

## 2015-2016 NUS Green Impact Submission

### Criteria

The union has reduced the amount of one or more utility over the last three years through efficiency.

### Further Information

Resource efficiency is becoming easier as technology becomes more efficient. However, we all need make a concerted effort to be less wasteful and more efficient if we are to reduce our carbon emissions in line with the targets that we have collectively set (for example institutional carbon targets; the Climate Change Act; the Paris agreement).

Many unions now have their own meters. If not, clamp-on [smart meters](#), like the [OWL](#), are cheap to buy and designed to be self-fitted to electrical distribution boards.

### How you will be audited

Auditors will be looking for data which demonstrates savings on at least one utility over a three year period. The reduction(s) should be absolute, in that they have come about as a result of efficiencies (more efficient equipment, better management of equipment), rather than structural changes (such as closing a shop, reducing staff numbers etc.).

Evidence should include a spreadsheet, table or graph demonstrating savings and a descriptions of which actions have been taken. It might include utility bills or utility consumption data from the institution.

Over the last three academic years, the Students' Union has been able to document its reduction of electricity and water use. Due to the Students' Union's new building, the organisation is more prominent to students and offer meeting and events spaces, making us more utilised by students. This has enabled us to better achieve our charitable aims and to organise larger equality and diversity campaigns and events within our space. Even though the building is used more by students, we are still making an energy saving on two utilities.

ELECTRICITY: comparing 2014 in F block (Students' Union Floors) to 2016 in U block, there is a **6.6 Tonne CO2 equiv. saving!** This is equivalent to around £2k (elec costs and taxes).

Compare:

|         |             | Electricity (kWh) | Tonnes CO2e from electricity |
|---------|-------------|-------------------|------------------------------|
| SU 2014 | SU F block  | 208,189           | 85.78                        |
| SU 2016 | New U block | 192,172           | 79.18                        |

WATER: Comparing 2014 with 2016, there is a 1,044m3 water saving. This is equiv to around £1,830.

Compare:

|         |             | Water supply (m3) | Water treatment (m3) | Total CO2e from water |
|---------|-------------|-------------------|----------------------|-----------------------|
| SU 2014 | F block     | 2578.32           | 2449.40              | 2.62                  |
| SU 2016 | New U block | 1534.20           | 1457.49              | 1.56                  |

Please find attached the spreadsheet from UWE's Energy Team detailing the reduction over the last three year period of both water and electricity utilities. We are unable to report on a gas comparison as the boiler that supplies heating / hot water for F-block also supplies other areas, so it is not so easy to see what the SU "consumed".

We are working with the University to install over the next academic year sub-meters into Glenside and Bower Students' Union - at present, this data is collected into a wider pool of data for the University. It is on their priority list to sub-meter moving forward.

In September 2015, The Students' union - alongside the University - were proud to move into and open our new building on Frenchay Campus. Please see the press release on new energy efficient building:

<http://www1.uwe.ac.uk/about/ourstory/campusdevelopments/studentsunionbuilding.aspx>

Please find information below on the energy saving features of the building. We also have included in our negative impacts document (SU001) activity taken to reduce our impact.

**DAYLIGHTING STRATEGY:** Certain areas of the building utilises natural light to illuminate the space. The installation provides LED light fittings with a dimming facility which reduce the light fittings output whenever possible. The light fittings to be dimmed are predominantly the fittings adjacent to windows.

Where natural lighting could not be provided due to the building form high efficiency LED type fittings were used in conjunction with movement detection switching to limit energy use. Due to this, waste is naturally cut down when spaces are not being utilised. These motion sensors are also in the Glenside and Bower Students' Union office space.

**GENERAL LIGHTING:** All new lighting was designed in strict accordance with all current CIBSE Design Guides and Codes of Practice. All luminaires were manufactured to British Standards and were complete with suitable long life, low energy LED lamps. Installations were designed to "maintained" illumination levels as defined by CIBSE guidance and taking account of the depreciation of the lamp light output, luminaires and room surface degradation. All luminaires were selected for their function, and aesthetic suitability including use of vandal resistant units where appropriate. Luminaires (adjacent to windows) in areas which benefit from sufficient natural lighting dim via PIR detectors.

**WASTE MANAGEMENT:** Waste diverted from landfill: **76%**. The graph is attached.

**DISTRICT HEATING NETWORK:** The plant room was connected to the new UWE District Heating network. This will reduce the Universities Carbon Footprint and works will start in the coming months to complete the final section of infrastructure on the Campus.

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**COP21 Student Engagement:** <https://westerneye.net/science-and-technology/science/2015/12/cop21-climate-talks/>

In December 2015 The Students' Union funded 5 students to attend Paris for the last weekend of COP21 negotiations. The students entered a competition and through their application forms were selected by the Students' Union Officers (5 out of 17 applicants.) The students were interviewed by Made in Bristol TV and also documented their experience via blogs, Instagram, Twitter, videos and news articles. They then exhibited a collection of their photos, poems, interviews, and blogs in D Block, along from Main Reception, opposite the Fruit and Veg Stall and Full of Beans Cart.

<https://www.thestudentsunion.co.uk/community/green-team/projects/past-projects/cop21/>

Full article on the students who went to

Paris: <https://www.thestudentsunion.co.uk/news/article/TheSUatUWE/Green-Team-go-to-Paris-COP21/>

Students then spread their experience to the rest of the community: <https://www.thestudentsunion.co.uk/ents/event/5164/>

One student even produced the following video: <https://www.youtube.com/watch?v=g3DIrPPpjxE>