SPORT ENGLAND

Improvement Fund
Project Proposals

Creating a sporting habit for life

HALLAMSHIRE TENNIS AND SQUASH CLUB: SHEFFIELD

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:

- LED (light emitting diode) lighting to both the indoor and outdoor tennis courts and generally throughout the facility
- New modern efficient boiler and heating system
- Underfloor heating to six squash courts
- Saunas replaced with modern heating systems and controls to allow the temperature to be lowered when not in use

New LED lighting to indoor tennis courts

Hallamshire Tennis and Squash Club is set just outside Sheffield city centre and has 2100 members. The club has 6 outdoor tennis courts, 4 indoor tennis courts, 10 squash courts, a gym and 2 saunas.

Sport England awarded the club £177,000 towards an overall budget of £256,816 to install environmental upgrades. The money, made available through Sport England's Improvement Fund, will be used to install LED lighting to both the indoor and outdoor tennis courts and generally throughout the facility, under floor heating to the squash courts and replacing an aging boiler and heating system. Air conditioning is also to be installed in the gym area and the saunas are to be replaced with new energy efficient alternatives. The environmental upgrades are anticipated to save 20-30% on energy costs for the club per annum. This money will be reinvested into the club to encourage growth within the junior section with a number of initiatives planned.

LED lighting to all ten squash courts, six of which to also have underfloor heating

LED lighting

LED lighting is to be installed throughout the club. Energy savings of 60% in the indoor tennis courts alone are anticipated.

The club has already upgraded one of their squash courts on a trial basis and found it offers a brighter playing environment whilst also being a sound environmental choice.

LED lighting has a number of features that will benefit the facility.

- **Saving money** – The increased efficiency of LED lighting is anticipated to make the total lifetime cost (purchase price plus cost of electricity and lamp replacement) significantly lower than metal halide lighting. Although the initial purchase price is higher, the payback period is significantly shorter due to reduced maintenance requirements and energy consumption.

Saunas replaced with modern, controllable versions

- **Reducing maintenance** - A typical LED light is stated to have an 'average life' of 20,000 hours (15 years at 4 hours/day), and will support 50,000 switch cycles. This will significantly reduce the overall maintenance costs since currently each metal halide bulb is changed a minimum of once a year.
- **Instant start up** - Metal halide bulbs require up to 15 minutes to fully warm up and reach optimum brightness when the gases burn at a high temperature. In addition, when power is lost, a metal halide bulb cannot be restarted until the ignition unit has cooled down which can typically take 10-15 minutes. LED lights have no such requirements for warming up or cooling down and can be easily switched off when the facilities are not in use. This will allow them to be controlled by the clubs booking management system and turned on just before play starts, saving at least 15 minutes of energy per booking.

Boiler efficiency

The club will be replacing an aging heating system within the club house. The club will replace the current boiler with a modern more efficient design. It is hoped that the modern system will bring significant savings to the annual energy bill.

Underfloor heating

As well as energy efficient lighting, six of the squash courts are also being fitted with underfloor heating to replace old ceiling-mounted heaters which rarely delivered the heat to where it was required. Underfloor heating will allow controllable heat at player level and will remove time consuming and expensive maintenance on the old units. This will save significant amounts of money by making the heating within the squash courts as efficient as possible.

Cooling off

The club has a sauna in each changing room. These saunas are to be replaced with modern versions which will drastically reduce energy consumption by allowing the temperature to be lowered when not in use. Members will push a button on the outside which heats the room up to 80 degrees in 2 minutes, each session will last for 15 minutes before returning to 30 degrees when not in use. The old saunas only ran at a constant 80 degrees and were on for 15 hours per day. Significant savings will be seen through allowing the reduction of heat in between sessions.

> ***"...this grant has allowed us to bring forward our environmental improvements by three or four years..."***
>
> ***General Manager***
> ***Hallamshire Tennis and Squash Club***

LED lighting is to be installed throughout the facility

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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