

# The University of Nottingham

## Britain's Global University



The University of  
**Nottingham**

UNITED KINGDOM • CHINA • MALAYSIA

Andy Nolan, Director of Sustainability

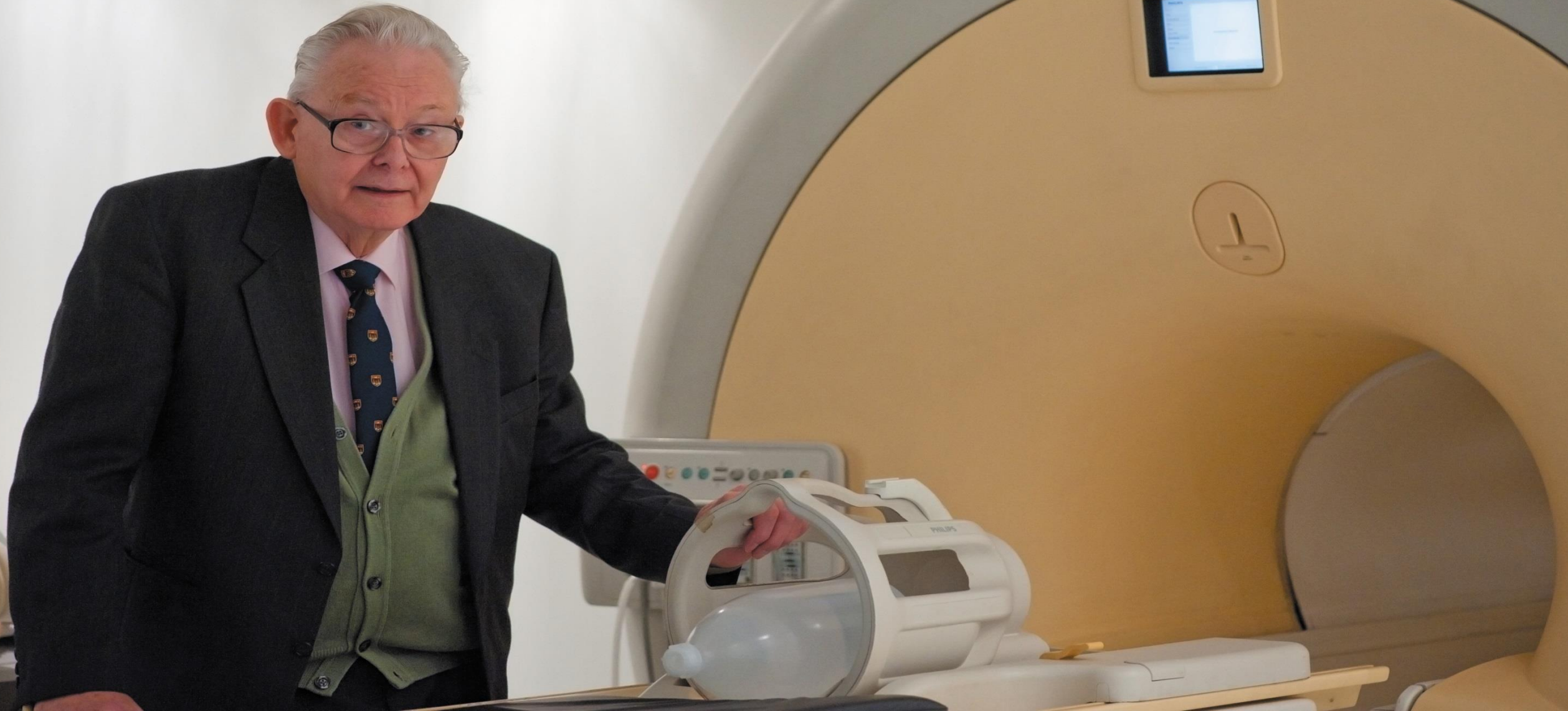


# /Nottingham in Numbers...

- **5 campuses** across **3 countries** and **2 continents**
- **43,893** high-calibre students worldwide
  - **11,000** students studying for University of Nottingham degrees in Asia
  - **24,455** UK Undergraduates **8,743** UK Postgraduates
- **9000** staff world-wide
- **£1.1bn** of annual economic impact in the UK
  - **18,000** jobs supported by University activity
- **£600m** annual income 2014/15
- **£186m** in research awards 2014/15
  - **60%** of research income linked to industry
- **£500m** total research portfolio



Nobel Prize Winner, Prof Sir Peter Mansfield,  
invents the MRI scanner







**United Kingdom**

London

Moscow  
Москва

**Estonia**

**Latvia**

**Lithuania**

**Denmark**

**Poland**

**Belarus**

**Netherlands**

**Germany**

Prague

**Czech Rep**

**Slovakia**

**Ukraine**

**France**

Paris

**Belgium**

**Austria**

**Hungary**

**Moldova**

**Romania**

**Croatia**

**Serbia**

**Bulgaria**

Istanbul

**Georg**

*Black Sea*

**Portugal**

Madrid

**Spain**

Barcelona

*Tyrrhenian Sea*

**Italy**

Rome

**Greece**

**Turkey**

**Portugal**

**Syria**

**Lebanon**

**Iraq**

**Israel**

**Jordan**

**Morocco**

**Tunisia**

*Mediterranean Sea*

**Algeria**

**Libya**

Google

**Egypt**





**United Kingdom**

**NORTHERN IRELAND**

**Isle of Man**

**Ireland**

**ENGLAND**

**WALES**

*English Channel*

**Google**

Galway

Limerick

Cork

Dublin

Glasgow

Edinburgh

Dundee

Liverpool

Manchester

Cambridge

Oxford

London

Bristol

Cardiff

Southampton

Brighton

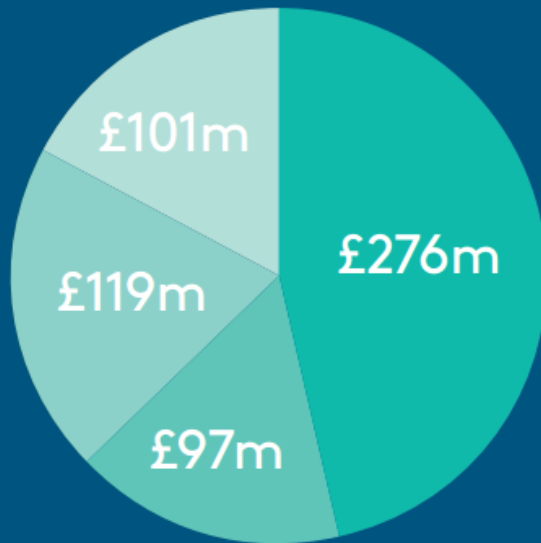
Plymouth

# /Finances...

2015

**£593m**

Total income



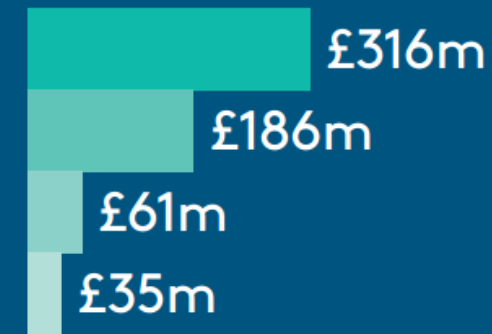
**+£25m**

Surplus

- Tuition fees and education contracts
- Funding body grants
- Research grants and contracts
- Other income

**£596m**

Total net assets



- Staff costs
- Research awards
- Capital investment
- Cash generated from operating activities



# /Global reputation



The University of  
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TOP  
**1** % of universities  
worldwide  
QS World University Rankings 2015

TOP



UNIVERSITY  
IN THE  
UK FOR

JOB  
PROSPECTS

WhatUni Student Choice Awards 2015



© Nobel Foundation

**2** Nobel  
Prizes

**Sir Clive Granger**  
(2003 – Economic Science)

**Sir Peter Mansfield**  
(2003 – Medicine)



**Teaching standards** at the  
University received the **highest  
possible commendation** in the  
latest QAA (Quality Assurance  
Agency) audit (2009)

**16**



**green flag** awards since **2003**  
across University Park and  
Jubilee Campuses



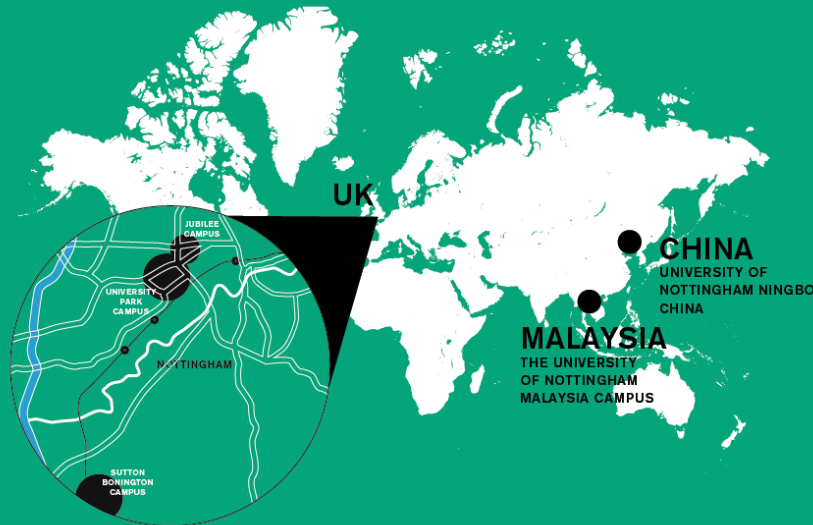
Winner of the Times Higher  
Education Awards 2014  
**Research Project of the Year**

# /International reach



The University of  
**Nottingham**

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**5**  
CAMPUSES

ACROSS

**3**  
COUNTRIES

as well as other  
research and  
education sites

Links with more than

**300**

UNIVERSITIES  
IN OVER



**40**

COUNTRIES

An alumni community of over

**250,000**

MEMBERS



ACROSS THE GLOBE

Across our **UK, China and Malaysia**  
campuses, we have over

**43,000**

students from more than

**150**

different countries. Of these, over

**9,000**

are engaged in postgraduate study

ALMOST

**9,000**

staff across our campuses



/02

University locations

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Our global campuses



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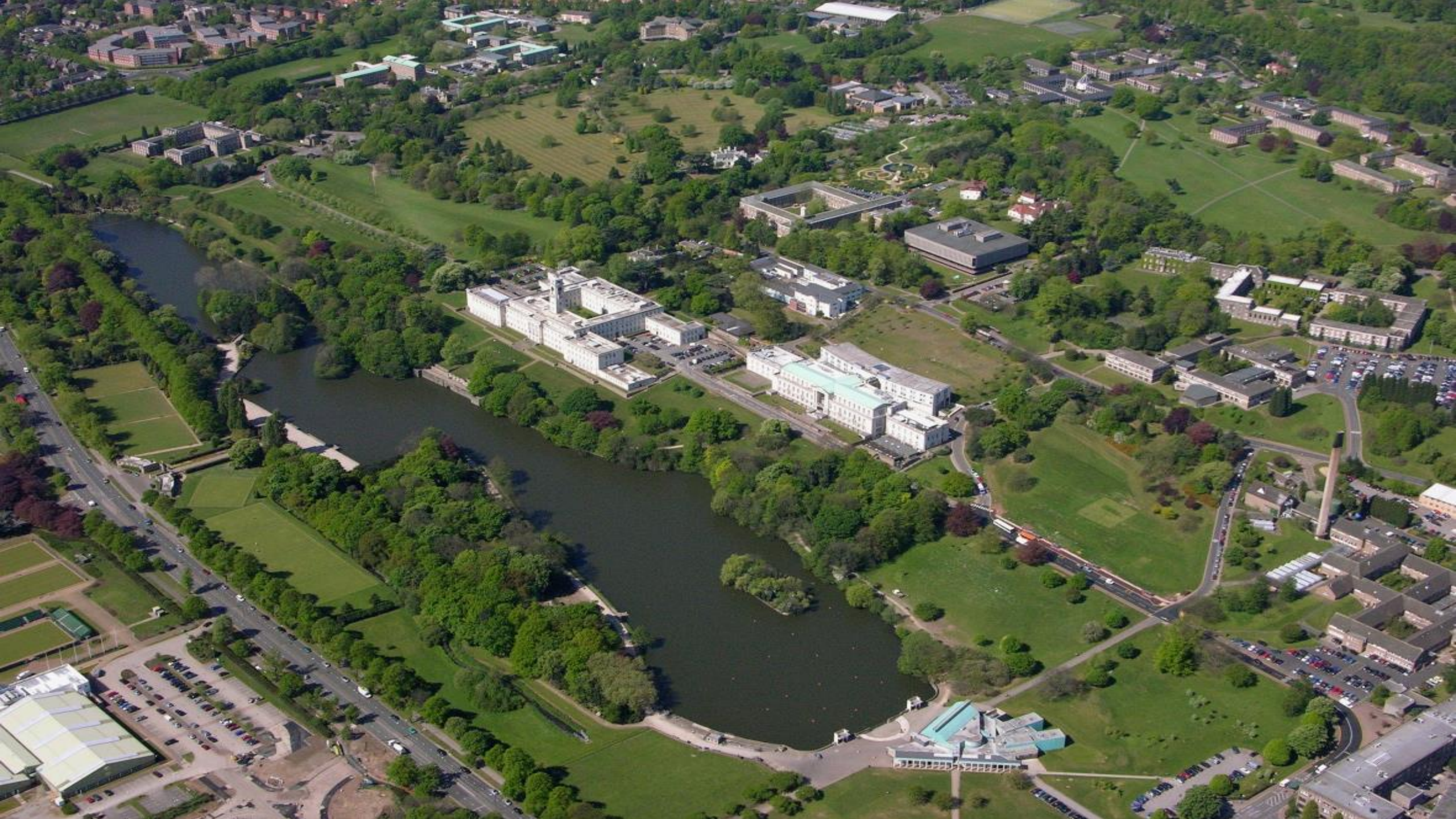
# /University Park Campus - UK



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# /Jubilee Campus, Innovation Park - UK



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# Raleigh Chopper – Launched in Nottingham 1969





# /Sutton Bonington - UK



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# /Ningbo Campus - China



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# /Malaysia Campus – Kuala Lumpur





# Sustainability – 10 key areas

Waste & recycling

Research

Carbon and energy management

Teaching & learning

Travel & transport

Information Technology

Community engagement

Awareness raising,  
training, communication

Procurement

Campus development

# Governance

- **Environment Committee**
- **University Executive Board**
- **University Council**
  
- **Major investments through University Executive Board and Finance Committee**





# Management



- **Director of Sustainability leads Sustainability Directorate**
- **10 office based staff**
- **50 operational staff**

# Sustainability Operational Budget (14/15)

	Pay	Non-Pay
Energy (Gas & Elec +)	-	9,788,969
Grounds/ Landscape	1,419,001	646,515
Transport	318,101	237,082
Environmental	2,883	153,476
<b>Total</b>	<b>1,739,985</b>	<b>10,826,042</b>

1.00 GBP = 5.62876 ILS



# How are We Performing?

- 1<sup>st</sup> place in Greenmetric Ranking of World Universities 2015
- People & Planet 2015 2:1
- Guardian Higher Education Awards - Best sustainability initiative 2015.
- Times Higher Education award for 'Outstanding contribution to sustainable development' in 2012
- NOOC shortlisted for Guardian University Award 2014
- Highly Commended Green Gown commendation for 'Sustainability in Teaching & Learning' in 2014
- 1 Winner and 2 Highly Commended Awards at 2015 Green Gown Awards



/Global innovation



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**The £26m Malaysian Government-funded Crops for the Future Research Centre** was completed on our Malaysian Campus in 2015, and puts the University at the forefront of global food security and nutrition research



# /World-Class research

In the latest Research Excellence Framework (REF) 2014



more than

**97%**

of research at the University is  
**internationally recognised**

more than

**80%**

of research is ranked as  
**'world leading' or  
'internationally excellent'**



Research Councils UK, 2015

# Sustainability Research

- Environmental Technologies Research Institute
- Sustainable chemistry
- Crops for the future
- International Centre for Corporate Social Responsibility
- Energy, environmental and sustainability research portfolio worth over £20m per year
- [Creative Energy Homes](#)





# Teaching & learning

- Professional institutions - require graduates to have sustainability and corporate social responsibility knowledge
- 'Sustainability' increasingly part of curricula across the University
- Careers events focused on sustainability sector – we're working with IEMA
- Students - believe sustainability skills are important to their future employers
  - Employers - anticipate a need to employ staff with sustainability skills
  - Education for Sustainable Development
  - Perspectives on Sustainability NOOC
  - Sustainability, Society and You MOOC
  - Nottingham Advantage Award





FREE ONLINE COURSE

# Sustainability, Society and You

Join us for an introduction to the major global issue of sustainability and discover how you can have a real impact on our future.

Register interest



FREE online course

# Sustainable Construction

- All new buildings to achieve BREEAM 'excellent' standard
- Green design principles - low embodied energy, passive design, maximise natural daylight, green roofs, lake source heating/cooling
- Gateway Building at Sutton Bonington uses straw bale construction







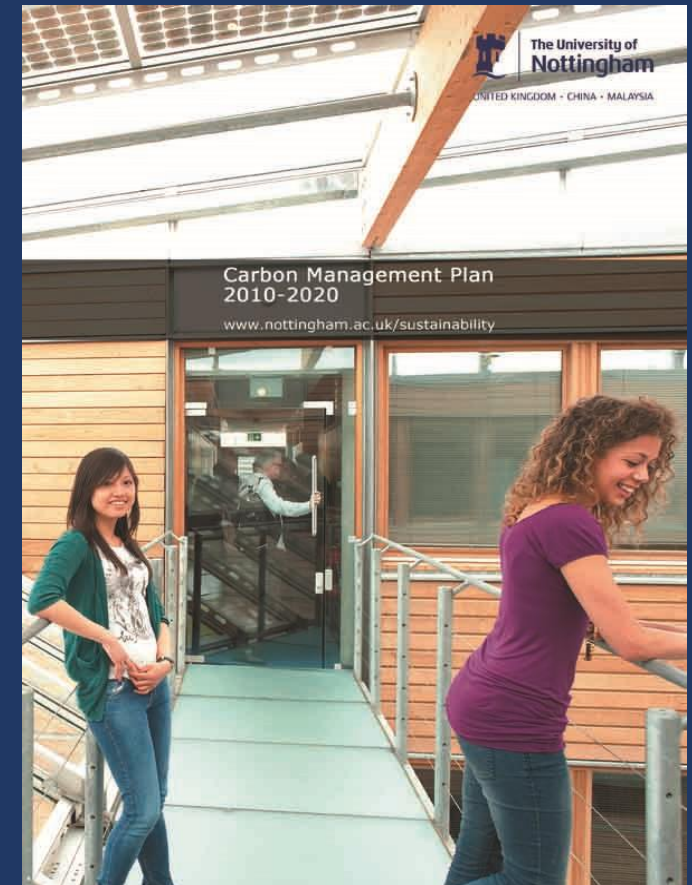






# Carbon Management Plan

- £10m annual energy costs
- University carbon targets
  - baseline of 68,000 tonnes (2009/10)
  - reduce to 54,000 tonnes/yr by 2015
  - reduce to 41,000 tonnes/yr by 2020
- 57,596 tonnes in 2014/15
- **Like for like comparison 2010 – 2015 Total CO<sub>2</sub> emissions -21%**
- £20m new investment programme
  - £5.8m already invested
  - predicted annual savings of 7,600 tonnes/yr



In **2014/2015** our  
carbon emissions  
from energy use were

**65,366  
tonnes**



**1 tonne of CO2**  
weighs as much as

**10**

baby elephants...



...and would take up  
the same space as a  
**10m wide, 25m  
long and 2m deep  
swimming pool**





An infographic with a teal background. At the bottom, a dark blue silhouette of a city skyline is shown. Four smokestacks rise from the skyline, each with a white arrow pointing upwards into a large, dark brown, cloud-like shape representing carbon emissions. A white dotted line is drawn across the top of this cloud shape. A white arrow points down from the top right corner of the image towards this dotted line. The text 'Carbon emissions have reduced by 4.5% since 2008/2009...' is written in white inside the cloud. At the bottom right, a green bar contains the text '12%' in yellow, with the text '...whilst the amount of buildings have increased by' in white to its left.

Carbon emissions have reduced by  
4.5% since 2008/2009...

...whilst the amount of buildings have increased by

**12%**

We spend more than  
**£11.5 million**  
**per year** on ENERGY...

That's  
**£349**  
per student







57kWp PV cells –  
Lincon Hall student  
residence



# Medical School



- Energy Intensive & Expensive
- Aging Building
- 24/7 Operation
- Electrical £650K
- Steam £1.3m
- Linked to QMC



# Salix RGF4 (Large) Medical School

- Installation of high efficiency chilled water plant to replace steam absorption units.
- 3 off units will give an total installed duty of 2MW.
- Total installed cost of £1.45m
- Annual fuel cost saving £276K
- Annual Carbon saving 933 t CO2



# Sutton Bonington Campus Main Boiler House CHP Plant

- 800kW Combined heat and power plant.
- Total installed cost of £1.35m
- Annual fuel cost saving £275K
- Annual Carbon saving 1,250 t CO<sub>2</sub>





# Vets School 1000m<sup>2</sup> Photo Voltaic Array

- Maximum output of 145kW with estimated annual yield of 127,115kW.
- Total installed cost of £200K
- Annual fuel cost saving of £23K including the Gov't feed in tariff.
- Annual Carbon saving 68 t CO<sub>2</sub>



# Sutton Bonington 500kW Wind Turbine

- Proposed installation adjacent to our dairy farm, subject to planning.
- Annual yield of 1,600,000kWh or approx' 15% of the site electrical consumption.
- Installed cost £1.8m
- Annual fuel saving £289K included Gov't feed in tariff.
- Annual Carbon savings 807t CO<sub>2</sub>





In 2014/15 we  
generated more than  
**4,300 tonnes**  
of waste...

..with less than **8%**  
going to landfill





## Mixed Recycling

- Plastic sandwich containers
- Plastic bottles
- Plastic cutlery
- Yoghurt pots
- Paper coffee cups
- Paper
- Magazines
- Cardboard
- Drink cans
- Foil
- Cling film

No food or liquid please





Since **2009** we've seen a  
**15%** reduction in the amount  
of waste generated  
per student.



The illustration shows a black trash bin with a lid that is slightly ajar. Inside the bin, there are several pieces of food waste, including a green leaf, a red apple core, and a piece of bread. The bin is set against a light brown background.

**More than**  
**120**  
**tonnes**

**of food waste** is  
generated each year  
and is used to generate  
electricity through  
anaerobic digestion.



# Travel & transport

- Cycle mileage allowance
- Bike to work schemes
- Ucycle Nottingham
- Intercampus hopper buses
- Improved public transport links including new tram link since Sept 2015
- Staff travel schemes – car share, season tickets
- Video conferencing

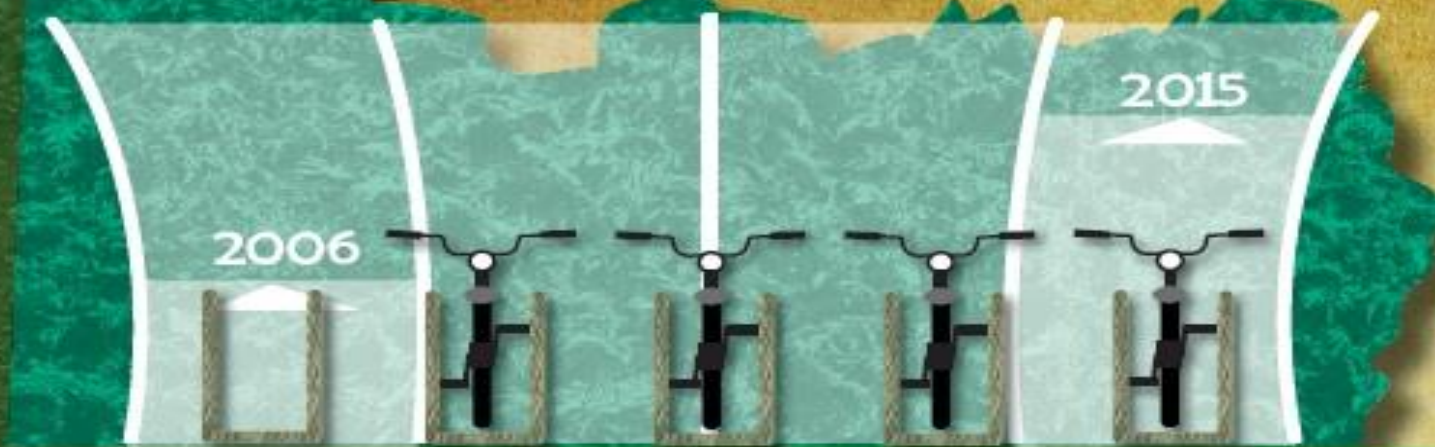






**Cycle Parking**  
on our campuses  
has increased by

**39%**  
since 2006



**More than**

**1.2 Million People**  
use our **HOPPER BUSES** each year



**This has grown from**  
**500,000 in 2006**





# Investment in cycling facilities

- Covered/secure cycle parking
- Showers
- Staff lockers
- Drying cabinets
- Puncture repair kits
- Bike pumps in cycle sheds
- Fix-It repair stands





Every day there  
are more than

# 2,200

push bikes on campus



In recent years we have seen a decrease in the number of people driving to our campuses and an increase in those travelling to our campuses by bike.









# Grounds & Landscaping

Active approach to biodiversity

Green waste used for mulching and  
compost

Wildflower meadows

Bee hives at King's Meadow

Diamond Wood planting

Sutton Bonington arboretum

13<sup>th</sup> consecutive Green Flag award for  
University Park in 2015

Green Flag for Jubilee Campus from  
2013 - Present

Arboretum development across  
University Park





# Communication & Engagement

- Go Greener Halls Competition
- Joint working with SU
- Roadshows
- Environmental Champions
- Posters, guidance documents and staff training
- Website, social media and e-bulletin



**GO GREENER  
HALLS  
COMPETITION**

Find us Online [www.nottingham.ac.uk/sustainability](http://www.nottingham.ac.uk/sustainability) Find us on Facebook [www.facebook.com/UoNsustainability](https://www.facebook.com/UoNsustainability)

Students' Union  
UNIVERSITY OF NOTTINGHAM

The University of  
Nottingham  
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Instead of putting that in the bin, could it be reused or sent back to the supplier?



[www.nottingham.ac.uk/sustainability](http://www.nottingham.ac.uk/sustainability)



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Mixed recycling facilities are available on campus for plastic, paper, card, tins and cans. Please recycle.



[www.nottingham.ac.uk/sustainability](http://www.nottingham.ac.uk/sustainability)



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Food waste bins are provided in cafés. Please recycle.



[www.nottingham.ac.uk/sustainability](http://www.nottingham.ac.uk/sustainability)









# Sustainability



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Teaching and learning

Carbon and energy

Waste and recycling

Sustainable transport

Grounds

Green IT

Sustainable buildings

## Launch of WARPit reuse network

The three Rs are a well-known concept in waste management, but all too often we tend to concentrate on the third of these - recycle. To help address the reuse issue the University has teamed up with WARPit to launch an online exchange system. University of Nottingham staff can use WARPit to redistribute their school's or department's unwanted furniture, fixtures, fittings and office equipment.

So why have we signed up to use WARPit?

- It's easy to use
- Reduces our purchasing and disposal costs
- Increases our recycling and reuse capabilities
- Encourages increased cross-campus and interdepartmental collaboration
- Helps to reduce carbon emissions

The scheme has been running for a couple of months and we have over 100 members already. In the first two months we have seen £39,000 savings, avoided eight tonnes of waste going to landfill and saved 17 tonnes of carbon by reusing furniture and equipment.



# Secretary of State for Transport visits world's greenest university

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The University of Nottingham hosted the Secretary of State for Transport on Monday 25 January following the announcement that Nottingham City Council had won £6.1m to fund environmentally-friendly transport to reduce carbon emissions and improve air quality.

During the event, The Rt Hon Patrick McLoughlin MP visited Innovation Park on Jubilee campus to meet with Sir David Greenaway, Vice-Chancellor at The University of Nottingham, which has just been voted the greenest higher education institution in the world.



The Rt Hon Patrick McLoughlin MP, Secretary of State for Transport; with Councillor Alan Clark, portfolio holder for energy and sustainability and Sir David Greenaway, Vice-Chancellor of The University of Nottingham "Jubilee is a remarkable campus with sustainability at its heart," said Professor Sir David Greenaway.

"Our new GSK carbon neutral laboratory building is the first in higher education to be rated outstanding in its sustainability credentials. And our geo-energy arm at Jubilee is leading the development of the next generation of carbon capture technology, energy storage and solar power," said the Vice-Chancellor.

Recent investment on campus has included a fleet of electric vans for hospitality services and new electric vehicle charge points, free to use, to encourage more hybrid car commuters.

The University has a clear sustainability strategy, supporting a pledge to reduce its carbon footprint, which dovetails with the wider vision of Nottingham becoming the UK's greenest transport city.

Andy Nolan, Sustainability Director at The University of Nottingham added that it was excellent news that Government has "chosen to back Nottingham's ambitious plans for investment in low emission vehicles



# Nottingham campuses are among the greenest spaces in Britain



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<b>Press releases</b>
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<b>July</b>
August
September
October



23 Jul 2015 16:06:29.387  
PA 115/15

[The University of Nottingham](#) has secured a prestigious Green Flag award for both its Jubilee and University Park campuses — for the third year in a row.

Nottingham was the first university to be awarded a Green Flag in 2003 for University Park, and it has continued to rack them up every year since. This is the third year that Jubilee has also received the accolade.

The University is among a record-breaking 1,582 parks and green spaces that will receive a prestigious Green Flag Award today — the mark of a quality park or green space.

## Additional resources

No additional resources for this article

## Related articles

[Electric vehicles spark energy savings in Nottingham](#)

Wednesday 29th July 2015

[Nottingham campuses secure Green Flag status once again](#)

Monday 28th July 2014

[Jubilee joins University Park in big Green Flag success for Nottingham's grounds](#)

Tuesday 30th July 2013

[Nottingham is number one in the world for sustainability for the third](#)



## // Blog Post

## UoN Blogs / The News Room



### [Press releases](#)

January 22, 2016, by [Charlotte Anscombe](#)

Nottingham is number one in the world for sustainability for the fourth time



The University of Nottingham has been ranked number one in the world for FOURTH time in a list

[Stem cell transplantation does not provide significant improvement for Crohn's disease, study finds](#)  
[Classics lecturers help businesses get their message across with help from Hercules](#)  
[Growth grant fund launches for Nottinghamshire businesses](#)  
[Nottingham shortlisted for four Times Higher awards](#)

### Recent posts

[Imagining a dementia-friendly University of Nottingham](#)

[Off to the palace – a specially made glass corqi carries tiniest](#)



# Emerging Trends – Challenges & Opportunities

- Student Experience – Linking to Employability
- Smart Campus / Smart Cities & Living laboratories
- Fossil Fuel Divestment



ESJ



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# SHOULD THE UNIVERSITY OF NOTTINGHAM **DIVEST** FROM FOSSIL FUELS?

Chair: Dr. James Corah

In Favour:

Tessa Tennant  
Tom Parker  
Peter Mullard

Against:

Timothy Devinney  
Dr. Matthew Rendall  
Luke Wenman





# Sustainable Nottingham

May 2016



This is Sustainable Nottingham – a monthly bulletin all about some of the key activities happening across UoN to make the University a more sustainable place to work and study. If you want to receive the bulletin at the start of every month then [please subscribe](#) and circulate it to your colleagues. And if you're involved in any "green" initiatives, then tell us about them via [sustainability@nottingham.ac.uk](mailto:sustainability@nottingham.ac.uk).



## **£2 million investment in medical school to save carbon and improve thermal comfort**

The University has recently started phase two of improvements to the medical school, which will result in both lower carbon emissions and improve the thermal comfort for users of the building.

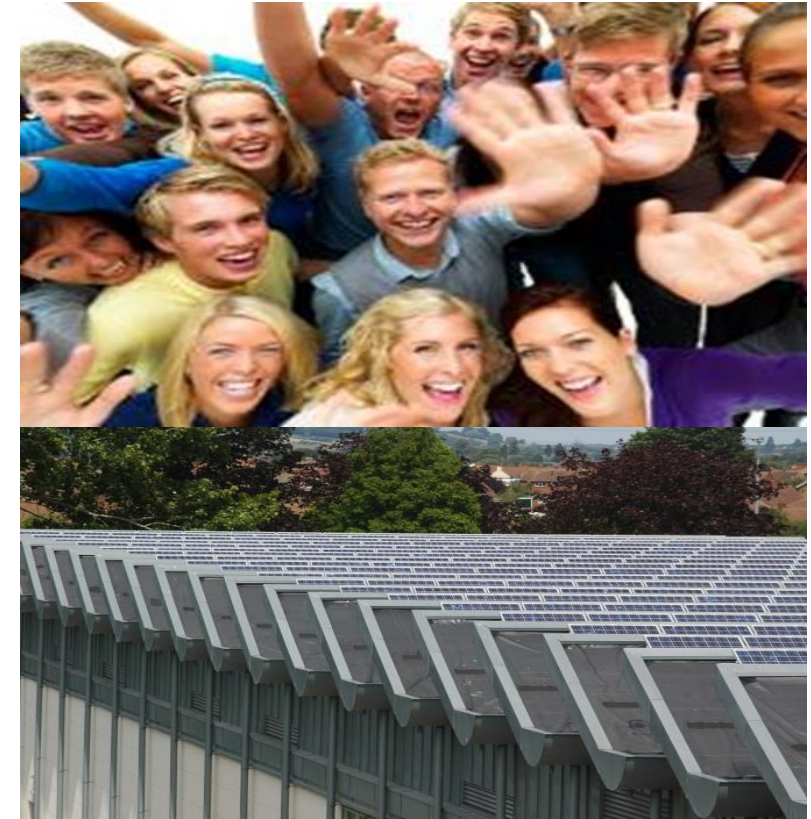
[Read more...](#)

# Environmental Association for Universities and Colleges

- 215 Universities and Colleges
- 130 UK and International sector bodies
- 48 Companies
- 5116 active contacts

[www.eauc.org.uk](http://www.eauc.org.uk)

Founded 1996





## SEARCH FOR SUSTAINABILITY RESOURCES

Search now

or **browse through our library** of over 1,000 resources

Browse by



England



International



Northern Ireland



Scotland



Wales

# Top Tips

- Focus on how a sustainability programme aligns with your corporate objectives, e.g. student experience, employability, financial drivers
- Ensure strong governance and embed it into the 'university machine'
- Build evidence-based business cases
- Measure it and report it
- Tell people, tell people, tell people



[www.nottingham.ac.uk/sustainability/](http://www.nottingham.ac.uk/sustainability/)



- [blogs.nottingham.ac.uk/sustainablenottingham](http://blogs.nottingham.ac.uk/sustainablenottingham)



- [sustainability@nottingham.ac.uk](mailto:sustainability@nottingham.ac.uk)



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Instagram

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/Questions?



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