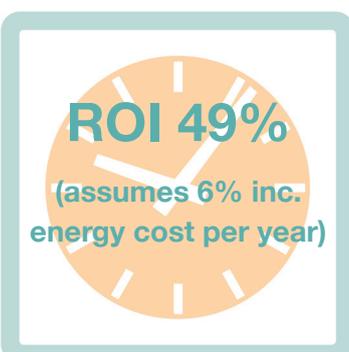
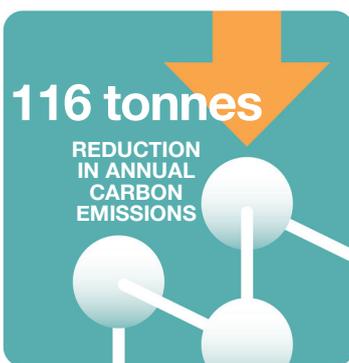
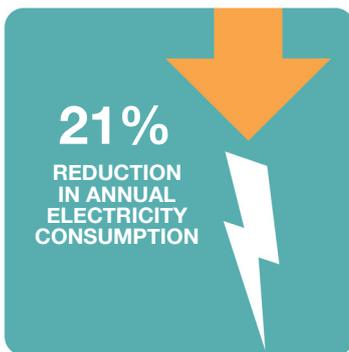
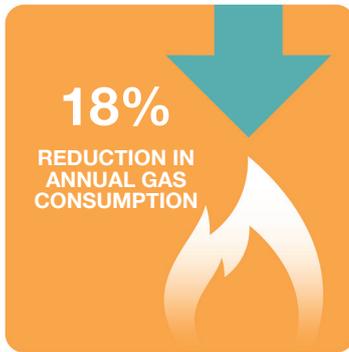


Brecon Leisure Centre Freedom Leisure - Powys



Working with Leisure Energy, Freedom Leisure in partnership with Powys County Council, **reduced their annual gas and electricity consumption** at Brecon Leisure Centre by **£23,537/year** at current costs.



Facilities

- 25m Main Pool & Flume
- Teaching Pool
- Track & Astro Pitch
- Fitness Suite & Studios
- Sports & Activity Halls
- Bowls Hall & Squash Courts

Our approach

Leisure Energy examined the whole life cost implications of the proposed improvements from the outset enabling us to demonstrate a return on investment to Freedom Leisure and Powys County Council – modelling the capital cost of improvements against energy savings and reduced maintenance.

BRECON LEISURE CENTRE ENERGY AUDIT

- Established baseline utilities consumption
- Identified potential Energy Conservation Measures (ECMs)
- Quantified ECM annual energy and utility savings
- Prepared costed turnkey ECM proposals
- Reviewed and confirmed the investment criteria
- Full turnkey, project managed ECM installations
- Comprehensive handover of ECMs and staff training



Project value
£208,641

Annual savings
£23,537 (at current costs)

Annual electricity savings
150,521 kWh (21%)

Annual gas savings
399,997 kWh (18%)

Annual CO₂ savings
116 tonnes



Project summary

Leisure Energy's audit recommended that Brecon Leisure Centre carry out a suite of interdependent works. These were completed for a total sum of £208,641 equating to an ROI of 49% assuming 6% increase in energy costs per annum.

What we did

Project managed the whole installation from start to handover with ongoing fine tuning and monitoring during the first year to ensure savings have been achieved.

Pool hall and changing room air handling unit (AHU)

The existing AHU within the Pool Hall and Pool Changing Rooms had reached the end of its useful life. A new system was installed with a number of energy conservation features, including:

- Fan modulation based on pool occupancy
- Two-stage heat recovery (high efficiency plate heat exchanger recuperator and fully modulating, dynamic air mixing section)
- Minimal energy, unoccupied 'set back' operation mode

These resulted in reduced energy costs and improved operational control.

Building management system (BMS) controls

We reviewed and reconfigured the existing BMS to optimise operational times and set points, thereby reducing periods of wasted energy consumption.

Low energy pool lighting and sensors

We installed specialist low energy lighting in the pool hall, sports and squash courts reducing installed electrical loads whilst improving existing illumination levels. 'Intelligent' lighting controls, such as daylight sensing, where used whenever possible. The installation of LED lighting schemes also reduces maintenance costs.

Plant room insulation

Specialist insulation was added to exposed pipework in the plant room, reducing standing losses and preventing wasted thermal energy. The insulation is fully adjustable and allows for easy access for future maintenance works.

Comprehensive handover

Upon completion of the ECMs, we provided a comprehensive handover to Freedom's technical team as well as providing training for other staff in energy conservation.

Who we are

Leisure Energy is an energy saving consultancy and are experts in identifying energy conservation measures in leisure facilities.

We offer leisure operators a range of energy efficiency services for their leisure facilities, identifying ways to reduce consumption and save money. We offer a complete solution; an initial energy audit and report (where we identify sustainable savings); funding sources; project management of the installation process and; training of staff.

Our client

Freedom Leisure, a not for profit leisure trust, manages leisure and cultural facilities on behalf of local authorities across the UK. Their key aims are to increase participation whilst reducing their carbon footprint combined with improving the centres environmental conditions.

Contact us

For more information on how Leisure Energy can save you energy contact Neil Bland:

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