

Energy Report

Over the past month, we have surveyed the students of our school to discover their opinions on renewable energy and climate change. We discovered a wide range of opinions both between and within the age groups. In fact the only things that everyone agreed on were that the climate *is* changing and that everyone has a responsibility to stop it (and that standby switches should be removed). We also interviewed our bursar, Mr Frere, to ask him about the logistics of swapping a school which spends an ever increasing amount of money on electricity, oil and gas (this figure has increased from £19,500 to £29,000 in two years. Two years ago, the figure was only 40% electricity, last year, this increased to 53% - 6% more than oil and gas) to renewable energy. Simon Green of the Energy Saving Trust gave us valuable insight into how renewable sources could be more effectively utilised. From these, we have created a pamphlet, which we feel would appeal to young people, and encourage them to live more greenly.

From the survey, we have found that the vast majority of the students are very concerned about climate change. All agree that it is changing and less than one percent believes that it is not due to human intervention. 90% of students are happy to sacrifice luxuries such as flying, and more than three quarters would be willing to use public transport instead of cars where possible.

Simon Green of the Energy Saving Trust emphasized that our main objective as a school must be to “reduce energy demand first by making sure your energy requirements are as low as possible for your needs.” He then went on to equate this to building design, for example cavity wall insulation which can save 30% of heat loss. According to Mr Frere, our bursar, there is an ongoing programme in place to update buildings for increased energy efficiency. However Mr Frere also pointed out that “all young people want to use electrical appliances.” When speaking of reduction of energy usage, personal appliances cannot be excluded from the equation.

The average female in the UK produces 76kg of CO₂ per year by just drying their hair. This is half the quantity of CO₂ produced from a short haul flight. In a school of approximately 550 girls around half of whom blow dry their hair regularly, this comes to 17,100kg of CO₂ per year (including holidays), the equivalent of about 71 short haul flights. Clearly, there is more to be done here than simply fly less. In our survey, all agreed that it was necessary to give up luxuries, but no one mentioned not blow drying their hair. We believe that the answer to reducing carbon emissions is to encourage, not only greater awareness of the big issues, such as flying, but to change lifestyles so that young people are not simply categorized as “wanting to use electrical appliances”. Yet although we are told to turn off the lights, recycle and take showers, very little is said about using paper instead of booting up your computer to take a few pages of notes. In fact, we are encouraged in school to use laptops and computers to increase legibility and writing speed, or even two computers simultaneously so that two screens can be viewed at the same time. New boarding houses are built with more and more sockets in an attempt to keep up with dramatic increase in usage. Many girls have their own adaptors so they can use more appliances at once, many of which are left on standby while we are at lessons and overnight. This is further reinforced by our survey, in which no student, although perfectly willing to reduce the amount they flew, or to recycle more, mentioned using laptops, hairdryers, straighteners and

mobile telephones etc. less. Life long habits are being formed, and we must address this as quickly as possible.

We do, of course, realise that young people, who are notoriously self-conscious, are unlikely to wake up one day and decide to oppose all current fashions by wearing thick jumpers and covering up so that they can turn the central heating down, and spending the day with frizzy hair so that they do not waste energy by blow drying it. We are unlikely to throw away our mobiles and Nintendos because they require energy to power them. Somehow, focus must be changed, so that saving energy is not seen as a chore, but as a side effect of enjoying life to the full. Only then will it be appropriate to make the change to renewable energy – considering that the developing world is using ever increasing quantities of energy, there are simply not enough suitable sites for wind farms, tidal barrages and other forms of renewable power stations when you take into account the amount of space also needed for housing for the predicted population boom. While nuclear power is accepted by 50% of our school, very few profess enthusiasm, and many are concerned about the very safety. Furthermore, uranium is not a renewable source, and so many feel that we should be wary of becoming too dependent upon it.

Instead, we feel very strongly that use of ‘dramatic media’ and the fashion industry is the best way forwards. If characters in popular soaps such as Hollyoaks and Home and Away – particular favourites among our students – can be seen to be changing their habitual lifestyles towards more energy friendly ones and still being ‘cool’, they will soon have imitators all over the country. If the fashion industries begin marketing appropriate items; in the same way as they have already begun advertising ‘ethical clothing’, then the results will soon become apparent. In the same way, promotion of high quality, long lasting clothing will become easier if fashions become longer lived. This may encourage ‘swap shop’ a little known phenomenon that encourages recycling clothes instead of throwing them away. The average girl in our school possesses approximately 23 pairs of shoes. Is this really necessary?

A further initiative that could be taken is use of media to change opinions towards wind farms. Our school has a site that could quite feasibly be used for a wind turbine, but as we live in an area of outstanding natural beauty, we would be unable to obtain planning permission. Many people object to solar panels because they are so unattractive (approximately 25% of students are worried about the way solar panels look), and use of dams for hydroelectricity has such an appalling effect on the way the environment appears that local opposition grows daily. Such nimbyism and resistance to change must be minimized by use of popular culture to make it appear commonplace, and the sceptical (for example, Mr Frere is doubtful about the possible benefits of heating water through solar panels because of both the logistics of siting the panels and the length of time before they are cost effective) must be placated with new, accurate evidence.

Our school *does* want to convert to renewable energy, none the least because it is cheaper. We are constantly investigating new alternative sources, such as Biomass or heat pumps, but unfortunately, we are severely limited in the number of renewable options open to us, excluding wind turbines. To take the step of converting to renewable sources there must be more available. There is controversy over a reward system for the reduction of carbon emissions and whether or not it should be a

separate moral issue. However as approximately 70% of our school are in favour, (although none are in favour of penalisation), one suggestion is for the government to introduce a more widely publicised and available reward and grant system than the one currently in place. Small family homes should receive the same amount of support and encouragement in converting to renewable sources as larger companies and organisations if they are willing to take the risk.