

Rapidly Changing Asia
Opportunities for Oil & Gas Industry
Indian energy sector at the global frontier

Speech by

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World Oil & Gas Assembly

Dear friends,

Goa has an irresistible charm.

Much like the energy industry, Goa revels in the bounties of nature's resources.

It provides a stimulating setting for this First World Oil and Gas Assembly.

This is an assembly of leaders from the Indian and global oil and gas industry.

It is a reflection of a growing interest in Indian energy markets.

It is really a pleasure to be here.

Thank you Mr. Narendra Taneja for the opportunity.

Indian Economic Renaissance

Ladies and gentlemen,

India is on the move.

To make the twenty-first century 'India's century'.

Today, there is newfound confidence in India.

We are beginning to see a resurgence in science.

Research-led companies of global reach are turning to our country.

They have plans to create new science facilities here.

Indian information technology prowess has already become a legend.

Other areas of technology are taking roots in India – from chemical technology and biotechnology to nanotechnology.

India is also emerging as a global manufacturing hub.

Several manufacturers are scouting in India for sourcing of components.

These include global giants of automobile, aerospace and consumer durables.

India has already made a mark in business process outsourcing.

The width, depth and geographical reach of such services are expanding.

Indian businesses are aspiring to be world-class players.

Several important industries are beginning to imprint their footprints overseas. These include steel, automobiles, pharmaceuticals, textiles and media.

Energy and Economic Renaissance

In such a milieu, the Indian energy sector is set to blaze a new trail.

It has the opportunity to fuel a new sense of excitement and expectation.

India's GDP is currently at 500 billion US dollars.

It is set to grow to 2 trillion US dollars by the year 2020.

Over the next 30 to 50 years, India has the potential to grow the fastest in the world.

After China and US, India is poised to become the third largest economy in the world in thirty years from now.

This, naturally, will make India one of the largest energy markets in the world.

Because economic resurgence is critically dependent on energy.

Friends,

History is a great teacher. The energy sector can learn a lot from the past.

During the twentieth century, global population increased about 4 times – from 1.65 billion to 6 billion.

In the same period, world GDP increased 15 times – from 2 trillion US dollars to 30 trillion US dollars.

Concurrently, energy consumption increased 18 times – from 500 million tonnes oil equivalent to 9,000 million tonnes oil equivalent.

Over the last one hundred years, energy companies have led the league of global corporations.

American and European companies were global leaders in market valuation in early part of the twentieth century.

They continue to be global leaders in market valuation at the turn of the century.

For example, Exxon had a market capitalisation of 390 million US dollars in the year 1912 and was the second most valuable company in the world.

Exxon-Mobil today commands a market value of 298 billion US dollars and continues to be the second most valuable company in the world.

Likewise, Shell was also among the top ten valuable companies at the turn of the twentieth century with a market capitalisation of 187 million US dollars.

Shell today enjoys a market value of 130 billion US dollars and is among the top fifteen global companies.

These companies have made an indelible mark by their resolute endeavour.

Exploration and production professionals from these organisations have roughed it out to make life easy for mankind.

They bravely faced the hazards in the jungles of Africa, the deserts of Arabia and the depths of Alaska.

They endured unending cycles of boom and bust.

They have had to reckon with dominant state owned producers and supply cartels.

We can draw lessons from these great organisations in our quest to place India as a global energy major.

The first and the foremost lesson of history is simple; but profound.

That Indian renaissance is dependent critically on contribution from the Indian energy industry.

Challenges

Friends,

We have to prepare the energy industry to fuel an Indian renaissance. This brings with it several challenges.

Managing a rapid growth in the industry is the foremost challenge.

Global primary energy consumption is currently of the order of 9,100 million tonnes of oil equivalent.

With a population base of 6 billion, this translates into a per capita consumption of 1,500 kg.

By the year 2030, the world population would swell to about 8 billion.

This would raise energy consumption to about 16,000 million tonnes of oil equivalent.

Thus, we can expect a rise in per capita global energy consumption by a third to 2,000 kg.

In this context, India should be targeting an energy demand of 2,400 million tonnes.

This is necessary to march ahead on a high trajectory growth.

Our current consumption is of the order of 315 million tonnes of oil equivalent of energy.

This works out to 300 kgs per capita.

We have, therefore, to target an increase of eight times.

This calls for accelerated oil and gas discovery programmes – both on land and in waters.

I am sure our companies are sensitive to this challenge.

My late father, Shri Dhirubhai Ambani, firmly believed that India is an under explored territory for oil and gas.

His conviction was vindicated when Reliance struck the largest gas find of the year 2002 in the Bay of Bengal.

This is what we found with just 2,000 square kilometers of exploration, out of a licence area of 300,000 square kilometers. We have reserves in place of 14 trillion cu.ft of gas.

We are confident of accruing on these early discoveries significantly.

Ladies and gentlemen,

The second challenge is to deliver compelling value to the consumer.

To my mind, the energy sector has the opportunity to deliver household fuels at one half of current prices.

It also has potential to halve the cost of power and make manufacturing competitive.

Equally, it has the strategic ability to accelerate the growth of a vibrant and competitive transportation sector.

All this will help the energy sector endear itself to society and support an economic resurgence.

It will also induce the flow of much needed capital to the sector.

However, I must enter a caveat at this point.

In enabling the energy sector to deliver lasting value to the people, the government has a major role.

Today, the government takes away 30 per cent of the value in the energy value chain.

This neither serves, the interests of the people nor growth.

The government must bring down indirect taxes and subsidies.

It must also significantly increase the proportion of plan outlays for the energy sector.

This will increase reverse cash flows of energy companies and enlarge the capital pool available for new investments.

This will make the energy sector a driver of economic resurgence.

In my assessment, an eight-fold increase in the energy sector in India will

demand an investment of at least 500 billion US dollars up to the year 2020.

This will come about only if the industry creates value through capital productivity, new retailing experience, risk management and profitable high growth.

Capital productivity will be the second key challenge for sustaining long-term shareholder value in the energy business.

This is so because the capital intensity is combined with commodity cycle nature of the industry.

We have established the capital productivity of the upstream and downstream petroleum industry in India.

In fact, in the refining sector, Reliance's capital productivity is about a third more than other similar operators elsewhere in the world.

But we will have to establish capital productivity in the retail sector.

Value can also be created by the energy sector at the retail end.

India has the unique opportunity to create a completely engaging retail experience in energy products.

And we have the ability to support the evolution of other products, synergistic with energy retailing.

Ladies and gentlemen,

The Indian energy sector has a fair track record in value creation.

The top three companies in India, in terms of market capitalisation, are from the energy sector – ONGC, Reliance and Indian Oil.

Together, they account for a quarter of the market capitalisation of Bombay Stock Exchange.

This is despite large energy companies, such as NTPC, not being listed on the stock exchange.

However, this formidable position should not give place to complacency.

Because, the energy sector has to negotiate several other challenges.

Friends,

An important challenge is to diversify the energy mix.

A shift to gas will be a critical aspect of this diversification.

The energy world will see a significant shift from oil to gas.

Natural gas currently accounts for 8 per cent of primary energy in the country.

This is one-third of the global average and 40-50% of some of the developed countries.

There is, thus, an enormous potential for enhancing the share of natural gas in India's primary energy consumption.

India has the opportunity to leapfrog in the gas-based energy economy.

Much like the leapfrog India is currently seeing in the information and communication sector.

A few decades ago, explorers were at a loss to figure out economic uses for gas.

This is no longer the case in today's context with a variety of options available.

Friends,

The challenge on the technology front is formidable.

Technology will be crucial for intensifying the availability of energy as well as for diversifying the energy mix.

India can bring into play new completion and production technologies to encompass semi submersible and ocean bed production systems.

In a similar vein, virtual reality technology can help uncover oil and gas fields more accurately.

India's rich gas hydrate resources can be extracted as gas and converted to methanol for use in fuel cells.

New technologies for converting gas to liquids will enable India to harness significant gas reserves.

India can also shift electricity production on-site in gas fields to feed directly to power grids.

Above all, researching and developing non-conventional sources of energy, such as solar energy, would be an important technology call for India.

India has the opportunity to develop solar energy and be the solar energy capital of the world.

Friends,

Managing an eight-fold growth, delivering value, attracting capital, improving capital productivity and addressing technology are undoubtedly challenges that should engage our attention.

But we must not miss out on another critical challenge – human resources.

An eight-fold increase in the energy sector will demand a commensurate increase of professional resources.

The world is seeing a war for talent on the horizon.

Quality people are no longer available in plenty. They are not easily replaceable. They are no longer relatively inexpensive.

Today, vast pools of engineers are moving to the technology sectors.

Young minds are in pursuit of engineering sciences and information sciences.

Natural sciences and earth sciences are no longer seen as career options.

Energy sector leaders must respond with farsightedness to this challenge of nurturing talent.

They must elevate management of talent to a burning corporate priority.

Partnerships

Ladies and gentlemen,

Developing countries are today acutely conscious of the need for energy security.

Developed countries are concerned about the volatility in energy markets.

Social groups and a new breed of investors are demanding greater environment consciousness.

Customers are demanding fuels that are safe, less polluting, inexpensive and high performing.

Oil majors are calling for deregulation and a rationalisation of taxes, which account for a significant part of the cost to the final consumer.

Governments are moving away from a state-controlled mindset to greater participation for the private sector.

All these demand a grand new partnership on the energy front.

Partnerships that will look at the energy sector from an entirely new perspective.

Partnerships that will be bonded by concerns for economic growth and sustainable development.

Partnerships that encourage the coming together of all Indian constituents to craft global leadership for the industry.

Above all, partnerships that will bring together the huge market for energy in India with the energy resources of emerging countries such as Russia and Iran.

The twentieth century was the century of oil. This gave Saudi Arabia spectacular strategic importance.

The twenty-first century will be the century of natural gas.

India will see many more new gas reserves. Russia, with its huge resources, and India, with its new finds will acquire similar strategic significance.

Conclusion

Friends,

Being home to one-sixth of humanity, India has every making of a global energy player.

To get that league, India must think big and act big.

India must seriously consider and efficiently execute new and gigantic projects.

Like linking electricity grids, building gas pipelines, promoting regional hydroelectric stations, stockpiling oil on a cooperative basis and pursuing nuclear energy options.

By ensuring such a comprehensive energy security strategy, India can alter the economic and political landscape of the region.

India's quest for energy will give rise to new economic and strategic challenges.

Ranging right from the challenge of mobilising capital to the subtleties of diplomacy.

This will require that we extend the frontier of our minds.

And place the Indian energy sector at the global frontier.

Thereby, we will change the face of energy in India.

We can do it.

Let us do it.

Thank you.

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