

**\$150 OIL: INSTABILITY, TERRORISM
AND ECONOMIC DISRUPTION**

HEARING

BEFORE THE

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\$150 OIL: INSTABILITY, TERRORISM, AND ECONOMIC DISRUPTION

THURSDAY, JULY 16, 2009

U.S. SENATE,
COMMITTEE ON FOREIGN RELATIONS,
Washington, DC.

The committee met, pursuant to notice, at 9:35 a.m., in room SD-419, Dirksen Senate Office Building, Hon. Richard G. Lugar, presiding.

Present: Senators Kerry, Feingold, Cardin, Casey, Shaheen, Kaufman, and Lugar.

OPENING STATEMENT OF HON. RICHARD G. LUGAR, U.S. SENATOR FROM INDIANA

Senator LUGAR. The chairman has asked me to call the hearing to order. He will be with us in a few minutes, but as a courtesy to our distinguished witnesses, and all who have joined us today, we'll begin now. I'll give my opening statement, and then I know the chairman will want to speak.

I begin by thanking the chairman for calling this hearing, which continues the Foreign Relations Committee's multiyear, bipartisan efforts to examine the role of energy in our foreign policy. Energy security is a critical factor affecting nearly all of today's foreign policy challenges. The American public increasingly understands that greater energy independence is a national security necessity, and that energy security should be a top diplomatic priority of our Government.

Three days ago, in Ankara, Turkey, Ambassador Richard Morningstar, who is with us today, and I, represented the United States at the signing of a milestone treaty on the development of the Nabucco natural gas pipeline. Nabucco will be a vital link in the East-West corridor that will connect the oil and gas rich Caspian region with Europe.

During the past 4 years, Russia has repeatedly demonstrated its intent to use its dominant position in European natural gas markets to project its influence across Europe, the Caucasus, and Central Asia. Nabucco will help diversify gas supplies to many European countries. In the process, it will bring more competition and transparency to natural gas markets, and it will reduce the coercive potential of Russia's natural gas dominance.

The significance of the Nabucco agreement is far greater than the natural gas it will carry. Agreement on Nabucco is a bold demonstration that governments representing diverse people and interests can overcome divisions, and it required substantial agreement

on energy security between European Union nations, Turkey, Georgia, Azerbaijan, and the United States. It's a signal to the rest of the world that partner governments will not acquiesce to manipulation of energy supplies for political ends, and also has the potential to build new avenues for peaceful cooperation.

This prospect was illustrated in the meeting that Ambassador Morningstar and I enjoyed with the Iraqi Prime Minister Maliki after the Nabucco signing this week. He indicated his desire to export natural gas via Nabucco, thus raising an opportunity for Iraq to establish stronger cooperation with Turkey and beyond, and raise money for the substantial postwar rehabilitation of his country.

American diplomacy has been extremely important in moving the Nabucco project to this point. I want to recognize the special efforts of Ambassador Boyden Gray in 2008. Although the United States is neither a customer nor a producer of the natural gas that will traverse the pipeline, steadfast American support over many years was instrumental in keeping Nabucco on the agenda and bolstering the confidence of partner countries.

Long-term, strategic thinking on energy security is needed across U.S. foreign policy. That is one reason that I authored legislation creating an international energy coordinator at the State Department. My conversation with Secretary Clinton indicated that this appointment will be made soon, and I am hopeful the energy coordinator will work to ensure that energy is at the top of our foreign policy agenda.

In today's hearing, we'll focus on key oil and gas producing areas of the Middle East, Africa, and the greater Caspian region, where political developments have major consequences for global prices and markets. A global economic downturn has reduced energy demand, bringing price relief to consumers and greater flexibility to markets, for the moment.

But predictably, the recession has also led to falling investment in the energy sector. The International Energy Agency projects that global investment in oil and natural gas production will fall by \$100 billion in this year. Just last week, OPEC announced sharp reductions in production investment. These cuts come at a time when more investment is needed to counteract high oilfield decline rates. When major economies start to recover, energy demand will rebound, causing markets to tighten and prices to rise. Under such conditions, markets will be highly susceptible to vulnerabilities that can produce severe supply shocks.

Three vulnerabilities stand out as areas of concern for energy diplomacy. First, instability and conflict may disrupt energy flows and undermine needed investment. Second, governments may make supply and investment decisions based upon politics, and not economics. And finally, terrorist activity may threaten major energy infrastructure.

In the near term, if we fail to address these vulnerabilities, the prospects for economic recovery could be seriously imperiled. An oil price shock that hits just as the recovery is beginning and demand for energy is increasing would likely generate inflation, undermine market confidence, and increase the risk of conflict. Over the longer term, even if we hope for a conversion from a fossil-fuel-dominated

economy to one that depends much more on renewable resources, failure to maintain consistent supplies of oil and natural gas in the interim could be debilitating to our economy and to our national security.

These are problems that require cooperation with other governments. We can work on long-term U.S. energy independence largely through domestic efforts, but short-term and medium-term energy security is highly dependent on the decisions, investments, and political attitudes of other countries. Consequently, there are few topics on which U.S. foreign policy has a greater responsibility to engage.

I welcome, along with the chairman, our very distinguished witnesses this morning. We look forward to their insights in these matters.

Mr. Chairman, I thank you for—

The CHAIRMAN. Thank you very much.

Senator LUGAR [continuing]. Allowing me to proceed.

STATEMENT OF HON. JOHN F. KERRY, U.S. SENATOR FROM MASSACHUSETTS

The CHAIRMAN [presiding]. On the contrary, I thank you for proceeding, and I apologize for being momentarily delayed. Senator Lugar, thank you for your introductory comments; I am grateful to the panel as well for being here today. Dick Morningstar is a great old friend, and I am delighted that you traveled with the ranking member in these last days. We're happy to have all of you here.

Let me beg your indulgence up front. Senator Kennedy has asked me to introduce a Massachusetts citizen to another panel where she is being heard today for confirmation. So I'm going to duck out of here in a few minutes to go do that. But, let me say up front a few things about this topic that brings us here today.

First of all, there is a striking overlap between the world's sources of energy and the world's sources of instability. And we need to take careful note of that. Iran, Iraq, Sudan, Russia, the Caucasus, Nigeria, Venezuela, are all on the front lines of our energy supply challenge, but also on the fault lines of our geopolitics.

Too often, our foreign policy debate has failed to reflect the importance, the connectedness, if you will, of this issue. Look back to President Carter: Back in the 1970s, he tried valiantly to make this connection clear to our country and set us on a path, but regrettably, we diverted from that path and have done so frequently. Senator Lugar has worked over many years to adjust that balance, and I'm grateful to him for his leadership in that effort. He's exhibited vigilance and leadership, and particularly in the development of biofuels.

It may seem a little strange to some people that we're here discussing \$150 oil barrel, with the price hovering in the \$60 range. But, given the incredible volatility of recent years, today's price is not the measurement of urgency. The volatility itself is a major problem in its own right. Last year, we almost reached the \$150 per barrel. By the beginning of this year the price had plummeted to less than \$35 a barrel. Since January, we've seen prices double. These dramatic swings are, frankly, devastating to the economy,

and make it very difficult to conduct business planning, investment, and so forth.

As the cost of oil soared last summer, gas prices rocketed, airlines cut routes, raised prices, businesses closed factories, trade slowed, and our economy began to plunge. Even with the lower prices today, the recent instability has left existing businesses reluctant to expand, and discouraged new businesses from opening.

According to the McKinsey Global Institute, price volatility is going to continue. They predict another spike somewhere between 2010 and 2013—I suppose that's the freedom you have in economic predictions—just as our economy gets back into gear. However, they, and many others, see a solution: Manage the demand.

Globally, we can reduce demand by up to 11 million barrels by 2020, at little or no cost, through higher energy efficiency, natural gas substitution, and the removal of subsidies internationally. That is more than the entire output of Saudi Arabia in 2008. Of course, we also have to understand and address the stability of our supply.

Many argue that it was the shortage of spare capacity that fueled last year's price spikes. The good news is, new production may be coming down the pipeline. In Iraq, BP and CNPC, the winning bidders on the Rumaila oilfield, believe that they can increase production by 1.85 million barrels per day, roughly equivalent to France's oil use in 2008. Saudi Arabia is bringing another 1.2 million barrels per day online, and is committed to maintaining spare capacity of 1.5 to 2 million bbl/d to avoid future shocks.

The bad news is, supply risks are simultaneously growing. In Nigeria, the militant group MEND has been, regrettably, successful in taking oil infrastructure offline, cutting oil flows nearly in half, and leaving exports significantly below the government's target. These conflicts are not easy to solve. MEND announced a cease-fire yesterday, which, after just a few hours, was already on the ropes.

Underinvestment is another risk to supplies, straining the ability of Russia and other countries to bring new capacity online. Now, of course, as Europe was painfully reminded during the standoff between Russia and Ukraine, energy security extends beyond oil. Several European nations were left without a vital source of natural gas during a cold winter. The risks of undiversified supply can be profound.

Again, I want to thank Senator Lugar for his leadership in this arena. As he mentioned in his opening statement, he has just returned from representing the United States in Ankara at the signing of the intergovernmental agreement on the Nabucco pipeline, which is going to bring natural gas from Iraq and the Caspian region through Turkey and into Europe. His advocacy played a critical role in moving plans for this pipeline forward, and in furthering the goals that we all share: Diversity in energy supply and free market access.

So, before turning to the panel, let me just raise one final point about energy security. This is an important point, which we're spending a lot of time talking about now, and working on here in the Senate: We have to think not only about the threat to our carbon-based energy supply, but we also have to think about the threat that our carbon-based energy supply poses to us. Energy and climate security must ultimately advance hand in hand, and

we need to keep both of these at the forefront of our energy policy as we go forward.

We're very fortunate to have with us today four distinguished experts to discuss, region by region, current and future challenges to our supply of energy. As I mentioned, Ambassador Richard Morningstar is an old friend of mine. Special Envoy for Eurasian Energy, he has been covering these issues for years as Ambassador to the EU and special adviser for Caspian Basin energy diplomacy, and has just returned from a successful visit to Turkey with Senator Lugar.

Ambassador Bill Hudson, Acting Deputy Assistant Secretary of State for Near Eastern Affairs, has had a long and distinguished career with the Foreign Service, serving previously as our Ambassador in Tunisia and opening our Embassy in Kabul.

Ambassador Richard Schmierer, Deputy Assistant Secretary of State for Near Eastern Affairs, was just confirmed last week, and will be heading to Oman shortly as our Ambassador. He previously served as Director of the Office of Iraq Affairs.

Ambassador Phil Carter, Principal Deputy Assistant Secretary of State for African Affairs, brings a wealth of experience on West African issues, having served as our Ambassador in Guinea, and Director for West African Affairs.

We have a great deal of expertise at the table, and we're very grateful to all of you for being here today. I look forward to your testimony.

And we'll begin with you, Ambassador Carter, if you'd start, and we'll just run right down the line, unless you guys have worked out a different scheme. Does that work for you? Thanks. OK.

STATEMENT OF HON. PHILLIP CARTER III, PRINCIPAL DEPUTY ASSISTANT SECRETARY, BUREAU OF AFRICAN AFFAIRS, DEPARTMENT OF STATE, WASHINGTON, DC

Ambassador CARTER. Mr. Chairman and Ranking Member Lugar, I would like to thank both of you, as well as the rest of the committee, for inviting the Bureau of African Affairs to participate in today's hearing.

The CHAIRMAN. Is your mike on? Can you pull it a little closer?

Ambassador CARTER. OK. I would also like to commend the committee for its report of October 2008, on the Petroleum and Poverty Paradox. It is quite useful, quite insightful, and something that we're all taking on board.

In his recent visit to Accra, Ghana, President Obama impressed upon African leadership the paramount importance of governance, the rule of law, and eradicating corruption. By highlighting governance, the President distilled a core reason as to why Africa—in particular, oil-producing states—has not fully benefited, either politically or economically, from its natural resource wealth.

In line with the President's message, we have been working in earnest with governments in sub-Saharan Africa to assist them in drafting and implementing the necessary legal, judicial, and economic reforms to help improve governance and curb graft. Many governments must improve their poor records of corruption, governance, human rights, and democratization.

In many countries, only a small percentage of the population has benefited from natural resource revenues. Few governments have developed plans for the prudent and well-intentioned use of oil or mineral profits. Rampant economic instability undermines peace and security efforts. Moreover, undiversified and single-export economies have resulted in a “Dutch disease” effect that has stunted economic growth and breadth across other sectors, most notably agriculture. Energy security, although important, is but one component in a broad range of issues—such as health, human rights, governance, democracy, and the environment—encompassing United States-African relations. But, in the end, the key to energy security in Africa is good governance.

As a net importer of oil, the United States relies on a diversified and extensive list of suppliers to import the approximate 12 million barrels per day to meet our current consumption needs. Two of the top 10 oil suppliers to the United States, Nigeria and Angola, are located in sub-Saharan Africa. Nigeria is our fifth-largest oil supplier, with around 661,000 barrels per day to the United States, and Angola is our seventh, with around 582,000 barrels per day.

United States companies operate extensively in these countries, as well as in Cameroon, Chad, Equatorial Guinea, and Gabon. Because there are direct shipping lines between Africa’s west coast and the United States, West African states are strategically positioned to supply oil to the United States. Yet, in spite of their geographic advantage, these countries still face many challenges. As you mentioned, Mr. Chairman, Nigeria, in particular, must address Niger Delta militant activity, the shut-in of available oil, oil bunkering, gas flaring, and gas-sector expansion, and the environmental impact of the energy sector.

The attacks in the Niger Delta are best described as routinely criminal. They do not represent the political vision of people striving for greater political rights and development for the region. Their frequency and potency demonstrate the challenges for the Nigerian Government’s ability to provide a secure environment for the people of the Niger Delta. The criminal acts are costly to the Nigerian people through stolen oil, lost opportunity, and infrastructure destruction.

Nigeria has the capacity to produce over 3 million barrels per day. However, recent anecdotal reports suggest that it’s producing less than half of that. Poor governance and endemic corruption have also denied the vast majority of Nigerians hope for a better economic future. Despite its GDP of \$220 billion, 92 percent of Nigerians live on less than \$2 a day. These economic challenges exacerbate Nigeria’s already weak governance and security institutions.

In addition to the criminal attacks on oil structures, and kidnapping in certain areas of the country, Nigeria also suffers economically from lost opportunities in gas, as a result of frequent gas flaring, which is also a detriment to the environment. In late May, senior Nigerian Government officials invited a United States team, led by a senior deputy official from the Bureau of Energy, Economics, and Business Affairs, Deputy Assistant Secretary Doug Hengel, to Abuja, to discuss energy and environment issues that focused on mitigating Nigeria’s contribution to greenhouse gases, including

flared gas, and deforestation. In addition, the United States Government, through USAID and other United States agencies, is working with the energy sector to reduce gas-flaring and help support the Nigerian Government's desire to end all flaring by early 2010.

More robust and better-developed liquefied natural gas and liquefied petroleum gas sectors would not only curb Nigeria's gas-flaring, but would also effectively address concerns about global climate change impacts, as LNG burns more cleanly than gasoline. Increased LPG availability would also help displace the use of kerosene and firewood.

In short, we cannot imagine a peaceful and prosperous Africa without a peaceful and prosperous Nigeria. We intend to direct greater diplomatic engagement with the Government of Nigeria to help bring stability and strong institutions to Africa. And, although there is much work remaining for Angola, its desire to diversify and revitalize its economy—speaks to the determination of its people to overcome its tumultuous past. Angola's September 2008 parliamentary elections, where more than 8 million Angolans voted during the country's first poll in more than 16 years, were a testament to the will of the Angolan people to build a new Angola.

Angola's internal economic revitalization, emanating from its national reconstruction program, is another sign of change in Angola, and is receiving international attention. In support of this ambitious and meticulous reconstruction program, the U.S. Department of Agriculture announced that it will provide \$23.3 million through the McGovern-Dole Food for Education Program, to assist women, children, and other vulnerable populations, to help Angola reach its food security and self-sufficiency goals.

Beyond Nigeria and Angola, the United States continues to work with international and West and Central African partners, to strengthen national and regional capacities to deter and mitigate challenges, such as armed robbery at sea, illegal fishing, trafficking in persons, arms, and illicit material, and terrorism. For example, the United States Navy has helped to train Gulf of Guinea states' navies, including those of Gabon, Nigeria, and Cameroon, through the Africa Partnership Station Initiative. The United States is supporting this important work, as are an increasing number of international partners, such as the European Union and the International Maritime Organization.

The African Union and subregional organizations such as the Gulf of Guinea Commission, the Maritime Organization of West and Central Africa, and the Economic Community of Central African States, are increasing their political awareness, and continuing to marshal and coordinate resources to maintain maritime security goals.

In order to encourage effective governance, the United States Government works through the Extractive Industries Transparency Initiative, EITI. EITI and natural resource revenue transparency are part of our comprehensive, anticorruption strategy and international energy security strategy. EITI aims to improve fiscal transparency between extractive industries and the host governments of the countries in which they operate. Governments, the private sector, and civil society comprise EITI's three constituent groups.

The price of oil is approximately \$60 per barrel today, less than half of its historic high in July 2008. Oil prices will continue to vary. But, sub-Saharan Africa offers a strategic and increasing percentage of United States oil imports. Partnering with willing African Governments to effectively use natural resource revenues to develop transparent, accountable, and democratic institutions will not only serve the United States national interest as we work to grow a greener economy that is less dependent on fossil fuels, but will ultimately allow Africans to take responsibility for their own futures, a point underscored by President Obama in Ghana.

Thank you very much, and I look forward to answering your questions.

Senator LUGAR. Thank you very much, Ambassador Carter.
Ambassador Schmierer.

STATEMENT OF DR. RICHARD J. SCHMIERER, DEPUTY ASSISTANT SECRETARY FOR IRAQ, BUREAU OF NEAR EASTERN AFFAIRS, DEPARTMENT OF STATE, WASHINGTON, DC, ACCOMPANIED BY HON. WILLIAM HUDSON, ACTING DEPUTY ASSISTANT SECRETARY, BUREAU OF NEAR EASTERN AFFAIRS, DEPARTMENT OF STATE, WASHINGTON, DC

Dr. SCHMIERER. I'd like to thank the chairman, Ranking Member Lugar, the other members of the committee, for the invitation to appear here today and represent the Bureau of Near Eastern Affairs at the Department of State.

I'm very pleased to be joined by my colleague Ambassador Bill Hudson, Acting Deputy Assistant Secretary of State responsible for Arabian Peninsula and Maghreb Affairs. With your permission, I'd like to make a few opening remarks, on behalf of Ambassador Hudson and myself, on the importance of the Middle East to U.S. energy requirements.

We should start by considering a number of key facts concerning the importance of the Middle East and North Africa to the United States. The Middle East alone holds two-thirds of the proven world's oil reserves. Seventy-eight percent of these reserves are held by OPEC members. And, as a net importer of oil, the United States reliance—and that of Europe and Japan—on petroleum imports from the Middle East and North Africa is significant, and it's growing.

Petroleum imports from Saudi Arabia, Algeria, Iraq, and Kuwait account for some 21.6 percent of our overall imports. The security of the U.S. energy supply is therefore very much part of our diplomatic and economic relationship with the key suppliers in the region. Our overarching approach to engaging the region is to pursue policies which promote regional stability, particularly in the gulf region. Stability helps reduce price volatility and its wider impact on both the United States and the global economy.

In this context, a productive and important interlocutor has been Saudi Arabia. Guaranteeing adequate petroleum supply is a significant theme of our energy security relationship with Saudi Arabia. The Kingdom is the world's leading producer and exporter of total petroleum liquids, and the third-largest petroleum supplier to the U.S. market. As OPEC's major swing producer, Saudi Arabia plays

a crucial role in supplying world markets with a stable and reliable source of petroleum.

The United States also continues to develop and cultivate its relationships with other key oil-producing states in the region. Kuwait, the United Arab Emirates, Qatar, and Algeria are all vital partners in the energy field.

Iraq is also of growing importance in the world energy market. It has the third-largest conventional oil reserves in the world, approximately 115 billion barrels, and the tenth-largest gas reserves in the world. However, due to years of war, sanctions, and underinvestment, Iraq's oil production remains flat.

In North Africa, Algeria remains an important player in our international energy strategy. It is the world's third-largest producer of natural gas, and the ninth-largest producer of oil. Algeria is a leader in liquefied natural gas technology, and is developing solar and other renewable energy technologies.

Let me close my remarks by addressing the important issue of physical energy infrastructure security. In response to the attempted attack, in 2006, on one of the world's largest oil facilities, Abqaiq, in Saudi Arabia, we are partnering with Saudi authorities in the field of critical infrastructure protection. In May of last year, the United States and Saudi Arabia signed a technical cooperation agreement aimed at providing a framework for this cooperation. Under this program, the United States is providing the Saudi Minister—Ministry of Interior—with technical assistance and advice to support safeguarding the kingdom's critical infrastructure. We have established a dedicated interagency office in Riyadh to implement projects related to United States/Saudi critical infrastructure cooperation. This project offers yet another example of the partnership between the United States and Saudi Arabia on a long list of issues of mutual interest.

Thank you very much, and I look forward to answering any questions you may have.

Senator LUGAR [presiding]. Thank you very much, Ambassador.

Secretary Hudson, do you wish to testify, or are you a team today?

Ambassador HUDSON. Yes, sir, we're a team, together.

Senator LUGAR. Very good. Thank you.

I'd like to recognize, now, Ambassador Morningstar.

STATEMENT OF HON. RICHARD L. MORNINGSTAR, SPECIAL ENVOY FOR EURASIAN ENERGY, DEPARTMENT OF STATE, WASHINGTON, DC

Ambassador MORNINGSTAR. Thank you, Senator Lugar.

Senator Lugar and distinguished members of the committee, it's a great pleasure to be here today to talk about one of the important pillars of U.S. diplomacy: Energy security. And I'd like to thank the committee for inviting me to talk to you about what the United States is doing with regard to energy security in the Eurasia area.

Before I get into the details, I'd like to express appreciation to Senator Lugar for the priority that you have placed on global energy security as a foundation for peace and security. I had the honor of traveling with you to Ankara earlier this week to represent the United States at the signing ceremony of the Intergovern-

mental Agreement on Nabucco. And I think that our presence there together underlined the strong bipartisan approach that we have on these issues.

And the Nabucco agreement is a major milestone in opening a new natural gas corridor to Europe. It demonstrated the commitment of Turkey, and the other participating countries, to that project and to the needs of Europe. And this signing should provide a great impetus to the project. But, we also have to remember that there are still many steps that have to take place for the project ultimately to achieve reality.

As you mentioned, Senator, one of the most interesting aspects of our day there was that Prime Minister Maliki attended the ceremony and announced that Iraq would like to supply 15 bcm to the Nabucco pipeline. Again, it's a long way from here to there, as indicated by the discussions we had in our meeting with him after the ceremony. But, it's significant. It's still very significant that he was there, and that he talked about participation in the project.

What is our strategy with respect to Eurasian energy security? I would argue that there are three main components.

First, we want to encourage the development of new oil and gas resources, and also promote efficiency and conservation in the use of all energy resources. Because there is a world market for oil, new production can meet growing demand anywhere in the world, including in the United States. When we're talking about new natural gas production in the Caspian region, it's unlikely that even one molecule of that gas will reach the United States. But it's still important, because it will add to the international gas supply. Additional supply in one place naturally frees up supply in another. And as the market for liquefied natural gas grows, we can start to think about gas moving around markets in much the same way that oil does.

Second, we want to assist Europe in its quest for energy security. Taking goods and services together, the EU and the United States account for the largest bilateral trade relationship in the world. And Europe is our partner on any number of global issues. We have an interest in an economically strong Europe.

Of course, Europe is composed of many different states, and energy security is a more pressing issue to some than to others. But, there are some countries in Europe that do not have a diverse energy mix, and depend to a great degree on one supplier and on one transport route. When that route is disrupted, as we witnessed in January 2009, the consequences can be severe. The populations of Bulgaria and Serbia, and other countries who suffered in the cold, can attest to that. So, our aim is to encourage the development of multiple energy sources, with multiple routes to market. This approach furthers competitive, efficient markets and the best prices for consumers.

Third, we want to help the Caspian and Central Asian countries find new routes to the marketplace. We want to help foster economic growth and prosperity in these countries. By expanding export routes they can increase competition for their resources, and they can demand a higher price. And, in addition, as a corollary, I think that Turkey's involvement in the Caucasus and Central

Asian region is critically important in helping those countries develop their economy and in maintaining their independence.

Some people have portrayed our energy policy, and Russia's, as the next great game in Central Asia, and I would reject this analogy. Energy security should not be a zero-sum game. Zero-sum games are too expensive these days, and we need to find ways where we can at least try to cooperate with Russia in the energy area.

In this spirit, on July 6 the White House announced a new binational Presidential commission with Russia that will cover a host of different issues, including energy. We look forward to that engagement, and we hope that progress can be made in areas that we can agree on.

How will we achieve our energy security goals? Well, private sector and free-market forces are the primary means through which oil and gas are produced, transported, and purchased. But governments can and should play a facilitating role. Governments should put in place the right business climate to attract investment, and should work with neighboring states to expand the market and increase interconnectivities. And we can encourage these efforts.

At the heart of our policy is the belief that energy security is best achieved through diversity—diversity of suppliers, diversity of transportation routes, and diversity of consumers. We support, strongly support opening a new corridor, a southern corridor, to bring Caspian natural gas to Europe. This corridor could include Nabucco—and we'll work strongly toward that end—and could include the Turkey-Greece-Italy interconnector, both of which we support.

These projects are extremely important from a diversification and from a strategic standpoint. They can help open up further upstream development, not just in Azerbaijan, of which there's been a lot of discussion, but also in countries such as Turkmenistan and Iraq, and will form a long-term bond between Turkey, the countries of the Caspian region, and Europe.

I should also add—I've talked a lot about gas, but oil is also critically important, and we support further production of oil in Kazakhstan, and new export routes from Kazakhstan to world markets. We can discuss that further if you have any questions on that.

It's also important to emphasize that new pipelines alone will not sufficiently provide for Europe's energy security, and the United States supports the other initiatives that Europe is undertaking to increase its own energy security. Those initiatives focus on building a single market for energy, unbundling the distribution and supply functions of energy firms, building interconnectivity of European gas and electricity networks, enhancing LNG import capabilities, and increasing gas storage. All of these are pieces of the puzzle that will ensure European energy security.

To summarize, the key to achieving our Eurasian energy strategy is engagement. We need to continue to engage with the private sector, with the EU, with individual European states, with Turkey, with Russia, and with the Caucasus and Central Asian nations. Our job is to listen, to identify common interests and priorities, and to play a facilitating role where we can.

Thank you very much.

Senator LUGAR. Well, thank you very much, Ambassador Morningstar.

We'll adopt a 10-minute question period for members as we question our panel members today. The Chair would like to mention that the Nabucco gas pipeline project handout has been made available, I believe, to committee members, but I'd like to make it a part of the record; by unanimous consent we'll do that.

Senator LUGAR. Let me begin the questioning with you, Ambassador Schmierer. You've heard Ambassador Morningstar discussing our visit with Prime Minister Maliki. One of the features of that visit was his concern that, in northern Iraq, contracts were being signed prior to passage of the long-awaited petroleum legislation, and already smaller companies, by and large, perhaps feeling that this was worth the risk, have signed on. What is going to be the evolution of these contracts, and what is your prediction with regard to the petroleum law, and, for that matter, do you predict some coming together of Iraq as a country before too many transactions occur that may have implications down the road?

Dr. SCHMIERER. Well, Senator, thank you very much. I think you've actually hit all the key issues right on the head. First, I just want to say that I was very pleased to see what did occur in Ankara with the Prime Minister, and really his commitment and his recognition of the importance of Iraq as a participant in stability and security in the energy spheres. I think that was a very important milestone, so it was very, very encouraging, for those of us who have been dealing with Iraq, to see that statement.

As you've indicated, there are a number of issues that have prevented, to date, the Iraqis from finally coming together with their hydrocarbons package. And primarily, the fundamental one is the one that you cited, which is the difference between the Kurdistan Regional Government's view of who has the authorities, and the central government's view of who has the authorities. They continue to discuss it. There have been a number of drafts that have been introduced, but the Council of Representatives has decided not to proceed with that until they really have a political consensus and that's what's still being worked out.

Now, there have been a number of positive practical developments. I think the one that you may be aware of is, recently both the Kurdistan Regional Government and the national government agreed on two contracts proceeding, such that two companies can now produce and export 50,000 barrels of oil a day from the Kurdistan region. And that, to me, represents a positive indication of a willingness to find compromises, to find middle positions. It's not a panacea, it doesn't solve all the problems, but it does indicate that both sides are looking for solutions.

The recent bid round also was, I think, an important milestone, as much for what it taught the Iraqis and the major internationals as for what actually came out of it, which was not a significant amount of new oil agreements. But, I think it showed the Iraqis that there are some real benefits to bringing in the modern technology that the majors can bring, and I think it also convinced them that they really do have to offer incentives to get that investment. So, again, small steps, but I think those are important steps,

and I think the commitment is there, and those two things together, we're hopeful, with support—we've been providing advice and support—will actually move this issue forward.

Senator LUGAR. Let me follow with another Iraq question. Certainly, at the Nabucco signing conference, the news that Iraq might provide as much as 15 bcm for the Nabucco pipeline, which has a capacity of 31 bcm, came as a startling development. Now, one of the skeptical aspects of Nabucco has always been: You can build the pipeline but who will provide the gas? Well, suddenly this announcement that Iraq might provide half of it—now, this has been modified by some, but probably at least 5 bcm, if not 15, a sizable contribution to a project that most of the world does not understand as being, essentially, a European supply situation—transiting through Turkey, with some use by the Turks, but then the pipeline runs north through Bulgaria, Romania, Hungary, and Austria.

Now, the point that Ambassador Morningstar and I believe we heard Prime Minister Maliki make, in a broad vision of the future, is that a huge amount of reconstruction of Iraq is going to be required after the war. Furthermore, there is a need for a lot of infrastructure that never existed to begin with—it's not that it was destroyed—for example, power lines so that people can turn on the lights throughout the country. And this is going to cost tens, if not hundreds, of billions of dollars, ultimately.

Ideally, in the ways of the world, the natural gas, and maybe, in due course, oil supplies coming out of a united Iraq, might provide this kind of capital. Such an outcome would be a miraculous happening and a wonderful ending to a very tragic period in their history. However, as a seasoned observer looking at Iraq, describe, really, the problems of this vision. Or does it have some degree of realism? In other words, as our overall look at Iraq envisions withdrawal of American troops, Iraq taking hold altogether of its affairs, is this provision of money and the potential infrastructure the beginning, really, of a new Iraq?

Dr. SCHMIERER. Well, Senator, I think in very many ways it is, or at least the potential for such, and there are a number of very encouraging elements there. First of all, I think the leadership is committed, and understands the value of using those resources for the benefit of the Iraqi people, as you have described. The processes, the systems, are now fully transparent, so that even though there continues to be a problem of corruption in the country, the commitment to transparency and good governance, I think, will also play an important role.

There are a number of very specific issues that will have to be addressed. I think you were made aware of those, in terms of production levels—associated gas—where the gas is. Those are things that do need to be addressed, but I think the strategic vision that you heard in Ankara is the important point to keep in mind.

The Iraqis do recognize that these resources are something that can be used to make up for the underinvestment and the destruction that they've suffered over recent decades. I think there's a learning curve that's really beginning to kick in, in terms of understanding, now, sort of, how the new world works, particularly how the energy sector works. There continues to be—and I'm sure you

heard this from the Prime Minister—concern that these resources are for the Iraqi people, and so there's a great concern about any appearance that they're being made available to international oil companies in some way that's not absolutely appropriate.

So, there's a sensitivity there. But I think the learning curve is really beginning to help both sides understand how they can cooperate. So, we're quite optimistic that, you know, if they can just get their internal issues together, the KRG and the national government, the rest, I think, will take off fairly rapidly.

Senator LUGAR. Thank you.

Ambassador Carter, let me follow on your thoughts about Nigeria, a very, very important oil supplier to the United States, as well as to the rest of the world. And yet, there are real problems of engaging, or reengaging, in the Niger Delta. What is either our responsibility or the possibilities of the United States being able to work with Nigerians to bring about greater security for these resources? Is this perceived by Nigerians as intrusive in their business, even though it's our business when things are shut down and spikes in the futures markets occur with regularity? Describe, really, what the program might be for our country, or perhaps more what it is, in terms of bringing some regularity to this process.

Ambassador CARTER. Thank you, Senator. We are engaged currently with the Nigerian Government to look at the issues of the Niger Delta. Publicly we call on all the parties to persevere in their efforts to find some means to avoid violence, to develop some common ground. We have supported the discussions—the effort by the President Yar'Adua for this amnesty. But, the amnesty is only a part of the solution.

The real problem for the Delta is governance. The problem of the Delta is corruption. And trying to engage the state governments is going to be key. We have started that process, but have a long way to go. We are working with them, with our bilateral resources, and trying to see the means by which international institutions, like the World Bank and others, can engage these state governments, as well as the Federal Government of Nigeria, to improve things like budget transparency, to work with civil society to put pressure on these state governments for the delivery of services in a transparent way. Those are the issues in which we are engaged.

The Nigerians do not see this as their show. They recognize that this is something that they have to do, and it's also affecting the amount of energy available to the Nigerian economy. Ironically, Nigeria is a significant exporter of petroleum products, and yet they have a shortage of energy for their own use. Though—they see this as a problem they must solve, they are encouraged and look forward to working with us as we try to grapple with these problems.

Senator LUGAR. Well, thank you. I appreciate your highlighting the Nigerian situation and transparency as a general principle and likewise our involvement as a country, in ways that are diplomatically and economically successful.

I would like to recognize, now, Senator Shaheen. Her distinguished colleague is pointing in that direction.

Senator SHAHEEN. Well, thank you very much. I appreciate Senator Cardin's willingness to let me go first.

I would like to follow up on Senator Lugar's questioning about Nigeria. I was there in both 2006 and 2007—before the elections, and during the elections in 2007—and couldn't agree more that governance is a major issue there, as we look at energy security.

You talked a little bit about the kinds of efforts that we have underway to encourage civil society, and to encourage better governance. Is there a role for some of those private-sector companies—oil companies that are benefiting from the oil that we're taking out of Nigeria, to also help promote better governance, more transparency, better business practices? And have there been efforts to engage them in that?

Ambassador CARTER. Madam Senator, yes, there have been efforts to engage the oil industry operating in the Niger Delta to improve their transparency. There have been direct efforts by parts of the Nigerian state governments, the federal government, as well as civil groups, to see how they can encourage civic activities by these firms. There has been some degree of work in that venue. But, more can be done.

The real challenge, however, concerns what happens when oil-generated revenues are provided to the state governments. The Nigerian Government had established a program, with the support of the IMF and World Bank, to improve the transparency and accounting of those revenue flows to the federal government. The challenge was that, when they then provided these funds to the state governments, transparency just simply vanished.

And that is the key. In my view, the key to getting ourselves on a road to resolving the problems of the Niger Delta is to engaging the state governments. The issue at hand for the companies that are there is that they work with civil society groups on certain levels, but their view is that, you know, our job is to pump the oil and provide the revenues. How that is moved forward is an issue.

Looking at EITI, working with the World Bank, we need to ensure that the oil revenues to the federal government remain transparent. And we need to work even more aggressively with the local governments to essentially copy that effort.

Senator SHAHEEN. I certainly would agree with that, that the Governors in Nigeria, by and large, did not share the commitment to transparency, and corruption was rampant.

Let me change the subject and ask the rest of the panelists to give us your thoughts about NATO and its role in energy security. As you know, NATO is reviewing its strategic concept document, and I wonder if you think that energy security should be higher on the priority list for NATO as it looks at the challenges facing its member countries in Europe. And I would open it up to anybody who would like to answer.

Ambassador MORNINGSTAR. I think they're pointing to me, Senator. I think that energy security should play a prominent role with NATO. The issue is what kind of actions can NATO take? And that's a lot more difficult than the general principle. There's a lot of talk, for example, about Article 5. Well, would there ever be agreement among NATO nations for Article 5 to actually be invoked in the event of an energy crisis?

I think, from a more pragmatic standpoint, that NATO should work with its Member States to urge them and help them and

encourage them to take the kinds of actions that will, in fact, protect them in the case of interruptions. NATO should work with the members of the North Atlantic Council, for example. The NATO political operation should be going back to their home governments and talking about the steps that need to be taken. If there had been more interconnectivity among European countries during the Ukrainian gas crisis, the crisis would have been lessened.

Likewise, if there's a Nabucco—Nabucco isn't going to cure all of Europe's problems, but it would have created a diverse source of supply to those countries that were most adversely affected by the gas shutoff.

So, I think that energy security is a national security issue. I think there's a limit to what NATO can do, but it certainly has a role in working with countries to make sure that those countries are taking all the steps necessary to protect themselves.

Senator SHAHEEN. And do you see the kind of role that you just identified as being on the agenda for NATO? Do you see—is that in their vision for what they should be doing?

Ambassador MORNINGSTAR. Well, I shouldn't speak for the people who are working on NATO in our Government. I think we do. And I think we need to encourage other Member States to take a similar view.

Senator SHAHEEN. Thank you. Anybody else want to weigh in on that?

[No response.]

Senator SHAHEEN. I was interested that, in all of the testimony this morning, that nobody mentioned Iran. What role does Iran play, as we look at the energy security needs in the future, and what impact does our policy with respect to Iran have on our energy issue—interests in the region, and on the potential for Iranian resources to provide additional help to Europe?

Dr. SCHMIERER. Of course, at present, our policy toward Iran is overshadowed by the sanction regimes associated with addressing the nuclear issue. And so, in terms of current policy and strategy, Iranian energy resources are not really viewed as being available, in that sense.

Ultimately, of course—and as you know, the President has indicated an interest in engaging with Iran, and it would be very encouraging if some progress can be made so that Iran could become a partner, or a player, at least, in those discussions. But, at present, as I say, I think the primary focus is to deal with the other aspects of the Iranian relationship, and the sanctions associated with that really are inhibiting any effort to deal with their energy sector.

Senator SHAHEEN. Are, then, Nabucco countries looking at Iran as a potential supplier of—

Ambassador MORNINGSTAR. Maybe I can address that. I've probably been asked the Iran question at least 487 times since I took this job in April.

Yes, I think some of them—some countries, certainly, in that region, would like to see Iran participate. I think that our position has been very clear. And that is that Iran should not participate now. We have engaged—tried to engage with Iran, but have really

not gotten any positive response at this point. We don't know what the effect will be of recent events that have taken place in Iran.

But, you know, if, in fact, they do make the choice to engage, and to resolve the issues—the outstanding issues we have, including, obviously, the nuclear issue, then participation in the energy sector would be a positive benefit to them, for doing so. And, whenever I'm visiting countries in the region, I always encourage them—and many of them have a decent relationship with Iran—to convince Iran that this is one of the benefits, and that they ought to take seriously the issue of solving their problems with us.

But, this would be the absolute worst time to encourage Iran to participate in a project like Nabucco, when we've received absolutely nothing in return.

Senator SHAHEEN. I appreciate—that's our position—I just want to be assured that that's the position of the other countries looking at the Nabucco pipeline.

Ambassador MORNINGSTAR. Well, let's put it this way. Maybe the best way to describe it—Prime Minister Erdogan, at the conference on Monday, did talk about the possibility of Iran participation at some time in the future. I don't think that anybody expects participation now.

We also still have the Iran Sanctions Act on the books, and I think that serves as an important deterrent. So, I don't think that there would ever be agreement, at this point, among the Nabucco Consortium for Iranian participation at this time. And our European allies are, I think, in sync with this position.

Senator SHAHEEN. Thank you.

Senator LUGAR. Thank you very much, Senator Shaheen.

Senator Cardin.

Senator CARDIN. Thank you, Mr. Chairman. And let me thank our witnesses.

One thing is clear. Many of the countries in the world that have some of the highest levels of poverty among their citizens also have mineral wealth. This is a tragedy, and it's against the interests of the United States. We find that there are countries that have mineral wealth, and United States taxpayers are asked to help in foreign assistance because of the inability of that mineral wealth to be translated into the wealth of the nation. Now, that's a result of corruption as well as many different factors.

The effort that we made internationally to deal with that—I think, Secretary Carter, you mentioned it in your statement—is the Extractive Industries Transparency Initiative, and many of these nations have some relationship to the Extractive Industries Transparency Initiative. My question is, Is that initiative adequate? Is it—I mean, we don't seem to have made as much progress as we should. Do we need to strengthen it? Do we need to strengthen participation in it? Does the United States have to make that a higher priority in our foreign policy objectives, to get more participation in that initiative? Should we be looking at something different than the initiative? Why hasn't that strategy been more successful in bringing about the type of transparency in nations that have mineral wealth, so that the people of that nation can benefit from the wealth of their country?

Ambassador CARTER. Senator, thank you for the question. It's a very, very valid point.

First of all, EITI is a voluntary program, and as—you note, there are several candidate countries in EITI, but only, I think, one that has met the full parameters of compliance. I think that's Azerbaijan. Though it's ironic that one of the candidate countries that's moved further along in Africa on this issue is, in fact, Nigeria.

EITI is a component of, I think, a broader strategy on our part to encourage membership—as we're trying to do, for example, with Angola, which is not a candidate country—to encourage their participation in EITI as an element of overarching good governance—trying to improve governance strategy on our part, both with our bilateral assistance, as well as looking at the country strategically in terms of its broader participation with the international donor community, international financial institutions.

One of the things that we're trying to do, particularly on the development side with Africa, and particularly with oil and mineral producing states, is to push aggressively on this issue of accountability, on a transparency of revenues generated. EITI plays a role in that. If we're looking at other sectors, the Kimberley Process does it with diamonds. We are looking for ways to increase a similar accountability with mineral-producing states.

So, do we think EITI can be stronger, can be better? Yes. But, it's a voluntary program. It at least provides a framework for these countries to say that, "Well, if you join this initiative, these are the things that must be done. And it provides us with the metrics upon which we can evaluate them in that area, in addition to providing other areas of assistance to improve fiscal responsibility by working with the central banks and finance ministries."

For example, in Angola, we're working productively with the Angolan Government to encourage the presence of a resident adviser from the Treasury Department to work in their central bank on this very same issue of fiscal clarity and transparency.

In the end, however, it rests upon these governments, and the citizenry of these countries, to manage and to husband their resources effectively. We can only encourage them.

Senator CARDIN. Well, I understand that. Should the United States be doing more to encourage countries to comply with the EITI? Are we getting the support internationally from our traditional allies to get nations more interested in complying with EITI? Do we need to strengthen the provisions within EITI, the standards?

It's a little frustrating. I believe in the EITI. I think it's a good initiative. I think those countries that are moving forward are making some progress. But, it's still frustrating to see how much leakage there is—it may be a poor choice of words—but how much leakage there is in the wealth that doesn't get to the people.

Ambassador CARTER. I share your frustrations, Senator. And, what we do in terms of specific countries like Nigeria, Angola, and Gabon is put EITI as a centerpiece, in terms of our bilateral engagement strategy, when we look at the questions of governance. So, bilaterally, EITI plays a major role, in terms of our dialogue with these countries.

We then try to see what we can do to help these countries meet the criteria for compliance within the EITI structures. But it is voluntary. Should something overarching compel these countries to be more transparent? That's a difficult issue as the resources are theirs and they can control them.

Some countries, like Chad, have walked away from this whole process. We're now trying to reengage the Chadian Government to be even more transparent, and try to reengage, for example, with the World Bank on the issue of the oil sector.

With regard to our donor partners, EITI and the issue of governance is a central feature in that donor dialogue. How central this issue is to other donors varies. But, it is a central factor for those that work with us very, very closely.

Senator CARDIN. I would just make a couple of suggestions. First, I think we should evaluate the technical assistance that we provide to countries to comply with the EITI, to make it easier for them to go down that path, and to be able to share best practices as to what countries have done in similar circumstances to deal with their challenges.

Second, I think there needs to be more attention paid to it. That is, those states that are saying they're doing one thing, but in fact are not doing that. We've done that in several human rights areas. We've done that in trafficking in persons. We've done that in human rights reports. I think it would be interesting, and I think helpful, to give more credibility to those nations that are making advancements. And on the other side, those that are not are highlighted.

And, third, it should be a standard for international investment. A country's compliance with the EITI should be a standard for the participation of international organizations in the country. I know it's voluntary, but there should be a reward system for those that are making progress, beyond just doing the right thing. And there should be some degree of penalty for those that are not prepared to have more transparency in their mineral industries.

I think the framework is right, but it's more urgent than ever that advancements be made in this area. In my own work with the international community through the OSCE, I think there's a willingness for OSCE Member States to take a stronger position on corruption within the mineral industries in countries.

And I would just hope that we would develop a strategy that would try to implement that in a more aggressive way, through resources, and through reports, and through participation in international organizations.

Thank you, Mr. Chairman.

Senator LUGAR. Thank you very much, Senator Cardin.

Senator Feingold.

Senator FEINGOLD. Thanks so much. I thank the chairman and ranking member for holding this important hearing, and to the witnesses for testifying. I'll ask a few questions.

Let's start with Iraq and the Kurdish region in particular, which was, as I'm told, discussed earlier, but I'd like to take a little different angle.

The large oil and natural gas reserves there continue to generate significant tension between the Kurdistan Regional Government

and, of course the central Iraqi Government, particularly as legitimate national reconciliation remains elusive. This has led to questions about the legality and terms of each government's oil contracts with international investors, but it has also not helped political reconciliation proceed. I'm interested to hear the panel's analysis of what needs to happen to ensure that this ongoing tension does not tip toward greater instability, and what you see as the appropriate role for the United States to play in order to see increased production revenue that can benefit the region.

Dr. SCHMIERER. Well, Senator, thank you for that question. I'm the Deputy Assistant Secretary for Iraq, so I've been following those issues very closely, and I think you've identified, really, some of the key elements.

As we had discussed a little bit earlier, one factor—significant factor holding up Iraq's ability to get its oil sector moving has been the disagreement between the Kurdistan Regional Government and the central government on how to structure the hydrocarbon sector, and particularly the hydrocarbon legislation. But, the broader issues that you've raised, I think, are also really the key ones, because they will ultimately affect the ability to resolve those specific issues. As you've indicated, there continues to be tension, disagreement, in terms of boundaries. There's the disputed internal boundaries issue of the Kurdistan region. The good news on that is we have been very supportive of an effort that was launched by the United Nations Assistance Mission for Iraq, led by Special Representative Staffan de Mistura, to engage the two parties, the Kurdistan Regional Government, and the national government, in a dialogue to address these disputed boundaries and they've had a number of sessions. Both sides have named, we think, very capable, very, sort of, politically connected representatives to these discussions. So, we're optimistic that this might finally be the vehicle to get those issues resolved. And with that, then, would come a major breakthrough in terms of reconciliation.

As you've indicated, one of the key areas there is Kirkuk, probably the most important, the most contentious area, and it is an oil-rich area. And so, this clearly is playing a role in that, as well.

We have been engaged in a number of ways, but, specifically, one area that we have, I think, tried—and I think played a very helpful role has been in—how should I say?—using our goodwill to make sure that the two parties cooperate and don't get into a contentious or, potentially, even violent situation when there are security concerns.

And so, I think we've had some great success in addressing those kinds of situations, and in generating greater understanding, and putting in place systems to ensure that those kinds of issues don't become more difficult.

So, I think we've had some success. But, it's a process, and there's still quite some ways to go.

Senator FEINGOLD. Other responses from the panel?

Dr. SCHMIERER. I think I'm really your Iraq guy this morning.

Senator FEINGOLD. All right. Let me move on.

There's now widespread consensus that transparency in contracts and revenues and expenditures is a critical ingredient to guard against corruption and conflict in natural resource management. In

fact, Senator Lugar's committee staff produced an excellent report on this, last year.

In our discussion this morning, where does transparency fit? What steps is the Obama administration taking to substantively bolster transparency efforts, including prioritizing resource revenue and contract transparency in our engagement with oil-producing countries in places like Africa, the Middle East, and elsewhere?

Ambassador CARTER. Senator, with regard to Africa policy, as you know, we're in the midst of developing the strategy for this administration. Transparency and good governance are at the center of our development engagement on Africa, along human rights, to economic development, to the issue of democratization. So, transparency, both in terms of the engagement with civil society, not only—with the government but also the private sector—is at the center of our strategy toward engaging on Africa. And it plays an increasingly important role when we talk about those countries which are oil-exporting countries, specifically.

In Nigeria, the Niger Delta question, is key, and I've stated before—that governance is the key to that solution. We looked at Angola, trying to engage with them, and they look to have a strategic partnership with us, and the centerpiece of that discussion is how we can do to assist them with technical systems on the issue of improved transparency at the central bank and finance ministries in the management of these resources, and the wealth that's generated by them.

And now we look at Ghana, which has potential for being an oil and gas exporter, and an MCC compact. How they manage that revenue is central to our assistance and economic dialogue with the countries.

Senator FEINGOLD. Could you be more specific about Niger Delta? What is the Obama administration's policy on this issue, and what specific steps are being taken to reengage?

Ambassador CARTER. A few months ago, when the Nigerian Foreign Minister visited with Secretary Clinton, there was an agreement to establish a multilayered bilateral working group. And though we're still developing how that's going to move forward, but central to working group, as the Foreign Minister mentioned, is how do we work with them to engage on the social problems, the political problems, and the economic problems of the Delta. That's one.

Second issue is that we had a team from AID and from State Department's Energy and Economic Bureau meet with Nigerian officials in May, in Abuja, to talk about how to best utilize the resources coming out of the Delta, to try to improve transparency. We are looking at our development program with Nigeria. Much of it is in the health sector. But, what is available outside of that, that we can focus on the Delta, in terms of engaging with civil society, improving our public diplomacy posture, in the Delta? It is an increasingly important role. We recognize that the stability of Nigeria rests with the stability also in the Delta.

Senator FEINGOLD. And I see that President Yar'Adua has recently made an offer of political amnesty to militants in the Delta, but I'm disappointed that it's not being combined with a serious initiative to address the underdevelopment of the region.

What do you think we can expect from the Nigerian Government, in terms of directly addressing the poverty of the communities of the Delta while also taking steps to confront oil bunkering, and illicit war economy? And you were talking about some of the tangible steps we're taking, but I'd like to hear a little more.

Ambassador CARTER. I think—candidly, sir, I think the issue here is the—amnesty is one aspect of what needs to be a broader strategy. There's a lot of discussion within Nigeria, and within the government, of what else has to be done. Unfortunately, I think, they're focusing largely on the issue of this amnesty, and the type of military responses that are required to deal with what they see as a criminal activity in the Delta. It's not unknown to the parties there that the center of activity has to be with the governors and the governments of the states in the Delta region. However, we don't see the kind of political will, to be perfectly candid, by those states' leadership to engage on the social, political, and economic questions effectively. The amnesty's part of engagement. But I don't see them addressing development questions in any aggressive way. We're trying to encourage them to do that, but it's a challenge.

Senator FEINGOLD. Thank you very much.

Thank you, Mr. Chairman.

Senator LUGAR. Thank you very much, Senator Feingold.

Let me ask a question I suspect that Chairman Kerry would ask if he were here. You touched upon the fact that, obviously, we are simply focused today on production of oil and natural gas, and the provision of adequate supplies. But, at the same time, the Congress is also, along with President Obama, taking a look at climate change, and ways in which carbon can be sequestered, or emitted in smaller quantities, along with other elements.

What advice can you give us as we proceed with these very legitimate quests for these resources, and for the wealth that they bring to countries to, hopefully, be used transparently, promoting better governance and standards of living, yet also recognizing that, obviously, oil, to some extent natural gas, may contribute to the climate change dilemma? Have any of you any views on how we might approach these goals simultaneously?

Yes, Ambassador Carter.

Ambassador CARTER. In terms of our development of Africa strategy, one of the things that's key is looking at the diversification of the economic base of African economies. That's critical. When we look at single-export countries, the problems of corruption and governance and the economic dysfunction are evident. So, one of the most important aspects that we look at, with regard to our economic development strategy, is diversification. And key to that diversification is the issue of food security and agricultural production. Managing resources, both in terms of mineral resources, oil resource, and also of the natural resources of the forests and arable land are critical aspects of this development strategy that we are in the process of formulating and launching.

Senator LUGAR. Ambassador Morningstar.

Ambassador MORNINGSTAR. With your indulgence, if I could just make one or two comments on the transparency issue—

Senator LUGAR. Yes.

Ambassador MORNINGSTAR [continuing]. Before answering that question.

Senator LUGAR. Fine.

Ambassador MORNINGSTAR. I was hoping to respond before Senator Feingold left.

I just want to emphasize that transparency is a very major part of our program in dealing with Eurasian energy. The G8 principles from St. Petersburg, a few years ago, dealt very much with transparency. We signed the Sofia Declaration in April, which also emphasized transparency and other good business practices.

With respect to EITI, we talk about that, and encourage all the countries that we're dealing with to comply. Azerbaijan is a success story, at this point, and is now a compliant member. Kazakhstan is a candidate member. We want to see Turkmenistan get involved, particularly as they deal more with Western companies, on transparency. But, we need to have a strategy in dealing with these countries, and we need to be able to show them that it's in their interest to comply with EITI, and have transparent business practices.

Now, to your question with respect to energy and climate change. That's also a major part of our program. And I've actually been encouraged by the importance that I've seen in the countries that we've been dealing with, and how strongly they feel about these kinds of issues. Let me give you a couple of examples.

We're trying to engage with Russia, as we've discussed. We're trying to find areas where we can have constructive discussions and have constructive results. The single area that they want to talk about most, with us, is energy efficiency. Because they have such terrible energy efficiency, right now, that they will admit to, and they also want to look at alternative technologies. They recognize these issues. And in the binational commission that the President announced in Moscow, the committee that will be dealing with energy is actually the Committee on Energy and the Environment. And so, these issues will play a very strong role.

In Ukraine we are encouraging them to reform their gas sector to help mitigate some of the problems that they're dealing with in connection with Russia. One of the obvious things that has to be addressed immediately is efficiency, because they will also readily admit they may be the least efficient energy country in the world, and part of that is because energy is essentially free, for all intents and purposes, to consumers.

And likewise, we're going to be working more closely on a structured basis with Kazakhstan and hopefully with Turkmenistan, and these issues will be involved with them. I was in Kazakhstan last week before going to Turkmenistan and then meeting you in Turkey, and they're also very much interested in this area. So, I think it is an area of opportunity, and we just can't let it pass by.

Ambassador HUDSON. If I could add to that.

Senator LUGAR. Of course.

Ambassador HUDSON. I think there are windows of opportunity. And I can cite one example. Algeria, which is a traditional energy exporter, is very interested in exporting solar energy. And we're—our Embassy in Algiers is quite engaged with—is engaged with the government and trying to see how we could bring our private sector

into that kind of opportunity. There's also some opportunities in the gulf, as well. The UAE, for instance, sees the fact that its oil is not going to last forever, and they are looking at alternate energy—alternate ways to produce energy, and want to work with us quite closely. So, there are windows of opportunity, I think, that we can take advantage of.

Senator LUGAR. Well, those are very important points.

Ambassador Carter, you mentioned, in discussing Nigeria earlier, “flaring.” What is “flaring”? And why does it occur? Why does it continue? Describe this phenomenon, and the problem there.

Ambassador CARTER. Well, flaring is a byproduct of the extraction of oil, and natural gas is in there; and in order to effectively draw up the oil, the pipes are essentially drawn into the ground, and this gas is then burned off. And in parts of the Niger Delta there have been communities that have never seen a night. I mean, the flaring is 24/7, continues week upon week, month upon month, and years upon years. Flaring has a bearing in terms of the environment, with acid rain that has, in the mangrove areas of the Delta, destroyed the fishing industry, has placed condensates on the soil, has affected the health of local populations. It's a byproduct of lifting oil.

However, there are technologies in place, to minimize and eliminate flaring. There is a clear effort by the Nigerian Government to eliminate flaring by 2010. This is an aspect of their dialogue with the various oil companies in the Delta to eliminate—or to turn that flaring into useful energy, and we are working with the Nigerian Government to that end, as well as other partners.

Senator LUGAR. Well, it's encouraging to know that at least the problem is recognized by the Nigerians, and that they're working with the United States, perhaps with others. It's a phenomenon that occurs elsewhere on the Earth, and we're talking about the production of natural gas, so learning about the burning of it, uselessly, as the case may be, is important.

Secretary Hudson, let me just mention. In 2005, in August, I visited Libya. I was staying at the Corinthia Hotel in Tripoli, and I noticed a substantial number of people from China and India were there. And with those having an English language facility, I got into conversations as to why there was such a profusion. It was the same answer for all of them. They were there in Libya to try to stake out claims for oil and natural gas that might be found. And I don't know how many succeeded, but discuss this for a moment—we've not yet touched upon Libya and its contribution and problems in the energy situation.

Ambassador HUDSON. Thank you for that question. As you know, we've just changed Ambassadors, and our relationship is progressing toward a more normal diplomatic relationship between our two countries. I'm happy to report that United States oil companies actually are probably the most active and the most successful, so far, as Libya is trying to revitalize its oil sector. When they were under sanctions, a lot of work was not done. They are seeking our technology because it's the best in the world. And we're doing quite well.

The Chinese are also active, but our companies have really taken the lion's share, so far, of bidding on plots of—for oil production.

And we can see Libya as becoming a major oil exporter, significantly increasing the amount of oil it exports over the next couple of years.

Senator LUGAR. Well, this is good news. I would mention that the reason I was there at that time was we had just had a successful release of prisoners in Algeria—Moroccans who had been in the desert for some time, and—you know the situation. I'd been asked by the State Department to go, because the President of the country wanted to go with me. He ultimately decided not to go with me. But I benefited from the assistance of Gen. Jim Jones and his aircraft, which was very important, in getting the people to Morocco to be liberated.

But, while I was in Morocco, I received word from the State Department, in essence, "While you're in the neighborhood, why don't you go via Libya, and see what can happen there." In those days, we had a very unsatisfactory relationship with the country, and we met with leader Qaddafi under a tent in the desert—an aircraft from the Air Force that got us out to that area. But Libya has moved on, thank goodness, in 4 years, to where now, I'm pleased to say, the sanctions were lifted. It's not just the Indian and Chinese personnel that are in the Corinthia Hotel, but also Americans who have been successful.

Ambassador HUDSON. That's right. And we have a very active Ambassador and Embassy there, now. So it's much better than it was.

Senator LUGAR. Thank you, sir.

Senator Shaheen.

Senator SHAHEEN. Yes, thank you, Mr. Chairman.

I have one more followup that I would like to ask and—since you've raised the issue of China, can you talk about what—China's growing demand for energy, how that is affecting our policies in the countries that you all are talking about, in the Middle East and Africa, and what, if anything, we should be doing to respond?

Ambassador CARTER. Madam Senator, the issue of China in Africa is something that has drawn an increasing amount of attention. With regard to China's investment, particularly in the oil sector, for example, it has been active. China's primary center of activity has been in the Sudan region, though it also is looking beyond that onto the west coast with Angola, as well as looking at the prospects in Ghana.

I think, for us, the issue here is we see them as perhaps economic rivals, but not necessarily as a threat to our national security, only insofar as we work with the international community to ensure that the bidding process, the utilization of tender and such, is done according to international standards. It comes back to that whole question, once again, of transparency, that the Chinese investments are conducted in a way that meets the world's standards, that we can compete with them on an even footing. And that's what we seek to do.

There have been questions in the past about that, but in the end, I think what we've seen is that the Chinese have not fared well when they've tried to seek sweetheart deals with certain African Governments. And there's a growing awareness that they need to conduct their business activities, particularly in Africa, in a way

that is similar to how we or our European partners enter into agreements with African Governments.

Senator SHAHEEN. Any other panelists' view on that? But, you know, we certainly saw, in our time in Africa, in Nigeria, and also in the Middle East, growing evidence of Chinese influence in business, in people as—in culture, in all aspects of life, in a way that made me have some concern about how we would be able to compete in the future, as the resources become more limited. So, I appreciate what you're saying about the business practices, with respect to making sure that we're on an even playing field, but certainly, when it came to influence in other areas, they are making tremendous inroads that I think we should really look at very carefully.

Ambassador Morningstar.

Ambassador MORNINGSTAR. Let me talk a little bit about the Eurasian area, because China is having an increasing and heavy influence in Central Asia. And let me, maybe, briefly talk about Turkmenistan as a case in point.

China is building a pipeline, at its own cost, from Turkmenistan through to China, to transport gas. China has agreed to provide—I think it's a \$3 billion loan for exploration at a major project site in Turkmenistan. And to some extent it's a good-news/bad-news situation. Maybe I'll start with the good news and get to the bad news. The good news is that it's good for China to get more gas. It's cleaner energy. And if they can import a lot of gas from that area that'll provide cleaner energy, it might free up supplies in other areas.

There's a bad-news part of it, too. And that is that, at least theoretically, that gas that goes to China will compete with gas that could go westward. Although, if Turkmenistan really opens up, there's an awful lot of gas there that can be extracted.

And the other issue that we have is that it is hard for us to compete with China in some of these countries, particularly countries that are a little more insular. It's easy for Turkmenistan to make a deal with China, when China can come in and say, "Hey, we're going to write a check for X amount of money, and we're going to build a pipeline, and furthermore we're going to lend you money so that you can explore, and we will be paid back in gas that you, ultimately, deliver to us." You know, that's not a hard deal to accept. And we can't compete in that way.

And I think we also have to develop a strategy to deal with that, and I think that Turkmenistan understands that, as it should not be dependent on Russia, it also should not be dependent on China, and needs to have diverse routes, including going westward.

And we need to encourage our companies to negotiate with Turkmenistan in creative and in flexible ways to do projects there. I think Turkmenistan has some interest in that, and our companies do, and we have to keep working that through. So, it is a complicated situation and something that we have to really fully focus on how to deal with.

Senator SHAHEEN. Are there more—any more opportunities to cooperate with China, when it comes to energy security and transport?

Ambassador MORNINGSTAR. Well, it's an interesting question that I've certainly thought about, and it's something that we need to explore. We have technologies that we don't think China has, at this point. In fact, there are American companies that are working with the Chinese oil and gas companies—in China, with respect to deep extraction of gas. If you have to drill below a certain level you get into some very dangerous sour gas that has a lot of sulfur in it, and—literally, I think, in China, they had some explosions that killed a lot of people. And so, we have American companies working with them, in China.

The question becomes, Does it make sense to us, or to our companies, or to China, to cooperate in a place like Turkmenistan? Does it make sense to Turkmenistan? These are questions that we have to think about, and I don't think we have a clear answer on it. I think our first priority is to get our companies into Turkmenistan. But, we also have to recognize that China is already there, and at least look at these opportunities.

One of the issues that companies do have in dealing with China, particularly in third countries, as I think one of the other witnesses mentioned, is the values questions. And how easy is it to venture—what would be the safety standards, for example, of an operation in which we were working jointly together?

So, all of these things have to be explored. But, it should be on our agenda, and I don't think there's a clear-cut answer yet.

Senator SHAHEEN. Thank you.

Senator LUGAR. Thank you very much, Senator Shaheen.

Senator SHAHEEN. Thank you.

Senator LUGAR. I have one more question, and that is, What is happening in Kuwait? Kuwait used to be very much on our radar screen because we had troops there, and there was a war going on, and destruction—at least at that time—of a certain amount of the productive capacity of the country. But can someone describe what kind of recovery occurred? Or rebuilding? Or has there been growth? Or what is the function of Kuwait, vis-a-vis the other producers in the area, as well as in our own interests?

Ambassador HUDSON. Well Kuwait is an active member of OPEC, and it really has been—its production has been restored to prewar levels, and destruction has been rectified.

It's an interesting country for us, because it's a very active. It's the most active democracy we have in the Persian Gulf. They just recently had parliamentary elections, and four women were elected to the Parliament, which is quite extraordinary. They have a very noisy Parliament, sometimes it's a problem for the ruling family. But, they have a very active democracy, and they're a full participant with us in working to stabilize energy prices, and to work with us to make sure that there's enough energy to meet demand. They're quite cooperative with us on that.

They—by the way, Senator, they still host our military forces going in and out of Iraq, and we still have—there's a large base there, where our military people go in and out. So, they're still quite helpful in that regard, as well.

Senator LUGAR. Well, that's a very good report, and one that I think the American people would be pleased to know. We have crises from time to time, and then a decade-plus passes, and we lose

track of where we were. But the thoughts you have expressed about growing democracy, about the elections, in addition to the revival of production capacity and their continued cooperation with us, is very good news.

Ambassador HUDSON. It is good news, I agree.

Senator LUGAR. Well, on that note of good news, I will conclude the hearing with thanks to each one of our panel members for your testimony and for your responses to our questions.

Thank you, Senators, for the good questions, as well as the panel, for the good answers.

We are adjourned.

[Whereupon, at 11:15 a.m., the hearing was adjourned.]

Nabucco –European Project

- ▶ Nabucco Gas Pipeline will constitute the **4th Corridor** to supply European markets with Natural Gas from alternative sources
- ▶ Energy Policy for Europe supports the market
 - ▶ market faces an **increase of energy demand** and an increase of import dependency
 - ▶ market calls for **diversification of energy sources** and transport routes
 - ▶ market calls for **improving energy efficiency and promoting of renewable energy sources**
 - ▶ **Natural Gas** will be the bridge fuel into a sustainable futur

Nabucco Gas Pipeline Project Results reached so far

- ▶ EU funding for feasibility study and pre-engineering
- ▶ Application and ongoing approval process for Exemption
- ▶ Owner's Engineer engaged, December 2007
- ▶ Implementation of RWE as 6th Shareholder , February 2008
- ▶ Execution of Market Sounding, June/July 2008
- ▶ Signing of the Intergovernmental Agreement, July 2009

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Nabucco Gas Pipeline Project Intergovernmental Agreement – stable legal framework

- Political agreement among the Nabucco transit countries, Austria, Hungary, Romania, Bulgaria and Turkey signed in Ankara July 13th 2009
- Guarantees full political support. Agreement is valid for 50 years
- Ensures equal legal conditions for gas transit throughout the entire Nabucco pipeline system
- Lays down transport tariff methodology and rules for network access
- Establishes political committee comprising representatives of all signatory countries to support development of the project

Nabucco Gas Pipeline Project The important role for Turkey

Turkey's position is favourable to establish an energy hub!

Prerequisites for the realization of an energy hub

- ▶ A broad portfolio of suppliers
- ▶ A high number of domestic and international buyers
- ▶ A high number of transactions of companies active in logistics and trading
- ▶ The availability of flexibility (based on gas storage and spot gas market)
- ▶ LNG liquifaction and regasification capacity

→ **and a gas pipeline like Nabucco with huge transport capacity to connect Turkey and SEE**

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Nabucco Gas Pipeline Project Market Effects for Turkey and for Europe

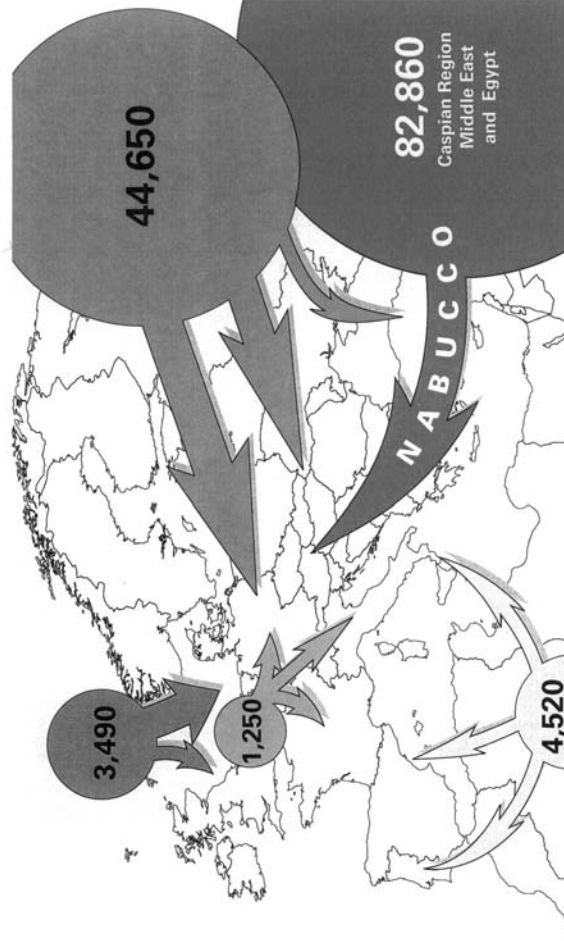
- ▶ Multi sourcing approach increase Security of Supply
- ▶ An alternative gas transport route will mitigate risk of transit and increase the interconnectivity, especially in SEE
- ▶ Third Party Access will strengthen competition
- ▶ The acquisition of new gas sources will enhance liquidity of the market
- ▶ Physical flows and gas swaps between traders together with flexibility services will provide a variety of business opportunities for all European Countries

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Nabucco Gas Pipeline Project Effects for producers in Central Asia and Middle East

- ▶ A broader export portfolio will increase independence of producers
- ▶ A bigger number of gas buyers will increase competition
- ▶ Enhanced business activities between Europe, Turkey and gas producers will provide opportunities for investments for all involved
- ▶ The exchange of know how between all players in the gas chain will increase efficiency
- ▶ The built up of long term contracts will provide positive effects in the overall industry and the state economies will benefit

Nabucco Gas Pipeline Project Link between giant gas sources and potential markets

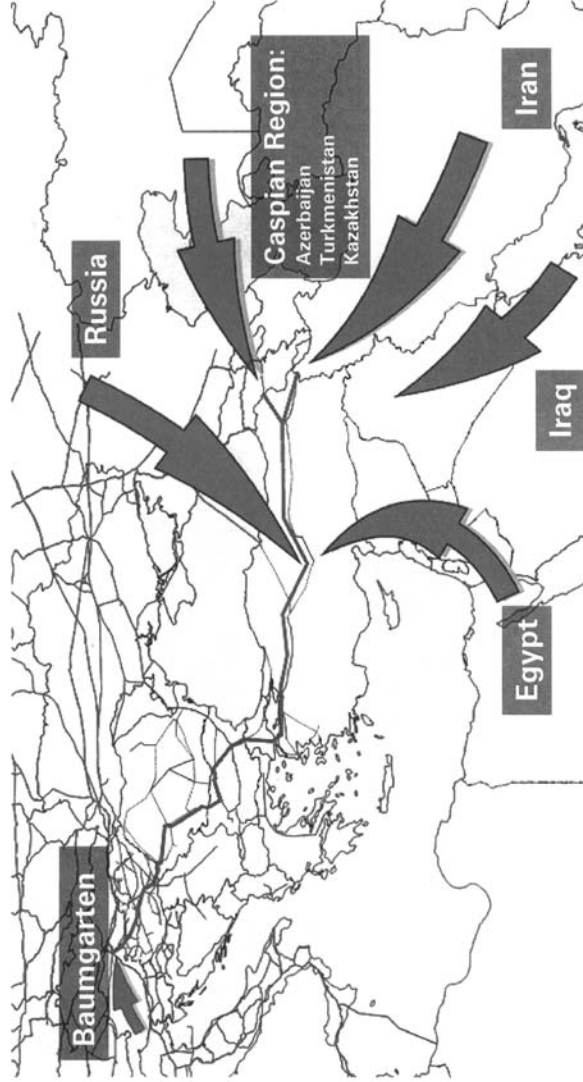


Source: BP Statistical Review 6/2008 (in bcm)

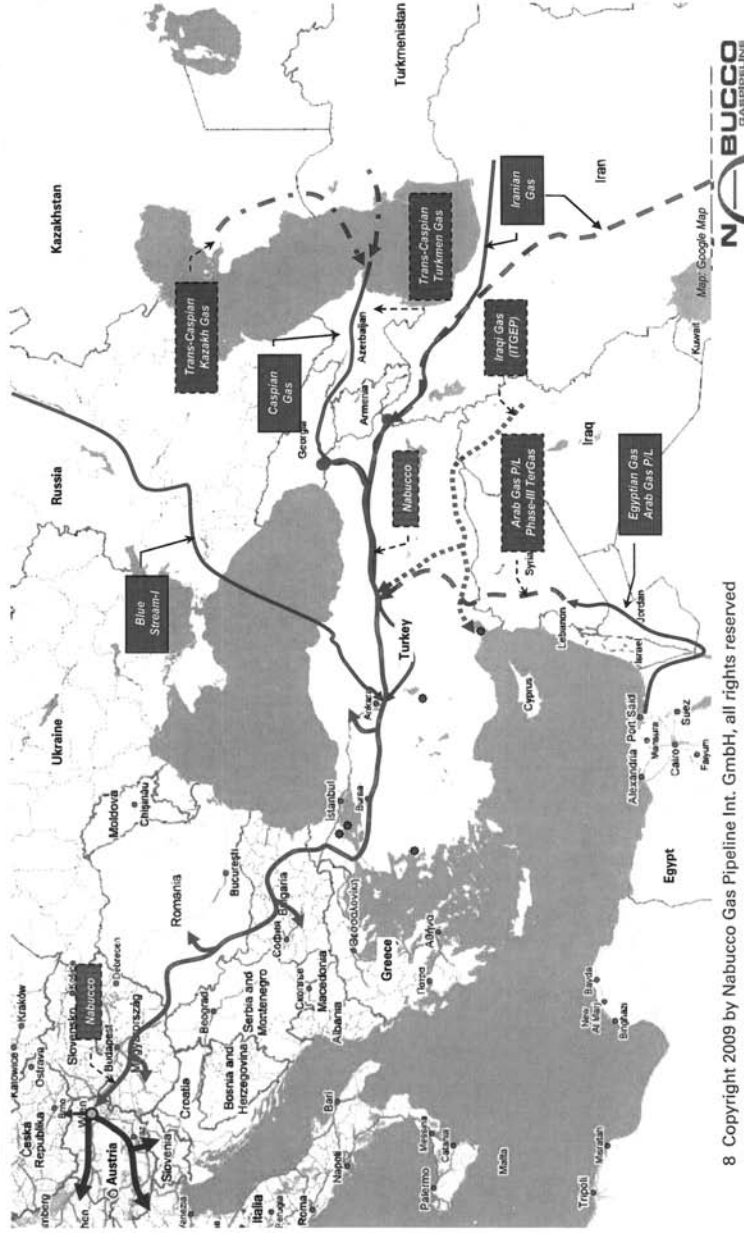
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Nabucco Gas Pipeline Project Gas Supply Sources

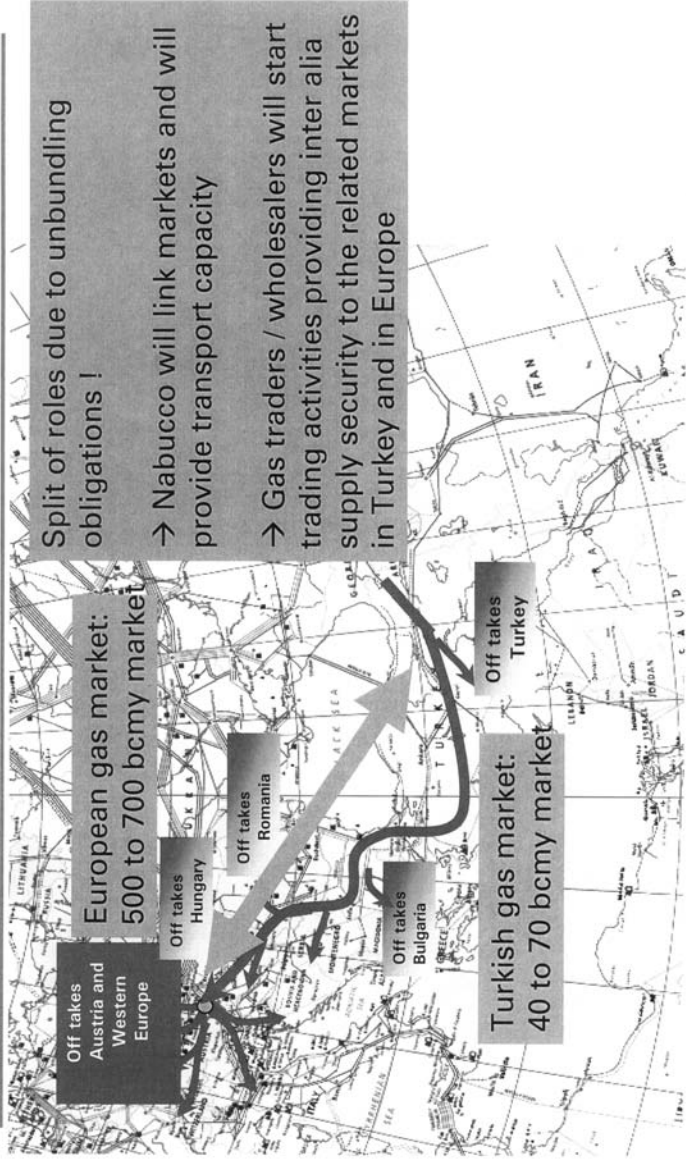


Existing/Possible Supply Routes to Nabucco Gas Pipeline



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Nabucco will reduce market risks in case of failures related to gas sources and to transit routes !



Split of roles due to unbundling obligations !
 → Nabucco will link markets and will provide transport capacity
 → Gas traders / wholesalers will start trading activities providing inter alia supply security to the related markets in Turkey and in Europe



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