Thank you very much. Hopefully you've got a good oversight of some of the operational challenges and processes that we have set up for the Green Deal.

Takase: Thank you very much, Jonathan. Alan discussed policy designs and subsidy programs and schemes or government systems and Jonathan discussed the operational side of the scheme and I feel as though you were able to breathe British air in those presentations. We would then like to designate the next 15 minutes for questions and answers. It can be questions or comments and I would like to see a very active discussion because this is a great opportunity. Those of you wishing to ask a question or make a comment, please raise your hand and state your affiliation before making a statement.

Q&A session

Question: Thank you very much for your wonderful presentations. I have a very simple question. On average what do you think will be the average annual yield over an investment? I think that users make investments and over a period of years I think they will recover their investment, so what do you think would be the ROI of the investment made as part of the Green Deal projects?

Alan Clifford: In terms of the customer it will depend on what measures they have had installed and the cost of the measure. There will be some measures, ones at a lower cost, that can pay for themselves in the savings very quickly so you might have a plan that lasts for maybe 5 or 6 years and then the plan will be finished, but the measures that people install, especially the insulation measures and things like that, they last for many years, sometimes 40, 50, 60 years so even once the investment is repaid and the measures have paid for themselves, the actual savings continue for many years afterwards and pay for themselves many times over.

There are some measures that are more costly and different sorts of insulation measures and they may not pay for themselves for a long time. It may take 20 or 30 years but they are still worth doing because there are other ancillary benefits in addition to just the savings. I'm not sure if I can answer the question about the finance investors.

Jonathan Harley: I can answer your question in relation to the different companies who operate in the Green Deal. One of the challenges that we had was to convince assessor organizations, installers and providers that they were going to get returns on their investment. One of the challenges that we had was because the accreditation framework, the regulations, and the policy, was set out to a high standard, the cost of entering the market was relatively high in comparison to other schemes. One of the important things that we do is to try to reduce the cost per participant to everybody operating in the market so that the scheme in the longer term can be self-funded. The cost for our services at the center of the market for MSC is only approximately 100 pounds a year for installers because as the market grows, the cost is lower. Assessors might take on a relatively high cost at the start but then they are expected to get a return on their investment over two or three years. Working on increasing volumes allows them to recuperate their costs. Installers have made an excellent return on investment in the MCS market and have grown considerably. Providers are in a position where they can make an excellent

return on investment once they get more connections with installers. I haven't answered your question in relation to exact figures but it is important to know that start-up costs can be high, but the longer-term volume increases, can facilitate substantial returns.

Question: Thank you very much for your presentation. I will be studying the International Economic Policy Analysis at Westminster from this coming September. I wanted to ask you about the examples, as in the cases, of introducing the Green Deal to the industry areas such as Manchester and Birmingham because in Japan the major consumer of electricity is the industrial manufacturer and they are the easy target that is always criticized. But the people who actually work there are making enormous efforts to reduce their consumption such as turning off the air conditioner at lunchtime and working in the summer without air conditioning which is like working in a sauna, and I was wondering if you can help them reduce their amount of consumption in economic beneficial terms. If you could introduce some examples of an introduction in the industrial area, that would be really nice.

Alan Clifford: So as in the energy efficiency volume in the domestic sector for commercial companies? So Green Deal is, or was, built to cater for the non-domestic sector as well. It's not something that has actually taken off yet and one of the reasons for that is because with households it's very homogenous. Houses, although they differ, they are very much the same as each other in terms of what you do. There's a small number of measures that you can do to all houses so you can get the economies of scale in installing those sorts of measures. With the commercial sector you get a much greater variety of buildings, a much greater variety of processes, sometimes very specialized processes, so there is in a way an order of magnitude, a greater number of different things you have to do and that makes it much more difficult than the household sector.

Now what we do in terms of my area of expertise is not non-domestic but we have a scheme, for example the energy technologies list, which offers companies a tax discount for investments in energy efficiency, technology such as efficient pumps and drives and processing equipment. They could also take advantage of that for energy efficiency measures as well and we also have best practice programs that we operate to educate businesses and help them to understand how they can save money through energy but generally speaking it's been less of a large-scale policy in the UK for the industrial sector largely because in fact for many business' energy is quite a small overhead compared to other operational costs and for the business manufacturing and with energy processes that are energy intensive where the energy consumption and costs are a big overhead, so for example paper and aluminum and those sorts of things where lots of energy is used, there's so much pressure for those companies to be energy efficient to keep their costs down, that they've already in effect done a lot of the things they can do and when it comes to office energy, it's a very small part of their energy consumption.

So in a sense you have some kind of companies that have a very high energy consumption for process and on the one hand their process is already very energy efficient because they have to be competitive. And the other aspect of their energy use for offices and computers are so small compared to their processes, there is little motivation for them to do anything about it. Then you have other companies that have a lot of office space perhaps and don't have the processes because the buildings are so different from each other from tiny little buildings and offices to huge skyscrapers and everything in between, there is no one obvious solution for each that covers everybody.

Jonathan Harley: I'll just mention something in addition to that. I have got a stat here that says that from 1970 industrial use of energy in the UK has fallen by 60% since 1970. That is partly because industry in the UK has changed. We used to manufacture a lot of heavy industry. Now it's more service-based systems so it sounds very impressive but there are other reasons for it. The other thing that has contributed, as Alan said, to companies doing a lot to save energy, is competition in electricity. Each energy company has specialist commercial teams that offer the best possible prices for large and small businesses. As part of those offerings they have to, because of their obligations to reduce energy consumption, offer some of the best tariffs, so businesses have really benefitted from competition. We have taken over 100 different electricity suppliers through the market in the last 15 years.

Question: Alan and Jonathan are in a position to promote these policies and to operationalize these policies. At your homes, Alan and Jonathan, have you introduced this system into your own personal homes and are you really seeing a personal impact on your life and if you haven't, what are your reasons for the postponement of the use of this system?

Alan Clifford: So I personally don't have a Green Deal yet. I moved into my home about 3 or 4 years ago and it's a very old house. It's about 110 years old and it has solid walls and it has a very old heating system and a lot of potential to improve the energy efficiency and it's something that I am definitely going to be doing. But at the moment the reason why we haven't done it yet is because in terms of the hassle it's quite a complicated house to do. But our boiler is now starting to conk out, we do need a new boiler and actually the Green Deal is something that I am actually going to be using the this year.

Jonathan Harley: Hopefully I can give a positive message as well. My house is also 110 years old. In the UK having a house that old is seen as a good thing and actually they are built very well, solid walls 12 inch thick but my property has leaks and a lot of inefficiency in it so I did have a Green Deal assessment and they told me where I could save money. I am in the process of getting new windows, I am in the process of changing my boiler, and I am also considering solid wall insulation as well. I also tell my wife to turn the heating down which is a very important thing because it's on far too high but people like me and my friends do take energy efficiency very seriously. My mother and father have solar panels and they are also going to install a ground source heat pump as well because I think the message really is getting through to people that doing something to improve the efficiency of their homes has long term benefits.

(Break)