

## Sleaford Leisure Centre: Refurbishment and Sustainable Energy Sourcing

### The History of the Pool

Sleaford outdoor swimming pool has been open since 1886, and has been enjoyed by the people of the town for many years. The site, originally made up of two pools, was updated in 1981 and one pool given a roof (the other filled in), but by 2010 the pool was in need of further refurbishment, with increasing maintenance costs and reducing turnstile numbers.

At this point, the District Council had to consider what to do with the aging facility. Its priorities were to continue to support the health and well-being of the community whilst also offering value for money. After reviewing a number of options, the Council took the decision to invest in the development of the facility. To ensure the long term future of the pool, it chose to invest in a sustainable manner, taking account of a range of different factors including transport, energy efficiency, community needs, and sustainable energy provision.

Now operating as Sleaford Leisure Centre it offers fitness facilities (gym), group exercise (aerobics), personal training, sauna / steam rooms, swimming pool and children's splash pool.



### The Project

Following some careful planning, £2.9m was invested in redeveloping the Sleaford pool, to incorporate a range of sustainability measures. The project has been a great success, and has led to an increase of over 60% in turnstile numbers.

Read on to find out more about the re-development project and the key factors that have made it a success.

### Transport and Community

The District Council was aware that Sleaford swimming pool is a community facility, and to make any future development of the centre a success, it would need to take into account the views of the wider community. A survey was sent to 3,000 households setting out options for the centre in the future, and inviting residents to provide their views. Options included locating the swimming pool at a new out of town site, and upgrading the existing site.

This first option would mean that townsfolk would need to drive to the site, the second, reusing the existing site, would mean that the leisure centre would be unavailable for a year whilst it was shut to accommodate the works. The result of the survey showed a clear preference - to keep the current site open within the town centre, and remove the need to drive.

In addition to the survey, the Council held consultation meetings to discuss all the options, and, once a strategy was agreed, continued to provide progress updates to the local people. Taking into account the need to close the centre for the works, it also provided details of alternative facilities that could be used in the intervening time period.

### Energy Efficient Refurbishment

Re-development plans for the site were designed to upgrade the facilities to meet current energy efficiency requirements, and in some cases go beyond. The upgrade included a number of energy efficiency measures such as the installation of LED lighting, additional insulation of the pool tank, and full refurbishment of the original 1910 bell filters. The five lane pool has also been transformed to a level deck, with its base and gradient modified to meet Sport England guidelines.

The refurbishment included an upgrade of disabled changing facilities to encourage greater use by the disabled. This has been shown to be a success, with a disabled club being established, and the pool used consistently.

Further improvements to the site include a more spacious entrance, designed to be lit naturally, a gymnasium and weights room, and the addition of a sauna and steam room.

### Sustainable Power and Heat Generation

The Leisure Centre is the first of its kind in the UK to be fully heated by a sustainable district heating system. This is powered by the excess heat from a renewable energy plant (a straw-burning power station).

This partnership was facilitated by the District Council which, at the same time as refurbishing the centre, was working with an energy provider to have a 38 MW straw-fired renewable energy power plant built just outside of town. This was to be fired with straw bales provided by farms within a 50 mile radius of the site. The plant was being designed to provide enough electricity for 65,000 homes.

The District Council, knowing that the swimming pool was due to be refurbished, started to consider if it could link the two activities together. Through joined up work within the District Council, and careful negotiation of a Wellbeing Agreement with the power provider, it was agreed that excess heat would be provided via district heating mains to five public and community buildings in the centre of town. This included the swimming pool, the local football club, the bowling club, a primary school and the council's own offices.



## Critical Success Factors

There were many factors that made this project a success, including:

- **Team**- many members of the council were involved in making the both the swimming pool and power station project happen, and in linking the projects together. The Councillors endorsed the activity, the Commercial Director drove forward both plans understanding the wider goals, and the team of surveyors, leisure managers, and finance professionals made sure it happened. It was only through endorsement and proactivity at all levels that the project was able to become a success.
- **Community engagement** – the local town and surrounding area were engaged on both projects, with the benefits of both being communicated well throughout the community. The local power provider understood the need to engage with the community and engaged with the District Council to find ways to support the community in a sustainable manner.
- **Funding** - The original funding for the pool refurbishment disappeared with a change in Government in 2010. The council therefore needed to seek new funding from different sources. Again, through team working at the council, a number of grants were secured through different routes. This included £150k from Sport England, and £70k from ASA.

## The Business Case

### Power Plant

The construction of the 38 MW straw-fired renewable energy power plant had a project value of £150M inclusive of financing, and was completed by Eco2. The power plant has an annual fuel requirement of 230,000t biomass which equates to approximately 50 straw bales per hour. In addition to the power provision under the Wellbeing Agreement, the following contributions were made by Eco2 to the local community:

- £2M District Heating Infrastructure Investment
- £40k pa to Kirkby la Thorpe and Sleaford Town Community Funds
- £10k Kirkby la Thorpe School Fund
- £200k Footpath Improvement Works
- £75k Apprenticeships in construction and operational phases
- £20k Sustainability Exhibition Fund
- £50k Public Art Fund
- £10k Urban Walks Fund

### Leisure Centre

The centre refurbishment was delivered on time, to budget, and exceeded all expectations of the public and other stakeholders, at a construction cost of £2.9m, which is approximately 50% of the cost of a new centre. It is estimated that the heat provided from the power plant will save in the region of £15,000 on heating and hot water bills each year.

## Awards

The project has received national recognition for its concept and design. This is testament to the excellent work undertaken. To date the following awards have been received:

1. Building Control Awards – Best Public Building Award for Sleaford Leisure Centre Architect Archial Paul Weston and Builder RG Carter
2. Constructors Considerate Silver Award 2014 – RG Carter
3. Sleaford Civic Trust Award 2014 for Building and Renovation
4. Chartered Institute of Building - Committed to Construction in the East Midlands Awards 2014 - Winner of the Committed to Sustainability Award
5. Royal Institute of Chartered Surveyors East Midlands Tourism and Leisure Highly commended
6. Greenbuild Awards Non-Domestic Retrofit category – winner
7. The Green Apple Award 2014 for Built Environment and Architectural Heritage
8. Green World Ambassador Award