

Repurposing the Lisheen Mine Site to develop Ireland's National Bioeconomy Campus

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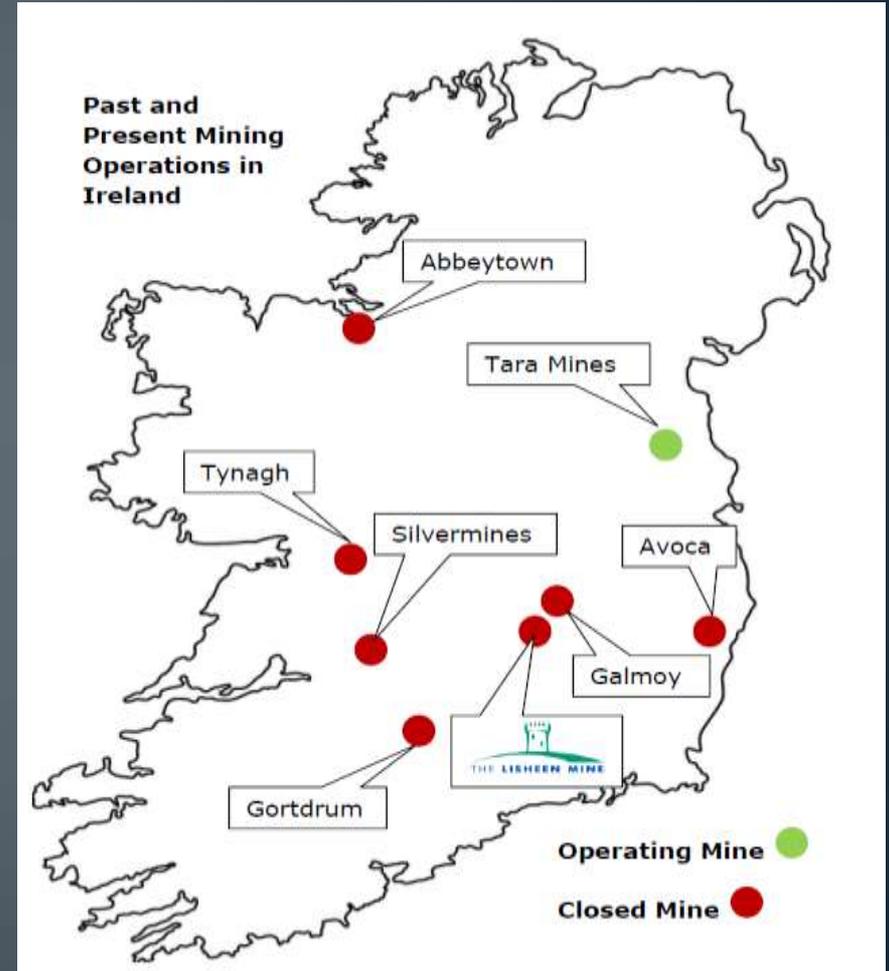
History of Lisheen Mine

- Lisheen is a closed mining/mineral processing company owned by Vedanta Resources.
- Operational 1999 – 2015.
- c. 400 employees.
- 22 million tonnes mined.
- Average ore grade
 - (Zn 11.6% Pb 1.9%).



History of Base Metal Mining in Ireland

- Legacy of poor Mine Closure in Ireland.
- Very strict licensing of the 'modern' Irish Mines.



Successful Mine Closure

- Planning and Management Commitment:

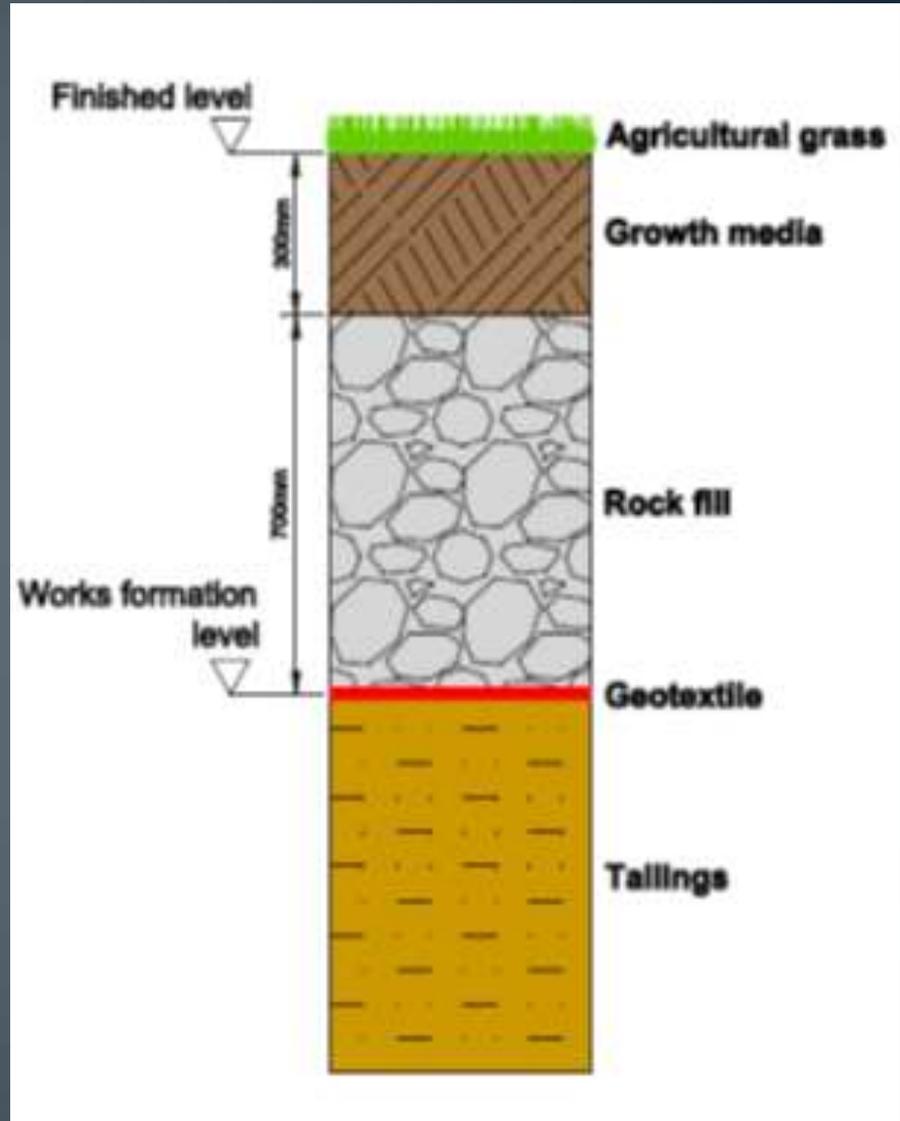
‘Before you run in you must plan how you will walk out’.

- Aspects:

- Engage Stakeholders.
- Physical / Engineering .
- Closure Finance.
- Long term vision for the site.



TMF - Capping Process



Tailings Dam Rehabilitation



Surface Plant and Mine Site



Mill Building Dismantling Works

Tipperary CC – County Plan

Policy ED1(b): Masterplan for Lisheen Mine Site, Moyne Templetuohy, Thurles

It is a policy of the Council to co-operate with the owners/operators of the Lisheen Mine site in the promotion and the development of lands situated at Moyne Templetuohy to provide for proper planning and sustainable development of the area. The Council will promote development which will provide for the following:

- (a) Promote the use / development / production of renewable technologies or their by-product;
- (b) Use of suitable lands to provide for industries / employment / clean technology based industries not currently provided for within the county.
- (c) A high quality sustainable development
- (d) Provide significant amenities, including a designed parkland,
- (e) Reuse of existing infrastructure within the mine complex wherever possible.

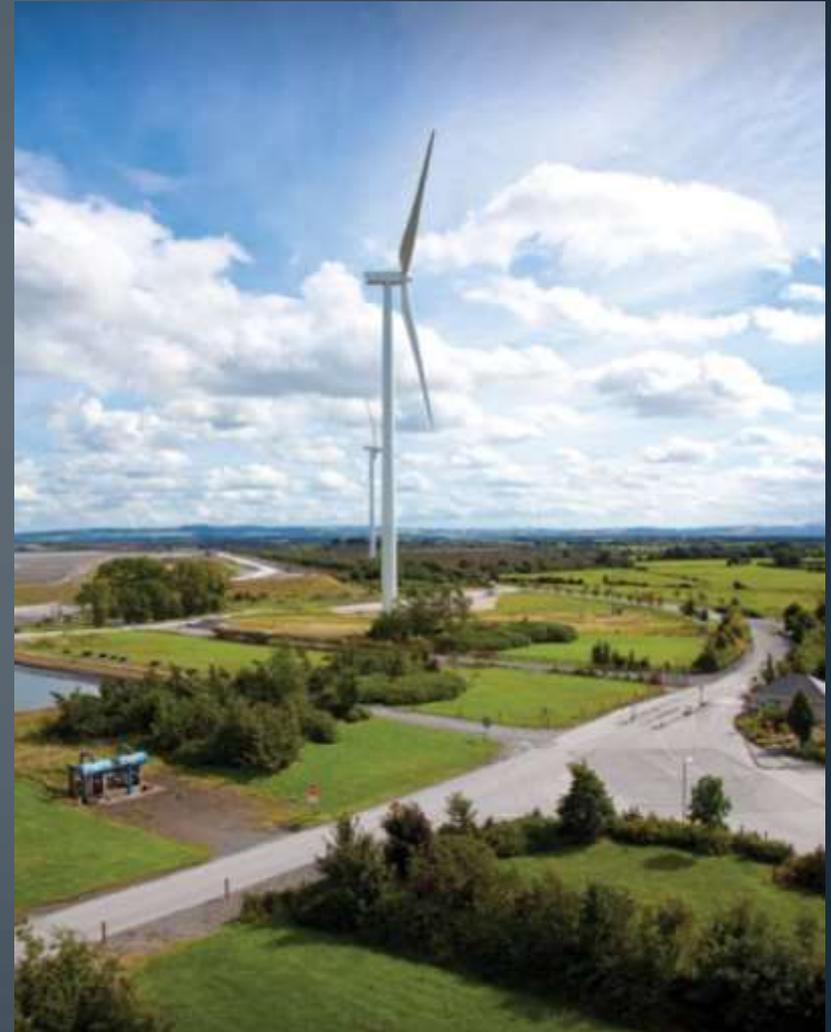
Taskforce for jobs

- Established in 2013.
- Ex Lisheen management, Tipp CC, IDA, Enterprise Ireland, UCD.
- Objective:
 - Market the Site.
 - Replace jobs lost at Lisheen Mine.
- Master plan for the site developed.



Post Closure Vision for the Lisheen Site

- Initially - Green Energy Hub.
- Substation connection to National Grid.
- 18 turbines (36MW) of wind power on the Lisheen Site
 - 24 turbines on third party land feed into substation.
 - Plans for additional turbines.
- Lisheen looked at other energy options for the site:
 - Pump storage.
 - Solar.
 - Other renewable power options.
- Strategy then moved from energy to the bioeconomy.



What is the Bioeconomy

Circular economy

Economy that is restorative and regenerative by design. It aims to maintain the utility of products, components and materials, and retain their value.

Current resource usage is unsustainable.

Globally

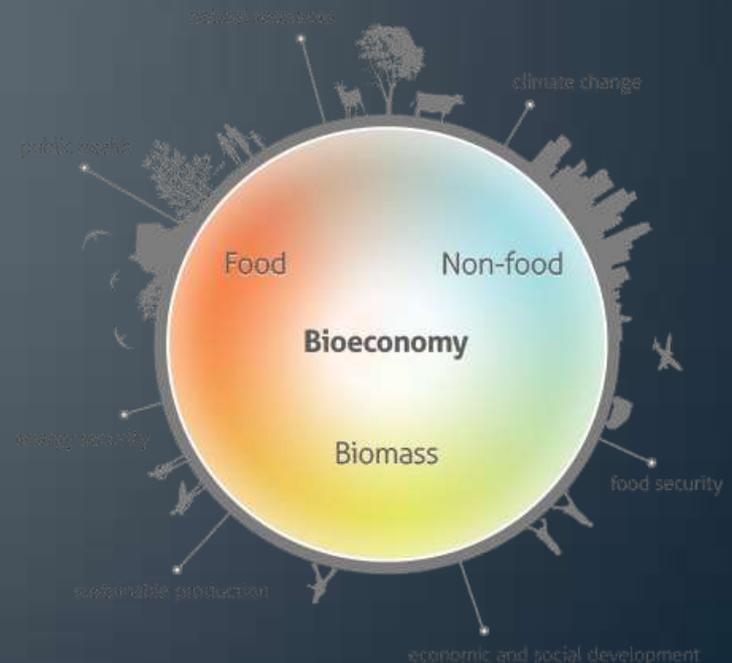


IRL / UK



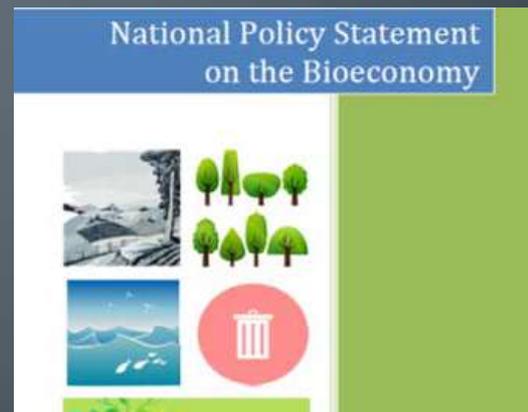
Bioeconomy

The bioeconomy covers the production of renewable biological resources and their conversion into food, feed, bio-based products & bioenergy.



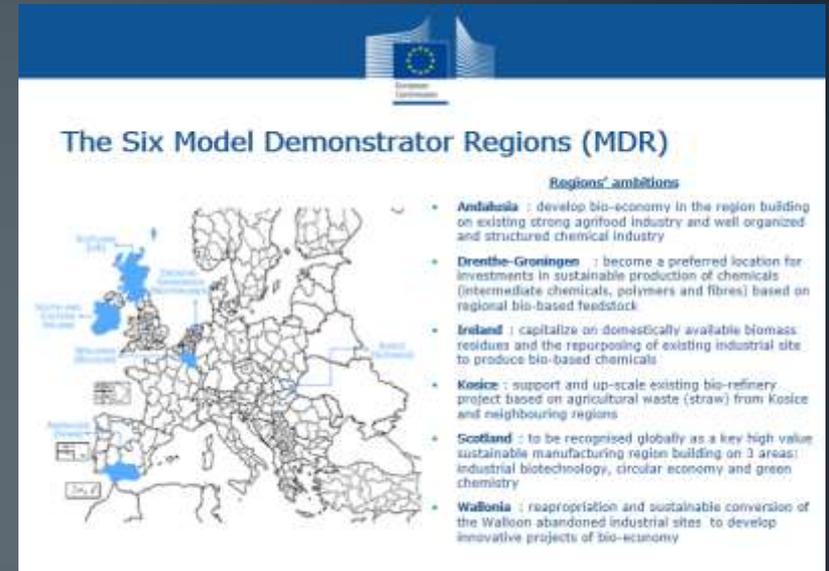
European / National position

- Bioeconomy is an area of focus for the EU and is a vital part of the vision to 'reindustrialise rural Europe'
- EU Bioeconomy Strategy launched 2012.
 - Under the lead of DG Research and Innovation. Strategy was co-signed by several others including DG Agriculture and Rural Development.
- Visit to Lisheen by John Bell EU Director for the Bioeconomy.
- Irish Bioeconomy Policy Launched 2018 – reference made to the Lisheen Site.
- Other Initiatives / Institutions:
 - Science Foundation Ireland: BEACON - €18M Research.
 - Shannon ABC.
 - Dairy Processing Technology Centre (DPTC).
 - BioEire.
 - ICT Biochain.
 - EU Bio-Based Industries.



Milestones to redeveloping Lisheen

- Lisheen at centre of Ireland's EU Model Demonstrator Region for the bioeconomy.
- Formation of the Irish Bioeconomy Foundation (IBF) – headquartered at Lisheen.
- Enterprise Ireland awards €4.6M to the IBF to develop a Piloting Innovation and Research Facility for the bioeconomy.
- CMP achieve planning permission for mushroom substrate facility.
- AgriChemWhey project plans to locate at Lisheen.
- Glanbia – Pilot facility operational at Lisheen.



Irish Bioeconomy Foundation



- Headquarters – Lisheen Site
- Mission Statement:
 - to promote the conversion of Ireland's natural land & sea resources to high value products for the development of a sustainable bioeconomy.
- IBF is a key partner developing the campus at Lisheen.
- Members include:
 - UCD
 - Trinity College
 - LIT
 - Glanbia
 - CMP
 - Avocet
 - Alltech



An artist's impression of the new facility planned for Lisheen.

Piloting, Research and Innovation Facility.

- Multi-purpose, flexible, modular facility.
- Range of chemical & bio reactors up to 1,000L.
- Upstream & Downstream capabilities.
- Seminar facilities for hosting events, teaching, continuous profession development etc.

AgriChemWhey

- The European Commission has awarded €22 million in funding for a new bio-economy research project to be led by Glanbia Ireland.
- AgriChemWhey will explore the development of a bio-refinery at Lisheen.
- The AgriChemWhey project will take low value byproducts from the dairy processing industry (excess whey permeate) to produce lactic acid.
- Lactic acid can be used in value-added bio-based products including biodegradable plastics.
- AgriChemWhey will be a world-first process for converting byproducts from the dairy industry into high value bio-based products.



October 19th Bioeconomy Ireland Day at the Lisheen Site.

- Formal launch of:
 - **BEACON SFI Bioeconomy Research Centre**
 - **Irish Bioeconomy Foundation (IBF).**
 - **Bioeconomy Ireland Public-Private Network**
- Attendance includes:
 - Sean Kelly MEP
 - John Bell (Head of the Bioeconomy Directorate in the EC)
 - Michael Creed T.D. (Minister for Agriculture)
 - Sean Kyne T.D. (Minister of State at Dept of Communication, Climate Action & Environment).

BIOECONOMY IRELAND DAY 2018
CONNECTING IRELAND'S BIOECONOMY

OCT 19
Bioeconomy Ireland Day 2018
by Bioeconomy Ireland

Free

REGISTER

DESCRIPTION

Bioeconomy Ireland Day 2018 brings together key bioeconomy practitioners, thought leaders, industry, researchers, and policy makers to drive Ireland's bioeconomy forward, creating indigenous wealth, and existing industry growth, creating new business opportunities, while enabling vibrant, sustainable communities, contributing to climate change mitigation and food security and delivering a host of other ecosystem services.

Bioeconomy Ireland Day 2018 will host the following:

Launch of BEACON SFI Bioeconomy Research Centre - BEACON, a Science Foundation Ireland Research Centre, brings Ireland's expertise, from SMEs, indigenous multinational companies, and others from University College Dublin, Trinity College Dublin, University of Limerick and National University of Ireland, to focus on the development of a sustainable circular bioeconomy, enabling vibrant sustainable communities.

Launch of the Irish Bioeconomy Foundation (IBF). The IBF is developing the National Bioeconomy Campus at Lisheen, Co. Tipperary with a view to producing high value bio-based chemicals from domestically available low value biomass residues. This National Bioeconomy Campus will be a model for rural economic development advancing industrial development, through collaboration between industries and between industry and research performing organizations.

Launch of Bioeconomy Ireland Public-Private Network initiative which will establish a network comprised of representatives of commercial entities operating within the bioeconomy and relevant public bodies. This initiative, is part of the Bioeconomy Implementation Group co-chaired by DAFM and DCCAIE as mandated under the National Bioeconomy Policy Statement - (launched earlier this year).

DATE AND TIME
Fri, October 2018
09:30 - 15:00 IST
[Add to Calendar](#)

LOCATION
National Bioeconomy Campus
(former Lisheen Mine)
Kilronan, Moyne
E41 R622 Thurles, Co. Tipperary
[View Map](#)

SOLD OUT

2020 Site Vision



IBF – Pilot, Research & Innovation Facility
CMP – Mushroom Substrate facility
AgriChemWhey – bio refinery project