



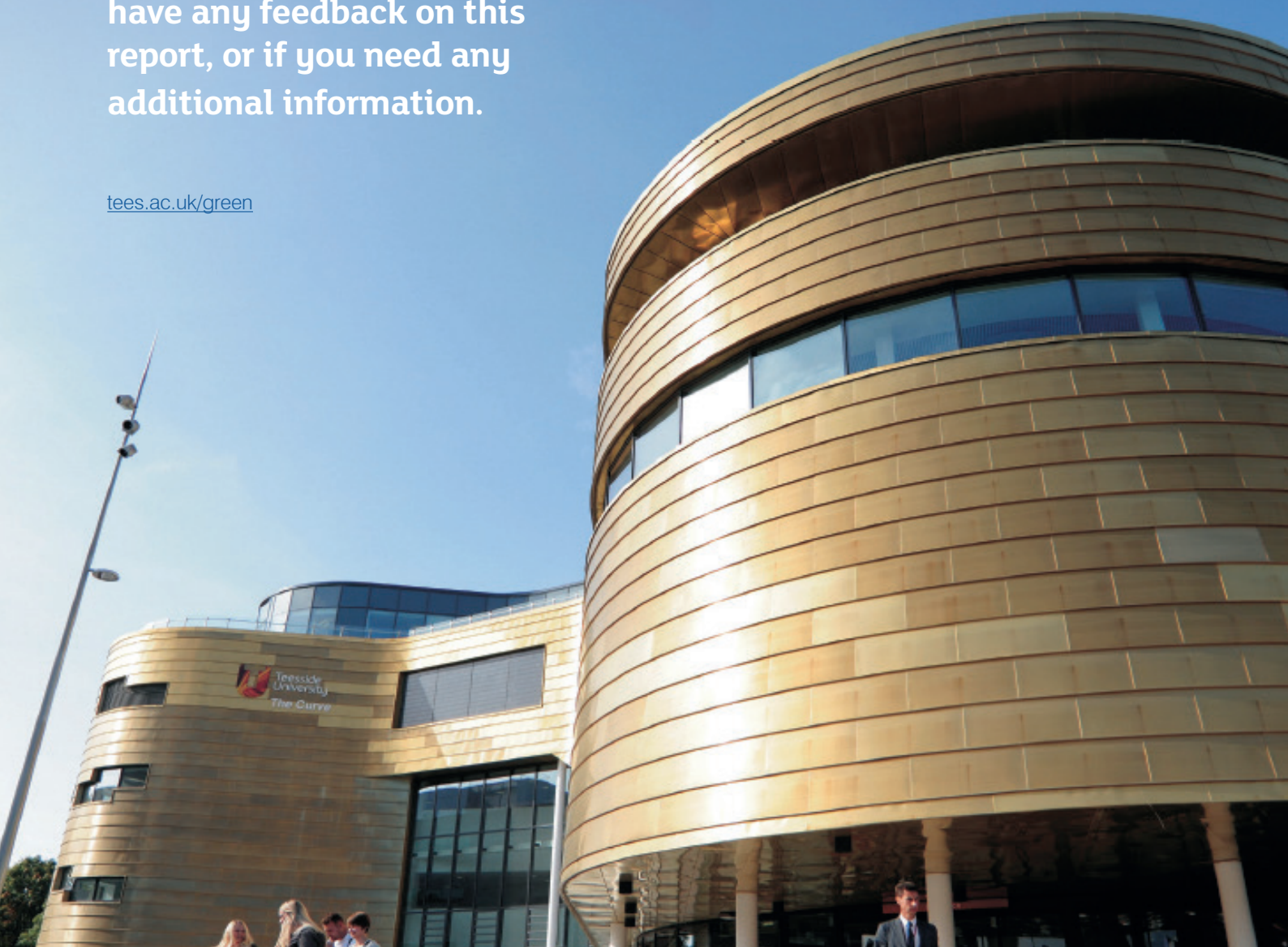
2018/19

ENVIRONMENTAL REPORT

Welcome to our
Environmental Report,
which, in keeping with our
environmental aspirations,
we are publishing online.

Please let us know if you
have any feedback on this
report, or if you need any
additional information.

tees.ac.uk/green



[EcoCampus](#) provides a structured framework to manage universities' sustainability performance in logical steps, in line with the international management system standard, ISO14001.

Teesside University is committed to retaining and improving our EcoCampus accreditation. The criteria for this prestigious award enables us to work in a consistent and pragmatic way towards ensuring that we manage our environmental obligations.

We are currently accredited at Gold level and we are committed to retaining this.

There are eleven areas considered within the EcoCampus management system and we have based this environmental report around these

Contents

HEALTH AND SAFETY	4
TRANSPORT AND TRAVEL	4
WASTE MANAGEMENT	6
ENVIRONMENTAL MANAGEMENT SYSTEMS	8
COMMUNITY INVOLVEMENT	9
CONSTRUCTION AND REFURBISHMENT	12
ENERGY AND WATER	13
EMISSIONS AND DISCHARGES	16
SUSTAINABLE PROCUREMENT	16
SUSTAINABILITY IN THE CURRICULUM	17
RESEARCH	17
GREENMETRIC WORLD UNIVERSITY RANKINGS 2017	18

HEALTH AND SAFETY

The University produces an annual Health, Safety and Well-being Report which is published online, and can be viewed by staff, students, and members of the public.

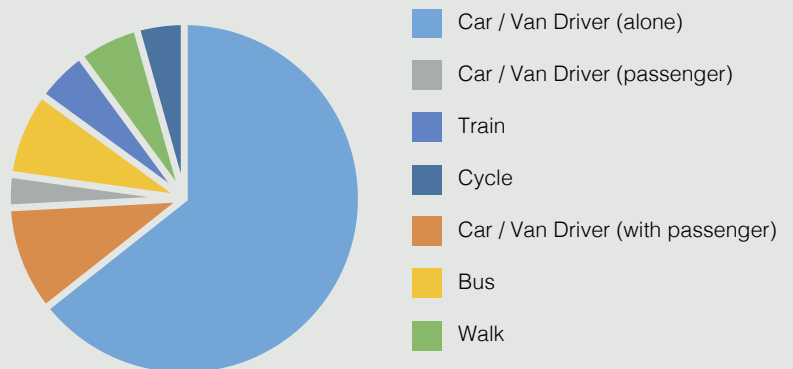
TRANSPORT AND TRAVEL

Green travel survey

As part of our commitment to sustainability, and to help us learn more about the travel habits of staff, the University regularly conducts a staff travel survey.

The most recent survey was conducted in the summer of 2018, and was designed to find out more about the success of travel planning initiatives to date, and identify measures to help staff on their journey to and from the University. This type of research is important to our travel planning process, and will form the basis of a new green travel plan for the University.

In the coming year a survey aimed at students will also be conducted in partnership with the Students' Union



Green travel initiatives

The University offers a range of options to staff to assist with using sustainable methods of transport to travel to the University. These green travel initiatives, which continue to be popular with staff, not only help to reduce the University's carbon footprint but are also beneficial to staff from a cost saving perspective. Currently around 70 staff are signed up to these initiatives.

Public transport season tickets

Annual travel season tickets are usually a cheaper and more convenient way of using public transport. The University offers staff interest-free loans, repayable over 12 monthly instalments, to pay for train and bus season tickets.

	2016	2017	2018	2019
Bus season tickets	15	18	18	20
Train season tickets	32	22	22	22
Cycle to Work Scheme	44	29	30	29

Cycle to work scheme

The University takes part in a government-approved scheme which enables staff to purchase cycles and associated equipment tax free.



Facilities for cyclists

The University has invested in facilities for staff and student cyclists, ensuring that their needs are catered for, and encouraging them to travel to the University by bicycle. There are currently 356 cycle parking spaces (publically available and secure entry) spread across the Middlesbrough and Darlington campuses. These facilities continue to be popular with around 290 staff and student cyclists registered to use the secure facilities.

Middlesbrough campus	68 publically available cycle parking spaces 136 covered secure entry cycle parking spaces (including locker, showering and changing facilities).
Darlington campus	132 publically available cycle parking spaces 20 covered secure entry cycle parking spaces (including locker, showering and changing facilities).

It is hoped that, with the continued success of the Cycle to Work scheme and increased promotion of facilities for cyclists on campus, the number of cyclists on campus will remain strong in the coming years.

WASTE MANAGEMENT

From April 2014, Teesside University's waste has been dealt with by [Biffa](#). This has enabled us to consolidate the waste management process and to improve the Management Information provided.

Waste stream	Provider
General	Biffa
Recyclable	Biffa
Hazardous	Healthcare Environmental (clinical), SRCC, Rentokil Initial and Biffa
Confidential	Biffa
All waste from residences	MBC

Confidential waste

The University has installed a console system throughout the site, with secure confidential waste sacks for overflow to ensure security. All the waste produced through this stream is recycled by Shred-It.

Recyclable waste

On average, 20% of our waste is separated into recyclable materials on site. However, our waste contractors also sort comingled waste, before recycling at their depot.

Food waste

Food waste is a growing concern. In the North East alone over 800,000 tonnes of food waste are generated every year.

In response to the demand from industry to tackle the issue, Emerald Biogas is the region's first commercial food waste anaerobic digestion plant. The £8m facility has been designed to recycle food waste, leftover and



unsold products generated by commercial organisations including food manufacturing companies, retailers, schools and leisure outlets amongst others.

Teesside University now works with Emerald Biogas and sends food waste generated on campus for processing. Once the waste is collected, Emerald Biogas recycles it using the very latest anaerobic digestion technology to create valuable new commodities such as renewable energy and fertiliser for agricultural land.

None of our waste is sent to landfill. 100% of our waste glass is recycled.



Monthly waste reports are available to all staff and students online, showing the weight of waste we generate and how it is dealt with.

Reuse



February 2013 to July 2019

CO2 Saved (KG)	71,454 KG
Waste avoided (KG)	19,507 KG
Total savings (£)	£92,748
Equivalent trees planted	97
Cars off the road for one year	31

In an attempt to reduce our levels of waste furniture throughout the university, we have partnered with [Warp-It](#), an organisation committed to re-use of resources and reduction in both recycling and waste. Reports on this initiative are shared via emails to all staff and on the [Green Tees](#) webpage.

Working with local charities



We work with British Heart Foundation to help reduce the environmental impact of some of our unwanted furniture and other goods

When furniture has been through WARP-it and we know that it is not wanted by anyone on campus, we donate it to [British Heart Foundation](#).

We have two large permanent donation bins on campus and also put out small portable collection bins on a regular basis. In 2018/19, 854 bags were donated by students and staff, weighing approximately 6.1 tonnes, with a value to the British Heart Foundation of around £10,696. 1.4 tonnes of electrical items with a value of over £1,000 were also donated.

Clothing, shoes and so on go to the Middlesbrough BHF retail shop. The furniture and electrical items donated are distributed around local BHF furniture and electrical shops including Middlesbrough, Eston, Hartlepool and Redcar.

British Heart Foundation said, 'We are very grateful for all the donations made by the University. We are able to sell these items locally, and the money raised contributes to saving lives and maintaining heart health for people in Teesside.'

General commercial waste

This is collected from buildings and transported to our waste compounds by our waste operative using a small electric vehicle. The University now sends no general commercial waste to landfill.

Hazardous waste

All hazardous waste is collected on site by Biffa, and serviced off site. Due to its nature, none of the waste produced in this stream is recycled.

ENVIRONMENTAL MANAGEMENT SYSTEMS

EcoCampus

EcoCampus is a national environmental management system (EMS) award scheme for the higher education sector. The scheme allows Teesside University to be recognised for addressing key issues of environmental sustainability, including carbon reduction. The University is currently accredited at Gold level and we are committed to maintaining this and working towards Platinum standard.

Sustainability in the Students' Union

The Students' Union has continued to improve the sustainability of its building with the fitting of low energy lighting and occupancy sensors in redeveloped areas, helping to deliver a reduction in utilities and carbon. Teesside Students Union is part of the National Union of Students' Green Impact initiative and is working with the University on a green travel plan for the main campus.

This year the Students' Union has sold:

- > nearly 19,000 hot drinks from Fairtrade sources
- > nearly 2,000 Fairtrade juice drinks sold in SU Shop
- > over 400 Fairtrade garments sold in SU Shop
- > over 500 Fairtrade biscuits and cakes

In addition it sold over 5,000 supplier run green/Fairtrade equivalent items.

The main clothing supplier of clothing products sold in the SU shop is Cottonridge – 'Cottonridge is actively committed to working towards a fair living wage for our overseas workers and we are a prominent promoter of this policy within our industry.'

Policy

Teesside University's [Environmental Policy](#) is overseen by the Environmental Advisory Group and is reviewed annually. It is published on our [Green Tees](#) website and is available to staff, students and the public.

COMMUNITY INVOLVEMENT

Fairtrade

Teesside University is officially a Fairtrade university once again thanks to a project driven by students, the University catering team and the Students' Union.

The University has been awarded the accolade for its commitment to Fairtrade principles and actively promoting Fairtrade around the campus.

Fairtrade helps small-scale farmers ensure that they earn reasonable incomes and have long-term contracts with companies. The Fairtrade mark independently guarantees that products meet economic, social and environmental standards and it is a widely-recognised ethical mark across the globe.

Both the University and Teesside University Students' Union have pledged to issue a Fairtrade policy, sell Fairtrade products on campus, serve Fairtrade products in meetings, organise campaigns and set up a steering group that will oversee Fairtrade on campus.



Middlesbrough Environment City

Teesside University is an active member of [Middlesbrough Environment City](#) (MEC) and worked with colleagues from Middlesbrough College, James Cook Hospital and Middlesbrough Council, to develop and launch a local Food Action Plan – which aims to increase the purchasing of locally sourced food, address food poverty and reduce food waste. Teesside University Catering actively supports the MEC Local Food initiative and took part in two Local Food events in 2018/19.

Together these working relationships have helped raise awareness on food waste, food poverty and the move toward locally sourced produce. Teesside University currently host The Veg Patch, a pay as you feel market stall on a Friday, which redirects surplus food from becoming waste to students and staff.



Celebrating Age

Coming to the close of its fourth year, MIMA's drive to celebrate age and bring the local community together has maintained Dementia Friendly status and has continued to work with a variety of different community groups to promote their health and wellbeing. These groups have been integral parts of some projects MIMA has produced.



MIMA Community Campus Learning Garden

MIMA has developed a green space which first opened in 2016, and can be used by all community groups to enhance their health and wellbeing. The garden is free and open to the public.

The MIMA Community Campus Learning Garden also has a regular community group who maintain the garden and grow produce which has supported other projects such as Barefoot Kitchen CIC.

Additionally, facilitating several events such as MIMA's community picnic, the community garden space was both a venue and provided produce for the picnic itself.

Teesside University staff regularly visit the garden to deliver talks on various specialist subjects relating to science, ecology and the environment.

The green space has also strengthened some of the relationships MIMA has already developed with local businesses. Middlesbrough Environment City are actively involved in the garden and guide community members on how to best care for plants and provide tips on plant care and harvesting times.

The University has helped to facilitate other community activities such as Yoga.



*Dr Amber Collings
delivering her 'Maggots
and Murder' talk*



*Community picnic taking place
Photo by Craig McCann*



Yoga session

MIMA's involvement with environmentally focused projects

Dr Helen Tidy (Principal Lecturer, Teesside University Forensic Department) developed the BioBurst project. This involved creating a small garden which could be taken by local community members and then grown on their windowsill, creating a mini meadow across Middlesbrough.

The Barrow Project

The Barrow Project is a portable garden aimed at bringing a green space to the local community. Through partnerships in North Ormesby, The Barrow Project facilitates activities for the community. This further progressed into a plant adoption scheme where members of the community can adopt a plant to take home. Plants were selected for their air cleaning ability to help reduce atmospheric emissions around the home and to clean formaldehydes and xylenes.



The Barrow Project stall, North Ormesby market with Barefoot Kitchen showing people how to make pesto from herbs taken from the barrow itself.

CONSTRUCTION AND REFURBISHMENT

Construction waste

Construction waste from new and refurbishment works are streamed at source, on site, by each contractor and then taken to local waste management depots for recycling. Any general waste produced by the project is sifted and sorted at the waste management depot by the waste contractor and then categorised for land fill or recycling. Waste certificates for each project are then provided by the contractor. General waste and recyclable skips for smaller in-house works will be introduced in the near future to better manage these waste streams.

Construction materials

The estates team, wherever possible within the confines of the allocated budget, will specify materials that are manufactured from recyclable materials and/or manufactured within the UK to reduce the scope 2 and 3 emissions in manufacture and delivery.

Major construction projects

As a responsible institution, we intend to grow and develop the campus in a sustainable manner, and pride ourselves on being closely integrated into the economic, cultural and social life of the Tees Valley and wider world. As part of our masterplan, and our commitment to developing the University in a sustainable manner, we work closely with our construction partners, particularly with a view to reducing construction waste to landfill.

Two examples of recent/current projects showing quantities of waste diverted from landfill:

National Horizons Centre Darlington

Waste stream	Percentage of waste diverted from landfill
Cardboard	99%
Inert	99%
Mixed municipals	99%
Gypsum	99%
Metal	99%
Plastic	99%
Timber	99%

Teesside University Business School Middlesbrough

Waste stream	Percentage of waste diverted from landfill
Ceramics/brick	99%
Concrete	99%
Furniture	50%
Inert	99%
Insulation	67%
Metals (including cables)	97%
Office/canteen	99%
Packing	99%
Plaster/cement	90%
Plastics	73%
Timber	86%

ENERGY AND WATER

Our energy team produce a comprehensive energy report every month and then annually. This is available to staff, students and the public on our [Green Tees](#) website.

Carbon

The University's carbon reduction target is 43% of the 2005 consumption by 2020, meaning that we have to save 3848 tonnes of carbon dioxide by 2020.

Energy monitoring

The aim of the University's monitoring and targeting (M&T) system is to provide a better understanding of how energy and water is being used across campus. In particular, it identifies if there are signs of avoidable waste and highlights opportunities to reduce consumption.

M&T can be used to quantify the savings achieved by energy saving projects and campaigns, and provide feedback for staff awareness. It will also help to improve budget setting and support benchmarking exercises.

Carbon reduction projects

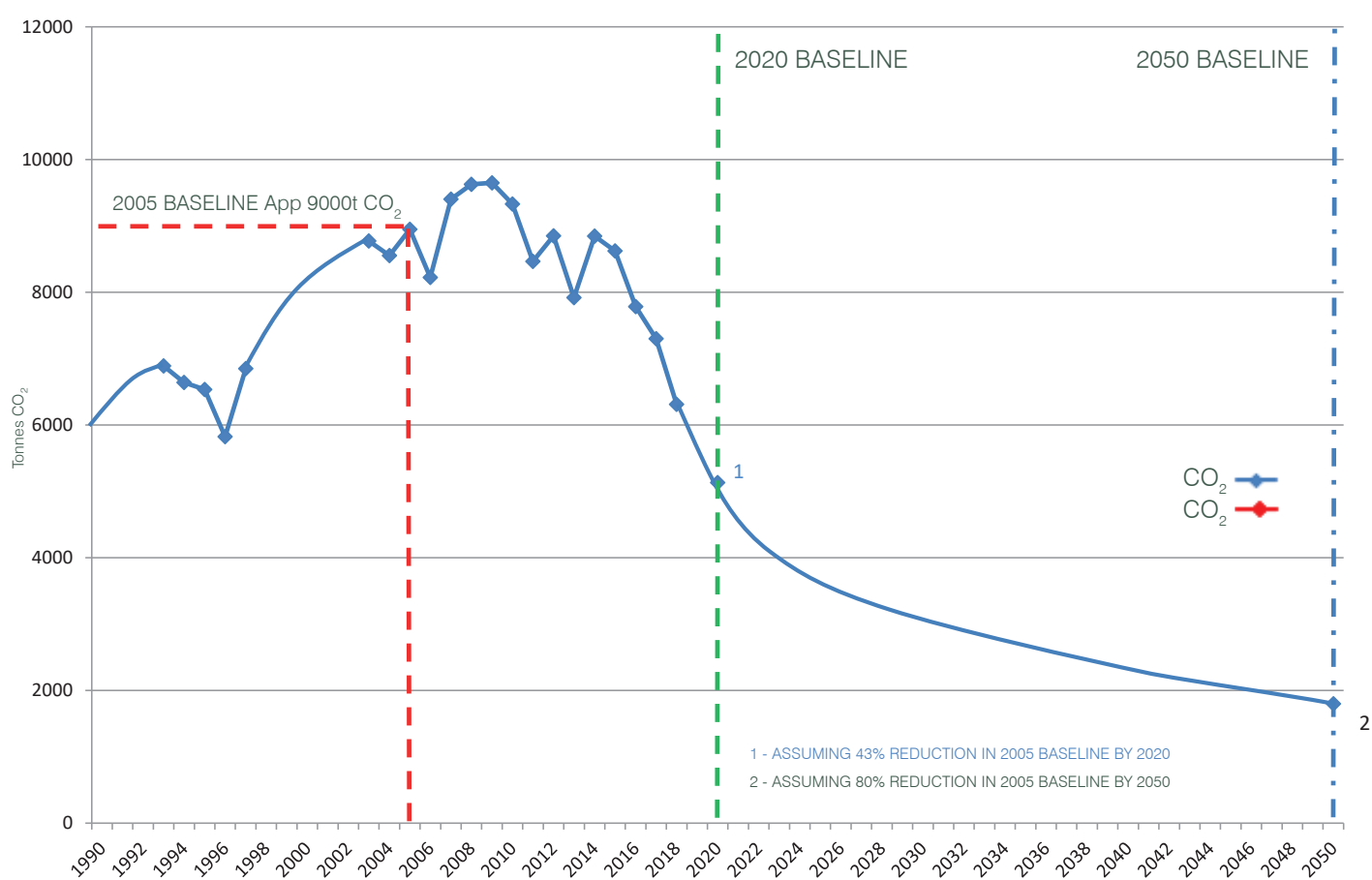
Carbon Reduction Commitment Energy Efficiency Scheme (CRCEES); The University submitted an Annual Report to the Environment Agency on 20 June 2019.

Reporting total emissions of 5,186 tonnes of CO₂ for reporting year April 2018 to March 2019. This resulted in an overall reduction of 1,013 tonnes CO₂ since 2017/18.

Project	Building
Installation of energy efficient lighting improvements	Campus wide
Pipework/ductwork insulation thermal insulation as specified in BS5422:2001, supplied and installed in accordance with BS5970:2001 complete with service ID labels as per BS1710	Campus wide
Installation of new energy efficient domestic hot water systems	Woodlands Halls

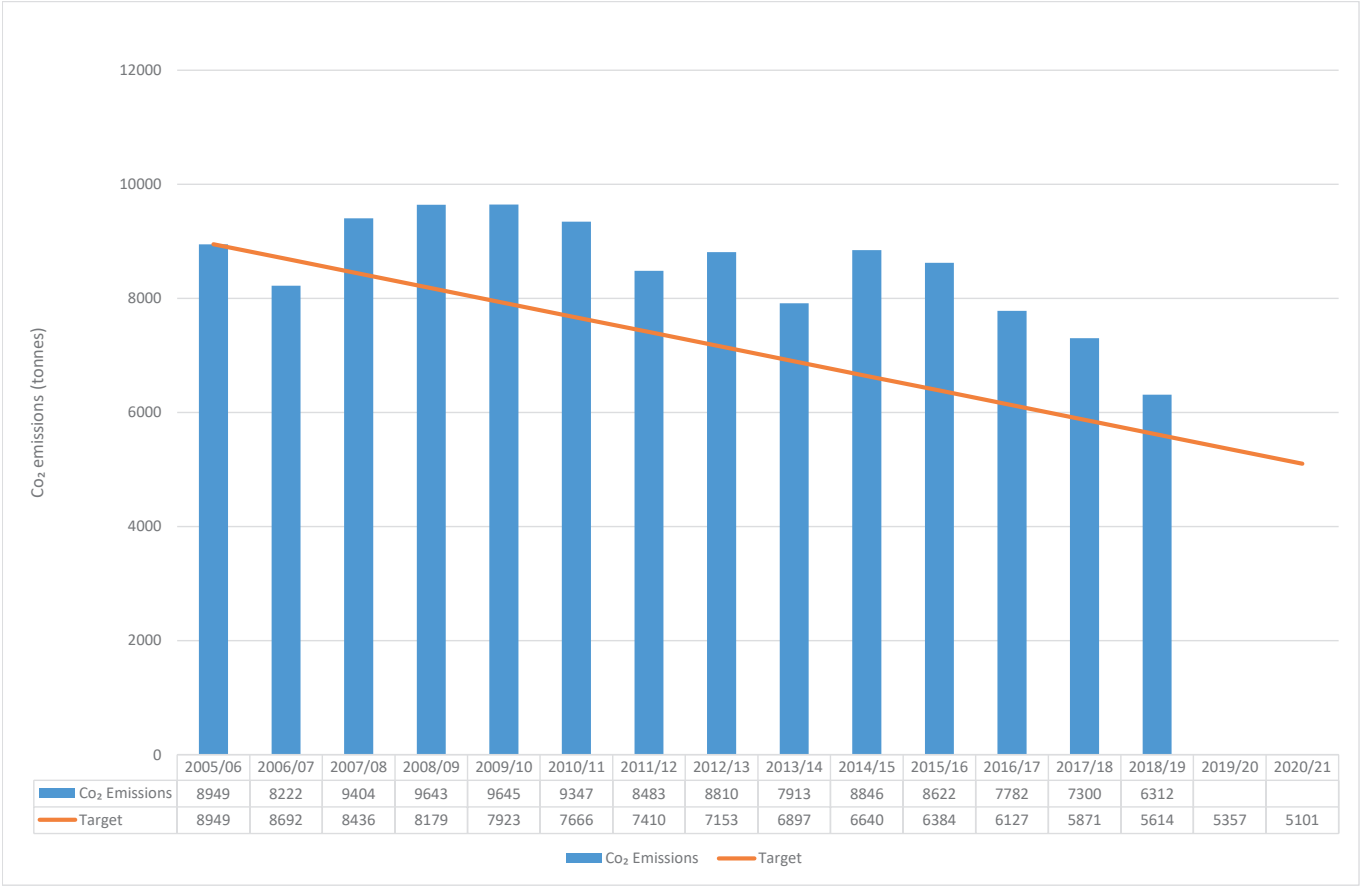
Carbon emissions - the technical data

TEESSIDE UNIVERSITY CO₂ EMISSIONS BASELINE AND CLIMATE CHANGE ACT TARGETS
(EXCLUDING WASTE & TRAVEL EMISSIONS)



Carbon emissions - the technical data

Scope 1 & 2 Target Emissions and Progress (43% reduction by 2020/21)



EMISSIONS AND DISCHARGES

Emissions and discharges are covered in the annual [Health, Safety and Well-being Report](#) which is published online

'To minimise the negative environmental impact of the University in relation to its activities which produce emissions to the atmosphere or discharges to the drainage system the University has a Waste Emissions and Discharge Policy to ensure that all waste produced is stored, removed, treated and disposed of according to legislative requirements and the Best Practicable Environmental Option.

During 2014 the Waste Emissions and Discharge Policy was reviewed and found to be still meeting the above objective. The requirement in the Health and Safety Policy Statement regarding the safe disposal of waste is still in place and the Asbestos, Control of Substances Hazardous to Health (COSHH) and Radiation Safety Policies are still relevant for activities involved in dealing with emissions and discharge of waste.'

SUSTAINABLE PROCUREMENT

Teesside University has a procurement manual, which includes a section on Sustainable Procurement.

The University's Sustainable Procurement Framework requires that sustainability and environmental issues are considered in the procurement of all goods, services and works supplied to the University.

The Procurement Section will assist staff to comply with the policy through the following objectives:

1. Raise environmental awareness amongst University purchasers.
2. Ensure relevant environmental issues are considered as part of the procurement process.
3. Support and encourage suppliers to be compliant with any current and future environmental legislation and help where possible companies to attain environmental accreditation.
4. Encourage the use of suppliers who aim to adhere to greener policies.
5. Conduct whole life costing exercises where appropriate, taking in to account factors affecting the environment.
6. Consider lease options where appropriate as an alternative to purchase in order to reduce waste.
7. Specify carbon and energy saving goods or services which are more environmentally friendly.
8. Encourage the purchase of recycled goods or goods with recycled content.
9. Minimise and regulate the amount of waste generated from University purchases by encouraging suppliers and contractors to return and re use packaging.
10. Promote and make full use of services offered by suppliers and contractors who will collect and recycle previously supplied used items.
11. Reduce the number of delivery vehicles entering and leaving site, by encouraging the use of contracted suppliers and scheduled deliveries.
12. Encourage the purchase of goods which are from a sustainable source and have the highest efficiency energy ratings.

SUSTAINABILITY IN THE CURRICULUM

Teesside University has made significant steps towards embedding sustainability into the curriculum. Courses currently available, which address sustainability and other environmental issues include:

[BSc \(Hons\) Environmental Science \(with Foundation Year\)](#)

[MSc Electrical Power and Energy Systems](#)

[MSc Electrical Power and Energy Systems \(with Advanced Practice\)](#)

[MSc Energy and Environmental Management](#)

[MSc Energy and Environmental Management \(with Advanced Practice\)](#)

[BSc \(Hons\) Environmental Science](#)

RESEARCH

In the academic year 2018/19 the University has dedicated funds totalling £723,840 to environmental and sustainability research.

Over the same period the University has had in the region of 60 scholarly publications on environment and sustainability published.

UNIVERSITY OF INDONESIA GREENMETRIC WORLD UNIVERSITY RANKINGS 2018

For the second time Teesside University has taken part in the GreenMetric World University Rankings. It is the first and only university rankings in the world to measure each participating university's commitment in developing an 'environmentally friendly' infrastructure. The rankings consider six indicators of each university (setting and infrastructure, energy and climate change, waste, water, transportation and education). This year 619 universities in 76 countries participated, compared to last year when 515 universities in 75 countries took part.

Universitas Indonesia (UI) released the result of UI GreenMetric World University Rankings 2018 on 19 December 2018, and the rankings were announced at the Makara Art Centrum Building.

This year Teesside University are ranked 124th out of 719 worldwide institutions (12th in UK), compared to 159th out of 619 in 2017.

The full results of the metric can be viewed here:

<http://greenmetric.ui.ac.id/overall-ranking-2018>

Teesside University continues to participate in the metric. New rankings will be published in December 2019.



Disclaimer

The information contained in this Report is, as far as possible, accurate and up to date at the time of publishing.

© Teesside University November 2019

This publication is available in alternative formats on request. Please contact Andrew Maclaren on **01642 342077** or email **a.maclaren@tees.ac.uk**.

Teesside University

Middlesbrough

Tees Valley

TS1 3BX UK

T: +44 (0) 1642 218121

tees.ac.uk