



## SUSTAINABLE BUILDINGS AT QUEEN'S

- We have applied secondary glazing to the High Street facing rooms in Drawda.
- We are now conducting a trial in Back Quad whereby we have made our own bespoke timber window frames to avoid the carbon emissions associated with aluminium production for the glazing.
- We have ground-source heat pumps for both the Shulman Auditorium and the New Library.
- We have installed passive infrared (PIR) lighting, which have motion detectors in the new Front Quad bathrooms and Back Quad communal toilets.
- We installed photo-voltaic (solar energy) panels on the roof of St Aldates House back in 2012 and since then it is estimated that we have saved 108 tonnes of CO<sub>2</sub>.
- We have been trialling the use of smart thermostatic valves on some radiators. These valves sense when someone is in the room and adjust the temperature accordingly and can also switch off radiators when they sense the windows have been opened. We are collecting data from rooms with and without the valves in order to measure their effectiveness.
- A large part of the College masterplan for its buildings relates to heating systems and replacing old gas boilers. We are exploring all options, such as installing gas boilers with hydrogen compatibility capability or ground/air-source heat pumps.
- We are replacing lighting with LED lights in communal areas.
- Thames Water conducted a water audit on the main College site and installed saver flush devices, restrictors on showers, and fixed a number of leaks. They estimate that these measures save us 51,742 litres of water per day.
- We also have an electric charging point for cars and have just made extra provision for bike storage in main College.
- Our energy suppliers supply us with 100% green energy (from wind farms), which is backed by REGO (Renewable Energy Guarantee of Origin) certificates.
- We have a flyer up around College and in all student rooms about how people can help to make the College a more sustainable place: advice ranges from unplugging appliances when not in use, reducing waste by avoiding purchases with excessive packaging, and shortening shower times.