

# GLOBAL WARMING: Engaging the US at the G8 Summit

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The National Academy of Sciences has sent an appeal to the G-8 to take strong action on global warming at its June 6-8 Summit. Most G-8 countries want to achieve this goal; Congress agrees; the Administration is resisting. Can the G-8 bring the U.S. along on global warming? On the 2 nd day of the G-8 Summit, the panel will give two views: John Boright, a view from the Academy of Sciences, Anatol Lieven, a view from the political side.

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UN Information Center 1775 K Street, NW, Suite 400, Washington, DC

**Tiziana Stella**: Welcome to this panel co-sponsored by the Streit Council and the Citizens for Global Solutions. My name is Tiziana Stella and I am the Executive Director of the Streit Council. This is the second day of the G8 Summit, this year presided over by Angela Merkel of Germany. Mending transatlantic relations has been a priority of the Merkel government. However, while successful in other areas, such as the Transatlantic Market program, she has encountered major obstacles in her efforts to bring the US into serious cooperation on climate change.

Today we have two distinguished speakers to address this problem. After they speak we will take Questions, and after that, a Reception.

Dr. John Boright (I'm told to be sure to pronounce his name "Boright", not Borat :) ) – Dr. Boright is Director of the International Affairs Division at the US National Academy of Sciences. Recently the National Academies of Sciences of all the G8 countries, along with several others, jointly signed a statement calling on the G-8 leaders to take urgent action on global warming.

Anatol Lieven, of the New America Foundation, will address the global warming issue from a more political and diplomatic angle.

Let me conclude by saying that it is perhaps what they call "a sign of the times" that we are holding this meeting at the United Nations Information Center. My organization, the Streit Council, was founded by the New York Times correspondent at the League of Nations, and has been working for decades primarily toward improved cooperation among the industrial democracies. Citizens for Global Solutions has been working primarily at the UN level. The growing connection of these two levels of work was underlined by the call that the UN Secretary General made to the G8 meeting to take leadership on climate change. It is a global problem; yet at the same time, the G8 plays a key role in it. The problem of stopping global warming is connected with the problem of getting more international cooperation and strengthening the institutions for it on both levels.

This panel will perhaps shed some light on all these interconnected tasks, with which we are bound to be dealing for some time to come.

Now I will pass the floor to Dr. Ira Straus who represents here the Citizens for Global Solutions - National Capital Area section.

Ira Straus: (...) We are facing the terrible problem of Global Warming. We may all be cooked out of our habitats by it in our lifetimes or in the lifetimes of our children and grandchildren. I guess there are two ways of looking at things: First, Is the G8 going to do enough to deal with the problem? And I think we can guarantee in advance: No, in terms of dealing with the problem itself. But how is the G8 and how are the international organizations performing in getting some movement on this problem and some cooperation, since no country can do it alone, and on that I think we can say in advance that thy are not doing too badly and that the G8 will have gotten more movement out of this administration as just about anybody else in the long time, no matter how insufficient it might be. So I guess, we have either the pessimistic or the optimistic side, and I just want to make sure that the gloom doesn't totally drown out the fact that the institutions given their fairly limited capabilities are probably doing as well as they can and they might be actually achieving something.

With that, I am pleased to turn over the floor to Dr. John Boright from the Academy of Sciences. As mentioned the Academy of Sciences has played the role in this, sending the letter to the G8 leaders and urging the G8 countries to take some action on this. It is very impressive that political intervention has been achieved internationally by coordinating group of National Academies of Sciences, paralleling the group they were ... itself. (...)

**Dr. Boright**: It is pleasure to be here. It would like to first tell you what the Academies are, because that is essentially in this and lots of other complex issues, as you know, and you really have to know where your information is coming from, so you can put it into context of other information you have.

The National Academy of Sciences was created in 1863, as a local society on the mold of the European tradition of honorific science academies that were going way back to the 17<sup>th</sup> century in Italy, Germany and England in particular. Our academy and these other academies of great scientists, like Newton, were essentially aiming to create association of top level scientists, to recognize excellence and to encourage progress. Our Academy was somewhat different. In the Charter that was signed by Abraham Lincoln, there was a paragraph that said that the Academy

should provide, to any department of the US government, advice on any matter of science and art (which was the word for technology in 1863), for no compensation whatsoever. That was unfortunate phrase that ended up in the Charter. The Academy therefore was kind of a different animal. In addition of the honorific one, it had the advisory role from the very beginning, and this was in the middle of the Civil War, and the government started to ask the Academy questions. For example: How do you quickly measure alcoholic content in liquid. It was actually important because it was the only tax revenue of the US government. The Academy, though, is then completely non-governmental organization. The government has no role in selection of the Academy's members. The Academy has the choice of selection its officers and members. So in last 140 years the Academy plays important advisory role to the government but it maintain its independence from the government. It is not hostile relationship. The government has always welcomed that the Academy has established itself and deals with the executive questions.

The way it works is that the government can ask questions in practically anything you can think of...environmental regulations questions included. The Academy puts together a top level committee, not drawing only from its own members or not only Americans but actually including whatever individuals you need. The committee is absolutely top group of experts who are essentially needed to answer the question. These experts make study, they orchestrate the review process and then certifies that other reviews of other group of experts has been taken into account, and the findings are always put out to public, so the government agencies always know that they might not get the answer they would like but it would be a public answer. The Academy does that about 250 times a year. These reports are heavy. The reports have on average 200 pages, they take 18 month to do and they cost good fraction of a million dollars. The reports have various sorts of impacts. National Bureau of Standards, for example, was created as pursuing one of the recommendations of one of the Academy's study. Many things around you were impacted this kind of advisory process.

The Academy has done a lot of work on the climate change. The Academy's website is a very good searchable website. The climate change has a special page, where you can access dozens of details of studies: reviews of the governments' researches on climate change problems etc.

## The website is www.national-academies.org

The process of doing very short statements as an input to the economic summit is quite new. It started two years ago, so this year G8 summit is the third one. The first one was at the Gleneagles Summit, UK, after a suggestion of our British counterparts. Joint Science Academies Statement Global Response to Climate Change was written in Gleneagles two years ago and was very relevant then as it is now. I will come to the substance of that very briefly. The academies involved were the academies from the countries participating in the summit. So, it is not only the eight but it is also the major developing countries; China, India, Brazil, South Africa and in this case because Tony Blair was very interested in making the support for Africa a key issue of the Gleneagles Summit, all of the existing academies from Africa were participating as well. There were actually only seven of them but they also participated in drawing out this joint statement.

The next year after Gleneagles, the summit was hosted by the Russians in Saint Petersburg. The Russian government wanted as one of its priorities for the Saint Petersburg summit the issue of

energy security and this was soon after the Russians had closed the gas pipe for Europe, so it was very interesting that they choose the energy security as their topic. Energy is the main way that we can do anything about climate change, because essentially the green house gas comes primarily from energy related activities. So, if you want to do anything about the climate change, it is the matter about the energy policy and energy programs, which brings us for this year. The title of this year statement is a Joint Academies Statement on Growth and Responsibility.

Growth and responsibility is the overall title that Angela Merkel's government suggested for this summit that is now going on in Germany, calling sustainability and proficiency of the energy and the climate protection. And, as a special bonus, you have a parallel statement by the African academies.

So, I will be glad to take any questions on the process. We (the Academies) really do think that the process is important because the stakes are huge for the climate change issue and as you know, there is possible to find quite extreme publications arguing for the both sides of the climate issue, and they are people who are earning their living turning out effective invective. That is why the process is so important. When you read a statement about climate change you probably need to know who is making the statement. I worked on these a lot, I have to say. I am a senior full time staff member, originally a particle physicist, though not a climate scientist, not an Academy member, I manage the international program of the academies. These statements are result of all of the academies accessing their network of top level experts on the range of technical aspects of this issue.

To address the headings: Firstly, climate change is real, that actually is a theme that is older than two years ago but quite interestingly the evidence is coming in faster, surprisingly fast, even to the scientists who are working on it. Most of the scientists are quite surprised of the coherence of the evidence.

Secondly, reducing the causes of climate changes is something that the analysis of all of the academies participating in it believes is necessary.

Third, whatever we do know there is already climate change in progress and there is continuing to be the climate change in the future. That is something that is simply true. We cannot avoid some impact of the climate change, so there is a section of preparing on the consequences. We can talk about what some of those things are.

Lastly, there are also some conclusion statements. In the handout is a statement from two years ago.

US National Academy of Sciences is trying to make these statements consistent with much more detailed work that it has done. Some of these conclusions for our part [the US Academy of Sciences] are at least from 1992 and some are even older, but of course there has been a lot of evidence since then.

Then, there is a question of energy sustainability and security. This statement says some important things...climate is essentially a question of energy but energy is not only a question of climate. Energy is important in three major ways to the world. First, energy is necessary for successful human welfare. I spend some of my time in some of the developing countries of the world and I can tell you that societies and communities without energy are deeply, deeply

challenged and I assume that you all know that. The availability of affordable energy for the world is therefore sort of point number one.

Point number two is...what we mainly talk about here, which are the impacts of the ways we generate and use energy and in this case climate change. However, it is not just climate change. The impacts, for example, local and regional, held impacts of burning coal are very, very severe. In the lot of the world, as another example, household burn traditional fuel...wood, coal, dung...inside their buildings and the health impact for the people who spend a lot of time in those enclosed areas, mainly women, is very severe. Deforestation in some areas of Africa is a primary driver of it. It is not climate change; it is people cutting the forest, so they have the way to cook their food for their families. The lack of energy is the major reason why those countries are not developed. People, mainly women, spend big portions of their lives walking long distances to find fuel.

So those are the collateral impacts of energy and then, there is the security question and this is also very serious issue. There are many aspects of it. One, that I have spend big fraction of my career on is that the nuclear weapon proliferation is connected to the energy question and for anybody who really wants to talk about that I am ready to any questions. However, there are major questions...where people generate their energy from...whether it is natural gas from Russia or oil from Saudi Arabia or nuclear energy and its safety. Security is a very complex and an important issue. That is what the statement from the Saint Petersburg summit is about. If you choose to read just one of the three statements, I suggest to everybody to read the Saint Petersburg statement although it does not necessarily talk a lot about the climate change.

There is one thing that you can do about energy that is positive in all three of those ways...that is in regard to economic, progress...with regard to environmental impacts of energy, generation and use with regards to security...that is energy efficiency. It is pretty much the only win-win-win option we have although it alone cannot solve the all of the world's problems, because although you can use less energy there are obvious limits. There are more people in the world, so you need more energy. But the efficiency, which the energy is used, is a hugely important. To me that is incredibly important, because we were looking at security and at the economic development altogether. The focus that all of these thirteen academies reached on energy efficiency was quite impressive. So, that is a few words on the second statement [St. Petersburg statement].

The third one, the one that we just completed, picked up the theme of energy efficiency. It restated where we are on climate, now, two years later, with more evidence. The world, as you all know, is inching forward toward elaborate understanding of what is happening and it is slowly increasing capability to reduce the errors in our predictions, to make the predictions gradually more confident.

In the first paragraph, there is a statement a little about climate. I am happy with the focus of the statement; it focuses on energy efficiency and how to actually do it. It predicts triple benefits to it. It mentions some benefits that are not so obvious. For example: Energy efficiency programs tend to have benefits in technology, collateral benefits to the communities all around the world. If you spend a dollar increasing your energy efficiency that dollar is probably spend in your own community building up capabilities. If you spend the dollar buying oil to run your car, that dollar does not do you anything, it goes somewhere else, long ways away. So, this is, in very gut terms, another reason why energy efficiency is a critical issue. Again, I will spare you reading of the scripture here. I hope everybody who is interested in this got a copy of the statements.

Similarly, my friends from the African academies came up with a parallel statement. It is interesting; because Africa is very star case on the need for the energy on one hand... it is most developmentally challenged part of the world...the projections fro human beings in Africa are far worse than any other part of the world...so they really need energy.

On the other hand, it is becoming reasonably clear that among the most serious negative impacts of climate change will actually be on Africa. This prediction comes from climate modeling and it is substantially matter of fairly predictable series of aggravation of desertification, deforestation and further straining, already limited water resources. Africa is particular place to look where all of this comes together.

Now, I can try to answer questions. I have been involved in a lot of back and forth issues. These statements are carefully crafted. They are usable in any way. They are quotable, and they are all entirely consensus...these are completely agreed without a lot of difficulty. The only discussion in fiddling with the language came over some of the conclusion and recommendation kinds of thing, because the conclusion you draw are in the context of a major political trade-offs that involve... on particular issue, for example, you cannot as a scientist proof how much you should spend and how much you should sacrifice to limit climate change. You need a scientist and the ethicist or alternatively, you need the society to decide together, because it is not a scientific question, how much human hardship is necessary to undertake today to benefit people in one, and two, and three generations down the road. That is not a scientific question; it is a social question of values and it is not self-evident, because your ability to predict is limited. This is something in which society having to decide through electoral process, and so on, how much it cares about the generation of grandchildren. I hope, the question is that the society cares a lot about the future generations, but it has to be decided by the whole society. I stop there and I will be quite delighted if somebody will disagree with what I just said so we can have a lively discussion.

**Ira Straus:** We will actually have the second speaker now and then will take the questions in the end, unless there is very pointed, precise and briefly answerable question, dealing with clarification of something. Anatol Lieven, I should mention, in addition to working with New America Foundation, will shortly be a professor in London. He is one of the public intellectuals who has the courage to take a stand on number of international political and diplomatic issues, and shockingly and alarmingly enough, I found myself with complete agreement with him. He is one those, who came from the old continent of Europe into America and speaks as a friend to our country, advising us what we should do without having an obvious wish to do us ill.

**Anatol Lieven:** [Laughs].....Absolutely...

**Ira Straus:** I am very happy, therefore, to turn the floor for Anatol to discuss these issues.

**Anatol Lieven:** Yes. Thank you so much, Ira. I am so delighted by your statement because it does reinforce the point. Frankly, on any other issue involving science, if you did have such a strong consensus among the scientists in the field, it would become pointless...I mean being no serious debate. Of course, the question: what to do about it, and how much to do about it that is, indeed, a different issue. But, the fact, that it is happening already and will have serious effects in the future is not beyond doubt, and from that point of view ...and I will try to not to bash

America, or even the Bush administration, because I do think, unfortunately, on this issue, there is more than enough blame to go around the world...

but I do think that it, although, it does not seemed likely to have any strong immediate effect or consequences or policy...Bush's latest statement has been very important because, after all, in recent years, has been denial from the Bush's administration that the process was not happening at all...so it is very important development.

What I want to talk about in my remarks...and thank you very much for inviting me, by the way...I am honored to be here...is the need to integrate this issue of the global warming, green house gas emissions and what to do about them, in the foreign policy thinking, in general. Now, this...it does seems to me...is a challenge, not just an obviously conservative thought in every country but also for progressive thought, because something that struck me very much working out, or at least ostensive progressive, was it complete failure of the main...not just the foreign policy in general...global strategy...but also of the policies toward individual countries to integrate this issue into that thinking and writing...but even to mention it as a tool. The Carnegie failed to, as most of the think tanks...at least the ones I was there...at least established...to send any question to this issue. But it was also true there were a lot of people, working on China...talked about trade, democracy, the issue of the North Korea, and they were never told about the Chinese mission on Kyoto or bilateral actual agreements or anything else in the context of US policy towards China. The same is true for Russia, unfortunately. Given the fact that you actually reminded them, they would say: "Yes, of course. This is a vital global issue." ... So, why did you never mentioned it? ... "Oh, well, well... well... by the way, this is a self-criticism..."You know, this is not really my field. I did not know about the issue in detail."...People, it must be said, who cannot be described as experts on Russian domestic politics, or Russian domestic economy or Russian trade have felt no such ambition, when it comes to expertizing these subjects, so, I don't, frankly, find out much of excuse. As I say, the failure in this regard is not just in official bodies or conservative bodies in the US but it is widespread in world in general. It is spread out through out the think tanks and the media as well.

Anatol Lieven: It's widespread, or indeed general, throughout the think tanks and media as well. If I could blow the trumpet of my present institution a little, the New America Foundation has actually just set up what we hope will be in the future a very important program devoted to the environment, global warming, and what to do about it, headed by the former, very successful, advisor to Governor Schwarzenegger, Terry Tamenin. It's important to note, by the way, that he of course comes from the Republican side. This by no means indicates a preference on the part of the New America Foundation for Republicans over Democrats but it does indicate that this is, or should be, a bipartisan issue in which there is progress from both sides. That is, by the way, increasingly true in Europe as well if you look at the stands by Angela Merkel but also the new president of France, Nicolas Sarkozy, both of whom of course are from the center-right, not from the left.

This is not a challenge that will just hurt industry, for the energy sector, for the US, for the West, it's a challenge, as the Nicholas Sterns report has it, for our entire system of government and indeed of culture and thought. As his report says, climate change is the greatest and widest ranging market failure that the world has ever seen. It brings into question some of the fundamental assumptions on which our system and thought is based. And this I think is still

very far from being recognized, not just once again the US, but across much of the world. With regard to enormous areas of the world, we've heard Africa mentioned, but it would be equally true, and frankly on an even bigger scale, in South Asia.

This threat, in the future, if the even medium predictions or concerns of documents like the Stern Report are fulfilled will call into question all of our existing hopes and plans for such regions. If the consequences for Bangladesh are as severe as is often feared, they will certainly, though in different ways, be just as severe for Pakistan as well. In these circumstances, it is very difficult to imagine India remaining, in the long run, either the economic success story that we all hope it will be, or seems to be becoming, or indeed the successful democratic model it may even be impossible for large areas for large areas of India to sustain themselves as organized societies, something which we've already seen in certain parts of Africa, at least in part as a result of environmental change.

Therefore, in my view, we do need to place thinking about global warming, greenhouse gas emissions, and all of the issues connected with them, which are of course very, very extensive, at the heart of all of our thinking. We need, therefore, to make our approaches to these issues at least equivalent in importance and prominence to issues which are treated by now as self-evidently vital by every important and organized government, the question of regional and global financial stability, the question of global and bilateral management of trade, the question of the treat of terrorism, and Islamist and other revolutions in certain parts of the world, and, at least according to Western rhetoric, the question of democracy and human rights in much of the world. Now as I said, this is a challenge in much ways not just to people on the right, but to progressives as well. This is something which we pay lip service to, and we may even believe our lip service when we say that it is very important. In practice, I mean just look at the media for God's sake, look at the letters to the newspapers, look at the advertisements, something that outside a relatively narrow field of activists, very few people instinctively do. I do have to say for that point of view, and I hope this doesn't sound hard-hearted, but I have been somewhat depressed by the amount of attention, and the including advertising given, in the weeks running up to the G8 to the Darfur issue, compared to global warming as an issue, in the run up to the G8, for the following reasons. One is that we do know by now, we can if have any degree of intellectual curiosity, the broad outlines of what the global warming question is about. I would myself doubt that one person in a hundred, if not a thousand, who signs these petitions after Darfur knows the first thing about the place. Certainly very few of them have been there. Secondly, the real commitment on the part of the people concerned, themselves, to do something about it, themselves, not in principle, we should do something about it, which turns out to mean the plural the United Nations again, or at best, unemployed kids from Pittsburgh or Texas in uniform, but should we, the signatures, should do about this is extremely limited. In fact, they don't know what to do about it, except talk. The question of what we can do when it comes to energy efficiency for example, or reducing our use of energy, is or should be much clearly, the problem is that it's also much more uncomfortable, literally uncomfortable, and I mean this as a self-criticism. All too often, the first thing I do upon coming home is to turn up the air conditioning, for which my grand children will damn me, but then again, I know.

We have to, therefore, in my view, take really serious account of the fact that whether one is looking at the economy, whether one is looking at security issues in certain parts of the world, whether indeed, as I meant by my reference to India, one is looking at the prospects for the spread of democracy and human rights in the long term, we have to treat the question of global warming as central, and therefore we have to do something, which I am afraid Western

systems, and the US system in general, has been extremely bad at in recent years, which is, we have to be prepared to make trade-offs in other areas, if necessary. In other words, if it is truly of vital importance that China reduces its greenhouse gas emissions, we may have to do a bargain in other issues, that's what I mean by "uncomfortable". With regard to Russia, I mean Russia because its economy is relatively small, not so small, and it is growing, we have a situation in which this issue is, practically speaking, is treated by much of the US media as of lesser importance than the question of whether Georgia should rule over South Ossetia. Not something that corresponds, in my view, to a rational view of the long-term interests of the United States, let alone of the world in general. On a specific issues, I've just recently come back from Pakistan, and I do think this is true that in all the acres of newsprint and comment that we had on Pakistan in recent years, I do believe that I am the only commentator that I have ever read that has mentioned that if you read the World Bank report in 2005 on the water issue in Pakistan, one could well draw the conclusion that 75 years from now, all the other issues that we're talking about won't matter much, because you'll have a population of 250 million people living in an area much of which is as dry as the Sahara Desert, at which point everything else becomes, frankly, irrelevant by comparison. Therefore, over the next 18 months, now that the Bush administration has committed itself, in principle, to seek a new agreement to succeed Kyoto, it is of the greatest importance that we all, I think, do our utmost to place this issue in the center of the American global policy debate. It is all the more true because, first, if they stick to that deadline, the Bush administration has to do something about it while they remain in power. If they don't, or if what they do is in fact grossly insufficient, it's extremely important that a range of candidates, and of course, hopefully the candidate that wins, should be committed in advance, as part of their electoral program, to take strong action on this issue. Now from this point of view, so far the signals, including the signals from the Democrats, I have to say, have been mixed. Not by any means all together poor. I was just reading a rather powerful statement by Tom Landis, for example, but not nearly as detail specific and central as one would wish. That creates a particular responsibility for public intellectuals such as ourselves, but also for the US media in general in certain areas to talk of responsibility in that regard would perhaps be odious.

The other reason why we need a much stronger debate in the West in general, including the US, is indeed that while the Kyoto system might be described as Winston Churchill once described democracy, the worst system in the world except for all the others, it is indeed I think as we would probably all acknowledge, deeply flawed in many other ways, that doesn't excuse the hypocritical and malignant denunciations of it by the Bush administration in the path and to a considerable extent today and by many on the American right. But its also true, as I think is now widely acknowledge, the European approach in particular, has had great failings, the fact that the caps were set much too high for particular European industries, whether as a result of incompetence or corruption, which has gravely distorted the entire system, as well as trade and win-for profits for certain industries, and the fact that there were strong indications that the subsidy system, in a good many cases, has actually had the effect of a perverse incentive, hardly a surprise to anyone who is acquainted with Europe's common agricultural policy, in that its actually encouraged certain people to increase their emissions so as to then to get a subsidy to decrease them, the result that you may end up with a net increase. There was a very good piece about this by Nick Davis in The Guardian of London on June 2<sup>nd</sup>.

Secondly, there is the relationship which needs to be discussed, I think very urgently, between the whole question of, well two questions. The first is the question of dealing with greenhouse gas emissions as against the possibility of, or according to many experts, the

certainty, of a resource crunch in many areas, particularly when it comes to grain production in the future, if global consumption continues to rise as a result of both population growth and growth of living standards in places like China and India, and if draught in places like Australia continues to reduce grain production. Now this is being pointed out that of course the diversion of acreage to the production of bio-fuel could, conceivably, have a very severe effect in this regard. Its also worth pointing out that what ultimately brings down governments in many parts of the world, and always did as far back as literally human recorded memory goes, is as they say in South Asia, the price of onions. If you actually start seeing basic food prices going through the roof in many areas of the world, once again, nothing else will matter. You never have seen the maintenance of political stability in these circumstances. These two things are mutually incompatibly if you see serious food shortages. Now how one balances this particular, terrible conundrum, I do not know. What I do know, or I believe, is that we have to think about it very seriously.

Another issue in Europe, especially Germany and Britain, but also very much in certain parts of the developing world of course, is the question of nuclear energy, and here there has to be, once again perhaps, especially some hard thinking among progressives on this subject. Now I am an agnostic on this, partly because I too am concerned about the terrorist threat, the threat of the spread of nuclear energy from this point of view. But I do think that Tony Blair has shown considerable courage in raising this as an important issue, albeit very belatedly, in his government. It could be, frankly, that we have no choice. It may also be that if you look at the relative threats posed by nuclear energy, even if one looks at the potential for disaster like Chernobyl as against what global warming could do to our system, that in the end one has no choice but to go for that and we need to do some very hard-headed, and as they say, uncomfortable, thinking on that score.

Now that leads me to a final point about our systems in general, which takes up very much from your point about our grandchildren and it not being obvious ethically, or practically, what sacrifices to make. The motto of the great American seal is "Novus ordo seclorum", a new order for the ages. My Latin is pretty ropey, but I think if it said "a new order for the age" or "our age", that would be different. My point is that in the US in particularly, but in Europe as well, we believe, our systems believe, our politicians tell us endlessly, our media repeats, that our system is not merely the best in the world, it is the best that there has ever been and the best that there can be. Now skepticism has grown in recent years as a result of the Iraqi debacle, what has happened in Russia, and so forth, about whether you can actually go out and spread this system everywhere in the short term, whether you can, but about the desirability of the system, except among the relatively limited number of people on the hard-left and so forth, there is very little debate, I would say almost none, in the mainstream media. "A new order for the ages". That means our grandchildren, and indeed our great grandchildren. I think that should get us to think, to imagine, what they will in fact say about us and our system if, as I say, even the moderately pessimistic projections of documents like the Stern Report are correct, our failure in this regard will, historically, cast doubt on our entire historical achievement. They will not admire us for what we have achieved, they will regard us as grossly self-indulgent and delusional materialist scum, frankly. And that leads me to my final concern, which I hesitate in some ways to put forward, because it sounds too gloomy. I should say that my three year old son, one of his earliest comprehensible phrases, which any fans of British popular cultural among you will know is derived from the Army: "We're all doomed". A certain pessimism runs in the family tradition. But I do wonder from that point of view, whether we may not be facing a challenge which the

very nature of our system makes it impossible for us to meet. An analogy I've used has been that of, one could say, the formally most successful, or certainly longest lasting and most continuously reduplicating system in the world, that of the Confusion order of China, lasted for 2000 years, in the last century ran up against a challenge which by its very nature it could not meet, the challenge of Western capitalism and the imperialism on which it was based, because of course the Western capitalist system was based on dynamism and change and the Chinese system was based on conservatism and stability. It's not because the Chinese system elites didn't do their best, actually they did, and they just couldn't hack it. In a sense, there was an internal contradiction. The things that they needed to do to preserve their system would have in any case destroyed their system.

Now that is why Nicholas Stern's report is so important, I think. It gives us what could be, over the next generation at least, our last chance of achieving success at reforming our system from within, at making the very limited, actually by historically standards, by the standards of what our ancestors, or some of us in this room, not me of course, did in the 1940s, are tremendously limited changes and sacrifices necessary to reduce the scope of this issue. If we fail in this, over the next generation or so, first, we'll have little left but hope and prayer. But secondly, I do have say, we'll also be acting in a way which is psychologically and culturally deeply counterintuitive, because any of us who are parents have made, unless there are extremely rich people in this room, have made tremendous sacrifices for the sake of the nurture and the education of our children. These sacrifices are logically insane if, having made them, we're then going to hand over to our children a ruined world. Thank you.

John Boright: We appreciate the spectacular effort and the dramatic conclusion which brings us right to the edge of what these two co-sponsoring organizations are about, which is the systemic failure of our political, not just economic systems, not just market failure, but the failure of the political system and the condition of which we face a global problem but our political systems are essentially national and if one nation does its duty, all the others are free-riders, therefore every nation says we can't do our duty unless all the others do, and the international system is not terribly strong to get them cooperating sufficiently to overcome the free-rider problem and that is one of the charges brought against the Kyoto Protocol, that it leaves too many free-riders in the world and that is the most substantive argument used by the United States for not doing its part of the duty. We'll see if this is repaired, but surely one of the questions we are facing today and which I will pose to both of you is, is there some need for strengthening of international agreements and international structures in order to secure sufficient cooperation among nations to avoid this kind of market failure on the international political level and secure continued cooperation across the sacrifices the countries must continue to make as the process goes on and how much strengthening of these international processes would be sufficient to achieve the results that the Academy and Angela Merkel are talking about, a 3.6% temperature cap and 50% emissions reduction by 2050. So that's a question I will be posing to you but don't want you to answer instantly, because it's a tough one. But the floor poses questions that I know we all have in mind and a couple people raised their hands.

**Audience Question 1:** Why is it that the political movement of Green parties has been relatively successful in one part of Europe but has never had any success anywhere else?

**Anatol Lieven:** Anywhere else in the world you mean outside Europe?

**Audience Question 1:** In other words, do they know something that we should learn?

Anatol Lieven: Well, I would say that there are various sources of this. One is, to be fair to America here, the size of the area does make a difference, the extent to which people do rely on the car to get around. That's one. Secondly, though, I do think that the fact of living in a long settled, a very long settled, area of the world, makes a difference. People in Europe, and you could well say that, as a result of wrecking our environment in a way, almost millennia ago in some cases, the notion of limited resources and the management of those resources, is a very old theme in Europe, in a way that it simply is not in the United States. You had vast new areas to exploit whose populations were very small in any case and were them driven and the entire mentality that that created is, I think, very different when it comes to the exploitation of resources.

**John Boright:** Germany, for many years, until now, was spending vast sums to artificially elevate the use of coal, because they needed jobs for political reasons in that region of Germany. They literally removed one hundred meters of Earth on top of coal seams, I mean think about this, removed the coal, reassembled the Earth, paid several times another option for energy in order to use more coal, which is the worst option in the world with regard to the environment, point one. Point two. Europe, in general, resisted the removal of lead in gasoline for close to two decades after the United States had banned it. These are not simple questions. We all are carrying sort of political and social history and I do have to make another point more directly to this question of what are we going to do about climate change. If you look in the Energy Sustainability and Security Statement, you find in several places, but one in particular addresses serious inadequacy in R&D funding in the energy area. If you look at a graph of whose been actually investing and trying to find solutions to this problem, the Japanese are clearly ahead of the rest of the world. Their R&D funding and their energy efficiency has been remarkable. They are the world leaders. The United States is not that bad. Europe has seriously disinvested. They have dropped dramatically their R&D spending on energy in the last 10 to 12 years. They are turning it around. Tony Blair is trying. The Germans are trying. But however you want to do it, per capita, per national budget, whatever, the Europeans have made a dismal showing at actually investing in the research to do something about this. There was a reference early on to blame to be spread and there clearly is. I can go on at some considerable length on my personal views on the inadequacy of American policy, but its not just us.

Anatol Lieven: Look at the Australians, for heavens sake.

**Audience Question 2:** Where was this region in Germany where they were mining the coal and was in from the united German government?

John Boright: It was the West German, the Rhineland

**Audience Question 2:** So even before the breakdown?

**John Boright:** Oh yes, long before that. It went on for many years. Next question.

**Audience Question 3:** Well, this is very depressing but I've been following things that have been being done at the municipal level, and its certainly not like having the national government move but, like there are more green programs, more green buildings, and it seems like this is going to help people catch on. I've heard of municipalities that are going to municipal vehicles being hybrids and it seems like this is going to save them a lot of money. I can't imagine why more people, more governments especially, aren't getting into the use of hybrids.

John Boright: Well your even going with, if you don't mind it, a little bit of optimism here and there. There are a lot of interesting possibilities, including one that I just recently became aware of myself, and I'm now speaking for myself and not the academies. Two very interesting small facts: If you add up the instantaneous power level, if their used at one time, of the batteries sitting here in American vehicles, it's actually substantially more than the total amount of electrical generating capacity in the country. So plug-in hybrids are a very interesting option, because batteries, if any substantial part of the vehicle batteries in the country were plugged into the grid, they actually could essentially provide the fuel for the grid. They could minimize the need for peaking power, for peak power generation. And vehicles are used on average 20% of the time, so at any given time, used as a storage device on the grid. It depends on where your electricity comes from. If it comes from coal, you've got to think hard about whether you are actually getting anywhere in this process. But if it comes from something else, like nuclear, there are really very interesting technological possibilities. There was a reference to bio fuels, which alone we could spend a long time just starting to outline that issue, and food shortages. By the way, that's not just theoretical. The price of tortillas in Mexico is very high and for them it's a crisis. And this is because of bio fuels already, so it's not just something that theoretically could happen. The question is: Is there some version of this option which essentially, the option that everybody realizes has to be done is that you have to use not the corn, in effect, but you have to find a way through biotechnology and clever engineering, a way to use what is essentially the waste material, the cellulose. And then the debate really gets complicated.

John Boright: which essentially, the option that everybody realizes has to be done is the option not the corn, in effect, the easy part, but you have to find a way through biotechnology and clever engineering to use what is essentially the waste material of the cellulose and then the debate really gets complicated. But it is depending on what can be accomplished technologically and that is essentially another potentially very interesting option. And then of course you can put CO2 under the earth, so called sequestration only if it is generated in very concentrated local ways is that ever going to be feasible, but that's another option. That's the only thing that will work – that is one of the things that could turn coal from the great villain to a potential savior. You're hearing me go on about coal because that's what is all about right now. There is a subliminal message here, I must say, (pointing to tie) this thing here is the Chinese symbol for harmony. If you want to know what is really happening in the world right now is what's happening in China. China's putting in about a gigawatt of new coal fired plants every week and they're going to burn for about sixty years. The rate of change there makes everything we do here rather small potatoes in terms of actually making a difference.

**Questioner**: Why are they not doing nuclear, instead?

**John Boright:** They are but their total nuclear that they've put in through decades of effort is equivalent to three or four weeks of installing coal. It's just they're sitting this coal everywhere in China. It's bad coal, unfortunately, high sulfur coal. But it's everywhere, and they use 60% of their coal, not for electrical generation, but lots of local industries, very bad inefficient burning....

**Questioner**: Could we help them switch to nuclear better?

John Boright: Well, we could help them do a lot of things. They can burn their coal much more efficiently. They can look seriously into sequestration. And I should say China has done a lot. I came to the Academies 11-12 years ago, and the first thing I started working on was that question. We did a joint report with the Academies of Science of Engineering in China starting about 8 years ago and completed 6 years ago, which I should have brought and waved at you. They're getting scarce now – the name of the report was "Energy Cooperation and the Energy Futures of the US and China." And there's a whole list of things that we can do together. Our latest report together with the Chinese just coming out in the next couple of months is "Specific Experience and Best Practices in Dealing with Air Pollution in Cities" which is a huge problem in China. There's a lot of things we can do.

I should say one other thing while I've got the soapbox. China uses energy far less efficiently than we do, but they have made huge progress. They've made very proactive policies, they've been tough on their dirtiest industries, they've set standards, they've even enforced some of them. Their energy efficiency has improved twice as fast as their economic growth. In other words, there's a very steep learning process going on there. If it's going to be fast enough is a whole another question.

**Questioner:** You anticipate that that's going to continue....

**Ira Straus:** Could we structure this? We have a physicist talking to an astrophysicist. So if you would like to ask a clearer, coherent question, not just an injection...

Questioner: Let me ask a broader question. In fact, maybe you can clarify my thinking on what it is that we are trying to achieve as far as climate change is concerned. And let me put it in the following sort of hypothetical way. I remember shortly after WWII, that nuclear would be too cheap to bother using it – hypothetically suppose that that had worked out that way and that we are meeting in 2007, and coal production worldwide is negligible and there's nuclear everywhere. Would we be having a meeting about climate change? Well, I don't know about that because we are still 10,000 years into the current interglacial. There have been plenty of interglacials before. Every interglacial toward the end of it – the carbon dioxide rises very sharply. It's rising more sharply this time than it has in the previous four because of the human activity. Would we be attempting to intervene – here we are now attempting to intervene? What is it that we are in fact trying to achieve? Prolong the interglacial? We don't know how to do that.

**John Boright**: Well, if you want a serious answer to that – and you'd probably read in the newspaper NASA administrators' comments a few days ago, which didn't exactly jibe with even

its president's statement, but the key thing that you just said is the rate of change now. And, you know, you either try to actually understand what's going on and project it, and try to figure out what are the implications of that projection or not. The science is clear and, just to take one particular thing, is, you probably know, a very large faction of the freshwater on earth is in ice. That's what's happening in terms of the melting of both ice on Greenland, but also the ice cover particularly in the Arctic, is really very clear. What is of concern is if we are getting into what you would call "serious positive feedbacks." And, the main one is one that everybody can understand on a very simple gut level. That is water that is covered by ice reflects the sun's back into space. Water that is not covered by ice absorbs it. So, melting ice is something which produces a positive feedback. It's pretty clear that's happening. And it's very clear that although there are time scales involved in natural change, the one that humans are imposing on now is considerably faster. So, I don't think we can duck and say, "Well, you know, the world is changing on a several thousand year time scale and who knows?" We are doing something that's much faster than those natural time scales. That's the bottom line.

**Anatol Lieven:** . . . which raises, of course, the critical issue of our capacity to adapt. I mean, the slower it is, the more chance we have to adapt. The faster it is, the more likely a civilization disaster will be, particular, of course in certain parts of the world that we discussed. Sorry, could I just add to China, the issue of India because it ties with some of the more geopolitical issues that I raised. And, obviously, India is still far far behind China. But when it comes to the issue of burning coal – that's very much India's challenge as well. Which leads, in turn, to questions for US policy, one of which I honestly greatly dislike in certain ways, but probably have to welcome from the standpoint of greenhouse gas emission, which is the nuclear deal between India and the US. If we are to try to help India use less coal, rather not use more coal, we do have to help India achieve alternatives. This is one of them. The other issue, of course, it raises which is even in more direct clash with US interest in other ways is, of course, Indian access to Iranian gas, in particular. Or to gas from Central Asia through Iran, which obviously is a contributor to global warming, but on a much lesser scale. That's what I mean about having to make hard choices, decide what's really important. Could I just say one thing on that score, before I forget, because you set out this challenge about changing into national institutions? Or should we leave until later?

**Ira Straus**: A little bit later, but not too much, because we are going to run out of time. I would like to thank our astrophysicist for having brought up a very important and interesting aspect of the question, and it does come back again the interaction of science to human science, hard sciences with human sciences, and interstellar processes with human civilizational processes. And it's quite possible that you are right. Even if that human contribution to climate change has been constant over all of civilization, now because human civilization has advanced so far (we have 6 billion people, we have modern cities, we need air conditioning to keep our societies running, and heating.) It couldn't be that we are so vulnerable to climate changes that in the past we would have shrugged our shoulders and not even know how to describe – now we must have global air conditioning and global heating, in other words global climate control, in order to keep modern civilization going and avoid a kind of genocide by normal climate changes processes, which six thousand years ago, there wasn't people around to call it genocide. So, that question can be taken in several different ways, and I think it was very helpful to raise it. I doubt it would give anyone a final satisfaction to it here. But perhaps we will have other questions.

**Questioner:** I am Scott Paulis for Global Solutions, and I have one very narrow one and one really broad one. The narrow one is, why is there not more attention being paid to mineral sequestration? Should I leave that one out there first, and then go the broad one? Or should I just go straight through?

John Boright: Go on.

Questioner: The broad question is kind of essentializing a question that I really hate, usually, but it comes back to the example that Anatol Lieven brought about that kind of looking comparatively to the crisis in Darfur to the crisis vis a vis the climate change and the kind of attention they are getting over the past month or so. It seems like the Darfur advocates in the United States had done something very very difficult and that is, make a very complex international issue feel sufficiently accessible to Americans so that they can take action and demand a sort of political action from their leaders. That seems like something very very rare in the United States. With climate change, what's interesting is that a lot of public opinion polls show that outside of a small group of activists who are very engaged on climate change, most of people generally see themselves as part of a persuadable mill who are generally inclined toward progressive climate solutions but don't do a whole lot either tend to see climate change as a problem, either individual citizenship and private virtue, or public governmental leadership, and it seems as if Europeans don't seem to suffer from that problem. And, so the broad essentializing question that I really don't like, but am looking for a somewhat satisfactory answer to, is why is that? Why does it seem that Europeans have less of a problem tackling climate change as both an issue of private virtue and one requiring public government leadership?

**Anatol Lieven**: Can I tackle the broader question first because I can't answer the carbon?

**John Boright**: I can't either - you struck out on the first one. (Laughter). I know what you mean. I can tell you where to go... (Laughter)

Anatol Lieven: But on the two broader issues. First, on Darfur, I have to say that I can hardly disagree more. Surely, the entire picture of a very large part of the mainstream media in the United States, politics, the think tanks, everything else, consists of taking highly complex issues of foreign countries, the internal political system of Russia's relationship, economic developments and future of Communism in China, and boiling them down to some drastic oversimplifications, many of them intended to make us feel better about ourselves. From that point of view, I regard Darfur as absolutely standard. You take a complex issue, you don't know what you're talking about, and you draw a set of simple solutions for which we are not actually responsible, unfortunately. And that's a cynical response, but, you know, one has seen this pretty often. On the question of the Europeans being better, as you said, are they? Or, rather, how much better?

**John Boright**: Do they just talk that way? (Laughter)

**Anatol Lieven**: I always remember there was a guide for American GIs going to England, going to Britain, during the Second World War, which is a mine of wonderful quotes, one of which is,

saying to these American soldiers, "Please don't laugh at the English. The driving such dinky little cars, after all they do live in such a dinky little country. (Laughter) As I say, there is a texture to the management of life in relatively very small, long-settled areas, where the human impact has been extremely intensive over a very long period, which does, I believe, create a different picture when it comes to managing these issues. It's also true, one should never ignore, and I speak here that pathetic, impotent creature, the British Liberal – one shouldn't completely ignore the facture of different political systems. One of the reasons why the Greens were able to take off in Germany was the proportional representation system. One of the reasons that they haven't in England, or, rather, they eventually had to convert, which they did, thank God part to the Labor Party is our electoral system essentially rules out new parties, as does yours, except that here, well, now we see this fascinating thing in the US. The Schwarzenegger phenomenon, whereby you do actually get changes in what quite recently would have been regarded as a radical direction in the recent Republican party, but it has to operate from within the existing two major parties. And the two-party system in the US made that extremely difficult.

**John Boright**: Well, I should say, I grew up in Vermont, and I never met a Democrat until I went away to college, and the Republicanism that I thought I was brought up in, conservative had something to do with conserving nature. You know, that actually, if you go, just a hundred years,

**Anatol Lieven**: As in Germany

**John Boright**: But let me say, actually the world has, in one specific case, done a complicated scientific calculation, decided that we were headed in a direction that was really bad. And without having to have it reach a calamitous situation, made a very complex, dramatic change, and essentially dealt with the problem. And, as you probably know, that's the Ozone depletion. It's very very interesting and it's very heartening. The States were economically much less than in the case of climate change, but institutions worked. The world believed its science and it did something about it.

Audience: Margaret Thatcher's degreeism counts, and her great friend was Ronald Reagan.

**Anatol Lieven**: Well, Blair has had a certain effect in that regard. He has, on Bush, not as much as he would have hoped, or we would have hoped.

**Audience**: Is it true that none of the agencies call on the Academy to make a study of a problem? I get the feeling that the report that we are reading in this group was done within the Academy with its usual selecting important scientific matter and writing in that particular area. But in this case, in the case of global warming, did any of the agencies, Congress, the Executive, did they come and ask, as they have many times before to solve many problems?

**John Boright**: As I said, if you go to the website, you can find in gruesome detail the answer to that. The answer is no agency has asked the Academy to recommend a national energy policy to deal with climate change. The agencies, the US has spent a lot on trying to understand climate change, and that was a top priority during the Clinton administration. But starting in and since then, right up to the present, the interagency coordination that studies climate change, not

necessarily does something about it, but studies it, has asked the Academy a series of times to review its strategic plan and do something about it. In the midst of that interaction, and I guess this is not attribution and simplified for dramatic effect, is that the strategic plan was brought to the Academy, the Academy put together its high level committee, and produced a report, which is public, which says, This is a terrible plan. It doesn't make sense and so on and so on. These are the main ways in which it's inadequate, and the government went back and reworked its plan and came back with its plan, and asked for another review. And the review was quite positive. So, one aspect of it actually has had, I think, a very healthy and productive interaction between the government and the Academy. We are now embarking on a whole set of energy-related studies beyond what we have done in the past, much more pointedly focused on this, to some degree at our initiative.

**Question**: The other question, the report that you've given us, and I'm sure it's more extensive than that. How has that been made and distributed so that when they are debating, other than the political aspects of it, have that information in their hands?

John Boright: Angela Merkel met with the presidents of the Academies two weeks ago, personal meetings. And then, had a joint conference with them, and to formally receive it, she had it three weeks ago. That's a first. That didn't happen for either the Glen Eagles or the St. Petersburg summit. We put it on our website, we handed it out to the press, it didn't get a lot of press. Some of the other Academies had a much more ... well, let me just say, the day we all agreed to put it out, our Japanese colleagues met with the Prime Minister, and discussed it directly with him, and then with the four key ministries. And more or less the equivalent thing happened in Brazil, in Canada, in some of the others. So, it's different in different places; it's gotten some real attention. The Germans worked very hard to draw on our statement during the Summit.

**Questioner**: One other matter, how is it the geothermal rays, you've spoken about it, of course...

**John Boright**: Let me say what I wanted to say about energy. It's a hugely diverse problem, and different places in the world and different places within a single country, ours, for example, are in very different circumstances. The answer is basically geothermal's a perfectly good idea. It's just not available everywhere, and the same thing with sequestration of carbon from burning or whatever, where it's going to be geologically, technically feasible, it's very attractive. But it's not available everywhere. The bottom line is we need to do a lot of things. We need a broad portfolio of energy options, we need efficiency across the board, we need new renewables – we need lots of things. Because any particular option, take nuclear for example, even if it had no proliferation or safety problems, I actually am something of an nuclear advocate, by the way. I think it's a tremendously important part of the portfolio. But if you're on a small island state, nuclear is not going to – you can't do it! And quite frankly, I don't particularly want Nigeria trying to operate a nuclear power. So, you know, the fact is none of us, there is no single silver bullet. There's lots of things we need to do.

**Ira Straus**: Every now and then, a question takes us back to the reason the meeting was held. And the answer does, and in this case, you've pointed the role of Angela Merkel, in getting publicity for the statement, the meeting with your group of people, getting publicity for your

statement. And reality is we are here today, not just because of the issue, but because of Angela Merkel, who has given this issue such prominence, has put the G8 to work on it, has given your joint scientific statement such prominence; she has been a remarkable diplomatic leader, fortuitously head both of the European Union at this time and head of the Group of Eight. I suspect that those haven't appreciated her and haven't cared about her being there will find on occasion to miss her sorely when she no longer has these international leadership positions. In any case, she is still there for a few more days to the end of the month as the European Union head formally, to the end of the year as G8 head. And I think we should all send her a motion of thanks, but also I think what we can do with what's left of that opening. We have time for one or two more questions plus the mega question. And so let us please try to briefly get through them.

**Mrs. Falkowsky**: Actually, I don't have a question, but I'm representing Citizens for Global Solutions at the local level at the (inaudible). But we have two people of the national staff, at least. I wanted to introduce them, and if you don't mind, I wanted them to stand up. (Inaudible) which I'm sure will clear up some of these issues. In fact, where are those handouts?

Person from **CGS**: I have them in my bag, so . . .

Mrs. Falkowsky: We'll have you pass them around? Is that alright?

Person from **CGS**: We can do that, but we still have to wrap up. I'm going to take seconds of indulgence, as we get to your mega question and another colleague of ours, Becca Brown, who was here for a short period but had to leave. She's really taken lead in our staff, both giving good analysis as well as some policy recommendation on the whole broad issue of energy as it relates to climate change, and how we approach this, as a world. And, one of the ways that I have feel like that we've really hit the nail on the head, if you will, is in terms of the debate in the United States, there's a lot of conversation around energy independence and that we believe that that's a real misnomer, and the framing of it, the communication of it, and I'd be interested in any of the panelists to respond to this. Is talking more about energy interdependence because the solution really is a global one for a problem like this that, ok, let's say the United States stops importing both foreign oil – that's not going to change the equation of climate change (inaudible) due to the rapid expansion of the Chinese economy, etc. etc. So I think that's one of the ways that our (inaudible) can have a value added to this dialogue and debate in terms of other approaches to policy, but we're in the feedback, seeking feedback stage, so if anyone would like to comment on that.

**Ira Straus**: Thank you; that helps. And I will try to clarify the mega question because we are talking to a scientist and a political scientist – we would like clarify our terms. The simple question is how strong would international organizations need to be to give a high probability of achieving sufficient action on climate change? Now, when we political scientists use the word sufficient, we always put it in quotation marks, and then we define what is sufficient. So, for this conversation, sufficient will be the goals of your report, your recommendations, and, it seems to be the same as Angela Merkel's goals: 3.6 degree cap on climate change and 50% emission reductions by certain date in order to result.

**John Boright**: Is that in Fahrenheit?

**Ira Straus**: Yes. 2 degrees Centigrade. And then, sufficient to achieve it: achieving it means giving a high probability of achieving it, better than 50%, and achieving it means getting coordinated action, sufficient action and coordinated action among enough countries to achieve this result, and continue to get that action over sufficient period of time to get this result, despite the costs and sacrifices that have to be made. That means there has to be enough visibility, in the sense that burdens are being shared, enough sense that benefits of some kind are being achieved, and enough sense of confidence that the other countries will continue doing. Those are the kind of burdens and problems that need us to think that international organization plays a significant role, that if we didn't have such feeble organizations as we have now, we wouldn't have gotten as far as we have in addressing this question. We'd have to invent them from scratch and that probably we would need somewhat more in order to achieve even the cautious results that you've put forward in order to get us through the next few decades. So, I am wondering if you could address might or should be done in the organization frame so we can get to these goals that you've shared.

John Boright: 30 seconds?

Ira Straus: As long as you would like.

John Boright: These joint statements don't, of course, address that. So now I could say a little bit. The UN or any other international institution is, what one would say strength in the institution, but what you really mean is adopt national policies toward coordination and toward that institution that produced the effect you're talking about. The UN or the whole UN family, or, to take the example I'd just gave of the Montreal Protocol and dealing with CFCs and so on. The bottom line is it's a sum of national policies, so I don't think your question really, personal, I don't think it's so different from what we've been talking about the rest of this session: what policies will, since we're in the United States, the United States adopt toward this particular issue. And, particularly, in light of the fact, that it's going to take parallel policies by a large fraction of the countries of the world to make a difference, so if we decide that it's very important to do that and if we make some of the tradeoffs that you referred to, by definition, we're going to be strengthening... the answer is yes. But it's simply not going to happen in my view that we go off and strengthen, you'd have to tell me what that means. The United Nations in an abstract way, and then, that's going to solve this problem. You see?

**Ira Straus**: I understand the point very well, and if I may clarify briefly. We're talking about arrangements of international agreements on our part of the international organizational structure, so we're talking about international agreements. And then sometimes agreements need joint provisions so that the may need international supervision in giving it confidence that they'll be carried out jointly. That's the sort of thing I'm talking about.

**John Boright**: I'm moderately optimistic, fortunately.

**Anatol Lieven**: Yes, I think I'd second both those things. As much I would like the United Nations be a stronger institutions, there are few signs of that happening. It has been possible on a whole range of issues, international treaty organizations, with sometimes strict supervisory

facilities. However, the pessimist in me would like to say that that is likely to happen only when the effects begin to bite more visibly than when they are happening at present. In the meantime, and, specifically with regards to the G8, since after all, that's why we're here, I would like to say something that on the strength of tradeoffs, which is that, if the G8 is not to become, in any case, a more and more irrelevant organization from the standpoint of the world economy, as is often being said, it will at some stage need to bring in China, quite possibly India as well, possibly Brazil, too. Or, on the other hand, if it is to be a clump of rich democracies, it will need to get rid of Russia, not very desirable from the . . .

**John Boright**: But China, India, Brazil, Mexico, and South Africa are there. And they have been for years. They are all co-signatories of this.

Anatol Lieven: No. Members of the G8, I'm saying.

**John Boright**: The G8 Economic Summit involves thirteen countries now.

Anatol Lieven: True.

John Boright: And it doesn't do anything outside of its annual meeting.

**Anatol Lieven**: But what I'm saying is, when it comes to fully integrating these new economic powers into what have been up to now Western, to a lesser extent, Japanese-led international structures, what I ideally we ought to do is make the certain actions on their part with regard, for example, to the use of coal and coal emission, as a key condition, an integral part of this integration process of their wider admission. To take another example, the Wolfowitz shamble has raised the question of whether the system which has hitherto existed, the nomination of heads of the World Bank and the IMF is sustainable into the future. Or whether, in fact, it must be broadened, so it no longer becomes a case of the World Bank nomination. Well, once again, a recognition of greater Chinese power and formal recognition of greater Chinese influence regard could be made conditionally on part of Chinese action of global warming. This is applying the traditional tools of realistic diplomacy, if you would, to the emissions issue. And I think this could be extended more widely. Up to now, the international organization which has been belatedly, this has been the European Union, I think, but then that's a very specific organization. From point of energy independence or interdependence, yes, there are, of course, great danger in stressing energy independence because if you put security and even nationalism first, it can lead you back, well, like the Chinese and the Indians to going for coal, since that is, the US also has limitless amount of that still, and doesn't need to import it from those Arabs, etc. On the other hand, I must say, on the basis of seven years in this country, I do find that there are few things here that one can achieve or perhaps that's putting it too strong. Let's say there are few things that are not in one way or another colored by American nationalism, and that trying to do anything simply in the teeth of American nationalism will not work. It's been used against us on this issue, again and again, alas, in recent years. If one can find a way, yeah if you will to exploit the devils for a good cause, I think it could help us very considerably, without, if you like, use this question, use this subsidiary argument without allowing it to take over the debate completely.

**Ira Straus**: Well, I thank you. We did get some proposals on international organization here, how they can be coupled with realistic diplomacy and realpolitik, in order to use them as instruments of extracting more commitment out of countries. And on both levels, UN level and the G8 level, so I think that we've had both the scientific and, again, a very good diplomatic discussion, and I'd like to thank all the audience for its attention and questions have also been quite provocative and stimulating. Thank you, Dr. Boright. Thank you, Dr. Lieven. Thank you, Streit Council. Thank you.

(Applause) End

Total Time 1:30:09