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The Environmental and Business Case for Sustainable Development

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There's a statue in the centre of Coventry, called the Coventry Boy. It shows a boy sliced down the middle. One half of him has got ragged clothes, he's barefoot, he's got a gaunt little urchin look and he is holding his hand out to beg. The other half is dressed in smart overalls, stout shoes and his hand is grasping a spanner firmly and confidently, he's looking ahead to the future. This is Coventry's myth about itself.

Talking about the environment and the business case for sustainable development, I wonder if I ought to be like the Coventry Boy: one half standing here in a woolly sweater, bushy beard, half a bobble hat, ranting and raving about mother earth; and the other half smartly suited, talking smoothly about paybacks and market scenarios. You see from my dress that I have tried to get half way in between that. You might think I have failed to be either smart or radical. I hope at least I can put the two things together in what I am going to say.

The classic definition of sustainable development is: "development which meets the needs of the present without compromising the ability of future generations to meet their own needs" - I think it encapsulates what we should be about. It doesn't mention environment or business considerations, it's about the way we treat people in the future. It's saying we should treat people in the future as if they matter as much as people now. We should behave now in ways that don't foreclose what people in the future can do.

This is basically a moral precept. It's a very simple one, one which we mostly live by. Please leave this planet as you would wish to find it or as John Gummer puts it: Don't cheat on our grandchildren.

The reason this becomes an environmental issue, is that there is good evidence that we are cheating on the future: that we are depriving future generations of some pretty basic things they are likely to need. Things like air to breathe, water to drink, the ability to grow food, the ability to walk about outside safely. I am going to concentrate on the evidence for one of the biggest questions, global warming. We are burning fossil fuels and releasing carbon dioxide into the air faster than green plants can mop it up, and the extra carbon dioxide is adding to the amount of the sun's heat that is trapped. There is growing evidence that this is altering the earth's climate:

* Mean sea level rising 7 inches per century

* Most observed glaciers have been in retreat over last 100 years

* 6 of the 7 hottest years recorded were in 1980s. Staying warm despite Pinatubo

* 1% of tropical forests lost each year in 1980s. "May be sufficient to commit 2 - 8% of planet's species to extinction within 25 years"

* 17% of world soil degraded by overgrazing, unsustainable irrigation and other poor management

* (UNEP 1994)

* Birds nesting earlier world-wide

Now it is important not to overstate this. There is no proof. There have always been fluctuations in the climate: we can not yet be absolutely certain that what we are seeing is a trend rather than a blip. What we can say, though, is that the balance of evidence is that there is something serious going on and we should be pretty careful.

This is one example - arguably the most important example - of a general problem: we are exceeding what we call our natural carrying capacity limits - or eating into the stocks of 'natural' capital upon which we would depend for future stability. Dickens put it rather nicely:

"Annual income twenty pounds, annual expenditure nineteen pounds nineteen and six, result happiness.

Annual income twenty pounds, annual expenditure twenty ought and six, result misery."

Think of the earth as like a savings account. We can take interest every year; we can take a certain amount of energy, we can take a certain amount of timber. Provided we are within the rate of regeneration we can keep doing this indefinitely. But if we exceed that rate, we start eating into the capital - and make life hard for ourselves in future.

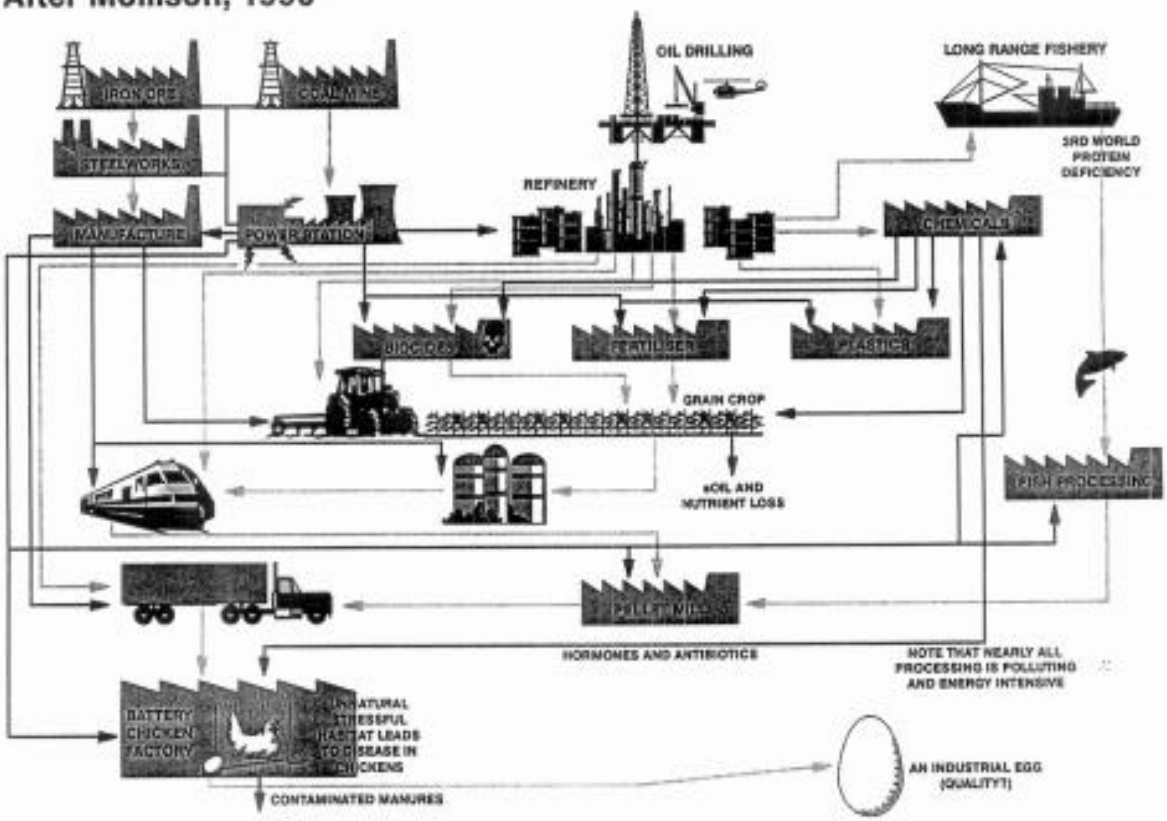
Here's a little example. Every now and then we have a war about fish with some basically civilised country. A while back we had a war with Iceland, and a few months ago we nearly had a war against Spain with Canada, or was it with the Canadians against the Spanish? I never quite got the hang of it. The logic of this is very simple. We have got very efficient at catching fish. We can locate them with sonar, and

hoover them up with big nets. So, instead of fishing being a hit and miss kind of business, which never really ate into the fish stocks, we can now destroy whole shoals of fish very rapidly because we have got the technology. Then we have to send our trawlers further afield to where there still are fish. Until of course, sooner or later we find somebody else's trawlers coming the other way towards us, because they have done the same thing. Then there is an argument. So I hope I have given some indication of how we are undermining future generations by the way that we are treating the planet.

What do we do about it? One thing we can do is to increase what is known as 'the environmental efficiency' of our activities? For a start we can just make things last longer. We can enjoy possessing things rather than just consuming things and then throwing them away. We can do things more simply. We can source locally rather than bringing things from long distances.

Here's an example of an elaborate production process, produced by Jim Mollison of the Permaculture Foundation.

After Mollison, 1990



Quite apart from the poor quality of life of the battery chicken, isn't this a complicated way of doing something that is basically very simple? Now, I don't want to overstate this case. I don't want you to think we should all go back to keeping chickens in our back gardens, I'm not saying that all long distance travel is bad and all trade is unnecessary. What I am saying is there's no necessary connection between the elaboration of the process and the quality of the result.

Moving on, there are more ways of improving environmental efficiency. One which everybody in this room is familiar with is: energy efficiency. Another is to get more out of the resources which we use through reuse, recycling and recovery of energy or secondary resources. Then there are the clean technologies: ways in which we get the same outputs with less waste and pollution. Then there are the renewable resources - resources which tap into solar cycles and come for free for as it were, instead of running down our reserves. Finally and grudgingly at the bottom of the list we have what is known as the end-of-pipe clean-up technologies. The problem with these is that they can just shift problems rather than actually solve them.

Catalytic converters are wonderful examples of this. A catalytic converter is a very good device for taking the pollutants out of a car's exhaust emissions that cause local health problems - provided the engine is warm. Now, the point where you are most concerned about those health pollutants is in cities where there is heavy traffic, and a lot of people live near the roads. The sad thing is that in the cities, the cars tend to be making very short journeys. So the catalytic converter very rarely gets warmed up enough to do its job. Moreover, it slightly reduces the fuel efficiency of the car, so you are adding a little bit to global warming as you are trying to deal with local air pollution. Then the catalytic converter itself has to be manufactured which requires very energy intensive and resource intensive processes and scarce materials. And then it has to be disposed of. This elaborate way of shifting problems around makes them a bit less visible. But it does not actually tackle the problem.

So end of pipe really isn't the answer. But as I hope I have shown there are many valid and useful technologies which all businesses can adapt to move towards sustainability. And there are opportunities for some businesses in making and selling these technologies. I was very impressed just strolling round the exhibition earlier, by the number of companies who are doing ingenious things to tackle these problems and seeing business opportunities in the new environmental market.

In fact, the evidence is, that a shift towards a sustainable economy creates more jobs than it loses because the green technologies tend to be more labour intensive than the ones that they replace. Obviously there are winners and losers, but overall, environmental sustainability is likely to increase growth as conventionally measured. However, I want to come onto another element of sustainable development now. I want to suggest that growth as conventionally measured is not what we should be concerned about.

Another of the classic definitions of sustainable development is *improving the quality of life, within the carrying capacity of supporting ecosystems.*

I have already talked about the 'carrying capacity of supporting ecosystems' bit of this, let me now talk about the quality of life bit.

Here is UK Gross National Product per capita, going triumphantly upwards from 1950 to 1990.

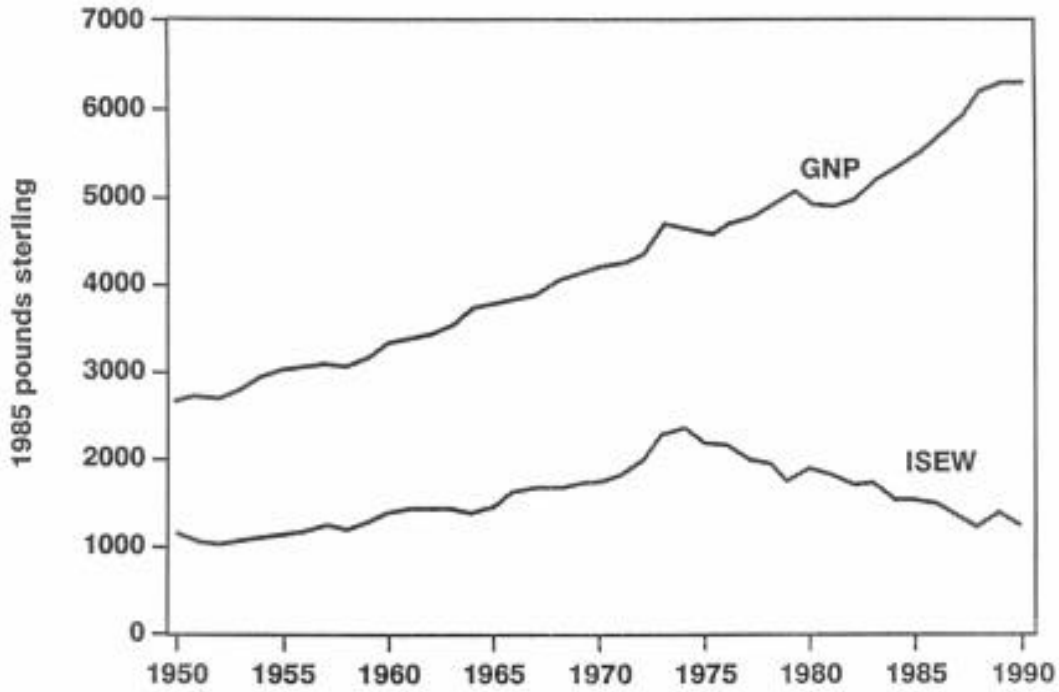
That includes various things which are quite questionable. For example, it includes the M25. The M25 when you think about it in conventional terms is a massive wealth creation device. All the bulldozing of fields and hedgerows that were needed to build it were goods and services that were bought from contractors, and added to Gross National Product. All the aggregate quarried from areas of scenic importance to lay down for the building of the M25 adds to Gross National Product, because it was bought, had to be paid for. So building the M25 made us richer. Now, every time somebody drives on it we are made richer. All the fuel we are burning makes us richer, all the cars we are buying make us richer. If there is a lot of congestion and people are having to grind along slowly, use more fuel and wear their cars out faster, that just accelerates the rate at which we get richer. And if one of those motorists happened to bump into another one it's a bit like winning on a lottery scratch card

because the cost of towing the car off, repairing it - all add to GNP. If someone gets hurt in the crash we are really lucky, because hospital treatment is really expensive.

Last year two economists, Tim Jackson and Nick Marks, tried to make GNP into a better measure of welfare. They made three different kinds of corrections to GNP. First they knocked off things that are in GNP which don't actually make us better off, such as commuting. Hands up anybody here who enjoys commuting? Yes....see what I mean, so the more we spend on commuting, the higher GNP goes, but we are not any better off. They knocked off various things which are called defensive expenditures, things like insurance premiums, treatment of illnesses caused by pollution, accident damage, burglar alarms, accident repairs, vandalism - all these things that don't actually make us better off . Then they added the things GNP does not include which do make us better off, including all the unpaid work that we do for each other: housework, DIY, and child care. Then they made an adjustment for unequal distribution. There is an economic concept called diminishing marginal utility, which basically paraphrased means, the more you've got the less each extra bit makes you happier. Basically, the argument is that if we took a million pounds off Lord Hanson and distributed it amongst our conference Chairman and others selling the Big Issue on the streets of Bath it would give them an awful lot more benefit than it would deprive Lord Hanson of. He's got so many millions he wouldn't really notice one going missing, whereas a few quid to someone who is really poor makes an enormous difference.

So Jackson and Marks made all these corrections, and this is what they came up with.

UK-ISEW PER CAPITA 1950-1990



(Jackson and Marks 1994)

The bottom line here is called the Index of Economic Sustainable Welfare, and it is plotted against Gross National Product. Until the mid 1970s sustainable economic welfare went up more or less with GNP. But beyond the mid 70s it has gone down, while GNP has kept going up. Now again, let me not overstate this case. ISEW was made by 19 different corrections to GNP. Some of them were relying on pretty dodgy data, and all of them were relying on assumptions and value judgements and decisions about and how much weighting to give to different factors and how to express different things numerically and so on and so forth. So ISEW doesn't prove anything, it doesn't define anything. But people that I talk to feel this is closer to what welfare consists of than GNP. If so, since the 70s we have succeeded in getting richer and buying more services, but we haven't actually been getting any happier for it. In fact the reverse.

Interestingly, similar calculations have been done in Germany and the United States, and they all show roughly the same shape. I think this has some very disquieting message about what we are trying to achieve in the economy. Think back to the Coventry Boy statue that I mentioned earlier. What that statue was saying was, get yourself some skills, get yourself into the productive economy, and you have a future. You are not going to be ragged, you are not going to be starving. Get a spanner, find a workshop to work with it in, and you can pull yourself up by your bootstraps. Now, that was true for a very long time. One can think of that Coventry boy metamorphosing from the guy with the spanner to having a more sophisticated tool, to having a machine tool, to being a machine tool designer, and to being a draughtsman, and maybe finally a CAD technician.

However, now, your Coventry boy would typically be, if we are lucky, a financial services rep, trying to flog people PEPs that they don't want, or, if we are a bit less lucky, a nerd in branded trainers, with a cap on the wrong way round, sitting in front of a games console, buried in fantasy, because reality has nothing to offer. Or if we are less lucky, the Coventry boy will be back to the ragged clothes, together with a spanner or some other hard object, but with a view to banging somebody on the head with it. So that is the way we have turned around, since 1974.

This leads us back to another part of the sustainability agenda. Here are the sorts of things we have set ourselves as benchmarks of success, as indicators, as signs of what we are trying to achieve:

- Jobs created, employment/unemployment levels
- Local income, wealth creation
- Opportunity to advance

These are the sorts of things governments have held up as goals.

I'm not sure that this is the sort of thing people actually want, I think people want some different things. In the same categories, but phrased differently. For example, it is not the number of jobs, or whether people have a paid job that matters, it's whether they feel they have something dignified and meaningful to do which is productive and fulfilling and which connects them with other people through providing the things that people need. Now, jobs may be a proxy for that, but I'm not sure they are a reliable one. Likewise, one could say that it is not really the income and wealth that people are after, it's what they can do with it. Can they afford a decent way of life? Can they get the goods, and the services and the facilities that they need to live the way they want? Then there is another side to the 'opportunity to advance', which is, the safety in not falling back, security in what you have got.

Then we can go a stage further: how good is the economy at providing for the least skilled, for the less energetic, for the less qualified? We hear a great deal about centres of excellence. Well let's hear it for centres of mediocrity, where decent people can do something decent, without overstretching themselves, feel secure, and feel fulfilled in what they are doing. Let's think about income differentials, about the effect on people of low incomes, of the advance of people on high incomes. A big report by prestigious academics for the Department of the Environment, last year concluded that 'trickle down' doesn't. The rich are getting richer and the poor are getting more disadvantaged. I think most people in this country are not so much concerned about whether they can get on, but just worried about not falling back. The ISEW offers a very clear and simple explanation of why the 'feel good factor' is absent. It's because we measure it in terms which aren't actually what people feel good about, what people are concerned about. People are concerned about decency, security, stability, a reasonable level of fairness and things like this. We can suggest some radical rethinking of those economic areas I showed you a moment ago:

- Jobs created, employment/unemployment levels
  Access to dignified, meaningful and fulfilling role in economic life for the least skilled/energetic/qualified

- Local income, wealth creation
  Access to the goods and amenities required for a satisfactory way of life for those on low incomes

- Opportunity to advance
  Security in what you have
  Protection from falling back

I don't personally think people want lower taxes. I think people want a decent quality of life.

Let's consider what business can actually do about these things.

What's the business case for sustainability? I think there are some very important advantages for businesses:

- Cost savings by reducing energy, resource and waste disposal needs
- Satisfy rising consumer and supplier chain environmental demands and preferences
- Regulatory compliance
- Meet 'good neighbour' and 'stakeholder' expectations
- Environmental management = good management
- Clean technology = better technology
- Prepare for future environmental regulation, taxation and price changes

As I said earlier, I am very impressed with the exhibition today, and the number of people who are doing this. That's the good news. But now I must say, there are limits.

- Energy, resources and waste disposal are cheap compared with labour and capital
- Many industries rely on obsolescence and disposal to maintain demand
- Free trade = unnecessary long distance trade and transport, prevents local autonomy
- Investment institutions bias businesses towards short termism

Energy resources and waste are still pretty cheap compared to other factors of production. There are huge efficiency savings to be made. But beyond a certain point, it costs you more to reduce resources than it is worth, and anybody who says companies can go on indefinitely reducing their resource costs is talking through their hat. In a funny way, it is actually very unfair on businesses to expect them to shoulder this environmental burden while the economy doesn't actually make it worthwhile.

Many companies - indeed whole industries - rely on built-in obsolescence to keep demand up. Think of the computer industry. Every time you buy a more powerful computer to run the latest software, a new release of software is brought out which overloads your hardware so you have to upgrade again. You have people in Warrington buying chairs made in Milan, while just down the road the factory in Warrington is busy packaging up chairs to sell to Milan. And in this country in particular, we have an investment programme framework which biases issues, biases businesses towards short termism. If you try to invest in the future, for example as Pilkingtons do, if you put a lot of money into research and development, your dividend goes down, the city institutions mark your share price down and you get below the dangerous point where your share price is less than the asset value of the company and the rust bucket asset strippers move in and start dismembering you.

The conclusion we can draw from this is there is only a limited degree to which companies can profitably pursue the sustainability agenda. There are huge opportunities within that. But there are also limits. If Government wants businesses to go further, Government has to make it possible.

Here are some ways that this can be done:

- Ecological taxation shift: 'shift tax from social goods such as employment to environmental bads such as resource depletion and waste production'
- Least cost planning: create regulatory frameworks which make *environmental* sustainability *commercially* profitable
- Energy *service* company approach
- Tariff structures

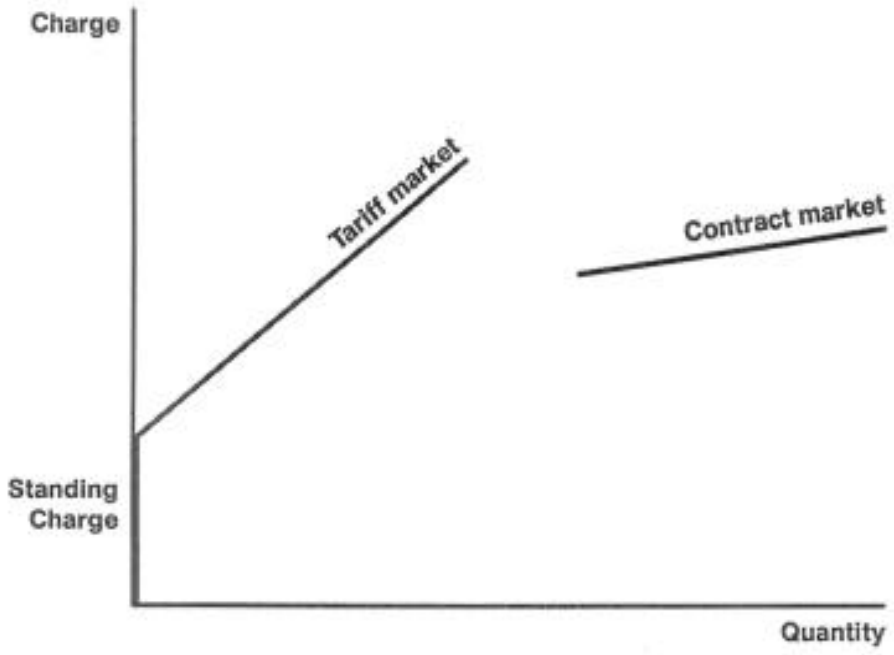
We can shift the tax base, we can shift taxes off the things that we want to encourage, like employing people and onto the things we want to discourage, like using energy and resources. Now, that has to be done rather cleverly. The one policy which has claimed to be a version of this is - in this country so far, VAT on fuel was actually a very bad example, VAT on fuel was a tax which had very little effect because those who could afford to do something about it - middle class people who have spare money who could invest in energy efficiency - actually had better things to worry about than a few extra quid on their fuel bills. Whereas the people who desperately needed to respond to it, people on low incomes for whom extra fuel costs are a severe burden were precisely those who couldn't afford to do anything about it. Now, there

was a bit of a palliative, some extra money went into the Home Energy Efficiency Scheme, but as an environmental tax it was really a non-starter.

There are different ways of doing things. For example, least cost planning. If you are not familiar with this do please get hold of the Association for the Conservation of Energy, Lessons from America, which explains the way the system works. Essentially, it's a regulatory framework, where it's made profitable for the energy supply companies to invest in saving energy. If it is cheaper to give insulation and draught proofing out to people to reduce demand than it would be to build a new power station to meet the demand, then the energy supply companies can put the cost of the draught proofing on to fuel bills, but not the costs of the power station. It's a clever and subtle way of making what is environmentally desirable also commercially viable and profitable. Leading out of that is the energy services company approach and I am extremely glad that AHS Emstar are sponsoring today because they are a leading example of the way that, instead of selling energy, you sell heat, light, warmth, the things that people actually want. A different way of looking at a market, which enables you to satisfy the human need, with less and less use of environmental resources.

I'm going to go into detail about the final one of these methods, tariff structures, because it is one which I don't think gets nearly enough attention. Here is something which, again is probably familiar to everybody, here is the basic structure of tariffs in gas and electricity for domestic consumers in the UK, and I emphasise that we are talking about domestic consumers.

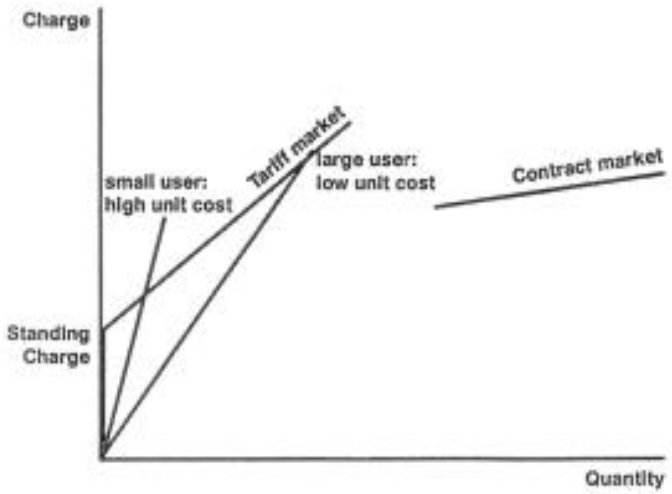
TYPICAL UK UTILITY TARIFF



There's a standing charge, then a standard rate per unit in what is called the tariff market. Then if you use enough, you can get onto the contract rate, which is cheaper. Here are a few features of this. For a start, it's regressive. The less you use the more you pay per unit, because your standing charge is spread over less demand. So a little old lady, living very frugally, pays a higher unit cost than somebody using more fuel.

TYPICAL UK UTILITY TARIFF

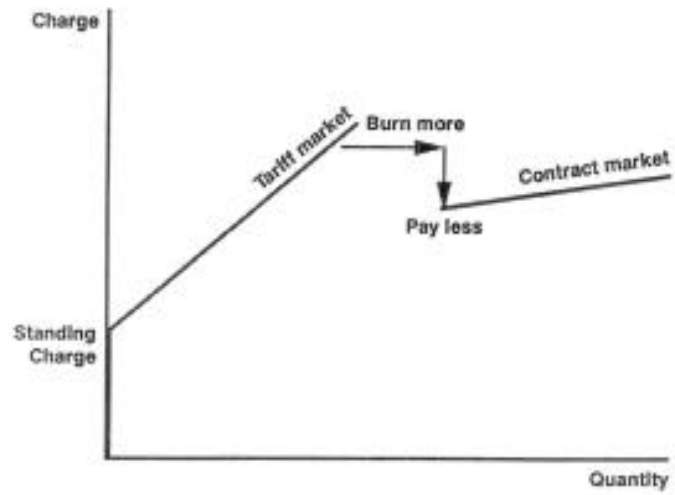
Regressive structure: the more you use the cheaper it gets



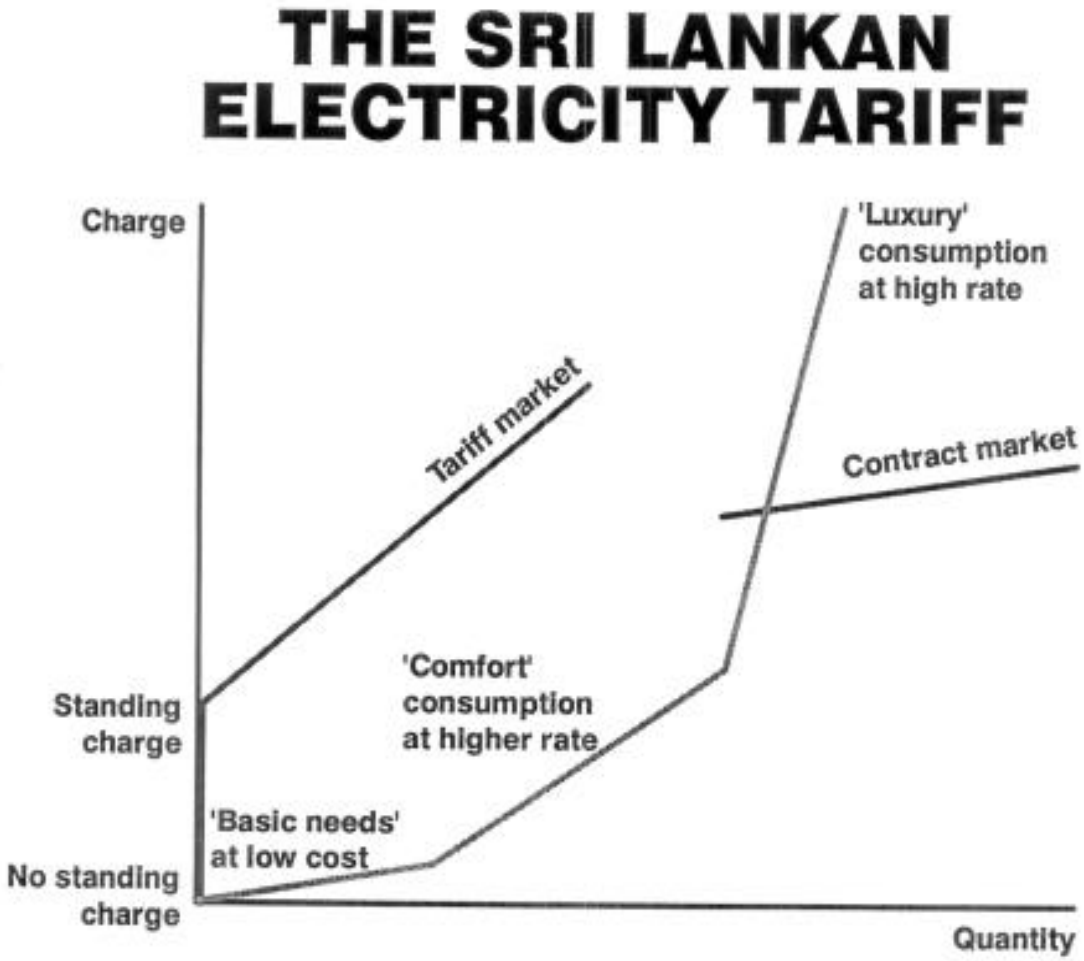
It gets worse though, because if you are at the top of the tariff market, if you can burn a bit more, and qualify to get into the contract market, you pay less. Some schools tumbled to this a few years ago. They ran the central heating through the summer holiday, full blast, so as not to inconvenience anybody in order to burn enough gas to qualify to become contract consumers. A very frugal, financially astute move.

TYPICAL UK UTILITY TARIFF

The 'flame of shame'



It doesn't have to be like that. Here is the domestic electricity tariff structure in Sri Lanka.

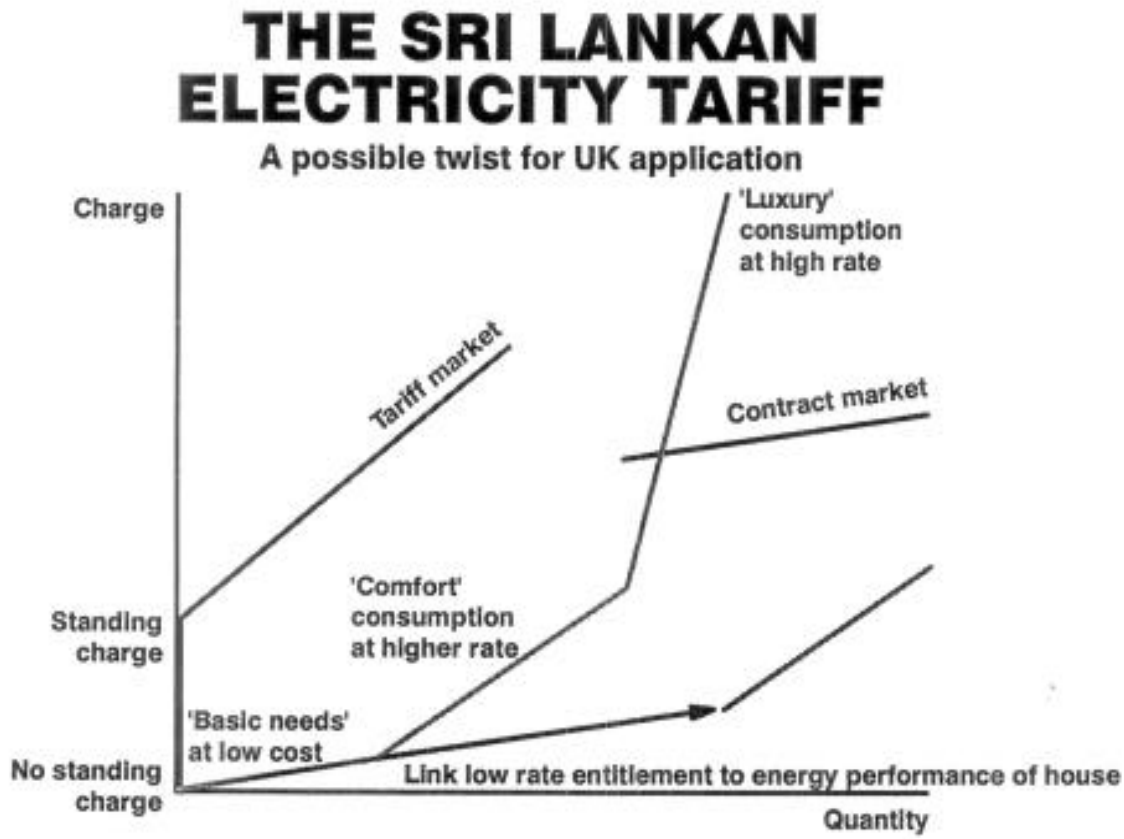


There is no standing charge, you can have a connection to the grid as of right, and you can buy a subsistence level of consumption for electricity at a very low unit cost. This is calculated so that anybody who has any income at all can afford to run a light bulb and a radio in their one room cottage at night, which in a benign, warm country like Sri Lanka is all the energy you need for a reasonable quality of life. If you are middle class and you want to run an air conditioner in one room and a radio and telly or fridge in another room, then you pay for the extra units at a higher tariff. And if you are an expatriate living in Colombo, and want to air condition your whole house all day long, and run lots of appliances all the time, then you pay through the nose, you have this third, high-luxury tariff rate.

This structure achieves three things. For a start, the sum of all the amounts the different people are paying on the tariffs adds up to enough to cover the cost of the electricity supply system. We are not talking about public subsidy. The second thing

this tariff achieves, is that everybody can afford a basic, decent provision. The third thing it does is give every consumer at the margin an incentive to reduce their consumption.

One should be very careful about moving schemes from one country to another. An obvious issue about trying to apply this idea in the UK is that we have much higher basic needs, because we are a cold country and a lot of our housing is energy inefficient. There is a lot of difference in energy needs between households. Households with elderly people, or with children need more. Energy inefficient houses need more than energy efficient houses. So we would have to think very carefully about how to apply this. But one possibility is to put quite a nice little twist in it.



We could say that the amount of energy that the utility has to supply at the lowest rate, which would be a loss making rate, would be pegged to the energy performance of the house. Now if that happened, all the energy supply companies would be rushing out to persuade householders to improve their insulation levels so they could start selling power at the higher rate earlier. Your instant reaction might be that is an attack on the utilities or that it is anti market. I think we should think of it very differently, as setting a different framework within which competition and profit making can go on. This is the key point I want to make. Regulation and markets are not opposites. There is a

notion that you do business favours by reducing regulation - this is oversimplified. Businesses compete within a particular framework. We have a framework in this country which has come about largely by accident - with high unemployment and yet a tax framework which discourages people from employment. Energy and resource waste, and yet a tax regime which makes those things basically cheap. It doesn't have to be like this. We can consciously manage markets to achieve social and environmental goals. Indeed we must.

So the message I want to give you about the way businesses can respond to the sustainability agenda comes in four separate parts:

SMART COMPANIES SHOULD

- Exploit current cost-effective opportunities to the full
- Anticipate and prepare for future changes (ask sustainability 'what if' questions)
- *Welcome* regulation to set *socially* desirable market 'rules' *within which* to compete
- Change your spots if necessary

The first part of this message is there are huge opportunities for saving money and improving your company's position immediately through resource saving and energy saving. And it is worth anticipating, going a little bit beyond what a current investment appraisal might tell you is the optimum. Think about sustainability 'what if' questions, think about some of the issues I have been raising. Think what would happen if Government really wanted to try to reduce resources and encourage employment through the tax system, and then think how your business would respond to that. The second part of the message is the hard one to accept: you should welcome regulation to set a socially desirable market framework, within which you can then compete. The third part of the message is that this may mean changing your spots. I visited Canada a few years ago. I travelling on Canadian Airlines, which is part of the Canadian Pacific group. I stayed in various resort hotels, part of the Canadian Pacific group. I hired a car from another part of the Canadian Pacific group. I bought all sorts of travel related services from various Canadian Pacific companies. Eventually I asked someone if I could travel on one of Canadian Pacific's famous trains. They gently explained that the railway business had been sold off years before. Canadian Pacific no longer run trains. They started on the railways, built resorts and invested in other travel businesses to diversify, to extend, to strengthen links and build their basic travel business. Then when railways became less profitable they got out of railways. So in one sense they have remained in the business they have always been interested in - travel infrastructure and services. But in another sense they have changed their spots entirely. I suggest this is the way ahead for companies like energy suppliers, who are

in a business which is basically against sustainability. Redefine areas such as energy service, companies.

So think back to the Coventry boy. Think of him standing there with the green half and the business half. The trouble with the halves is, they fall apart. Half a bobble hat falls off. You can't tie half a tie. We can only deal with these issues if we bring the business half and the environmentalist half together. We have to reconcile the environmental pressures I was talking about with business profitability. And to do this we need a crucial intermediary: a regulatory and Government framework which makes the sustainable behaviour more profitable and more commercially viable. We've actually got to pack three things together: the environment, business, and, I suggest, a new view of what Government ought to be like: setting the framework so business can go further towards sustainability.

Thank you.