I want to begin with a closer look at the conference theme: ‘Rising to the Challenge: Securing the Energy Future.’ I interpret that challenge as providing the adequate, affordable and reliable supply of energy needed to grow the global economy while concurrently protecting the natural environment. As the theme’s wording would suggest, achieving this objective will not be easy, and all of us in the energy industry must work hard - and work together - if we are to build an energy future that benefits both our planet and its people.

The energy mix

One of the most important factors in securing that future is the energy mix over the next several decades, and beyond. Some parties advocate a rapid transition from fossil fuels to alternative sources of energy for reasons of both environmental protection and security of supply. While I share their twin objectives and appreciate the depth of their convictions, I strongly believe that rushing from tried and tested energy sources toward still questionable alternatives is imprudent. Such a stance ignores the state of development of alternatives, the seriousness of many unresolved issues associated with them, the demands of global economic development, and the need to eliminate energy poverty in the developing world.

This is a very critical industry that affects the life and wellbeing of every nation. Therefore, we need to craft an energy vision that is balanced and addresses the concerns of all. Anything short of that will run the risk of taxing economies unnecessarily. It is important that we recognize that we live in an interdependent world, that we promote the development of new technologies based on sound economic merits, and that we avoid creating economic overhangs caused by unfounded overreactions and misguided analyses.

A look at the numbers is instructive. Because of the abundance of fossil fuels, their proven performance, and the size and scope of the global hydrocarbon infrastructure, the Energy Information Administration of the Department of Energy expects fossil fuels to remain the dominant energy sources for the foreseeable future. In fact, the EIA forecasts that the proportion of fossil fuels in the global energy mix will actually rise from 85.5% in 2001 to 87% by 2025. At the same time, the share of nuclear and other sources, including renewables, is forecast to fall from 14.5% to 13%. Now, if we really wish to ‘secure the energy future’ while protecting the environment, should we focus primarily on the narrow niche of alternative energy, or more than 85% of supply that will be coming from fossil fuels?

Saudi Aramco chief confident that cooperation can stave off energy crisis

Abdallah S. Jum’ah, president and CEO, Saudi Aramco, expressed confidence that oil and gas demand can be met for many years to come if the nature and needs of our interdependent world are properly recognized.

Abdallah S. Jum’ah of Saudi Aramco with Daniel Yergin, CEO of CERA

Clearly, the responsible course in the decades to come is to phase in realistic alternatives while developing and deploying cleaner, more efficient uses of hydrocarbons and associated technologies. Given the continued dominance of fossil fuels, even marginally improving their environmental performance will significantly benefit the health of the planet - and I am certain we can go well beyond marginal improvements.

At the same time, we must recognize that economic development also drives social development, spurs technological and scientific progress, and allows people around the world to raise their standards of living. We cannot risk the future of our societies on energy sources some of which may contribute modestly, while others are prohibitively expensive and lack robust and reliable production and distribution systems.
I believe that in the long term we will need to draw upon both fossil fuels and alternative technologies. One day, as the alternatives become both technically and commercially viable, they will be in a position to take on greater responsibility for meeting the world’s demand for energy. However, that day is not today, nor will it be tomorrow. In the meantime, we must continue to rely on fossil fuels to meet most of our energy needs, even as we accelerate our efforts to improve their environmental, operational and economic performance. Or, as they say here in Texas, “You’ve got to dance with the one what brung you.”

Let me now turn to today’s topic: oil. In particular, I want to look at the prospects for the upstream sector, global refining capacity now and in the future, a set of environmental technologies that will challenge the ingenuity of our scientists and professionals, and the need for increased investment in petroleum-related infrastructure.

**Upstream**

Recently, there has been a good deal of media speculation about the adequacy of future oil supplies. However, the numbers would suggest that such alarming forecasts are injudicious. The US Geological Survey, for example, places the mean value of ultimate recoverable resources of conventional oil, including natural gas liquids, at more than 3.3 trillion barrels. Of these, less than a third have been consumed to date, with almost 2.4 trillion barrels yet to be produced.

In addition, there are also vast resources of ‘non-conventional’ oil - some 7 trillion barrels initially in place, according to various estimates. Although it is uncertain what proportion of those resources will be ultimately recovered, if advanced technologies could lead to a 10% recovery rate on average, another 700 billion barrels of oil could become available.

Although 80% of these unconventional resources are found in Canada, the United States and Venezuela, at the moment two-thirds of the world’s proven reserves are situated in the Middle East. Similarly, a significant share of the yet to be discovered conventional oil is expected to be located in the region. This worries some observers, who fret over import vulnerability and supply insecurity. Certainly we need to acknowledge that a peaceful and stable Middle East will translate into a more secure supply of energy, and that efforts to eliminate tension in the region are more vital than ever.

However, advocates of supply security ignore the fact that exporting nations need oil revenues every bit as much as consuming countries need oil supplies. Therefore, it is more instructive to talk about mutual dependence, and to recognize that the degree of interdependence, in all areas of trade and for all nations, will only increase in the future.

International oil trade will increase substantially over the coming decades. However, it should be viewed no differently than trade growth in other goods and services, and is simply another aspect of an increasingly interconnected global marketplace.

On a related matter, it is only rational that alongside free trade agreements and tariff rationalization in various areas of international commerce, policies that discriminate against oil should be done away with as well. Exceptionally high taxes on petroleum, along with proposals for additional carbon taxes, unfairly target oil - and even surpass the taxes levied against coal, which has a much higher carbon content.

EIA forecasts that over the next two decades or so, the global demand for oil will grow to over 120 million b/d. To reliably meet this growth and achieve a secure energy future, additional capacity must be developed in a timely manner. If that is to happen, discriminatory policies against oil must give way to enhanced producer-consumer dialogue, pragmatic energy policies, rational taxation schemes, and greater cooperation on cleaner and more efficient oil-based technologies.

At Saudi Aramco, we’re doing our part to ensure that oil supplies will be available when they’re needed. We continue to identify new reserves through additional discoveries, enhanced recovery techniques, more accurate characterization of our reservoirs and a better understanding of their behavior over time. We are confident that we can extend that success well into the future given continued advances in exploration and production technologies and the fact that vast relatively unexplored areas exists in the Kingdom with potential hydrocarbons to be discovered. We are also committed to utilizing long-term reservoir management strategies and developing, procuring and applying state-of-the-art technologies that maximize recovery rates.

We continue to develop production increments that will gradually raise Saudi Aramco’s maximum sustained capacity, consistent with demand growth, beyond the current level of 10.5
We believe that there is plenty of new oil to be discovered as we explore more, drill more and make use of increasingly better technology. This surplus capacity, which the Kingdom has maintained at great expense, continues to tighten. We've already seen the effects of the mismatch between available refinery hardware and the types of crude increasingly available in the market. Last fall, oil producers - including Saudi Aramco - ramped up production to calm the oil market, but refiners geared toward lighter, sweeter crudes could not process all of these additional heavy, sour barrels. Refiners and marketers, regulatory agencies and producers must cooperate more closely to alleviate the product supply-demand imbalances and ensure that consumer demand is adequately met.

Downstream

But here we must turn our attention to the downstream sector, because our challenge doesn't end once the oil is out of the ground. Even as crude oil production must increase by nearly 40 million b/d over the next two decades if demand is to be met, there must be a corresponding expansion in the world's refining capacity. Given the nature of much of this additional production, a significant share of new refining capacity will have to accommodate heavy, sour crudes, as the barrel of refined products continues to whiten and product specifications continue to tighten.

We've already seen the effects of the mismatch between available refinery hardware and the types of crude increasingly available in the market. Last fall, oil producers - including Saudi Aramco - ramped up production to calm the oil market, but refiners geared toward lighter, sweeter crudes could not process all of these additional heavy, sour barrels. Refiners and marketers, regulatory agencies and producers must cooperate more closely to alleviate the product supply-demand imbalances and ensure that consumer demand is adequately met.

The location of future refineries is just as significant as their configuration, however. Until now, refineries have been built primarily in consuming nations, but I believe we will see a portion of this new refining capacity being located in producing countries. To an extent this is due to the permitting constraints associated with new or expanded refineries in many consuming nations. But the growth of producer-based refineries will be driven primarily by their proximity to oil reserves, the flexibility that comes with supplying products to multiple markets from a central location, and the desire to add value to oil supplies prior to their export. Such refineries and mega-manufacturing complexes and clusters - which integrate refineries, petrochemical facilities, and downstream conversion and service industries - also serve to strengthen and diversify local economies while stimulating job growth.

I think this emerging downstream paradigm also represents a new opportunity for international investors, if they are willing to rethink their investment models and better align them with the needs of host nations. Many producing countries have strong upstream capabilities, but can benefit from partnerships in downstream activities, the engineering and technology sectors, and in selected service areas.

The experience of Saudi Arabia and Saudi Aramco certainly demonstrates that promising, mutually beneficial opportunities are available. From our existing in-Kingdom refining and gas partnerships, to the joint-venture expansion of the Rabigh Refinery into an integrated refining and petrochemical complex and our plans for the development of an export refinery, Saudi Aramco is partnering with world-class companies that recognize the immense potential on offer. We view cooperation as a two-way street, though, and value just as highly our refining and marketing partnerships located outside Saudi Arabia in the United States, Europe, Asia and the Pacific. We also look forward to strengthening our relationships with the Chinese and Indian petroleum sectors, and to helping them meet the rapidly expanding energy needs of their home markets.

Whether it's our present partnerships or prospective deals, these are long-term, strategic investments based on the principle of mutual benefit for our companies, as well as the benefit of the consumers we serve.

Environment and strategic technology initiatives

Partnership and cooperation will be critical in another important area: improving the environmental performance of oil. As I noted earlier, the development of cleaner burning fuels, new generations of higher efficiency, lower-emission engines, and even more environmentally responsible...
sible oil production and transportation activities are all vital in securing our energy future. The petroleum industry can take the lead in these research and development initiatives, though we should not try and go it alone. Rather, we should work cooperatively, enlisting the aid, support and expertise of technology developers, national laboratories, academic institutions and related industrial sectors, such as automobile and electric power equipment manufacturers.

At Saudi Aramco, we continue to work on incremental efforts to steadily improve petroleum’s environmental performance. At the same time we have identified three strategic technology areas, which I would like to highlight for the industry’s attention. We believe that one day these technologies may revolutionize the way we view oil as an energy source.

First of these technology areas entails desulfurization of both crude oils and oil products. This could help refiners meet the challenge of producing ultra clean fuels from sour crudes, using groundbreaking but cost effective technologies. The second area involves economically managing the issue of greenhouse gas emissions, going beyond carbon sequestration. Potential technologies could include the use of hydrogen enrichment, nanotechnology and other groundbreaking techniques. Finally, the industry needs to devise technically and economically viable ways of reforming oil to produce hydrogen, focusing on both fuel formulations and hardware.

Together, these technologies - and others like them - will help meet growing demand for energy and lighten the footprint of our activities on the environment. As business leaders, we have an obligation to utilize resources wisely and to exercise our stewardship of nature responsibly. That obligation is every bit as important as our role as producers and suppliers of energy and enablers of economic development. We as an industry are committed to maintaining the balance between promoting prosperity and protecting the environment.

Infrastructure issues
I would be remiss if I did not address the important issue of investments in crude oil and product infrastructure. The existing infrastructure, including pipelines, terminals, tanker fleets, and road and rail systems, is coming under increasing strain with the growth in oil demand. This is a worldwide issue that can be seen in several geographic regions including the areas of the former Soviet Union and Russia. As we all know, significant new infrastructure will be required if growing amounts of oil are to be transported from these areas to world markets, including the fast-growing Asian region.

Furthermore, the growth in oil trade means increased traffic through the world’s strategic shipping channels, including the Straits of Hormuz, the Bosphorus Straits and the Straits of Malacca. Managing the safe movement of oil through these key channels and ensuring the security and stability of sea lanes will be critical in ensuring security of supply. For all these reasons, cooperation between the concerned nations, and investment in and attention to infrastructure will be vital in meeting future demand for oil in a reliable and responsible manner.

Lastly, I am convinced that global capital formation, including the financial resources of producing nations, is sufficient to fund the wide range of investments required to expand oil supplies. This is true so long as oil prices are sufficiently healthy to attract capital and there are no legislation restricting cross-border investments in producing nations. At the same time, government bodies and regulatory agencies bear a heavy responsibility in ensuring that permitting for petroleum projects and programmes is forthcoming in a timely fashion, so that these investments are both logistically and commercially viable.

In conclusion, I firmly believe that petroleum will remain the bedrock of the world’s energy supplies for the foreseeable future, just as it has for the past century. However, if we are to ‘secure the energy future,’ there are issues that must be addressed cooperatively by a range of concerned parties. These include pragmatic energy policies and a level playing field for the competing sources of energy; increased investment and capacity expansion all along the petroleum value chain; and the understanding that cleaner and more efficient uses of petroleum are vital to protecting the natural environment.

Ladies and Gentlemen, when all is said and done, rising to the challenge is more than just a matter of getting oil out of the ground, maintaining market stability, or even meeting growing demand for energy. It goes beyond these factors, because energy is so fundamental to our societies, and so essential to the well-being of people who live in them. For me, securing the energy future reliably and responsibly means not only delivering on our commitments as an industry, but also meeting our obligations as individuals to the generations that will follow us, and to the Earth that they will inherit.
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Why the US needs an energy policy based on interdependence

David J. O’Reilly, chairman and CEO, ChevronTexaco, says it’s time for the US to develop a serious energy policy, among other things, to compete in the growing international competition for oil and gas resources.

Let me start today by saying that by almost any measure, 2004 was a great year for our industry. It was driven to a large extent by commodity prices and also by effective exploration, production, technology and increased operating efficiencies.

But make no mistake, as good as 2004 was, I believe our industry is at a strategic inflection point, a unique place in our history. And what we do right now - or don’t do - to address the energy challenges we face as an industry and as a nation will have implications for years to come.

Let me take a moment to put our history in perspective. ChevronTexaco celebrated its 125th anniversary last year. As part of that celebration, we invited six former CEOs of Chevron and Texaco to a roundtable to gather their experiences and insights. They represented 55 years of collective leadership of the two companies. And the depth of history they recalled was extraordinary.

Several of our former CEO’s remembered an altogether different regulatory climate - from the early restrictions on oil production by the Texas Railroad Commission to the federal government regulation of natural gas prices and to the Nixon-era price controls over oil and petroleum products. Another former CEO remembered that 50 years ago, you could fly over Louisiana at night and read a newspaper by the light of the flares. Technical problems were routinely solved by a group of people with slide rules sitting around a table.

And another of my predecessors remembered more than somewhat fondly, ‘If a reporter called, you could say “no comment” and hang up on him - and get away with it.’ Think of how different it is today - how far we’ve come in terms of technology, environmental stewardship, operating efficiencies, governance and transparency - virtually every aspect of our industry. It really is remarkable.

I’ll need to step back even further to explain why I think we are entering a new phase of the business. The first cycle of the oil industry’s history was driven by the rise of international oil companies - the so-called Seven Sisters - through the first two-thirds of the 20th century. The demand for oil was satisfied by private enterprise, sometimes at the expense of the owners of the oil. In the second phase of the industry, beginning in the 1960s, OPEC came into prominence. The 1970s price shocks and resulting demand impacts led to a period of relatively plentiful supply.

I believe we are entering another phase that is being shaped by globalization in production and trade, economic growth and surging demand, and declining oil production in the OECD (Organization for Economic Co-operation and Development) countries. These factors are making us more energy interdependent than we have ever been. They have created what is, in effect, a new energy equation. The most visible element of this new equation is that relative to demand, oil is no longer in plentiful supply.

The 1970s price shocks and resulting demand impacts led to a period of relatively plentiful supply. The time when we could count on cheap oil and even cheaper natural gas is clearly ending.

Why is this happening now? After all, there are more proved oil reserves today than there were in the mid-1980s at the beginning of a long era of cheap oil. How did access to stable energy supplies become such a challenge? What has changed?

Demand from Asia is one fundamental reason for this new age of more volatile and higher prices. The Chinese economy alone is a roaring engine whose thirst for oil grew by more than 15% last year and will double its need for imported oil between 2003 and 2010 - just seven years. This new Asian demand is reshaping the marketplace. And we’re seeing the centre of gravity of global petroleum markets shift to Asia and, in particular, to China and India.

In fact, many expect global primary energy demand to jump 40% over the next two decades. It took humans 125 years to consume the first trillion barrels of oil, and we’ll likely consume the next trillion within just 35. But demand isn’t the only factor at play. Simply put, the era of easy access to energy is over. In part, this is because we are experiencing the convergence of geological difficulty with geopolitical instability. Although political turmoil and social unrest are less likely to affect long-term supplies, the psychological effect of those factors can clearly have an impact on world oil markets, which are already running at razor-thin margins of capacity.

Many of the world’s big production fields are maturing just as demand is increasing. The US Geological Survey estimates the world will have consumed one-half of its existing conventional oil base by 2030. Increasingly, future supplies will have to be found in ultradeep water and other remote areas, development projects that will ultimately require new technology and trillions of dollars of investment in new infrastructure.

Collectively, we are stepping up to this challenge. The industry is making significant investments to build additional capacity for future production. However, there are limits to what the industry can do alone. We need the active cooperation of all stakeholders in the
energy value chain. And as the largest consuming nation in the world, the United States bears a unique responsibility in addressing global energy issues.

Which brings me to US energy policy. Until recently, I didn't particularly think we needed an energy policy in the United States. But in light of our changing circumstances, I now feel the administration must refocus our nation's energy policy to meet the new energy equation. And Congress has its role to play as well - by enacting energy policy legislation consistent with these changing circumstances.

What has led me to this change of opinion? Four things. One, as I mentioned before, the United States is becoming more energy interdependent in terms of our dependence on diverse sources of oil and gas, our position as the world's largest consuming nation, and as a significant and often-leading investor in international energy ventures. Two, demand will not decrease any time soon. Three, reliable energy supplies are critical to sustained economic growth. And finally, I believe a constructive national discussion of energy policy would bring about a much better understanding of energy issues among key stakeholders, including the American public.

A new U.S. energy policy doesn't have to be complex. It simply needs to be driven by two strategic objectives: transparency and alignment. We need to make our policy trade-offs clear. And we need alignment of energy policy with other policies central to our national interest: environmental, economic, trade and national security. A number of these policies are now misaligned or do not recognize each other at all, inhibiting the development of new energy sources.

As one example, take a look at natural gas. It is an environmentally clean fuel, and global supplies are plentiful. From an energy policy perspective, common sense would suggest that we develop natural gas supplies as quickly as economically feasible. But US environmental policy makes it difficult to access potentially significant resources in the Rocky Mountains and Alaska as well as offshore. And at the local and regional levels, regulatory barriers have made investment in vitally needed natural gas infrastructure very difficult.

If a preference for natural gas is going to be our de facto policy for the generation of electricity, then our national policy should encourage and enable the development of natural gas - whether it is exploration and production in this country or permitting the building of import terminals to bring natural gas from overseas sources.

Our policy should consider the role of alternatives to natural gas - coal and nuclear power, for example. These require trade-offs between energy supply and environment. We should also consider the role of renewables and especially focus on what can be done to improve energy efficiency, one of the best sources of additional energy supply. Another example of aligning policies to encourage the development of new energy sources is in the arena of trade and diplomacy.

Development of new energy sources will require trillions of dollars of investment, much of it in the developing world. And sustained investment requires markets that honour fundamentals such as sanctity of contracts, rule of law and transparency. Our diplomatic policies should encourage investment in oil and gas production to increase levels of production and improve access to global supplies. For example, despite its own plentiful reserves, Mexico is importing gas and petroleum products from an already stretched US market. Our government should make it a priority to encourage increased investment in new supplies.

Another example - western Africa - is the source of light sweet crudes that are in very tight supply. Improving the security and investment climate of that region should be a priority in our foreign policy.

With the growth in Asian demand, China, Japan and Southeast Asia as a region are by far the largest importers of oil and gas and are particularly dependent on the Middle East. And as a result, we are seeing the beginnings of a bidding war for Middle East supplies between East and West.

What are the implications for US foreign policy? Ideally, each of the key policy areas - foreign policy, trade, the environment - needs to align around a common set of objectives to promote the sensible and safe development of energy. But the United States has rarely made these kinds of trade-offs and alignments explicit in our national policies. This must change. Safeguarding America's energy security must become a top priority of American policymaking. Energy security must be on the table when US environmental, trade, and foreign policies are being developed. In short, we should recognize the interdependence of these policies in achieving our country's strategic energy objectives.

There is an example of how to do this right - a nation that has long recognized its strategic reliance on imported energy. And that nation is Japan. Japan's goals for national policy are to attain the '3 Es' simultaneously: energy security, economic growth and environmental protection. Japan coordinates its foreign...
policy, energy policy, and industrial policies to accomplish those goals by strategically cultivating relationships with oil and gas producers and by diversifying its sources of energy.

Let's take a look at the results of this approach. Japan's energy supply has been steadily diversifying. From a peak of more than 75% in 1973, oil now accounts for less than half of Japan's energy supply. Nuclear power has increased from less than 1% to almost 12% over the same period, and natural gas use has increased more than eightfold. That's the result of having a coordinated national strategy built on a full understanding of a nation's energy interdependence.

Now compare Japan with the United States and the rhetoric of our last political campaign. Virtually every candidate called for American energy independence - which is something that may sound good in a campaign, but has no grounding in reality. With the political season now behind us, we can move from rhetoric to reality. We must create an energy policy that is pragmatic and holistic and that reflects the reality of the interdependent world in which we live.

Educating key stakeholders and the American public and getting the United States to think strategically about energy is an ambitious objective. And while making U.S. energy policy is the job of government, it can't be done by government alone. There is a role for all stakeholders. And we in this room today have a critical role. That role is education.

You see, we understand the vital strategic importance of energy. We all understand that energy is a fundamental component of economic growth and national security. In fact, it is a fundamental component of the quality of life.

I think the American people need to be educated to get to the same set of understandings - and it will be a challenge. Americans must begin to think about energy in the same way they would think about national security, or education, or healthcare - as an essential enabler of our quality of life. And to do that, we have to get our message out.

So I ask everyone here today to take responsibility for communicating the value of energy and the importance of aligning our policies to enhance that value. In this year's State of the Union message, President Bush said that four years of debate about energy is enough, that it is now time for action, time to get something done. I couldn't agree more.

Russia looks to global spread for its oil and gas exports

V.Yu. Alekperov President, LUKOIL, says that as Russia's production increases, Europe will no longer be the customer of choice.

Over the last few years, the political, business and cultural contacts between Russia and the USA have become much more active. Our countries are in a state of continuous dialogue. While protecting their national interests, the two countries are, at the same time, actively developing their bilateral cooperation. Russia and the USA are the oldest oil powers. Despite obvious differences, both the Russian and the American oil schools enjoy recognition the world over.

Russian-American cooperation in the energy sphere started developing actively on an intergovernmental level at the beginning of this decade. The political basis for the cooperation was provided by the creation of the global anti-terrorist coalition, while the economic basis was the USA's desire to diversify imports and Russia's desire to diversify exports of energy raw materials.

It is the high status of the participants that contributes much to the success of the Russian-American dialogue in the energy sphere. Specifically, the cooperation between our countries in the energy sphere has been included on the agenda for the forthcoming meeting between Vladimir Putin and George Bush in Bratislava. The development of Russian-American energy cooperation has become particularly important against the background of the global competition between the major consumers of hydrocarbons, i.e., the United States and the countries of the Asian region.

This competition in the sphere of oil can be seen in the growth of world production and refining capacities. Last summer, OPEC's idle production capacity fell to its lowest level in recent decades, i.e., to 500,000 b/d. At the same time, capacity loading at refineries reached 95% in Europe and 96% in the USA. As a result, the market has lost its flexibility and its ability to respond quickly to deficits. In the absence of any real shortage of raw materials, we have seen a dramatic rise in oil prices.

The first signs of global competition are beginning to appear on the natural gas market. In the future, the universal spread of liquefied gas production and transportation techniques will make this market more flexible and will help producers change supply directions and volumes quickly.

Today, the competition between the USA and the Asian countries can be seen in most of the world's regions rich in natural resources - and Russia is no exception. This can easily be explained by the fact that our country occupies seventh place in the world with regard to proven oil reserves and first place with regard to proven gas reserves. Within 10 years,
provided the transportation infrastructure is adequately developed, oil production in Russia might grow from 9 to 11 million b/d and gas production may grow from 22 to 27 trillion ft³ a year.

Over the last 15 years, the oil industry in Russia has not only overcome the consequences of the collapse of economic relations but has also learned to function efficiently under the conditions of a free-market economy. The level of corporate management in many of the Russian oil companies easily competes with their Western counterparts. They invest actively in the development of new oil and gas provinces, in the construction and modernization of the infrastructure for the production, transportation and refining hydrocarbons.

The attractiveness of the Russian oil industry for investment has been confirmed by the organization of strategic alliances between TNK and BP and between LUKOIL and ConocoPhillips. Much to my regret, there are examples of the opposite, the clearest being the fate of YUKOS. I would not, however, link YUKOS to the overall investment climate in our country. Nor am I alone in this. Such respectable agencies as Fitch, Moody’s, and Standard & Poor’s share my views and have recently raised Russia’s sovereign rating to the investment level.

The structure of the Russian oil and gas industry is constantly changing and it will take more than one year for the industry to achieve its optimum configuration. Today we can make only general forecasts. In my opinion, in a few years time there will be three basic types of oil and gas company in Russia - private transnational companies, private Russian companies, and state-owned companies.

The concentration of capital engendered by tougher competition will result in each of these groups being represented by one or two big companies, and these will have to resolve a most complicated problem, that of leading Russia on to the global oil and gas market. In our country, we are fully aware that an orientation on Europe as the sole consumer is obsolete. Russian companies have been making pilot deliveries of crude oil to the USA and the Asian region for a few years now. In 2004, Russia exported 145,000 b/d to the USA and 216,000 b/d to China.

However, the companies will make their final choice only when it becomes clear which of these two directions is better developed from the angle of the pipeline and port infrastructure. The importance of this choice for the world market is determined not only by the volume of additional supply but also by the quality of the crude oil to be exported. In this case, we are not talking about the more traditional Urals export mixture, but about the Siberian Light lighter brand, with a lower sulfur content.

The appearance of Russian oil on the global market might change the balance of demand and supply in both the Atlantic and Pacific regions, depending on which receives most of the crude oil. The same can be said about the export of natural gas. At present, Russia is exporting more than 7 trillion ft³ of gas a day. In 10 years’ time, provided new gas fields are developed, this figure may reach 11 trillion ft³.

The growth of exports will be accompanied by a change in their structure. Today, Russian gas is delivered to Europe by pipeline. In the future, our country is planning to employ gas liquefaction techniques to deliver gas to the global market. I have to admit that, today, we are working more actively on the project for deliveries to the Pacific region. A decision has been made to start laying the Taishet-Nakhodka pipeline, branching off to China, and contracts have been concluded for liquefied gas deliveries within the framework of the Sakhalin-II project.

At the same time, the prospects for building a new export infrastructure in the northwest of Russia are still vague. Only one project envisaging oil deliveries to the USA has been implemented so far: the construction of the Vysotsk terminal, with a flow capacity of 240,000 b/d. Together with LUKOIL, the American engineering company Fluor Corporation has taken part in the project, as has the US Government agency for the insurance of private investments abroad (OPIC).

The terminal in Vysotsk is the most up-to-date project of its kind in Russia. It will not, however, solve the problem of large-scale oil deliveries to the USA.

The indefinite situation with respect to the development of the transportation infrastructure in the northwest of Russia jeopardizes not only the interests of the USA, as the world’s biggest consumer of hydrocarbons, but also those of American companies, as potential investors in Russian hydrocarbon exploration and production projects.

Last year, LUKOIL and ConocoPhillips entered into a strategic alliance aimed, in particular, at organizing a joint venture for developing the northern part of Timano-Pechorskaya oil and gas province. The proven oil reserves in the region where the joint venture operates exceed 3 billion barrels. Prospective reserves may reach 10 billion barrels. By the beginning of the next decade, about 240,000 b/d will be produced and the first shipment of Timano-Pechorsk crude oil may reach American refineries in 2007.

We are now considering the possibility of exporting crude oil through the Varandey oil terminal, with a planned increase in capacity up to 240,000 b/d. Deliveries could be much more efficient, however, if a pipeline was built in the direction of Murmansk. According to our estimates, the transportation costs of oil delivered by this route to the East coast of the USA would be half those of oil delivered by the Middle East-Mexico Gulf route. Another project of interest to both partners is the construction of natural gas liquefaction facilities on the G’dan peninsula. We plan to put our first field in G’dan into operation early in April.

Within 10 years, gas production on LUKOIL’s licensed sites will reach 1 trillion ft³ and we are interested in delivering this gas to the USA. By joining the scientific and industrial potential of Russia with the technological and financial potential of the United States, we could achieve impressive results. So far, this scenario has been realized solely on the level of individual companies. It is in our common interests to do so on the intergovernmental level.