

STATES OF JERSEY

Environment Scrutiny Panel Energy Efficiency in States Buildings

WEDNESDAY, 24th JUNE 2009

Panel:

Deputy P.J. Rondel of St. John (Chairman)
Deputy D.J.A. Wimberley of St. Mary
Connétable J.M. Refault of St. Peter

Witnesses:

Mr. J. Richardson (Deputy Chief Executive, Chief Minister's Department)
Mr. P. Garraghan (Energy Manager, Jersey Property Holdings)
Mr. A. Scate (Chief Executive Officer, Planning & Environment)
Dr. L. Magris (Assistant Director for Policy Planning & Environment)

Present:

Mr. M. Orbell (Scrutiny Officer)
Mr. M. Haden (Scrutiny Officer)

Deputy P.J. Rondel of St. John (Chairman):

Good morning, ladies and gentlemen. Firstly, I must inform you this is a public hearing. There may be points that we require to go in camera during the debate through the question and answer session, but then I am sure you will, if we have an audience, then we will do so. We will kick off with John Richardson, if I may, the Chief Officer of the States of Jersey, who will give us an overview of his energy saving views for the Island in the future, please.

Mr. J. Richardson (Deputy Chief Executive, Chief Minister's Department)

I will certainly focus just on what I see as potentially or options for the States of Jersey. There are clearly broader issues for the Island but I do not think that is my remit. I think I will stick to the States. This very short paper I just put together really is a summary of, I think, the main document that you also had, which is the ... will go into a bit more detail. But the way I have looked at it so far is I think there are 3 opportunities to look at in the States. One is buildings, and that is our entire property portfolio. Transport, we clearly have a large transport fleet in the States that either we operate or we lease or we have connections with through bus contracts, for instance, and what I loosely term general infrastructure which you can take in a very broad perspective but the 2 I highlighted are street lights, floodlights, display lighting. I put sewage works as an example but we have users of very high energy consumption, particularly T.T.S. on sewage works, waste treatment side of it. There are opportunities there but they are much longer term, much bigger projects which we are very happy to outline some of those to you this morning.

The Deputy of St. John:

Before you go any further, could I personally apologise. I have not done the necessary and got everybody to give their names for the record because, for one, this gets transcribed. So I will do that now if I may before we go any further. I am the chairman, Phil Rondel.

Connétable J.M. Refault of St. Peter:

John Refault, Constable of St. Peter, Scrutiny member.

Mr. M. Haden (Scrutiny Officer):

Mike Haden, Scrutiny Officer.

Mr. P. Garraghan (Energy Manager, Jersey Property Holdings):

Paul Garraghan, Energy Manager, Property Holdings.

Mr. J. Richardson:

John Richardson, Deputy Chief Executive.

Dr. L. Magris (Assistant Director for Policy Planning & Environment):

Louise Magris, Assistant Director for Environmental Policy.

Mr. A. Scate (Chief Executive Officer, Planning & Environment):

Andrew Scate, Chief Officer for Planning and Environment.

Mr. M. Orbell (Scrutiny Officer):

Malcolm Orbell, Scrutiny Officer.

The Deputy of St. John:

I apologise, continue, thank you.

Mr. J. Richardson:

If I just take each one of those 3 headings just in highlight terms, summary terms to start with, and then perhaps we can open up some discussion. States buildings; 3 key headings, heating, lighting, cooling. Those are the main users of energy in our State property. I have looked at that from several elements. First of all is procurement. That is, how do we procure our energy? Do we have appropriate contracts in place with our energy providers? Are they optimised? Are there opportunities for improvement? That is an area which is key, which I will be looking at with my procurement director for the States in overall terms. I will not go into it but I think if you then go into the Property Holdings report you see there is a whole table of different tariffs and that is a very clear indicator that there are opportunities there for improvement. Housekeeping, and I think that is probably our number one area to target in the short term. Basically it is getting people to turn lights off, turn heating down, manage their own energy consumption within their own buildings without the need for major investment. Once we go beyond that, the next 2 headings, which is office strategy, I am sure you are aware we are living in a very large portfolio of property at the moment. Some of it is very old, very inefficient from an energy point of view, and to improve it to optimise energy consumption is going to be very expensive and clearly investment in property we are about to dispose of does not make sense to me, so my plan is that we start developing office strategy now. I am in the process of putting a team together who will be the office strategy team to identify the appropriate office accommodation we need and develop a modern office facility for the bulk of the States thereby freeing up a lot of the old assets that can be disposed of or rebuilt, regenerated, whatever, but the aim there will be to optimise energy consumption. The next point there is investment in building infrastructure; into where we are going to retain buildings, those buildings need to be looked at and reviewed from an energy point of view to see what level of investment is required to improve their energy consumption, energy efficiency, and make them fit for

purpose in a modern world where we are aiming to reduce energy. So those are the outline views we have got on property at this stage. Transport, very large user without question, I think the biggest user and operator of transport fleets on the Island, and hence fuel consumption. In addition to that, as I am sure you are obviously aware, we run or we manage the contract for the Island bus service which again is a very large operator of vehicles and fleet, and it is about managing and optimising the operation and fuel efficiency of those vehicles. Using my experience from my previous job in Transport and Technical Services we maintained a policy where we had a replacement cycle on vehicles of between 8 and 10 years in order to optimise their depreciation cycle and make sure that we maintain a reasonably modern fleet of vehicles from a fuel efficiency point of view as European legislation and European vehicle construction use regulations so you see the introduction of more modern engines, more modern emission controls, and by having that 8 to 10 year replacement cycle it means we are keeping up with those replacement cycles from new engines, new emission controls. It also means that as an operator of a large fleet then we are not operating vehicles with excessive emissions when the engines start to wear or emission control systems start to deteriorate and it has been the appropriate way, I think, of maintaining it. In terms of the bus fleet, when the buses were procured in 2002 they were of the latest engine spec and emissions which, I think, in those days was Euro 3 emission limits. We are now on Euro 4 and Euro 5 is coming. Again with the bus contract coming up for renewal in 2012 then part of the new contract and specification will be a replacement programme to make sure that the fleet of buses operating on the Island, (1) are retained in a modern condition for the passenger but equally are retained in modern condition in terms of the latest emission limits. Then finally I have just put a very short note down on infrastructure. Again I will refer back to the areas which I am familiar with, which is Bellozanne or T.T.S. (Transport and Technical Services) sewage treatment works and infrastructure. We have been aware for some time that those areas are very high energy users and we are looking at opportunities, and there are quite a lot of opportunities, certainly in the liquid waste side of it, I am sure I will leave the detail to T.T.S. to describe to you, but in essence as we develop liquid waste strategy, there are opportunities to reduce the peak hour consumption and store for a period and then pump later in the night when you can negotiate a better rate with the electricity company for off-peak consumption. They are a very high demand user, so if you can avoid power in the 5.00 p.m. to 7.00 p.m. evening period, which is maximum demand, peak period, for the level of energy they are procuring they can negotiate far more favourable rates between midnight and 6.00 a.m. in the morning. If you develop an infrastructure which allows you to store and pump later on, you can have a significant impact on your energy consumption ... not on your consumption but on the tariffs you are paying for energy. Those are areas which certainly I know they are going to be looking at as part of the liquid waste strategy. Then the final area is things like street lighting, promenade lighting, display lighting. We know they are not a significant user in terms of energy compared to sewage works infrastructure, but clearly there is a lot of illumination at night, a lot of questions perhaps to ask and to answer later on as to whether or not it is the right thing to turn them off. I think that is more of a public political decision than a technical decision whether you turn them off or leave them on. That is a very quick summary, Chairman, of where we think we are at the moment. We have a lot of detail in the report we have to go into, but perhaps I stop at that stage and see where you want to go.

The Deputy of St. John:

Can I just say thank you very much, Mr. Richardson. The Deputy of St. Mary, Deputy Wimberley, has just entered the room and taken his chair as a member of the panel.

Deputy D.J.A. Wimberley of St. Mary:

From Jersey College for College.

The Connétable of St. Peter:

John, thank you very much for coming again this morning. It was a very useful meeting last night and hopefully today is going to be even better. When you started your briefing just now you were talking

about different types of energy. Are you also looking at the associated footprints of different types of energy in making judgments? For example, we have had presentations on the Jersey Electricity Company where they say that their energy production is carbon neutral. Is there any sort of motivation towards looking towards electrical vehicles on behalf of the States to look at the carbon footprint benefit of using that type of vehicle?

Mr. J. Richardson:

In simple terms, yes, we will be looking at that. Certainly if you look at the 3 areas of buildings, part of an office strategy will be looking at carbon footprint. I think there are some issues about carbon footprints, energy utilisation and economy which all need to be matched. There is a danger of perhaps going down one route without paying sufficient recognition to the others. So there is a balance to strike. The answer to the building is yes, that will be part of the office strategy in terms of what is a carbon footprint of new accommodation compared to what we use today. In terms of vehicles, we have been monitoring - I am wearing my old T.T.S. hat at this stage - we have been monitoring for a number of years the development and use of electric vehicles. We trialled some vehicles very successfully back in 2004 or 2005, we thought they were excellent. They served our needs very well but the manufacturer clearly was not happy with them in terms of their performance or reliability and withdrew them after a season, I think. They brought them in as hire cars for a summer season and then we had them for the winter period, and we ran them in 2 areas which are fairly high usage and high mileage areas, and they performed very well but they were withdrawn from service.

The Connétable of St. Peter:

That is an interesting one; that was the Rav 4 fleet, was it?

Mr. J. Richardson:

That was the Toyota models.

The Connétable of St. Peter:

You had charging bays in Sand Street for them as well, did you not?

Mr. J. Richardson:

We put them in parking control because we have got mobile patrols out all the time which were high usage, high mileage. They were withdrawn and we have monitored very closely the use of vehicles. Unfortunately we do not seem to have had a manufacturer who has had a significant take-up in the last 4 or 5 years. I am aware of vehicles that were brought into the Island in 2008, I think, and I think some of those are under trial at the moment. I know of one or 2 other companies that are still looking at them. There seems to be more development going on within the motor manufacturing industry to produce very low CO2 emission vehicles which are petrol/diesel engines as opposed to pure electric at the moment. Where the market goes in the next 5 to 10 years I think is something we have just got to monitor.

The Connétable of St. Peter:

Just a slightly different tack but carrying on the same type of line. When things come to your priority, is consumption going to be your main priority, in other words driving down consumption, or is it going to be driving down CO2 emissions?

Mr. J. Richardson:

I think it is going to be a combination of the 2. There is a discussion to be had which is very much about consumption and CO2. If we want to drive consumption down on a modern building then clearly the opportunity is there through good insulation values, modern heating systems, ventilation systems, et cetera, but consumption will go up if that building has modern air conditioning systems in it. There is a question mark over the current consumption in terms of fuel efficiency from a winter heat load point of

view compared to reduced heat load during the winter because of modern insulation value in the heating systems, but higher electrical loads in the summer because of air conditioning, which we may not have at the moment in buildings.

The Deputy of St. John:

How do you intend to establish your baseline on information on the current energy use?

Mr. J. Richardson:

I think our baseline perhaps, and Paul perhaps can give us some more detail in a minute in terms of what is in the document of our baseline figures, but the development of an office strategy from an energy point of view is going to have to pay due regard to this question of consumption versus energy ... sorry, energy consumption versus CO2 and work out the best strategy for it.

The Connétable of St. Peter:

Also a supplementary there; I understand what you are saying and I agree with what you are saying. How is John Richardson going to police that or is that going to be a Planning Department issue to police it? For example, if you come out with a directive that all States officers shall meet certain sort of criteria to deal with best environmental benefits and heating benefits and consumption of energy benefits, how do you police that or is that ... is it a job for Planning or is there something else going to be needed to be put into place in the middle?

Mr. J. Richardson:

I think it is a combination of the 2, between ourselves as effectively the developer for new office strategy and Planning who will be applying the latest standards, and I am sure Planning can expand on that later on. But I am very aware of one building that has been constructed at the moment on the Esplanade which is to the latest standards in terms of energy efficiency, energy utilisation. My goal certainly would be to optimise the office space requirement and ensure that that building in conjunction with Planning is developed and built in accordance with later standards. But we do have to consider this whole issue of load because of the winter heat load versus the summer air conditioning load. One factor which is very clear is that when you go for large open plan office space which reduces the footprint and your square footage, because you can put a lot more people in open plan, you do have to consider very carefully the load and the ventilation requirements because a large number of people work in small office space, smaller than we are in a building such as today. So there is a balance to strike. We have not done that work yet and that is going to be part of the plan for developing the most appropriate office accommodation.

The Connétable of St. Peter:

Again, going off on a slight tack and I do not know whether to throw this softball or hardball at which department. In developing office space, is there any sort of source moving forward that ... the current provisions within Planning have generally been that office space has to provide an amount of underground parking. Now would it not be rather unique to move away from underground parking and, therefore, make it less palatable for people to bring their cars into the town? Obviously when talking about the I.T.T.P. (Integrated Travel and Transport Plan) as we were talking about some weeks ago now, but it was quite evident that only about half the vehicles that come into town park in public parking, the rest park in private parking. So it makes it more difficult to impact on people's habits by controlling the cost of parking if they have a private facility. It is just whether there is any thoughts in that way of making the building itself or the planning permits help to improve the environment by changing people's appetite in driving.

Mr. J. Richardson:

The simple answer to that is yes, definitely. It is quite an interesting point that you raise because I am

certainly looking at potential sites for office accommodation. There are several options clearly in terms of do you build one building for everyone, in which case it is a very big building and there are benefits to it, but the disbenefits mean that a large number of staff who are effectively working out within the Island for the bulk of their work in the day but they need office space to do certain tasks, they will have to drive into town to the central building, wherever that may be, which has got an issue about parking, energy use, pollution in town, et cetera. An alternative which I certainly want to evaluate, and I am not saying either is the right solution at this stage, is that you have a core office in the centre of town somewhere for the core provision of State services but you have a secondary building on the outskirts of town which is far more flexible space utilisation to allow staff who do not need to come into the centre all the time to have access to it, thereby reducing the amount of traffic you are bringing into the town. But you have to recognise there is a need for a large number of States employees who are mobile on doing certain tasks. That has got to be part of the evaluation of an appropriate office strategy.

The Connétable of St. Peter:

Thank you, John. I am delighted to hear you are looking at the bigger picture in all of this than rather what I call nuclear(?) options.

Mr. J. Richardson:

In terms of underground parking, I will leave you to address that to the Planning Department and Transport and Technical Services from a waste management side of it.

The Deputy of St. John:

What are the manpower implications in carrying out your review?

Mr. J. Richardson:

At this stage not defined, both in terms of manpower and the financial resource to undertake it. I am just developing now the project brief for the office strategy, and that will be the defining point as part of that will be very clear requirement for energy. I suspect there will be a need for the energy manager and the team from within Property Holdings but I think given the scale of this and the need to design and work to the highest standard, which I am sure will be a topic of conversation with Planning, we will no doubt need external experts, energy and environmental experts, to advise us on appropriate standards. So I cannot actually give you a definite answer but clearly we have to make provision in the cost of the office strategy for developing appropriate environmental standards.

The Deputy of St. John:

In energy audit, give us a typical or identify a number of technology improvements which would require a modest level of investment to gain long-term benefit in reducing energy consumption. How will you encourage States departments to make such an investment?

Mr. J. Richardson:

If I just use this briefing note. The first is procurement. That we can use from a procurement tool point of view, which is effectively driving through efficiency through better procurement and energy. The second, which I think is the obvious one, is housekeeping. It is encouraging people to turn off lights. I know we have got an Environment Department here and no doubt they will be talking to you about the Eco-active plan that has been lodged recently. The stages in that are very encouraging because the first 2 stages seem to me very appropriate to deliver that section. The key is going to be, which I think is the nub of your question, how do you make sure we deliver it? There are 2 ways of doing this: one is persuasion, which is where I rely very much on the Eco-active; the environment team, the Eco-active team, education, persuasion, just become part of the day job. The second is perhaps the slightly harder line which just says: "We are going to make an X per cent reduction in our energy consumption" and we just remove that from budgets.

The Deputy of St. John:

Just thinking about it, is energy budgets the way to go forward?

Mr. J. Richardson:

I always prefer the carrot and the environment in the team first to educate but in T.T.S., I keep going back to it because it is fairly recent, but last winter I joked slightly, but I was quite serious about it, saying if we turn the heating down in the department and instead of all us sitting in shirt sleeves in January and February, the department bought everyone a decent pullover with the States logo, if you want, bears the corporate ... just that shift ... it goes down as a bit of a joke but actually I am very serious about it. If you turn the heating down and you sit in an office, an old drafty office such as we had up at South Hill, you are not going to sit there in your shirt. So, if you want to encourage people to do something it is about education awareness, making them more responsible for it, give them something to help them do it. I did not cost it but I am absolutely sure that procurement could buy us a few hundred jumpers which we get the saving back in a very short period of time by saying the heating is going down from 2 degrees to whatever the temperature ... knock 2 degrees off and you will achieve it. So, a little bit light hearted but I am quite serious about things like that. The only way to achieve it firstly is the educational side of it, and, second, if that does not work, then I am afraid we will have to take slightly stronger measures.

The Deputy of St. Mary:

Following on from that, all the measures that you mentioned were focusing on behaviour, as you say at the very end just there, education and so on, but going back to technological improvements - there are technological improvements which do deliver - I wondered whether you had a scheme or will develop a scheme for evaluating the technologies and for the sake of delivering capital costs up front and then go on to the progression of how you would persuade the States to spend money now to save later.

Mr. J. Richardson:

I think at this stage I will make a general comment but I will ask Paul perhaps to just come in here and give you a little bit more detail. There are a number of fairly modern energy management systems within our newer buildings. There is from Property Holdings' point of view, our view is they are not being optimised at this stage. So with very little investment there is an opportunity there to optimise those existing systems before you invest in anything new. Once we then get past that point and we decide which buildings we are keeping, I think the fourth point in my note there is that investment in building infrastructure is then key. We need then to look at what level of investment do we need to make in order to optimise efficiency in those buildings that are remaining, and there are energy management systems we could put in. I have touched on some from the infrastructure, there are opportunities there through different control systems and timing and monitoring systems; relatively low but probably have to accept there is a fairly long payback period on them. Those are the sort of technology sides I would certainly want to look at in the short term. We have got some technology, we are not using it properly at the moment.

The Deputy of St. John:

The J.E.C. (Jersey Electric Company) chief executive in a recent hearing with the panel said that the States could make significant savings if there was a more co-ordinated approach to energy management across the States departments. Do you agree with this statement; if so, what do you perceive as the principal benefits of the more co-ordinated approach? How do you intend to implement this change across the department?

Mr. J. Richardson:

I read the article but I did not read his transcript from Scrutiny. Reading the article in the media I was

taking that from 2 angles. One is the procurement of the tariff base. Now, the simple way to do that is to bring all that centrally into our Central Procurement Department. They lead on procuring contracts for all departments and effectively there is a far better management of energy, energy consumption, which we can then monitor centrally from procurement.

The Deputy of St. John:

Bringing it to the centre.

Mr. J. Richardson:

Bringing it into the centre for procuring the contracts with the J.E.C. It was quite fascinating when I read this report - I am not sure which page it is on - but there is a table with all the different tariffs.

There are 14 different tariffs if I remember rightly; clearly there is opportunity there. But in terms of the technical side of it, there is a whole issue which is covered in this report about the power factor correction which is lacking in many buildings. We did a lot of work on that in T.T.S. because we are a very high energy user. But a lot of buildings do not have it in. Now, that will have a significant impact on technology and how we manage it. The third point, which I have just been talking about, is modern energy management systems. I think those are the 3 we have got to tackle.

The Connétable of St. Peter:

Bearing in mind we are approaching the Business Plan and there is certainly strong rumour out there there is going to be some significant cuts in department spending, how do you see any efficiency or improvements in buildings to make them more energy efficient being funded? He is stumbling.

[Laughter]

Mr. J. Richardson:

The reason I am considering it is simply because budgets are devolved in departments. So, I can give you a view from a central point of view as to how we would look to optimise but I think the key is going to be about making departments aware of their energy use, actually having someone fairly senior in each department being responsible for monitoring how much energy they use, be it heating, oil or electricity, whatever, and saying to them: "If you have got a budget issue which you have got to deal with because of funding pressures, et cetera, one of your own opportunities is about saving energy" so trying to, through the education side of it in making awareness, making them more aware of reducing their energy consumption, reducing their cost, which will go towards managing their own budgets.

The Deputy of St. John:

So you did not bring it to the centre?

Mr. J. Richardson:

Bringing it to the centre means I have got to bring all of the energy budgets to the centre, which means I then have to have control of how they use energy. At the moment we are not structured to do that.

The Deputy of St. John:

So that would not be part and parcel of your remit to bring it to the centre so you have got one person controlling the entire energy use for the entire States?

Mr. J. Richardson:

Given the current States property portfolio and States use of buildings, I think that would be almost impossible at the moment. In the long term with a modern building programme, modern office accommodation, you have a facilities manager and that facilities manager would look after the estate and would have control of it, and you will control it centrally. To do it now with a completely devolved system of budget financial management and operation across the States I think it would be very

difficult. If I went to each department and said: "I am going to extract from you your energy budget and bring it into the centre" I cannot see how I would balance the argument of if they need to do a certain ... pump more sewage or treat more waste in a year, and I have cut their budget because I am saying I am going to control your energy consumption, I am almost doing their job for them. I do not think that is achievable at the moment.

The Deputy of St. Mary:

Even on that scenario that you cannot bring all the management and the behaviour into the centre and issue jumpers to 3,500 people, whatever it is, I am still concerned about this because you say, for instance, make departments aware of their energy use and somebody is responsible for monitoring that, but if they do not have the tools which will involve investment and then they come back to the Constable's question of if there is money up front that is needed to allow these responsible people to do their job, which is to monitor, get the baseline, then you can move forward, how is it going to happen?

Mr. J. Richardson:

You do not need investment to go and read an oil gauge or read an electricity meter once a month.

The Deputy of St. Mary:

Is it that simple?

Mr. J. Richardson:

Absolutely. But that is the level I am starting at. I am saying that someone in every building should be responsible for going and reading an electricity meter each month and having a simple spreadsheet that monitors how many hours have been used, how many litres of fuel have been used this month, and then asking the question: "Is that right? Can we turn the heating down? Are people turning the lights off or not?" That is the starting point. You can build from that and where you have got a modern school or an old people's home, nursing home, or whatever, which has got a modern energy management system in, which you can link through a telemetry computer system, then that is where I hand over to my experts here in the energy sector or in Property Holdings to say that they can monitor and they can control. But to go and put investment in every building and feed it all back centrally ...

The Deputy of St. Mary:

I can see that with oil you go out and read the gauge, but with electric there are 50 rooms in this building, some people leaving it open, some are not leaving it open, some rooms leak, some do not, and how are you going to find that out without some investment? I mean, I just do not see how this responsible person is going to do it.

Mr. J. Richardson:

The starting point is this building can have 120 rooms in it. Every room has got lighting in it but there is one supply coming into this building and one meter. You read that meter once a month and at a management team meeting, part of that requirement is that the chief officer, who is the accounting officer, has to account for or monitor his energy consumption. You can get all that data fed back into the centre and we can monitor it centrally through Property Holdings, and I think it is something we should be doing. But if you put some responsibility on to user departments to monitor their consumption of energy, fuel, electricity, and if we are going to set a target of saying we want to reduce by so many per cent in a year, then those departments need to start looking at it and monitoring it. You need to establish that baseline.

The Deputy of St. John:

So your cost implications on that, if you are putting manpower, i.e. in each department to do this, is that going to outweigh the cost of your savings?

Mr. J. Richardson:

The cost of going and reading a meter, in my opinion, is zero. Someone goes and reads a meter once a month ...

The Deputy of St. John:

I am talking about all the paperwork is going to be ... the paper chase is going to happen in between forwarding all that on because you have got to add up the labour involved that somebody will ... somewhere the statistics working out that it is going to take X to go to a particular meter to do so-and-so, but if you have got other items and smart metering, for instance, which can be installed quite reasonably, and all that goes to the centre, would that not be easier to be talking to the J.E.C. in the first instance, see how many of those smart meters can be put in existing buildings and that is all done directly from the centre instead of having manpower at a monthly meeting sending reports in?

Mr. J. Richardson:

Yes, and that is where my fourth point, investment in the building infrastructure, comes in. That is the point where we do look at those opportunities there. But I am starting off from a very simple baseline for this winter of saying we are going to start having a responsible attitude towards energy management, and I look to working with the environment team from the educational side of it, of saying: "You have got to start somewhere" and even in parallel to working with modern technology to invest in automatic recording systems, you do a simple review. There are some areas, and I again turn back to T.T.S., you have got 110 pumping stations around the Island, I do not want to be paying someone to get in a car every month and drive around 110 stations and read the meter. That is where modern technology will play a part because you can link that to your telemetry system and bring that information back. But we have got to start somewhere and my point, if you start with the basics of what you have got, you then decide on where the most important points are to put your investment in, and you start investing them to get the best return.

The Deputy of St. Mary:

So will the priority be for each building and/or department, depending on the situation, to establish firm baselines of present consumption?

Mr. J. Richardson:

Absolutely.

The Deputy of St. Mary:

That is the first job?

Mr. J. Richardson:

Yes, that is the first job.

The Connétable of St. Peter:

Just staying on the same tack for a moment, if you do not mind, I am just looking around this room here at all the incandescent bulbs around here, there is not one energy saving bulb in this room. Simplistically the budget required to change, assuming all the rooms in this building are the same, the budget required to change these to low energy bulbs would be fairly significant. They are not cheap items. I come back to my question really when I said about driving budgets down this year, how does this type of very simple way of improving energy consumption in this building, how they are going to manage it if they do not have the money that is available within their diminished budgets to just go out and change the light bulbs?

Mr. J. Richardson:

My first line would be, I keep going back to it, the education side of it, is making them aware that every department just had to absorb a 24 per cent increase in its budget for electricity charges. Now, they have had to find that money from somewhere and it has not come from the centre, they have had to absorb that cost within their budget.

The Connétable of St. Peter:

In the current year?

Mr. J. Richardson:

In the current year. Now, the way to mitigate that is to go round and start looking at some opportunities to reduce your consumption. So to do it, classic example of low energy bulbs, and if I was sitting here as a chief officer running a large operational department, that would be one of the areas I would be looking at.

The Deputy of St. Mary:

But would you really? Because, as the Constable said, the cost of the bulbs in the first year may be more than the electricity saved, and if you are really being pushed by this central thing that you have got to save money it will not happen. So I just wonder whether there is going to be a vote which says: "Yes, you will do it, you can do it" there is an effective subsidy to get the benefits they ...

The Connétable of St. Peter:

Some feed cash.

Mr. J. Richardson:

The simple answer is there is no cash available or no cash I can identify, should I say, in the Business Plan for pump priming, for energy management within the States apart from the money that has been made available in the energy fund. I do not think there is, I am not aware, a restriction on States departments making bids for that funding.

The Deputy of St. Mary:

Sorry, could you elaborate on the energy fund?

Mr. J. Richardson:

There was some money assigned last year for energy and recycling and transport which is ... I look to my colleagues in Environment because they manage that scheme. I am not aware that there is a restriction on States departments not being able to apply for funds from that, from an energy manager. I think the insulation grants, is it not?

Dr. L. Magris:

Do you want me to jump in there? Can I add to that, that was money that John is picking up on that was awarded out of the Business Plan from 2008; £1 million supplemented by £500,000 voluntary contribution from the J.E.C. That money was voted to assist low income homes with energy improvement. At the moment we have one year's worth of funding there. As you know, the States decision was that if we did not have an environmental tax to bring in further revenue that that initiative would stop, but currently that programme is rolling that money out as grant assistance to low income homes for insulation, cavity wall insulation, loft insulation, pipe lagging, so at the moment that money is not available to the States departments, and I think the intention of the House was that it would not be.

Mr. J. Richardson:

Thank you for that. So on that basis there is not money available there, there is no new money to be

ascribed that I am aware of in any of the departmental budgets for energy management, so I think it comes back to if you have had to absorb 24 per cent you need to find a way of mitigating that 24 per cent, and the obvious one is to look within your own organisation first to see how you can reduce cost.

The Connétable of St. Peter:

Wearing your new hat, John, with procurement now particularly, staying still with the same topic of light bulbs, is there an opportunity of going to a wholesaler and buying at a very knock-down price a whole stock of low energy bulbs which then can be drawn down? So in that way you are helping departments to make that change. Not only you are changing their attitude but you are also giving them the means to be able to improve their energy consumption hopefully at a cost which is not going to exceed the energy saving in the first place. Could that be done through a procurement type of initiative?

Mr. J. Richardson:

The simple answer is yes because (1) we can manage it from within procurement but (2) we can manage it within Property Holdings because all States buildings come under the control of Property Holdings, and it is a decision we can make within Property Holdings that we may well then look at investing in low energy light bulbs if that proves to be appropriate for the conditions, and that is something we then talk to each department about saying if we procure however many and they change there is a cost to be worked between the department who pays for their own energy at the moment and Property Holdings, who are the administrators of the buildings, to work out the best deal to change those out.

The Connétable of St. Peter:

I think I would probably prefer to put you on notice. When we meet in P.A.C. (Public Accounts Committee) next time on procurement we may want to address this one again. But I think, just deviating momentarily, I think if the States were to take up an initiative like that it would be seen by the general public to be a positive move forward by them to make a positive improvement in the environment and lead by example. That would be nice.

The Deputy of St. John:

How do you intend to work with the J.E.C. and the other utilities, that is the gas company and the fuel consortiums, to implement efficiency savings?

Mr. J. Richardson:

The J.E.C. I think there is a ... from what we have discussed so far is a clear need to work with them at the highest level to recognise our overall consumption, our current tariff bands and then work up a new contract between the J.E.C. and ourselves, States of Jersey that is, for a corporate contract for electricity. I know from work that I have done with the J.E.C. in terms of negotiating the contract with the Energy from Waste plant, they are very keen to talk about optimising power and they are very open to those discussions, so I think that is one of the roles that we will be playing from a procurement point of view, to start those off fairly soon.

The Deputy of St. John:

Do you believe in displaying energy certificates and they should be mandatory in all public buildings as happens in the U.K. (United Kingdom)?

Mr. J. Richardson:

I think the concept is right but I think we are not at that stage until we have got our baseline data ready and we can start. What I have been saying already is understanding and managing your own consumption to be able to demonstrate what you are using.

The Deputy of St. Mary:

Could the D.E.C. (Display Energy Certificate) process be used as the kind of mechanism for making this happen if you were to say ... I do not know whether you can in the present dispensation to say to departments: "It will be good or it will happen that 6 months, a year, down the line you will have a display energy certificate in your front lobby and it will give consumption per head or per square metre" however it works. So at least you have got a timeline that they are working to and then they go: "Ah, yes, we have to have this certificate. We have got to get the data." Encouraging them.

Mr. J. Richardson:

I think it is one of the educational tools which makes them stop and think about their consumption and they should be encouraged to show some graphic detail of how they are managing it, hopefully managing it down.

The Deputy of St. John:

John, thank you. Can we ask now Paul to sit in the hot seat and answer some questions. Could you tell us, Paul, what is the role of the States Energy Manager in this review, please?

Mr. P. Garraghan:

To review and reduce energy consumption and, therefore, cost.

The Deputy of St. John:

What resources do you currently have at your disposal to carry out improvements in energy management?

Mr. P. Garraghan:

At the moment I go into a building, I will get called into a building, and then I advise the building occupiers of what measures to take on how to save energy. This is primarily based on mechanical and electrical equipment like pumps, motors, heating, ventilation, air conditioning, that type of thing.

The Deputy of St. John:

What major improvements have been achieved over the last few years since the establishment of your role?

Mr. P. Garraghan:

Major improvements; one of them was to reduce energy consumption in one of the schools which was a higher user, lots of other issues that had been highlighted to the various people that they are going to put in place when they are refurbishing various departments.

The Deputy of St. John:

What are the principal obstacles you have encountered in your time in office? You can be as frank as you like, I am sure it would be advantageous to Mr. Richardson to know these things because unless we know, we need a baseline to start from so at least if you can tell us what the problems have been we know where to start.

Mr. P. Garraghan:

Budgets, basically. A lot of people know what the problems are but they have said they have not got the budgets to rectify the problems.

The Connétable of St. Peter:

Just a supplementary on that one, please, Paul. It is always an easy thing to say: "Well, I have not got the money to do that so I am not going to bother." What sort of encouragement can you put into people?

What sort of initiatives can you - or education, in fact, to John's area - what sort of educational

initiatives can you promote to them to look beyond just the budget in last year's ...?

Mr. P. Garraghan:

Put the payback period to them saying: "If you cost £1,000 you are going to get your money back within 3 or 4 years" and show them the wear and tear on the equipment, what is going to reduce, it is going to prolong plant life and promote plant failure.

The Connétable of St. Peter:

Had you again ... just moving on from an initiative that John was thinking about in T.T.S., do you think there is any benefit in promoting the use of a fleece instead of ... and drop the energy down by 2 degrees; have you ever costed that out? What the payback time would be?

Mr. P. Garraghan:

No.

The Connétable of St. Peter:

Is that something that you think might be worth doing in putting that forward as an initiative before this coming winter season?

Mr. P. Garraghan:

We could do, yes. Who is going to choose the colours on the jumpers?

The Connétable of St. Peter:

It is a principle rather than the ... rather than looking for what colour and what name you have got to put on it. It is the principle just to promote across the whole States network.

Mr. P. Garraghan:

Yes, we could put some costs together for that.

The Connétable of St. Peter:

I think there are some figures out there, perhaps you guys know, that turning your energy down by one degree can make quite significant savings, is there not? So if you turn it down by 2 that could be quite significant improvement in departmental budgets.

Mr. P. Garraghan:

But it all depends on what energy you are using as well of how much you are going to save, and also one of the issues is the degree day data, which is published by the Met Office every year, so it shows how cold the air has been, how hot the air has been, et cetera, and I think that we have been doing some work where setting the actual usage of the energy compared to the degree day data ... so you actually get your base load of how much that building will cost on a certain amount of degree days. So I think, following on from that, if a certain building goes out of kilter with the degree days you see serious issues going on. But, as John was saying, it is a good baseline to start on.

The Connétable of St. Peter:

Are you monitoring that information? That all comes back to you in the centre, does it?

Mr. P. Garraghan:

I get the degree day data sent to me, and various buildings the energy data comes back to me, yes.

The Connétable of St. Peter:

That is only on the buildings that your department currently manages, not the whole States network?

Mr. P. Garraghan:

Not the whole States, no.

The Connétable of St. Peter:

You are limited on feedback then, are you not?

Mr. P. Garraghan:

It is just basically on the Property Holdings buildings that we are looking at at the moment.

Mr. J. Richardson:

If I can just add to that, I mean, one thing that has become apparent to me is that we seem to have some fairly modern energy management systems in some of our buildings, certainly in the newer buildings that have been constructed the last few years, but some of those, as I have said already, are not optimised probably and one of the pieces of work that Paul has identified to me so far is that if we can bring some of that data back in centrally into a central control system which Paul and his team could monitor, or Paul could monitor because he is a one man band, to include the opportunities there to maximise the efficiency we can, or certainly to make the departments who are the users more aware of what they are doing and then trying to get them to work on reducing their consumption.

The Connétable of St. Peter:

So, again, following on from all of those possible solutions, when are we going to start? I know we are going to start with budgets pretty soon but how do we start the education process and when do you start and who is going to start it?

Mr. P. Garraghan:

Regarding the education side I have ... the buildings that I have looked at I am in regular contact with them seeing how things are going, getting the data sent to me and I also get the data from the J.E.C. so we are getting data from the Met Office, data from the J.E.C. to get the profiles of the buildings, and seeing how the buildings compare.

The Deputy of St. Mary:

You mentioned buildings managed by Property Holdings, as if there were buildings within the States portfolio that are not managed by Property Holdings. Could you explain what that ...?

Mr. P. Garraghan:

Basically the Property Holdings one, I have spent a lot of time in Health and Education, but the things like harbours which I have not spent much time on, so I think harbours are now under the umbrella of Property Holdings but I have spent no time ... I have spent nothing down there at the moment.

The Deputy of St. Mary:

Are you saying that all the buildings that house States employees are within your remit but you have done some and not others?

Mr. P. Garraghan:

Yes.

The Deputy of St. Mary:

I just thought there might be some of them outside your ...

Mr. P. Garraghan:

Under T.T.S. I have done nothing at the actual pumping side of things. I have done nothing.

Mr. J. Richardson:

Can I just clarify just so that you are aware as a panel; the administration of all States ... all buildings within the States property portfolio belong to Property Holdings, all the land. The administration of some of those buildings because of their technical infrastructure nature has been left with certain departments. So examples Paul has just raised, harbours, because most of their consumption is based on heavy industrial power to run cranes and industrial plant, they administer through their own services that section. T.T.S. also administer their own industrial power consumption because they are the experts in managing the industrial side of it. So there is a divide here which you just need to be aware of. One is buildings which is clearly Property Holdings responsibility, which is why I have split my report into property and infrastructure, and all the infrastructure we need to address with individual use of departments.

The Deputy of St. John:

So you will have an overview as being the lead member, for want of a better word, on this particular issue?

Mr. J. Richardson:

Yes.

The Deputy of St. John:

Right, let us move on. Please give us an overview of the current discussions with the J.E.C. relating to the reviews of tariff.

Mr. P. Garraghan:

At the moment the J.E.C. ... well, basically, historically, if you had a new supply coming on to a building you went into the J.E.C. and said: "I have got this building" and they would advise you of the tariff. That has been going on since the J.E.C. has been supplying electricity. Until this point now there are certain tariffs that the J.E.C. have States buildings on that have never been reviewed; one of those being the standard rate, which I think is about 21 pence per unit which has never been reviewed because no one has ever looked at it. So, this has led on to the J.E.C. pulling a few of the ... taken out of mainstream publication these tariffs so they are ... there are small users on there but they are going to save us in the long run because the one that is 21 pence per unit is directly linked to the 1937 Electricity Law which, if you think, if you keep a tariff high it has a knock-on effect on what they can charge for the street lighting.

The Deputy of St. John:

This is getting back, I presume, you did mention earlier, John, that you will be taking these 14 different tariffs in hand and discussing them with the J.E.C.

Mr. J. Richardson:

Yes. The whole tariff arrangement I want to bring that into procurement and we will manage the tariff arrangement and the contract with the electricity company and all fuel companies for that matter, which we do now, centrally.

The Deputy of St. John:

Because I notice in your report you raised a couple of issues in there. There are some pretty big issues in there and, therefore, I am pleased you are on board on that. That is good. In one of your recommendations you state that the aim should be to work towards implementing a universal control package, a network, and encompassing all States buildings to provide information on energy usage, full

monitoring and correct operations, section 4.0 control installations; what are the practical implications of implementing this package? What level of investments would be required and what do you believe would be the financial return on the investment? Are you confident that this recommendation can be achieved?

Mr. P. Garraghan:

At the moment we have got a number of schools, which comes back to a P.C. (personal computer) in South Hill. But because technology has advanced the new range of controlled equipment cannot be read by the P.C. we have got up there, so this is just basically for educational buildings, and as technology moves on so does the software that runs these controls. Basically with all schools they have already got a network, the schools network, which link all the schools up. So if we look at ... start it with the I.T. (information technology) people, could we get a link taken up to South Hill or wherever in the States where we can connect all these P.C.s B.M.S. (Building Management System) systems together and then from that you will see how much electricity they are using, what time of the day they are using it, and start benchmarking schools against each other and seeing which schools are performing better than others and the worst performing ones where you go in and we find out what is going on.

The Deputy of St. John:

So it is down to funding?

Mr. P. Garraghan:

Yes and no. There is going to be a funding element. If we can get it on to the States network, which Education are looking at, or we have to run phone lines in, which then you would have your monthly phone bill from Telecom so where they are supplying the phone bill. So it is just in the infancy at the moment. So, there is going to be a level of investment, independent of what that is, is what payback is going to be.

The Deputy of St. John:

Out of interest, what is your current budget for yourself for doing your job?

Mr. P. Garraghan:

How much is in that glass? I do not have a budget. I advise the various departments of what needs to be done.

Mr. J. Richardson:

I think it is a very important point. There is no central energy budget across the States. Property Holdings has a team of building maintenance managers, a team of architects, and within the Architects Department there is the M.&E. (Mechanical & Electrical) Services section who do design work for new buildings and one person, which is Paul, the Energy Manager. That is the sum extent of what we have in the department in the States.

The Deputy of St. John:

It is totally new then?

Mr. J. Richardson:

You can see why my staffing point is fairly low level. You were asking the question about why we are starting at the very low level; it is simply that. We are starting off with a zero budget and a zero ... well, one person resource to build this energy audit. So we are looking at significant work to be done and we have to structure that in a way that will allow it to grow without a budget being identified to do this work.

The Deputy of St. John:

Your report makes it clear that the installation of power factor correction equipment is essential. What progress is being made in this regard?

Mr. P. Garraghan:

At the moment at Health, a prime example, are monitoring their supplies now into the General Hospital. They have got 5 incoming supplies so they are monitoring each one of those, and then as I have sent an email to all the big energy users that we get one manufacturer over to look at all the actual supplies we have got and do it all as one contract, because a lot of the installations on the Island is manufactured by one supplier anyway, so it would just be good that they know the equipment to go down that level of one contract to serve all the power to effect corrections.

The Deputy of St. John:

In the section on additional matters your report refers to a number of initiatives for reducing energy usage, e.g. scrutinising the design and installation of new buildings, better major maintenance alterations to buildings, service equipment and controls and work on formulating benchmark procedures for budgets to give more accurate energy usage patterns. This sounds like a very ambitious programme of activities; do you have the resources and capability to undertake this programme and, with this in mind, the programme requires reorganisation of existing manpower or investment in additional staff?

Mr. P. Garraghan:

Regarding the benchmarking, I have already made a start on that because we are getting the data in anyway. We are getting the electric invoices in, our fuel invoices in anyway, so that is undertaken, so as the year progresses it takes into account any variance in the price of fuel, and it will say at the end of the year that is how much money we need to spend. So as the months progress that margin will get lower and lower, so we can see by November how much money we will need to spend at the end of the year. Now, regarding the maintenance side of things, again that is the maintenance division that call us in as and when if they see a problem, if they are calling the design side, so we will go in and look at that.

The Connétable of St. Peter:

Just coming back to budgets, just looking at some of the notes I have got here in front of me while you have been talking as well, Paul, I am just slightly worried that perhaps we are talking about linking back data from the school back to the centre on a daily sort of read out basis. I am always reminded, which is quite fortuitous actually, that weighing yourself every day is not a good idea because you fluctuate on a daily basis; once a week is better to get a general trend. Are we not really looking at trends rather than live data? Would it not be suitable, for example, an easier way I would have thought to start off with getting a baseline is to perhaps get a monthly report back. If you really need to know the degree day consumption on a particular day, yes, it is going to be higher, we know that. I know I went out for dinner last night so I am going to be heavier this morning than I would have been yesterday morning. It is almost down to that level. Do we need that level to control an overall energy budget? Are we trying to look for too much detail rather than a higher level sort of overall picture?

Mr. J. Richardson:

Can I answer that because I think it ... Paul runs it from the technical side of it, I am looking at it from the overall management side of it. I think the answer to that is where we have got systems in place now in modern buildings, with modern energy management systems, and it is very simple linkage through existing networks, then that data will come back electronically and it is how you monitor and manipulate it, which is something that Paul or someone can do off a desk and make best use of it. It is where you have got buildings that have not got any of that information in, which is why I started off by saying get someone to go and read the meter each month, and then send that information in or manage it yourself to use your display energy certificate system of what you are doing in your building. In the long term, with

new office accommodation, yes, you would have modern energy management systems. But we have got 2 very distinct camps at the moment. One is new buildings with new systems that can be managed properly and probably efficiencies made on how the energy is utilised in those buildings and we have got a lot of old stock that has got very limited, if any, energy management systems in them.

The Deputy of St. John:

Any more questions? You are 2 minutes within your time and I would like to thank both of you for giving evidence this morning. Sorry, one more question from ...

The Deputy of St. Mary:

John, you mentioned there is significant work to be done and I am completely supportive of this whole area, as you know. I am going to come back to budget and money. For example, if there is a 3 or 5-year payback on a particular project then we seem to have a problem. Do you agree that it will be critical for the States to learn to invest to save as a strategic aim of the States management; if you like, managing the States?

Mr. J. Richardson:

I am not trying to avoid answering the question but it does come down to departments are responsible for their own energy consumption; they pay for their own energy use and I think it is a question that departments have got to address themselves. I would love to be able to say to you the answer to it is yes, but I cannot give you that as a definitive answer today purely because departments manage their energy bill, they pay their electricity, gas, water, heating, oil, et cetera, and they must take some responsibility for whether or not they want to put their investment in. If there was a central budget available for a global energy management review and investment for new systems and new controls, et cetera, then clearly we would do that as a team and we would look at that from the investment point of view to get the best return on it. But I am not in that position today and, at the moment with the business plan and the capital programme as it stands, I do not expect there to be so my line that I am taking at this stage is: "Do what we can with what we have got by working with departments" but my core focus is on the soft strategy because I believe that is where the biggest return will be. In getting an office strategy developed it will make significant returns on capital for the States in terms of disposing of old stock but it will also allow us to address this whole issue of energy consumption in a large number of buildings.

The Connétable of St. Peter:

It is a bit like the old adage, is it not: "How do you eat an elephant?" You know: "One bite at a time." I think it is the same thing. Change the light bulbs in this room it is a small difference but overall it is a start.

Mr. P. Garraghan:

Regarding the light bulbs in this room, the manufacture of these light bulbs are soon to become obsolete so you will not be able to get them anyway. They run at 230 volts and the average Island voltage is 240 volts so the life expectancy is reduced anyway so it is going to be a matter of time before they are all replaced with energy-efficient ones anyway without coming in and throwing a good light bulb out; we just wait for it to pack up.

The Connétable of St. Peter:

That is re-activity, though, rather than pro-activity.

The Deputy of St. John:

Anyway, I would like to thank you very much and we are all working to the same ends at the end of the day; we are all taxpayers. So, thank you for giving your time. We will now move on to the second

session, which is the Planning and Environment section.

Dr. L. Magris:

Excellent. Thank you, Chairman. Okay, well, what I would like to do this morning is to describe the role that our team and the Eco-Active initiative is playing in helping John to fulfil the overall corporate objective of reducing energy use. As you have heard already from John, we are tackling quite a specific part of that in looking at rolling out a behavioural management programme, you know, good accounts-keeping initiatives, really, that can contribute to the overall aim. I think it is important just to pick up on the points that have been made by the panel about small steps, really. It is true that what we are trying to do here is very much influence behaviour with a longer term aspiration for invest to save type measures. But it is worth reflecting that the Carbon Trust think that in most organisations you can make a 10 per cent reduction in energy use simply by behavioural changes. Given that we know the States of Jersey energy budget is about £5.6 million now, obviously some of that is for infrastructure and all the rest of it, but you would imagine that there is a significant saving that could be made corporately from small actions across a large organisation. I have got 2 bits of evidence which you have obviously received: one is describing how we got on at the Environment Department when we carried out an environmental audit and the experiences and learning from that, and the second piece of evidence that I have already given is a piece of work which is policy and development that we are working with the procurement team to roll out a demand management programme through the Eco-active scheme. If you are happy, I would like to go through the environmental audit and sort of what we learnt from that as a department and then go on to policy and development, if that is agreeable to you. I will whiz through the high level. In 2007, we employed a consultant to do an environmental audit of simply the Howard Davis Farm buildings and the reason for that was 2-fold: firstly to identify environmental improvements for the actual building and savings that we as a department could make but also, secondly, because at that time we were developing the Eco-active business programme and we knew that we would be rolling out a framework of environmental improvement to the private sector and obviously, as part of that learning and development process, we wanted to go through the sorts of things we were asking others to do. That was the reason for doing what we did and obviously the evidence that I have given has shown how we have fared against what we were set as challenges within that audit: what we have been able to achieve and what it has cost us to do that and what we have learnt from that.

Mr Richardson and Mr Garraghan leave

The Deputy of St. John:

Thank you very much for attending, gentlemen, on behalf of the panel committee. Thank you. Sorry about that.

Dr. L. Magris:

Okay, no problem. You have obviously seen the audit in the written evidence and I will not go through all the detail. I will leave you to pick up on the questions if you want but I think what is important to recognise is the sort of high level of what we learnt from that process. I think in particular 2 things stand out that very much reflect on John's evidence: firstly, Howard Davis Farm, although a wonderful, lovely building, is not well suited to office accommodation. There were limitations about the building in terms of some of the challenges that were set for us by the environmental audit. Secondly, our long-term position using that building is not necessarily assured. There is a wish to co-locate the department with Planning, and we have looked at various options, so it may be the environment division of the Planning and Environment Department is not at H.D.F. (Howard Davis Farm) for a long period, so there is an amount of investment that we probably would not make at this point because we may not be in the building for that much longer. However, that said, there are several things that were identified to us and that we could make progress on. I think, firstly, it is really important to say that carrying out the audit was a really useful process. Up until that point we have been managing our budgets, we have been

doing our thing, we have been attempting to behave responsibly, but we never stood back and looked at what we were up to and the audit provided a really good opportunity to do that and identify some responsibility within the department for looking at the energy use, the other environmental aspects of our operations and making some changes. I think it goes back to the point we were making and that John made: each department will be very different and it is the people on the ground that have an idea of what is going on and where improvements can be made, so it was a very important stop gap, I think, to carry out the audit. What was immediately difficult for us, I think, was to get the baseline data; similar to the point that Deputy Wimberley raised. We needed to have that baseline information and although we could get it from our accounting systems it was not particularly straight forward and it did take a bit of looking and a bit of piecing together of information. It was there but it was not necessarily straightforward to hand, which I think is a barrier for people when they are coming into this as a secondary issue to their core job. However, that said, we got as much information as we could at the time and we have elaborated that in the evidence that we have given in the written form. What it has allowed us to do is know pretty much our baseline and, therefore, report and monitor against improvements as a result of the behavioural changes and some of the other changes that we made as a result of the audit. We were charged within the audit, they were potentially told that we could maybe save up to £8,000 per annum with perhaps an investment of £600 to £1,000 for the work that needed doing. How did we compare against that challenge? We reduced expenditure over our energy use, water and transport use of £6,800. There was an additional £700 that was avoided expenditure as a result of using recycled office equipment from Fort Regent for our office refurbishments so, you know, nearly £7,000, perhaps you could say £7,500, we have saved and we expended £2,400 to do that and we had to raid our buildings maintenance budget to do that which left very little money for anything else. Going back to the point again about is there seed funding to save, the situation is generally not, so we used our buildings maintenance budget for that. The vast majority of that was spent in our reception area which had halogen spot lighting, very badly organised, bad for the people who work in that area, so we rewired that area, reconfigured the lighting, put in low energy spot lighting and that has made a significant change. Not only that, though; I certainly do not want to mislead you. One of the other things we did as part of the audit was re-configure our office space. The very fact of someone going around and having a look at what we were up to made it clear that we were not using the office space that we did have most effectively. We were able to rationalise that office space, close off one of our external office blocks which was very thermally inefficient, bring those people into the department, close off that block completely and thus make savings around that. Obviously that is not something open to everybody but it was something we were able to do. Also, there was some rationalising of some of our research activity. As a department, you can imagine we have laboratories, we have soil sampling kits, we have transport energy use. You know, there are lots of things that we do as a department and one of those was have a research and development function which meant that we had some green houses that were commissioned. That came to an end at the end of 2007 so that infrastructure was decommissioned so, of course, there will be a one-off electricity saving or energy saving by decommissioning that infrastructure. That was a one-off saving that I cannot possibly attribute to anybody turning off the lights. You know, that was a step change in business operations and, you know, we are not claiming a saving there because clearly it was a one-off action that arose from something else. I think certainly what we learnt is that you certainly can make significant savings, if you like, by increasing awareness, putting a monitoring programme in place and raising expectations among staff members that they should be doing their bit. I mean, it was quite interesting that simply by putting up: "Turn off the light" stickers next to the lights, people turn off the lights. You know, it is really quite basic stuff and I am not suggesting that that is going to save the world but, certainly, cumulatively across the whole of the States behavioural changes will definitely make a substantial difference and, we hear from the carbon trust, maybe up to 10 per cent energy savings. It was well worth doing, I believe, and it certainly changed department culture.

The Deputy of St. John:

Permanently?

Dr. L. Magris:

I think so. I think it requires topping up because everyone becomes blind to the sign that says: "Turn off your computer, turn off your lights." Everyone gets bored of hearing the same message. You can do really clever stuff as well: you can have energy monitors that go round and check that computers are being turned off at night and you can name and shame people, perhaps, if they do not or you could put little chocolates on their desk if they do; that tends to work. There are some neat little things that you can do to engender behaviour change, but the point that you made when you were questioning John is well made in that that does require someone to take that responsibility on and we have had to look within our existing resources to make that happen, and our office manager did a brilliant job in leading on this programme and we all work together to support her in doing that. But it is something that she has to do in addition to her many other tasks and, you know, that must not be forgotten because this does require investment in time as well as money. That sort of is the generic of the report. I do not know if you prefer to ask questions about anything in particular within it if you would like? Yes. I am seeing nods.

The Deputy of St. Mary:

Yes. I am raring to go. We start with your wonderful savings of £6,800 on a cost of £2,400 which sounds wonderful and then you tell us very honestly that you closed an inefficient block, you decommissioned some equipment that will never happen again. In fact, the figures are telling a different story, you know, the real story is slightly different that then there might be a saving of less than £2,400 on a year on year on year. That is the background to the question and then we have the cost of this person who has put some time into all of this, which is fair enough. Where I am going is it is quite likely that the saving in the first year did not cover the cost of the first year but it would in future. I just put that to you and you know ask you to comment on that.

Dr. L. Magris:

Yes. Absolutely, I am glad you picked up on that. Sure. I am glad you picked up on that point because I do not want to pretend that we saved £6,800 purely from being terribly good because that is not the case; you quite rightly pick up on the business changes that have occurred. The difficulty for us is it was not possible to disentangle that which was made from the buildings so, again, there was just no way to do that, unfortunately. You are right; in the first year it could be that we did not make those savings so we had to, in this instance, raid our buildings maintenance budget to make that investment and put the time aside and that may well have had a longer term payback. At the moment, our accounting processes do not really allow for that invest to save and I think that is a very important point that has been picked up several times this morning. From a departmental experience perspective, you know, we had to be careful about how we did this. We probably could have done some more rewiring, we could have done some further things but we had spent our maintenance budget; that was the end of that.

The Connétable of St. Peter:

That is very good. You have achieved, certainly, a very good result there to Howard Davis Farm. How do you see that being rolled out across the other properties and how do you inter-relate; how do you taper in with the work of Property Services? Is there an opportunity there and has that been explored?

Dr. L. Magris:

All right. Absolutely. That is the next piece of evidence I would like to give which is about the Eco-active programme that we would like to roll across the whole of the States of Jersey. That is the policy and development that I have given evidence on. Would you like me to go through that now or would you like to pick up more specifically on anything else from the audit report?

The Deputy of St. John:

I think we should finish the audit report first.

The Deputy of St. Mary:

I am not sure if it was covered in the audit report: transport to and from work. I have not got my copy in front of me, I cannot remember if I read it. Yes, transport to and from work: was it part of the audit to quantify the amount that transport contributes to the energy budget as a proportion of the whole?

Dr. L. Magris:

We excluded people coming to and from work. That was a decision that was made because that is not something that the departmental budget was attributed to. That is not to say that how people come backwards and forwards to work is not important because clearly it is, but obviously it is a personal issue for members of staff on how they make that choice to come to work. Going on from that, clearly we would want to encourage people to come to work in the most sustainable fashion possible. When we moved into the building back in 2005 we installed showers, again out of the buildings maintenance budget, so that people who cycle to work can get showered at work, get changed and then clock in for the day and, you know, are clean and tidy to continue the day. Another initiative that is in place is the States of Jersey car pooling website which is a piece of software that is available to States of Jersey employees to buddy up and car share; people making similar journeys. To address people coming to and from work, we certainly encourage people to come in the most sustainable fashion. We encouraged them to car share where possible but we did not quantify that for the audit because what we were looking at was the States of Jersey financial savings as opposed to the savings of the people who may or may not be driving to work or coming by bus or whatever they might be doing.

The Deputy of St. Mary:

Effectively one for later, although you did take it as a serious issue because you used some of your maintenance budget to put in showers.

Dr. L. Magris:

Absolutely. We take it very, very seriously.

The Deputy of St. Mary:

Yes, as your department would, in a sense. But there are issues there again because a shower block is money that is down the drain.

Dr. L. Magris:

Quite literally, yes.

The Deputy of St. Mary:

But in the other sense, in a wider sense, and I am just looking for ways that we can account for these things, and I am not clear that we have got a way of accounting for these things.

Dr. L. Magris:

I think your point is well made. I mean, similarly, we have an electric moped that we purchased a couple of years ago and the idea behind the electric moped was to whiz backwards and forwards to meetings into town because, again, for us being remote from the centre, those of us who have lots of meetings in town clock up a fair bit of mileage going backwards and forwards. You know, there is no way out of that unless you happen to coincide with a bus coming backwards and forwards and often that is not the case. The moped is used not as extensively as we would like; I think people find it quite difficult to get to grips with so we keep trying with it but it requires a little bit more familiarisation to get staff on board to use it. Important issues and, like I say, we continue to encourage people to think about

what they are doing and look to alternatives.

The Deputy of St. John:

I note, going on to your scooter familiarisation course that you planned for 2009, what kind of take up? You say there is not a great deal of take up, but if you have only got the one scooter ...

Dr. L. Magris:

Then we are in trouble, are we not?

The Deputy of St. John:

Yes, you are in trouble because, you know, you are putting people on a course and you have only got one piece of equipment. To me it does not seem logical.

Mr. A. Scate (Chief Executive Officer, Planning and Environment):

Can I say, from a departmental side, I think a number of the issues that have been raised centre around investment into changing behaviour. Certainly, the department is coming from a perception of reducing the amount of resources we need from 2 perspectives: certainly the evidence from John is really around cost and the cost to the States of using all of these resources. That is certainly important to us as a department because we ultimately also need to reduce our budgets and become more cost effective. However, we are also reducing resources because of the environmental gains, reduction in carbon and other things, so I guess from a P. and E. (Planning and Environment) perspective we have probably got 2 drivers for this behaviour which is sometimes why we have invested in the showers and other things because there are wider benefits. But the single scooter, I think, is pretty symptomatic of the whole issue as to we would like to have a fleet of 10 scooters or we would like to have a fleet of 5 electric vehicles but it is incentivising that investment up front to enable us to put in place the infrastructure that we will then pay back over a 5 or 10-year period. Some of the payback times on some of these technologies, and certainly the work that Louise has just outlined, on the face of it is very simple stuff, what we have done up at Howard Davis Farm, and it shows pretty much a 3 times payback. If you extrapolate that against other States departments you would expect a sort of similar payback. Could there be more up at the farm we could do or within the department? Yes; there could. We could invest a lot more into more energy-efficient technologies: computers or electric vehicles or whatever we can. It is getting that funding for initially that we can borrow from that will incentivise our behaviour and I think the funding mechanism for that is the critical issue; that we need a loan, in effect. I do not think it should be seen as a pot of money which just disappears every year but as a pot of money that we can loan from. As we then incur the savings from those investments, some of that money is paid back into the pot which then re-incentivises it for future years but then some is kept within the department to incentivise that behaviour so the department gets something for doing it and the pot gets paid back over a period of 5 years so it is continually replenished. Once that pot is set up, it should become a self-funding incentive fund, if you like, and that is possibly one area that the States as a whole does need to do a bit more work on because I know that the P. and E. budget has very limited funds to do anything, frankly, in terms of new capital investment. We have next to nothing and I would have thought that would be very similar to most other departments.

The Deputy of St. Mary:

What you have just said I would agree with. How can you see this happening with the present system as outlined by John that it is all departmentalised? So I suppose the question is a little bit cheeky, but will this be coming up at C.M.B.(Corporate Management Board) and will you be, you know, pushing the case for a system that is going to deliver? Because if it is down to departmental budgets that means every department has to agree, there has to be a system every department can use, and then you are going to buy one more electric scooter. What you need is a pool of 10 where you will say: "I am running a course, I need another one up here, please bring it."

Mr. A. Scate:

I think what John outlined ... and I would certainly agree in terms of making sure that the first step we need to take is make sure the departments are far more aware of what they are doing, know where they can save and I think that is the first hurdle we need to get over to break the cycle of thinking: "This is just free energy. We turn the light on in the morning and if we do not turn it off at night, so what, you know, the States picks up the bill" sort of mentality. We need to break that cycle. One you have got that mentality higher up on the people's agendas and departmental agendas I think you can then get an investment vehicle in place to start incentivising additional investment on even further technologies which make greater paybacks. But I think that what John has outlined is correct: we need the first couple of steps to be done first.

The Deputy of St. John:

But surely the first step must come from government where they put funding in place to make something happen, not put a policy in place with no funding to make it happen.

Mr. A. Scate:

Certainly, the answer at C.M.B., certainly, would I be leading the environmental line at C.M.B.? Absolutely, yes. I think it is incumbent on the P. and E. (Planning and Environment) Department to go to C.M.B. to talk to other departments about not only the environmental gains that we need to meet and are under our international obligations, but also this makes just good financial sense. Realistically, that is what is going to sell it to most people because, you know, as in all communities there will be a percentage of people who are convinced about the environmental arguments. Those who are not convinced, frankly, there is a big chunk of people in the middle who are very apathetic but they will do it if they can see an improvement to the bottom line. I think whilst we are taking a more global perspective and a financial perspective most other departments I think probably will take a financial perspective, and if they can be incentivised to save money I think they would all do it, frankly. I think it is just a matter of creating that loan fund in the first place and whether that comes from States reserves of some kind, because if the money gets paid back the money does not come out of the fund then. Obviously money comes out, money gets paid back, but the loan fund as a whole stays as it is and maybe we need to just be a bit more creative as to how we use some of our reserves to incentivise behaviour.

The Connétable of St. Peter:

Can I just ask a quick question? Does your staff, when they work off site as they do at the moment, will they still get a travel allowance; a pence per mile?

Mr. A. Scate:

They do. Yes. It is the same.

The Connétable of St. Peter:

Are we not still then paying somebody to use their own vehicle instead of using the electric bike?

Dr. L. Magris:

If that were the case, yes, I would agree with you. We have a pool of work cars, some are duty cars so, for example, pollution response vehicles with all the kit in and what not. Last year we pooled those cars to reduce the number of vehicles in that pool and that has left people in a position where they are having to use their cars and they would have to take mileage for that or jump on the electric scooter which is part of the pooled mileage. I do not think I know of anybody that would use their own car for the mileage reclaim, although it is a relatively generous recompense I would agree, but I do not know of anyone who does that, you know, for profit. I think it is just that if there is not a pool vehicle available

they will go to a job in their own.

The Connétable of St. Peter:

But my point about funding is that, you know, it could almost be self funding to buy another scooter. If, for example, a scooter is being left out there or somebody going: “Well, I do not like using it, I will use my own car and claim for it”, well, hang on, you are not going to get anyone using your car because the scooter was available; therefore, I have made a saving on my departmental budget there because that saving carries on. Then, with that saving, you may be able to go and buy a second scooter.

Mr. A. Scate:

I agree. I think the mileage rates at the current time are about 67 pence a mile for a reimbursement.

The Deputy of St. John:

How many miles did the scooter do last year?

Dr. L. Magris:

To be honest, I could not tell you but it would not be thousands, I can assure you of that.

Mr. A. Scate:

I think the main problem we have with the scooter is people’s safety and they feel if they are not used to riding bikes or motor bikes or a scooter, people do not feel safe. I think that is one of the bigger issues, which is why the familiarisation and safety course has to be run but ...

Dr. L. Magris:

Sorry, I am leaping in now. I think as well, you are quite right to focus on the scooter because it is an interesting case study. I think bearing in mind that all our departmental vehicles that are not duty vehicles that do not have to have a pollution kit in, let us say they are all ... bar 2, I think, the Micro cars, the little tiny ones. They are 109 grams of carbon dioxide per kilometre so, you know, they are relatively fuel-efficient in terms of what is available on the market.

The Deputy of St. John:

Can you give me that in miles, please?

Dr. L. Magris:

I cannot tell you in miles.

Mr. A. Scate:

We reduced our vehicle fleet by about a third at the end of last year, so what Louise is saying around our pool fleet, we have a number of vehicles that we allow people to go and use because it is more cost effective for them to do that than pay them 67 pence a mile because actually the true cost of mileage is probably about 5 to 6 pence a mile plus maintenance. The AA will give you a figure of probably about 10 pence a mile in total but we are paying 67 pence a mile at the moment so that does not incentivise travel by another mode of travel. There is a 57 pence profit in every mile that currently happens.

Dr. L. Magris:

Sorry, just to jump in, although, to be fair, it is departmental policy to use a pool vehicle car. You know, you are very much supposed to go and find a vehicle that is appropriate for the use you require and then only use your own car as a last resort. The reality is that often pool cars are not available when people need to jump in and zoom out so there will always be some mileage at the moment that is claimed from people; as Andy says, quite generously, I guess.

Mr. A. Scate:

Again, around behaviours, if I look at the planning and building side of the department what we did there we removed 10 pool vehicles last year which on the face of it was a big shock, big change, reducing our vehicle fleet there by a substantial amount. What we have done then is made sure that planning and building officers change their behaviours. Building officers tend to visit sites in the morning, planning officers, we have told them to visit sites in the afternoon. They can share the same vehicles, but invariably they are just making better use of the vehicles that we have so that is a management issue about how we use our resources. Also when we are travelling certainly for people from South Hill coming up to the Howard Davis Farm: "Let us share a car", for God's sake: "Let us all get in one car where 4 people can get into it rather than ...", simple behaviour changes like that. There is something around, firstly, the reduced manage/invest sort of hierarchy that we are sort of pursuing really is about reducing our resource use: "Let us walk. If we are coming to a meeting in town, let us walk, let us cycle", that sort of thing. Can we manage our fleets or manage our resources more effectively? Yes, we can. So there are behaviour changes and Eco-active is a big player to that. We would like to roll out across all States departments so that all States departments get Eco-active accreditation through Eco-active business and that behaviour starts driving some of their operational decisions. I can describe that further, I think, than any seasoned financial benefits but that is fine because that will come. Only once you have done those 2 then we need to invest in further things, so you can make some quite significant gains doing the first and just to reduce managed stuff, which is where I think John is initially coming from. Because, frankly, the invest pot is not that big at the moment but, you know, over the next 2 to 3 years if we all changed our behaviours more effectively we could make substantial changes: 20, 30 per cent reductions, I am sure, on our travel and resource take because of that.

The Deputy of St. John:

On your travel take-up, shall we say, between departments and meetings, if you have got 4 people going to your department up at Trinity, for instance, it is fine if you are all in the same meeting, but if they are at different meetings you do not need dead time for staff who we are paying good wages to hang around waiting for somebody who could bring him back into town. Particularly if it was a rainy day, they are not going to want to be using your scooter to come back into town. You know, bring it one way and how does it get back the other way? To me your scooter policy alone - it is good and I am a scooter user - it is only good on a fine day; you do not want to be on one of those and your staff will not want to be using it on a wet day.

Dr. L. Magris:

Yes. I think your point is very well made.

The Deputy of St. John:

But we have to move so let us carry on, shall we, otherwise we are going to get bogged down in a certain area. John?

The Connétable of St. Peter:

No, I have got nothing else, I just want to come back later on.

The Deputy of St. Mary:

It just occurred to me the States magazine, if you are talking about rolling out this kind of approach, this kind of attitude to other departments, I just wondered whether you could fit that into your schedule, if there is any of you and, you know, comment on that in the States magazine and the use of it and, "Drip, drip" or ...

Dr. L. Magris:

Absolutely. That picks up perfectly on the Eco-active States initiative, so shall I go through that and pick up on that point as we go through? As you have heard, we have learnt quite a lot from having a go at doing this ourselves and the Eco-active business scheme was put together. That, I am sure you are aware, is an environmental accreditation scheme for business and organisations to identify their environmental impacts and make environmental improvement. There are plenty of companies in the private sector that are already accredited to the scheme and a couple of States departments just at departmental/division level. We believe that in order to assist John with the corporate initiative and the corporate savings we can use the Eco-active business framework to assist departments to identify their environmental impacts and improve upon them and, particularly, support that through behaviour change and the Eco-active initiative. What we have proposed in the second document that I have submitted in evidence was this programme which at the moment is policy and development so any feedback is obviously gratefully received. We have put this together within the environment department using the Eco-active initiative, but we have worked with the Procurement Group on that and at the moment this piece of information is out with the Procurement Lead Group which consists of procurement representatives from across all of the States of Jersey. We said to them, you know: "We are thinking about doing this. How do you think you can roll this into your department? Is our approach successful, or would it be successful for you?" and they are feeding back to us. This policy will develop but essentially it is a very clear-phased action plan, if you like, for engendering better behaviour and housekeeping throughout the States. Phase one is a very simple programme: "No Excuses" we are calling it, and this is about small behavioural changes; the sorts of things that we have been discussing this morning: "Turn off the lights, make sure your computers are turned off overnight", you know, all those sorts of very simple things that we know, cumulatively, can make a big difference and we look to support that by initiating baseline audits of all departments. As we have heard this morning, it is very difficult sometimes for a department to know exactly (a) who is responsible for taking care of these matters within the department and for getting that information, but what we are proposing is that each department would appoint someone as a green team eco champion, whatever you want to call them, that would take responsibility for getting the information together and getting a baseline, just like we did at the farm. We were able to do that within existing timescales and then, you know, it perhaps took a little longer than we had hoped but you can absorb that within departmental costs, I believe. Obviously, you get an idea of where your department is and then work out what is appropriate and what are appropriate areas of improvement within each department or division or building or whatever unit makes sense for the particular initiative. The idea would be that we have rolled out this first phase which is about increasing environmentally responsible behaviour through departmental changes supported by champions and having monitored information so that we could see where improvements have been made. That is the phase one. The second phase we are calling: "Greener Steps."

The Deputy of St. John:

Could you summarise your presentation and your phasing in and such because we have got a number of questions and time is running out.

Dr. L. Magris:

Okay. I can whiz through it very quickly; 2 or 3 more minutes. Phase 2, we move on to requiring a little bit more effort from the departments; not quite: "No excuses" but things that departments should certainly be doing: making sure they are using duplex paper, all these sorts of things, printing on paper, potentially looking at things like installing showers where possible from within existing budgets. Phase 3, moving on to the Eco-active business registration and then accreditation. Moving a department into the framework that other organisations are already successfully utilising and identifying and improving, through action plans, what they personally can do to reduce their environmental impact. What we are presenting here is a programme that we are developing and hope to roll out to all States departments to change behaviour, change attitudes, monitor progress and thus make environmental gain as well as obviously financial savings for the organisation as well. That is it in a nut shell; it is probably easier if

we go into questions if you are happy to do that.

The Deputy of St. John:

Okay. Thank you. Please clarify the statement in paragraph 2, page 1, about the target for carbon emissions. Do you mean the reduction of 80 per cent of 1990 levels or a reduction to 80 per cent of the 1990 levels?

Dr. L. Magris:

We will be proposing in the end of year policy White Paper that will be coming forward a target in line with the E.U. (European Union) new target which will be that year, by 2050, a reduction of 80 per cent of carbon emissions compared to a 1990 baseline, and that is consistent with what the E.U. have signed up for. Previously it was 60 per cent and now it is 80 per cent and we will be proposing that in the new end year White Paper.

The Connétable of St. Peter:

That is a reduction of 20 per cent, then?

Dr. L. Magris:

20 per cent compared to what was previously proposed. Sorry, I understand. Yes, it was 60 that the E.U. had signed up to it and now they are saying 80 per cent to keep us on line for keeping carbon levels in line with what the scientists accept is important for global warming.

The Deputy of St. Mary:

Can I ask on a detail, it is a very important detail; will there be an intermediate target for 2020? Mind you, it had to be front loaded. I just wonder whether that is in ...

Dr. L. Magris:

Absolutely. But you will see that in the White Paper coming forward. That is exactly correct. If you put it into the distance it becomes something that is not tangible. We definitely would have milestones along the way: we would have a target for 2020 and in order to meet our 2020 target - which I am afraid I cannot pluck out off the top of my head - but it does mean that we would have to implement demand management that would mean that all sectors will have to reduce their energy use by 20 per cent so that is what gets us to the interim target.

The Deputy of St. John:

Okay. All right. What have been the significant achievements of this scheme to date?

Dr. L. Magris:

The Eco-active business scheme? We have been very, very pleased. We have 45 organisations signed up, 5 of which are at level 3 status. Level 3 status is equal to ISO 14001 which is the internationally accredited environmental management system level, so very, very challenging environmental performance management and improvement, so that is what the private sector are up to. Many other organisations, both large and small, are either registered on the scheme or accredited members on the scheme. They are showing us that they are out there doing it and what we are painfully aware of in the States of Jersey is although, you know, we wish to be matching what other organisations are doing, we are not there yet and this is an important route to make us match up with what is happening out there in the wider community. The corporate social responsibility requirements of a lot of the international corporations that are signed up to our programme fit perfectly with the Eco-active accreditation scheme and the States of Jersey, you know, perhaps unkindly I could say are lagging behind in that and we need to be catching up quickly.

The Deputy of St. John:

All right. What evidence is available to show significant savings by private firms? How many businesses have signed up to the scheme and what obstacles have been encountered by the businesses?

Dr. L. Magris:

Okay. The way the scheme works is that the organisation or business will take an audit themselves so they will do what we have done: sort out their baseline and then they will identify an action plan for improvement and within that action plan they have to set targets for their reductions that they think are achievable and manageable for them. Then they report back yearly on those themselves, and we can spot check and identify if they are being successful in that or not. It is mainly a self-verification scheme. We are a small team and, you know, our resources are limited in what we can do but, you know, we ask for the information, people are very forthcoming in telling us about their successes and we can spot check to ensure that they are doing that. I think that there is significant progress in the first year of the scheme, I would say, and I am very happy to see a lot of very large organisations making significant environmental improvements. As I said before, there are about 45 businesses signed up and they are dripping in slowly all the time so I know that that number is constantly rising. The third part of your question was about obstacles. I guess the obstacles that everyone has to this sort of thing is that often it is not people's core business. You know, everyone is worried, particularly if it is an economically difficult time, people are worried about running their businesses and they are perhaps not putting the environment at the heart of their organisation, and what we have done with the Eco-active business scheme is say: "Look, good environmental management is good business sense. You will save money and you will lessen your environmental impact and you will be certain to be complying with all environmental legislation" because part of the scheme is about companies carrying out an audit and ensuring that they are complying with all environmental legislation and they have to show to us that they are doing that before they are accepted on the scheme. You know, for them to go through that audit process, I guess, is slightly timely and I think if that is an obstacle to people that is probably where I think people are meeting challenges. But as a team, we go out and we help people through it and we speak to them on the phone and you know officers are there to assist. We are slowly getting through that, I think.

The Deputy of St. John:

Did I pick up earlier on that you said the States departments were slow in participating in the scheme and if so what is the reason?

Dr. L. Magris:

I think the same reason that the private sector have been slow. I mean, as a department we have signed up to the scheme and it has taken some resource and some time to go out and get that monitoring baseline. We have got about 4 other departments who are working towards becoming signed up but it is not their core business and, you know, people are distracted by the many, many other pressures on their time, which is I think why it is important, if we are to be successful in this programme and helping John's team to achieve the overall corporate savings, is that we do get a strong lead from C.M.B. to enable people to put this on their agenda and to take the time to perhaps carry out monitoring or whatever it might be; not in themselves huge tasks but it does need to be taken on board.

The Deputy of St. Mary:

Can I ask just quickly, you say that basically private business is quicker on this than the States. Maybe you have been marketing to them or, you know, whatever. Do you have any feedback on how they see this issue of: "Spend now save later" because in a normal business model you borrow and then you save, you know, and then you get your money back, so they would not, you know ... would you like to comment on that?

Dr. L. Magris:

Yes. I think the difference for them often is that their capital budgets and their operational budgets are not as separate as they are in the States of Jersey so they can make a saving and reap benefits back over several years by building it into their revenue budgets. The States of Jersey works by a system whereby you have your allocated budget for the year and then at the end of that year that budget is finished and you move on to the next year. If you make a capital investment and you make a saving through revenue, you are not counting that backwards, you are not saving that and making that benefit over the repayments years, if you like. That is the difficulty for us whereas I think in the private sector obviously they can make investment decisions very differently.

Mr. A. Scate:

I think there is just a change of mindset between public and private sector. Private sector are far more used to levying funds up front to do something and see the payback over a period of time rather than public sector pretty much operates on a year-by-year basis.

The Connétable of St. Peter:

That is where G.A.A.P. (generally agreed accounting principles) accounting is going to improve it, is it not, because you will be writing off your assets to make provisions over the life of that asset and that there you will see a beneficial change when you look at that: "Okay, percentage savings." Could I just pick up something from your report? It was the figures in your report which trouble me slightly. You are talking about the amount of oil over 2007/2008 and you are saying that the figures, the actual cost per head, the figures suggest a 33 per cent increase. It is not double and yet the actual figures have almost doubled.

Dr. L. Magris:

Sorry. Are we looking at page 3 of the report? Yes. That was the oil price rises; massive oil price rise.

The Connétable of St. Peter:

Yes. They went up by about a third, did they not, not doubled?

Dr. L. Magris:

It will be the price that we paid on delivery each time. If we were unlucky and we happened to purchase 3 tankers full and those were all very, very high, you know, they came in at a spot price that was high that is why it will be so much more. I can certainly go back and check that for you and provide further evidence if you like. I mean, what we did to get this information is take out of our accounting system the amount of money we spent on oil in 2007 and in 2008 and benchmarked it back, so that will be it. So I suspect what probably happened is that the actual weeks that we purchased were exceptionally high and so it has meant that our price per head has increased.

The Connétable of St. Peter:

Just moving on from that one, also in here there is a note that: "There is a 2,000 litre increase in oil usage over the 2006 figure" so in actual litres used, ignoring the cost per head, we are seeing a greater consumption of oil not a reduction in oil usage.

Dr. L. Magris:

Sorry, I am not with you. I am looking at the 2007 figure which ...

The Deputy of St. Mary:

Yes. 3.1, oil usage. If you look at 2006 it is 7,600 litres on the fourth line and then it goes up to 9,600 on the ...

Mr. A. Scate:

I think those figures come off the original audit report I think rather than ...

Dr. L. Magris:

Am I comparing 2007 and 2008? Sorry, I am misinterpreting what you are saying. You are looking at this graph here, the original audit report. In 2006 we used 7,000 litres and then in 2007 we dropped right down, is that what you are referring to? That will be because of the research and development function that the department was carrying out and we ran greenhouses during that period.

The Deputy of St. John:

So the litres were going up into a greenhouse and ...?

Dr. L. Magris:

Yes. Then, of course, because we changed that function within the years and then between the 2007 and 2008 we completely decommissioned one of the research functions so I suspect that is where that has come from. I can certainly check for you but it will be more of a business thing rather than heating the department because it would be very strange that we were almost a whole tanker-load difference.

The Deputy of St. John:

Can I fit a question in on that in purchasing your oils? If this was done centrally you would actually possibly do good housekeeping. If it was at home you would say: "The price of oil is up this week; therefore, I will wait maybe 2 or 3 weeks and hopefully there will be a downturn." When it is done through a department somebody just picks up the phone and they do not bother taking that step.

The Connétable of St. Peter:

If the J.E.C. forward buys their oil for their generation is there any reason why the States cannot forward buy their oil on an annual basis and you draw down oil as you buy it on an existing price per litre?

Mr. A. Scate:

Yes. That is absolutely sensible.

The Deputy of St. John:

Getting on to there, of course, they should be buying all their fuels annually in advance. Because at the end of the day, the price that the States of Jersey pay for their fuel is the price that basically controls the price of fuel for everyone else in the Island because they are benchmarks and then the fuel companies from there on, for the lesser users, start pushing the price up. So there is an advantage both for the Island and for the States.

Mr. A. Scate:

Certainly, we are very supportive of, you know, John's move to centralise some of the procurement around our energy because it just makes absolute sense to do that.

Dr. L. Magris:

Yes. As you have seen, government use 9 per cent of all of the Island's energy. You know, that makes us a significant customer, does it not, and we surely should be able to use that to our advantage, I would suggest.

The Deputy of St. John:

Did you say 9 per cent?

Dr. L. Magris:

Yes.

The Deputy of St. John:

We are going to have to move on because we have got an awful lot to go through yet. Paragraph 3 says: "The first critical steps to be established as baseline in the audit should be carried out professionally as in Howard Davis Farm case study." What was the average cost, please?

Dr. L. Magris:

The cost of the audit for our department was £2,500 so it was not cheap. We tendered for that and we had 2 tenders for the audit and both of them were about the same price. Potentially, if one were to continue to do it that way, that would be an expensive way of doing it. However, if the States of Jersey was to pick this up as a corporate initiative one would imagine that there would be savings that could be made, we could perhaps skill-up in-house to be able to do that. So I think we need to think very much about how we would roll something like that out more successfully. Obviously, in the first instance, we would look at doing what we could in-house by looking properly at electricity bills, water usage; all of those sorts of things. But in the longer term, if we were to go to a full-on environmental audit for the whole of the States, I have no doubt that the cost of that would pay back over time but we would have to look at how we did that to ensure best value.

The Deputy of St. John:

Okay. Section 3.1 mentions training co-ordinated by the Environment Department. What are the cost manpower implications for the Environment Department in delivering this training, please?

Dr. L. Magris:

Part of the remit of my team is environmental awareness and we have a small resource for that. We have a three-quarters time officer and we would intend to cover that as part of our normal mandate to roll that training out. Obviously there would be a cost of people attending that training course. Again, what we are talking about here is very high level simple stuff. It is about sharing our experiences with people. You know, we are not training them to become environmental auditors; we are training them in implementing this scheme to their department. It would be very high level, kept as simple as possible but it would have to come from within existing resources because we do not have a budget for this programme currently.

The Deputy of St. John:

Section 3.1 states that not all the States departments are metered. Should the installation of meters be recommended in all States departments?

Dr. L. Magris:

I think they should be definitely. You know, it is very difficult when we did this work and we did it with Eco-active accreditation for the Planning Department, because obviously the Planning Department share the building with T.T.S. It is very, very difficult to disentangle who is using what energy and where.

Mr. A. Scate:

It is very hard to make any management decisions without that management ...

Dr. L. Magris:

Yes. You cannot do it.

The Deputy of St. John:

Be careful we do not talk over each other, please, because it is on tape. What information is available to

enable the States departments to benchmark the performance of their building against standards elsewhere?

Dr. L. Magris:

At the moment, the U.K. publish those figures and we would probably have to do some work to make sure that they were appropriate for Jersey, but the U.K. does publish government figures on environmental performance and energy use and things like that.

The Deputy of St. John:

The E.U. Energy Performance on Buildings Directive gives clear guidelines and targets for reducing energy usage and carbon emissions. To what extent are the States compliant with standards set out in this directive?

Dr. L. Magris:

I think at the moment it is very difficult to say because we genuinely do not know how buildings are performing.

The Deputy of St. John:

Okay. Do you believe that displaying energy certificates should be mandatory on all public buildings, as happens in the U.K.?

Dr. L. Magris:

I think in the longer term, yes. I think at the moment it would be very difficult because of all the difficulties we know are there and we have talked about this morning. But I think you are quite right; it is a way forward and, not only that, it would obviously be interesting perhaps as part of the States key performance indicators to examine how we are doing year on year.

The Deputy of St. John:

Any other questions?

The Deputy of St. Mary:

I just want to clarify for the record the baseline energy audit. You gave a cost of £2,500 but I think that was before environmental audit. I just want to clarify that. So if it was a baseline energy audit, it would come a lot less and then, as you said, you could go on to the in-house and so on, so one person employed could drop out all the time.

Dr. L. Magris:

Absolutely. Yes. To clarify for the record, the environmental audit that we had of Howard Davis Farm that was factored into the development of the Eco-active business programme was for everything. If we were just to do energy audits that would be a different and separate thing that would not cost as much. I agree.

The Deputy of St. Mary:

Yes. Okay. The other question was you, under 3.1, training co-ordinated by the Environment Department, presumably for other departments, you mentioned that it would take a three-quarters time person or that you have a three-quarters time person; I was not clear about that.

Dr. L. Magris:

Yes. We have a three-quarters time person whose role is to roll out the Eco-active programme. A small part of that person's time would be used for the training. What I am saying is we would absorb that within normal departmental activity because we consider it part of our remit to do this very simple

training that we propose in this instance.

The Deputy of St. Mary:

Because what alarmed me was you then said there was no budget so I could not square those 2 statements.

Dr. L. Magris:

There is no separate budget for this project currently. We have an Eco-active budget which we would be using a portion of to support this programme.

The Deputy of St. Mary:

Specifically within the Eco-active budget?

Dr. L. Magris:

It is within Eco-active existing budgets, that is correct, yes.

The Deputy of St. John:

Officers, for the record, are there any areas that we have not covered? I am sure there are some but ...

Mr. M. Haden:

There may be some more areas of technical thinking I might like to follow up and put certain questions.

The Deputy of St. John:

In writing.

Mr. M. Haden:

Maybe by email later on.

Dr. L. Magris:

Yes. I am happy to do that as much as we can. Yes.

Mr. A. Scate:

There was one question a Constable raised earlier to John around building and planning standards which John said all the planning should answer that. You are right; I think that we need to do a lot of work on sustainable construction and how our buildings, through the planning and development system, are going to be constructed in the longer term. Clearly, the building by-laws are a way of imposing greater building standards and they are increasing in their remit, whether it be thermal efficiency, energy efficiency and so on. The other big area is through design and through planning and design of buildings in the planning system and getting architects to think around passive heating and shading, hot and cold areas within their buildings to generate flows of air through their buildings rather than needing air conditioning on all of the time. There are a lot of areas there that we need to do some more work on to encourage. Again, it goes back to that reduction of resource use in the first place. If you get a more environmentally efficient building in the first place through the development process, you should be taking on less energy loads later on when you are using it.

The Connétable of St. Peter:

This is a simple aside. You know, in St. Peter we are just about to embark on building life-long homes for the elderly and, looking at the Rowntree Foundation work on those, they are recommending under-floor heating because the heating remains within the lowest third of the room where people are sitting and not up at the ceiling. Equally, you think about the airport departure terminal where the heat is blown down from the roof. By the time it gets down to the floor, it is fairly cold by then but the top

two-thirds, which nobody uses, is lovely and warm. It is things like that, I think, that need to be looked at and if people are encouraged to take those options.

The Deputy of St. Mary:

Yes. Someone has to take the lead in each department, we are told, and then we are told by you, and correctly, that in the planning of your whole exercise with the audit and following through, there was a start-up cost; there was someone who had to deliver this and lead on it and so on and so on. I suppose the question is how are we going to ensure; well, you cannot answer that. I suppose it should have gone to John but you mentioned it, you know, and I am just struggling to square the departments finding champions, basically, when they are already doing other things. I just have a problem with this.

The Connétable of St. Peter:

Can I give you a little example: just going back to my previous life as an executive when I was chief officer at the airport. All my chaps did the same job; however, individual chaps had individual specialities for they had training in particular areas. That did not take them away from their day work, this was an add-on to their day work, and I assume this is a possible opportunity to do the same type of thing. It does come under the office manager, at the end of the day, to manage the resources of the office. That does not mean he or she has to do it but somebody in the office could be nominated the agreeing person, for want of a better term.

Mr. A. Scate:

That is right, but what we are trying to encourage is at the moment we have got people within States departments who are the customer care champions, for instance, or the I.T. champion and is the first point of contact for I.T. purposes. What we want to create is another champion. This is the person who also has that sort of conscience within the department to build that up. We would love this to become a part of the day job. You know, in years gone by, organisations used to employ an equal opportunities officer. Equal opportunities now is mainstream across everyone's thought processes. It is the same sort of process here. We are talking about an Eco-active champion - which is great - but we want everyone to be Eco-active champions in the longer term and have that as a mainstream thought process. That is the sort of journey we need to take the States departments on, really.

Mr. M. Haden:

Can I just ask one question and that is would you be able to point to any kind of case studies for the Eco-active programme of companies who have put in significant investment and got a great deal of savings back from it? Just thinking of the example of the Co-op; I mean, have you got evidence you can give that ...?

Dr. L. Magris:

I certainly have a lot. I mean, I am trying to think off the top of my head. We have got an awful lot because obviously as part of the programme they feed that back to us. A good example is the supermarket chain that spent £14,000 on changing their lighting and got it back, I think, within ... goodness, it must have been 6 months or something really tiny, because they moved to low energy lighting. But I can certainly look up some information from the scheme because we will have that and feed that back to the panel if you like.

Mr. M. Haden:

It is a question of, I would assume, case studies like that.

The Deputy of St. Mary:

Then feed it back States-wide as well because when people make something like that, that ...

Dr. L. Magris:

Yes. There is no doubt good environmental management is good financial management.

The Deputy of St. John:

Can I thank you very much and can you confirm that you are happy to answer additional questions by email/hard copy for the panel? Because obviously there are a number of other questions still to be asked and I see our time is up and we have given you the hour we had agreed.

Mr. A. Scate:

Absolutely. We are happy to respond by any means.

Dr. L. Magris:

Yes, please do. Thank you.

The Deputy of St. John:

Thank you very much indeed and on behalf of the panel, thank you very much and I close the meeting at 12.28 p.m.