**Environmental Impact (Negative) Headlines – April 2021**

The Students’ Union at UWE understands that through our operations as a charity, we will create a negative impact on the environment around us. We have started the process of analysing our impact, which will inform the creation of future Sustainability Action Plans and will focus our work with our students, staff and University colleague to reduce this impact.

As an organisation, our main impact has been evidence through energy use and utilities consumed, waste produced and the impact of creating multiple and sustained coach travel through our plethora of BUCS fixtures.

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| --- | --- | --- | --- | --- | --- |
| Ranked in order of impact: |  |  |  |  |  |
|  |  |  | kg CO2e / kWh | **Tonnes CO2equiv** |  |
| Electricity (location based) |  |  |  343,108 | **79.99** | Higher impact |
| Food Miles (Commercial) | 28,144 | miles | 38970.32 | **38.97** |  |
| Gas | 95,697.90 | kWh | 0.1839 | **17.60** | GOV UK  |
| Waste (cans, plastics, paper, general, food waste) | 67,915 | kg |  | **1.39** |  |
| Water sewerage | 970.20 | m3 |  | **1.36** |  |
| Water supply | 1021.30 | m3 | 0.344 |  **1.04** |  |
| Paper (External Printing) A4 | 1,938[[1]](#endnote-1) | Pages |  | **0.009232** |  |
| Paper (Excluding Large Format in Marketing) A4 | 344 | Pages |  | **0.00163874** |  |
| Electricity (GOV UK conversion)  | 343107.7 | kWh | 0.23314 | **0.0002314** |  |
| BUCS Transport | 25,649.20 | km |  | **0** | Lower Impact |

\*Please note: utilities and waste data is used from previous academic year 2019/2020 due to UWE reporting. Paper usage data is from academic year 2020/2021. Food miles is from 2019/20 academic year due to reporting.

**Utilities**

**Utility – Electricity**

* Reduced electricity consumption by 48, 063kWh from 18/19 – 19/20, this is a 12.3% decrease, resulting in 19.99 Tonnes CO2e (location based) saved, or 0.02246 kg CO2e. This saving would charge 2.7 smart phones.
* The impact of using0.23314kg Co2e is the same as charging 28.4 smart phones, it would require 0.004 tree seedlings grown for 10 years to carbon sequester.

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| **SU - U block** |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |
| **Electricity** |   |   |   |   |   |   |   |   |
| **Date** | **kWh** | **Tonnes CO2e (location based)** | **Tonnes CO2e (market based)** |  |  |  | **GOV UK Electricity conversion factors (using year ending)** | **kg CO2e /kWh** |
| 1.8.18 - 31.7.19 |  391,171  | 99.98 | 0 |  |  |  | 2018/19 | 0.25560 |
| 1.8.19 - 31.7.20 |  343,108  | 79.99 | 0 |  |  |  | 2019/20 | 0.23314 |

\*\*We have included “location based” and “market based” CO2 emissions.  Location based is based on the carbon factors of the UK grid.  Market based reflects that we purchase 100% renewable electricity, and hence our carbon emissions from this are zero.  Under GHG Protocol (the international agreed method to report on carbon emissions), it is correct to report both emissions calculations.

\*\* UWE have recalibrated their meters across UWE (this year) – meters that were never commissioned correctly have been corrected, it has affected the electricity data on The Students’ Union, we can accurately reflect on two years of activity.

Since October 2016, UWE Bristol has purchased 100% green electricity through EDF, under a framework with The Energy Consortium (certificate can be downloaded from [this webpage](https://eur01.safelinks.protection.outlook.com/?url=https%3A%2F%2Fwww1.uwe.ac.uk%2Fabout%2Fcorporateinformation%2Fsustainability%2Fsustainabilityservices%2Fcarbonenergyandwater%2Frenewableenergystrategy.aspx&data=04%7C01%7CRachel2.Colley%40uwe.ac.uk%7C1d5b99ab885c43e0bd6708d8fb63714a%7C07ef1208413c4b5e9cdd64ef305754f0%7C0%7C0%7C637535751953145977%7CUnknown%7CTWFpbGZsb3d8eyJWIjoiMC4wLjAwMDAiLCJQIjoiV2luMzIiLCJBTiI6Ik1haWwiLCJXVCI6Mn0%3D%7C1000&sdata=6xbEOY%2BAMSy6fZJ6idAJgS1%2FwLwRmoBtkPvX68dXfms%3D&reserved=0))

* <https://info.uwe.ac.uk/news/uwenews/news.aspx?id=3437>

UWE Bristol also produce electricity from various solar arrays across the campuses, most notably a 450kWp array, the largest single array in the UK higher education sector installed in October 2016.  The UWE solar arrays produced over 490MWh during 2019/20.  This saved 114 tonnes carbon, and £73,500.  During 2019/20, 1.9% of UWE electricity was produced from solar on site.

HESA return data 2019/20 is below:

|  |  |  |  |
| --- | --- | --- | --- |
| **Total percentage of renewable energy purchased through green tariffs (EPREPGTT)** – 100% electricity, becomes 44% when gas is incorporated  | **%**  | **42%**  |  |
| **Total renewable energy generated onsite or offsite (EREGONF)**  | **kWh**  | **490,351**  |  |
|  |  |  |  |

Alongside the PV array the University has now installed two Combined Heat and Power system (CHP) engines which operate like a small power station on Frenchay Campus. The CHP system will use gas to generate both heat and electricity for use on the campus. The heat generated by burning the gas is captured and distributed to buildings on campus, via underground pipes. This is used in the Student's Union building, student accommodation, the FBL building and the new FET building, for heating and hot water, reducing overall emissions for energy use on the Campus.

Since October 2019, UWE have entered a Power Purchase Agreement to purchase 20% of electricity directly from four wind farms in the UK.

**Utility – Water**

* We have saved 315.4 (m3) in our water supply between 18/19 and 19/20. This is a 23.6 % decrease.
* This saving is enough to provide water supply to wash 1,577 full loads of laundry!
* Source: <http://www.parksville.ca/cms/wpattachments/wpID70atID4418.pdf>

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| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Water** |   |   |   |   |   |   |   |   |   |   |   |
| **Date** | **Supply (m3)** | **Treatment (m3)** | **Supply tonnes CO2e** | **Treatment tonnes CO2e** | **Total tonnes CO2e** |  | **GOV UK Water supply conversion factors (using year ending)** | **kg CO2e/m3** |  | **GOV UK Water treatment conversion factors (using year ending)** | **kg CO2e/m3** |
| 1.8.17 - 31.7.18 |  1,407.2  |  1,336.8  | 0.48 | 0.95 | 1.43 |  | 2017/18 |  0.344  |  | 2017/18 |  0.708  |
| 1.8.18 - 31.7.19 |  1,336.7  |  1,269.9  | 0.46 | 0.90 | 1.36 |  | 2018/19 |  0.344  |  | 2018/19 |  0.708  |
| 1.8.19 - 31.7.20 |  1,021.3  |  970.2  | 0.35 | 0.69 | 1.04 |  | 2019/20 |  0.344  |  | 2019/20 |  0.708  |

**Utility – Gas**

* The Students’ Union now takes heat from the district heating network.
* We have reduced our gas consumption by 126,262.90kWh gas from 18/19 to 29/20, this is a 53.7% decrease saving 20.41 Tonnes CO2e. This equates to 46,533 miles driven by a passenger vehicle, 2.2. homes’ energy for one year or 2.4 homes electricity for one year.

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| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Gas & heat** |   |   |   |   |   |   |   |   |
| **Date** | **kWh gas** | **kWh heat (from DHN)** | **total kWh** | **Tonnes CO2e** |  |  | **GOV UK Natural gas conversion factors (using year ending)** | **kg CO2e /kWh** |
| 1.8.17 - 31.7.18 |  216,142.2  |  -  |  216,142.2  | 39.76 |  |  | 2017/18 | 0.18396 |
| 1.8.18 - 31.7.19 |  206,770.8  |  -  |  206,770.8  | 38.01 |  |  | 2018/19 |  0.183850  |
| 1.8.19 - 31.7.20 |  80,507.9  |  15,190.0  |  95,697.9  | 17.60 |  |  | 2019/20 |  0.1839  |

The Students’ Union at UWE has achieved this through:

* Lobbying the University to build a new Students’ Union building that has been fit with eco-saving lights and sensors
* Energy saving challenges and awareness campaigns with staff and Officers as to their role to play in “embedding sustainability in all we do” as an organisation
* Replaced the IT servers resulting in an 85% reduction in the CO2 emissions of our company servers
* Reducing cloud storage on an annual basis
* Auto setting screens to power off
* Changing the timings our projection screens operate (no longer weekend and evenings)
* The carbon intensity of the UK grid has decreased, resulting in the CO2 from the SU electricity consumption to have also dropped, in addition UWE Bristol is on a 100% renewable energy tariff
* Joining the new district heating network at UWE Bristol.

**Waste Reduced**

This year we saw a:

* 21,866kg reduction of waste across all categories, despite an estimated increase of 187kg in food waste
* UWE Bristol saved £5,061.99 in waste collection costs.

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| --- | --- | --- | --- | --- | --- | --- | --- |
| 2019/20 - KG |  |  |  |  |  |  |  |
| Site | Plastic & Cans | Food Waste | General Waste | Glass | Paper & Card | Grand Total |  |
| Frenchay | 6474 | 4240 | 26750 | 8925 | 8608 | 54997 |  |
| Glenside | 2586 | 1400 | 4225 | 1225 | 3482 | 12918 |  |
| Grand Total | 9060 | 5640 | 30975 | 10150 | 12090 | 67915 |  |
|  |  | + 187kg |  |  |  | - 21,866 kg | reduction  |
|  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |
| Site | Plastic & Cans | Food Waste | General Waste | Glass | Paper & Card | Grand Total |  |
| Frenchay | 11.77% | 7.71% | 48.64% | 16.23% | 15.65% | 100.00% |  |
| Glenside | 20.02% | 10.84% | 32.71% | 9.48% | 26.95% | 100.00% |  |
| Grand Total | 13.34% | 8.30% | 45.61% | 14.95% | 17.80% | 100.00% |  |
|  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |
| Site | Plastic & Cans | Food Waste | General Waste | Glass | Paper & Card | Grand Total |  |
| Frenchay | 333 | 106 | 1304 | 255 | 416 | 2414 |  |
| Glenside | 130 | 35 | 116 | 35 | 168 | 484 |  |
| Grand Total | 463 | 141 | 1420 | 290 | 584 | 2898 |  |
|  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |
| Site | Plastic & Cans | Food Waste | General Waste | Glass | Paper & Card | Grand Total |  |
| Frenchay | £818.80 | £597.72 | £5,890.48 | £622.30 | £1,300.30 | £9,229.60 |  |
| Glenside | £493.54 | £196.66 | £933.88 | £85.75 | £505.44 | £2,215.27 |  |
| Grand Total | £1,312.34 | £794.38 | £6,824.36 | £708.05 | £1,805.74 | £11,444.87 |  |
|  |  |  |  |  |  | = saving £5,061.99 |  |
|  |  |  |  |  |  |  |  |

**Important notes on this data:**

* After the March lockdown, collection frequencies were significantly reduced at Frenchay. Glenside SU was completely closed (no waste collections) from March to August.
* The bin store at Frenchay is shared with Bristol Robotics Lab, Health Tech Hub and (since the arrival of the Nightingale Hospital) Future Space as well. Therefore weights will not have decreased as much as expected due to the additional user.
* Food and glass are not weighed, weights are estimated at 40g & 35kg per bin, so not a true reflection of waste in bins.
* Food & glass collections were maintained at the same level at Frenchay throughout lockdown as ideally food should not be collected less frequently that once per week. It is highly likely that the bins being collected were not full too capacity but as weights are estimated this gives the impression that there was no reduction in food or glass volumes during lockdown.

**What are we doing to reduce waste sent to Landfill?** The University are separating cans, plastics, food waste, glass, paper & cardboard. We are also sending unsorted waste to a treatment facility to further extract resource from the material. We have put the correct recycling points at strategic locations to make it easy for all staff to use and embedded into procedures for commercial areas.

**What have we brought in before academic year 2020-21 to further reduce waste?**

Covid-19 will have inevitably reduced our waste from big style events like Freshers Fair.

* Reducing food waste from events through the new events booking process
* Increased promotion of reusable water bottles, reusable coffee cups, water fountains on campus and discounts available
* Bringing in zero waste shopping aisles at Frenchay and Bower Ashton Campus Sites
* Bringing in new staff and student guidance on ethical purchasing, focusing on ’up stream’ procurement to reduce the waste at the end.
* Continuing to invest in the Bristol Big Give partnership to reduce moving out waste going to landfill
* Revisiting the UWE/SU Sustainable Events guide, with one expressed outcome being reduction in waste from events.

**BUCS Transport**

April 2021, we have participated in zero BUCS Fixtures or events this year, due to Covid-19. At the beginning of the 2020/2021 academic year, the plan was for BUCS Fixtures and Events to recommence from Feb 2021. From the beginning of October 2020 to the national lockdown in November, only training took place (totalling approx. 2 weeks). Following this the national lockdown was imposed in November, which has resulted in no UWE Sports Club in person activity until 12 April 2021. Even at this point, only outdoor sport will resume. At the time of writing we do not have any confirmed fixtures, however any fixtures that take place will be local fixtures (Bristol/Bath/Gloucestershire). In addition, due to the risk still present with Covid-19, if there is to be any out of Bristol travel we will be encouraging people to travel in their own vehicles/in bubbles to any matches they may have, and will not be hiring any large coaches to transport groups.

Had this been a ‘normal’ year, we would have expected to have used a similar level of transport as last year, as we had a similar number of teams proposed to be entered. The sports teams collectively travelled36320.6km in2019/2010, up by 41% from 25, 649.2km. UWE students were 4,000km short of travelling round the circumference of the Earth. BUCS travel has the equivalent emissions to a single passenger flying from London to New York nearly 18 times (up 7 flights on last year).

**What more can we do?**

* Investigate Electric Coach and minibus companies (see below)
* Encourage the sports teams to fundraise to ‘off-set’ their carbon footprint with The Converging World, tackling deforestation issues
* Continue to promote the Greener Futures Sports and Societies Award to reward and encourage sustainable travel to training
* Ensuring that any team that competes in BUCS is entered into the B league which typically covers the northern part of the Western Region (as far north as Gloucestershire) as opposed to the A league which can go as far as Plymouth and Falmouth.
* Work at the start of the year to arrange games at an opposition venue to be around the same time so teams can travel together more often and save on money and environmental impact.
* Further encourage the use of public transport as opposed to driving cars for the smaller teams

Research into the viability of Electric/Hybrid vehicles in replacement of petrol/diesel vehicles, and the cost implications of this:

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| --- | --- | --- | --- | --- | --- |
|  |  | **Petrol/Diesel** | **Hybrid** | **£ Difference** | **% Difference** |
| Small Hatchback Car | 1-6 Days inclusive | £15.00 | £27.00 | £12.00 | 80% |
| Medium Estate | 1-6 Days inclusive | £26.15 | £38.68 | £12.53 | 48% |
| Medium Hatchback | 1-6 Days inclusive | £24.15 | £30.15 | £6.00 | 25% |
| Large Estate | 1-6 Days inclusive | £30.05 | £40.48 | £10.43 | 35% |
| Large Hatchback | 1-6 Days inclusive | £27.00 | £39.60 | £12.60 | 47% |
| MPV | 1-6 Days inclusive | £39.00 | £62.91 | £23.91 | 61% |
|   |   |   |   |   |   |
| Small Hatchback Car | 7-27 Days inclusive | £11.83 | £20.70 | £8.87 | 75% |
| Medium Estate | 7-27 Days inclusive | £16.75 | £32.31 | £15.56 | 93% |
| Medium Hatchback | 7-27 Days inclusive | £13.55 | £23.31 | £9.76 | 72% |
| Large Estate | 7-27 Days inclusive | £18.16 | £35.08 | £16.92 | 93% |
| Large Hatchback | 7-27 Days inclusive | £17.00 | £35.91 | £18.91 | 111% |
| MPV | 7-27 Days inclusive | £18.65 | £44.91 | £26.26 | 141% |

**Food Miles**

For 2020/2021 Green Impact, we added in food miles calculations, as our usual BUCS transport has been severely impacted via COvid-19, we want to continually improve our reporting of our negative environmental impact. We took this opportunity to utilise resources to best estimate the food miles and delivered for our Commercial Outlets.

* Total miles travelled = 28,144
* 38970.32 kg CO2 e produced
* This equates to 4,740,453 smart phones charged or 4.7 homes energy for one year, or 7 homes electricity for one year.
* It would take 47.7 acres of US forests in one year to carbon sequester this total, or 644 tree saplings grown for 10 years.

[Source: MPG](https://steps.ucdavis.edu/wp-content/uploads/2017/05/BURKE-ZHAO-EVS30-MDHD-Fuel-Economy-Analysis_ver1.pdf)

[Commercial Fleet Converter](https://www.commercialfleet.org/tools/van/carbon-footprint-calculator)

[Greenhouse Equivalencies](https://www.epa.gov/energy/greenhouse-gas-equivalencies-calculator)

Assumption if diesel for worst impact

**LWC (75% F&B)**

Total deliveries 2019 = 16

Average deliveries per week = 1.3

Miles per trip = 31.5

Miles 2019 total = 504

**Blakemore (delivers 50% shop deliveries)**

Total deliveries 2019 = 156

Average deliveries per week = 3 (Blakemore)

Further deliveries from different suppliers: 3

Miles per trip = 91.8

Miles 2019 total = 28,640

**Printing**

**Reducing internal Students’ Union Printing:**

**The Students’ Union Staff Printer Totals**

* 2017/18 - 118,813 sheets of paper
* 2018/19 – 98,624 sheets of paper
* 2019/20 – 90,856 sheets of paper
* 2020/21 – 344 sheets of paper
* Figures up to March 2019 show a saving of 1699 sheets of paper compared to 3 months of 2018 printing. This equates to a 6% reduction in printing, or 3.4 Reams of paper.
* This year, partly due to the COVID-19 pandemic, we have reduced internal printing by 90,512 sheets, 99.6%. This saves 181 reams of paper. This saved The Students’ Union £615.40. This saved 0.431179TCO2e.
* Over 3 years, we have saved 118,649 sheets of paper, equalling 237.2 reams of paper and a 99.71% decrease. This saved The Students’ Union £806.80.

Source - A ream of A4 paper from our provider, £3.40 for 500 pages.

Paper weight source

1 sheet a4 paper = 0.0044kg

Source for paper co2 data

1.1 tons co2e are produced for every ton (1016kg) paper produced

|  |  |
| --- | --- |
| **Carbon emissions from 1 piece a4 paper TCO2e** | 4.76378E-06 |
| **Carbon emissions from 1 piece a3 paper TCO2e** | 9.52756E-06 |

* We consumed 0.001639 TCO2e carbon emissions this year through internal printing
* We saved 0.431179TCO2 carbon emissions from reducing internal printing sources this academic year
* Reducing internal printing this academic year translates 10.886 trees saved or 236.8 kg CO2e.
* This equals 28,805 smart phones charged or 595 miles driven by a passenger car or 262 pounds of coal burned.

Sources:

* + Data based on that a tree contains 16.67 reams of A4 sized paper ([conservatree](http://conservatree.org/learn/EnviroIssues/TreeStats.shtml))
	+ Data based on that a tree stores 21.75kg CO2

**Case Study of Saving:**

The Opportunities Team will switch in person elections for Club and Society Committee positions to online paperless elections,

- 7523 eligible voters across Sports and Societies
- An average of 5 positions voted on per person
- 37,615 possible votes cast
- ½ a sheet of A4 per vote
- 18,808 SHEETS OF A4 PAPER SAVED
- 1 TREE = 8,333 SHEETS OF A4 PAPER
- 2.25 TREES SAVED

**Welcome Guide**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Media** | **Year** | **Item Quantity** | **Size** | **Printed Sides** | **Single Pages** | **A5 Equiv. (pages)** |
|  |  |  |  |  |  |  |
| Welcome Guide | 2019/2020 | 7.500 | A5 | 32 | 16 | 120,000 |
| Digital Welcome Guide | 2020/2021 | 0 | 0 | 0 | 0 | 0 |

Partly due to the COVID-19 pandemic, The Students’ Union made the decision to create a Digital Welcome Guide rather than a printed Guide, using the platform Zmags. This guide has consumed 0.571654 TCO2e, around 14 trees.

**Additional steps that The Student’s Union has taken in 2020-2021 to reduce printing:**

* when entering a marketing request on our ticket system, each team is being reminded: ‘Before requesting printed material, please take into consideration the impact of the materials and decide if they are necessary for the campaign duration.’
* for every campaign, the Marketing team ensures teams are aware of the variety of existing marketing channels outside of printed posters.
* as often as possible, we design assets with no specific date so they can be reused. For instance, for our Accommodation Fair 2019, we created a banner that says ‘Coming soon’. Another example of this is the banner we created for Student Experience Awards and which doesn’t display a date.
* we send off cuts from our large formats to the nursery. For every A2 poster printed for example, the nursery receives a blank A3 for crafts.
* this year for our Christmas competition, we decided to go entirely digital and our promotion was done through social media channels, our website and digital screens.
* the Media Pack we send to prospective commercials is entirely digital
* we make sure our large poster frames across campus contain year-long campaign posters, in order to reduce having to print new posters on a regular basis.
* the Zero Waste area of the Shop has a vinyl detailing instructions and containing relevant SDGs. The promotion of this section was done digitally through social media, the website and digital screens.
* Due to the COVID-19 pandemic, poster promotion in Halls was not permitted, which contributed to reducing the amount of internal printing, however in order to sign off The Students’ Union building as Covid-secure has resulted in additional printing and signage as well as purchase of floor stickers, protective screens, visors, and hand sanitiser bottles (although refillable).

**Ongoing External Printing Reductions**

**2021/2021 Externa printing:**

This year we printed the below externally:

Loyalty cards – 250 copies 85 x 55 mm

RAG week flyers – 750 copies A5

SEA Booklets – 100 copies A5 8pp booklet

LNDIR Social Norms Posters – 350 copies A3 posters

Table talkers – 50 copies A4 then folded

Hallslife flyers – 80 copies A6 flyers

Presidents business cards – 250 copies 85 x 55 mm

Hallslife Christmas event flyers - 1000 copies A6 flyers

Welcome wall planners = 4,500 A0

Welcome booklets = 750 copies 16pp A7

**External Reductions (SU Wide Elections & Editorial Print)**

The Students’ Union has been tackling our externally printed paper consumption by means of actively reducing printing services, eliminating certain practices, and digitalising media. We have seen a rise in printing on last year, likely due to more accurate figures logged and increasing some printed materials for welcome (printed 8,5000 A3 welcome posters in addition to the 7,500 welcome guides with 4 additional pages).

External printing has seen certain reductions between 2018/2019 to 2019/2020.

* Printing of media on A6 sized paper has been reduced by 81.8%.

**Black History Month Magazine**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Media** | **Year** | **Item Quantity** | **Size** | **Printed Sides** | **Single Pages** | **A5 Equiv. (pages)** |
| BHM Magazine  | 2018/2019 | 2,000 | A4 | 32 | 32000 | 16000 |
| BHM Hall of Fame | 2019/2020 | 30/22 | A2/A3 | 240+88 |  | 328 |
| **Total** |  |  |  |  |  | **15,672** |

* 2000 copies of magazine printed in A4 – 32 pages= £1,483
* Eliminating the magazine in favour of the printed Hall of Fame saved 15,672 A5 pieces of paper, which equates to 0.94 of a tree and 20.44kg CO2
	+ Data based on that a tree contains 33.34 reams of A5 sized paper ([conservatree](http://conservatree.org/learn/EnviroIssues/TreeStats.shtml))
	+ Data based on that a tree stores 21.75kg CO2

**Freshers Magazine**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Media** | **Year** | **Item Quantity** | **Size** | **Printed Sides** | **Single Pages** |
| Freshers Magazine  | 2017/2018 | 4,000 | A5 | 32 | 72,000 |
| Freshers Magazine  | 2018/2019 | 0 | 0 | 0 | 0 |
| Freshers | 2019/2020 | 0 | 0 | 0 | 0 |
| Freshers | 2020/2021 | 0 | 0 | 0 | 0 |
| **Total** |  |  |  |  | **72,000** |

* In 2017, The Students’ Union printed 4,000 copies of the Fresher’s Magazine with 36 printed sides per copy on A5 paper.
* In 2018, The Students’ Union eliminated this service by digitalising information and signposting.
* A savings 72,000 single pieces of paper is reflected from this – 144 reams of A5 paper!
* This equates to saving 4.32 trees or 94kg CO2e!
	+ Data based on that a tree contains 33.34 reams of A5 sized paper ([conservatree](http://conservatree.org/learn/EnviroIssues/TreeStats.shtml))
	+ Data based on that a tree stores 21.75kg CO2

**Elections Newspaper**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Media** | **Year** | **Item Quantity** | **Size** | **Printed Sides** | **Single Pages** | **A5 Equiv. (pages)** |
| Elections Newspaper | 2017/2018 | 1,500 | 420 x 289 mm | 16 | 12,000 | 48,000 |
| Elections Newspaper | 2018/2019 | 0 | 0 | 0 | 0 | 0 |
| Elections Newspaper | 2019/2020 | 0 | 0 | 0 | 0 | 0 |
| Elections Newspaper | 2020/2021 | 0 | 0 | 0 | 0 | 0 |
| **Total** |  |  |  |  |  | **48,000** |

* The 2019 election season at The Students’ Union at UWE has eliminated the practice of printing election newspapers. The candidate’s and their respective manifestos were digitalised and promoted via The Students’ Union website.
* <https://www.thestudentsunion.co.uk/news/article/thesuatuwe/The-Leadership-Race-Candidates-announced/>
* We have decreased our paper use for this media outright, and saved the equivalent of 48,000 A5 single sheets of paper, or 96 reams of A5 paper.
* The elimination of printing election newspapers translates in 2.88 trees saved or 62.62kg CO2e
	+ Data based on that a tree contains 33.34 reams of A5 sized paper ([conservatree](http://conservatree.org/learn/EnviroIssues/TreeStats.shtml))
	+ Data based on that a tree stores 21.75kg CO2
* Further, this equates to a financial savings of £435.
1. This result comprises all the pages (A0, A1, A2, A3, A4, A5, A6 and A7) printed externally from August 2020 until March 2021. All pages have been converted into A4s (i.e 1 A1 = 8 A4) [↑](#endnote-ref-1)