



BeGreen



GreenBusiness

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Green Business





**FOOD PROCESSING
/DIARY**

**PHARMACEUTICAL
/CHEMICAL**

PUBLIC BUILDINGS

SECTORS

**FOOD RETAIL
/SUPERVALU**

OFFICES

ENGINEERING



**Working
with nature**



- Have assisted **Bord Bia** with their **Origin Green Sustainability Programme**
- Our **site visits** guide food processors with their environmental plans.



Food Group



The Home of
Amazing Irish Eggs
since 1966





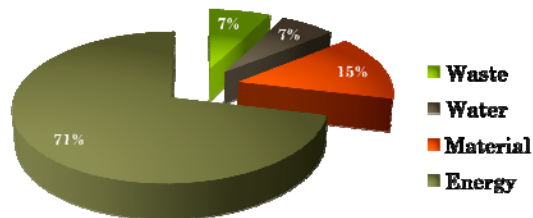
**GUIDANCE FOR
300 FACILITIES**

**€18 MILLION SAVINGS
IDENTIFIED**



POTENTIAL SAVING IDENTIFIED - 2012

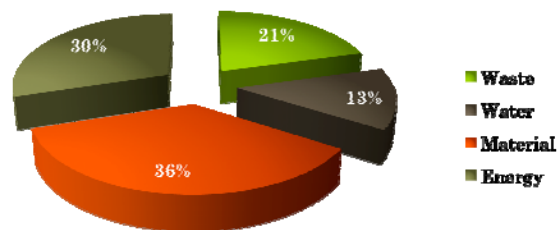
€60,000/ company



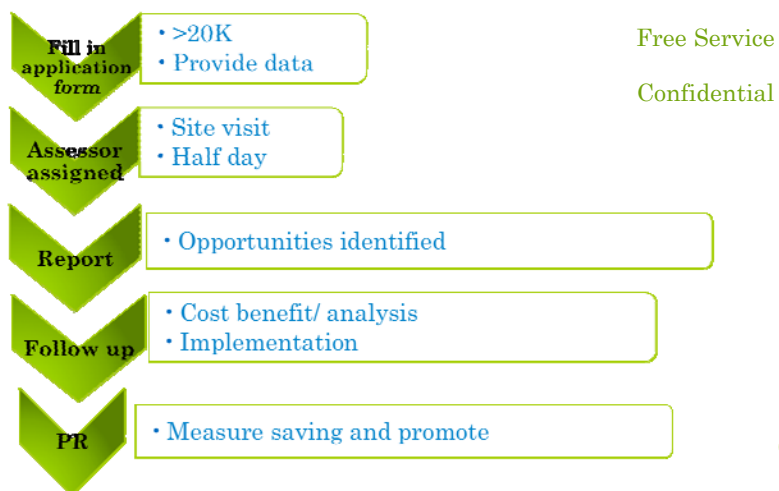


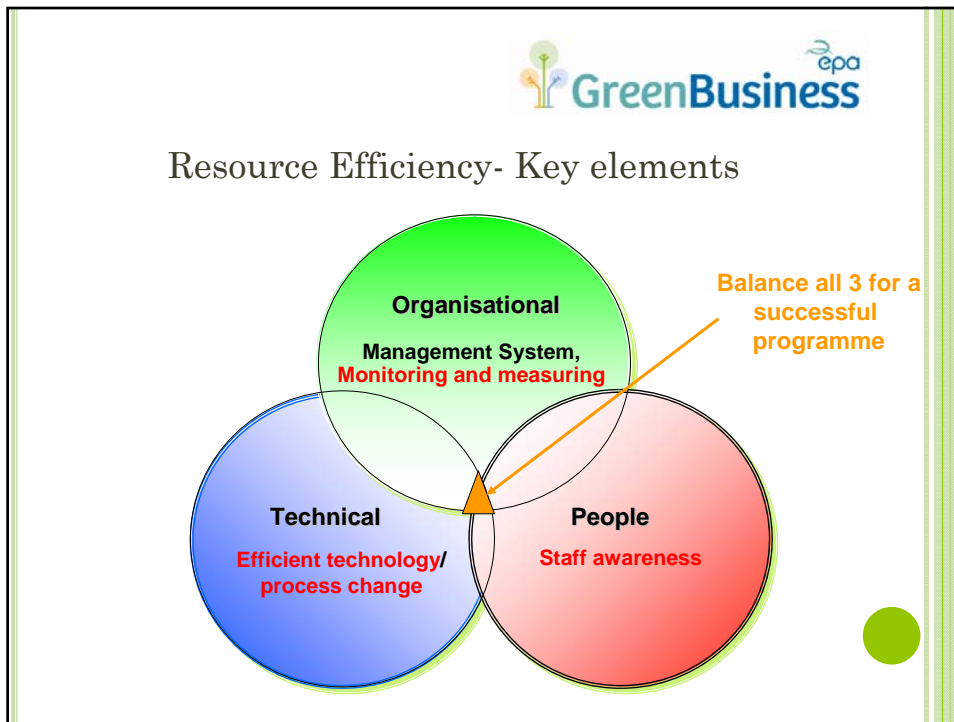
POTENTIAL SAVING IDENTIFIED - 2012

- o €20,000/ company (No and Low cost Savings)
- o No/Low Cost = Payback less than 1 year



So how does our service work?





GreenBusiness epa

Organisational Management Systems

Key Requirement for Resource Efficiency

- ✓ Management Commitment
- ✓ (Staff Time , financial)
- ✓ Green Leader/ Green Team
- ✓ Environmental Policy
- ✓ Monitoring and Measuring
- ✓ Benchmarking

GHP Landfill Waste Benchmarks

Year	Kg / Sleeper
2004	3.5
2007	2.1
2008	1.7
2009	1.55
2010	0.95
2011	0.86
2012	0.54

MONITORING WATER CONSUMPTION

Are you consuming too much?

- ◆ Does consumption make sense
- ◆ Benchmark usage against productivity using industry norms
 - ◆ Litres per Kg product
 - ◆ Litres per cover



People
Staff Awareness



Key Requirement for Resource Efficiency

- ✓ RE should be part of the culture
- ✓ Departmental checklists
- ✓ Communicate policy, action plans, improvements
- ✓ Staff suggestion scheme
- ✓ Reward staff for improvements



Technical




 Up to 94% savings on electricity bills

Key Requirement for Resource Efficiency

- ✓ Lighting
- ✓ Process controls
- ✓ Sub metering
- ✓ Heat recovery
- ✓ Waste prevention
- ✓ Elimination of hazardous materials







Energy/
Water




Meat Processor – Optimising cleaning

- Using 175 m³ 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 water savings: 7,000 m³ per year
 - Potential fuel savings: 425,000 kWh per year
- At typical values of €2.50 for water and €0.05/kWh for fuel, **potential savings of €42,000 per year**




Energy




Office block- Fuel switch


- ◆ 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
- ◆ **We identify/you implement**

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






Energy



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!**





Monitoring
and
Measuring



Freshways, Kerry Group

- Produce packaged Sandwiches and Wraps (200 employees)
- An analysis of waste produced revealed that 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

Efficient
technology/
process change



Large Food Processing Plant

- Company uses 640,000 outer cardboard boxes costing the company €192,000 / annum
- Potentially boxes could be used 30 times before recycling



- Potential Cost saving €148,670/ annum
- Investment- €0
- Payback- Immediate



How can Green Business assist you

Green Business can identify opportunities for resource efficiency at your site which can be fed into your Sustainability Plan.

- Site Visit
- Report
- Case Study



ONE STOP SHOP FOR RESOURCE EFFICIENCY



