Fridge mountains – What went wrong?

By Andrew Williams

Following the UK implementation, in late 2001, of the European Union regulation on substances that deplete the ozone layer[1], a situation quickly arose whereby many thousands of unwanted used refrigerators were stockpiled at local authority waste sites across the country, seemingly with no available route for appropriate disposal. These stockpiles were widely dubbed by the media as 'fridge mountains'. The situation quickly became very embarrassing for the government, and many questions were raised concerning how such a 'fiasco' might have occurred. So, how did the implementation of a European regulation lead to the 'fridge mountain' situation? The answer lies in analysis of two articles of the regulation in particular. The first, article 11, which came into force from October 2001, imposed a complete ban on the export outside the EU of controlled substances, identified as deleterious to the ozone layer, as well as products and equipment containing these substances. The second, article 16 (in effect from January 2002) requires, amongst other things, the recovery of controlled substances from used domestic refrigerators and their 'environmentally acceptable destruction', reclamation or recycling. It was when the provisions of these two articles came into effect that a complex chain of inter-related economic, social and environmental events commenced.

To understand the effect of the export ban it is helpful to investigate the complexion of the used-fridge market infrastructure in the UK prior to its coming into force. Until the ban, several of the major electrical retailers operated a product take-back service, whereby upon the purchase and delivery of a new fridge, a consumers' used one was collected free of charge. Approximately half of all used fridges were collected in this way, with local authorities picking up the remainder. The provision of this service was used by retailers to distinguish themselves from other retailers in terms of after-sales care. As such it was a source of competitive advantage, although not profitable to the retailers themselves. The profitability lay with those waste management contractors that collected the used-fridges from retailers' depots. These often relatively small businesses refurbished many of the fridges for onward sale. There was a thriving trade in the export of refurbished refrigerators to the developing countries of West Africa. In fact, 40% of used refrigerators were sold in this manner. A further 15% were resold to the UK second-hand market. As such, refurbished fridges were a valuable source of income to these businesses and helped to finance their handling of other, less profitable, white goods from retailer depots.

Of course, all this changed from June 2000, when the blanket ban on export to countries outside the EU came into effect. Very quickly, vast quantities of refurbished fridges started gathering at UK ports, prohibited from leaving the country. Virtually overnight, the most profitable activity of many smaller waste contractors ceased. In many cases this resulted in a drastic reduction in profit margins or even a loss-making situation. The inevitable happened, and many of them were forced out of business. This left the large electrical retailers in a predicament. What did they do with the used fridges mounting up in their

depots, with no-one to collect them? The solution was clear, stop the take-back services provided to customers indefinitely. This meant a drastic increase in the burden placed upon Local Authorities to collect used fridges from householders.

The situation was further complicated by the regulations' strict requirements on the reprocessing of, amongst other things, used fridges. The problem lay in the fact that the UK recycling infrastructure at that time was not technically capable of meeting the requirements of the regulation. This left local authorities with no option but to stockpile all used fridges at civic waste sites, until such time as the recycling infrastructure was able to deal with them adequately under the terms of the regulation, hence 'fridge mountains.' The resolution to the problem finally came in the form of an initial lump sum payment from central government funds of £40 million, to finance the increased collection responsibilities of local authorities as well as contributing towards the technical upgrades required for reprocessing.

This brief account of the series of events that led to the 'fridge mountain' scenario illustrates how unintended ex post policy outcomes can occur. Even though, eventually, the intended effect of the ODS regulation was realised (i.e. a reduction in the dispersal of ozone depleting substances to the ozone layer), it came at the expense of the socio-economic effect of lost jobs in the waste management industry and the substantial cost to the tax payer incurred in remedying the situation. When understood in the context of sustainable development it can be seen that greater environmental sustainability was achieved at the expense of social and economic sustainability.

We might now ask ourselves how such a situation could arise, even when those involved in the policy making process in both the EU and the UK knew for several years that regulation of this nature was in the pipeline? In the UK, the *Environment, Food and Rural Affairs Committee* set up a sub-committee to consider the effects of the regulation and to analyse the Government's preparations for its coming into force. The analysis below is largely based on the findings of this sub-committee, as published in a subsequent report[2].

- To begin with, it appears that communication between representatives of the UK government and the EU, before the regulation was implemented, failed to clarify certain technical elements. Between early 1999 and mid 2001 the UK government made repeated requests to the European Commission to discover whether the requirements for environmentally acceptable destruction did in fact apply to used domestic refrigerators. It seems that some confusion had arisen due to amendments to the regulation put forward during the Austrian presidency. However, while seeking this clarification, the government failed to make contingency plans to ensure that the infrastructure was able to cope with this waste stream should the article prove, as it ultimately did, to apply to domestic refrigerators.
- Secondly, one of the largest waste management company's in the UK wrote to DTI, at least a year before the regulation came into force, asking for clarification of the exact requirements before it committed itself to a £2 million investment to upgrade its reprocessing facilities in line with possibly stricter standards. The DTI made no formal reply. Six months later, in March 2001, the company wrote a letter to the Environment Agency with the same request. A further three months later the

Environment Agency informed the company that it was still unable to clarify the situation. At this stage, perhaps unsurprisingly, the company decided not to make its planned infrastructure investment.

- Thirdly, DEFRA, the lead government department responsible for implementing the regulation, was unaware of the existence of the sizeable export market for used fridges in West Africa. It seems that the Customs & Excise Department neglected to inform them of the 1-1.5 million fridges sold in this way annually.
- Fourthly, as early as two years before implementation, one of the UK's largest electrical retailers wrote to both the environment minister and DEFRA expressing concerns that the proposed ban on export outside the EU could lead to the end of take back schemes. These warnings, it appears, were not heeded.
- Finally, it appears that local authorities in the UK were not informed by central government of the requirements of the regulation until October 2001, four months after the definitive interpretation was received from Europe. This, even though local authorities were ultimately responsible for collecting used fridges following the withdrawal of retailer take-back services. At the inquiry, a representative of the Local Government Association (LGA) stated 'local authorities are having to bear the brunt of a problem outside their own making.'

This analysis shows that the fridges 'fiasco' largely occurred as a result of the lack of effective communication between key stakeholders in the policy process. The quality of the dialogue process between various levels of government at EU, UK and local level was inadequate. In addition, communication between government departments at the national level failed to properly highlight the likely effect of the regulation, even following repeated warnings from those organisations working 'at the coal face.' In the context of sustainable development, a more co-ordinated approach to the formulation and implementation of policy is required, if the types of 'trade-offs' between economic, social and environmental affects are to be avoided[3]*. This is especially important when a variety of stakeholder groups are increasingly expressing concerns about the likely effect of forthcoming EU legislation, particularly the directives on end of life vehicles and waste electrical equipment.*

References

1. Official Journal of the European Communities (2000), *Regulation (EC) No. 2037/2000 of the European Parliament and of the Council of 29 June 2000 on substances that deplete the ozone layer*, Brussels.
2. Environment, Food and Rural Affairs Committee (2002), *Fourth Report – Disposal of Refrigerators*, HMSO, London.
3. A forthcoming working paper, that will be published on the BRASS website, will explore some potential strategies to facilitate more integrated policy design and delivery.