

Biofuels: The Public Affairs of Folly

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Religion, Science & the Environment Symposium VII

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Your Excellencies, Your Highness, ladies and gentlemen

Jane, thank you for ‘giving me the speaking stick’, as the Cherokee communities of the Appalachians would say. It’s a different tradition from the Inuit. I will try and honour that Cherokee tradition by telling the truth for the whole group, even when that truth may be painful. I grew up as a good Anglican school boy, singing a wonderful hymn that begins “From Greenland’s icy mountains”. So, it is a particular pleasure to look out of the cabin and see Greenland’s icy mountains. I want to start not with asking permission of the Inuit, but with something more fundamental. I want to apologise to the Inuit peoples of the Arctic for the extraordinarily flagrant way which modern society has abused the environment. They are the first victims. I think it is right that we should be here and it is right that we should consider their fate, but it is also right that we should understand that the very Greenland that we are visiting is the nemesis for our own society. We have abused the Arctic. In that icecap out there is the water that will flood London, Copenhagen and Bangladesh. It is a story worthy of a Greek tragedy.

I want to switch our attention slightly from the immediate problems of our Inuit friends here, to the challenges that we face in the rest of society. I call my talk ‘Biofuels: the Public Affairs of Folly’. What I want to do is to take biofuels as an example of how the political process can come up with absolute idiocy. Biofuels are an example of how that happens. We’ve ended up backing, in both the European Union and the United States, the wrong kind of biofuels, for the wrong reason. We were responding to very strong lobby pressures, otherwise known as farmers in election years. If we continue to deliver that kind of bad decision, we will continue to threaten the survival of our species.

Maria knows that when Sadruddin Aga Khan encouraged me to attend the first Symposium, he said “Please go, there will be fifty theologians and fifty marine biologists, and you will be one of the two politicians”. Ever since then I have wondered exactly what politicians are for. So I thought we might spend just a moment trying to identify what it is that politicians, or more accurately, public affairs the structure of decision making, can actually achieve. I refer to public affairs to describe what most of you think of as just ‘lobbying’. Public affairs is in fact a much more complex tapestry. If we had time I would really like to create one of those beautiful slide presentations that our scientist colleagues have used. It would show the ecology of the public affairs world - the companies, the consultants, the think tanks, the churches, the NGOs, the ministries, the civil servants, the parliamentarians, everything. Public affairs takes ideas and turns them into policies. If we could understand how that process works, we could be honest and reject the normal model of thinking of politicians as either venal or stupid. We could recognise that politicians may not be heroes, they may be weak at times, but they are responding to a system. If

we could improve that system, we would improve the quality of the outcome. I think politicians in general, and parliamentarians in particular, have an important role, as story-tellers to their tribe. They have to take complex ideas and make them stand up in a public debate, in the rough and tumble of a radio interview or a television programme.

So let's explore just for a moment the 'grammar of public affairs'. Let's assume that the nouns in this grammar come from science, giving us the facts. I think the verbs come from religion, telling us how we should operate. The Media, the third part of this trinity, give us the adverbs and the adjectives. How do we make this live? How do we talk about governance? How do we explain governance? How do we use governance to win consent, whether in a democratic system or a non-democratic system? All systems need the consent of the governed. There is a brilliant book, that many of you will have read, by Jared Diamond called 'Collapse'. He points out that one of the first signs of societies under stress, in particular environmental stress, is that their political systems degrade. I am on very dangerous ground here because one of his best examples is the Norse settlements in Greenland. When I floated some of these ideas about the collapse of the Norse settlements over lunch, I got massively re-educated by Norwegian friends! But let me try nevertheless. If you were a Mayan society or if you were on Easter Island, or if you were in a settlement here in Greenland, as the climate changed, people tried to resist change. They tried to go on in the old ways. The first thing that happened was that those vested interests most threatened captured the political structures. They reduced the resilience of their political systems. I feel that that is what is happening, on a much bigger scale, to our industrial societies today.

This session is called "Reducing our Addiction to Fossil Fuels". Now, I hope the no one is going to announce a "war on Climate Change", because that would come from the same sort of mindset that gave us the "War on Drugs" and "the War on Terror" with their record of consistent failure. But addiction is the right word. Our society is addicted to fossil fuels. With addictions you normally find pushers. I want to look at the pushers. I want to look at the public affairs of those people who are determined that our society will continue to be addicted to fossil fuels. Our society is a vicious political marketplace in which people threaten and fight and blackmail. It isn't a great wonderful cathedral in which we all discuss like intelligent Swedish Social Democrats in working groups. To think that our policies are the outcome of some graceful platonic discussion is just to mislead ourselves.

Let me attempt a very brief history of climate change as if written by public affairs. I like Stefan's model of the boat's oars, but I have the sneaking feeling that someone evil has got our rudder. Often it's the lobbies that are pushing the rudder in one direction or another. Now, I am not going to try and argue that this is all about public affairs or all about the 'Climate Contrarians'. So, let me just state some of the other things which we have to master if we are to tame this political system. Yes, it's complex. Yes, people live in different 'silos'. Yes, even the best and most well-intentioned can be blind to something that is obvious. We have a classic example later this month with the 20th anniversary of the Montreal Protocol. The Montreal Protocol is an ozone treaty, but is also the most effective climate change treaty we've ever had. And yet if you go to the Commission or the British Government, you'll find people who say 'we do Ozone, the people doing Climate are next door'. We have to find

ways, even in civilized and intelligent governments, of getting people to talk to each other and to realise that the most immediate change we can make to improve the reduction of greenhouse gases is to phase out CFCs¹ faster. We need to do a deal with the Chinese and the Indians, and do it rapidly. Preferably we should do it in Montreal this month.

I'm not a Marxist, I do believe that personalities matter. Personalities in key places. Sven (Auken) you are not going to like this, but you are undoubtedly the most successful Environment Minister that the system has ever produced. It is partly because you were there for a long time, and it's partly because you saw the opportunities. Individuals can make a difference. You did wonders for the strength of Environment Ministries, in the face of Finance Ministries. If you were there today, you would be doing battle with Defence Ministries and Foreign Ministries. Individuals matter. Take for example these Symposia. These seminars would not have happened without His Holiness and Maria. Now, it is absolutely true that the Orthodox insight of 'co-creation' is very valuable in this area, but that principle needed an individual who was also prepared to embody it. I am going to show in a moment a few slides of the Contraction and Convergence analysis. Many of you may know a wonderful character, called Aubrey Meyer who invented Contraction and Convergence. Aubrey is both brilliant and abrasive, but he understood the need to convince the individuals that matter in this bit of the political system. We need to think about individuals, we need to cultivate them. Finally, in the words of Harold Macmillan "Events, dear boy, Events". Climate change is not a straight line evolution and the crisis is affected by external events. One of the un-mourned victims of September the 11th was the loss of political interest in solving environmental issues. Energy was suddenly switched to problems of terrorism and foreign policy. These issues of geopolitics are crucial to the evolution of our response to climate change. But at the core, and continuing despite the personalities, despite the complexities, despite the events, are extremely well-financed public affairs campaigns.

In the early 90's, I was made parliamentary Rapporteur in the European Parliament on the CO2 Energy Tax. An individual representing the Global Coalition tried to buy me. It was a bribe. Actually he offered me a very large consultancy, before I got the rapporteurship. He didn't understand that a British Conservative might actually be in favour of the environment. Probably an American cultural problem! He had never heard of Edmund Burke, so it serves him right. It was a straight attempt to buy a significant figure and he was foolish enough to explain their strategy. He said: "Well, Tom, you see, we've got to stop Europe now, because otherwise in ten or fifteen years, the American opposition to measures on climate change may be swamped by Europe. I can assure you, that we have an absolute choke hold over the US Congress. Nothing will pass through Congress to do with his idiotic global warming idea." I said: "That's very interesting, but what are you going to do?" And he said: "First of all, we are going to make sure that everyone sees this as a tax. You may call it a revenue neutral instrument, but we'll sell it as a tax. Nobody in democracies is in favour of taxes. Secondly, we are going to deny the science. Now, if we do those two things, that will buy us fifteen years and then all that is left, is adaptation". I think that's actually the most chilling phrase. When today you listen to a colleague talking about adaptation, remember that 'all that's left after fifteen years is adaptation'. Well,

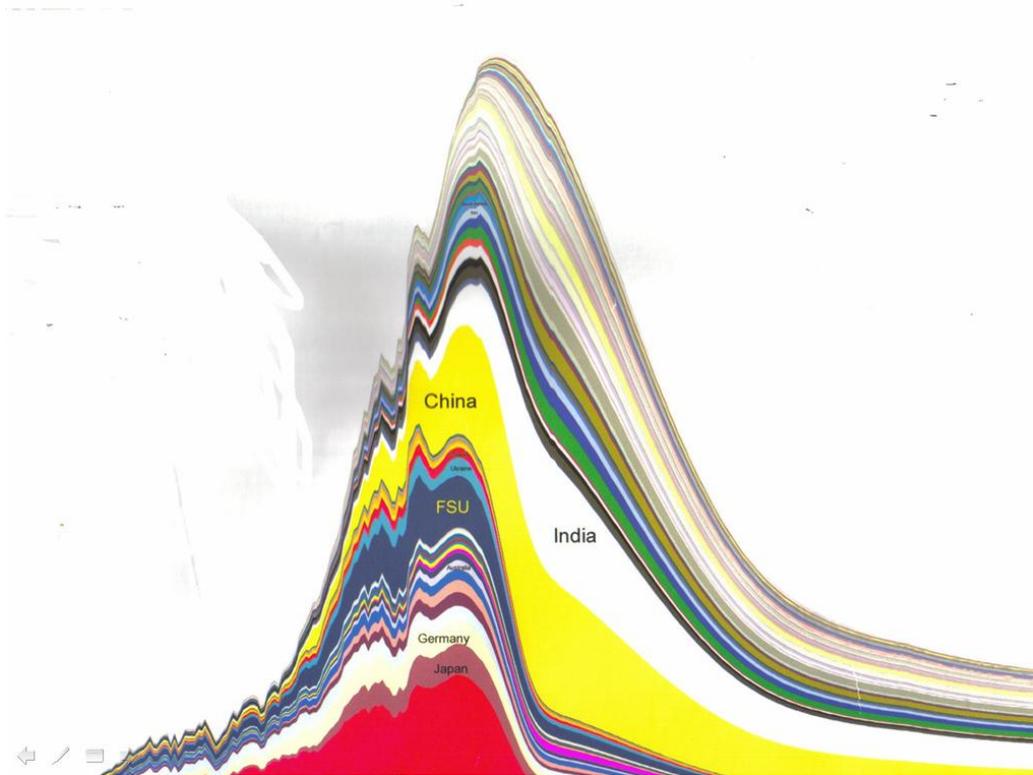
¹ CFC – chlorofluorocarbons.

that campaign was brilliantly carried through, it continues to this day, and it has cost us fifteen years. It's criminal. Of course it's legal, but in my mind it's ethically criminal. These are not sceptics. These are people who know perfectly clearly what they're doing and they're doing it for reasons of personal and corporate gain. They continue to do it today, even if the debate has shifted slightly. The majority of politicians have moved on after those fifteen years, from a state of denial to what's becoming a hectic competition for subsidy. Even *ExxonMobil* will now say 'yes, it is happening, but of course, we need to have further thought and to prove the linkage mechanisms'. All the things that such companies usually say. But what they're actually concentrating on is defending the subsidies to the fossil fuel industry and finding new excuses for subsidies. They continue, of course, to confuse as much as they can the public debate about the reality of climate change. In the States you can see that very clearly. The coal lobby now say "we need to use coal, because we don't want to rely on dangerous Middle-Eastern figures! So we must have good American coal – or nearly as good Canadian tarsands". Coal has become the latest security weapon at the interface of climate change, energy security and foreign policy. Brilliant. Oil companies do it, coal companies do it. Shell does it. Shell is one of the world's largest coal companies. They are a huge lobby for the coal industry, even if they present themselves as an elegant and progressive force in European debate.

Then you have the nuclear lobby. I study and teach public affairs nowadays, so again I recognise a brilliantly conducted campaign at national, European and at global level, playing on the fears of greenhouse gas emission. This competition for subsidy continues on across the spectrum. We have a competition for subsidy, a competition for political support, between fossil fuels and nuclear, and then between both of those and renewables. Within renewables there is a competition between hydroelectric, geothermal, wind, tidal and even solar. Most politicians in Europe, and most politicians around the world, if you say solar, think of photovoltaic cells. They do not think of the massively more important Concentrated Solar Power, which is large scale arrays of mirrors in deserts. Why not? Because there is a very active photovoltaic trade association in Brussels that spends its time lobbying on this issue. So, Concentrated Solar Power, despite the fact that Europe is very well placed to source it in southern Spain or North Africa is severely under-funded. It is a Californian technology, now developed by the Spanish, but in 2006 the two Senators for California had never heard of it! So, you can get bizarre exercises where the ranking of desirability is done entirely in terms of public affairs. It depends on who is campaigning and who is not campaigning.

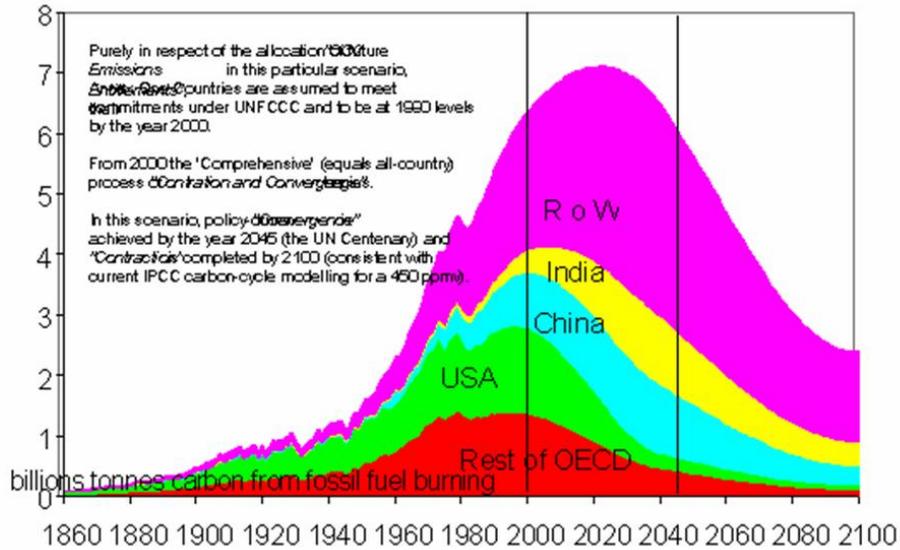
Let me return to the question of Biofuels to underline some obvious statements. We should go, as the Swedes are proposing to go, to second generation biofuels. We should deconstruct the word 'biofuel'. Biofuel is a snakelike word. It sounds as if everything that is a biofuel is green. But that's not true. If you have to destroy a rainforest in order to grow palm oil, the result is not a green fuel. Yes there are exceptions. You can make a case for Brazilian sugarcane, grown without chemicals, as a green fuel. We need to deconstruct the word and create a system of traffic lights. If you see that if it's a red biofuel, you will know that it may make your car work, but it ain't going to help the environment.

Can we just move very quickly to some of my pretty pictures? I hate PowerPoint presentations, because it means everybody looks at the screen and not at me. We've had enough looking at me, so just a brief look at the screen.



Many of you will recognize this. This is the Contraction and Convergence analysis. It shows carbon dioxide emissions from 1850 to 2100 split by country. The curve shows current emissions and then swings down to meet the target that the scientists tell us we must meet. How should “permissible” emissions be divided between countries within that global cap? Given the demands of historical equity, how do we allow for expansion in India and China and in the rest of the developing world? Answer: we all contract eventually, but the developed world, with its historical legacy which you can see on the early part of the chart, contracts faster, so as to allow for some expansion in the developing world within the overall cap.

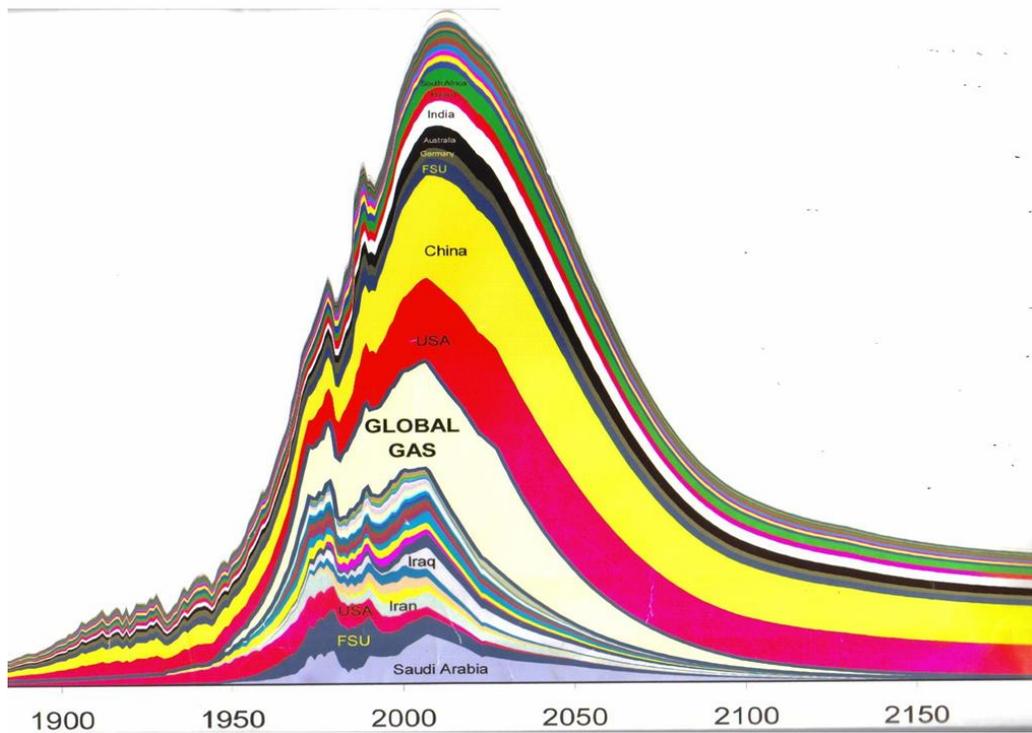
HISTORY & GCI CO2 SCENARIO for 450 ppmv under "CONTRACTION & CONVERGENCE"



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Here's the problem. The bottom is the rest of the OECD², the top is the rest of the world, but the only deal that we are going to get on climate change that matters is between the USA, China and India. And if we don't get that deal, you can forget it! All right? Yes, of course it matters what happens elsewhere, but they are the 'iron trinity'. All three countries are all heavily dependent on coal.

² OECD - Organisation for Economic Co-operation and Development.



This is the same exercise, but split by source of fossil fuels. In the middle you can see global gas supplies. The area below global gas is oil. You can see how oil is increasingly concentrated in politically unstable areas in the Middle East and Central Asia. Everything above global gas is coal. These are the remaining fossil fuels that we are 'allowed' to use. And again, the point is made clearly, there has to be an agreement over the use of coal between India, China and the USA. That big white area to the right is the amount of fossil fuels that we have to replace. If we haven't actually cut our energy use massively, we are going to have to find renewable energies to fill that gap! But unless we are very careful, that gap will be filled by coal.

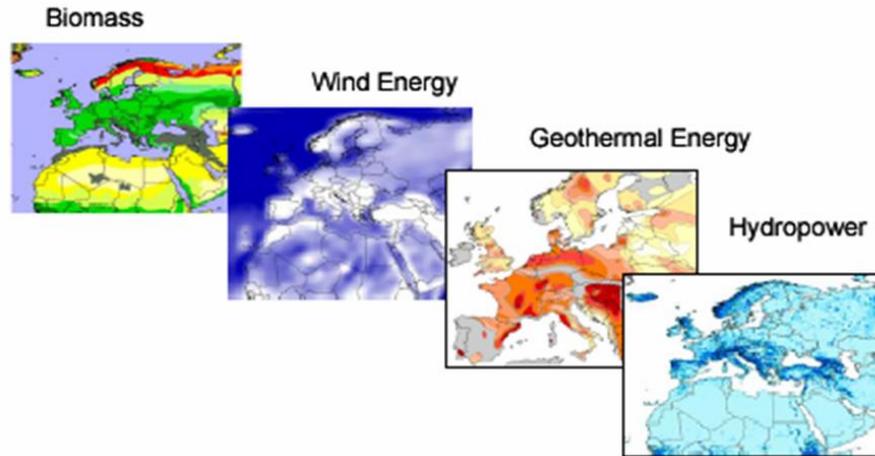
The Public Affairs of Biofuels

Farmers, Food or Forests?

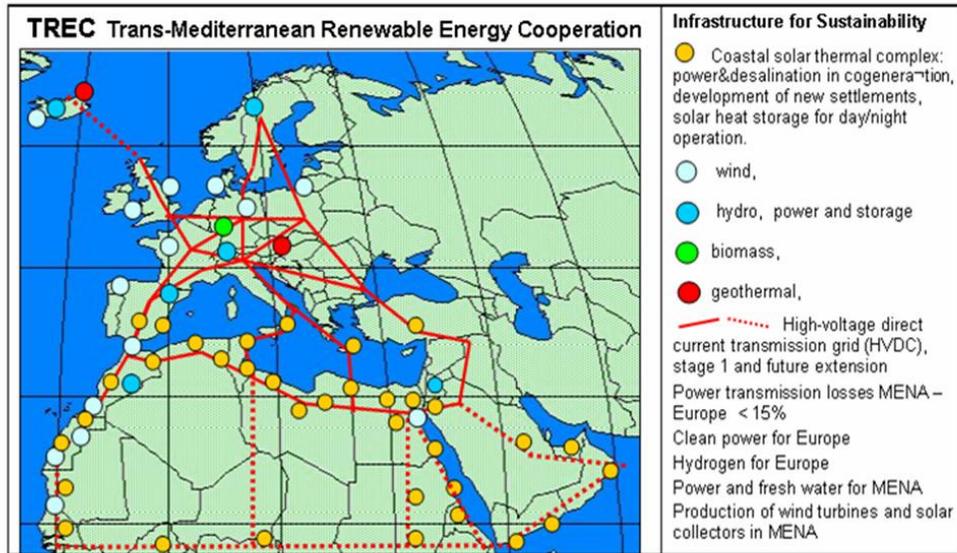
This is the biofuel choice on how to use our land. Do you want the farmers' interests, do you want higher food prices or do you want tropical forests?"

A wiser way of looking at this issue is to integrate all renewables. This is a map from a German study that looks at all the renewable energies that are available in Europe and begins to knit them together in an HVDC grid. You could bring geothermal from Iceland or wind from Ireland to the markets of mainland Europe.

This resource can be used both in distributed photovoltaic systems and in large central solar thermal power stations. Thus, both distributed rural and centralised urban demand can be covered by renewable energy technologies.

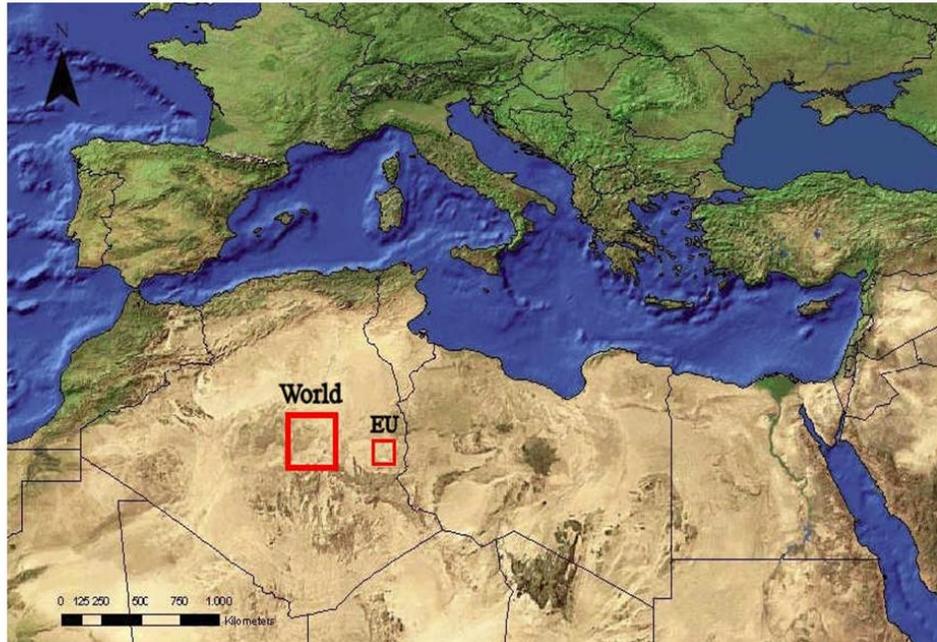


So put together hydro-electricity, bring in wind, bring in biomass, and you begin to have a solution. But what really interests me about this is making intelligent use of the potential for Concentrated Solar Power in North Africa. This particular proposal suggests siting these CSP plants along the coastal area, using them also for desalination. CSP is a proven technology that is easily up-scalable, in which we are investing tiny amounts by comparison with the investments going into nuclear power. Why haven't the politicians of Europe and the Middle East even begun to look seriously at this?



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I strongly recommend a visit to www.trec-uk.org.uk. It is a German idea, but this is a British website with some brilliant stuff in it. I kick myself. I thought I knew this area. But only a month ago, I knew nothing about this. I've been in the climate-energy business for fifteen years. Why did I know nothing about the potential for Concentrated Solar Power? And if I didn't know about it, lots of other people didn't either. "Less than one percent of the world's hot deserts, if covered with Concentrating Solar Power plants could produce as much electricity as the world currently uses".



Those little squares in the Sahara.. If we put industrial sized CSP plants, mirrors in the desert, in all of that little square, and we would meet all of the EU's energy needs. The bigger square would give you all of the world's energy needs. Now, obviously they are not all going to be in that particular square in Algeria, but you can put them in these areas of high potential, in the US southwestern states, (Arizona, New Mexico California) or in North Africa or in southern Spain or in Egypt... anywhere you are getting clear sunlight. We should be farming energy and not thinking that "it's the CAP, it must be therefore be plants". Nonsense. The Common Agricultural Policy should include energy as a farming exercise whether it's PV on roofs or fields of mirrors.

I was affected as a child by reading Keats' poetry. I am still tempted to believe that "Beauty is truth, truth beauty". If something looks elegant, I tend, in line with Ockham's Razor to believe it. So, let me leave you with a last slide. This is a solar tower plant in Spain that looks to me stunningly like a cathedral. Thank you.

