

**WRITTEN QUESTION TO THE MINISTER FOR TRANSPORT AND TECHNICAL SERVICES BY  
DEPUTY G.C.L. BAUDAINS OF ST. CLEMENT**

**ANSWER TO BE TABLED ON TUESDAY 13th MAY 2008**

**Question**

Would the Minister advise, with regard to solid waste, how high a percentage is possible to recycle before the residue becomes unsuitable for disposal by incineration?

**Answer**

For the purposes of this question it is assumed that the Deputy is referring to standard mass burn incinerators of a similar nature to those currently operating at Bellozanne.

The operation of a standard mass burn incinerator is designed around the energy content (Net Calorific Value - NCV) of the waste to be disposed of. The incinerator will normally be referred to as being capable of processing "x tonnes per hour" at the specified NCV. The effect of changing the NCV of the waste will be to change the amount of waste that the incinerator can process which will increase or decrease the throughput in tonnes per hour depending on whether the NCV rises or falls.

Recycling has the ability to change the NCV of the waste being sent to the incinerator for processing. The removal of high Calorific Value (CV) arisings such as plastics and tyres will effectively lower the NCV of the residual waste, which will result in the incinerator being able to process a greater quantity (by mass) of waste. Conversely the removal of low CV arisings such as glass and wet green waste will increase the NCV of the residual waste and reduce the capacity (by mass) of the incineration plant.

From the explanation above it can be seen that recycling can and will have an effect on the amount of waste that an incinerator can process as recycling will not only reduce the quantity of residual waste, it will also influence the incineration plant capacity as the NCV varies. It is for this reason that mass burn incinerators are popular and successful as they can process waste over a range of NCV and can be run at a lower than specified capacity if required to do so. This flexibility is one of the reasons that mass burn energy from waste plants offer a robust solution against a changing waste arising.

In summary there is no definite answer to this question as providing that the waste is within the normal CV ranges of residual waste, an incineration plant can be turned down or ultimately switched off to cater for the input variations influenced by recycling. However it must also be emphasised that the maximum waste input to the incinerator cannot be exceeded

It is, therefore, very important to consider the recycling rate, NCV and maximum residual waste arisings when specifying the capacity requirements of an incineration plant.