



Teesside
University
Cornell Quarter

2019/20

ENVIRONMENTAL REPORT



Our award-winning Student Life building

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](https://www.ecocampusaward.com/) 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

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Introduction

While the resultant impact of COVID-19 has had a dramatic effect on the University community and operations, there has been a significant reduction in energy consumption, travel, waste and carbon emissions. The hybrid teaching model and working from home have become the new norm, for the foreseeable future.

As the world returns to normal post COVID-19, the positive aspects of digital connectivity, reduced/changing travel patterns, waste management and review of space management will be explored. This will inform longer term environmental improvement objectives to support the University's aspiration of becoming carbon neutral by 2030.

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.

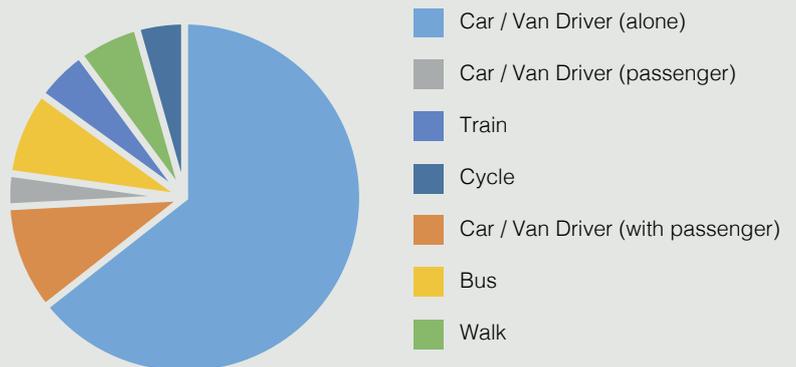
TRANSPORT AND TRAVEL

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 2019, 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, post COVID-19 restrictions, 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 wellbeing and 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.

	2017	2018	2019	2020
Bus season tickets	18	18	20	21
Train season tickets	22	22	22	21
Cycle to Work Scheme	29	30	29	31

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 444 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 publicly available cycle parking spaces 224 covered secure entry cycle parking spaces (including locker, showering and changing facilities).
Darlington campus	132 publicly available cycle parking spaces 20 covered secure entry cycle parking spaces (including locker, showering and changing facilities).

It is anticipated 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 and increase in the coming years.

WASTE MANAGEMENT

From April 2014, Teesside University's waste has been collected 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 our sites, with secure confidential waste sacks for overflow to ensure security. All the waste produced through this stream is recycled by [Biffa](#).

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. 

Reuse



February 2013 to July 2020

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 2019/20, approximately 400 bags were donated by students and staff, weighing approximately 3 tonnes, with a value to the British Heart Foundation of around £5,000. 0.5 tonnes of electrical items with a value of over £500 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.

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



The University continues to hold Fairtrade status, 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.



Students' Union

Teesside University Students' Union continues to operate in as sustainable manner as possible, putting into place initiatives to reduce impact on the environment. Some of the key achievements/initiatives of 2019/20 include:

- > 30% reduction of energy consumption in 2019/20
- > introduction of non-plastic packaging for TUSU-produced takeaway sandwiches
- > the removal of plastic straws
- > the National Union of Students has launched Students Organising Sustainability, building on the work of Green Impact (formerly Sound Impact) which TUSU was involved in for over ten years.

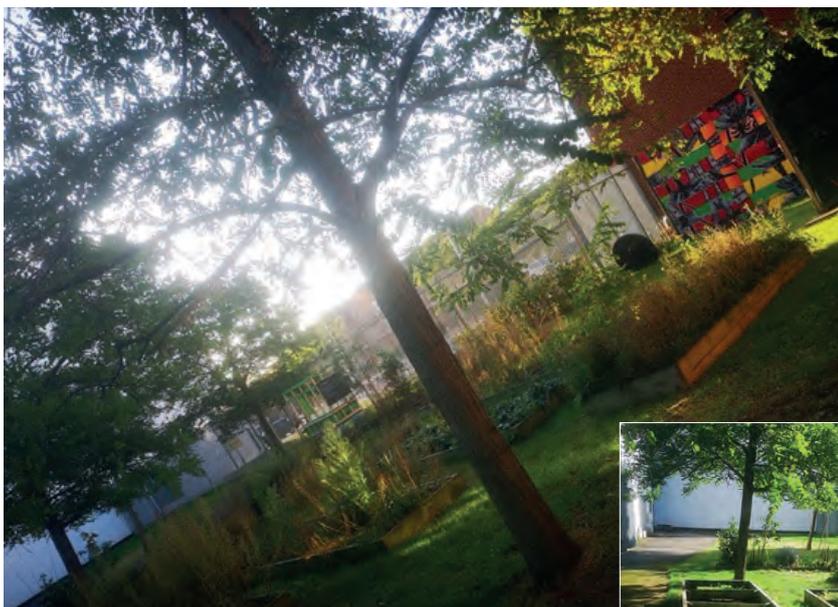


MIMA community campus learning garden

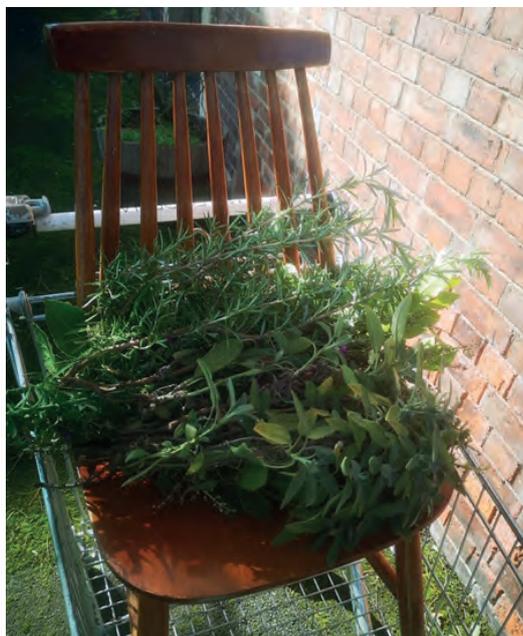
Our garden serves the Middlesbrough Institute of Modern Art (MIMA) kitchen with a host of edible delights including herbs, flowers and fruits curated with artist duo Barefoot Kitchen.

A programme of talks, workshops and gatherings are hosted by MIMA, guests and our Community Day Friends in this intimate and private space.

Weekly garden updates are shared through a range of digital platforms and communication interventions.



Veggie planters ready for planting.



Herbs picked from the garden herb wheel, ready for use in the MIMA Kitchen.



Doorstep Portraits

Doorstep Portraits is a new project documenting life following lockdown and the experiences of residents and families living in North Star accommodation or communities. Doorstep Portraits is arranged by MIMA, in partnership with North Star Housing Group Limited.

The MIMA and North Star team spent time out on location in Middlesbrough and Bishop Auckland. This series of images is a glimpse into the lives of local residents and the North Star community, revealing what or who helped them cope in lockdown.

A large digger bee.



Plants and compost ready for planting action.

Jan's garden

Inspired by the Community Campus Learning Garden, Jan is one of many amazing volunteers who week in week out, in all weathers has worked with artists, guests and University academics to keep the MIMA garden shipshape.

This image is testament to all Jan's hard work and the great knowledge and skills she has shared over the years in the MIMA garden and her own special space.

Trevor – alley hero

'We started making the alleys lovely and safe as a tribute to my partner who passed away a couple of years ago. We play music, have an outdoor bookcase, arts and crafts and soon to be clothes swap project. It makes us all feel happy, nice and safe.'



MIMAZINA

Through lockdown and afterwards, MIMA continued to serve their Community Day Friends and new friends through MIMAZINA.

This is a community magazine bursting with ideas and thoughts on how to stay active, from gardening tips, ideas to do when out walking and staying connected with nature. People from far and wide got involved and sent us their contributions, it was a great way of staying in contact. 20,000 copies were distributed to shielding residents and it's also available online: mima.art/mimazina/

We have also worked closely with our front of house team on a range of well-being initiatives including flexibility sessions and mindfulness as we move through these strange times.

Discover, create, collaborate

A new exciting programme co-curated with artist Claire A Baker this thoughtful programme examines themes of memory, place and home with self-settling elders of the Chernobyl and Community Day Friends from far and wide, using the history of embroidery as a starting point to stitch together, as a way to exchange stories and share mutual experience.

Monthly making kits are posted to the group, alongside a series of private MIMA YouTube tutorials for inspiration and introductions from the artist and MIMA Learning Team.

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.

An example of a recent project, the Student Life building, showing quantities of waste diverted from landfill:

Student Life building

The Student Life building was awarded a prestigious industry award in recognition of its positive and transformative contribution to society.

The £13.2m building was awarded the RICS Social Impact Award (North East) 2020, in the education category. Student-centred, and student-led, the building is designed to provide everything students need outside of the classroom, in one place.

It is a technologically-enabled environment to support a variety of learning styles, activities and attendance patterns. A central hub for students, it allows easy access to our full range of support services and promotes learning innovation.

The BREEAM rating achieved for the Student Life building was Excellent.

Solar panels have been installed as part of the environmental initiatives for this project resulting in the generation of 22,531 kWh of electricity.

Waste	Tonnage	Landfill	Recycled	Total
Glass		0.00	0.00	0.00
Paper		0.00	0.00	0.00
Cardboard	11.94	0.00	11.94	11.94
Plastic	21.75	0.00	21.75	21.75
Green Waste	1.55	0.00	1.55	1.55
Timber	25.62	0.00	25.62	25.62
Scrap	4.37	0.00	4.37	4.37
Gypsum Plasterboard	0.06	0.00	0.06	0.06
Others	0.49	0.00	0.49	0.49
Soil	0.01	0.00	0.01	0.01
Rubble	28.05	0.00	28.05	28.05
Subtotal	95.75	1.91	93.84	95.75
Mixed (combined)	220.74	1.91	312.67	316.49
Total	316.49	3.82	312.67	316.49

Victoria building

In 2020 refurbishment of the Grade Two listed building took place, which incorporated the repair and replacement of the existing timber windows including improvements to reduce heat loss through the windows, through the introduction of near seals and increased window locks. There has been a replacement of the old large single gas fire boiler with two new smaller energy efficient boilers, and the introduction of improved insulation to the heating pipework. The floor slab has been removed and replaced with a new insulated concrete slab, helping to reduce damp penetration and reduce heat loss.



Cornell Quarter



Cornell Quarter is another welcome addition to the University's student accommodation portfolio, and provides a first class facility at the heart of the campus. This new development is a state-of-the-art, 300-bedroom residential complex for students, arranged across 48 cluster apartments, each complete with communal facilities.

Sustainability was central to the development – which has already achieved a BREEAM Excellent rating. A number of environmental initiatives, including green roofs, solar panels and energy efficient lighting and heating are all measures which have been implemented to contribute to ensuring the development has minimal impact on the environment.

Throughout construction, Wates continued to deliver on its pledge to provide training and engagement opportunities for the local community, with a number of school children welcomed on site during the development to get a closer look at how a building takes shape. In addition, Wates offset any carbon produced during construction with a local tree planting scheme.



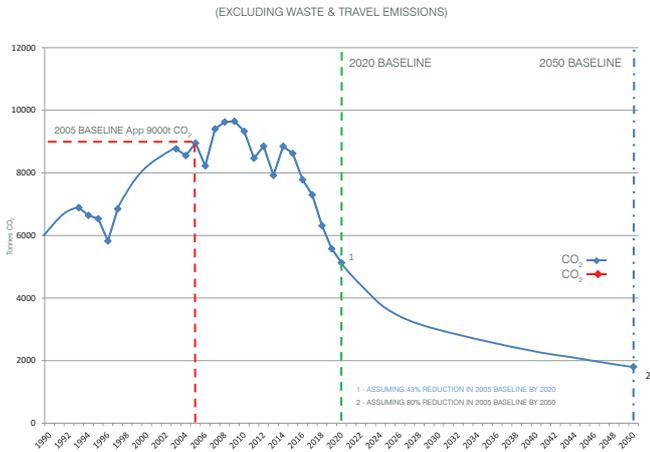
ENERGY AND WATER

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.

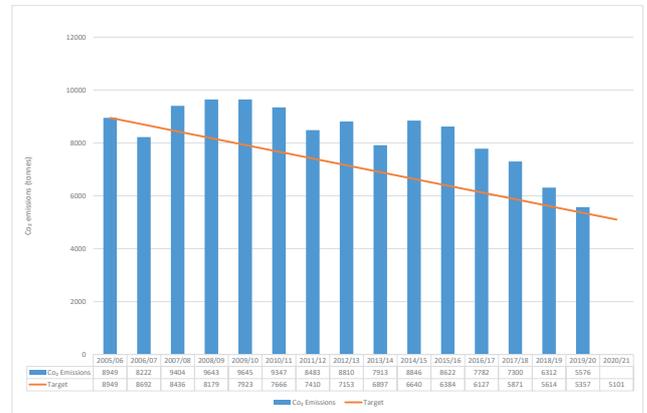
Carbon

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.

TEESSIDE UNIVERSITY CO₂ EMISSIONS BASELINE AND CLIMATE CHANGE ACT TARGETS



SCOPE 1 & 2 TARGET EMISSIONS AND PROGRESS (43% REDUCTION BY 2020/21)



Since 2008 the University has progressively added water leak detection systems to all major buildings across the campus. Up until the end of the 2019/20 financial year the systems saved circa 160,000 cubic metres of water.

The water leakage systems have enabled the University to act upon and respond to water leaks in all manner of locations including faulty percussion taps, running taps and underground pipework leakage. A significant amount of water and budget has been saved. At an average of £2 per cubic meter over the period, an average of £25,925 per year has been saved.

TOTAL WATER SAVINGS FROM LEAK DETECTION



Energy monitoring

The aim of the University's monitoring and targeting (M&T) system is to provide a greater understanding of how energy and water is consumed 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 through implementation of energy saving projects and campaigns, and provide feedback to inform staff awareness campaigns. It will also help to improve budget profiling and to support benchmarking exercises.

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](#)

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

[MSc Electrical Power and Energy Systems](#)

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

[MSc Environmental Management](#)

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

RESEARCH

In the academic year 2019/20 the University has dedicated funds totalling £737,822 to environmental and sustainability research.

Over the same period the University has had in the region of 50 scholarly publications on environment and sustainability published.

UNIVERSITY OF INDONESIA GREENMETRIC WORLD UNIVERSITY RANKINGS 2020

For the third 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 780 universities in 76 countries participated, compared to last year when 719 universities in 75 countries took part.

Universitas Indonesia (UI) released the result of UI GreenMetric World University Rankings 2019 on 3 December 2019, and the rankings were announced at the Makara Art Centrum Building.

This year Teesside University are ranked 128th out of 780 worldwide institutions (12th in UK), compared to 124th out of 719 in 2018.

The full results of the metric can be viewed here:

<http://greenmetric.ui.ac.id/overall-ranking-2019>

Teesside University continues to participate in the metric.

New rankings will be published in December 2020.



Disclaimer

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

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This publication is available in alternative formats on request.

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