STATES OF JERSEY



DRAFT WASTE MANAGEMENT STRATEGY (S.R.4/2005): RESPONSE OF THE ENVIRONMENT AND PUBLIC SERVICES COMMITTEE

Presented to the States on 31st May 2005 by the Environment and Public Services Committee

STATES GREFFE

DETAILED RESPONSE TO SCRUTINY PANEL REPORT (April 2005) on the DRAFT SOLID WASTE STRATEGY (September 2004)

1. Introduction

The Environment and Public Services Committee published a Draft Solid Waste Strategy in September 2004, which the Scrutiny Panel selected for investigation. The Scrutiny Panel review, chaired by Deputy Rondel, published an Interim Report in January 2005 and its Final Report in April 2005.

Since the original Draft Strategy was published, a great deal of work has been done, resulting in the new Solid Waste Strategy. It should be noted that the Panel was scrutinising the Draft Strategy of September 2004.

This report is a formal response to the "Findings and Recommendations" in the Scrutiny Panel's Final Report, and the responses follow the structure of the Recommendations in the Panel's Report. References to Sections are to those in the new Solid Waste Strategy (May 2005). For ease of reference, the Scrutiny Panel's Findings and Recommendations have been included at the beginning of each topic, prefixed "SP".

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2. Summary of Scrutiny Panel Recommendations and EPSC Responses

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A brief summary of the Recommendations from the Scrutiny Panel Final Report is given here (numbered in accordance with the sections in this report), and a brief summary of the Committee's (EPSC) response is given.

Scrutiny Panel Recommendation	EPSC Comment
4. 2008 Deadline (EfW plant) – use third stream	Not accepted: Third stream already worn, and key
only, as interim solution	central components need replacing.
5. Emissions – remove inappropriate materials from incineration	Accepted that certain materials can be removed, and EPSC is planning to do so, but emissions will still be
	unacceptable.
6. Export of waste – need broad review of export of	Accepted that recyclable materials can be exported
segregated waste streams	(and are presently), but not that residual waste can be exported.
7. Quantity and Composition of Waste – more data	EPSC believes data already available is reasonable, but
required; reassess projection of waste arisings	that better data collection will be obtained in the future. Projections of waste arisings are valid.
8. Collection and Recycling – encourage reduction,	Accepted: EPSC agrees with importance of reduce,
more reuse and recycling; implement kerbside	reuse, recycle, has set higher targets, and plans
collections including kitchen waste; return biodegradable waste to land	education and awareness; discussions ongoing with Parishes on collection.
	Not accepted: Returning biodegradable (kitchen) waste
	to land at present on account of health concerns.
9. Alternative Technologies – adopt an interim	Not accepted: Alternative Technologies have been
solution, to enable advantage to be taken of these	considered, but EPSC believes they will not develop in
technologies	near future, and that decision cannot wait.
10. Synergies – integration of a number of waste	EPSC is proposing more than one option for dealing
management options	with waste (composting, recycling, etc.); does not agree that an EfW plant would prevent recycling.
11. OJEC Notice – this process should be suspended	Not accepted: Because this process has not committed
pending approval of Strategy by States	the States, but has identified potential suppliers, and provided cost estimates.
12. Bellozanne Covenant - costs of buying out and	EPSC accepts that there are implications, but these are
implications on funding	addressed in the new Strategy.
13. Guernsey – develop inter-Island recycling, export	EPSC accepts inter-Island initiatives for recycling and
or treatment of waste	possibly for treatment of waste, but not export.
14. Funding – accounting for costs over lifetime;	EPSC accepts need for accounting for infrastructure;
impact on capital programme; private waste operator	impact on capital programme has been addressed in new Strategy; but does not accept that private waste
	operator would produce benefits.
15. Parish Involvement - full consultation needed to	
improve bring systems and improvement of kerbside	and discussions are continuing to develop way forward
collections	appropriate for Island.
16. Public Involvement – initiate on-going dialogue	Accepted: Importance of public participation is
with all stakeholder groups	acknowledged in new Strategy, and EPSC has taken on board other views.
17. Working Groups – should have been an "expert"	EPSC accepts importance of working groups, but does
group from outset	not agree that no experts were included, and reaffirms support for its officers.
18. Waste Management Strategy – there should be no	Not accepted: As EPSC believes these options have
debate of Strategy until options in Panel's Report	been fully considered and some are incorporated in
have been fully researched, and full consultation has	new Strategy; consultation has taken place and will
taken place	continue.

3. General comments

The Committee recognises the contribution of the Scrutiny Panel in raising the level of debate on the Solid Waste issues, and wishes to thank the Panel for its work and effort in putting this important matter into the public domain. In the new Strategy, the Committee has included a number of the issues that were raised during the Scrutiny process.

The Committee was expecting that some of the key criteria of the Scrutiny process would have addressed issues such as – does the Strategy seek to achieve environmental and human health standards in line with best practice and international obligations? Does it minimise impact on the population through the siting of proposed facilities? What is the impact on Jersey's reputation in the international community? The Committee is somewhat disappointed that the Scrutiny Panel's findings and recommendations do not seem to recognise the commitments that the States have already made to environmental matters.

The Committee wishes to point out that it is easy to take parts only of an argument and make a case, without taking into account the overall context of the matter under discussion. Unfortunately, this has happened in a number of instances, and the reader could be persuaded that a good case has been made, without having heard the other side of the argument. It is vital that commentators make further investigations into the background of the matter under discussion, in order to understand the matter fully.

It has been said in the Scrutiny Panel Report that there is a perception that the Committee and the Public Services Department have been putting things the wrong way round. This refers to what is perceived as putting the issue of the replacement for the Bellozanne incinerator as the first priority, with everything else coming behind. The Committee and the PSD have <u>constantly tried</u> to emphasize that minimisation and recycling of waste are the first priorities, and are fundamental in determining the remainder of the Strategy. However, the focus of attention has inevitably fixed on the replacement for the incinerator, simply because it will involve a very large financial commitment and there has been high profile publicity on alternative technologies and the other matters related to Energy from Waste (EfW) plants.

It should be pointed out that the Scrutiny Panel Opening Statement states that the Draft Strategy was issued in September 2004 "by the Environment and Public Services Committee's consultants Babtie Fichtner". Babtie Fichtner assisted with the preparation of the Draft Strategy, but it was not issued by Babtie Fichtner – it was issued by the Committee.

The Scrutiny Panel states that it reserves the right to consider the final Strategy, once it has been lodged "au Greffe". The stated Terms of Reference of the Scrutiny Panel were in relation to the "Plan". This was a reference to an earlier draft of the September document, when it was called the Draft Solid Waste Plan, before it was issued as the Draft Solid Waste Strategy. It seems that the Scrutiny Panel has decided to extend its Terms of Reference. The Committee believed that the intended purpose of the Scrutiny process was that the Scrutiny Panel's review of the Draft Strategy would enable the points raised to be addressed in the final Strategy. This has been done, and to suggest that the final Strategy should now be reviewed by the Scrutiny Panel appears to indicate that the Scrutiny process will only end when the Strategy is completely in agreement with the Scrutiny Panel's views.

4. **2008** deadline (for replacing the Energy from Waste Plant)

- 1. The Bellozanne incinerator comprises three separate streams, two forming part of the original installation and a third larger stream added in 1991.
- 2. The year 2008 has been set as a <u>target</u> date for closure of the incinerator by the Environment and Public Services Committee.
- 3. There is no clarity as to whether this refers to two streams only or the entire plant. If it refers to the latter, there is no evidence which suggests that it is essential to close the third stream by 2008.

4. The Public Services Committee report and proposition P.199/1996 states that the third stream at that time had at least a further 26 years of life. (Commissioned 1992, design life 30+ years).

SP/Recommendation: The continued operation of the third stream should be considered as part of an interim solution to enable an improved overall waste management strategy in the longer term.

The Scrutiny Panel appears to imply that the decision of the Committee to set a deadline of 2008 for the replacement of the existing incinerator was merely a target date. The Committee took into account the fact that numerous key components of the existing plant are wearing out, and it has been kept going over the last few years by patching and repairing, in the expectation that it would only have to last for a limited period of a few years longer. If the plant had to be kept running longer, some of these key components would have to be replaced, at considerable cost and disruption to the operation of the plant, with the consequent effects on the ability of the plant to dispose of the incoming waste. There are problems with the internal flues of the chimney, which could result in considerable cost to rectify. All of the evidence from the reports and investigations carried out, from the professionals running the plant, and from the consultants advising the Committee pointed to the serious risks in keeping the plant going beyond 2008. The Committee considered all of these factors and felt that the most responsible way to deal with this important issue was to set a target date of 2008 for the replacement of the plant.

The Scrutiny Panel has stated that there is no clarity as to whether the deadline for the closure of the incinerator refers to the closure of two streams or to three. It has always been clear to the Committee that what has been referred to as the replacement of the existing incinerator has meant a total replacement of the existing with a new plant.

All options to extend the life of the existing EfW plant have been considered in detail, in the original work conducted by Babtie Fichtner in 2001. The key issue for the existing plant is that it has unacceptable levels of emissions of gases, due to wholly inadequate Flue Gas Treatment (FGT) equipment. Retrofitting FGT equipment is an expensive option. Closing streams 1 and 2, and fitting a FGT system to stream 3 alone would reduce the plant capacity to only about 50,000 tonnes a year, and would mean that only a single unit, or stream, was available. A disposal route would also be required for the remainder of the residual waste that exceeded the single stream's capacity, and export is suggested as a short term solution. (The matter of export is dealt with later.) During lengthy outages of the single stream, which will occur when, for example, the furnace grate needs to be repaired or significant boiler tube surface needs to be replaced, the Island would be left with no backup capacity. This would mean that an additional considerable quantity of waste would have to be exported, at short notice, for several weeks, or have backlogs of waste building up.

As mentioned previously, there are a number of other key, central components of the plant that are giving cause for concern (Section 5.2.2). The notion of retaining only the newest (third) stream in service ignores the issues of the key, central components that would still have to be replaced. These central components are necessary for the operation of all or any of the three streams of the incinerator, and the Committee has expressed its concern over their deteriorating condition. The costs that would be involved in replacing these components would be considerable, but it would also be very disruptive to the running of the plant and its ability to deal with the waste. Although the third stream is considerably newer, it has already seen heavy wear, as it has had to take additional load from the frequent breakdowns of the 2 older streams. This suggestion would require the exportation of the waste that exceeds the single stream's capacity, and would add the significant capital cost of the infrastructure for exporting the waste (waste transfer station and container system) and the considerable operational costs of so doing (transportation, shipping, disposal costs, taxes, etc.). (These costs are dealt with in more detail later.) This option would not deliver value for money.

In addition to the recommendations, the body of the Scrutiny Panel Report states -

The Panel believes that consideration of alternative technologies is not a "diversion" but an essential part of the formulation of an overall Waste Strategy. It believes that this work should have been undertaken more fully by successive Committees in order to keep abreast with developing technologies, but unfortunately this has not been the case. It is the duty and responsibility, therefore, of the incumbent Environment and Public Services Committee to undertake this work in investigating whether there are technologies which fulfil the criteria in the above quote from the President of the Health and Social Services Committee.

The quote referred to is -

"So if I were to be persuaded that any delay was to be acceptable in terms of shutting down that incinerator, I would need some very robust evidence that there was in fact a realistic, viable, alternative way of dealing with our waste on the horizon".

Consideration of alternative technologies has been undertaken, and has identified very few that meet the criteria identified by the President of the Health and Social Services Committee. These criteria are endorsed by the Environment and Public Services Committee and the Waste Strategy Steering Group (WSSG), which is composed of representatives of the Committee, the Health and Social Services Committee, and the Finance and Economics Committee. These technologies are represented in the 'short list' of interested suppliers (Section 5.4).

5. Emissions

SP:

- 1. Current working practices lead to inappropriate materials being included in the incinerator input stream. These materials contribute to the toxic loading of the emissions as well as reducing the efficiency of the plant.
- 2. In November 1996 the States of Jersey approved a proposition to bring emissions in line with European Union legislation. This was to be achieved by retrofitting a Flue Gas Treatment system. However funding requests at that time were denied. The Flue Gas Treatment system has never been installed.
- 3. The Panel found no evidence of monitoring of emissions since 1992. No action has been taken by the Health and Social Services Committee to encourage the Public Services Committee to review its working practices to improve emissions.
- 4. There is no evidence to suggest that if the life of the plant was prolonged for a short period beyond 2008, it would pose any serious threat to health.

SP/Recommendation: Immediate steps should be taken by the Committee to develop policies and controls to ensure that inappropriate materials are excluded from the incinerator waste stream e.g. no more burning of TV sets and waste electrical and electronic equipment (WEEE), batteries, metals etc. The commercial and bulky waste stream should be sorted with separate bins for each waste type.

The Committee accepts that there are certain materials that could be excluded from the material fed to the incinerator, i.e. electrical and electronic wastes, some batteries and metals. It should be noted that, until recently, there has been no disposal route for these materials, such as old television sets, but the Strategy proposes that these should now be separated (Section 4), and PSD is already undertaking an exercise to remove these components, which contain significant amounts of heavy metals, from the waste. Their removal will affect mainly the quality of the bottom ash (i.e. the ash from the furnace grates), and will enable the bottom ash to be recycled.

However, apart from heavy metals this will not significantly improve the emissions from the existing plant, which will still be well beyond what is currently acceptable in the E.U., and the Island will still be failing to meet its existing obligations under the Geneva Convention and future obligations under the Aarhus and Gothenburg Conventions. In particular, acid gases, dioxins and furans are mainly by-products of the incineration of plastics and food waste. These materials are not the components of the waste stream that can readily be separated for alternative treatment, whereas those described above are. (Note – Dioxins are particles emitted that are toxic and very persistent in the environment. Dioxins and other components of emissions and their effects are described in Section 5.2.1 of the Strategy.)

Whilst the Committee agrees that 'there is no evidence to suggest that if the life of the plant was prolonged for a

short period beyond 2008, it would pose any serious threat to health', such a course of inaction would be in conflict with the "precautionary principle" adopted by the European Community. The Scrutiny Panel report focuses only on demonstrable human health effects, whereas environmental policy across Europe goes well beyond this to cover the wider environmental effects of emissions (e.g. climate change and accumulation of persistent chemicals).

Jersey has been debating cleaning up its incinerator emissions since 1996 and, as the Scrutiny Panel states, this has not happened, because the funding was not available. During this time, large quantities of pollutants have been emitted, which have not been allowed in other European countries. The WSSG and the Committee agree that this situation must end as soon as possible. It is also clear from the public consultation that this is a major issue for some Jersey residents, in particular the residents in the immediate neighbourhood of the existing plant, and the Strategy is correct to give a strong commitment to ending this situation.

In the body of the Report, the Panel states -

Advice on the matter was taken from Professor J. Swithenbank, one of the Panel's Advisers who stated -

"If I take dioxins, that plant is the worse I know in Europe on dioxin emissions. But at the same time, if you look at the dioxin emissions from all the plants in the U.K., all the incinerator plants only contribute 1% of the total dioxins in the U.K... I would doubt if you could identify any health effects from the existing plant. I am not defending it. It needs to come down and there needs to be a new plant but I don't think you would find or you could identify health effects from the present plant".

The U.K. Department for Environment, Food and Rural Affairs stated in 'Dioxins and Dioxin-like PCBs in the U.K. Environment' (October 2002) –

Specific controls are in place for several processes which have resulted in significant reductions in dioxins emissions, in particular from municipal solid waste (MSW) incineration plants. In 1996 these incinerators became subject to stricter controls on their emissions, with a limit of 1.0 nanogram ITEQ per cubic metre of gaseous releases being set, and resulted in the closure of many of the older incinerators which could not be satisfactorily upgraded. Emissions from municipal waste incinerators, which were the major source of dioxins release to air in the U.K. with around 600 g I-TEQ per year in 1990, have been reduced to around 2 g I-TEQ per year in 1999, less than 1% of total U.K. releases.

[I-TEQ stands for international toxic equivalent concentration, a measurement device to bring the toxicity of a group of similar compounds with differing toxicity to a common base.]

In other words, the 1% of U.K. emissions that Professor Swithenbank quotes is that achieved <u>after</u>, i.e. post-1996, the closure of (or retrofitting of flue gas treatment to) the old polluting incinerators, such as Jersey's existing plant. It is worth noting that many of the major dioxin and furan sources in the U.K., such as steel manufacture and chemical processing, are not present in Jersey, so it is reasonable to expect that the Bellozanne incinerator will produce a larger proportion of Jersey's total dioxin and furan emissions. It is also worth noting that the levels of emissions of dioxins from the existing plant are 500 times the level from plants operating elsewhere in Europe.

However, it is important to understand the context of the quote, which is that he would not condone the continuing use of such a plant, and Professor Swithenbank clearly states that "It needs to come down and there needs to be a new plant".

6. **Export of waste**

- 1. The statement within the draft waste strategy by Environment and Public Services Committee, that waste cannot be exported because of international agreements is inaccurate and misleading.
- 2. It is possible to export recyclable waste from Jersey to other European Union countries. There is no

requirement to obtain prior consent from the United Kingdom to do this.

- 3. The export of other waste streams for recovery is regulated but permissible.
- 4. The export of waste streams for disposal (e.g. landfill) is more strictly regulated.
- 5. The export of segregated waste streams has not been adequately considered.
- 6. The costs associated with the export of waste streams have not been fully quantified.

SP/Recommendation: A broad review of the potential for export of segregated waste streams should be undertaken.

There appears to have been a misunderstanding of the Committee's statements in the Draft Strategy that "waste cannot be exported". This was referring to the residual waste that is left, after recycling and composting have been carried out.

The Draft Strategy did not make it as clear as it could have that the majority of recyclable materials that are collected (paper, timber, agricultural plastics, metal) are, in fact, exported to reprocessors, and have been for a number of years (paper, card and aluminium for about 10 years, scrap metal for much longer). This is the obvious choice for the additional materials that the Strategy proposes should be collected for recycling. In consequence, the Panel appears to be labouring under a misunderstanding, because the Strategy does propose the export of recyclable materials, as has been done in the past.

For the residual waste, the Committee still does not believe that it is morally right for Jersey to export its waste to another jurisdiction, when the Island is quite capable of dealing with it here in Jersey, as is stated in the Strategy (Section 1.3). This accords with one of the main principles of the Basel Convention (on Transboundary Shipping of Waste), i.e. the proximity principle, which states that waste should be dealt with as close to the point of origin as possible. There are no environmental or economic grounds for export for the purpose of recovery of energy from residual waste, and export for landfill has been considered and dismissed on environmental and risk terms.

The Committee has taken further legal and constitutional advice on the export of residual waste, and the legal position is now clear that there would be implications for the U.K. Government from any agreement to export residual waste from Jersey to landfill. This is because any waste exported from Jersey for landfill elsewhere would be added to the U.K. landfill totals, as Jersey would be considered to be part of the U.K. in terms of international conventions. It is already known that the U.K. landfill totals are likely to exceed the limits set in the E.U. Landfill Directive, and that this could result in large penalties to the U.K. Inevitably, a Jersey decision to send waste to landfill would lead to pressure being brought on the Island from the U.K.

The position has also been clarified that, once the Waste Management (Jersey) Law 200- is in force and once the Basel Convention has been extended by the U.K. to the Island, residual waste could be exported to countries that are signatories to the Convention, provided that their governments, acting in accordance with the Basel Convention, agree to accept the waste. The U.K. Government has indicated it would not accept waste for disposal, except in an emergency situation. The issue of exporting to landfill is complicated by the E.U. Landfill Directive, as described above. The attitude of other governments has so far only been investigated at a preliminary level, because the Committee believes that the Island has a duty to act correctly and responsibly, in accordance with the Basel Convention, by handling its own waste, unless it can prove that it cannot do so.

Beyond that, to implement a policy of export of residual waste would incur considerable costs. The Committee carried out a preliminary exercise, to establish the approximate costs of this option. The indications were that it would be around £141 per tonne to export residual waste from Jersey to EfW plants in France. These costs included for the construction of a waste transfer station in Jersey, to process and "pack" the waste; a container system for it to be safe and hygienic; transportation and shipping; charges for disposal at French EfW plants; French taxes; harbour dues, etc. The total cost would depend on the quantity of residual waste to be exported, but this could result in an annual cost of around £9 million to £10 million. It also has to be borne in mind that the quantity of waste will grow over the years ahead, as explained in the Strategy. The Committee believes that this

would not provide value for money, and would also increase the risks to the reliable disposal of the Island's waste, whether it was through weather, human, or foreign political factors. In addition, these French plants send waste to landfill, during times of breakdown or shortage of capacity, so Jersey could still end up with some of its exported waste going to landfill.

The Committee has not pursued this issue further, because this is not a path that the Committee is suggesting should be followed, for all of the reasons given.

7. Quantity and composition of waste arisings

SP:

- 1. Insufficient data has been kept on the quantity and composition of household and commercial waste delivered to Bellozanne. This data is essential to the preparation of a comprehensive waste management strategy.
- 2. The assumption that waste arisings will increase by 3% year on year is not confirmed by the figures produced for 2004 by the Statistics Department which showed a decrease of 5.5% on the previous year. The peak in arisings previously influenced by the Tourism Industry is no longer as pronounced and this is understandable given the reduced number of staying guests.

SP/Recommendation: Environment and Public Services Committee policies should be amended to allow for simple collection of data required. It is standard practice in France and Norway to require commercial and bulky waste to be sorted by the deliverer into separate bins according to the waste type. This system should be quickly implemented to provide the data required at minimal cost.

SP/Recommendation: The waste arisings projection should be reassessed in the light of the downturn in staying visitor numbers, the population demographics and the E.U. directive to reduce per capita arisings to 300kg per annum.

The data that the Committee possesses has been examined by its technical advisers, who have considerable experience of the situation in other jurisdictions. Their view is that Jersey has a reasonable historical record of the composition of waste deliveries to Bellozanne, which is better than many U.K. local authorities have. Many waste strategies in other jurisdictions have been prepared without extensive compositional analysis, and waste contracts have been let to private companies without any local waste analyses. The Committee believes that the available data is sufficient for the purposes of developing a strategy for waste management. The separation of waste by the deliverer, suggested by the Panel, is essential as part of a coordinated recycling approach, but is not necessarily undertaken for the purpose of collecting data.

The types of data available are (in tonnes) –

recycled material (including composting); arisings from the sewage treatment works; Parish collections; miscellaneous deliveries to Bellozanne; bulky waste delivered to Bellozanne; inert waste delivered to La Collette.

The Scrutiny Panel is correct that what is not known with certainty is the composition of the mixed deliveries to Bellozanne, but for this, on the advice of two different consultants, the Committee has used figures from U.K. analyses to derive recycling targets for the different materials. The Committee accepts that, as more waste is source-segregated and recycled, it will be necessary to have a greater understanding of waste composition and this will be carried out as the increased segregation of each component is investigated. The recycling targets will be reviewed regularly to ensure that they remain challenging, and that the approach of flexibility in the Strategy is maintained.

The projections of waste arisings were considered in detail in the Draft Strategy, and have been revised in the new Strategy (Section 1.5.2), using the latest 2004 data that has become available. It is generally accepted that arisings have greater correlation to household numbers than to population, and the model used for the projections in the Strategy uses the household numbers from the Island Plan 2002 (Section 1.5.2). The projections for household numbers are towards a greater number of households, with fewer people in each. Therefore, even if the population stays the same, the number of households will increase. The growth in waste arisings from the growth in the number of households is due to each household producing its own packaging, from furnishings and goods, and from ready-prepared meals, etc.

The Committee does not agree with the Scrutiny Panel that there is an E.U. directive to reduce per capita arisings to 300kg. per annum. In 1993, the 5th Environmental Action Programme set a target to stabilise the generation of municipal solid waste at 300kg. per capita, which has not been achieved. Other targets have been set; for example in Wales there is a target of 300kg. per capita of household waste by 2020 (National Waste Strategy for Wales 2002). However, the amount of waste generated in Europe is a reality, as discussed in some detail in Sections 1.5.2 and 2.3 of the Strategy, where Jersey's waste arisings are compared with other E.U. states and other islands. Whilst a clear aspiration is to reduce the amount of waste created in Jersey, the Committee has to deal with the reality of waste in the Island, rather than aspirations. On that basis, the Committee takes the view that encouraging recycling initiatives is likely to be more beneficial long-term, than simply setting hopeful targets for waste production.

8. <u>Collection and recycling</u>

SP:

- 1. Despite acknowledgement by the Environment and Public Services Committee of the importance of recycling in any waste management strategy the proposals for recycling in the draft strategy are limited and the targets well below European best practice.
- 2. In particular the draft strategy suggests that kerbside collection services are essential for recycling initiatives to reach their full potential, but insufficient effort has been made to secure such improvements at this time.
- 3. Viable technologies exist to treat kitchen waste in ways which return the organic matter to the land.

SP/Recommendation: Much more should be done to encourage the community to reduce, re-use and recycle materials in order to minimise the quantity of waste requiring further treatment or disposal. This would require a vigorous education campaign.

SP/Recommendation: The Parishes should implement a kerbside collection service of dry recyclables immediately and kitchen waste at the earliest opportunity.

SP/Recommendation: As far as possible biodegradable material should not be burned and alternative methods of managing such waste in order to return organic components back into the land should be actively pursued as a matter of urgency.

The Committee agrees with the Scrutiny Panel about the importance of reducing, reuse and recycling of materials, and remains committed to extending the recycling effort significantly. The new Strategy reflects this and incorporates challenging, but practical and realistic targets. The importance of publicity, public awareness and education is recognised in the Strategy, and will be a continuing process.

In developing its ideas on recycling, it has become apparent to the Committee that, to achieve the maximum recycling rate, the kerbside collection service of recyclable materials will need to be improved, but this can only be implemented with the support of the Parishes and the community. There have been discussions with the Comité des Connétables, regarding the introduction of pilot schemes for kerbside collections, and the expansion of the bring-bank schemes in the Parishes. These discussions will continue, in order to develop a partnership

between the Parishes and the Committee, and to agree a way forward that will provide the most appropriate service for the Island's situation.

The Island's finite land bank is already accepting composted green waste, agricultural green waste, agricultural slurry and sewage sludge and cake. The Committee is anxious that the ability of the land bank to accept these diverse waste recyclables is not compromised by introducing composted kitchen waste to the mix. As discussed in Section 4.8 of the Strategy, the potential for kitchen waste to contain pathogens and protein prions raises concerns, if this is included in a central composting facility. Following advice from the Health Department, and adopting the precautionary principle, the Committee believes that it is not in the Island's interest to compost kitchen waste at the present time. This will be kept under review.

However, the diversion of green waste to compost will be extended. The Strategy also proposes increasing the amount of selected biodegradable material, such as paper, that will be recycled. Only residual waste for which there is no environmentally and economically acceptable alternative is intended to be processed in the EfW plant.

9. Alternative technologies

SP:

- 1. Since 2000 the pace of change in the waste management field has increased dramatically with new technology emerging.
- 2. The Panel has received considerable interest from organisations involved in alternative waste management solutions.
- 3. The modular nature of these technologies provides a more flexible approach to waste management allowing units to be added or subtracted as waste volumes change. Units are factory built and construction time is shorter than for conventional incinerators. Capital costs are much lower. Multiple units reduce the impact of overall downtime.
- 4. The United Kingdom government is organising a showcase of demonstration alternative technology plants over the next two years for local authorities to prove the operational viability of these plants in the United Kingdom.

SP/Recommendation: An interim solution for Jersey's waste situation should be sought to enable advantage to be taken of one or more of these technologies.

The Scrutiny Panel appears to be recommending that the decision on a new EfW plant should await the outcome of the Demonstrator Programme supported by DEFRA in the U.K. This programme is providing £30 million or government funding to support the construction of ten demonstration plants by the end of 2006.

The Committee and the Department are aware of the U.K. Demonstrator Programme and have reviewed the shortlisted proposals to ensure that nothing has been missed from being considered. The seven companies shortlisted in September 2004 were –

WasteGen U.K. Ltd – pyrolysis and/or gasification Devon County Council (Compact Power Ltd) – pyrolysis and/or gasification Premier Waste Management Ltd – MBT/in-vessel composting Greenfinch Ltd – anaerobic digestion Golder Associates – MBT/anaerobic digestion ADAS Consulting – MBT/in-vessel composting Fairport – material separation/complex material recycling facility/ gasification.

Even when these demonstrator plants could be considered as proven, which at the earliest would be 2008, they will not be commercially sized plants. Indeed, part of the criteria for awarding funding to the above projects is

that they are "non-commercial", as otherwise they would infringe E.U. regulations.

The Committee has maintained throughout that the supplier selected to build Jersey's replacement EfW plant must have commercially-sized plants that have operated for several years and are proven to be reliable. We have adopted this criterion because the consequences of the new plant not performing sufficiently well would be severe. The Committee does not believe that any of the plants in the DEFRA trial could meet this criterion before 2012 at the earliest (2008 demonstrator successful, 2010 commercial sized plant in operation, 2012 satisfactory operation demonstrated).

To follow this course of action, the very earliest that Jersey would get its replacement EfW plant would be 2015. However, one could expect the situation not to be as clear cut even as this, as even newer technologies will almost certainly emerge in the intervening period, so this argument could be rehearsed again in 2012, when a future E&PSC brought a proposition to the States for a replacement EfW plant.

It should perhaps be mentioned in passing that the Scrutiny Panel appears to believe that the alternative technology processes are much better, in terms of emissions and residues. There is no clear evidence to support this belief, and it must be noted that all types of technology will be governed by the same rules on emissions and residues.

The Committee would like to quote a statement made by one of the Scrutiny Panel's Technical Advisers, Professor Coggins, on a recent television programme (called "Waste – a time-bomb for Europe") referring to waste management, when he stated... "All waste creates problems; all waste management options will have some risks. There is no other option; we're running out of landfill sites. We cannot just prevent waste; we will need incinerators in the future."

Alternative technologies have been considered in enormous detail in the development of the Strategy. It would have been helpful if the Panel had been more specific in identifying which alternative technologies it sees as offering potential to the Island, how these might be of benefit and the time-frame for establishing these. Whilst it is true to say that the pace of change in waste management has increased dramatically in the U.K., the main technologies presently proposed for the U.K. have been in use in mainland Europe for many years – technologies such as pyrolysis and gasification have been around for decades.

Thus, in conducting its reviews of technologies, the Committee has analysed developments in countries such as Germany. Pyrolysis plants were installed in Germany in the 1980s, but have not established a significant foothold, precisely because they do not offer a significant advantage. However, these technologies are not, and never have been, excluded from the Committee's consideration, and gasification plant supplier remains on the list of technology suppliers being considered for the residual waste treatment plant. If such a technology can demonstrate that it is better for the Island and cheaper than other systems, and that its emissions are no worse than other solutions, it has every chance of being the preferred plant.

Alternative technologies such as Mechanical Biological Treatment have also been operating in Germany, Austria, Italy and Spain for several years and do not require "demonstration" to show they are commercially available – they are indisputably so. However, MBT and anaerobic digestion systems are not seen as suitable for the Island (as reviewed in the Strategy, Section 5.3)– in that they are not in themselves complete systems for dealing with the waste, and leave other issues to be resolved. The other two systems in the DEFRA programme, proposed by Compact Power and WasteGen are not new – WasteGen is based upon a pyrolyser operating in Germany, and Compact Power has an operating clinical waste gasifier in the U.K. Therefore, we see little point in delaying any decision to await the outcome of the Demonstrator Programme.

10. Synergies

SP:

1. The draft strategy fails to recognise the advantages of integration of a number of waste management options.

- 2. Short-term export could be used to provide the opportunity of closing Bellozanne for refurbishment or retrofitting of Flue Gas Treatment to the third stream, which otherwise would be expensive and operationally difficult to achieve. Likewise an interim solution which combined export with the running of the third stream for a period would allow time for alternative technologies to mature.
- 3. High recycling rates which reduce the overall residual component of the waste stream would allow the introduction of smaller modular end treatment plant with lower capital and operational costs and increased flexibility.
- 4. Working with the other Channel Islands could allow recycling markets to be developed in line with economies of scale. Instead of redundant capacity in 2 separate plants, each island could be designed as the backup for the other.
- 5. Conversely opting for a fixed size conventional Energy from Waste plant which needs an 85% load to run efficiently would commit the Island to produce a supply of waste which could only be treated for the 25 year life of the plant in one way. Reduction and recycling initiatives would take second place.

SP/Recommendation: The waste strategy should recognise the advantages of integration of a number of waste management options in its proposals.

The Committee does recognise the benefits of the integration of a number of waste management options, and that is why it has chosen to publish a holistic Strategy instead of merely advocating a replacement EfW plant in isolation.

We do not believe short-term export is a sensible way forward. The risks of an export-led strategy would be at least as great as those associated with any other; in particular, it would be expensive, as export facilities would need to be built.

The sizing of the EfW plant needs careful consideration, to optimise recycling, whilst ensuring there is sufficient capacity to handle the residual waste. However, it is not correct to say that a plant requires 85% load. The proposed plant would have a minimum of two streams, and modern plants can operate easily at loads down to 70%. By operating with one or two streams, the plant would be able to operate from 35% to 100% of the plant capacity, as required. There is, therefore, much greater flexibility in the plant operation than suggested by the Panel. The Committee is well aware of the need to install a plant that can accommodate the variation in the volume of waste received, not only across the year, but also across the day and the week.

The Strategy recommends much greater recycling than presently achieved, which has resulted in a smaller EfW plant being required than would otherwise have been the case.

Discussions have continued with Guernsey to investigate whether a joint plant would be more cost-effective than 2 separate plants, but, at the time of writing, Guernsey is in the midst of re-assessing its way forward.

11. Official Journal of the European Communities Notice (OJEC)

- 1. The Island is not bound to use the Official Journal of the European Community notice procurement method.
- 2. The Official Journal of the European Community notice asking for expressions of interest from equipment suppliers was placed prior to the States considering and deciding upon a waste management strategy.
- 3. A procurement report written by Price Waterhouse Coopers in 2002 starts from the assumption that the States had decided to replace the existing equipment with a new Energy from Waste plant.

4. The Official Journal of the European Community notice was drafted in a manner which excluded expressions of interest from waste management operators and had the effect of deterring many of the alternative technology companies from applying.

SP/Recommendation: States Departments should only initiate official procurement processes for major projects under the authority of an explicit States decision or agreed strategy and with requisite funding in place.

SP/Recommendation: The Official Journal of the European Community process should be suspended pending approval of a waste strategy by the States.

The Scrutiny Panel appears to be confused as to the purpose of this Notice. This is somewhat surprising, as a member of the Scrutiny Panel was involved in the drafting of the OJEC Notice that was issued. A major reason for issuing the OJEC notice was to test the market for available technology suppliers willing to build plants in Jersey. The number of suitable suppliers of equipment is not large, and not all of them would be interested in building projects in the Channel Islands. It was considered that it was necessary to produce a Strategy that could be achieved, where suppliers of technology would be able to offer facilities that were viable. In addition, it was necessary to provide costings for the Strategy, and this would not be possible without making contact with suppliers.

The OJEC process was selected not because Jersey is bound by it, but because the Official Journal is read by the main European equipment suppliers and was therefore seen as the fairest, most efficient, and most open way of attracting as much interest as possible. The Committee challenges the statement that the Notice "had the effect of deterring many of the alternative technology companies from applying". There is no basis for this statement.

The OJEC notice was successful in identifying which suppliers were interested in bidding for a project in Jersey – the list still includes alternative technology suppliers – and providing an open and fair way of producing a list of companies, from which essential information, such as plant layout and budget plant costs, could be established.

The issue of whether waste management contractors were allowed to bid is a separate one. The Strategy identifies that the best route for Jersey is to procure facilities, not to contract out the waste disposal services. However, whether services or facilities are contracted for does not change the selection of the technologies to be used, as waste management service contractors do not generally supply equipment, they procure them from the same suppliers as Jersey can.

In summary, the Committee rejects the assertion that its mind is or was closed to new technologies, but believes that it would be foolhardy to purchase a technology that is unproven.

12. Bellozanne Covenant

SP:

- 1. Without a resolution of the Bellozanne Covenant issue it will be difficult to impose any form of user pays charge or environmental tax for waste disposal on the residents of St. Helier.
- 2. The cost of removing the Covenant has not been established and could be extremely expensive.
- 3. The decision to accept a proposal to remove the covenant rests with the Parish Assembly.

SP/Recommendation: The States must be fully apprised of all costs associated with buying out the covenant and the implications on funding and user charging if the covenant is not removed.

The Committee agrees that the Scrutiny Panel's recommendation is valid, and this is reflected in the Strategy. The effect of the Covenant is to allow the residents of St. Helier to bring their waste to Bellozanne for disposal free of charge. It is also recognised that there are issues and costs involved in removing the Covenant. The Committee

does not believe, however, that the Covenant precludes the introduction of environmental taxes at point of sale or import.

- 13. Guernsey
- 1. Although there have been some discussions with Guernsey dating back to 1999, the possibility of working together with Guernsey has only recently been addressed.
- 2. A feasibility study of a joint Channel Island Energy from Waste plant of conventional design was recently released. However the report did not consider the use of alternative technology or at reducing the residual waste through intensive recycling.
- 3. There has been little, if any, co-operation with Guernsey into researching the development of freight options for exporting waste to France.

SP/Recommendation: More work needs to be undertaken in developing inter-Island initiatives in recycling, export or treatment of waste where mutual benefit might accrue.

The recommendation to develop inter-Island initiatives is accepted, and discussions are already in progress. However, building a joint Channel Island facility will not change the position regarding alternative technology – this will be selected only if it is proven to be reliable and it is the best economic solution. As stated above, exporting waste to France is not an option recommended in the Strategy.

Working with the other Channel Islands to improve recycling, particularly to improve the market conditions for recyclables by increasing the tonnages and reducing freight costs, has been identified as a possibility and it is intended to take this forward through the Department's Recycling Officer.

14. Funding

SP:

- 1. Insufficient attention has been given to a funding structure since it was decided that a replacement for the Bellozanne incinerator was required.
- 2. The draft strategy suggests that the project should be funded from the capital program but no allocation or application for funding has yet been made in the current five year plan (2005 2009).
- 3. The "user-pays" principle is beset with difficulties due to the terms of the Bellozanne Covenant.
- 4. Despite interest on behalf of waste management operators in bidding for a complete waste management service to include collection, recycling and disposal, an early decision was taken to exclude this option due to perceived problems that this would cause with Parish and manual workers.
- 5. Alternative technology providers have expressed interest in public/private partnerships to showcase their technology at a reduced capital cost.

SP/Recommendation: Major items of infrastructure must be accounted for in such a way that replacement funds are set aside over the lifetime of the asset.

SP/Recommendation: The cost of the waste strategy could make a substantial impact on the capital program and must be reconciled within the current financial environment.

SP/Recommendation: The Design Build (Fund) Operate procurement method or the use of a waste management operator should be re-examined as these options could provide infrastructure at little or no

capital cost to the Island. Operational efficiencies could be achieved in this way.

SP/Recommendation: Public/private partnership procurement initiatives should be explored.

The Committee agrees that major items of infrastructure need to be accounted for properly, moreover, that the States should adopt internationally recognised accounting standards concerning capital. The successive Strategies have always recognised that the cost of the Strategy is high and will have a major impact, but the failure to invest in these facilities would have an even higher impact. The Committee is pleased that recent decisions of the Group of Presidents recognise the need to invest in infrastructure.

The funding of the Strategy from the capital programme has been addressed in the new Strategy. The principle of "user-pays" charges is not being recommended by the Committee, and the terms of the Bellozanne Covenant have been recognised.

The use of outsourcing to reduce the capital spend is certainly an option, although the effect is merely to transfer the expenditure from capital to revenue. The reviews of the Strategy and work carried out by PricewaterhouseCoopers all recommended that Jersey should build, own and operate its own facilities. Contracting out the waste disposal services does admittedly avoid the initial need for the Island to raise the capital expenditure, but would lead to a more expensive solution for the Island in the medium to long term.

We do not agree with the comment "Operational efficiencies could be achieved in this way". This has been considered in detail by Babtie Fichtner, who could identify no major efficiencies that a private contractor would introduce into the service. On the other hand, off-island overheads, profit and higher borrowing costs than those of the States of Jersey are all strong influences in increasing the costs for the Island.

The issues of alternative technology providers have already been addressed, but the Committee does not believe that the Island can afford the risk of being used as a "test-bed" for unproven technologies.

15. Parish involvement

SP:

- 1. Parish Authorities are key providers of the waste collection system and have been insufficiently involved by successive Public Services and Environment and Public Services Committees in formulating a key part of the draft waste strategy.
- 2. Very recent involvement has taken place since the intervention of the Scrutiny Panel.

SP/Recommendation: Full consultation should be undertaken with the Parish Authorities to investigate a means of improving 'bring' systems in each of the Parishes, encouragement of the householder to re-use and recycle and an improvement of kerbside collections.

The Committee recognises the crucial role of the Parish authorities in developing the waste collection processes that will result in maximum segregation of recyclable materials at source. Discussions are continuing, and the Committee is encouraged by the enthusiasm of the Connétables to participate in developing a viable way forward that is suitable for the Island's situation.

16. <u>Public involvement</u>

- 1. There has been insufficient consultation with the public in the development of the draft Strategy.
- 2. There has been insufficient consultation with other organisations and businesses in the development of the draft Strategy.

SP/Recommendation: An ongoing dialogue should be initiated with all stakeholder groups as the waste strategy is developed to foster and encourage, educate and involve all sectors of the community in responsible waste practices.

The recommendation is accepted. The importance of public participation in waste management is acknowledged in the Strategy, and the Committee has taken on board other views, including those of the Scrutiny Panel. The benefit of the community has always been a priority.

17. Working Groups

SP:

- 1. A number of working groups have been established since 1998, some of which appear to have dissipated, others of which appear never to have met and the most recent group has held five meetings between its formation in 2003 to the end of 2004.
- 2. The Groups have all lacked people with a breadth of professional and technical expertise in alternative waste management technologies.

SP/Recommendation: In any matters of a highly technical content, there should be an "expert" group from the outset. In the case of Waste Management an excellent example of this is the composition of the Panel of Inquiry into the Future of Solid Waste Disposal in Guernsey.

The Committee accepts the importance of working groups. The Report states -

The Panel was surprised and concerned to note that until 2003, there had been no inclusion of any people with an in-depth knowledge of Waste Management. It is also concerned that in 2003, the only representative with any knowledge was from the Environment and Public Services Committee's Consultancy firm. The Panel is of the opinion, therefore, that these groups lacked the range of expertise required and appropriate professional input.

The Committee, in turn, regrets that the Panel has chosen to ignore the fact that every Group included Officers from Public Services Department, who indeed have 'an in-depth knowledge of Waste Management'. The Committee reaffirms its support for its officers, and recognises, as the Panel has not, that their experience and knowledge is valuable.

18. Waste Management Strategy

SP:

- 1. As the Environment and Public Services Committee has been unable to provide a detailed analysis of all the options available, it has been necessary for the Scrutiny Panel to undertake its own research into a range of options and technologies. Considering the importance of such a major project and the long-term implications for the Island, the Panel is extremely concerned that there is insufficient information available to States Members and the Public, to enable a sound decision to be made.
- 2. Insufficient work has been undertaken by the Environment and Public Services Committee into various issues such as export, alternative technologies, joint initiatives with Guernsey and consultation with the Parishes.

SP/Recommendation: There should be no debate of the Waste Management Strategy until the options within this Scrutiny Report have been fully researched with results made public, and a proper consultation exercise with all stakeholders undertaken.

The recommendation is not accepted. The options in the Scrutiny Report <u>have</u> been fully considered, and some are incorporated in the Strategy. Others have been rejected, as not viable or not appropriate for the Jersey situation. Consultation has indeed taken place with relevant groups, and further consultation will take place before the Strategy is debated in the States and at each subsequent stage in its implementation. The Committee is quite certain, however, that procrastination would be the highest risk strategy of all.

19. Conclusion

The Committee has found some aspects of the Scrutiny process helpful, as an additional external focus helped to highlight weak areas in the Draft Strategy. The Committee believes that the final Strategy is stronger and more robust as a result. Although it has inevitably been a time-consuming process, the Committee believes that well-informed and objective Scrutiny has a valuable role to play in modern government.