Professor Cox

Good evening, everybody. First let me introduce myself, I'm chairing it this season, I'm Professor Michael Cox from the Department of International Relations and Ideas Diplomacy and Strategy at the LSE.

Welcome to this Ralph Miliband lecture in the programme for 2007/2008 looking in the broad terms of oil energy security and global order. One could say there is no better time to be discussing this, indeed according to at least three of the great narratives of our time, global warming, the inexorable rise in the price of oil and the emergence of what some people are calling an axis of new oil powers stretching from Russia to Venezuela, we have no alternative but to discuss it.

We are delighted to have somebody here tonight at the LSE who has thought and written about the issue of energy and security and world order certainly longer and definitely more critically than possibly anybody else I know, Professor Michael Klare. Professor Klare has a long and distinguished career. Firstly, as an academic, he is Five College Professor of Peace and World Security Studies, whose department is located in Hampshire College in Amherst, Massachusetts. Secondly, as a public intellectual, he is defence correspondent of the radical American magazine *Nation* established in the late 19th century. Thirdly, as a prolific writer and author, he is in fact author and editor of a dozen books at least, the first - dare I mention the date, Michael – 1971, *War Without End: American Planning for the Next Vietnams* and the last book I think came out in 2004, *Blood and Oil: The Dangers and Consequences of America's Growing Dependency on Imported Petroleum*. And fourthly, of course, Michael has a long and distinguished career as a dissenting voice in an environment where sometimes saying nothing is often better for your career than saying the sorts of interesting and difficult things that Michael Klare has been saying for many, many, years.

We welcome him to the LSE tonight to speak in the lecture Oil, War and Geopolitics: the struggle over what remains. Michael, you are more than welcome to the LSE and to this lecture series. Thank you very much.

Professor Klare

Well, thank you for that warm welcome and thanks everybody for coming today. I am very honoured to have been invited to participate in the Ralph Miliband programme. Ralph Miliband was a towering figure in critical social thought in this country and in the United States and it's a real privilege to be standing here at the London School of Economics and to participate in this programme. I didn't have the good fortune to study with him but I did study with somebody that he admired very much, C Wright Mills, and C Wright Mills had a big influence on me. So I guess in some ways there's a bond and a connection with Ralph Miliband and so I am happy to somehow all these years later to be able to speak here.
For my presentation tonight I am going to speak about the potential for a conflict or a Cold War-like rivalry among the great powers, especially the United States and China, over dwindling supplies of critical raw materials especially oil. In my mind this is the greatest threat of instability and conflict in the 21st century involving the major powers. There are other threats to international security in the 21st century involving the great powers and lesser powers or non-state actors like terrorists that are probably more likely to occur, that might occur more frequently; but in terms of the potential consequences (even though it may be less probable) a conflict or a new Cold War involving the major powers over resources is the greatest danger that we face, and therefore worth our close attention tonight.

Now before I get into the heart of my argument let me say that the problem of conflict among the great powers, especially involving new powers, has always been a major issue in international affairs. The rise of new powers has always been a source of anxiety for the existing so called status quo powers and has often been a source of instability. I think you are all well aware of this. The dominant powers in the international system, the status quo powers, have always been fearful of the demand raised by newer powers for a seat at the table of international affairs and thus face the prospect of giving up some of their privileges they enjoy as the dominant powers. The rising powers, on the other hand, are often impatient with the reluctance of the status quo powers to make room for them at the table and this, as you know, has often to led to catastrophic conflict. Two great world wars in the 20th century are to some degree a product of this phenomenon.

The question thus arises is what can we expect in the case of China's rise to great-power status? There are many American political scientists who believe in this case, no less than in the case of the rise of Germany and Japan, that conflict is inevitable -- that this is just an iron law of international relations. Others, for example, John Ikenberry writing in the current issue of *Foreign Affairs* magazine, argues that China's rise can be accommodated peacefully assuming that the major Western powers, the current status quo powers, make room for China at the table and allow China to benefit from the international institutions created after World War II to benefit the dominant powers of the time. As I'm sure you're aware, there is a lot of discussion taking place in the United States, and I'm sure no doubt in this country as well and in Europe, over this question, and I'm sure we'll see more of that in the future because the rise of China is probably the most important single political and economic fact of our time. But to my ears some of this discussion has a sterile, airless, academic quality because it neglects the all important resource dimension, which in my mind changes everything.

It is true of course that Germany and Japan rose to prominence at a time when the great powers were competing with one another for access to the raw materials of Africa, Asia and Latin America and that to some degree the antagonisms that led to World War I in particular were stimulated by that competition and this was a factor that led to the world wars of the 20th century. But they did not face a world in which the demand for essential resources was growing at an exponential rate and in which the supply of many of the most important resources was facing imminent contraction -- and that is the situation that we face in the coming years, and in my mind this poses a very different situation than was faced in the past and it changes everything.

So the first thing I want to do is to review the demand and supply situation with respect to energy and especially regarding the situation of the United States and China. The first part of this is the explosive growth in the demand of energy. Now this is a complicated topic, and I don't intend to go into enormous detail in this, though I am happy to discuss it in more detail.
if you would like after I finish, but I think it's necessary to at least go over the rough outlines of the situation.

Right now the world is facing the most rapid and the largest build up in demand for energy in modern world history. Perhaps right after World War II the pace of demand might have been higher but the base upon which that demand was built obviously was much smaller, but today the pace of demand is absolutely extraordinary. According to the US Department of Energy, world energy consumption is expected to rise by 57% between now and 2030, an extraordinary and perhaps unprecedented degree of expansion over such a short period of time. This will require increases in the output of every form of energy, traditional fuels, fossil fuels like oil, coal and natural gas, nuclear power, and hydropower -- as well as non-traditional fuels, emerging fuels, bio-fuels and renewables. It will probably entail the greatest economic and industrial challenge facing policy makers in the years to come and will certainly be the most expensive undertaking facing the planet in the coming decades.

Probably the greatest part of this challenge will come in the area of petroleum. Oil now provides the single largest share of world energy, about 38%, nearly two-fifths, and the overwhelming majority of world transportation energy, about 98%. Virtually every moving system on the planet is powered by petroleum, and despite all of the talk of petroleum alternatives there is no substitute to petroleum on the horizon that can be expected to assume its critical role for the foreseeable future. Lots of talk, lots of investment under way, but there are no projections to show that any alternative fuel will replace petroleum for the next two or three decades and possibly beyond. We are stuck in our addiction to oil for the largest share of our energy for the foreseeable future.

According to the US Department of Energy the world demand for oil will rise from approximately 84 million barrels of oil per day today (that's how oil consumption is measured, in millions of barrels per day) to an estimated 118 million barrels a day in 2030. This is a number I would like you to remember, 118 million barrels per day, the estimated demand in 2030, because I am going to come back to it in a little while.

At the same time that we're seeing this explosive increase in demand for energy, especially oil, we're seeing a dramatic shift in the allocation among consumers in the demand for energy and this is something that is even more significant I think. Until very recently the majority of demand for energy and oil was in the global North, the mature industrialised countries of North America, Western Europe, Japan, Australia, New Zealand and the former Soviet Union. As recently as 1990, in my mind not very long ago, these countries together accounted for three-fourths of total world's energy demand while the global South, with an overwhelming majority of the world's population, accounted for only one-fourth of world energy consumption. But that pattern is changing very rapidly because of rapidly rising demand in China, India and the other newly industrialised countries of the developing world.

At present, energy demands in the global South has risen to about 35% of world's energy and 35% of world petroleum use, but this is just an early indication of the South's impact on global energy use. Energy demand is rising so rapidly in the global South that by 2025 the South will overtake the North to be the leading consumer of energy, and by 2030, according to the latest Department of Energy projections, China alone will consume more energy than all of Europe plus Japan combined -- just China -- a remarkable turnaround since 1990 when Chinese consumption was less than half of Europe's. So not only is demand increasing
radically but within the increased level of demand from China a huge shift from the global North to the South in terms of consumption.

So far we have looked at the changing distribution of demand, but what about the supply side of the equation? This is where things start to get very dicey. The very significant challenge posed by rising energy demand from China, India and other rising powers would be addressed without great anxiety, I'd argue, if we had high confidence that the world's energy industry could satisfy the ever increasing needs of both the older consuming nations of the world and newer consumers in the global South. But we can have no such confidence.

There is a growing body of data and analysis to suggest that the global supply of energy will not be sufficient to satisfy anticipated demands of all consumers in the decades ahead, producing fierce and possibly violent conflict over whatever supplies are available. Now I know you probably are aware there is a great deal of controversy over this matter, particularly with respect to oil, but it’s also true of natural gas, of uranium for nuclear power, of coal and hydropower, in fact, of all sources of energy. I obviously can't do justice to this debate in the time allotted to me. I am happy to go into this in as much detail as you'd like in a question period. I will talk about oil because I think that's the one that's most important and most critical and even there I can only give you the highlights of the debate.

First, the rate of discovery of new oil fields has been falling for every decade since the 1970s, which is the last decade in which new discoveries exceeded the amount of extraction from existing fields. At present, we are consuming twice the amount of oil from existing fields than we are replacing with new oil from newly discovered fields. This is obviously a non-sustainable situation. This is not due to laxity on the part of the major oil companies; in fact, they are spending more money each year than the year before in the search for new oil fields, but they are simply not finding new oil. Only a handful of major fields, really large fields, have been discovered in the past 40 years: the Kashagan field in the Kazakh part of the Caspian Sea, a few fields off the west coast of Africa, recently a new field off the coast of Brazil, one or two others. None of these fields is as large as the giant fields in Saudia Arabia and some big fields in Mexico and Venezuela that were discovered in the 1940s, 1950s and 1960s. And in fact those giant fields discovered 40, 50, or 60 years ago still provide a very large share of the world's current petroleum supply. So the fact that we are not finding any more giant fields like them, or even many medium sized fields, is a very worrying sign indeed.

A second factor: The rate of decline in output of many of the existing fields we rely on today appears to be accelerating year after year as these fields approach the end of their natural lifecycle, which eventually occurs to all oil fields. Oil fields have a natural lifecycle, they're discovered, oil is pumped out of them, and they reach the end of their lifecycle. And many of the giant fields, as I say, were discovered 40, 50, or 60 years ago and are now approaching the end of their natural lifecycle and so their output is beginning to shrink. This is not something you read about in the major press, but if you read the technical literature you can detect growing worrying signs about this. Giant fields, like Ghawar in Saudia Arabia and Cantarell in Mexico have gone into sharp decline or are being kept at their current levels through extreme, unsustainable rescue efforts. This would be a matter of secondary concern if the rate of decline in these giant fields were matched by discoveries of equally large fields to replace them, but, as I said, that's not happening.
So the world still contains a lot of oil but we are using up what we have and not replacing it. It's a little bit like some of the novels I've read, about people inheriting large inheritances and then squandering them in wasteful extravagance. That's the situation today with respect to the world's inheritance of petroleum. We are going through them at an extravagant rate and we are not replacing them with new resource wealth, and you can do that for a while but eventually you'll be left with nothing.

We could ameliorate this problem to some degree if the major oil companies would develop fields which are known to exist but are located in politically challenging parts of the world, for example in Iraq, Iran, Russia, Kazakhstan, Nigeria, Sudan and a few other countries. These are, as I say, fields that are known to exist but haven’t been developed because of war, corruption, violence and state thievery. Some efforts have been made to develop these fields, and with an investment estimated in the tens of trillions of pounds or dollars we could increase somewhat the level of output in the future, but the large oil companies and their investors and bankers wisely are choosing more and more frequently not to take risks -- especially, for example, in Russia or Kazakhstan, where they are being robbed by governments and state-owned companies, governments, and their investments are being taken from them through corruption or otherwise, or their employees are being kidnapped or killed as is occurring in Nigeria. So for whatever reason, they're not making these investments, and as a result of the lack of investment, these fields are not being developed and thus we can't count on them either.

Combine all these factors together and the picture regarding future oil availability is very dismal. Just how dismal – well let's go back to that figure I asked you to remember of 118 million barrels a day for anticipated world demand in 2030.

In its most recent assessment of the world oil equation, titled *The Medium Term Oil Market Report for 2008-2012*, the International Energy Agency, the IEA, concluded that world oil output will rise to about 96 million barrels a day by 2012 but will not be to rise much beyond that in the years beyond 2012. A very similar assessment was given by the CEO of Total, the leading French company, Christophe de Margerie, who was at a London conference in October, when he said that 100 million barrels per day “is now in my view an optimistic case” for maximum world output. So 100 million barrels per day is the optimistic view whereas the US Department of Energy says that anticipated world demand in 2030 is expected to be 118 million barrels a day, so we have a potential shortfall of some 15-20 million barrels a day, somewhere in that range.

Both of these analyses and others published in industry circles say that it might be possible to sustain output at approximately 100 million barrels a day, maybe a little bit over that, for a few years past 2015 but eventually, long before 2030, the level will begin to decline. Now I know that the disappearance of conventional oil, conventional liquid petroleum, will be compensated to some degree by an increase in non-conventional petroleum supplies, Canadian tar sands, Venezuelan extra heavy oil, a certain amount of liquids from corn, ethanol and other alternatives – adding maybe 5 million barrels a day, maybe a little bit more than that by 2030 if we're lucky, but nowhere near the level of demand projected by the Department of Energy.

The likelihood is that the world is going to face substantially less petroleum and its projected demand beginning 5 to 10 years from now and the supply will increasingly contract after that until some point in the distant future when alternatives will become available on a very large
scale -- which is to say not in my lifetime, or the lifetime of others in this room who are in the
professorial class. Maybe some of you who are students will live to see that day, that is when
second-generation ethanol or other petroleum alternatives that are being tested in laboratories
today are available on a large scale, but not in the next two or three decades. So we're facing
a huge crisis of liquid energy supply beginning in about 5 years to 10 years from now and
lasting for another quarter of a century at least.

So we will face a very significant energy crisis which will have huge economic impact.
Anything to do with transportation will be affected because there won't be any alternatives
available, and that means virtually all forms of commerce will be affected as well -- and it's
in this context I think that we have to look at the issue now of rising powers and how the
United States and the other mature industrial powers will respond to China's efforts to capture
more and more of the world's oil supply when the availability of global supplies is about to
peak and go into decline.

How do you think they are going to respond to this? My prognosis is badly, really badly.
Now why do I say this? First of all a vast supply of affordable oil is absolutely essential to the
successful functioning of the American economy and American society. Many of you, I
suspect, have been to the United States, maybe the overwhelming majority. I hope those of
you have been to the United States have been beyond New York City, Washington and
Boston -- those are virtually the only cities in the United States with a workable public
transportation system, the rest of the country has none of that or the bare minimum, and relies
almost entirely on petroleum-fuelled transportation systems to get by. The entire
transportation infrastructure of the United States runs on petroleum and the situation is
getting worse, not better because virtually all of the housing in the United States is beyond
the reach of rail transportation. Entire industries in the US are dependent on oil --
automobiles, airlines, tourism, and mechanized agriculture.

Also something you may not think about: American military power is totally dependent on
petroleum. American leaders talk about the prowess of our precision-guided missiles and the
effectiveness of stealth technology, that this is our great advantage, but the fact is that
America's global military power is totally dependent on a vast supply of petroleum, and that
dependency is growing exponentially. The average American soldier in Iraq consumes 16
gallons of oil per day -- that's 4 times as much as the average soldier in the first Persian Gulf
War of 1990-91 because the new weapons that have been introduced for this war are much
more fuel intensive with the high-tech revolution introduced by Secretary of Defence Donald
Rumsfeld, and the new weapons now on the drawing board for the next conflicts are that
much more fuel intensive than the current ones. To deploy a global military capacity to fight
wars simultaneously in Afghanistan and Iraq, and to station forces in Korea, Bosnia, makes
the US military the world's largest consumer of petroleum. It uses more petroleum every day
than the entire country of Sweden, to put this in perspective.

So oil is essential to the United States. It is the essence of the American way of life, of
American civilisation. For this reason American politicians would come under immense
pressure to use whatever means are necessary, including military force, to ensure an adequate
supply of oil if the country faced actual shortfall, and possible economic collapse as a result
of any shortages. It doesn't matter whether there would be a Democrat or a Republican in
power at the time -- either would be forced to act dramatically and if necessary militarily to
ensure that the United States had enough oil. Bear in mind the defining stated policy of the
United States, with respect to access to foreign oil, is the so called Carter Doctrine of 1980,
which was enunciated by the most liberal and peace-minded of all post-war American presidents, Jimmy Carter, in response to the Islamic revolution in Iran and the Soviet invasion of Afghanistan, which were seen in Washington as posing a threat to the flow of Persian Gulf oil. This is a doctrine which remains more relevant today than it did in 1980 – and, by the way, perhaps we could come to a discussion over this, could provoke a new conflict with Iran starting tomorrow or at any time in the future. The essence of the Carter doctrine says that any attempt by a hostile power to threaten the flow of oil from the Persian Gulf will be viewed as an assault on the vital interests of the United States of America and, as such, will be repelled by any means necessary including military force. And this was said by Jimmy Carter, who, as I said, was the most peace-minded of American presidents, so you could be sure that any future threat will be faced in the same manner.

Finally, the fact of the matter is China has already been targeted by the United States as a potential threat to vital American energy supplies. I can't emphasise this enough to you. US policy makers view China as a potential threat to America's access to the oil that we will need in the future and they are already taking steps to combat what they see as China's energy seeking efforts. China's pursuit of energy supplies in Africa, the Middle East and Central Asia is viewed through a "national security" lens, and anything viewed in Washington through the lens of national security has a potential military component to it. This is evident in reports of the US Department of Defence, the US/China Security and Economic Commission (which is a body established by Congress to study US/China relations), and specific acts of Congress. I don't have the time tonight to cite all of these documents, but, for example, I refer you to the annual report of the US Department of Defence, mandated by Congress, called the Military Power of the People's Republic of China, which you can obtain online, which each year has been talking with greater concern about China's dependence on foreign sources of energy, saying how that's increasingly driving the build up of Chinese military forces and how this is posing a future potential threat to US security.

Likewise let me call your attention to the Unocal affair of 2005, when the China National Offshore Oil Corporation, known as CNOOC, made a bid to buy the United Oil Corporation of California, known as Unocal for $18.5 billion, the largest bid ever made by a Chinese company for an American company. This was $2 billion more than the highest bid made by a US company, Chevron. This bid, which under capitalist free market terms, which supposedly the Bush administration holds up as its highest principle, was defeated in the US Congress on national security grounds with no intercession on the part of the White House, for all its talk of free trade. Prior to the final Congressional act to block the purchase of Unocal by CNOOC, an overwhelming majority of Democrats and Republicans in the House of Representatives passed House Resolution 334, which called on President Bush to conduct a thorough review of the national security implications of the proposed purchase on the grounds that oil reserves, wherever they are found, are "strategic assets" and that the global demand for energy was "at the highest level in history" and that the acquisition of Unocal by China would jeopardise "the national security of the United States of America." This is the way policy makers in Washington view this issue, not as an economic issue but as a national security and a strategic matter. Now this was in 2005, when the global supply of petroleum was more or less adequate and China's demand for petroleum was approximately a third of where it's expected to be at 2003. So you can imagine the hysteria and alarmism we could expect when China's demand is three times greater than it is today and the supply is in a crisis condition.

How then is the United States acting on this perceived national security peril? The most significant response for now is in the area of competitive arms diplomacy, the use of arms
transfers, military assistance, intelligence sharing, military training and the like, to gain geopolitical advantage in areas of interest to both the United States and China in Africa, the Middle East and Central Asia. In the past few years both the United States and China have substantially increased their delivery of all forms of military aid and arms in a competitive struggle to win the loyalty of key oil-producing countries in those areas. In many respects this feels very much to me like the competitive arms diplomacy of the Cold War era, when the United States and the Soviet Union competed for influence using arms in the very same areas, except now that it's US and China and the objective is not so much political influence as it is access to valuable oil and gas reserves, but also for uranium for nuclear power, and vital minerals.

In Africa, for example, which is the fastest growing source of new oil for both the United States and China, the United States has stepped up its arms deliveries (a lot of it for internal security purposes) to Nigeria, Angola, Kenya and a number of other countries, while China has stepped up its arms deliveries to Sudan, a lot of it reportedly being used in Darfur and in southern Sudan to crush rebel forces there, as well as to Algeria, Angola, Nigeria and Zimbabwe. And these deliveries seem to have a competitive cause and effect -- the recipients say, “We’ve been offered something from China, can you match that?” Or, “We're being offered such-and-such from the United States, can you match that?” -- just as you had during the Cold War era in the competition between the US and the Soviet Union.

In fact US military involvement in Africa has reached such a high level that the US government has established a new military establishment there, the US Africa Command or Africom to oversee all of its burgeoning activities in the continent. Now when you consider that the last time the US established an overseas command like this, which was in 1980 when President Carter established the Central Command in accordance with the Carter Doctrine, which I told you about, and when you consider that the Central Command, or Centcom, has since been engaged in four wars in the Middle East and many minor engagements, the establishment of Africom in the past few months should be cause for deep concern. It certainly is something that troubles me very deeply.

Turning to Central Asia and the Caspian Sea area, which is also viewed by both China and the United States as a major source of new oil, and as an alternative to the troubled Persian Gulf area, you see a very similar situation of competitive arms diplomacy, with China supplying arms, technical assistance and training to the Central Asian republics of Kazakhstan, Kyrgyzstan, Uzbekistan and Tajikistan and the United States providing similar equipment and supplies to Azerbaijan, Kazakhstan, Kyrgyzstan, Uzbekistan and the Republic of Georgia and here too you see a cause and effect kind of relationship, with both trying to outmatch the other. In this case, however, US efforts are aimed not only at China but at Russia as well.

Now Russia is not like the United States or China, Russia is not interested in this area for acquiring oil or gas for its own use; rather Russia seeks to control the flow of energy for its own strategic advantage, largely to dominate the transportation of energy in Eurasia and to use that as a tool of influence in surrounding areas, including Europe. So in the Caspian Sea area we have a three-way arms contest, though China and Russia co-operate in the Shanghai Corporation Organisation, the SCO, providing arms to those countries that I mentioned. So in terms of US/China competition, it's often the US versus the SCO.
Looking further into the future, the US military is preparing for the day when the Iraq war is no longer the major focus of American military action and when the global struggle over energy becomes the central focus of global security affairs. In this hypothetical future the Navy rather than the Army or the Marine Corps is expected to play the leading role as the major powers struggle for control over access to foreign resource zones and the protection of key sea lines of communication (SLOCs), like the Straits of Malacca in the South China Sea, become the focus of concern. It sounds an awful lot like the 19th century to me, doesn't it, but, anachronistic or not, the US navy is now engaged in a major expansion largely justified in the documents supplied to Congress on the projected expansion of the Chinese navy, which they claim is largely driven by China's growing dependence on imported energy from the areas that I've described. So all of this is being driven by assumptions regarding a future struggle with China over energy resources that we have to prepare for now in anticipation of this.

In regard to this no one in a position of authority in Washington will say on record that war over oil between the United States and China is inevitable. What they will say is that such warfare is possible, and becoming more so all the time, and that therefore we have to begin now to prepare for this, therefore creating a self-fulfilling prophecy that I fear will prove to be the defining paradigm, the defining military paradigm of the 21st century.

What worries me about all of this is not that China and the United States will ever choose to go to war with one another for overseas sources of energy. I see a very slight risk of a deliberate war over oil. Rather, I fear a situation of inadvertent or unintended escalation, a situation in which the two sides have become so suspicious and fearful of each other's motives and intentions that they misperceive or misunderstand their rival’s behaviour in a crisis and miscalculate, leading to an uncontrolled chain of events ending in full scale hostilities. Think Sarajevo in 1914. There are ample cases where such a thing could occur today. For example, Chinese and Japanese warships have nearly collided in the East China Sea over disputed undersea sources of natural gas in a disputed area that both of them claim. An attack by China on Japan would require immediate US military involvement under our defence treaty with Japan.

Even without the outbreak of hostilities, a new Cold War between the United States and China over access to energy supplies would prove catastrophic for the planet because it would consume trillions of dollars in military expenditures -- precisely the amounts of funds that are needed to develop new energy options to avert the worst effects of global warming. If we continue to spend the amounts that are being planned and devoted in my country for this naval build up and other plans to fight these future wars over energy, there will be no money left in the Treasury to spend the like amounts for the energy options that are necessary to eliminate our dependence on fossil fuels and so the race towards a hotter planet will continue without surcease and the same will be true in China -- and so the two of us, the US and China will in 2030 account for nearly half of all the world’s carbon dioxide emissions.

In concluding, I return to what I said at the outset. I indicated that an outright conflict or a new Cold War between China and the US may not be the most likely threat to world security in terms of probability, but it is the most serious threat when the degree of likelihood and the degree of consequence are combined. This being the case I argue that averting an energy war, hot or cold, between the United States and China is the most pressing long term task facing the international community today both in terms of reducing the risk to international peace and security that stems from this, and also increasing the prospect of addressing the risk of
catastrophic climate change. And I have to say that unfortunately I don't see that any of the leading presidential candidates of either party have recognised the magnitude of these threats. So I think that education around these issues and political action to raise the magnitude of these dangers, especially the risk of a Cold War between the US and China over the race to secure foreign sources of energy, has to be the major political task in the years ahead and has to be viewed as a major danger even if other risks seem more imminent. And it's this message that I'd like to leave with you. I thank you for your patience and listening to me and I look forward to your comments and questions. Thank you very much.

[Audience applause]

**Question**

Thank you very much for a fascinating talk. Just one brief comment and a question – the question is about Europe, which you said you might mention if someone asked about it. I mean obviously we're situated in Europe and it would be interesting to hear your view of how we're pursuing our energy needs over the next couple of decades. The comment was it's not new for the US, is it, to work with fairly young undesirable regimes in order to secure oil. Saudia Arabia seems to be the prime example and the co-operations continue even though there is a lot of evidence that Saudia Arabia or the rulers of Saudia Arabia played a large part in funding the development of Al Qaeda but still America works with them.

**Professor Klare**

I didn’t grasp the nature of the question what you're asking me to speak to.

**Speaker**

Speak to Europe and our own energy needs.

**Professor Klare**

When you say Europe, the answer is Russia, because Europe is becoming increasingly dependent on the natural gas flowing from Russia and this obviously raises geopolitical questions of its own because Russia has a political agenda that goes with that, which is that they want, as I say, they want to be at the table of decision making, which has been denied Russia for the past 10 or so years, and Russia is demanding a seat at the table and I'm not quite sure what its list of demands is going to be, but they are going to be pushing those demands with increasing authority in the years ahead and Europe will have to decide which ones to say yes to and which ones to say no to but there will be a price to be paid.

I think Europe will be drawn into the struggle in Africa as well as the United States and China because that is the only other alternative to Russia for energy and I gather from the meeting in Lisbon that European leaders are shocked to the degree to which China is beginning to pre-empt Europe, not pre-empt, but has moved so aggressively to tie up oil, gas and mineral reserves so the competitive pressures are growing rapidly.

**Question**

The positive ethic is profit and the Arabic ethic is honour and as America seems to dishonour the Arabic world with Israel can you comment on the American future policy on Israel and the Middle East in relation to this and obviously China is seen as a least threat to them so obviously they may side with China and can you comment on the last OPEC big meeting that went on.
**Professor Cox**
That's 5 questions, just take the first one, Mike.

**Professor Klare**
Well I think the point you made about China… China is making a huge effort to supplant the United States in the Arab world, a huge effort. The problem is that the Saudi royal family, which this gentleman raised in the first question mentioned, is so dependent on American military protection that it can't abandon the United States for the time being and the Chinese are not ready to replace the United States as their guardians at the palace gate, not for the time being, but the Chinese are certainly making an effort to supplant the United States in the Middle East and the way this has been shown, for example, is in arms sales to Iran, which is seen as very provocative by the United States and could lead to some future crisis. But the Chinese view the Persian Gulf, as they call it, an American lake. They are very aware that they are outgunned, that this is the centre of American power, so they're concentrating their efforts in Africa and in Central Asia where they see a comparative advantage. That's why I emphasised that in my comments because that's where the rivalry now is hottest. The Chinese are playing it cooler, more cautious, in the Gulf because they know that America will be much more reactive and violent if they mess around too much.

**Question**
Supposing we accept your premise that there is going to be a dramatic shortage of oil, which I'm not completely convinced of and we could talk about that, but lets just for the sake of argument assume that we accept your premise, my question is why is the response to that a geopolitical conflict rather than say co-operation? Just to go on a little bit on this line, and I think it reflects what the gentleman upstairs was mentioning about Saudia Arabia, if we take the case of Iraq this was an extremely irrational war if the aim was to increase the supply of oil because actually the oil production hasn’t yet reached its pre-war levels. So if the method is geopolitical competition it's actually rather an inefficient method and I would say that was true of the Caucasus and Central Asia because it's more likely to provoke conflict and instability which is bad for oil production than it is to secure. Surely the simplest thing the US could have done would have been to make a deal with Saddam Hussein that would have been the way to secure its oil supplies.

So my question is really…and I think there is a clue in what you were saying about the anachronism of the language, isn't this a very anachronistic method in a world of globalization, in a world where military power is no longer as effective as it used to be? So why do you think a shortage of oil will necessarily lead to this anachronistic response?

**Professor Klare**
I would love to spend the rest of the evening on your question but we can't. First, I should be clear that when I talk about shortage I am talking about a shortfall with respect to a much higher level of demand. So actually the amount of oil that will be available, at least for the next 5 or 10 years, will be greater than the amount available now but the level of demand will be so much higher that we will perceive scarcity even though the supply will actually be greater. So let me clarify that.

Secondly, as I just mentioned, American strategy is to preserve the Persian Gulf as an American lake and the war in Iraq, in my view, was not to seize Iraqi oil but to preserve American dominance of the Persian Gulf as a whole. So the war was not so irrational from
that perspective. Saddam Hussein was viewed as a threat to the principle of unquestioned American dominance of the lake and he was eliminated and new bases have been acquired which will never be given up, not by Hillary Clinton, not by Barack Obama, not by Mr Edwards. No prominent Democrat or Republican has spoken of abandoning the enduring bases in Iraq which will be very effective in a case of a war with Iran and all of them say that if Iran acquires nuclear weapons they are prepared to go to war if necessary. So the principle of strategic dominance of the Gulf remains the governing policy of the United States and from that perspective the war in Iraq is not totally irrational. I think it's crazy but from a strategic point of view it's not completely irrational because the goal was not Iraq's oil but control of the lake.

Why not co-operation? Because I think that elites in a declining imperial environment, if I could use that expression, that's what I think we have here, inertia rules. The navy and the military are trying to preserve their privilege, and you've written about this, you know I follow your thinking, this is baroque imperial apparatus trying to preserve its institutional power and they need a threat large enough to justify spending on unimaginably extravagant terms. Only China fits that bill, not terrorism, not Iran, not any combination of rogue states and  

Professor Cox

Could I follow up just quickly, I am going to abuse the privilege of the chair for the very first time in my life, new alliances are being formed between Mary Kaldor and Mick Cox probably for the first time in a long time. I mean if one takes the China versus USA argument, following the logic of your argument, I mean I see a lot of argument in which you're saying, but why is it the policies of both China and the United States point in almost the opposite direction to those which you're suggesting? In other words the Chinese rather than seeing the United States as the hegemon to be confronted actually is engaging with the United States in what it would call constructive engagement and sees its relationship with the United States in terms of the theory of the peaceful rise of China, in other words not repeating the 19th century which you referred back to.

To take the Bush administration, which I've not been at all happy with for 8 years, ever since he got selected in 1999/2000, I mean whatever one says against the Bush administration the one thing you could say it says on China, certainly since 9/11, they've been talking a lot about peaceful engagement with China, you know China is a co-operative partner, China is somebody you have to work with in terms of world trade, world organisation. I mean they do see China in a sense as a problem, as a kind of long term rise of China, but not necessarily in the oil terms I suppose.

So just following up on Mary, it seems your argument, a strongly realist one, points to deep conflict, it's quite true, but following on from Mary's point the actual policies being pursued by both the Chinese communist party and indeed by the Bush administration look towards a kind of constructive engagement between the two as a kind of way of world management of international order rather than the conflict you talked about.

Professor Klare

My answer, I am glad I inserted into my talk the comments about the Unocal affair because I think this was a turning point because this was this effort by CNOOC, remember this was the largest effort ever made by China to acquire an American firm. What they were told was that oil and natural gas and energy are not part of international commerce or free trade or
capitalism, it's off limits. As it was said this is a strategic matter and in this area there is no engagement, no co-operation, this is a military matter, we are adversaries and the lesson the Chinese took for this was June-July 2005. Here's what happened in 2005.

The Chinese President, Hu Jintao, met with President Putin at a summit meeting in Moscow at which they adopted a protocol on world order in the 21st century in which they denounced unilateralism and established a strategic partnership which has led to a military alliance for the first time since the 1960s. So it pushed China into a military alliance with Russia which I think they would prefer not to have. They went from Moscow to Astana where there was a summit meeting of the Shanghai Cooperation Organisation, which adopted a resolution calling for the expulsion of American military bases from Central Asia. This followed an uprising in Uzbekistan in which the Americans and the British and the EU condemned Karimov, the dictator of Uzbekistan and the Chinese welcomed him with open arms and he expelled the Americans from their base in Khanabad.

It was like the beginning of a new era in which energy I believe was the centre of this and since then the SCO has become an anti-American proto-NATO like military alliance. So there was a shift that took place and I believe the US pushed them in that direction. If the Unocal thing had gone through we might be in a different world but they took the message that there is no free trade and no fair play when it comes to energy.

Question

I was thinking of asking you a question about the high price of oil, which has obviously been in the news in the last week, and particularly whether you thought that might change the behaviour going forwards of both consumers of oil and those supplying it but I am loathed to drag you away from the debate you've been having just in the last few minutes because my feeling was that through your presentation your conception of how this international system might develop, focussed on the energy security issues, was clearly one which is pessimistic but also almost appeared to be touching on an element of inevitability in terms of the way you saw in particular the conflict between the US and China as being likely to develop. So perhaps to push you a little bit on this point I'd be very interested to hear if you, perhaps in a years time, had a hot line to President Elect Clinton, President Elect Obama, President Elect McCain, would you be saying there are policy alternatives which the west and particularly the US can pursue which could change the situation or do you feel that there is such a degree of inevitability about it because of the structure of the international system and that the only advice you'd have would be start digging?

Professor Klare

Thank you for that. I mean I am pessimistic because I think the trends are moving in this direction. My advice would be, and here's where, what Mary Kaldor said is what my advice is, co-operate, co-operate, co-operate and that ultimately China and the US will go down in flames together if we don't co-operate, flames doubly, militarily and literally flames in a planet that will be uninhabitable because, as I say, the two of us, the US and China together, are going to roast the planet. So the incentives for co-operation are so great.

I fear…I mean I could spend half an hour and give you my specific proposals, you know, here's what you should do, but I don't think that's what you want and what has to be done is pretty well known, which is a rapid increase in the development of petroleum alternatives and I hope I make clear that the emphasis is on liquids. I mean we could talk about wind power and solar power, those things are fine and good but they are not going to solve the liquid
transportation problem, is the crisis for both of us because of our dependency on liquid transportation fuels. So it has to move towards biofuels. Non-food biofuels is where the thrust has to be and the two potential sources of that are cellulosic ethanol, non-food ethanol and coal as a source of liquids if you bury the carbon -- but to do that you have to cut the defence budget in half, that's the only source of money. So that's the essence of my suggestions. But I was about to say that I think it is going to take a few crises before that message is brought home… I mean that's known but the political will is going to require crisis and I hate to say it, but I think we are going to get those crises -- either a global warming crisis or something else.

**Question**
How does the…well we've just heard of the decision to go nuclear in terms of nuclear power stations in the UK and presumably this will be copied throughout the European continent and maybe further afield, how does this feed into the equation of rivalry for resources between China and the USA because uranium is present in countries which are, to put it mildly, very, very dodgy whether it be Chad or elsewhere. So I would like you to comment on that and also you said you could have said more about these American reports or corporations which came out with these – I can't remember what you said – ideas about how energy, a rivalry for energy would feed into a future scenario of rivalry?

**Professor Klare**
The short answer is that the nuclear power that the British are going to develop will have a negligible effect but the larger race worldwide towards nuclear power, especially using uranium as a source of energy, primary fuel, will stir up geopolitical conflict, as you suggested, for supplies of uranium. Now China is getting most of its uranium from Australia and Niger in Africa and the French have a lot of influence there. There is an insurgency in Niger, there has been some violence, there could be more. I don't know where the British get the uranium and I think they also have some recycling of plutonium but the problem, as I say, for the US and China is not electricity but liquids so the impact there is, in terms of the US/China competition, is not very great.

**Question**
China has a huge reserve of US dollars and I am wondering if you have an opinion as to what extent they might use that as leverage in negotiations and alter the fact that oil is traded internationally in dollars. It was speculated that the invasion of Iraq was accelerated by Saddam's intentions to, or at least an initiative, to try and have oil traded in currency other than dollar and that might have a negative impact on the value of the dollar. So I wondered if you had a view on the far <?? – 1.15.19> component or is there one to this issue?

**Professor Klare**
I've heard this raised many times and I have spoken with people who might be in a position to answer that question, the second part of your question, and so far as I know the possibility that Iran or Iraq might switch to non-dollars was not a factor in the US decision to go to war. I don't think it’s a strategic factor. The fact that China holds such a large supply of dollars in its currency reserves is a kind of insurance policy that they hold against rash action by the United States but they can only use it once because if they do use that they will sink their own economy as well as the American economy so it can only be used once and my suspicion is that would be used in the case of something like an American intervention over Taiwan in the short term.

**Question**
On a continuation of American economy could you comment on the potential for American slow down in the economy over the next couple of years due to the credit crunch etc. and the impact that has on all this and their continued pursuit of oil?

**Question**
I was wondering, too, what the people in this room should do with their influence and their personal actions to prevent these future wars and to bring about peace?

**Professor Klare**
The first question about the US economy – there will be an economic slowdown in the US or at least there appears to be, all the signs point in that direction. This will reduce the demand for petroleum, there's some signs of that, but as I tried to indicate the American economy has become so hard wired in its reliance on petroleum that it’s very hard to American consumers to give up their addiction of petroleum. They’re cutting back on trips to the beach, frivolous trips, you know those of you who have travelled to the US and as I say got beyond the big cities, if you drive 50 miles to work and the only way to get there is to drive you are going to drive to work and you are going to give up eating out and going to the mall and spending money at K-Mart or Walmart or whatever, that's what you do, and that's what's happening and you may know that the Christmas shopping season was very disappointing for a lot of retailers and the speculation is that people have to keep spending on gasoline to maintain their employment and other vital activities so people will keep driving, that's the sad fact, even though the economy may suffer because until we reconstruct our society, which has to be the ultimate objective I believe, in more concentrated housing, closer to public means of transportation, we're going to be stuck in this horrible mess.

This gentleman asked about what we could do. Now I don't know the political cycle in this country. We have an election under way and it's a remarkable opportunity to press for the thinking about new, fresh ideas and they are coming up and I have to say young people are taking the lead in a lot of this and Obama's campaign has given young people, college students, a remarkable opportunity to have their voices heard and bringing new thoughts into the political process. Even if he doesn’t get elected I think he will have this dramatic effect. So I don't know what the equivalent opportunity would be here in this country but I teach, I'm a college professor, and my impression is that college aged students know a whole lot better than people of my generation about the things that I've been talking about, especially global warming. They know much better than we do about what they face in the future and therefore are beginning to take leadership on these issues. So I say empower young people to take leadership on these issues and let them tell us what should be done.

**Question**
At the beginning of your lecture you just referred to the lack of investment and the global corruption, at least corruption of countries…

**Professor Klare**
And theft.

**Speaker**
Yes of course, just wanting to be sure that you also consider in your picture investment made by technologies company that may help the situation and I am thinking about just new technology for ultra deep water or deep water and the other point in relation to corruption, do
you think that this could be…that the international initiatives such as the investment treaties or the Energy Treaty Charter or whatever may help to solve this problem as well?

**Professor Klare**
That new technology could help?

**Speaker**
The first one is new technologies if they may help to increase investment and to solve the problem of the lack of investment and the second point related to corruption, if new international treaties such as the transparency initiatives as well may help to solve the problem of corruption?

**Professor Klare**
I'm very pessimistic about that part. The reason for that is that it's the low hanging fruit problem as they say. I don't know if you have that expression. All of the friendly, safe, uncorrupted countries’ oil has already been exhausted. So you leave to last the most corrupt, politically unpalatable countries knowing that they are going to be problematic and that's the place we are in today. There aren't any uncorrupted governments to go to or unproblematic governments left, they're all problematic, and this is true of any resource, but that's the history. So yes, these initiatives will help but I just don't have a lot of optimism about it. We could talk in specifics but I don't have a lot of optimism and I think this situation will become more so. As the value of the assets grow the attraction for corruption and theft will also grow. So the problem probably will get worse not better. If you are in a country like Angola, where most people earn $1 a day, if they're lucky, and a handful of people can make a million dollars a day, you're going to try to be in that group by any means necessary, which probably involves corruption or assassination, those being the only two ways you could get into that privileged group. So I think we'll see more of it not less.

As for technology, it could help, but you have the same problem of the low hanging fruit, the cost of new technology like the new field in Brazil, which is very promising, but the cost of operating in those areas is going to become so much greater and then by the time we get to those places global warming will kick in with a vengeance and you'll have more storms and more climate problems making the situation a lot worse. I don't know about offshore Brazil but the most promising new technology area in the United States is the Gulf of Mexico and the place in the Gulf of Mexico that they want to drill in is where the hurricanes are at their most intense and most frequent. So sure, technology could help, but the more we rely on petroleum the more carbon dioxide we emit into the atmosphere, the warmer the planet is becoming, the more global warming the more storms, the more insanity. So I don't think technology is going to save us.

**Question**
Just a comment, I mean I think if we actually look at the main title of your talk Oil, War and Geopolitics, for me the major source of tension in today's sort of global system is not so much the competition, let’s say, as you described between China and the US, but it's more really the sort of dynamics of the relationships developing between producer countries or producer regions on the one hand and consumers of course on the other because, well I mean you've given us a lot of very rich information, but if you look at the policies of let's say governments in Venezuela, in Bolivia, Kazakhstan, Russia of course, these are certainly creating a lot of concern for the European Union as a block, you know, how is Russia going to keep promoting its natural gas export policies to the European Union market? This is a
major source of concern. Russia's potential moves towards collusion, let's say, with Algeria, Iran on certain gas projects, for example, is a major source of concern and also of course Russia's relations with Venezuela to some degree. So I mean I think in terms of immediate tension the tension is really coming out of that sort of dynamic.

Both the US, which is both a consumer and a regulator of the international system, and China, they're both consumer states. China's increased demand is actually going to provide a massive business opportunity for many, both national oil companies and international oil companies in the future and the Gulf loves this, the Saudis love the Chinese at the moment. So I mean I don't know if you have any comments on that but that's how I see the source of tension in this system.

Professor Klare
Thank you for that. I appreciate your comment and I would love to spend another half hour or so responding and I am getting the signal we can’t do that but the gravitational pull of demand that I described between China and the United States is going to colour their relations with those supplier countries that you described and the way that it is playing itself out is, as I say, that they are using not just diplomacy and, as you say, economic means to form relationships with all those countries that you described, but military means as well. In many of them that you described China and the US are also upping their military tools of influence and this has a self-fulfilling nature.

I'll finish with one example, and Russia plays a part in this too, because, as I say, Russia seeks not oil and gas for itself but control over the flow of energy from these areas. So Russia has announced a series of new arms sales to Iran, which is very threatening to the United States and its domination of the American lake. This summer the United States announced a $20 billion arms package of sophisticated weapons to Saudia Arabia and the Gulf Co-operation Council States to reassert its dominance, its authority in the region. This of course angered and worried the supporters of Israel in the American Congress so the Bush administration had to turn around and assure Israel that it would get billions of dollars of new weapons. This of course made Syria and other countries in the area nervous, which will generate billions of dollars of additional arms sales into the region.

Just like during the Cold War period all of this is touching off a Cold War like regional arms race that is going escalate and have a future - we don't know where it's all going to lead. So this energy competition, even if it's played out in a diplomatic and economic realm, also has this military dimension, which has its own built in dangers. That's what worries me but thank you for your very good perceptive question.

Professor Cox
Thank you all for your questions. Michael, just briefly, thank you for your presentation, probably one of the most pessimistic I've heard for many a year.

[Audience applause]