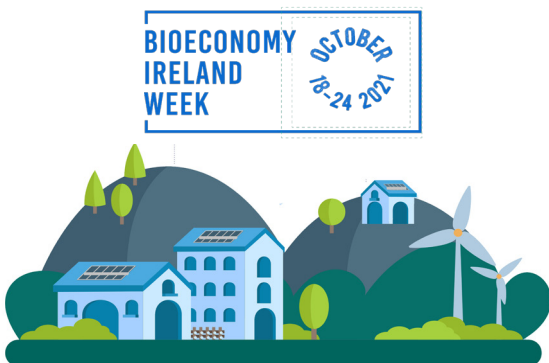
BIOACTIVE - Compounds extracted from a biological origin that provide nutritional or health and well-being benefits for plants, animals and humans.

BIOENERGY - Bioenergy is a form of renewable energy generated from burning biomass fuel.

BIOGAS - Biogas is a renewable, carbon-neutral gas generated from biological processes. The biogas is extracted from organic material such as food waste, animal slurries, and biodegradable material and can be harnessed for heat, electricity and transport.

CIRCULAR ECONOMY - The Circular Economy is where the value of products, materials and resources is maintained in the economy for as long as possible, and the generation of waste minimised (European Commission 2015).

CIRCULAR BIOECONOMY - The Circular Bioeconomy put simply is the intersection of bioeconomy and circular economy. The circular bioeconomy promotes principles of renewable energy, circularity, and prioritising the use of biomass for socially preferable sustainable biobased products, notably food, feed, materials, chemicals and energy in integrated, multiproduct production chains optimising the value of sustainable biomass and making use of residues and waste.





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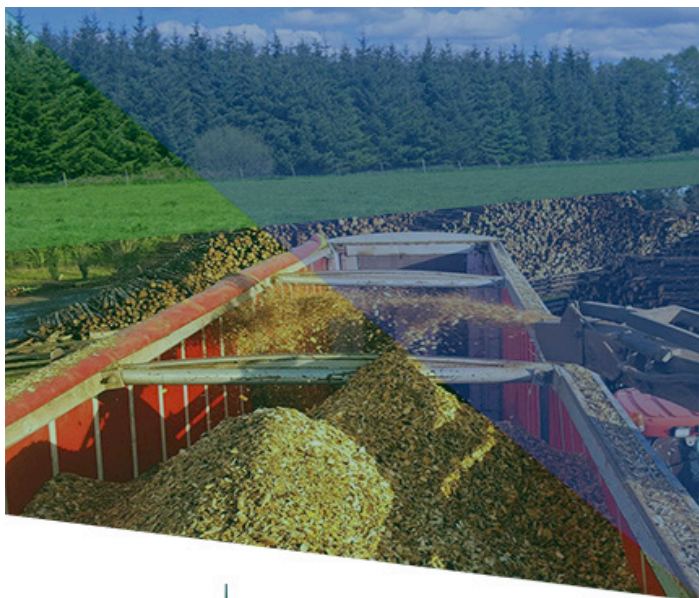


The European Agricultural Fund
for Rural Development:
Europe investing in rural areas



The LEADER Programme





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