# How to develop the Bioeconomy without damaging the environment or competing with food supplies


Bioeconomy in the EU: achievements and directions for the future
February 14th & 15th 2013 Dublin Ireland

Dara Lynott
Deputy Director General
Environmental Protection Agency

# How to develop the Bioeconomy without damaging the environment or competing with food supplies

- Agree on the Science
- Align Strategy
- Prioritise Research
- Plan Land-Use
- Regulate Proportionally & Transparently
- Use Resources Efficiently

# Agree on the Science

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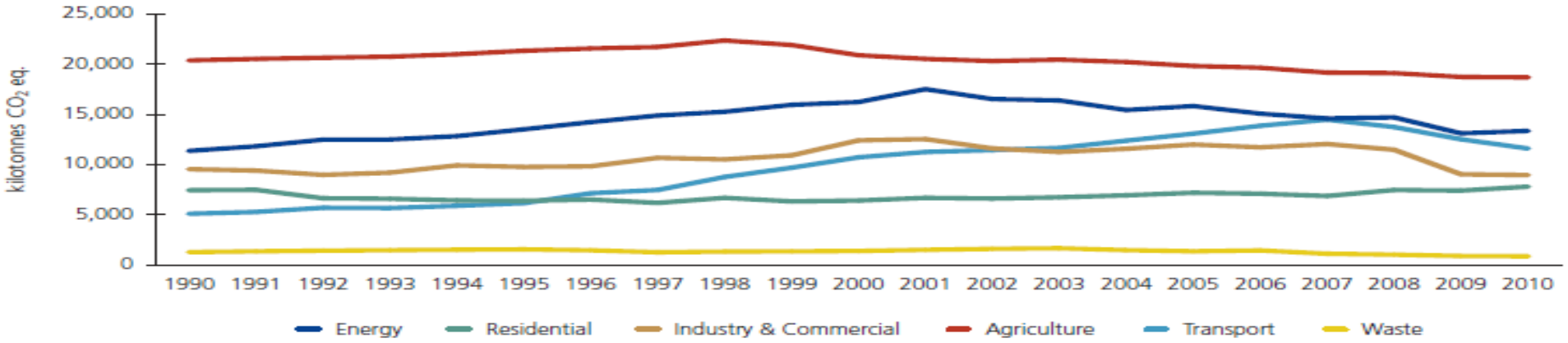
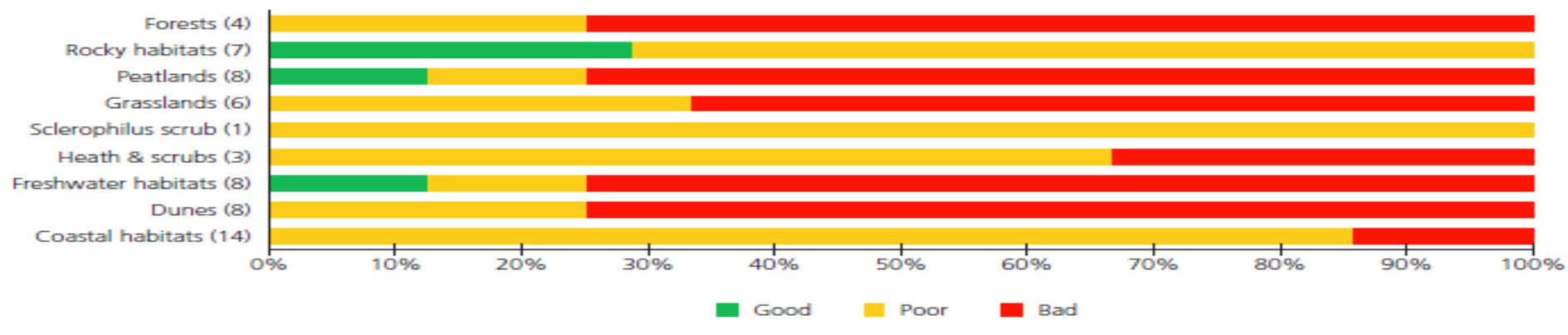
# Greenhouse Gas Emissions

- Ireland on track to meet its Kyoto commitments (2008-2012)
- Overall reduction target of 20% by 2020 for sectors that are not included in the EU Emissions Trading Scheme
- Under most optimistic scenario, Ireland will exceed its annual limit by 2017 and exceed its 2020 target
- Within the EU, Ireland has an unusual emissions profile, with emissions from agriculture accounting for over 30% of the total



# Conservation Status of Habitats & Species




- Only 7% of Ireland's habitats listed under the EU Habitats are considered to be in **favourable** state
- 39% of species listed considered to be in **favourable** state
- Some species especially in wetland and freshwater environments considered to be in **bad or poor** conservation status

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# Align Strategy


"Only farms operating to the highest standards of efficiency and sustainability will be capable of meeting the competitive challenges of the future"

Department of Agriculture, Fisheries and Food
An Roinn Talmhaíochta, Iascaigh agus Bia

# Food Harvest 2020.

A vision for Irish agri-food and fisheries

The Environmental Protection Agency

epa
Environmental Protection Agency

www.epa.ie


Headquarters
PO Box 3000
Johnstown Castle Estate
County Wexford, Ireland
T +353 53 916 0600
F +353 53 916 0699
E info@epa.ie
LoCall 1890 33 55 99

twitter.com/EPAireland
www.youtube.com/user/epaireland


"Building a resource-efficient low-carbon economy and society by protecting Ireland's green image while also supporting sustainable development in key sectors such as agriculture, food and tourism."

# Strategic Plan 2013 - 2015

Working with others for a *Better Environment*

# Prioritise Research

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Teagasc
Agriculture and Food Development Authority

seai
Sustainable Energy Authority of Ireland

epa
Environmental Protection Agency

UCD Dublin

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

# Stimulating Sustainable Agricultural Production through Research & Innovation (SSAPRI)

A Research Agenda to guide public investment in primary agricultural research in Ireland

Feirmeoirí Aontaithe na hÉireann
The Irish Farmers' Association
IFA

ICBF.com

APHA
Animal & Plant Health Association

icos
Irish Cooperative Organisation Society

# SSAPRI – Stimulating Agricultural Production through Research and Innovation

***FH2020*** *"DAFM should establish structures to facilitate greater input and resources from the agriculture industry into the design and structure of primary research programmes'"*

**Research needed was prioritised based on the following criteria:**

1) Key Drivers
2) Extent of knowledge deficit
3) Benefit accruing
4) Feasibility of carrying out research

# Priority Research needed in Water/soil

- **Water/soil -** Nutrient management strategies for pristine (Q5) water Bodies.
- **Climate** - Mitigation Techniques at farm level.
- **Livestock** - Benchmark (including by Life Cycle Analysis) the environmental performance of Irish livestock production.
- **Biodiversity** - Influence of changes in land use on biodiversity.

# Research to Action

- **Examples** - Agricultural Catchments Project, Pathways Project and ISIS Project.
- Research must be followed by **practical measures** for farmers and for catchment management in order to achieve sustainable agriculture.
- **Knowledge Transfer** must be facilitated by large-scale advisory programmes.

# Plan Land Use

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# Land Use Planning

- Policy and Strategy must be linked to land use suitability.
- Consider impact of  increased forestry, intensive farming, urban demand, rural housing and on Special Areas of Conservation such as bogs, fragile/eroded/contaminated soils, water quality.
- Recognise that the limiting factor for some locations for food production or development will be the capacity of receiving waters to accept discharges while not causing any deterioration in the water status.

# Regulate Proportionately and Transparently

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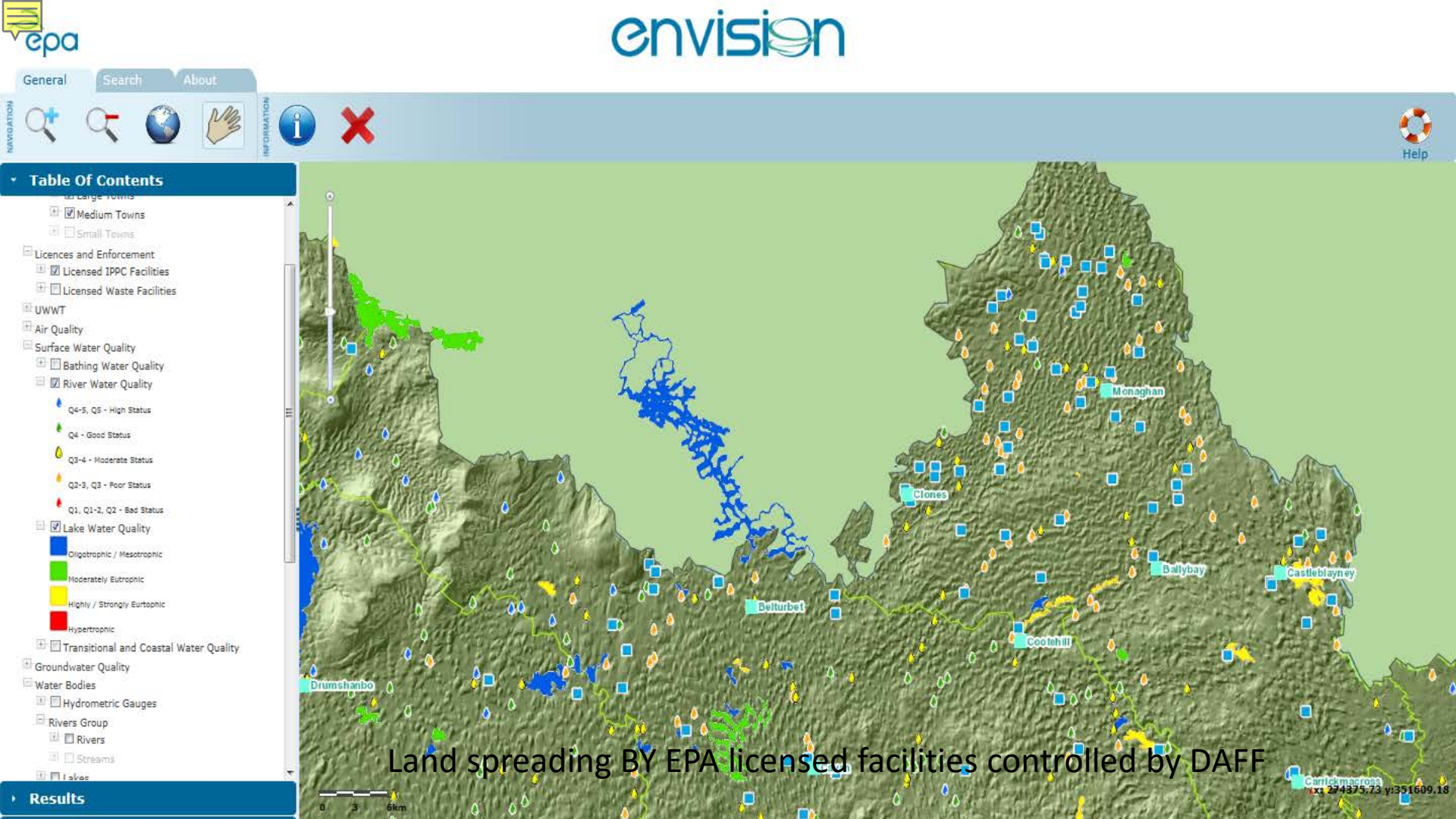



Land spreading BY EPA licensed facilities controlled by DAFF




Privacy | Maps |

epa | PRTR

## Search

Year: 2009

RBD: South Eastern

County: Select...

Licence:

Facility:

Sector: Intensive livestock production and aquaculture

Pollutant: Ammonia (NH3)

Search

Search

Layers / Legend

*16 Facilities Selected*

**P0453**

*Rennard Pig Farms Limited*

Wexford

**P0455**

*Messrs Thomas O'Reilly and Rory O'Brien*

Tipperary

# Rennard Pig Farms Limited

**Licence Status: Licenced**
*Licence Sub Status: N/A*

## General Information

| | |
|---|---|
| Facility Name | **Rennard Pig Farms Limited** |
| Full Address | **Rennard Pig Farm, The Deeps/Cornwall, Crossabeg, Co. Wexford** |
| Parent Company | **Pig Farms Limited** |
| Coordinates of the Facility | **52.3840, -6.56052** |
| Regulatory Authority | **EPA** |
| NACE Code | **01.46** |
| PRTR Class | **7** |

Silverlight

Annual Environmental Report
Pollutant Thresholds (PDF)
Capacity Thresholds (PDF)
Waste Transfer Thresholds
Confidentiality

## Detailed Information

Select Year 2010

Export Report

### Releases to Air

Pollutant: **Methane (CH4)** *(Cas No. 74-82-8)*

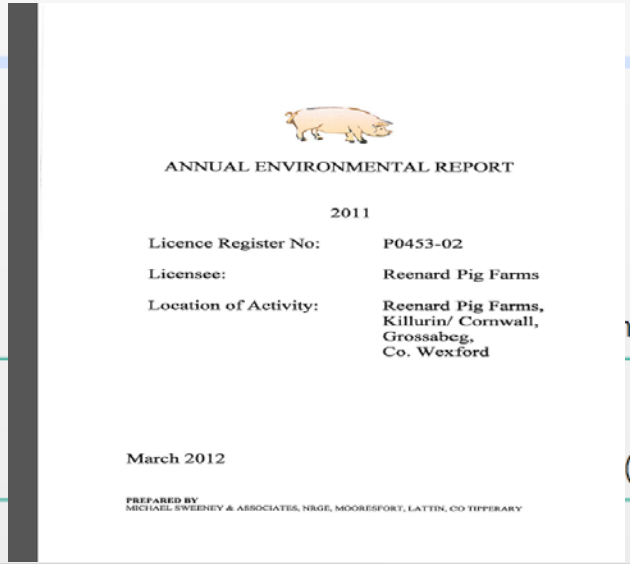
Method: **Calculated**

nnum): **123775.9**

Pollutant: **Nitrous oxide (N2O)** *(Cas No. 10024-97-2)*

Method: **Calculated**

(Kg/annum): **BRT**



ANNUAL ENVIRONMENTAL REPORT

2011

Licence Register No: P0453-02

Licensee: Reenard Pig Farms

Location of Activity: Reenard Pig Farms, Killurin/ Cornwall, Grossabeg, Co. Wexford

March 2012

PREPARED BY
MICHAEL SWEENEY & ASSOCIATES, NRGE, MOORESFORT, LATTIN, CO TIPPERARY

# Use Resources Efficiently

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# Smarter (*Resource Efficient*) Farming

**128,000** family farms, employs **150,000** people,
annual turnover **€24 billion,** Net input costs **€4,150 million**

BeGreen
PREVENTING WASTE & SAVING MONEY

In partnership with

Feirmeoirí Aontaithe na hÉireann • The Irish Farmers' Association

# “We are green and we can prove it”

- Web support developed by a network of Agencies (SEAI, Teagasc, Bord Bia) www.smarterfarming.ie
- Produce a Smarter Farming Guide for farmers - “top tips”
  - Animal nutrition, Fertiliser management, Land management
  - Energy efficiency, Water conservation, waste minimisation
  - Inputs management and cost savings
- Resource Efficiency Assessments
- On-farm discussion Groups