

# UKSPA CASE STUDY

## CLUSTER GROWTH AT LOUGHBOROUGH SCIENCE AND ENTERPRISE PARK

Since it acquired the former British Gas research site in 2003, Loughborough University has created a fully commercial corporate environment at its Science and Enterprise Park. With ready access to the University's research capability and graduate supply, distinct clusters have emerged in energy, advanced engineering, low carbon technologies and sports technology. It now offers 700,000 sq. ft. of high quality accommodation for more than 55 organisations and 2,000 people



Advanced Technology Innovation Centre

### Major expansion planned

Major expansion plans bring further potential to create new clusters for knowledge-based businesses and associated advanced/high value manufacturing, as Prof Tracy Bhamra, Loughborough's Pro Vice-Chancellor for Enterprise explains: "A 35 hectare expansion is underway to create a further 1,000,000sq ft. floor space. We already have a very significant science park and the expansion we are talking about would perhaps make LUSEP the biggest science park in the UK."

This is partly due to LUSEP's forward-looking gateway policy which welcomes knowledge-based organisations – and specialist support organisations – at every stage of development across all sectors, whose activities complement the University's activities.

"We seek a willingness to engage in ongoing discussions around mutually beneficial joint activities," continued Prof Bhamra. "This approach stimulates the flow of knowledge between LUSEP organisations, as well as strengthening partnerships"



### Proximity to the knowledge base

The advantages of proximity to the University's knowledge base are further enhanced by a comprehensive array of benefits and services to all organisations.

Prof Bhamra said: "We aim to encourage LUSEP's 2,000-strong workforce to feel part of the University community. So we have developed a unique 'campus partner offer' that includes free services such as cross campus travel and library borrowing, and preferential rates for the University's extensive sports and conference facilities, executive education, languages and arts programmes. Essential business services are also available, including HR and print, in addition to enhanced IT provision, above the standard provision of super-fast broadband and telephony."

### Energy innovation

Energy is largest cluster of activity at LUSEP, with more than 1,100 people in eight companies accelerating the low carbon economy through collaboration. These include BSI, DNV GL, National Grid, the Energy Technologies Institute and Cenex.

The University's complementary research base spans the generation, supply and demand for energy and includes: the invention and improvement of new and renewable energy technologies; the efficient and flexible generation of power; nuclear energy and waste; electrical and thermal energy storage; the efficiency of conventional transport systems; transport and travel; and end-use energy demand in buildings and for travel.

Specialist R&D facilities on LUSEP include the Centre for Renewable Energy Systems Technology, which houses one of a handful of laboratories in the world with ISO17025 (calibration) accreditation to measure solar cells and modules. "As well as practical improvements, the cost of technology has rapidly declined. In the early years, several people tried to break into the building in order to steal graphics processor chips from our workstations, which were the very latest tech and could fetch a hefty price. The average person's phone now comes with more RAM than those chips had."

### Case Study: Intelligent Energy

Intelligent Energy Holdings is a British energy technology group which develops efficient and clean hydrogen fuel cell power systems for the global automotive, consumer electronics, distributed power and generation markets.

An IP-rich company with over 25 years in R&D, resulting in 1,000+ patents granted (and over 1000 patents pending across more than 400 patent families). Its origins trace back to the development of proton exchange membrane (PEM) at Loughborough University in the late 1980s

## Sport Innovation

Loughborough University and LUSEP also provide a unique innovation environment for the sports sector. The campus is often referred to a living lab with the highest concentration of elite athletes studying and training onsite.

The co-location of sports organisations at Loughborough strengthens innovative partnerships between sports organisations and the University's applied research and teaching practice.

Many of the largest governing bodies and national sports organisations are based on LUSEP in SportPark, a £15 million development housing British Swimming, The English Institute of Sport, Sport England, the Youth Sport Trust and many more.

In 2008 the Sports Technology Institute opened on LUSEP. The £15 million facility is home to the University's Sports Technology Research Group, one of the world's leading research groups of its kind, working with global brands such as Adidas, Callaway Golf, Canterbury of New Zealand, Dunlop, New Balance and Nike, on the design, simulation, testing and manufacture of sporting goods.

The University also hosts the biggest and most advanced indoor cricket facility in the world – the National Cricket Performance Centre, home to the England and Wales Cricket Board (ECB) and its England Performance Programme.



The University campus is also home to the National Centre for Sport and Exercise Medicine East Midlands, a partnership of scientists and clinicians working to benefit the health and wellbeing of the nation – from everyday people at risk of ill health through to elite athletes.

## Case Study: England and Wales Cricket Board

The National Cricket Performance Centre at Loughborough University is home to the England and Wales Cricket Board (ECB) and its England Performance Programme. Working together, the ECB's coaches and physiotherapists and Loughborough's sports biomechanics and psychologists have gained invaluable insights into fast bowling that have positively impacted on talent selection, coach performance and injury prevention.

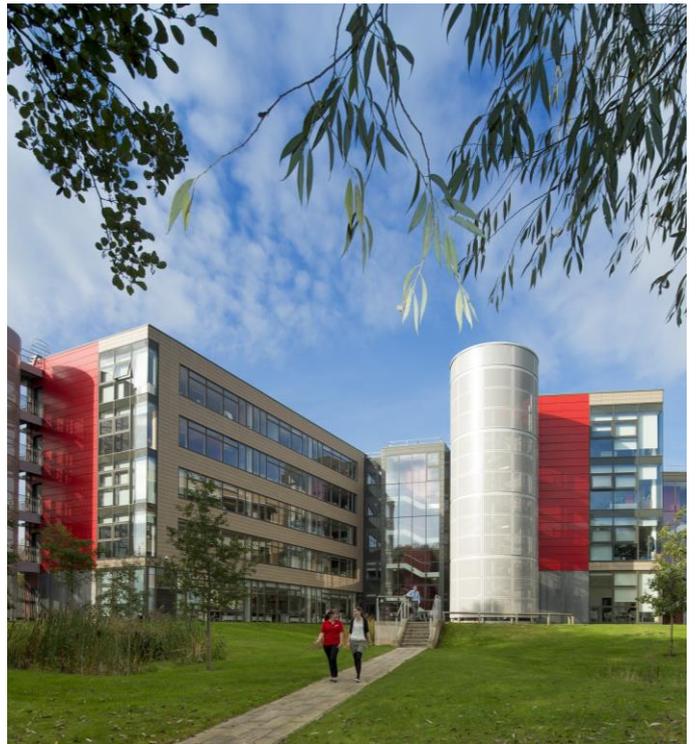
The collaboration has also stimulated new research projects to develop cricket apparel, most notably culminating in a landmark announcement of regulations governing the use of helmets across the professional and recreational game. All male and female cricketers playing in professional cricket matches are now required to use helmets which meet the latest British Safety Standard, informed by the Sports Technology Institute's research.

## Current Expansion

LUSEP's current expansion – made possible with City Deal investment – sees the development of seven hectares, now available as fully serviced plots for design and build.

The first building to be developed as part of the expansion, the Advanced Technology Innovation Centre, was made possible with support from the European Regional Development Fund. Opened in September 2015 and already at 85% occupancy, the 3,000 square metres building caters for start-ups to larger technology SMEs.

LUSEP is set to play a significant role in local and regional economic growth in the future. The Midlands Engine innovation theme recognises the importance both of universities like Loughborough, and also the key role of the region's science parks.



SportPark on LUSEP – home to many national governing bodies and sports organisations.

## About Loughborough Science & Enterprise Park

Loughborough University Science and Enterprise Park (LUSEP) is already one of the UK's largest science parks, with 700,000 sq. ft. of high quality accommodation for more than 55 organisations and 2,000 people. Set in over 19 acres of mature parkland, LUSEP provides a fully commercial corporate environment, whilst also having ready access to the research capability, resources and graduates of Loughborough University – a leading UK institution with an outstanding record in engineering and technology and known for the quality of its graduates.

## About UKSPA

UKSPA is a membership based Association providing opportunities for Science Parks, Innovation Centre's and Incubators to network, share good practice and pool knowledge and experience to accelerate business growth.

More information on UKSPA members and all of UKSPA's services with details of membership can be found at [www.ukspa.org.uk](http://www.ukspa.org.uk).