

HOUSE OF LORDS
MINUTES OF EVIDENCE
TAKEN BEFORE
THE SELECT COMMITTEE OF THE EUROPEAN UNION
(SUB-COMMITTEE B)
INQUIRY INTO THE EU'S 20% RENEWABLE ENERGY TARGET

MONDAY 9 JUNE 2008

MR JEREMY NICHOLSON

Evidence heard in Public

Questions 450 - 468

USE OF THE TRANSCRIPT

1. This is an uncorrected and unpublished transcript of evidence taken in public and reported to the House.
2. The transcript is not yet an approved formal record of these proceedings. Any public use of, or reference to, the contents should make clear that neither Members nor witnesses have had the opportunity to correct the record. If in doubt as to the propriety of using the transcript, please contact the Clerk to the Committee.
3. *Members* who receive this for the purpose of correcting questions addressed by them to witnesses are asked to send corrections to the Clerk to the Committee.
4. *Prospective witnesses* may receive this in preparation for any written or oral evidence they may in due course give to the Committee.

MONDAY 9 JUNE 2008

Present

Bradshaw, L
Freeman, L (Chairman)
James of Blackheath, L
Mitchell, L
Paul, L
Rowe-Beddoe, L
Ryder of Wensum, L
Walpole, L
Whitty, L

Witness: **Mr Jeremy Nicholson**, Director, Energy Intensive Users Group, examined.

Q450 Chairman: Mr Nicholson, thank you very much indeed for coming. You are familiar, I know, with Select Committee proceedings. So perhaps you would be good enough just to give us a bit of background on the Energy Intensive Users Group and also yourself; an opening statement.

Mr Nicholson: Thank you, firstly, for the opportunity to allow us to voice some of our concerns about the target and the way it is being pursued, and its possible impact on the industrial sector. The Energy Intensive Users Group is an umbrella group that represents a dozen or so trade sectors, mostly trade associations such as the Chemical Industries Association, the Confederation of Paper Industries, steel producers, brickmakers, aluminium, cement and so on, all of whom represent industries that operate in international markets. They have to be internationally competitive, and depend therefore on secure and competitive energy supplies to stay in business. They are also sectors that have a strong commercial interest anyway in energy efficiency, which will not surprise you when you realise that for a steelmaker, 20-25 per cent of the production costs might be energy related; for an aluminium smelter, 40-45 per cent; for the industrial gases and some of the chemical firms, as

much as 70 per cent of their costs are energy based, typically for the electro intensive firms. So for them, you can see how potentially small differences in energy prices can have quite a big impact on their competitiveness, but equally provides them with a very strong commercial incentive to manage their supplies efficiently. I should say, our views sometimes diverge, to put it mildly, from the environmental lobby and occasionally from Government and opposition too. We accept the need to diversify away from fossil fuels, both for environmental and economic reasons, partly to reduce concerns about energy security, but we do not take an ideological view on energy supply. We do not think any technology should be ruled in or out on those grounds. In fact, we welcome research and development to bring as many new low carbon technologies as possible to the market, and reducing the barriers to their exploitation. However, we do not accept the practice of setting arbitrary politically determined targets, whether in the UK or at an EU level, for renewable energy, or indeed any other technology. We believe consumers' interests are most likely to be met by allowing the market to determine the energy mix within a carbon cap. We would also say, and I do not know whether you would regard this as controversial or not, but the practice of target setting undermines one of the cases for market liberalisation that we and the Government are pursuing elsewhere in Europe, allowing the market the maximum freedom to determine where our supplies come from, and perhaps even more importantly internationally, it undermines the principle that markets should be allowed to reduce emissions at least costs, and choose the technologies to do so. That is implicitly enshrined in the EU Emissions Trading Scheme and something that we in principle are trying to advance internationally, so I hope that might be one aspect of the debate we might have a chance to touch on this afternoon. I should say I will not be able to answer in detail some questions about the potential costs, but I hope I can give an indication of the possible impacts in the absence of full evidence, and I hope that if

that is not satisfactory, I can give some other supplementary response on behalf of our members, if there is anything that remains unanswered.

Q451 Lord Ryder of Wensum: Good afternoon, thank you very much indeed for your very clear introduction. You have touched on the EU and UK targets in your introductory words, I wonder whether you would like to put perhaps some more detail to them and tell us how achievable you think they are.

Mr Nicholson: I would not use the word achievable to describe either the UK or the EU targets. I think one of the difficulties in discussing this whole subject is we feel obliged to talk in euphemisms. We do it as consumers, I am sure ministers feel they are obliged to do this regularly in the course of their work; well, perhaps that is natural, but I think it is sad when the energy industry and others who should be perhaps a bit more open about this find that they have to do so too. So do we, I think for reasons of trying to avoid causing offence to the environmental movement and others. But sometimes, targets are not challenging, they are ridiculous, and I think it therefore falls on those of us who have the freedom to express those views rather more clearly than some to do so on the record. That does not mean that we should not be looking at ways of rendering renewable energy more commercially viable, subsidising it perhaps where necessary, and certainly in an efficient way, and certainly reducing barriers to its exploitation. But I think the EU has done itself no credit in making such a public commitment to a target which I think few in the energy industry or outside, even in the green groups actually, starting from a current position, believe is achievable. It certainly is not for the UK. The thought that we are going to go from 2 per cent to 15 per cent of our energy in the next eleven and a half years, more particularly 5 per cent of our electricity to perhaps somewhere between 35 and 40 per cent of our electricity in that timeframe, or shortly beyond, is not realistic, and I hope perhaps as a result of your Committee's efforts and others that we might reach the stage soon where ministers and the energy industry can be a bit

more open about that.

Lord Ryder of Wensum: You have been clear again, thank you.

Q452 Lord Rowe-Beddoe: Thank you, Mr Nicholson. Yes, so let us speculate, however, for one moment. Let us assume that the EU 20 per cent target is achieved. How would that affect you, do you think, in your association, the members of your association rather more particularly?

Mr Nicholson: Firstly, I think it is theoretically possible that the EU target could be met. I suspect the political and economic consequences of doing so might be rather dramatic, but at least it is theoretically possible, unlike the UK target, which is, I think, practically, as well as economically, impossible. Part of the answer to that depends on how that target is met, or at least how we move towards it, because some aspects of that target might not actually be delivered by 2020. The Severn Barrage, for example, within the UK, if it ever comes about, might be delivered rather later than that. I am sure you will have read or had drawn to your attention the important piece of work done for BERR by Pöyry Consulting on the potential costs of meeting this target, not just to the UK but to the EU as a whole, and they are talking about lifetime costs in the order of €259 billion to achieve the target, under the most optimistic scenario, namely that there are not any undue barriers to exploiting technologies where they are feasible, there are no particular problems with grid access or back-up, that the technologies are just deployed in the most geographically sensible location, as opposed to those determined by Government national subsidy policies, and that it is done in the most efficient way as far as timing is concerned. Now all of those things are somewhat in doubt, to put it mildly, and they also presuppose that there is free trade in renewable energy across the European Union. Well, we do not have free trade in gas or electricity across the European Union at the moment, we have something approaching it, and indeed I recall giving evidence to your Committee a couple of years ago about the slow progress of liberalising the energy

markets. This is doubly difficult with renewables, because there is a plethora of national support policies that in practice make it very difficult to trade renewables across national boundaries, even assuming there is a capacity to do so across the networks, which as I am sure you are aware in many cases there is not. So all of that suggests to me that the costs of attempting to meet this are likely to be on the higher side of estimates rather than the lower, much though as we would wish it otherwise. Certainly Pöyry Consulting's cost estimates suggest that for the UK, we might be talking about an impact four or five times as great in financial terms as is caused by the Renewables Obligation currently, which at the moment is costing consumers around £1 billion a year, and adding just over £3 per megawatt hour, increasing annually, to our electricity bills. That is about 5 per cent of the cost of supply to an industrial user. Now I do not know whether pro rata the same impact would apply from the renewables support policies that might emerge as a result of pursuing this target across Europe. But certainly a cost impact four or five times the size, when renewable subsidies are already accounting for around 5 per cent of our bills, and we have to pay a climate change levy, albeit at reduced rate for the intensive sectors, and we have the impact of the EU Emissions Trading Scheme as well, which is morally a very good thing, but that is adding another £12 per megawatt hour or so to our power prices too, and therefore the competitiveness impact has to be seen in the context of tax and emissions trading hitting power prices at the same time. All of this, of course, is happening at a rather unfortunate time as far as the consumer is concerned when, irrespective of the environmental agenda, the market is driving energy prices up anyway.

Q453 Lord Rowe-Beddoe: Your assumption therefore is that energy produced by renewable sources is going to be more expensive than currently?

Mr Nicholson: That is true as a generalisation. It is not universally true that renewable energy is expensive, of course. Large scale hydro, where it is feasible, is probably the

cheapest source of bulk energy that we have. There are environmental constraints as to the extent it can be exploited, of course. Certain forms of biomass and energy from waste again can be highly cost efficient, although there are limits to what can be done in scale. Not all of them have equally glowing environmental credentials as far as CO2 reduction is concerned. The problem with evaluating the cost of something like wind is it is not a single cost. I do not just mean whether you do it onshore or offshore, but wind at 1 per cent of the energy mix has a trivial impact on balancing costs and security of supply. Wind at 15-20 per cent has very considerable costs associated with it, and therefore, there is a non-linear relationship there. So it is wrong to generalise and say it is either expensive or cheap, it depends on the scale on which you are doing it. Unfortunately, the sort of scale we are talking here implies very large exploitation of wind which is problematic actually from a security of supply point of view. So we should not generalise to the extent of saying renewable energy and the subsidies that might have to go with it will necessarily be very damaging but it is the scale that causes the problem here.

Q454 Lord James of Blackheath: Mr Nicholson, quite early in your comments you indicated a deep degree of scepticism as to the achievability of the target. I wonder if you could define that more closely for us; whether that is a scepticism on behalf of the entire membership of the association that you are working with, or whether it is in fact related to the overall achievability for the United Kingdom without reference to the mix of different energy sources presumably needed, because some will be needing a huge dependence on electricity and others on fossil fuels. I have never heard of a foundry that could run on electricity.

Mr Nicholson: You are right, there is a difference of exposure to this within the Energy Intensive Users Group and our members. Some proportionately buy very little electricity and use natural gas as a feedstock. Actually, it is not obvious for them what renewable alternative they have in producing fertiliser, a certain amount of biogas perhaps, but by and large, there is

no alternative to what they are currently doing. Others are highly electro intensive; in fact, even in the steel sector, the electric arc furnace operators are highly electro intensive. They are not buying much in the way of fossil fuels, but they are consuming a lot of electricity, so there is a range of exposure there. It is true that all up to a greater or lesser extent are concerned about the costs arising from this. It is not true to say that they are prejudiced against renewables. Some take advantage of them; there are aluminium smelters that have a direct interest in hydro production themselves, some co-fire biomass in coal fired power stations which are part of their autogeneration and so on. One or two as a small part of their energy mix have wind turbines and other facilities on their industrial sites. So there is not a philosophical objection to this, there is a practical and economic one as to what this would mean for a firm that requires secure, 24-hour baseload supplies, and is highly exposed to international competition, and this accounts for a very, very large proportion of their production costs.

Q455 Lord James of Blackheath: Mr Nicholson, is there any way in which your organisation can monitor the extent of success in using renewable fuels, and guide your membership to the point where some part of it gives up a dependence on fossil fuels to release those fuels which are more necessary to other parts of your membership and get a better balance into the use of fuel within the economy overall?

Mr Nicholson: Is this a suggestion that natural gas might be best used as a feedstock rather than necessarily as a generating fuel?

Q456 Lord James of Blackheath: They seem to have more flexibility in many ways, and you yourself talked about the possibility that wind might be successful. Wind is likely to drive electricity, and you might have a lesser demand on electricity, and I am wondering whether any part of your user base could be given up in order to free up more of the valuable

and scarcer fuels as we use instead, something of which we can make a surplus, and whether we should be directing policy that way?

Mr Nicholson: I think in a sense the market is starting to drive in that way anyway. A number of people thought that gas supplies were going to remain relatively cheap compared with coal, for example, and that we could merrily, without any great intervention, see a continuation of the dash for gas, this would result in the benign situation that prices would be kept under control and emissions would go down simultaneously. If only we were in that situation; we are not, and for international reasons, we are not going to go back to it. The market is trying to diversify away from gas, in power generation in particular, but of course there are constraints on what it can do in the short term. In the medium term, we are locked into it. In the long term, we have the option of diversifying away to nuclear and eventually to coal with carbon capture, and I guess there is no reason to expect that renewables will do anything other than grow within the mix. Our concern is about the effect of trying to artificially grow that proportion, beyond what the technologies can currently sustain.

Lord James of Blackheath: Thank you. My Lord Chairman, I would welcome a supplementary later if time permits.

Q457 Lord Walpole: I know you started on this one, but let us continue: given the nature of the industries you represent, what role do you see for them in energy efficiency measures to help meet EU targets, and as a supplementary I would like to ask you: when do you think, at the sort of production level they are now, their energy consumption will actually start to fall?

Mr Nicholson: Well, I assume, if I might answer that last point first, that by energy consumption falling, you are talking about an energy efficient response rather than a demand destruction response or a relocation of industry to other parts of the world.

Q458 Lord Walpole: No, purely efficiency.

Mr Nicholson: Yes, I assumed as much, but thought there would be no harm to put that on the record, because nobody wants to achieve our environmental aims by transferring our liabilities on to someone else's balance sheet.

Q459 Lord Walpole: Absolutely not.

Mr Nicholson: I fear that we are up against diminishing returns in the intensive sectors as far as energy efficiency is concerned. There may be improvements in carbon efficiency, particularly in respect of the electricity supplies on which they depend, but of course these industries have always had a commercial interest in keeping their energy bills down, much more so than either business generally or most of us as domestic consumers, unless, I would say, we live in fuel poverty, and there there is a very strong commercial incentive to keep power bills down, unfortunately sometimes at the expense of the health of those concerned. So we are tempted sometimes to say that the energy intensive sectors are kind of the fuel poor of the industrial sector. We do tend to manage these things quite well, and there has been a steady history of energy improvement even within those sectors recently, and I think we have seen evidence of this from those sectors covered by climate change agreements, who have probably made more energy efficiency savings than perhaps some others. I think therefore the scope for energy efficiency savings, both proportionately and in aggregate, is higher in the less intensive sectors and in some parts of domestic supply, and I do not think we have really fully exploited that at all. Of course, it takes a while for the public and for non-intensive businesses to catch up with fuel price rises that are rising anyway from the market, quite apart from signals that may be imposed on top from Government, but I have no doubt that there are plenty of boardrooms that are concerned about managing energy efficiency costs now that were not as concerned two or three years ago. Now you posed the question how important is this in terms of hitting the renewables target as a whole; well, plainly, if energy consumption is either lower than it is now or at least has not grown by as

much as it otherwise would, the practicality of hitting that target or something close to it becomes that much greater, so we certainly should not let up on energy efficiency. In fact, for economic reasons, irrespective of climate change, it makes good sense to do so in any case. I would raise a note of caution here: the history of energy efficiency improvements has not gone hand in hand with a net reduction in aggregate energy use historically, and there are wonderful academic arguments as to how much energy efficiency savings might be realised in practice, some of it takes the form of compensatory increases for comfort taking and so on, but I think it would be unwise to rely too much on an energy efficiency saving at a micro level, resulting, you know, megawatt for megawatt, in an energy efficiency saving at an aggregate level, because history tells us it is not that simple. It is worth pursuing, it may make the renewable target that much more realistic, but it is not a substitute, I am afraid.

Q460 Lord Walpole: I think this Committee, it must have been this Committee, a few years ago went to have a look at a cement manufacturer. I mean, even at that stage, they were using what you might call second-hand car oil and old tyres and things then, which I really was very impressed by. They cannot really go very much further than that, can they?

Mr Nicholson: That is my fear, either in terms of their direct carbon input or indeed the energy use per tonne of product, and if you think of a process like aluminium smelting, well, there is a chemical equation, that some of you here may well be very familiar with. Given a tonne of bauxite or whatever it is and a tonne of finished product, you are going to require a certain amount of energy to convert one thing into another, even in theoretically perfect laboratory conditions. You are never going to go below that target. The alternative, I guess, is to find a substitute product, ultimately, but that is not terribly easy when it comes to something like steel, on which just about every process depends. So I think we have to be realistic about how much more we can carry on tapping the intensive sectors that have done so much to improve efficiency there, and we are therefore into a rather more problematic area

of how do you deal with service industries and much more atomised businesses, not all of which have energy management departments or board interest in this that perhaps the firms that our members represent do.

Q461 Lord Paul: In the last 20 years, steel industry and aluminium industry has done a lot of things for energy efficiency, to reduce their energy consumption per tonne, would you be able to say what kind of reduction they have been able to make per tonne? If you do not have the figures offhand, you can write to us.

Mr Nicholson: I do not, but I would be very happy -- in fact, I will probably get told off by my boss, because I know there is a very good little leaflet produced by UK Steel on the subject which is sitting on my desk at the moment which has a chart that shows just that, and a comparable one in my filing system for the aluminium sector, and I would be pleased to provide it for you. One thing I would say is that some of these sectors, not just in the UK but elsewhere in Europe, are already getting secure low carbon supplies, those that are fortunate enough to have access to hydroelectricity, Scandinavia being an obvious example, but also those that have a direct relationship with nuclear producers. I am thinking here of firms like Anglesey Aluminium within the UK; they are already doing their bit by procuring low carbon supplies from a local nuclear power station, which unfortunately will be closing by 2010. None of this is an anti-renewables comment, but we would question why, if a business is already doing the right thing by procuring a low carbon energy supply that suits their business, even if other options may be viable for other sectors of the economy, they should be forced to pay a premium to subsidise other businesses and other consumers that are not doing the same thing, and perhaps an unnecessarily high premium, because there has been too much of an emphasis on renewables within that low carbon mix. That is the point we would raise. We fully understand the need to decarbonise baseload energy supplies, actually we have a number of alternatives available there from the industrial sector, but they may not

necessarily be the ones that environmental campaigners or, dare I say it, politicians chasing votes or playing to the green gallery, would necessarily choose as being an easy sell. Nonetheless, if we want those industries to survive in Europe, we have to recognise that renewables will not always be the ideal source of energy for them.

Q462 Lord Bradshaw: I am going to change my question a bit, because you have more or less told us the targets' named are not what we should be focusing on. I would like you to talk a little bit about security of supply, and the volatility of energy prices, and how that will affect your industry. I have some assumptions that were produced last week which have the BERR forecasts for 2008, they are just hopelessly wrong, I mean many orders wrong, and obviously I would have thought it was more sensible to talk about \$200 a barrel of oil, if you are thinking ahead. What can you say about security of supply and volatility?

Mr Nicholson: Firstly in terms of pricing of fuel, before answering that part of the question, none of us knows with confidence what the future price of energy is going to be, and if we did, we would doubtless be making a lot of money out of it on the markets instead of sitting in this room. However, I think our group and others have expressed concern that until recently, BERR, and DTI as was, was taking a rather optimistic view, particularly on gas prices, and indeed the ability of the gas market to disconnect from the price of oil. Now I was giving evidence last week to the Business and Enterprise Committee on this very subject, so I will not repeat it again here, suffice to say that even if we have a theoretically perfect market within the UK, or indeed across the whole of the rest of Europe, and we have far from that at the moment, we are still at the mercy of international markets, and the Russians and others are not keen to price gas on anything other than an oil index basis, and we have all seen what has been happening to oil prices recently. Even if we take the view that there is an element of a bubble going on, in addition to the supply/demand situation, it is hard to see oil prices going back to anything like the level that consumers enjoyed a few years ago. We are all going to

have to live with higher prices there. That does two things, it means that it makes it more difficult for the economy to absorb additional costs of transition, but also actually it makes a strong case for diversification away from oil and gas anyway on commercial grounds to some extent. Now the question of security of supply, the simple answer to that, which others I know have already given you, lies in having diversity of fuels, and also in respect of those fuels having a diversity of supply routes and countries of production. So to the extent that renewables will help with that, it is obviously beneficial. The problem comes, I think, when there is an over-reliance on a particular form of renewable energy that is either inherently expensive, and one thinks of the example of solar in the German market for this, it is not a particularly cost-effective way of providing your energy or indeed your carbon reductions, and in particular wind, which we all recognise has a growing role to play, and on a seasonal basis can contribute significantly in terms of reducing fossil fuel demand over a period of time. However, on an instantaneous basis, the reliable output from any given wind turbine is effectively zero. Unfortunately, given the sort of climatic conditions that can prevail over the whole of the British Isles and indeed north-west Europe, there are occasions, not all the time, but with a certain statistical frequency, when the output from that entire wind resource is depressingly close to zero as well, which means that back-up has to be maintained. We have seen not just theoretical evidence or scaremongering from those who might have a different agenda, but empirical evidence from network operators in Germany and elsewhere about what the practical difficulties are of managing fast drops in output from wind turbines over a large supply area or indeed large increases in power. I think we need to be realistic about how difficult that is going to be to manage. It may not be impossible, it will certainly be easier to manage if we have a more liberalised market, with more flexibility in the transmission systems, because they are not physically constrained and so on. So there are a number of things we can do to make it more manageable, but to suggest that it is straightforward or an

issue we need not confront is, I think, naive. I suspect the Government is very well aware of that, but like many things, it is constrained on what it can say in public at the moment on this subject.

Q463 Lord Bradshaw: So the disconnect which people had hoped for between oil, gas and electricity and other prices is something which is not going to happen?

Mr Nicholson: Not in the immediate future.

Q464 Lord Paul: What effect would a well-functioning Guarantees of Origin scheme have on industry and users? How do you envisage the scheme working in practice? We have had some very mixed views on this.

Mr Nicholson: This is the Guarantee of Origin idea; well, before answering the practical question, from a theoretical point of view, it would be a great thing if there was free trade in renewable energy across the European Union, and to the extent we might wish to subsidise it either on its own merits, or because it is a low carbon source or support it otherwise, that it would be done on a consistent basis that does not distort the markets and act like a series of blatant trade restrictions, which is what frankly national policies do at the moment. However, I think there are a number of practical issues with this. Even if it could be done with the agreement of 27 Member States, which is problematic, to put it mildly, there are potentially quite high transaction costs associated with doing this, and tracking the energy and so on, which I do not think should be underestimated. They may not be insurmountable, but they are not necessarily going to be trivial either, and it is certainly true that if we were going to move towards such a scheme, we could not do it overnight, and therefore our progress towards this renewables target over the next few years would have to take into consideration existing schemes and modifications of those existing schemes before we even thought about moving to an overarching single support mechanism or something close to it for the European Union.

On a more pressing matter, of course, this simply will not happen if Member States do not wish it to happen, and Member States have constructed their renewable support programmes with a view to supporting indigenous renewable energy, and those forms of energy that are considered more popular within their national boundaries. Well, they are not going to dismantle those schemes in a hurry, and I think the Commission is well aware of this. Where that leaves us, I am not sure, but as you will have heard from other evidence, not least from Ofgem, and indeed from the Pöyry report to BERR, without that flexibility of trading, there really is not the remotest chance of the UK even getting near to the 15 per cent target or 35-40 per cent electricity figure, we simply could not move anywhere near to that internally. Now even if we had a theoretically perfect trading system for renewable energy within the European Union, would there be enough surplus for someone else to sell us commensurate with a deficit relative to our target? I think that is highly questionable. Before perhaps even considering what can be done between now and 2020, it is worth reflecting on the fact that virtually every European country has failed to achieve its existing renewable electricity target for 2010. We are not there yet, I suppose a revolution could happen in some of those states in the next year and a bit, but it does not seem very likely, and this has happened during a period of rising fossil fuel prices, relatively generous fuel subsidies, plenty of public goodwill in the main, even if planning systems and other things are not perfect, and so I think it is highly questionable whether the other Member States, you know, those who have looked at it in sufficient detail, are going to get anywhere close to these targets. If others do not exceed it, there cannot be a surplus for anyone else to purchase.

Q465 Lord Paul: Do you think it is an excuse for not doing anything?

Mr Nicholson: I certainly would not advocate that we do not do anything, indeed our group does not. What I would question is whether we are doing things in an intelligent, cost-effective and realistic way, and I do worry personally that there is going to be something of

a backlash here against the green agenda. I think we have seen some aspects of it with green taxation, which governments may pursue for a number of different motives on occasions, and even if their motives are pure, it does not stop suspicion arising in the minds of those who have to pay the bills. It is one thing expecting people to give governments the benefit of the doubt on this when energy prices are low, oil is \$15 a barrel; it is quite another when it is nudging \$140 and issues of competitiveness for us and fuel poverty for others are very pressing. So I am concerned, and I think our members are concerned, that despite these ambitious targets, as some people describe them, the market actually will decide that they are not tenable, and will not invest accordingly, and what will this do? It will mean that the prices of things such as the Renewables Obligation are likely to spike even higher, and there will be general dissatisfaction all round. I go back to the point I made earlier, it does no one any favours to be in pursuit of a target which no one seriously believes can be achieved. One last word on that: I was most encouraged by the measured remarks of Paul Golby from E.ON in the press recently on this. It is not an easy thing for a large energy company, let alone one that has an interest in coal-fired and potentially nuclear power stations as well, to say publicly what I know he and his colleagues in other firms have been saying in private possibly to some of you and others as well, but to be open and honest about the likely cost implications of this, the need to move in a measured way, that brings the public with us, and allows those of us who are working in industry to say, well, it is a pain to be paying a bit more, but it is something we can live with, and we can stay operating in this increasingly low carbon economy; that is really important. I hope that this Committee's report, when it is published, might encourage those, as I say, in Government and elsewhere to have the confidence to say that without fear of criticism from others, because I do not think anyone should be afraid ultimately of speaking their mind on these topics.

Q466 Lord Whitty: You have clearly spoken your mind on these topics, you have had a few sideswipes at the green agenda. On the other hand, you have said that there is a need to have a lower carbon economy. Two things arise from what you have said: one, other countries have achieved or are on course to achieve a higher level of renewables than we are. They may not hit the target, but they are very significantly higher than the UK. Have your fellow industries in those countries suffered from that process? Or if not, what is so unique about either the natural heritage, which I can understand hydro power in Scandinavia, say, or the terms of the government policy in those countries which makes that more acceptable to your equivalent members? The second thing, just briefly: you in passing said we ought to be focusing on other technologies for achieving a low carbon economy; did you just mean nuclear power or are there other technologies you had in mind which may not be acceptable to public opinion or politicians but which you think we should be pursuing which would be rather more cost efficient than renewables?

Mr Nicholson: Certainly nuclear is essential within the context of baseload power supplies to industry, no question about that. That is not the only answer, of course, either. I think it is vital that we pursue carbon capturing storage as an option. I think the jury is out about how expensive that is going to be, but it is certainly likely to be less expensive than some of the renewable options, though not necessarily all, and given the scale of the task ahead of us, it seems astonishing that more has not been agreed at a European level on this. There was much talk about 15 demonstration plants, I think, across the European Union. Of course, this is not just relevant to power generation; for primary steel production, absent carbon capturing storage, or indeed for the cement industry, there is no low carbon solution. You can decarbonise your energy supplies as much as you like, but you cannot produce the stuff without producing CO₂, and as the world needs both commodities, and the developing world needs it in very large quantities, I think it is essential that we move forward on that front too.

There is also, I should say, in the environmental lobby, a predisposition against large scale hydro. I am not quite sure why this is. I am sure it is appropriate in some instances and less so in others, but there seems to be a view that if a project is large and delivers energy at competitive prices, it must therefore have something wrong with it environmentally, which I think is not always very helpful. You asked the question, Lord Whitty, about whether members in other parts of Europe are similarly concerned about this agenda or not. The nature of the support policies is very different in different Member States, just as the energy mix is. We are part of an international federation, IFIEC Europe, and I spend a certain amount of my time as a UK board member of that organisation discussing this with colleagues in Brussels and elsewhere, and indeed with the Commission. It is true that one or two states have taken quite a different line in terms of exempting intensive users altogether from the cost of directly subsidising renewables; of course they get the knock-on costs of carbon through their power supplies, if they are exposed to it, Sweden being an obvious example, and to a lesser extent, Germany too. There are some qualifying criteria there, you have to be a user over a certain size and a certain amount of value added associated with energy spend, but for some of those more intense, more exposed to international competition, there has been a realisation there that the renewable subsidies need to be tempered, not necessarily removed entirely, but levied at a different level. I think this is analogous to what we have in the UK with the climate change levy. I am not saying there is a free ride on this, you still have to pay an element of the tax, but you have to undertake energy efficiency improvements through the climate change agreement, which I think have worked reasonably well. I cannot see why in principle the same thing could not be done with renewable subsidies; in other words, if the costs reached the level where they would threaten the viability of some intensive industries, and that is the last thing we want, because we are hardly going to persuade China or anyone else to go down this route if we cannot sustain those industries

within our low carbon economy; in fact, it would provide an absolute disincentive for them to follow. This could be a way of mitigating some of the impact, if it was felt that some classes of consumer could absorb this and others could not, so I think that is something we hope the Government might pursue here when consulting on how to move forward, beyond the current level of costs.

Q467 Lord Mitchell: When we have taken evidence and been speaking to various officials, one of the things that I thought has come out of it is that certain countries have made pretty significant progress in this issue, and the countries that have been cited are the Scandinavian countries, Germany in particular, Spain and Portugal. There have been various reasons put forward, one of which, and that is certainly true in the northern countries, is the fact that planning permission is much easier to obtain, and it would seem to me, when we come to do this report, that is going to be an issue we have to think about a lot, because if planning is one of the major inhibitors on this, this is significant, and I wonder if that is your view.

Mr Nicholson: It most certainly is, and not just incidentally with respect to renewable facilities, but everything that goes with it. The transmission lines and so on; we have had an example of this within the UK, even where it is possible to get the generation through planning, there is an objection ironically sometimes from the same people who want more renewable energy to the transmission lines to hook it up to the grid. Well plainly, you cannot have one without the other, and indeed, as I have mentioned earlier, and I know others will have done too, we are going to need an expansion of grid capacity to cope with greater amounts of intermittency, and indeed a different distribution of renewable energy across the European Union, so that I think is vital. While we would certainly welcome a more responsive planning system here and everywhere else in Europe, it is not in the interests of consumers, whether in industry or anywhere else, to have undue barriers to new capacity coming onstream. Those barriers are unhelpful from the point of view of security of supply,

just as they are from the point of view of carbon reduction. So we think that the renewable industry has a valid point in complaining about the non-responsiveness of the planning system here and elsewhere, and indeed the lack of equitable access to the grid. Now we might part company with them in arguing for preferential terms for grid connection, but it is certainly true that the tardy response from grid operators here and elsewhere in Europe is unhelpful to them and indeed to consumers generally, and that is somewhere where we think, you know, improvement is due. When people talk about progress in renewables, they mean different things depending on which perspective they are coming from, and what commercial interests they have in the market. I am somewhat surprised sometimes when people talk about the great success of renewables in Germany. It depends what you mean by success. If by success you mean making energy more expensive and no more secure than it was before, I would argue it has done quite a good job. It has not necessarily diversified towards the more secure forms of renewables or certainly the more cost-effective. I heard a presentation from a member of the UK's climate change committee the other day, who shall remain nameless, to avoid his embarrassment, who was talking about the great commercial opportunities of solar power, and look what a success it was in Germany. I did point out, and he agreed with me, that they are receiving seven times the market rate guaranteed for the next 20 years. Well, most things would be successful if you gave them that. I would like to earn seven times the market rate for the next 20 years, and I am sure that most of my members would love to for their products too. So I think we need to be quite careful what we mean by success. To me, and this may be a few years away, but is not unimaginable, success is when renewable industries can compete with the minimum of subsidies subject to internalising the carbon cost of their competitors and can do so without artificial support, and indeed are the market choice. That would be success to me, and it is not clear that the support policies we have in Europe or elsewhere are making that more likely.

Q468 Lord James of Blackheath: Mr Nicholson, towards the end of your response to my earlier question, you were saying that there was an expectation that gas would have to reduce in significance, or I think words to that effect. In the event that it became possible to increase the resource of gas on comparable terms as at present, would this materially alter your ability to achieve a better distribution and utilisation of overall energy resources to extend the time in which to introduce the new renewables?

Mr Nicholson: I am sure it would. Incidentally, not just in the UK but elsewhere in Europe, we are locked into a certain amount of growth in gas consumption in power generation in the medium term at least, until other scale alternatives become available, so that gas dependency is likely to grow unfortunately for a while before there is a possibility of diversifying away. There are all sorts of views about the -- I am hesitating, to avoid using the word peak gas because peak oil is a controversial subject; we are certainly a distance away from that. Unfortunately, if you look at the location of gas resources internationally, much of it is in some of the less stable states.

Chairman: Thank you very much indeed, Mr Nicholson, for coming.