

EXPLANATION NOTES ON THE WASTE STRATEGY FOR BUCKINGHAMSHIRE

What We Are Doing

The Buckinghamshire Waste Authorities are jointly preparing a long-term *waste strategy* (the Waste Strategy for Buckinghamshire) to help decide how to deal with the ever increasing amounts of waste over the next 20 years.

The Problem

We currently produce about 250,000 tonnes of public waste a year and this has been growing at 2%+ annually in recent years. This will mean an 80% increase (to some 442,000 tonnes) by 2020 unless this rate of growth can be slowed. This is bad for the environment and will take increasing amounts of public money that could be better spent on other services. We estimate a doubling in costs from about £14M now, to £28M in 2020.

So we must cut down on the waste that we produce. However we dispose of waste in the future it will be easier, cheaper and better for the environment if we have less waste to manage in the first place.

A starting point of the Strategy will therefore be to slow the growth in waste produced by encouraging people to purchase products with less packaging and to throw less away.

The use of landfill sites (holes in the ground, eg old gravel pits) for waste disposal has been relatively cheap and problem-free in Buckinghamshire. About 80% (*200,000 tonnes*) of Buckinghamshire's public waste goes to landfill at present. The remaining 20% (about 48,000 tonnes) is recycled.

However this situation must now change. The national policy for the management of waste is now rapidly **moving away from landfill towards more environmentally friendly, long term sustainable alternatives (for example, recycling and composting)**. *These methods do not pose the same pollution risks as landfill, but allow value to be recovered from the waste.* However, they cost more and require difficult decisions about what waste facilities we will need.

The Government has now published its waste strategy for England and Wales. It wants higher levels of waste recycling and recovery before final disposal. To achieve this it has set a number of targets, for example to recover value from two-thirds of public waste by 2015 (at least half by recycling or composting).

Recent European Union legislation, now absorbed into UK law, seeks to reduce the landfilling of "biodegradable" waste (waste which decays). This organic waste produces methane at landfill sites. This is an explosive gas that is released into the atmosphere and contributes to "global warming". As the materials decays, it produces a liquid that can pollute water in the ground and on the surface.

Our existing recycling and composting programmes, whilst successful, are not sufficient to meet the targets mentioned above. The indications are that Buckinghamshire will have:

- a **164,000 tonne shortfall in the “recovery” (by recycling, composting or energy recovery) of household waste at 2015**
- a **140,000 tonne shortfall in diverting organic (“decaying”) public waste from landfill to other treatment processes by 2020**

We shall therefore need to introduce new ways of managing our waste to meet national targets.

In addition to new facilities there will also **be new ways** in which the Buckinghamshire local authorities work together, and with others, to manage household waste in the future. There will be closer links between all local authorities.

Whatever waste options are chosen they will have to be based upon better ways of working than at present. The *Waste Strategy for Buckinghamshire* will form the framework for making these choices. **Your support for the eventual Strategy will be essential if it is to be successful.**

In Summary

- We need to find a long-term *Waste Strategy for Buckinghamshire* with the least damage to the environment, at a reasonable cost that residents will pay, for the period to 2020.
- We know already that, as time passes, we must recycle and compost more material and send much less to landfill. But there are still major choices to be made if these measures are not enough: for example we shall have to decide on other ways of meeting the targets with acceptable costs.

The Short-term

- In the short term the majority of our household waste will continue to be landfilled whilst the necessary infrastructure for greater recycling and composting etc is put in place. But by 2003/04 the Government wants Buckinghamshire to be recycling or composting 33% of our household waste.
- Rising costs of landfill will mean alternatives will become more competitive in terms of cost.
- We must all work together to reduce the amount of waste that is landfilled.

The Future

Action needs to be taken to achieve more environmentally sustainable waste management in Buckinghamshire. **We have therefore set out below for public**

comment some suggestions from which a Waste Strategy for Buckinghamshire could be built.

- **More waste minimisation**

A Public Waste Awareness Campaign

A new Waste Minimisation Officer

Support for Home Composting (including subsidised or free composters)

A Real Nappy Campaign (a significant tonnage of nappies are contained in the waste stream)

- **More recycling**

Household collections of paper and card, glass, cans, plastics and textiles

- **More composting**

Household collections of Green Waste

Managed composting sites

- **New waste infrastructure (normally local to where waste originates)**

Composting Facilities

Materials Recovery Facilities (for sorting recyclables)

Waste Transfer Stations.

- **Use of recovery technologies, including incineration with energy recovery**

A new incinerator with energy recovery at Lakeside, Colnbrook in Berkshire could (if implemented) take an increasing amount of the organic household waste from southern areas of Buckinghamshire.

- **Residual waste to landfill**

Residual household waste (what cannot be recycled or composted) within North and Mid Buckinghamshire could continue to be landfilled. The limit for organic waste might be the permissible figure for the county allowable under the EU Landfill Directive (about 50,000 tonnes at 2020).

- **Changes to the current pattern of collection services**

To make the most cost effective use of vehicles and workers.

- **Be broadly self-sufficient in dealing with our waste**

To “export” our waste to other counties for treatment only where this is the best environmental option and a necessary process is not available within Buckinghamshire.

- **Seek to move towards direct charging – for example for the collection of Garden Waste from homes – where possible.**

Some new and additional services could be charged for as they are used (i.e. additional to your Council Tax payment) in a similar way to most privately provided services. The advantage of this could be that funding would be available for new or extended services that cannot currently be provided.

What do you think? Your views matter

If any waste strategy is to work it needs to be supported by local people. What are your views on what should be done?

Because the choices that are made will affect your household, we need YOUR views now...

**Finally ... what do you do with your household’s waste?
To plan for the future we need to know**

- Do you recycle, and how?
- Do you compost?
- How do think our waste should be managed in the future?

PLEASE SEND YOUR COMPLETED QUESTIONNAIRE TO

[to be decided]

Your help in completing this questionnaire is greatly appreciated and essential to plan for the future.

ADDITIONAL INFORMATION

What should the aims of the Waste Strategy for Buckinghamshire be? What are the future choices for dealing with our waste?

For those who want to know a little more about the principles upon which the *Waste Strategy for Buckinghamshire* should be based, here are the main factors which have led the Councils to the “building blocks” set out on page 3.

What the government wants us to do

The Government has said that any local waste strategy should be underpinned by three basic environmental principles, as follows:

- **Choices should cause the least damage to the environment through time whilst being of acceptable cost – (the “*Best Practicable Environmental Option*”).**
- **Waste management measures should be progressively moved upwards through *the Waste Hierarchy* which ranks the main waste management options in order of “environmental friendliness” as follows:**
 - Minimise waste;**
 - Re-use;**
 - Recover value (recycling, composting or treatment with energy recovery);**
 - Disposal to landfill as a *last resort*.**
- **Waste management facilities should be located as near to the origin of the waste as possible to minimise the distance that it has to be moved for treatment or disposal (the “*proximity principle*”); subject to acceptable cost.**

The new initiatives that we shall need to introduce if we are to achieve the more sustainable management of our waste and meet national targets will have to accord with these principles. **So the Waste Strategy for Buckinghamshire must aim to:**

1 Minimise waste

We should start a continuing public awareness campaign to advise consumers on the ways in which they can reduce waste.

Many individual householders already carry out **home composting** in their gardens existing schemes to provide subsidised composting bins should be continued.

2 Recycle more

We should recycle as much of our household waste as we can. If we recycle, we reduce the need to import raw materials.

We could increase the recycling of waste materials through additional, separate collections of recyclable materials from your home. Current practice differs in different parts of the County, but the aim might be to collect newspapers, cans, plastics, and glass from homes.

More material is collected through household collections than from recycling centres, as householders find separate collections more convenient. The separate collection guarantees material is cleaner and has a higher value, but success depends on you being willing to separate and store your waste, and on there being a market for the end product. This type of scheme already operates successfully in parts of Buckinghamshire for some materials.

The recyclable materials previously sorted by the householder are then taken directly to the industries that reprocess them or are bulked up first before they are delivered on to their destination.

An alternative system whereby household waste is collected as normal and then sorted at a plant. *This process sorts out materials for recycling, but the value of the material will be lower, as it has already been contaminated by the rest of the waste stream. It can also make households less likely to think about waste reduction or whether purchased items are recyclable.* For these reasons the Buckinghamshire authorities do not favour such “unsorted” systems.

- **We should increasingly move from relatively cheap recycling centres towards the separate collection of (pre-sorted) recyclable materials so as to achieve significant gains in recycling performance.**
- **Clear uncontaminated materials are required for end markets.**

3 Compost more

We should compost as much of our household waste as we can. Kitchen waste and garden waste (“Green Waste”) together account for about 1/3 of rubbish produced by an average household – and most of this can be composted.

To significantly increase composting will require the home **collection of Green Waste** (in a similar way to that proposed for recyclable materials). The waste can be processed to form compost that can be used as a soil improver or mulch.

The green waste is then taken to a **Composting** facility for composting. Sorted waste is usually shredded to mix thoroughly and to reduce particle size. The composting can be done in two basic ways, in rows usually in the open or in an enclosed reactor. *In either case, by removing and treating organic waste, composting reduces the pollution potential of landfilled waste.*

- **We should extend separate collections to Garden Waste and provide managed composting sites.**

4 To recover energy from waste by incineration

New laws mean that we shall have to cut the amount of waste that we send to landfill. At the same time, **value** can be extracted from this material through recycling, composting or, as fuel to power electricity generators.

Clearly we should start by recycling and composting to the maximum practicable extent in the ways set out above. However these measures **may not be enough** if we cannot sell all of the material that we collect.

Beyond this, another way in which the need for landfill could be reduced and value recovered would be to use waste to **produce energy in a purpose-built incinerator.** *But energy-from-waste incinerators are very expensive, and it is hard to find suitable sites for them.*

The recovery of value from waste is not restricted to the traditional technologies of recycling, composting, incineration with energy recovery and capturing landfill gas. Other technologies such as pyrolysis or gasification (thermal treatments) and anaerobic digestion (a “high tech.” composting process in the absence of air) may become viable means of making the most of the energy that waste contains. However at the present time they remain **“unproven technologies”**.

- **We should initially investigate the possibility of recovering value from waste through energy-from-waste incineration.**

5 Deal with waste as locally as possible

Moving waste, especially by road, has an impact on the environment. Waste should be dealt with as close as possible to where it is produced. Our aim should be to become as self-sufficient as possible in recycling and disposing of our own waste.

This reduces the energy use and air pollution emissions which result from the transport of waste and the higher level of local solutions is usually considered to help local communities focus upon the wastes which they generate – since the consequences are not “exported” to another area.

- **Since most waste is made in towns this suggests that most waste handling should take place in or near to urban areas. Remote rural locations may mean fewer people are affected but transport costs will be higher.**

6 Find the most environmentally-friendly solution for every waste stream and every part of the county.

The aim is to produce less waste in the first instance and, thereafter, to consider how value might be best recovered through its treatment. Disposal is seen as the last resort. The main objectives are to stimulate recycling and recovery of waste, and to reduce landfilling in the interests of a better environment.