



# Green Business



# BeGreen

Welcome to

**Green Business Resource  
Efficiency Seminars**

**Winter Series, 2014**



Working  
with nature



epa  
**GreenBusiness**

**JAMES HOGAN –  
PROGRAMME MANAGER**

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## Today..

- James Hogan - Why Green Business?
- Andrew Mullins- Origin Green Programme Manager
- Eamonn Diver- Bewley' s Manufacturing.
- Gary Nugent- Rosderra Irish Meats
- *Coffee at 11.00*
- Justin Carton - Manor Farm
- Calor Gas Case Studies- Ciara Twomey
- Gabriel Kelly- Dairygold
- Ray O' Neill - Head of Energy and Clean Technologies , AIB



BeGreen brings together all of the activities and programmes that have been put in place by the EPA, local authorities and other partners to promote waste prevention. The BeGreen programmes provide homes, business and other sectors of society with ways in which they can participate in making Ireland a more sustainable country while saving themselves money. Click on the programme of most interest to you.



  
WASTE STATISTICS

  
NATIONAL WASTE PREVENTION PROGRAMME

  
HAZARDOUS WASTE PREVENTION

**PUBLIC SECTOR**

  
LOCAL AUTHORITY PREVENTION NETWORK

  
GREEN HEALTHCARE


**BUSINESS**

  
GREEN BUSINESS

  
SMART FARMING

  
GREEN ENTERPRISE

  
GREEN HOSPITALITY

  
SMILE

**HOME/COMMUNITY**

  
STOP FOOD WASTE

  
FREETRADE IRELAND

  
COMMUNITY REUSE NETWORK

  
GREENING COMMUNITIES

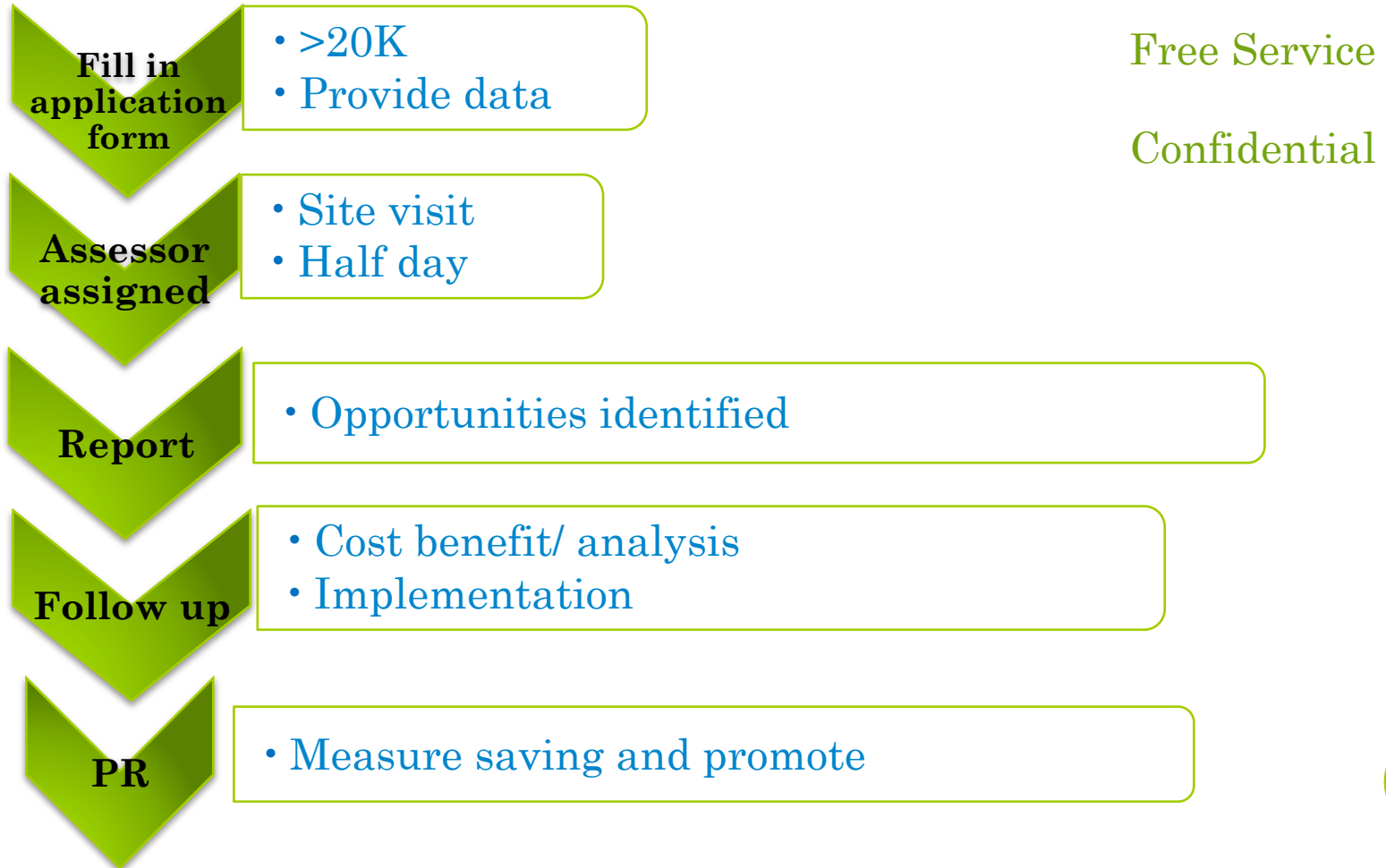
  
GREEN HOME



## Who are Green Business?

- **We are an EPA funded programme, part of their BeGreen Programme funded under the NWPP**
- **Green Business is managed by the Clean Technology Centre, CIT.**
- **We provide FREE resource efficiency advice for Business**
- **Our services direct support include on site assessments, telephone support**
- **And indirect support: Guidance, Case Studies, Seminars, etc.**

## SO HOW DOES OUR SERVICE WORK?



GREEN BUSINESS PHASE II  
JUNE 2011 - JUNE 2014

**€6 Million**

Potential cost savings identified



Energy

€4.2 Million



Water

€660K



Waste

€1.2 Million



**€37,000**

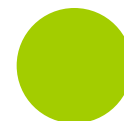
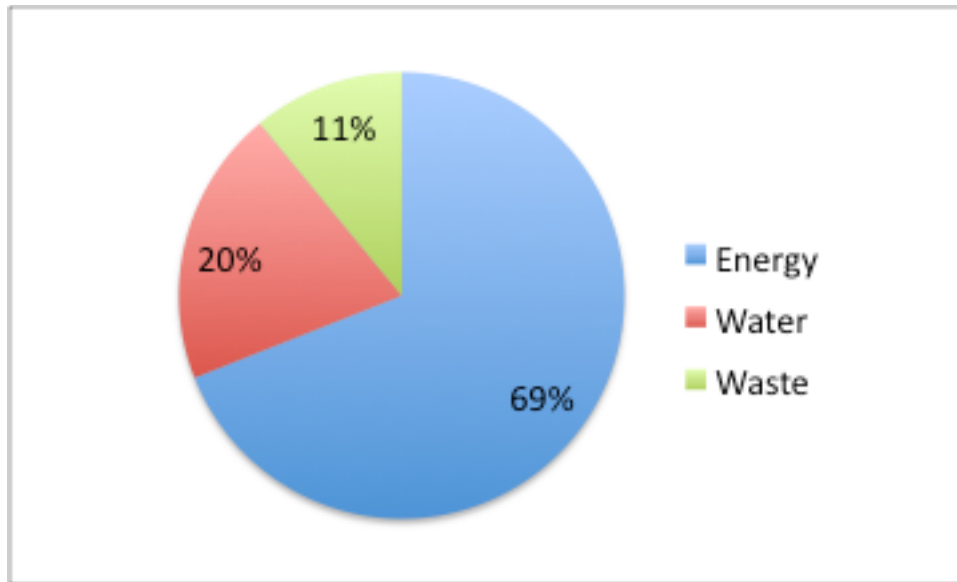
Savings identified per company visited



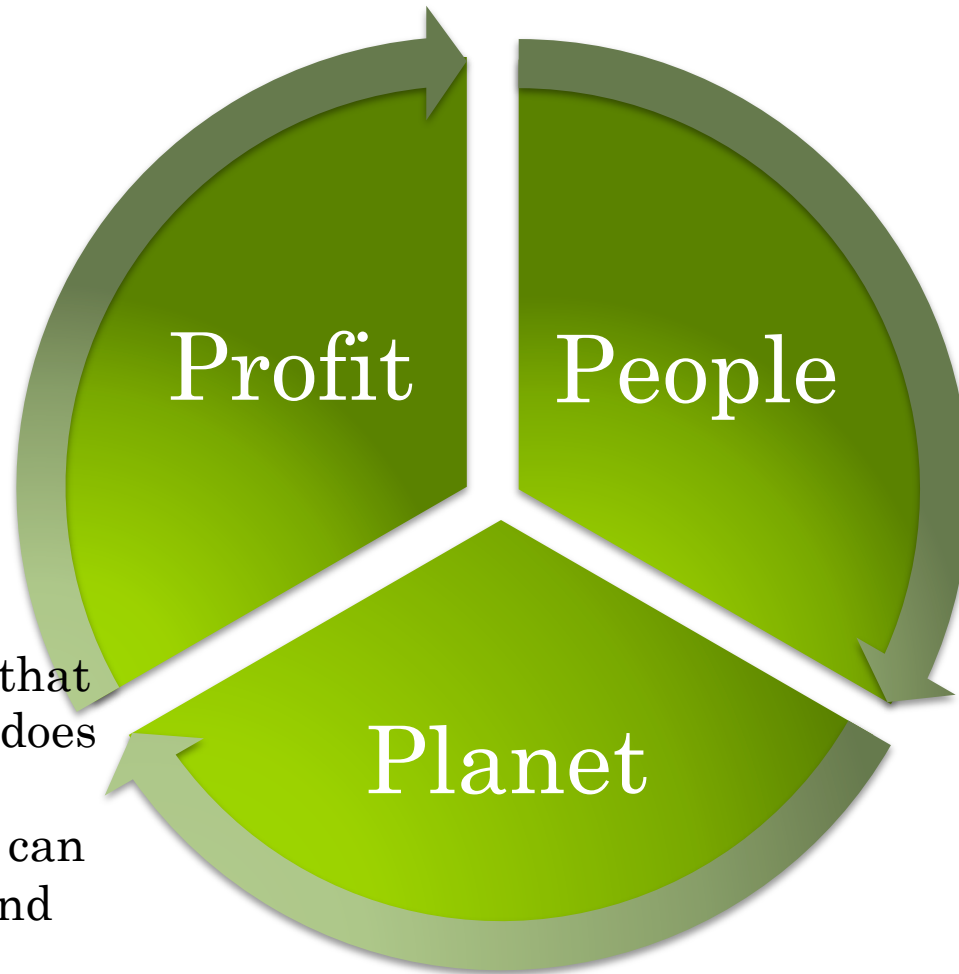
JUNE 2011 - JUNE 2014



GreenBusiness



# SUSTAINABLE BUSINESS



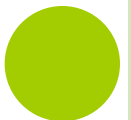
The reality is that business that does not adopt sustainability can not compete and will fail!





# PROFIT

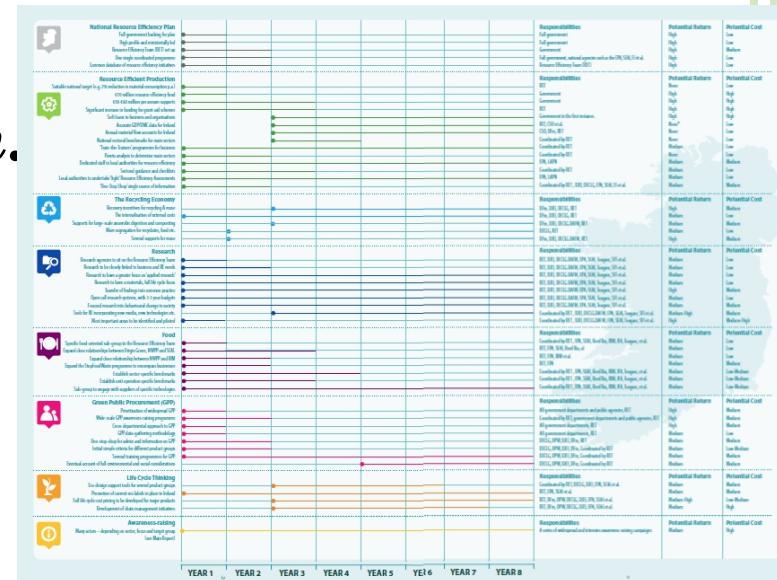
- This driver that is most evident to us at the coal-face.
- Reduce energy, water , waste costs- “It’ s good for the planet too!”



# ROADMAP FOR RESOURCE EFFICIENCY PLAN- RELEASED LAST WEEK



- 1% improvement in resource efficiency  
→ initial saving of €464 million per annum
- Moderate resource efficiency improvement:  
(25% by 2020)  
→ national savings...
- Private sector: €6.1 billion.**
- Public spending: €900m.**



National Resource Efficiency Plan SUMMARY CHART

# PEOPLE



# PLANET

- Dependent of environment for :
  - Raw materials
    - Need to protect Soil, Water, Air , Limited Resources
    - Dublin has a limited water...
  - Stable environment for people to live
  - Stable economy – Wall Street appreciates this now
  - Governments beginning to see bigger picture.

You can't have PROFIT without PLANET.



# SUSTAINABLE BUSINESS



# SUSTAINABLE BUSINESS



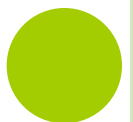
# PLANET

- <http://natureisspeaking.org/about.html>

**NATURE DOESN'T NEED PEOPLE. PEOPLE NEED NATURE.**

Human beings are part of nature.  
Nature is not dependent on human beings to exist.

Human beings, on the other hand, are totally  
dependent on nature to exist.



# IRISH DAIRY SECTOR SUSTAINABILITY



- ❖ Irish Dairy sector predicted to expand by 50% by 2020
- ❖ Limiting factors to expansion will emissions of CO<sub>2</sub> , Water and Wastewater





## *Lighting*

### Food Processing Plant

- Replace T8 florescent light with T5 florescent lights.
- 40% reduction in energy
- > energy reduction in cold storage
  
- Lamp Cost- €9,000
- Energy Savings - €15,000
  
- Payback=7 months

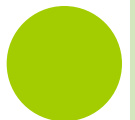


***Fuel switch / greater efficiency***

**Office block**

- ◆ Installed new gas boiler 92% efficient compared to old oil boiler at 70%
- ◆ Natural gas 50% price of oil
- ◆ Estimated fuel cost reduced by 68%
- ◆ ROI= 1 year

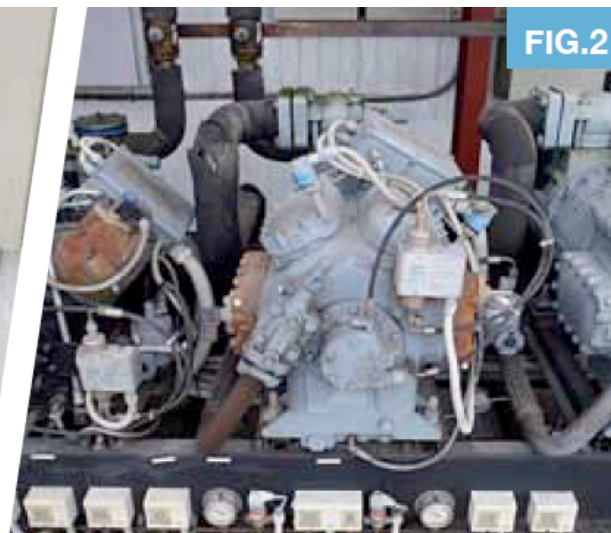
2012 Estimated fuel Cost	Cost
Oil	€38,000
Potential Annual fuel savings	€25,800
Project Cost	€23,300
Payback	< 1 Year



## *Heat Recovery*

### Ballon Meats , Carlow

- 40% reduction in oil bills
- Recovered waste heat from refrigeration units
- Investment: €47,599
- Payback: 36 Months



## *Reduced flows*

### Meat Processor – Optimising cleaning

- Using 175 m<sup>3</sup> water in cleaning shift , at 65°C cleaning shift
- Measurement of a typical individual hose: 26 litres/min
- By **reducing flow** to 20 litres/min
- **Potential savings of €42,000 per year**



## *Leak detection/ repair*

Stillorgan Village saves  
€24,000 on water leaks.



- Cost Savings: €24,000 / Annum
- Investment: €15,000
- Payback: 7 Month



## Waste Prevention

### Freshways, Kerry Group

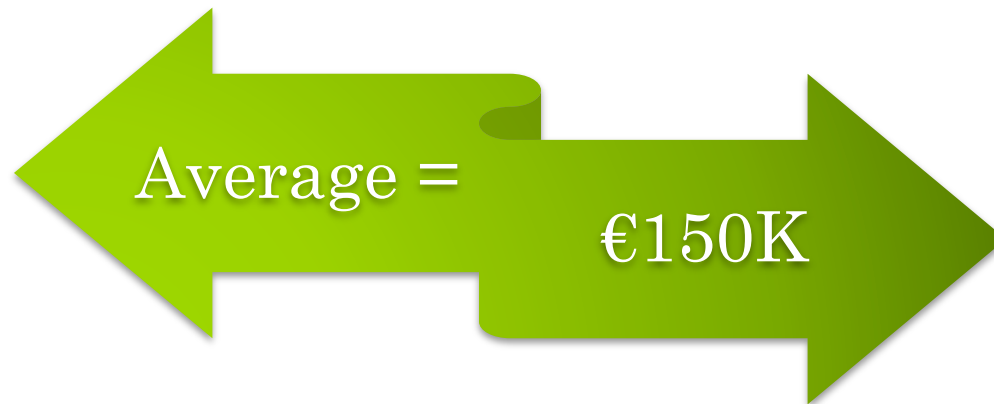
- 112.5 tonnes / annum of bread crusts sent for composting
- costing €7,500 for waste management
- Possible to sell these crusts to produce bread crumb manufacturer



- Cost saving €7,500/ annum
- Income from sale of crusts = €8,000.
- Net benefit the company = €15,500

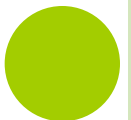
GHP HOTELS

TONNES OF FOOD WASTE/ ANNUM



# Why isn't there more resource efficiency?, Barriers

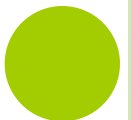
- Too busy making products/ providing service
- Not enough staff time devoted to RE
- Capital expenditure an issue
- Confused by the variety of technologies/ solutions
- Weak environmental policy/ culture





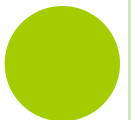
# What can drive resource efficiency?

- Cultural change ,
- At management level where resource efficiency and environment is valued as part of the culture/ DNA.
- Management need to be convinced to invest in RE, from a cost and market perspective
- Staff awareness



# What can drive resource efficiency?

- Technical
- More awareness / information required on technical solutions
- BP guides and case studies
- Financial incentives.





**THANK YOU**

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