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The “In Touch” Business Forum: *Energy Savings in the Clubhouse*



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Agenda



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- Introduction to SWEA & Context
- The service
- Minchinhampton Golf Club
- Chipping Sodbury Golf Club
- Useful tips
- Receiving similar support
- Questions



- Independent not for profit charity
- based in Gloucestershire, Swindon and mid Wales
- Energy efficiency, renewable energy and education projects
- Team of 40+
- Providing support to the Domestic, Public and Private sectors
- Business Support: Target 2050

The Service



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- Data analysis of a minimum of 1 year energy data to establish baseline; identify trends & anomalies and highlight opportunities for tariff reduction
- On-site energy survey (half day minimum) to assess current energy utilisation and management
- Provision of report - good practice/opportunities/measures
- Presentation of report to business manager & team
- Identification of Action Plan – Business case
- Implementation of no cost measures
- Support in identifying suppliers/installers

The Service



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| | | | |
|------------------|---------------|------------------------|------------------|
| | Refrigeration | | Life time Cost |
| Air Conditioning | | Compressed Air | |
| | | Water Wastage | Office Equipment |
| Lighting | | | |
| Renewable Energy | | Tax Breaks | Heating |
| | Purchasing | Hot Water | |
| Ventilation | | | Draught Proofing |
| | Energy Policy | Insulation | |
| Control | | Motors, Pumps & Drives | |
| Funding - loans | Awareness | | Glazing |

The Survey mainly assesses:



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- Our service has been provided to many sectors of the industry: > 200 businesses signed up
- We have particular expertise in the hospitality sector
- Two directly relevant case studies
 - Minchinhampton Golf Club
 - Chipping Sodbury Golf Club

Minchinhampton Golf Club



- Old and New Clubhouse's surveyed in August '08
- Total Energy spend of £32,300
- Savings of £6,000p.a identified through no cost and low cost measures
- Emission levels equiv to that from 20 homes
- Monitoring and Targeting programme established



- Heating & Hot Water
- Insulation
- Lighting
- Passive Cooling
- Paper towels v air blade hand dryers



- Main uses of energy:
 - Gas: Heating and Catering
 - Electricity: Lighting, Cellar & Equipment

- Effective recycling policy in place & occupancy detectors fitted in changing rooms



Lighting

- To reduce consumption
- Reduce overheating in summer
- Maintain or improve lighting quality

Heating

- Improved control
- Replacement of boiler

Passive Cooling

Equipment



Lighting

- £4,500 annual savings in use of more efficient lighting
 - Phase 1 implemented, achieving £1,500p.a. savings

Heating

- £400 annual savings from replacement of boiler
- 8% reduction in costs can be achieved from reduction in temperature – implemented through improved control

Air Blade and dryers

- Installation of these reduced paper towel costs by £5,000 per annum

Chipping Sodbury Golf Club



- Clubhouse surveyed in Jan '11
- Total spend of £25,500p.a.
- Total savings highlighted of £7,000p.a. minimum
- Emissions equiv to that from 25 houses*
- Energy Diary created to improve ongoing management



- Heating & Hot Water
- Lighting
- Insulation
- Time Control
- Renewable Energy

* Note this is higher than MGC even with a lower energy spend



- Main uses of energy:
 - Oil and electricity for heating and catering
 - Electricity for cellar, lighting, equipment and refrigeration
- Electricity accounts for 50% of consumption but 70% of cost: This is typical, but often unknown
- Occupancy detector have been installed, good to note, changes needed to settings



Heating

- Boiler replacements
- Zone control to improve control (temp and time)
- ASHP consideration
- Pipe work lagging

Hot Water

- Temperature
- Pipe work lagging

Insulation

- Cavity wall required, but good loft insulation



Lighting

- LED and Fluorescent
- Occupancy detector control
- External lighting

Equipment

- Cellar Temperature
- Time control on equipment
- Reduce use of portable electric heating (through heating recs)

Renewable Energy opportunity – 300% return!



Heating & Hot Water = £2,900 min

- Time control
- Zone Control
- Replacement of system
- Temperature

Insulation = £1,500 min

- Pipe work lagging
- Cavity Wall insulation

Lighting = £3,150

Electricity Generation: £15k cost: £45k return



- Hopefully you have already picked up on some of the opportunities, but briefly:
- Heating: Times, Temperatures, Heat Loss, Local control
- Insulation: Lagging, Cavity Wall, Loft, Draught proofing
- Lighting: Efficient type, technical and manual control
- Equipment: Use of A/C v Heating, time switches, cellars
- Renewable Energy – FITs & RHI
- Monitoring is essential for effective management
- Savings in region of 15% minimum should be expected

Receiving Similar Support



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- This service is available to all businesses
- At a cost of 2.5% of your annual energy cost, with savings of a minimum of 15% identified in no cost and low cost savings
- A real opportunity to make significant savings at a very low cost
 - Example business spending £20,000p.a. on energy, spends £500 on the survey and support and will return a minimum saving of £3,000 through the implementation of no cost and low cost measures
 - A minimum annual energy spend of £15,000 applies

Thank you for your time,
Any questions?

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