

STATES OF JERSEY
ENVIRONMENT SCRUTINY PANEL
WASTE PLANT REVIEW
Grouville Meeting

THURSDAY, 31st JANUARY 2008

Panel:

Deputy R.C. Duhamel of St. Saviour
Connétable K.A. Le Brun of St. Mary
Connétable A.S. Crowcroft of St. Helier
Deputy P.V.F. Le Claire of St. Helier
Deputy C.J. Scott Warren of St. Saviour

Deputy R.C. Duhamel of St. Saviour (Chairman):

... whatever it is going to be will be built at La Collette but the way States Members go, even that may be kind of rescinded at the last moment and perhaps common sense will break out because there are other issues with the planning of La Collette that have not been considered in terms of long-term strategic planning. One of the things that is coming to the fore, and I think it is only right that I mention a few of these things, is the relocation of the fuel farm following the Buncefield explosions in the U.K. (United Kingdom). There have been a number of safety studies that have been carried out and the long and short of it is that any fuel farm that is dealing in L.P.G. (Liquefied Petroleum Gas) fuels or any other fuels has to have a safe working radius around it and members of the public will be excluded from coming within too close a distance of what is an unsafe area. There is a little bit of anomaly in the legislation and there seems to be differences in terms of whether or not the same law applies to whether or not you are a worker. If you are an office worker, then I think you are covered by a different part of the law as opposed to if you are an ordinary resident wanting to take a walk down at La Collette or whatever to walk the dog or to enjoy the marine leisure opportunities that were once on the table and being proposed to us as part of the long term thinking for that particular area. Things are looking a little bit tight down there. There is also discussions as to whether La Collette, long term, is the

best place for an extension of infrastructure facilities and that is using the jargon for things like a Bellozanne sewage farm replacement and indeed there is also talk, and there has been for a long time, by Harbours and Airports that the harbour facilities are no longer sufficient. The number of ships that can come to the Island to be adequately berthed within the facilities that we have got are diminishing day by day. The long and short of it is that the pier facilities when we considered, and I cannot remember which revision it was - there has been so many - but the pier facilities are not particularly long enough and the waters are tidal which means that the use of those facilities cannot be extended 24 hours around the clock. That causes problems for the commercial running of the port and these issues have got to be considered in terms of long-term planning for the area. I called, as did a number of other politicians, a while ago for a proper long-term strategic plan for the La Collette area but that was not met with approval by my colleagues on the floor of the House, but since then I am told that negotiations are under way to try and solve some of these problems because there are conflicting courses of action in which one department might find themselves trying to do things that, due to the safety implications or whatever, just are not available to be done. The meeting tonight is to try and see what extent there is a feeling for principally recycling. Waste management has been looked at from a lot of different angles. The department, at the moment, are tending to go in the direction that they would prefer to put all their eggs in one basket and have, in the jargon, a one-stop shop and the one-stop shop, in terms of technology that is being suggested, is a large incinerator. It has been suggested that the size would be of the order of 126,000 tonne capacity. At the moment the Island last year burnt, or tried to burn -- there is an argument about some of the materials that go into the incinerator not being combustible, although the department have made some efforts of late to take some of these materials out, notably the T.V. (television) sets and the waste electricals which cause the emission problems because, quite honestly, they should not really be burnt. The department is suggesting that they want 126,000 tonne capacity unit principally on the basis that although we are only burning "around 72,000 tonnes" they think at this point in time, although it may well change by the time we come to the July debate, that they need an overcapacity just in case people start becoming even more profligate in their wastefulness and start throwing away even more rubbish than we throw away at the moment. In terms of the rubbish we do throw away we are fairly high up in the spectrum in terms of our wastefulness and really, as far as the

Environment Scrutiny Panel are concerned, we think that should be reconsidered. The trend in the U.K., and the U.K. is not ahead of the game by any means, it is trailing the best practice in Europe, is it is recycling more. That is not just sending things back into what is termed as close loop recycling. If you have plastic or whatever, plastic can go back and be turned into other plastic goods. That is termed a closed loop. If you have wooden products, wooden products can go back and be made into further wooden products like gib board or whatever. That is called closed loop recycling. The whole of the world is really moving in the direction of wanting to do more. There are arguments that are tied up with burning and in most burning processes you do have the release of prodigious quantities of carbon dioxide and, with the larger kind of climate change problems, we should really be taking that into consideration in terms of what final plant is decided upon. The last time the States discussed the waste management strategy, which was a couple of years back, I put forward a number of amendments, not all of which were accepted, but one of which was and that was that nothing would move forward until the States had another opportunity to decide whether the department's proposals were going to be acceptable in Island terms or in global terms. So, the debate will take place in July I am told and, at that time, I managed to secure a further recommendation or obligation on behalf of the department in that they would not just come forward before the end of this particular year with a single option, they would come forward with 2 options and one of the options would be for limited recycling which was decided upon at 32 per cent or thereabouts and a consequential large incinerator or a piece of kit to deal with the residual which would be the remainder. The other alternative was to go for the opposite which was for high recycling and a smaller piece of kit. So, the July debate is to hear from the Transport and Technical Services Department exactly what is going to be proposed. I am hearing at the moment that what is being suggested is that, contrary to what was agreed in 2005 that there will be 2 options put on the table, in fact, only one option is going to be put on the table and that is going to be an oversize plant which might not be run. If the Island chooses to follow the suggestions made by Transport and Technical Services that the 126,000 tonne incinerator is the piece of kit they want, if we are only producing 72,000 tonnes at the moment, then it is pretty clear that you have almost got a factor of 2 difference in the capacity of the plant. So, that means it will not be run. It will be a 2-stream facility. At the moment you have got 3 streams at Bellozanne and that is 3 incinerators or ovens and they run

at different capacities and between them they manage to get through the load. But if the Island does adopt 126,000 tonnes it will mean, in effect, that the Island is adopting a policy of -- suppose you were going out to buying a car, it is equivalent in the Environment Scrutiny Panel's eyes of saying that we will not buy one car, we will buy 2 cars on the grounds that we may have to change the tyres at some stage. So, we park the second one in the garage until we need it, or until the first one is broken or until the first one needs mending, but we will have it there as a safeguard. There are a whole load of issues in terms of the financing of that particular option as to whether or not it makes sense long term. From the Environment Scrutiny Panel's research, there does appear to be quite a lot of different kit on the market and different technology so that would and could solve the Island's waste problem in slightly different ways without having to go for a higher expenditure for a piece of kit that is basically oversize for the problem that we have. Compounded with that, there are opportunities of continuing to recycle if an oversize piece of kit is ordered. There is experience of other places around the world where the purchasing of an oversize piece of kit squeezes out the public's demand for recycling opportunities. So, it has to be taken into account as well. Now, bringing it right back to basics, one of the interesting things that we have got in Jersey, compared to other places, there is no general waste management law which stipulates that the rubbish that you purchase -- so if I go in and buy a bottle of water in a plastic bottle, I pay for the goods and I own the water and I drink it or wash in it or whatever and then I have got the plastic bottle. I own the plastic bottle and under the parish system, I pay a parish rate to the Constable and his committee to have those materials collected. In doing so, I still retain the opportunity at parish level to tell the Constable where to deliver those materials. At the moment, what parishes appear to do is the message goes out from the parishioners who run the show - and the parish assemblies are, in effect, the most democratic system we have got in the Island, although many parishioners do not particularly realise that. The Constable is not elected to do as he sees fit. He is elected to do the bidding of the parish assemblies. So, as a consequence of the decisions that are taken across all parishes, the materials are collected and you pay your parish rate and they are delivered to Bellozanne for further treatment. Now, the irony is that having spent a lot of money in the collection, we then commit, by gifting those materials to the States facility, ourselves to tie into further expenditure to get rid of those materials through the taxation system and it is a little bit odd. So, we do have the powers

written into the laws, as we have at the moment, to stipulate that any materials that are collected with our parish rate by the parish collection vehicles could be delivered to anybody. So, it might well be that if we had, for the sake of example, a parish collection service that specialised in collecting one of the higher value materials within the waste stream, such as the plastic, which is also particularly bulky and bulks the bin enormously -- if any of you have tried taking out your plastic containers, well that slims the bin massively. So, those plastic materials could quite easily be directed through a parish assembly to a recycler and it does not have to be a recycling facility. It could be a person or persons or companies that are operating in the Island or indeed outside the Island, interests who would be in a position to bid for those materials. Now, the laughable situation we have got at the moment, I find a little bit sad and, as I said before, there is a touch of irony in the subject, is that the waste materials are not waste. Now, we know the saying, one man's meat is another man's poison, there is value in these materials. Plastic, at the moment, if it is sorted in a particular way, commands prices on the open market for resale in closed loop recycling of between £100 and £300 a tonne. Now, that is a sizeable amount. Textiles, your old clothes, at the moment that the Salvation Army are collecting, they are not collecting them because they want to. They are a valuable resource and clothes, at the moment, are a similar price. So, there are 3 different markets. There are firsts, seconds and thirds but there is a substantial market of the order of £300 a tonne for old clothes. So, there are key concepts that Jersey has to think about before it decides that the best route forward is to burn everything because a one-stop shop is the best way forward. You do not have to think about what you do. You just buy your stuff, chuck it in a bin, tell the Constable to go and deliver it to Bellozanne and then pay your tax monies to run the facility. If we are burning £1 notes, what is the sense in that? Collectively, the parishes spend about £2 million in collection services. Some are run more expensively than others but that is a different issue. But just within the single waste stream of plastic, the plastics at current market levels, if we could sort it out and bale it - and you get a better price if it is sorted, and you get a better price if it is cleaned - but sorting and cleaning can be accommodated at economic prices, the value of the plastic at the moment for the 6,500 tonnes that we have got is of the order of £1.5 million, just to go back into a recycling loop to send it back to the plastic recycler and get it turned into something else. Now, the Scrutiny Panel have been in touch with a number of bodies who are companies who are interested in making products out of

recycled plastic. My wife was quite happy at Christmas to receive a gift from Marks and Spencers which was of these tops that had been made out of, I think it was, 30 plastic recycled bottles. Absolutely ridiculous. My mother bought it. I had been spouting off for a number of years about Marks and Spencers being at the forefront of recycling and how good these companies were at taking something which we all kind of take for granted as intrinsically worthless and turning it into a different product which is worth something else. My mother did not particularly believe it until she went in, just before Christmas, and there we were, there were these fleeces for women and men to purchase made out of plastic bottles. That is not just an isolated story of a product that can be made out of these things. There is a whole stack of other things that I could bore you silly with with products that do have an extra value. The key issue is that we must not really be thinking about these things as being waste. They are materials and it is a bit like weeds. Weeds are plants in the wrong place but they are plants with a particular value in any case and if we play our cards right -- the research that the Scrutiny Panel has done so far is that there does appear to be a substantial amount of money that could be made and there are business opportunities to square the circle in some sense and instead of considering waste as something that you have to pay for through your taxes to get rid of, it could well be that, with the support of the public, there is an opportunity to turn it round and to claw back some of the value within the materials in order to pay for the collection services themselves. That really is the issue that I wanted members of the parishes to consider this evening. As to whether or not you think you should, as a matter of right, and you do have this right at the moment, the ability and the opportunity to instruct your Constable in your parish who does your bidding through the parish assembly, to tell him that some materials, and it may well not be all materials, and we accept that fully, that some of the more high value materials should not be automatically taken and delivered to Bellozanne to be burnt and that is as far as it goes. But perhaps the Constables themselves and the parish administrations should be instead instructed to look into opportunities to get into a commercial agreement with outside providers of services who could make some money for you to offset your parish costs. We have got an opportunity to do this. Come July when we get to debate, if the public message does not come forward strongly enough to say that the public is really keen on recycling, not because it is the green thing to do or it is the cranky thing to do or whatever and you are saving the planet - although those reasons are just as good - but if we bring it

down to economics, if the parishes are happier to instruct their Constables to make a bit of money on the side to bring their parish rates down, then it is down to you to pass those instructions through the parish assemblies to the Constables to do it. But if you do not say it before July and we get to a point where the public have not said anything or you are not properly aware of what is happening, then we may well be in a position of having to adopt an Island policy, which, as I say, from the Scrutiny point of view, looks as if we are tying ourselves into paying for getting rid of rubbish twice. Once through the parish rates to collect it, and having collected it, it is in a position to go somewhere else but then saying, no, send it to Bellozanne or La Collette or wherever it is going to be and burn the thing and maybe get only a small amount of electricity back off it. It makes commercial sense, I think, to look at the individual materials within the waste stream and that is what I think we should be doing. One final example, the Scrutiny Panel went to France. A lot of the arguments that are put forward about the economics of the situation seem to suggest that because our business partners were the U.K. that automatically any further business into the future must always take place with the U.K. We have been on the Bailiff's working party. I have been on it for a number of years, 15 years, and there are substantial opportunities for dealing with European businessmen or French businessmen or whatever. It is all on our doorstep. The distances involved in transporting materials to France are substantially shorter. We are told by the department that the cost of taking materials to the U.K. is prohibitively expensive. The panel have it on record that the costs of transportation are not as high as we are being told. If we think about the economics of the situation, there is some 450,000 tonnes that come into the Island at the moment, principally from the U.K. but not exclusively, and not a lot of materials go out. Now, we have got the potatoes and other bits and pieces, so we have 450,000 tonnes coming in and around about 50,000 tonnes going out so, in effect, that means that we are paying twice on incoming goods and that is why we think that piece of water is the most expensive in the Island. It is really down to the economics of the situation. We are not sending anything back. The Scrutiny Panel brokered some meetings with the major players for the shipping transport at the moment and, in effect, it is a win/win situation for them because rather than sending back an empty ship, there is an opportunity to transport recyclable materials back to the U.K. or to France in what would otherwise be empty vessels. So, in terms of getting some money back into the shipping companies, it makes sense for them to broker at a reduced rate because

otherwise the materials will be being paid for by taxpayer's money to be burnt. So, the transportation difficulties, or perceived difficulties, have been sorted and it is all documented within a number of our reports. Finally, on that vein, we went to visit a number of places in France and I will give you another example. The current policy for dealing with waste paper on the Island within the 32 per cent recycling rate is that the Island will only aspire to a 50 per cent rate for paper and card. Paper and card are commanding very high prices. China is industrialising at a huge rate of knots at the moment and, again, there are goods coming from China, the manufacturing capacity of the U.K. is diminished. We are putting in our orders to Chinese companies in the east and the boats are coming in laden with goods. They would otherwise be going back empty, so they have got exactly the same situation and what is happening in order to stimulate demand is that, rather than chopping down their forests in China, because they are beginning to be as green as perhaps some of us are in the west, they are suggesting the better way to achieve the materials is to get a 2-way flow. So, the prices that are being paid at the moment to transport what we have been considering to date in the west as waste materials, they are being imported as resources and instead of knocking down forests for paper goods, they are taking our waste paper goods in order to stop them chopping down their own forests. That is a global plus. Closer to home we have got a similar thing happening and the panel went to see a place called Eco-Emballages, which is a green paper manufacturer, and a lot of the paper at this particular factory in France is being turned into a papier mache type material and it is being reworked into cartons for egg production or whatever. There are huge opportunities for taking this paper material and turning it into another product and you go round the cycle and round the loop and everybody makes a bit of money to keep the thing going and it all seems to make sense. They are within spitting distance of the Island and we have been told that there are business opportunities because in France they tend to build their factories larger than they need and they are on the lookout for material resources just as China is looking for material resources. So, the long and short of this argument is that if we have a policy which stipulates that only 32 per cent recycling can take place and within that policy of 32 per cent, there is a suggestion that only half of the paper that the Island has produced can be recycled, it is not a sensible assumption. Pretty well all of the paper could be recycled if we wanted it to be and that comes back to the public working through the parishes. So it might well be if we have got parish collection systems for the paper,

having collected those material and we have done the work by bringing the materials here or we have paid for the materials to be brought here through the parish rates system, we tell the Constable that those materials we would preferentially like not to be burnt but to be sent into some other remanufacture process. That is the thing that I would like us to begin to discuss this evening. Is there a public demand through the parishes to do this type of thing or will it be better for us to just sit back and say let us abdicate all responsibility and any green hats we may have or any aspirations for playing our global part or being more environmentally friendly and allow the T.T.S. Department or the States to spend our money perhaps unwisely. So, I would like to hear your comments, please. That is probably enough from me. That is half an hour and I am getting nudged at the moment under the table to shut up. So, over to you. There is a roving Mike or Mikette or Mickey or whatever, Michelle who will come round and give you an opportunity to speak. So, gentleman here with glasses.

Mr. Hodgkin:

Good evening. My name is Hodgkin and I am a metal converter in Zimbabwe. I have been doing what you have been talking about for the whole of my life but mainly in metals. That is converting copper, tin, lead, zinc into bronzes. What you are talking about you should have spoken years ago because Hunt Brothers in Conway Street and down Commercial Street have been doing this for over 100 years, what you are talking about. The biggest single problem you have got when you are talking about £300 a tonne for plastics is sorting it because it is highly labour intensive. The only way I can see it being done is if it was done at the prison in some way or move the prison to the scrap or take it to the product. The other thing is educating the public to do the sorting themselves because this is a major, major problem in that you have got to have quite a long conveyor belt and it is mainly hand sorting and this takes an awful lot of time. Unless you have got really low cost labour, it is almost not on. The other thing I would like to say I have never yet seen prices for metals or scrap going -- any tenders, I have never seen a tender yet for materials. The other thing I would like to suggest in all these vehicles I do not know if you have like a contract with the Arrears(?) crowd that do all the selling of the materials themselves but all the axels and tyres and wheels should be put on one side and sent to the third world. Donkey power is the best form of transport in the third world. It only eats grass and so wheels, tyres, axels should be all going out to the third world. Kenya, Zimbabwe,

South Africa, all those countries want those products and they are prepared to pay for them. Rubber tyres also are convertible but the plastics, let me tell you, it is a very difficult one. If you have got cables, especially telephone cables, if you get a little bit of copper in among the plastic, you scrap the whole batch because little bits of copper getting into the exuder can muck up everything. Sorry about that. Sorry I have taken so long.

Deputy R.C. Duhamel:

No, thank you for that. That is very interesting. The Scrutiny Panel did visit another place in France where they stripped the plastic off the cable and it was absolutely brilliant and it was not a particularly complicated piece of machinery. Again, the French people were quite keen to be offered the opportunity to come to the Island to bid for those materials rather than have them incinerated. I think it is particularly galling at the moment to understand that a lot of our tyres, in fact pretty well all of our tyres at the moment, rather than looking for the secondary use which would be a beneficial one, certainly for third world countries, and indeed there are other processes to turn it into a granulated crumb which can be used for play services for schools instead of importing fresh materials. But it is galling to note that most of our tyres are quartered and burnt in the incinerator and then we are complaining about the emissions from the rubber that has been burnt or the smell from those materials. I mean the key issue is that if you treat something as a waste and the only way forward is to burn it, you have got to have more and more expensive equipment in order to deal with those emissions. If you go back along the cycle and become a little bit more creative with the materials, as you are suggesting, there are third world opportunities, there are other business opportunities that the Scrutiny Panel are suggesting quite strongly that should be looked at first before we go to the next stage of saying that we cannot deal with that. We have tried everything we can. Classify it as a proper waste and the best way to get rid of it is to burn it. But your experience is valuable. The other interesting comments from the panel is that, in terms of metal, it is quite interesting that the Island is not alone in the small amount of aluminium that is recycled. Although we do have Hunt Brothers and there are a number of other people looking into and we see their collection cans around the Island, not all the cans that are made from aluminium and the steel tops are recycled. When you think of the amount of resale value for recycled aluminium at the moment, the environmental

argument for recycling is clearly there in energy terms, and is of the order of £900 to £1,000 a tonne. Now, we should be doing a hell of a lot more. A lot of our kids - and we are to blame as their parents, we are allowing them to drink soft drinks or whatever which is probably bad for their health, but that is another issue - then throw away those cans into an unsorted bag and, as the gentleman said, it is difficult to sort these things so what happens is they just go in and get burnt. They are worth absolutely nothing at the end of it. The department paid for some front end metal separation equipment but, from my knowledge, it has never been properly used. So, if you put aluminium in an unsorted bag, it goes through the incinerator at the moment and it has got a very low melting point and it just comes out as a clogged up mess with anything else that does not burn properly as a char, and those materials are the basic constituent of the bottom ash, which we then pay even further sums of money to have lined pits, because they are toxic metals, at La Collette. So, we are throwing money on top of money on top of money when, in actual fact, the simplest thing to do is to say is -- like we used to bring our bottles back to the counter and get our threepence or whatever it was, or sixpence, in the days for doing our duty. We should be doing that with these metals and making the £1,000 per tonne. Any comments from the Scrutiny Panel?

Deputy P.V.F. Le Claire of St. Helier:

Thank you for your comments because I had not thought about the tyres and the donkeys in the third world that could benefit from this. I am certain that maybe my panel colleagues have thought about it, but I did not. I had not heard about that as a new member, but I would just say that in relation to the expense and time consuming method of sorting and recycling plastic, I went, before I joined the panel, to Swansea with the panel and I saw a material recycling facility. You are probably all familiar with Stanley Payne's place down the road there where he has his little sheds and his little playroom and his restaurants. We went to a facility about that size and it was dealing with 300,000 people's waste and they had about 14 people employed in a meaningful way that would not otherwise be employed. They were union workers. The union was very pleased because the union's workers had increased and they were recycling the plastic that arrived in the front end. In about 45 minutes, they had gone through the entire process and come out the back and had been packaged up. I think, at the time, one of the paths that we were looking at was the tin that you mentioned

and they were telling us that it came here 45 minutes ago as a worthless piece of tin and it is stacked up in front of us now in a cube that represents £1,400 a tonne. Now, I am not sure if that is the correct figure but I believe that is what it was and I saw it with my own eyes and we have done this on an evidence basis. We have looked at what is available. Those people are prepared to come here and set one of those up in Jersey and it would certainly be something that would offer local opportunities for work and it certainly is a modern solution to the sorting problem that you have mentioned.

Mr. Hodgkin:

Can I just point out there is iridium in telephones and that is worth of thousand of pounds a tonne and tin is about -- I am not really au fait with it today but --

Deputy R.C. Duhamel:

He did not mean tin. He meant aluminium.

Mr. Hodgkin:

Tin is about, I think, about 8,000 U.S. (United States) dollars maybe more. Copper is about to 6,000 dollars to 7,000 dollars a tonne. Everything is usually in -- but one of the things I would like to recommend is the *Metal Bulletin* which is a booklet which should be in the public library and the *Metal Bulletin* gives the prices of all the material. But more important than that, you can get -- like plastics, there must be 150 types of plastics. Like copper, there is about 50 or 60. Well, I will not say there is quite as many as 50 or 60 but they have all got code names. Ebony and -- I have forgotten what they are but each one has got a code and when you sell that material, it has to be to that code exactly, otherwise you get a penalty thrown at you. Otherwise you get an impurity in the materials that you are selling.

Deputy R.C. Duhamel:

Yes, that is right. Gentleman in the front.

Adrian:

Thank you. I would like to express concern about the very simple way these issues are polarised. In the late 1970s, we were going to run out of oil so we changed our

accounting from pound notes to energy accounting and we judged everything on the basis of comparative energy costs and we learnt a lot. We learnt how complex these things were and how extremely easy it was to come to wrong conclusions. The oil companies then found a lot of energy and most of that knowledge was lost. We are relearning it in the context of carbon economies and global warming. Unfortunately we have not yet learnt that these issues are terribly complex and the law of unintended consequences keeps biting our ankles. So, I would like to give you a couple of examples of this as to support a plea for dealing with the genuine complexities of the problem. Plastic recycling, the U.K. market in plastic recycling has been destroyed. The plastic recycling companies in the U.K. have virtually all gone bust. The reason they have done this is because all of those containers going back to China were going back empty and the Chinese would pay for the plastic and they would turn it into fleece and they would ship it back in the next container coming over to be sold to you in Marks and Spencers. Now, that is not sustainable. That is not good for the planet. That is the pound note economy dictating, not the energy accounting dictating and you might notice that carbon and energy are linked. The business of paper recycling, on the whole we learnt that papers made from purpose planted forests are sustainable and most of the energy accounting model said that it was better to burn your paper as long as you were generating power and if you were generating heat, useful heat, as well, then it beat any of the alternatives for dealing with that paper by a country mile. Now, of course, you are quite right, you have to take the incombustibles out if you are running a combined heat and power station. I want to add glass to that. In many states in the U.S.A. (United States of America) at the moment, if you take your glass more than 25 miles, it is classified as waste disposal and not recycling. That is because the transport costs very quickly overwhelm the energy saving in recycling glass collected. It occurred to me as I was driving here that I do not know what happens to the glass that is collected on Jersey and I decided that I was not really qualified to have an opinion of whether it is good or not until I knew where that glass ended up. I do know that all of Ireland's collected goods is exported and I know that most collected glass ends up landfill. My point is that these issues are extremely complex and the simple ways of looking at it as recycling good, combined heat and power bad, will let us down, particularly in the long term. One other point, as a sort of point of information, when we were looking at setting up big incinerators and combined heat and power stations on the south coast of the U.K. the economics

demanded that they were as big as possible and the economics demanded that to make them really economic, now I am measuring in pound notes and not in energy and not in carbon and switching between them to suit the argument is a little treacherous, but what was proposed is that we imported waste from France to burn. That again is not exactly good for the planet so, as a point of information, I wondered if importing waste to burn in our double-sized incinerator has ever been on anybody's agenda. It might be worth asking that question. But I do not want my last question to take over the tenure of the argument. These things are dreadfully, dreadfully complicated. When we were collecting the first split systems, plastics, paper, bottles, purchasables(?) in Milton Keynes we realised that we had to account for the energy used in the traffic jam that followed the wretched lorries around all the small bits of the places like Stony Stratford. What I have heard so far is too polarised. It is too difficult to polarise in that way, so it is a sort of plea for dealing with the genuine complexity of the problem, not trying to polarise an argument into recycling good, burning bad. It is never that easy. One last point, when we did the modelling in the late 1970s, the combined heat and power linked to the recycling because things like glass bottles have to be got out. You do not want to push your glass bottles through a combined heat and power plant. Now, it is good for a society to take their bottles out, whether they are waste or whether they recycle, but always it is blessed with the notion of recycling and I swear to God that I have seen somebody drive up with only glass bottles in a 4 by 4 to a waste disposal site and post green, brown and white bottles into different holes. They had all been washed in domestic hot water, they had all had their labels taken off them. He threw nothing else away at that site, drove off in his Mitsubishi Warrior and most of that glass was going to end up buried. That is the sort of problems we do have. Thank you.

Deputy R.C. Duhamel:

I think you raise a number of valid points and I think the Scrutiny Panel would agree with you up to a point that it is a complicated issue. But, that said, we do feel that you have to be balanced and rather than promoting in a polarised fashion one particular solution, and this has been the argument all along, a range of solutions should be there for the taking for States Members, after they have been suitably educated into the complexities of the system might I add, but that has not happened to date. In terms of our glass at the moment, most of the glass we have had independent glass collections

for a number of years. The practice has changed somewhat and there were restrictions that were placed on the Island's biggest parish, St. Helier, who operate in a different fashion and to go from a household collection, kerbside collection service, to a bring system which has not worked particularly well. The consequence of that is that a number of other parishes do have black bags of unsorted material which include glass so, from a pure efficiency point of view, the operational efficiency of any burning plant is going to be detrimentally affected by those glass materials within it and I would agree with you 100 per cent. I think what we would like to see is if there are economic arguments and environment arguments and any other sustainability arguments or whatever, all those arguments should really be wrapped into one massive argument before we get to a position of deciding what is best and what is not and I think this is where Scrutiny has had difficulty because there does seem to be an element of polarisation, as you put it, that has been coming from the department that we task to deal with these issues and it would appear that the public's opinion of recycling and green issues is changing whereas the department is not going at the pace of those changes. We thank you for your comments and if you could talk to me afterwards, I would like to know what your source material is and we can possibly exchange reference points. Thank you.

Connétable A.S. Crowcroft of St. Helier:

Chairman, can I come in about the very important transport costs and the other, if you like, hidden costs of recycling. The previous speaker was talking about the costs of sorting which, clearly in Jersey with very high labour costs, are going to be a factor. I suppose one of the things we have in our favour as a small island is that the distances between the collection point and the sorting are going to be much smaller than in the United Kingdom and in France so, although that has to be calculated, I would hope that the distances involved would make that element of the calculation certainly less onerous in Jersey.

Adrian:

Can I ask what does happen to the glass bottles when they are collected when they get to the final depot? Where do they go?

Deputy R.C. Duhamel:

They are used as a lining material for the reclamation site.

Adrian:

All of them?

Deputy R.C. Duhamel:

No, not all of them. Those that do not get taken out by way of the separate collection do go through the incinerator plant and reduce the temperatures in the thermal efficiency of the --

The Connétable of St. Helier:

The other point I was going to make, obviously again being a small island, we are potentially, I think, in a very good position. We have not yet talked this evening about the other elements of the waste strategy which, of course, is minimising waste in the first place, but it does seem to me that we could do much more to -- everything that comes in has to be either flown in or shipped in clearly and Jersey could, I think, do more in terms of reducing the amount of waste that comes in, working with the larger importers of goods. Some of them are already very responsible in making sure that the packaging that comes in goes out, but we frequently hear the argument that there is not the mechanism to take our recyclables off Island. People seem to forget that everything that we eat on this Island, if it is not grown locally, is going to come in a container and this is why we have had talks with the shipping companies who are very interested in filling up those empty containers with recyclables so long as there is an end user for them.

Deputy R.C. Duhamel:

Can I come in? On the glass front in particular, again it is the Scrutiny Panel's experience that there are a substantial number of businesses that could quite easily undertake extra business in the areas that they are working in. We, for the Island, brought over a new piece of kit which was a sonic imploder from a company called Crystalline and it was British technology and thinking at its best innovation. For once, they managed to go the whole hog and convert it into a product which has been usefully used in a lot of Island situations and city situations otherwise. Basically the piece of kit sonically implodes and if you run your finger around the top of a glass

and the fat lady singing or whatever, it sets up vibration in the glass and the glass will shatter. The general idea is that if you fire a sound wave at a particular frequency, then the glass will implode from the inside out. If you hit it with a hammer, you end up with sharp glass shards. If you sonically implode it, you end with an imploded material which has got rounded edges and can be handled without fear of cutting. Now, the interesting part about using this particular equipment, which is relatively inexpensive and could be used to treat all of the Island's 6,000 tonnes of glass or thereabouts, is that there has been some material science work done at Portsmouth University and others which show that the use of sonically imploded green glass as an aggregate substitute for concrete manufacture means that the concrete comes out a hell of a lot stronger than it would do if you were using ordinary stone materials. So, there is a particular case where the relative value of a green bottle goes up massively if you put it through the sonic imploder. If you hit it with a hammer or drive over it with a bulldozer, which is what we do at the moment down at La Collette, it is only fit for using as a blinding material which has got a substantially lower value. On top of that, there is a whole host of other uses. They use glass for grit. We have got quite a big interest in boats in the Island because we are an island, and grit blasting for cleaning off paint from the bottoms of boats is another use. They use it in cleaning buildings. We have an inordinate number of swimming pools on the Island and instead of using hazardous chemicals or complicated chemicals, chlorines and ozones or whatever, there is an opportunity to have filtration systems that could use an element of the recycled glass. There are markets, as we said before, and the annoying thing is that we get kind of pretty taken up seeing all these things around and we just feel that all of these issues should really be passed on to the public so that you can begin to judge whether or not we are a bunch of cranks or whatever or what we are saying in that material can be used and not considered as a waste, but as a raw material for something else, is the better way to think about things. If we come to saying what is the second use or third use that we can get out recycled glass or whatever, you run down the hierarchy. So, if you have got glasses that you do not need, somebody else may need to have them. Give them away or do not buy them in the first place. If you are running your swimming pools, I can give them to somebody and they can be ground up into filtration equipment. There is a whole stack of uses and we really have to kind of nail this one on the head and start to think of the utility

of the materials rather than just writing it off and saying: “They are a waste, get rid of them.”

Deputy P.V.F. Le Claire:

Sorry, but I think the gentlemen poses a number of challenging points and, from an intellectual perspective, it is proper that those should be considered. I think it would be right of the panel to consider those. We are employing a team of people to do the financial assessments and then obviously part of that mix is to see whether or not the ethos of buying into sustainability is more than just about finances. I think that what it boils down to, as far as I am concerned, is it is buying into the ethos of sustainability and it may be that you have people driving up in 4 by 4s that are putting bottles into landfill, but if they are on board from a sustainability perspective, their next action is going to be sustainable as well and they will get into other issues in relation to conservation and preservation of our planet. I think there is a number of issues you could put on very, very succinctly the cost of the plant’s £130 million, the cost and the energy of building the plant, the cost and the energy of operating the plant, the cost and energy of the emissions of the CO2 to the planet, the decommissioning of the plant, the alternatives that could be used in that location and the alternatives that that money could go towards solving in terms of energy wasting and everything else. So, I am not dismissing what you are saying, but when you hear these arguments, for example, that you are better off using nuclear power because it is a clean energy and then they come along and tell us in the newspaper today that they have underestimated the decommissioning of nuclear waste by £78 billion in the U.K., then you start thinking about, are people on board and do they want to buy into a long term sustainability strategy or do they just want to burn instead of return?

Deputy R.G. Le Hérisier of St. Saviour:

Three separate questions. Rob, could you speak into the microphone please? We are not hearing some of what you are saying. Secondly, could Paul talk about decentralised compost, so to speak, because we have gone around in a big circle on the whole garden compost and apparently we have got La Collette costing £800,000 having abandoned the Bunalay(?) system which you want to, in a sense, reintroduce; and thirdly, Rob, you talk about each parish in a sense mounting its own, for example, plastic collection, but you are not suggesting, are you, that the Constables each sort of

negotiate separate shipping contracts to get this plastic off the Island? I mean, you can mobilise the parishes, but surely there has to be a more co-ordinated approach and while we may dislike the way T.T.S. are doing it at the moment, at least there is the possibility of having, you know, a central point of contact, having somebody at their level handling shipping contracts and so forth. It all seems a bit loosey goosey.

Connétable K.A. Le Brun of St. Mary:

Can I just come in there as one of the smaller parishes as such and this has been my problem, our problem, and I was discussing it literally this afternoon with my procurers and the refuse collector as well who is wanting to start doing it and it is a question -- this has always been the problem for what to do with the end products because, as it stands at the moment, the only place that we have to deposit the rubbish is through them. I think what we are trying to do, certainly myself and ourselves, through the parishes, is trying to get the Transport and Technical Services to forge more ahead with these ideas and they do seem to be stuck, as well as they are trying to move forward and such like with their bring bank places. The answer is for everybody -- I get requests for parishioners and we have to look at the demand of the parishioners as well, but until such time as people become more innovative and with the ideas and things being able to do and I think this is where we feel that the Transport and Technical Services are not wanting to forge ahead and see these problems early enough to be able to do something for them. It is only within the last, I think it is, 6 months or so that they have stopped putting batteries into the incinerator where we knew about this thing an awful long time ago. It has always been said: "Well we cannot get rid of it. We do not know how to get rid of it." We feel that there has not been enough willingness to try and find ways and outlets. It just seems the easy option and, let us be fair, we are all lazy at heart and we will always go for the easy option. I mean we have the bring back systems but as soon as one would introduce the kerbside or collecting out of the households, everybody would do it because it is an easy option and I think this has been the problem as well. As we have the ideas, try and put it out into the public that there are ways and try and get people to think better and to do it and to get that balance as well. The majority of people want to do it, they want to recycle. Every parish wants to do it as well, but it is the end product, as you rightly said, there is only one place of taking the majority of this and that is through that particular one, but if we can find outlets and get people more

interested in it so as to have the outlets and to bring it forward, then that will most probably arise. We just need one or 2 more entrepreneurs and then I am sure there will be ways and means but because we are on the little island we seem to be still a bit void of all the things that are going on elsewhere and this is why, I think, we, as an Environment Panel, have been going away, coming back, giving ideas and trying to put it into other people's minds.

Deputy R.C. Duhamel:

I think I will chip in a little bit in there. It is down to economies of scale. I think, although there was an attempt a number of years ago by the department and the presidents of various committees to try and centralise the collection services for the whole of the Island, it rapidly fell apart because I think it was felt by the Constables at that time, they probably feel the same today, if such an attempt was made, they would be losing part of their heritage, if you like, and their ability within the parish to organise their own parish refuse collections. When we think of what has happened with the parish welfare being centralised, there are not many other areas that the parish actively gets involved in other than roadside maintenance and I think there was also talk, at some stage, as to whether or not the roads should be passed over to a central authority as well. But, that said, there have been a number of suggestions by some other Deputies and some other people that you do not necessarily have to go for a single collection agency by bringing all 12 parishes together. If, for example, we were a little bit more creative and it was decided, as is happening in the U.K. and other places, that separate collections of separated materials were going to take place, it might well be that, for the east of the Island consisting of 4 parishes in the east, there may be a sharing of those services to say that St. Saviour would pick up the plastic and the glass one week and that would be their job and, I do not know, Grouville would pick up the food waste and the other parishes would kind of share whatever was left. So, I think, by moving together that way there would not be any implied reduction in terms of the services that the individual parishes were bringing to the table. You just relabel them and share out the work between you and there would be huge advantages in doing that.

Deputy P.V.F. Le Claire:

I would like to answer, if I can, specifically the issue of compost, just to give people in the public arena an understanding of what is going on. The Transport and Technical Services Department has been running a temporary compost site at La Collette which came to St. Helier without any consultation whatsoever, without consulting with the Parish Constable, without consulting the residents and set up shop in between 2 elections. It was a piece of hard standing at considerable cost and a poor practice in terms of composting began to take place in composting the Island's waste. The issue of the compost site is that they are looking to solve the issue of compost in Jersey by taking what has been valued as a £6 million piece of land and putting a £4 million shed on top of it and continuing to operate it probably at similar costs if not more than they are doing now. At the moment, last year, it cost the taxpayer £800,000 to run that compost site that is making everybody in town sick. They made something like less than £40,000 in sales of that product. It is currently stacked so high because they cannot shift it but it is making people sick to the stomach, staying off school and selling their properties. Deputy Duhamel and I and a number of other States Members went into the issue of the compost site in a thorough way and came up with a number of recommendations that the Transport and Technical Services Minister and his department took on board. We spoke about public private partnerships with many people in the Island and we identified something like 21 sites. We identified people that would wish to be involved including the Parish of St. Helier, and we went through a 2-year process of consultation while we were being told it was being looked at. We got to the last part of the consultation which was occurring in October of this year, and the final parts of when they had to do the valuation. We were told that it would be done in conjunction with all of the other departments. In the end, they did not really do that. They just decided to hell with it; let us just put it down at La Collette where we want it in the first place. They did not look at the solutions we were suggesting. What we were suggesting were sites in the east, the centre and the west of the Island and not compost sites like at St. Helier. Nobody wants that. We were talking about in-vessel composting facilities which are basically composting in a box - something about the size of this stage - 3 of these in the Island where people could drive close to where they were, leave the product or leave it in a central location where it could be taken to these places and composted in-vessel like they do in many other places in the world next to schools, next to hospitals, next to buildings. They do not smell. To do the entire solution for Jersey would cost

about £3.5 million. They did not want to do this. They wanted one big huge facility, like they are going for the incinerator, stationed in the waterfront where they can have a little empire running it at enormous expense to the taxpayer in a poor practice, on top of the fact it is making everybody sick to the stomach.

Deputy R.C. Duhamel:

Is there another question or opinion, please?

Mr. R. Russ:

Yes, just a question, please. I just wanted -- we are on an Island, therefore there are certain environmental costs of getting a lot of stuff into the Island and one of the key issues just seems to be with changing technology. Are there any additional uses for any of the sorts of materials we produce? I mean, something that comes to mind, you know, printing newspapers and things has changed over the years and you do sort of wonder when you are flying in newspapers every day, you know, just one idea, but you know we produce lots of print. Is it really necessary to go through this process and so I just ask, you know, as an Island how much work has gone into looking at other possible uses for product locally that would mean transforming the end use and making it more worthwhile?

Deputy R.C. Duhamel:

Yes, I think that is an absolutely sound point and something to consider and something that the Scrutiny Panel has considered and I will give you 2 examples. Current practice, but we were all told a number of years ago that when computers came in it was going to be the end of the paper in the office and we were going to have paperless offices, but it does not seem to have materialised particularly well. Now, what has been happening behind the scenes is that there has been a whole stack of innovative work that has been done to produce something called electronic paper and it is just about to come on to the market. In fact, one of the large newspapers, I think it is either *The Tribune* or whatever in America or *The Telegraph* - I have not got the details at my fingertips at the moment but it is one of those - they are conducting trials at the moment and the idea is that you have a piece of plastic. It is absolutely brilliant, I think. It has got the ordinary kind of electronic cells embedded within the paper, it is printable, you can roll it up and then it downloads a page at a

time, so instead of having to have a book -- and you have got all your pages stacked together and you have got to turn the pages. They have even got software packages that will effectively kind of create the impression that you are turning the pages. You can have a piece like that and you have it split down the middle if you want to, to simulate a book, and as you read it through press a button and it turns the pages as you go. The real beauty of the system is that you do not need to print it on paper. You have one piece of plastic, it is an electronic system and you download whatever books, whatever materials, and they are working at the moment on downloading visual media, so films, and all the rest of it on one piece of paper. So effectively long term, you know, if we all live long enough, within 10 to 15 years - I do not know; it may take a little bit longer - but it is here now just about to come on to the market. I think the practice of having printing presses printing on a piece of paper and then we have to find ways to get rid of the paper or find other products is probably going to disappear. That is one example. The other thing is that in terms of getting rid of materials in a slightly different way, plastics as we said earlier can be closed loop recycled into other plastic products. What we can also do is there are technologies called gasification and pyrolysis which will take the plastic materials which are oil based and re-combine the elements, the chemical elements within them, to create a synthetic diesel fuel. Now, I did some calculations the other day. I do not have a car but I borrow my dad's from time-to-time. I do drive and I have a driving licence. I checked out the price of diesel. At the moment it is 98 pence a litre. The 6,500 tonnes of plastic that the Island at this point burns in an incinerator, and would continue to burn in another incinerator that is being proposed if it went through a different process, a different technology, it could supply the Island with 6.5 million litres of synthetic diesel. Now, one of the big benefits about doing that would mean you could have an automatic fuel displacement, so instead of having to import that 6.5 million litres of fuel to the Island, petrol or whatever, we could be taking out plastic materials, reconvertng them into a fuel and away you go. So, in carbon terms that is a huge plus because if you put them through an incinerator they are generating carbon. If you do not put them through an incinerator and you turn them into fuel, you can offset the fuels that would otherwise have to be imported. So that is just 2 kinds of small examples. I get quite excited as you can probably tell about a lot of these things that are coming on to the market because I think the future is important, but equally what is important is trying to make sure that these future changes are fed

into the Island system as soon they are able to be in order to make huge benefits to our economy, to the way we socialise, to the way we live and to the way we use the planet and its resources, so I am quite encouraged.

The Connétable of St. Helier:

Can I just come in with 2 more examples? I quite like books. I think it would be a shame to stop reading books and newspapers, but I have 2 quick examples. I know that there are now local users of recycled oil particularly from the fish and chip shops. So that is now happening. One is that the Parish of St. Helier, for obvious reasons, does not take green waste down to La Collette which was taken from our good friends in St. Mary and dumped on St. Helier, so my offices and the Parks and Gardens Department that maintain our parks, gardens and cemeteries are under strict instructions not to take a single twig to La Collette. They are looking after our waste in the good old-fashioned way. They have a number of compost heaps which work very well, but it is clear that once the parish obtains the necessary piece of technology -- and we will probably start with a fairly small one such as being used by council's right across the U.K. now. Some of them are called Rockets, some of them are called Big Hanna's; there are lots of different ones on the market. We want to get as soon as we can, at least on a trial basis, a piece of kit that will compost our green waste collected from the parish gardens. We can then add the kitchen waste that we are collecting in Havre des Pas. We are proving wrong the people who say that the public will not separate kitchen waste because they are doing it in Havre des Pas at the moment and we will then be able to stop buying in compost which we are currently doing which comes from -- which as we all know some compost is particularly damaging to the peat sources where it comes from. So that is one example, I think, of where, subject to getting that piece of kit in place, the parish at least will no longer be importing compost. It will be using recycled compost and, hopefully, that will encourage other departments in the Island, other parishes, to do the same. Something I would like to do is to introduce a green waste collection because to go back to a previous question you do not really want everybody driving their 4X4 with their green waste. A much better system would be for the parish collection facility, and that could be several parishes working together, to have a day a week or a day a fortnight when your green waste is collected from your kerbside and taken to these various composting sites.

Male Speaker:

Yes, we hear a lot about the States and their waste problem but not much about the private sector. They are the ones who produce the waste. Should they not be dealing with or be more responsible for it?

Deputy R.C. Duhamel:

I think they could. But I think what has to happen is that there is a certain mentality among politicians, and I am one so I should know, so I am speaking for myself, I think there is an unhelpful attitude when you are a politician that assumes that the government has the only rights to kind of run everything on behalf of people. Now, I think in some instances that is probably correct but you can go too far. So I think where the States, and this is my own personal opinion, is going wrong at the moment, is that we are trying to use States solutions to solve all the problems instead of finding ways to use the States facilities to encourage private people and private companies and groups of people, communities, to do the things in probably a better way than we do them through departments and the States at the moment. So I think it is using government in a light touch fashion whenever you can and we do not do that particular well in Jersey. It is, you know, the bigger the project the more kudos you get from saying, well, I was the one who signed it off and, you know, we have seen a couple of articles in the newspaper just in the last few days about, you know, we are going to have big things. There is going to be the Guy incinerator or the De Faye incinerator or the so-and-so hospital or the whatever. Politicians like to be associated with big projects. I may be bucking the trend the a little bit, but I think that is wrong. I mean, okay, do the things that need to be done but do not assume that the States will automatically solve every problem in the best fashion and I think they will.

Adrian:

Me again. I would like to comment on the last 2 points from the audience. There is no doubt that there are good uses of materials like burying cullet in landfill in order to be a drainage material and there is decorative use of glass and concrete and such like. They are nascent technologies; they are growing. They should be left to grow in a sort of evolutionary way and the successes left to run and the failures to fail. The problem with the cutting edge of technology is it makes you bleed and when

politicians from the top down impose new technologies using our money that we have put into collecting the raw materials and subsidising the raw materials on the whole, it does not work. The other point is about the businesses that, if you like, share with us the generation of all this waste. If you reclassify collecting glass from a recycling problem to a waste disposal problem, and the British industry's glass association have been extremely effective in labelling it as recycling all these years, then you have a genuine argument by which you can go along to the co-op that sells me my wine bottle and say: "Mr. Co-Op, in conjunction with you, Mr. Wine Drinker, the 2 of you have got to pay for getting rid of this bottle" not just you who do not drink wine and me who does. So there is a real issue there which is clouded by the language of recycling and they love it. They love the fact that we pay for all that glass to be got rid of. They do not want to pay for it. They used to collect the bottles and re-use them. This sort of thing is quite interesting. I would also like to make a comment about the nuclear issue. If it was a cold winter in the U.K. last year, or this year if you like, there would have been power cuts, major power cuts. There is about 40 per cent reduction in nuclear power in the U.K. and the wind farms produce something like half the power they were slated to use. You might ask yourself why; it is quite an interesting question. If those power outages for the whole of the U.K. grid had happened and the hospitals were going on emergency power the discourse would not be about renewables and recyclables, it would be about the old days of the C.E.G.B. (Central Electricity Generating Board) about insuring supply. So we are living in an appalling dynamic position and Jersey is extremely lucky because we are next to and have a cable to the best nuclear industry in the world bar none, and they will be building the new nuclear stations and that is one of Jersey's major advantages and it is sustainable.

Female Speaker:

My point was really just one of housekeeping because I certainly will not even attempt to follow Adrian. I have learnt an awful lot tonight and I would like to thank the panel for coming around and doing these meetings to inform us of some of the options, but, Rob, you were sort of putting the onerous on the parishioners to demand parish assemblies but what I would like to ask is for -- we have 2 Connétables on the platform this evening. You could work as a body, the Comité des Connétable, to look into issues like the cross parochial borders and sharing collections and what have you.

You could work together with the panel and with Transport and Technical Services and then rather than parishioners come along and have to demand parish assemblies which, you are quite right, most of them I am sure are unaware that they can do this, have the right to do this, could the Comité des Connétable not decide when they have had these discussions - and I do not expect them to agree on everything - but at least then come back to the parishioners and be a bit more proactive and they organise their own parish assemblies and put various options to their parishioners so they can get some feedback and go into the debate in July with the knowledge of what their parishioners want to do?

The Connétable of St. Mary:

Yes, I will come in there as well by the same token because already the Constable of St. Heliers trying to negotiate with me so as that all St. Mary's rubbish gets to St. Helier in the future so he starts making some money out of us or we will come to some agreement, but that is a suggestion and it is another suggestion. But coming back to that as well, and I know there is already talk -- I think when you say the Comité des Connétable we are all in this together but I think, as you will agree, all the parishes have their own pride and want to go their own way to a certain extent as well so it is to get that through. But the way that you see forward as well as that the -- our refuse collector also collects from 2 other parishes, so there is already that link that is starting. If the 3 of us parishes say to their refuse collector, because as Deputy Duhamel said beforehand initially the rubbish is yours, the parishioner, then it becomes the charge of the parish for the refuse collector so the parishes then dictate and say -- well, you know, I can say to the refuse guy: "I want you to take all the paper to St. Helier and all the cans and the tins and all the rest can go somewhere else," and it is dictated where he will because the refuse collector is at the command of the parish and such like. So I think it is one of those -- but I think speaking from a smaller parish as well is that the parishes themselves can do it as such but it has to be in co-operation with others as you say because not every parish is big enough to have their own recycling amount either. It is the same as well as -- Grouville's got their beautiful -- well, not beautiful, but their recycling down the road. I am sure 50 per cent of the rubbish that goes in that comes from other parishes. It is not just Grouville rubbish, is it, that goes into the recycling one so you are being very good on behalf of all the other people to come possibly from St. Clement and St. Martin and utilise that

as well. So it is of course that Grouville is picking up other people's rubbish at this ... Sorry [**Interruption**].

Deputy R.G. Le Hérisier:

That is why the Constable of St. Helier got the --

The Connétable of St. Mary:

Well, that is right. So I think there is an evolution going at this moment in time but I think primarily it is a question of, yes, we can do all of the recycling but where will it go; who is going to pick it up at the moment in time. There is only one source and there is not the -- other than St. Helier by doing it themselves, it would be difficult to expect 3 parishes to get together because there would not be enough -- shall we say enough rubbish to get together but it is something I think that is, you know, being spoken about and as I say already the negotiations might already be going on once St. Helier get theirs going and then we can see through that way as well.

Female Speaker:

But can you then give the options to the parishioners at the end of the day because I am sure there is a willingness out there to recycle or do the best thing whether that be burn not recycle or whatever, but there is a willingness out there.

The Connétable of St. Mary:

Oh, yes, definitely, there is because as I say, well, St. John have started as you are well aware but it still comes at a cost because the cost to them -- and as I say I was just discussing this afternoon and seeing about the future for us to do recycling kerbside within St. Mary and such like, and to have the right equipment, shall we say, and such like, the boxes and so on, to recycle it would cost whoever, and whether we get it sponsored at all or not, £7 a household for that. So, you know, St. Mary is about the smallest households with about 600 or so, so you are talking about an extra £400,000 that would have to be found from somewhere to supply all the parishioners with their recycling equipment. But that would have to be put to the Parish Assembly and say: "Well, this is the course, do you want to help us to get going?" and then that would be the way forward. But there is always costs because to do the recycling it does mean to say that the refuse collectors as well as the normal, shall we say, refuse

collection once a week ... you then have to incorporate other refuse collections as well every fortnight, every month, so there is an extra cost on top of that for the refuse collector to go along and pick it up. But, yes, I think there is an evolution going on and I can see that will be the way forward.

Mr. W. Le Marquand:

Good evening. Wayne Le Marquand. I am from W.P. Recycling. We have been recyclers for some 20 to 30 years now and in the early days, in fact until quite recently, it has been more aggravation and resistance to all the initiatives we have tried to do, saying that Planning and T.T.S. and those are coming around to seeing that the initiatives that companies like ours and others are the future and are benefiting the Island in recycling and disposal of waste. One of the things that we have learnt over the years and from listening to various astute comments made tonight by both the panel and the audience is that primarily recycling is expensive and there is no getting away from that. In fact, it is more expensive to recycle than it is to burn and create electricity. The trouble with Jersey is we seem to have gone about it in maybe the last 4 or 5 years in a proactive way but in a piecemeal way, as far as Scrutiny have got their views which are very proactive, but they seem to be differing to those of T.T.S. in many -- or going in different directions and as recyclers we have heard -- we are involved with the bring bank collection and the door step collections in St. John and in Grouville and discussions with other parishes, but T.T.S. are now going forward as people may be aware with their own bring bank collection. I believe this excludes cardboard which really is one of the quantity items that need collecting. I understand that budgets are hard to achieve because it is expensive to set up these collections, so I am listening here to people saying let us go to common sense practices. Where is the common sense in our political scenario with the Constables? If the Constables for examples sake said: "Right, for every person we are going to put £10 on the rates across the board for the 12 parishes, let us get a Comité des Constables together and let us say, right, we will organise with the respective refuse collectors a recycling collection and we will administer where we want that to go." It does not necessarily need a subsidy to those people, as T.T.S. would be paying to various peoples, the Constables Committee could organise decent shipping rates. They could organise the end purchaser on the mainland. Whoever is collecting it could be 4 or 5 different organisations. We would participate in covering their costs -- the parish would cover

their costs, and get back a certain portion of the £10 per person rateable value however it was administered. But there is a return at the end of the day if it is administered probably without subsidy. But it is expensive and the public are recycling minded and they will accept that there is an element of expense - I am sure the majority of them, not everybody but the majority - and as I say until we have got the political will to look down that line then recycling will never work in a piecemeal fashion. I am a great believer that households should have 2 bins. One bin for what is refuse, the other bin for everything that could be deemed recycling from plastic bottles to cans, to glass bottles to cardboard, your Weetabix box, your newspapers, everything. Now the refuse bin could have a cost element with electronic tagging where the parishioner pays for his refuse collection. The other bin could be collected free. It could be taken to sorting banks which are expensive; a lot of manpower. The items which are all recycling could be handpicked into plastics, newspapers, cardboards, tins, glass, bottles, green bottles, white bottles, blue bottles, whatever you fancy, and there is just about something that can be done with every item. Recycling is possible to a far higher percentage than 32 per cent. We could be recycling 70 per cent of what we throw away without a doubt and that is achievable and then, of course, your power station, it would not need to be 1,300 tonnes it could 40,000 tonnes a year. So there is a lot in what you say, but the political will has to be there to start to say recycling is expensive, how do we go about it? Let us get some common sense into the whole scenario.

The Connétable of St. Helier:

Can I come in first on that one? Very helpful, very interesting, and perhaps the most controversial idea of the evening there which is that the responsibility of the collection is already with the parishes. If the parishes were to take on responsibility for disposal of waste, you would effectively be taking away quite a lot of the *raison d'être* of a major States department, which in itself is an interesting idea. Clearly, what you will be doing though is transferring the bill from the taxpayer to the ratepayer and there are issues associated with that as people will know. Rates are paid by everybody regardless of their means except in cases of real hardship whereas taxes are levied. As you know, it is a much more progressive form of taxation, so I think depending on the cost it might well be something that will be possible. A minor issue I suppose, although it is quite an important one for St. Helier ratepayers, is that when

the Bellozanne area was given over to the States back in the 1950s a covenant was assigned by the States and St. Helier ratepayers uniquely enjoy the ability to have their rubbish disposed of for nothing. In fact, any waste arising in St. Helier has to be disposed of for nothing by the States. So I think for the St. Helier ratepayer that will be a particularly difficult or challenging decision to make because they would have to agree for the parish to dispose of their waste and charge them as ratepayers, whereas effectively you will be setting aside the covenant and I think that would be -- again, it is a political decision that would have to be made, but I think broadly speaking the Constables, as Ken said, are talking much more now about working together, breaking down the borders a little bit. Previous studies of refuse collection on the Island have indicated that it really does not make sense to have these different authorities doing the work. It does make sense to start to think much more collectively about it and I am sure once we get these pilot projects going for glass, for example if we get a glass imploder in St. Helier and if it worked well, we would be scouring the Island for all the green glass we can get to make this aggregate for concrete. So I think these things are going to happen once we get these processes started.

Mr. W. Le Marquand:

A lot of what you say, that is it. Obviously, that is the other argument and coming through on the financial thing, but these things can be overcome I am sure with the political will. For example sake, I listened to the gentleman there who had very valid points about the cost of transportation compared with the benefits of recycling and then coming back to the short distance to Bellozanne or to La Collette, wherever the incinerator, maybe less damaging to the environment than people driving all over the place to take things to recycling banks where the end result really is not that efficient in that product being recycled. So, listen to that. At our depot, for example sake we saw this years ago, we separate stones from ground; we turn it into topsoil. I want to start doing some in-vessel composting myself at private enterprise, so when the compost is finished we will mix it with the top soil so we will have an end use for the product because many times you can recycle something but if you have not got an end use for it or a volume use for it, it ends up still in a heap which is still wasted in effect. As the States of Jersey make a lot of compost, they end up just basically giving it back to the farmers because there is no resale value for these things and they do a good job but there is no resale. You have to find and identify end uses for everything you

recycle. At the moment, we just ship it away and let somebody else deal with it. But as I say at our depot we have looked to take all our waste and we recycle nearly 90 per cent of our waste by using this product with that product, mix that one up. We will introduce mixtures that 2 products, which in themselves would not be useable, but by the time they are blended or used become a valuable product, so it has taken us years and years to identify and work up all these scenarios but it all takes space, it takes money, and it takes time. It takes understanding of the public and the public's perception at this moment in time is that a recycled product is generally a cheap product. That is not true. A recycled product most times cost more than a natural product because it has taken more effort to collect it, to recycle it and turn it into something else and people's perception must understand that recycled products at the end of the day should cost the equivalent of natural products or, in fact, even more but if you want to save the planet bear it in mind. That is the way we have got to go.

Deputy P.V.F. Le Claire:

Can I just say very briefly that is it, right at the very end there, in a nutshell. You know global warming; if you had spoken about global warming 5 years ago you would have been laughed out of the room and in 5 years time it is going to be a serious issue for many countries and the world at large to focus upon. Climate change is with us now. The interesting thing, just one thing to say apart from I agreed with practically everything that you said, I recycle 99 per cent of what you just put to us and you should be up here. The one thing that I think I should tell you is that the Council of Ministers did a survey of the public and about 78 per cent of the public were in favour of environmental taxes and wanted to spend more money to recycle. Huge amounts were in favour but they knocked that on the head on the grounds that it might jeopardise getting G.S.T. (Goods and Services Tax) through and they said in their papers: "Let us get G.S.T. through and once that is done we will revisit recycling." The public wants these taxes; it does not necessarily want the other taxes. The public's will is clear. Unfortunately, they just keep choosing the wrong politicians; maybe me included.

Deputy R.C. Duhamel:

Before we get another question I would just like to open up and maybe get a straw poll. I mean our sister Island seems to be making far more kind of ambitious strides

to kind of move in the general direction of recycling and so much so that they decided last year that they were going to endorse, by 2010, a 50 per cent recycling rate. Now, one of the things that the States have got on the table at the moment is that we are committed at this point in time to 32 per cent for the next 30 years. Now, bearing in mind that the U.K. issued some documentation and some propositions just recently as well to suggest that they also were going to go to 50 per cent minimum recycling and seek to increase that proportion on a regular basis, can I have some comments perhaps from the floor as to whether or not you think that 32 per cent for the next 30 years fixed is a realistic target to represent Jersey's long term thinking in terms of waste management ... Is anybody brave enough to jump into the hole I am trying to dig?

Deputy P.V.F. Le Claire:

We reached 54 per cent in Havre des Pas in recycling.

Mr. W. Le Marquand:

I mean that does seem a low figure. You would have thought you could be a bit more ambitious on that over a 30-year time frame. I am sure people will have to be because I would expect that some of the products will become far more expensive. There is going to be a real problem with oil in 20 or 30 years ago, so some of the products will become more expensive so certain economics will start to change I am sure. So the question I was trying to get on before that was while I think it is very important we get a good solution to this and it is a critical thing for the Island, I guess, I have 3 young children and the overwhelming desire I have got is to see Bellozanne closed down as soon as possible. You know I find it extraordinary that in such a wealthy Island we are the only ones with an incinerator that would fail to meet any European standards and, you know, I am very concerned about the emissions and the possible routing of some of that back into the food supply perhaps through milk or anything else. It is a serious concern because I would like to know just how much testing there is in the immediate vicinity of that of some of these outputs and also whether there have been any -- you know, if there is going to be some delay in getting an improved incinerator of any sort whether there needs to be any more drastic action to get rid of some of the worst of this to France or anywhere else in the interim.

Deputy R.C. Duhamel:

Yes, I mean that is an interesting point but I think we have to be a little bit careful that we do not go around scaremongering. I mean if there were environmental problems with the gas emissions at the moment then our Environment Services Department would not be doing their duty if they were not checking these out. I do know that there have been a number of dioxin surveys that were done a number of years back. The key issue though is that it is not the incinerator itself that is at fault; it is what we burn in it. Until very recently -- I mean we heard another member suggest that we were still burning batteries. There is still a number of batteries whether they be lead, mercury or cadmium or nickel-cadmium still being thrown away in a black bag and because of the difficulties of sorting, or the public not being educated enough to kind of put them to one side, they are being burnt. Now, we had the same thing with tins of paint. Now we are all kind of doing our bits and pieces around the household, painting walls and things and then when we have got an odd can of paint we take it down to Bellozanne or they go down to Bellozanne and those paint cans were put into the incinerator and the paint inside burnt and then we are complaining about the emissions. Now, the department have seen the error of their ways, if you can say that, and have since begun to introduce a scheme to take out with a local company who is bagging the paint cans that have would otherwise have been burnt. But the key point if you go back to the plastics and dioxins, and this really underlies the whole way people look at materials, if you treat it as a waste and you are going to burn it there is technology there and monies that you can put into a system, any system, to mitigate the gases and the health problems that would otherwise be caused if you did not have the gas cleaning equipment. But does it make sense? If you can simply take those materials out of the waste stream and not burn them in the first place, find other uses for them, not use as much or send them around a close recycling loop. That is the type of thinking that we are hoping, right, desperately hoping, will be discussed when the States finally debate whether or not we should go for a one-stop shop. Burn everything, spend £80 million on hefty gas cleaning equipment and burn everything, because the public cannot be bothered to do any sorting whatsoever. But we will take your money and pay for it or go the other route and maybe not completely back to the experience of the Indians where, you know, you have got Indian landfill sites at the moment creating jobs for Indian workers who are in cities picking out the bits and pieces to make money. Now, I am not suggesting that Jersey do that by any means. There is a whole spectrum of actions that can be taken, but what the Scrutiny Panel

are after is that we discuss the options within a wide enough framework to determine sensible ways forward which do not necessarily break the bank or cause us to be less environmental aware than somebody else from a different country.

The Connétable of St. Helier:

Can I just respond to the question where I think there is an urgent need to -- given the delays in closing down Bellozanne there is an urgent need to take out all the nasties that we can. If it is true that we are still burning car tyres it is a matter of a States Member asking the States to agree that T.T.S. will no longer burn car tyres and a simple States debate will solve that problem. It may not even be necessary to go to the States. I mean when we were shown around the latest recycling areas at T.T.S. we were very impressed to see that they are now taking out a lot of the white goods, computers especially and televisions, that a couple of years ago were being burnt. So that is good. T.T.S. are taking things out of the waste stream that contribute to the nasties coming out of the chimney but until the plastic is taken out, which is the really serious one, then there is going to be a risk however slight. I think the other point that the question has raised is we, as States Members, must certainly check that the dioxin surveys are still going on because I have certainly not seen any results for some time.

Deputy P.V.F. Le Claire:

Well, I think you raise a valid concern, especially for your children, dioxins and all of the pollutants entering the food chain and everything else and I do have confidence in our Health Department and its ability to make sure that this is being regulated. Unfortunately, when you try to regulate something you cannot regulate it all day and all night, every day and every night, and I think there are incidences where things are being burnt such as tyres for example because of an economic argument and a lack of a technical application to the end resource. That means now and for years they have been putting things in this burner that have been wrong and the only analysis that they have taken upon themselves in all of this has been to the crushed bulky waste. They have not done any analysis of the contents of the black bag. I live in town so I know the vast majority of people in town, whether they live in houses or whether they live in flats, they either use the black bag or the little carrier bag from the shop and put whatever is in their house or in their flat into that and into the nearest receptacle. So there is a whole issue about material separation and reuse of those items. But I think

we need to invest money in a modular system to sort through, which can be done mechanically to a very large degree now, most of these items that will cause problems; source them, separate them, ship them off into their end solutions and stop putting all of this stuff in the fire in the first place. The Constable said tonight it would be very simple for a proposition of a States Member to go before the States to stop these entering the waste stream. I would certainly second the proposition if the Constable brought one tomorrow to stop these kinds of items entering the waste stream. I do not know why it has not happened. I do not know if it would stop it happening because they do not analyse what is in the black bag; what is in the back of the big lorry. They get dumped into a big pit and that is the problem. They are not separating and sourcing out all of these bags which have got batteries, glass, bottles, telephones and everything else in.

The Connétable of St. Mary:

If I could come in there as well. Mr. Le Marquand mentioned about all the recyclables into a black bag. Paul has just mentioned about the whole of the black bag which is what one tends to use now, but we did visit Cardiff and that is a very big place and they have that specifically. That is exactly what they do. They have the bin where you throw all your food rubbish and such like but in the black sack, which is an especially strong one which they give out to all the householders, you put all your recyclables in there and when I say recyclables it is; it is glass, cardboard, paper, plastics, batteries, metals, tin cans, aluminium cans and that goes into a black sack and gets taken to a huge sorting out area. It automatically sorts everything out all into the different channels and when it reaches the end, you know, half hour to an hour later, it is then all compressed and you have got all the things done at the end there and they do that and they were doing it. They were importing rubbish from near places around and that is what they were doing. That was their recyclable one so it was not left just to the people so on that basis -- and they monitor it as well and it is tagged and if they find that anybody has put wrong things in it, because it is all done on computer -- every one of them is tagged and it is on computer, they get automatically fined. I think they get warned first, one warning, and there is a £50 fine to the household if you put things into the wrong one. So that was completely sorted out but that just was meant to say they had 2; they had a bin and then they had a recyclable extra strong bag which then went to a depot and completely sorted out so it made it easier. That

was all kerb side and they used to -- 2 trucks used to go around at the same time once a week. There were 2 trucks but nevertheless it found that that was the easiest way forward and that is how they did it for -- rather than having you to separate your glass and then your paper and such like into different boxes as well, it was all done in a black sack and this is what we have kind of asked the States to look towards to see as well, but whether they will come up with that -- I do not know whether that will be an option but that was another option which worked very well from their point of view.

Male Speaker:

Jersey has not got a small industries sort of system. You are talking about recycling things where you do plastics and people have got an injection moulder or something like that. There is so much red tape in industry, or for a person to start up a small industry in Jersey, that I think it would be a major change in the States attitude. Guernsey is a very ... I had an aunt or a cousin who lived in Guernsey and if you went around Guernsey, around that area, there were little tiny workshops doing all sorts of things totally different to Jersey. I think that our policy in Jersey is that we have never created premises suitable for the small industries.

Deputy R.C. Duhamel:

I think that is absolutely right and you have hit the nail on the head. Although, I must say that the interpretation that I get from the Economic Development Department at the moment is that when they talk about diversifying the economy they are talking about diversification into different financial products primarily, and I think they should do as you are saying; look at other small businesses to create a better general balance so that we do not have all our eggs in one basket as indeed Guernsey do not have.

Male Speaker:

Can I make another point? I do not know whether this is a sensible point but, you know, we are talking about reclamation and that. Jersey has got, and especially around Grève d'Azette and St. Ouen, we have a great abundance of wrack. Why can we not collect that wrack because all the States do is pick it up and take it out into the bay. Why can we not take that into one spot, put it through some form of steam

process or something and convert that back to a proper fertiliser that can be exported worldwide?

Deputy R.C. Duhamel:

You are absolutely right. I do not know why we are not doing it, but if you look at farming practices across the board and we probably have not got time - it is probably the subject of another meeting perhaps if you invite us back - the number of farmers in the Island has diminished massively. The old farming practices are no longer fashionable or in vogue which is a bit of shame, but I do agree with you. I think there is a huge opportunity for spawning new businesses to deal with seaweed. I mentioned it to some people a while back and it has since gone through to the department. At the Brittany shore at the moment, there are a lot of very small French businesses that grow seaweeds for export to Japan and other Far Eastern places. It is used as a food. You have got alginates in seaweeds that are used in the paint process. There is a whole stack of things. Again, it is the way you look at these things. A piece of wrack is probably just a brown piece of seaweed to somebody, but look at that in a different fashion it could be somebody's livelihood. We should really be looking at these things more seriously because they are individual parts of the Island and have been and they are important to our cultural heritage, and maybe those are the things that should be coming back pretty quick to retain this difference about the place.

Deputy P.V.F. Le Claire:

I just sent an email to the panel about a topic the Chairman made me first aware of in respect of algae and creation of fuel from algae. An interesting thing about it is that it is not a food to anything other than fish but it can be produced either inland in concrete ponds or at the seaside. They have got a very big project underway at the moment in Hawaii with Shell and a number of other jurisdictions are looking at that as an alternative fuel for the future, so there could be areas in that regard. But one of the things that I have been pressing for, together with the panel, is for these industries to be supported and incentives be given to diversify the economy so we do not rely so heavily upon one industry.

Deputy R. Duhamel:

I said we would finish at 9.00 p.m. and we have 2 or 3 minutes. I will take one more opinion or view from the floor or not as the case may be ... All right, okay, that is it. I would just like to wrap up then by saying that I have certainly found this evening and your comments very information and I hope you found our comments equally so. It is all about partnerships I think and that is why we are here primarily. If you think that some of the things that we have been saying make sense then we pass it back to you and see what you can do among yourselves within the parishes to beef up the parochial point of view and see if we can solve some of these problems without spending huge sums of money doing it. I thank you for having us and I hope your Constable gets better pretty soon. Thank you.