

SPEECH BY TOM BURKE

# **CARBON MARKETS ARE NOT THE ANSWER**

**INTELLIGENCE SQUARED 'GROWTH CAN BE GREEN' DEBATE,  
ROYAL SOCIETY OF ARTS**

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Growth can be green. In fact, as we go deeper into the twenty first century, it will have to be green if it is to continue at all. But the carbon market will be much less important than orthodox opinion, and the proposers, would have you believe.

We face a shared dilemma. All of us need to secure reliable access to energy for our economies to grow. Without that growth we cannot maintain social cohesion and political stability.

For China, India and the United States, as well as Europe and the rest of the world, that means using more fossil fuels, especially coal. If we do so with present technologies then it is certain the climate will change and probably much sooner, and more, than we currently expect.

If that happens then the very social cohesion and political stability we are burning the fossil fuels to maintain will be at great risk.

The point of a dilemma is that neither of the choices is attractive. We do not want to give up either the use of fossil fuels or a stable climate. The problem with a dilemma is that you will be gored by both of its horns if you take too long to decide what to do. Then you have the worst of both worlds. The trick is to resolve the dilemma not to make false choices.

The proposers of tonight's motion believe that this can be done by carbon markets. Get the price of carbon right, internalise the externality, and all will be well. Technology will be deployed, behaviour will be changed, emissions will be reduced, even eliminated and this discomfiting dilemma will disappear in a puff of rhetorical smoke and oratorical mirrors.

To believe this is to believe in magic – the magic of the market.

Climate change is a problem like no other humanity has ever faced. A stable climate is not simply another good thing to have if we can get it. Without it we cannot have any of the other good things we need or desire.

Keeping the climate stable is an imperative not an option. Put more formally, a stable climate is a system condition for civilisation. Without it civilisation is impossible.

Climate change is different in other ways. It will adversely affect the security and prosperity of literally every single person on the planet.

Poverty, disease, illiteracy and conflict affect far too many of us. But a great many of us also lead lives of peaceful affluence in educated good health.

More importantly, climate change has a ticking clock – the two parts per million increase in the amount of carbon dioxide in the atmosphere each year. And that clock is ticking faster.

There is no rewind button on the climate. We cannot go back and correct mistakes. Once the extra carbon is in the atmosphere we must live, or die, with whatever climate it produces.

This means that we cannot afford policy failure. We have at most two decades in which to shift our energy system onto a low carbon trajectory.

If we make the wrong policy decisions in the next few years, it will be impossible to keep the eventual rise in global temperatures below a devastatingly dangerous three degrees, let alone the two degrees that most scientists think is already risky.

The task we face is immense. But its dimensions are clear. The technologies we need are already available or within reach. We know we can afford to deploy them. What we do not know is whether we can agree to do so. It's the politics that's the problem.

Securing a stable climate means making the global energy system carbon neutral by the middle of the century. The earth's natural buffers absorb some of our carbon emissions. But that buffering capacity is all taken up by agriculture, deforestation and land-use changes.

That is why stabilising carbon concentrations, and thus temperatures, means all our electricity generation and transport must be emissions free in just over forty years. We can do this by improving energy efficiency, using zero carbon coal, wind and solar and other renewables for electricity and hybrids and eventually hydrogen for transport.

By 2050, if we want a stable climate, we have to be living in a world where gas is no longer used for domestic and commercial heating and cooling, there are no internal combustion engines in our transport fleets and all our electricity is generated by coal with carbon capture and the renewables.

Getting there from here means making very rapid step changes in technology. At best, a carbon price will make a difference at the margins. Price signals are helpful if you are making incremental decisions. However, incremental decisions will not stabilise the climate in the time we have available.

Furthermore, there are many price signals in a market place and not all of them are going in the same direction. The fuel duty escalator illustrates this difficulty perfectly.

You will remember, it raised the tax on petrol five percent in real terms each year. But while the tax was going up, the real cost of driving fell and real disposable incomes rose over forty percent. Not surprisingly, it did not change driving behaviour very much.

It did however raise a very large amount of revenue for the government.

If prices really did work the magic the proposers believe you would expect that a rise in the price of oil from under thirty dollars a barrel to over seventy dollars would have stimulated a huge rush to decarbonise the economy.

What has actually happened is that it has stimulated massive investment in exploiting tar sands and oil shales, in converting coal to liquids and in developing environmentally destructive biofuels.

The truth is that markets work much better in economic models than they do in the real world. In the models, investors behave as you assume they will. In the real world, they are much more inventive. Generally, they try hard to find new ways to carry on doing exactly what they were doing before.

Let me give you another illustration of the problem with models of markets. Almost every economic model shows that if you input a carbon price large enough to reduce emissions significantly, you drive coal out of the economy.

But energy security considerations mean that in the real world there is no politically available path to a stable climate that does not involve Chinese, Indian and American coal.

Economic models are useful tools to help you think about the world. They are very dangerous alternatives to doing that thinking.

Nothing illustrates the incoherence in market distorted thinking about climate change better than the deep contradiction in this government's policy.

Such is its belief in the power of markets that in the same Energy White Paper we are told that we must liberalise energy markets as quickly as possible to drive energy prices down for competitiveness reasons and that we must drive the price of carbon up aggressively for climate reasons.

Nowhere are we told how the left hand pushing energy prices down at the same time as the right hand is pushing them up leads you to anywhere other than the land of the deeply confused.

There are a many other unsolved problems with a market led climate policy.

Markets, even when mature, are by definition volatile and prices in them difficult to predict. This discourages precisely the kind of high risk, long life investments in the step change technology transition we need to stabilise the climate.

Without a global price for carbon, there will be competitiveness risks for those economies that do put a price on carbon. But to get a global price for carbon we have to agree a global cap on emissions and a mechanism for allocating the permits under that cap.

You have only to have read the papers in the past week to know what an impossible dream that is. America will not agree until the Chinese agree and the Chinese will not agree unless the Americans act first. And in any case, if they were to agree, it would be to the least they thought they could get away with.

The widely held belief that building carbon markets is the best policy for tackling climate change is the triumph – and tragedy – of theory.

Of course they have a role to play but it is currently much smaller than is believed and much too small to solve the problem.

In practise, three other policy tools are much more important and reliable if we are to mobilise the tremendous capacities of the business community in time to make a difference.

The first is to set the right technical standards to drive the technology deployments we need. The European Union has already shown the way by beginning the legislative process to require all fossil fuelled electricity generation to be carbon neutral by 2020. It is a pity, however, that it lost its nerve on vehicle emissions under German pressure and ceded leadership in this field to California.

The second is to structure the regulation of energy markets so as to allow utilities to pass through the additional capital costs of making the low carbon transition to whole of the rate base. This would spread the costs so thinly as to make them much more bearable than the oil price rise we have absorbed with little difficulty.

The third is to spend public money on buying the public good of a stable climate by paying to accelerate the rate at which low carbon technologies are deployed thus driving down their costs more rapidly than markets alone could ever accomplish.

We can have green growth but only if we reject the irrational market optimism of the proposers and deploy the policy tools that will actually deliver a stable climate.

It is for these reasons that I am pleased to second this motion.