BRIDPORT LEISURE CENTRE: DORSET

Upgrading works due to commence in 2014

An outline of the project proposals supported through the Lottery Improvement Fund are set out below. These will be followed through to post completion to assess the benefits of the range of interventions, new products and technologies.

New features

Environmental improvements will include:

- New high-efficiency air handling unit and heat exchanger to manage the air conditions and ventilation
- Showers in all changing areas upgraded with sensor-operated aerated showerheads mixing air with the water to reduce hot water consumption
- Replacement pool covers deployed using booms to reduce drag on the poolside floor, to increase longevity.

Bridport Leisure Centre forms a leisure hub for the surrounding community and has over 260,000 visitors per year. The leisure facilities at the centre include a 25 m pool and 12 m learner pool, a 4 court sports hall, 70 station gym, spinning room, and 3 squash courts.

Sport England awarded the centre £162,261 towards an overall budget of £216,348 to bring environmental improvements and energy cost savings to the centre. The money, made available through Sport England’s Improvement Fund, will be used to install a number of sustainable energy saving initiatives which will complement the hard work and already impressive reductions in energy use and CO₂ emissions.

Upgrades to the air handling unit, showers and pool covers are all included in the project and these initiatives will reduce the centre’s requirements for conventional energy. It is hoped that the centre will see anticipated reductions of 60% in energy costs and 40% in carbon emissions.

Reducing conventional usage

Prior to their application to the Improvement Fund, Bridport and West Dorset Trust concentrated on reducing the usage of conventional energy through many years of environmental improvements. This has seen savings of over £45,000 in energy costs and carbon emissions have been cut by 30% in 7 years.

Having reduced conventional usage to sustainable levels, the Trust are now anticipating cutting another £50,000, a reduction of 60%, in energy costs and will also reduce carbon emissions by 40% through the use of energy efficient improvements and the installation of renewable energy.
Efficient ventilation
The centre will be installing a new high-efficiency air handling unit and heat exchanger to manage the air conditions and ventilation on the pool side of the building. This will improve the air quality in the pool environment and changing facilities whilst generating heat and energy for other purposes within the centre.

The efficiency of the new unit will mean it can be run at lower intensities and for shorter periods meaning less energy will be used. This will be a major contributing factor in the massive cost savings anticipated.

Small changes, big savings
The showers throughout the centre will be upgraded with aerated showerheads. Standard shower heads commonly allow 20 litres per minute to flow during use, whilst the aerated heads that mix air with the water reduce the flow to 6-8 litres per minute. At these rates, it would only take around 25 showers of say three minutes each to save a cubic metre of heated water, and result in savings of £5.

The introduction of the showerheads combined with sensor operated showers is set to have a significant effect on hot water usage by the centre with estimated cost savings of 60%.

Containing the heat
Pool covers perform an important role in reducing energy consumption and energy costs. An efficient cover, when used effectively, reduces heat losses from a pool, lowering the energy required to maintain the temperature of the pool water.

As part of the Improvement Fund upgrades, the centre is replacing both pool covers as the existing ones have started to degrade through continued usage. Learning from experience, the new covers will be deployed using booms which will reduce the drag on the poolside floor. This simple addition will increase the longevity of the covers and maintain the efficiency for many years.

“... these works will ensure the community has a sustainable centre for years to come...”

General Manager
Bridport & West Dorset Sports Trust Ltd

Between 2012 and 2017... the Improvement Fund will invest £45m of National Lottery funding into medium-sized projects that improve the quality and experience of sport.

The Improvement Fund aims to award capital grants worth £150,000 to £500,000 into sustainable projects with a clear local need.

The priorities for 2014 are projects that can clearly demonstrate environmental sustainability through changes to efficiency and usage of energy.

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