

## **Waste to Power**

Two of the most important issues facing society in the 21<sup>st</sup> Century are how we dispose of waste products, and how we generate energy.

Many people talk a good game when it comes to green energy, but once solutions are put in front of them the old attitude of “not in my back yard” soon rears its head.

Everyone wants their kettles to boil, their televisions to work, their houses heated and their lights to come on. They will also tell you that they support alternative energy, particularly more environmentally friendly “green” energy, but can be rather less forthcoming when they themselves have to pay part of the price.

With the exception of wind power, Northern Ireland is not blessed with a wide range of resources when it comes to energy. We have no reserves of coal, oil or gas on our land or off our shores. When it was suggested that lignite be mined in north Antrim there was large-scale opposition. Planning applications to erect wind-turbines also regularly attract objections.

Northern Ireland has historically relied upon the UK National Grid for its energy, and while much of this has come from oil, gas or coal fired power stations – not sustainable in the long term as reserves run out – a significant proportion of energy needs are met by Nuclear power stations.

“Nuclear” has very negative connotations in the eyes of many people, but it must be recognised that the development of a new generation of Nuclear power stations is very much part of current UK Government thinking, and it is logical to assume that in the longer-term, no matter the political complexion of the Government of the day, Nuclear power will play an ever increasing role in meeting the future energy needs of the nation.

Supporters of Nuclear energy say that it offers a sustainable source of energy with reduced carbon emissions and reduces a nation’s reliance on oil, supplies of which are dwindling, and have the potential to be the source of much friction as nations compete to gain access to increasingly limited supplies.

Many objections relate to perceived safety fears, but there has to be a recognition and an acceptance that the Nuclear industry of the early 21st Century is a very different animal to the Nuclear industry of the 1950s or 1960s.

One can only imagine the reaction in Northern Ireland if it was suggested that a Nuclear power station be sited in the Province, yet the same objectors would have no qualms about utilising power generated by such stations. This is a most hypocritical position.

Science and technology have brought about advances in so many fields in the past 30 or 40 years. This is as true of the field of energy as any other, and is indeed inevitable, due to the focus which has been placed on the need to find alternative energies to replace fossil fuels as reserves run down.

In the last 40 years Society has also become increasingly aware of Environmental concerns, and the need to seek “greener” energy and live more sustainably. This has brought a focus in the field of wind-power, and has also brought about a sea-change in how we treat waste.

The days of putting all “rubbish” in the bin for collection and burial in a Council landfill site are over. We now follow the mantra of “reduce, re-use and re-cycle”, and are accustomed to separating items of household waste and placing it into placing items in grey, blue and green wheelie bins for collection.

One area which is of interest to me and of increasing importance and relevance to us all is “Waste to Energy.” As stated before, the notion of putting all household waste into a bin and placing it in huge landfill sites is not sustainable in the long-term. Much of that waste can be re-cycled and used to make a variety of products, and some of it can be used to create energy.

This includes the dreaded word “Incineration”, which creates hostility amongst a number of people. Once again I believe we have to recognise the technological advances which have been made, and the lessons learned from the experiences of the past.

In order to facilitate economic growth and to sustain and improve our current standard of living, we must support investment in research & development in a whole range of fields, but two of the most important are the fields of how we create energy, and how we dispose of waste.

This will obviously require innovative thinking and a willingness to take on certain vested interests and to show leadership.