

# BIOECONOMY GLOSSARY OF TERMS



National Rural Network

## 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.

## 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, multi-product production chains optimising the value of sustainable biomass and making use of residues and waste.

## USEFUL SOURCES OF INFORMATION

### BiOrbic BIOECONOMY RESEARCH CENTRE

BiOrbic is a national collaboration of over 100 researchers, focused on the development of a sustainable circular bioeconomy in Ireland.

### IRISH NUTRIENT SUSTAINABILITY PLATFORM

aims to promote sustainable nutrient management on the island of Ireland. The Platform seeks to enhance economic prosperity, whilst safeguarding the environment, by supporting the implementation of a nutrient circular and sustainable society, through stakeholder co-operation, value chain development, corporate responsibility, education, technological innovation, knowledge exchange and informing policy.

### IRISH BIOECONOMY FOUNDATION

Their mission is to promote the conversion of Ireland's natural land and sea resources to high value products for the development of a sustainable bioeconomy that is globally competitive and creates local development.

### CRÉ

is a non-profit association of public and private organisations, dedicated to growing the biological treatment sector. Cré supports the production of high quality outputs, assists the delivery of Government waste diversion and bioenergy targets, and promotes the creation of sustainable indigenous jobs.

### THE EUROPEAN NETWORK FOR RURAL DEVELOPMENT (ENRD)

serves as a hub for exchange of information on how Rural Development policy, programmes, projects and other initiatives are working in practice and how they can be improved to achieve more.

### IRISH BIOENERGY ASSOCIATION (IrBEA)

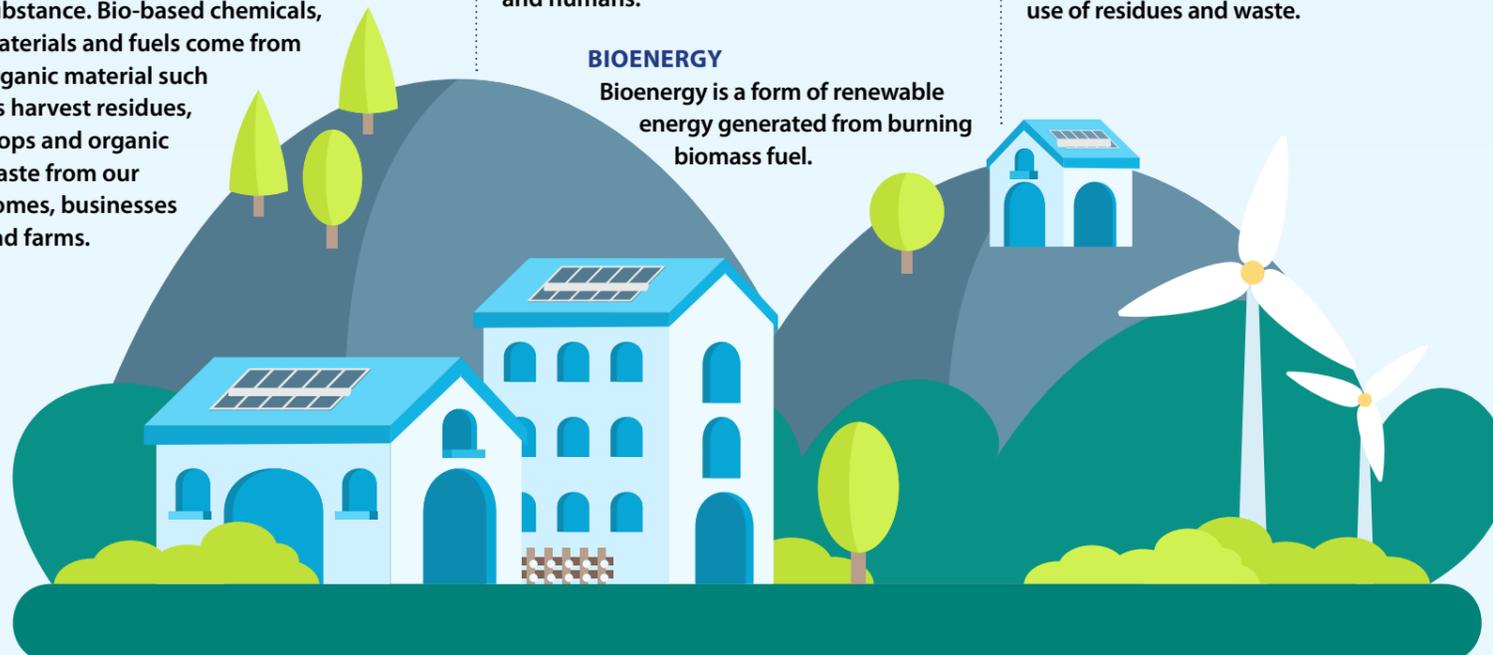
promotes the bioenergy industry and to develop this important sector on the island of Ireland. The organisation is a self-governing association of voluntary members. Its membership includes: farmers and foresters, fuel suppliers, energy development companies, equipment manufacturers and suppliers, engineers, financiers and tax advisers, legal firms, consultants, planners, research organisations, local authorities, education and advisory bodies – anyone with an interest in the bioenergy industry.

### CIRCULÉIRE

is the national platform for Circular Manufacturing. Between 2020 and 2022, CIRCULÉIRE will take manufacturers and their supply-chains on a journey from linear to circular business models through base lining, auditing, business case development and deep demonstration innovation projects delivering significant reductions in greenhouse gas emissions (GHGs) and in waste production across the network.

### THE RURAL BIOECONOMY PORTAL

forms part of the work of the ENRD Thematic Group on 'Bioeconomy and Climate Action in Rural Areas' and focuses on the challenges and opportunities for bioeconomy in rural areas.



An Roinn Talmhaíochta,  
Bia agus Mara  
Department of Agriculture,  
Food and the Marine



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

