

POLICY BRIEF

# Russia – India Energy Cooperation: Trade, Joint Projects, and New Areas

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## Russia – India Energy Cooperation: Trade, Joint Projects, and New Areas

*In 2017, Russia and India celebrate the 70th anniversary of diplomatic relations. Over the years the two states have implemented a wide range of long-term and large-scale joint projects in energy sector, first and foremost in the nuclear area, making it one of the foundations of their special and privileged strategic partnership. However, in order to boost comprehensive ties and bring them to a new level corresponding to the changing global economic environment Russia and India are in need of innovative approaches in energy sector. The present paper is a result of Russian and Indian experts' joint efforts to evaluate the potential of new collaboration formats and develop specific recommendations for enhancing cooperation.*

### Russia–India Energy Partnership: The View from Russia\*

Russia and India have a long history of cooperation in the energy sector, and the prospects for the development of the energy dialogue are as promising now as they were during the period of friendship between the Soviet Union and India. Since the late 2000s, the Russia–India energy partnership has been enjoying a renaissance. So why is now the time for Russia to think seriously about giving a new impetus to the energy dialogue with India?

#### TIME TO TURN TO THE EAST?

India could make a significant contribution to diversifying the geographical coverage of Russian energy supplies. The accession of Crimea and the conflict that erupted in Eastern Ukraine in 2014 demonstrated that the Russian energy sector could very well become a target of the European sanctions, even though Europe continues to account for around 80 per cent of Russia's gas exports, and 65 per cent of its oil exports.<sup>1</sup> The main threat to Russian exports is not the sanctions, which theoretically can be lifted, rather than the colossal changes that have taken place on the energy market over the last 15 years.

Firstly, the shale revolution started to take hold in Europe in 2016 with U.S. LNG shipments arriving in Western Europe,<sup>2</sup> and later in Eastern Europe, which had been traditionally considered the domain of Russia's Gazprom.<sup>3</sup>

Secondly, the European market has taken its cue from the Asian market, where a fierce price war has been unleashed by oil producers trying to offset the losses they suffered during the period of low prices by increasing their market share. The first delivery of Saudi oil to Poland in September 2016 was a direct consequence.<sup>4</sup>

Russian companies are still in a good position to withstand the competition for the European markets, but as far as Europe is concerned, energy companies are competing for a market that is gradually shrinking. European countries are reducing hydrocarbon consumption, including through the widespread introduction of renewables and energy efficiency technologies. It is almost exclusively developing countries that account for the growing energy demand, with China and India alone making up half of that growth.<sup>5</sup> And India is taking advantage of the low energy prices by increasing its oil imports faster than any other country in the world, including China.<sup>6</sup>

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#### \*AUTHOR:

**Vasily Shikin**, Ph.D. in History, Expert, Russian International Affairs Council (RIAC)

<sup>1</sup> BP Statistical Review of World Energy June 2016 // British Petroleum. June 2016.  
URL: <https://www.bp.com/content/dam/bp/pdf/energy-economics/statistical-review-2016/bp-statistical-review-of-world-energy-2016-full-report.pdf>

<sup>2</sup> Europe Gets First Sabine Pass LNG Export Cargo // LNG World News. April 27, 2016.  
URL: <http://www.lngworldnews.com/europe-gets-first-sabine-pass-lng-export-cargo/>  
U.S. LNG Expands to Eastern Europe as Poland Avoids Russian Gas // Bloomberg, April 27, 2017  
URL: <https://www.bloomberg.com/news/articles/2017-04-27/u-s-lng-expands-to-eastern-europe-as-poland-avoids-russian-gas>

<sup>3</sup> Lithuania Signs First Deal for U.S. LNG // Reuters. June 26, 2017. URL: [http://www.reuters.com/article/us-lithuania-lng-idUSKBN19H14M; Poland Can Become a Hub for American LNG // July 6, 2017. URL: https://ria.ru/economy/20170706/1497941464.html](http://www.reuters.com/article/us-lithuania-lng-idUSKBN19H14M;Poland Can Become a Hub for American LNG // July 6, 2017. URL: https://ria.ru/economy/20170706/1497941464.html) (in Russian).

<sup>4</sup> Russia Sees Saudi Oil Exports to Poland as a Threat // RBC. URL: <http://www.rbc.ru/politics/14/10/2015/561e30179a794738c0e8027a>

<sup>5</sup> BP Energy Outlook 2017 Edition // British Petroleum.  
URL: <http://www.bp.com/content/dam/bp/pdf/energy-economics/energy-outlook-2017/bp-energy-outlook-2017.pdf>

<sup>6</sup> India Oil Demand Seen Taking Off as China Crude Growth Fades // Bloomberg.  
URL: <http://www.bloomberg.com/news/articles/2016-03-14/india-oil-demand-seen-taking-off-as-china-crude-growth-fades>

A similar situation is unfolding on the electricity market. Demand for electricity is not growing in Organisation for Economic Cooperation and Development (OECD) countries, and has even dropped in some regions as a result of energy conservation efforts. But this is not true for India, where extensive development continues; electrification of the country is still not complete.<sup>7</sup> Given India's demographics situation finding a solution to the problem of universal access to electricity will not be easy.<sup>8</sup> This is why Narendra Modi's government has set itself the ambitious task of increasing by 2022 the installed capacity of renewables to 175 GW,<sup>9</sup> and of nuclear energy to 10 GW.<sup>10</sup>

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*The situation on the global energy market affords Russia a unique opportunity to diversify its energy exports with help of India.*

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## NUCLEAR ENERGY

The resumption of the energy dialogue between Russia and India started with nuclear energy and was determined more by political rather than economic considerations. In 1998, an Annex was signed to the 1988 agreement on the construction of the first stage of the Kudankulam NPP, which at the time had not yet started.<sup>11</sup>

However, full-scale cooperation only became possible in 2008 following the decision by the Board of Governors of the International Atomic Energy Agency (IAEA) on the entry into force of the "India-specific" safeguards agreement,<sup>12</sup> and the decision of the Nuclear Suppliers Group (NSG) to suspend restrictions on the export of nuclear materials and equipment, as well as dual use technologies, to India.<sup>13</sup>

Indian market has become the second largest in terms of its planned capacity: the total installed capacity of India's nuclear power plants is expected to reach 63 GW by 2032, up from the current 6.2 GW.<sup>14</sup>

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*And it is likely that India will become the Russian nuclear industry's largest ever customer during this period.*

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In accordance with the Strategic Vision for Strengthening Cooperation in Peaceful Uses of Atomic Energy between the Republic of India and the Russian Federation, not fewer than 12 nuclear power units of Russian design are set to be built in India before the end of 2020.

Rosatom, the only foreign vendor that builds new nuclear power units in India, has already commissioned the first stage of the Kudankulam Nuclear Power Plant (the first and second power units, each with a capacity of around 1000 MW, were commissioned in 2014 and 2016, respectively), and construction of the second stage began in 2017. A General Framework Agreement and intergovernmental credit protocol for the construction of Kudankulam 5 & 6 were signed in June 2017.<sup>15</sup> Both sides are currently negotiating the search for a new site ready to host six additional Russian-designed nuclear power units.<sup>16</sup>

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*As is the case with the other suppliers of nuclear technologies, the biggest barrier to the development of Russia-India cooperation is the issue of liability for nuclear damage that remains unresolved with regard to Russian projects.*

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<sup>7</sup> Access to electricity database // The World Bank Databank. 2014.

URL: <http://data.worldbank.org/indicator/EG.ELC.ACCS.ZS?end=2014&start=1990&view=chart>

<sup>8</sup> India database // The World Bank Databank. 2016. URL: <http://data.worldbank.org/country/india>

<sup>9</sup> Overview // Ministry of New and Renewable Energy.

URL: [http://mnre.gov.in/file-manager/annual-report/2015-2016/EN/Chapter%201/chapter\\_1.htm](http://mnre.gov.in/file-manager/annual-report/2015-2016/EN/Chapter%201/chapter_1.htm)

<sup>10</sup> Nuclear Power in India // World Nuclear Association.

URL: <http://www.world-nuclear.org/information-library/country-profiles/countries-g-n/india.aspx>

<sup>11</sup> Kudankulam Nuclear Power Plant // NIAEP JSC ASE. URL: <http://www.atomstroyexport.ru/about/projects/current/kkudankulam>

<sup>12</sup> Agreement between the Government of India and the International Atomic Energy Agency for the Application of Safeguards to Civilian Nuclear Facilities.

INFCIRC/754: International Atomic Energy Agency Information Circular // International Atomic Energy Agency. May 29, 2009.

URL: <http://www.iaea.org/Publications/Documents/Infcircs/2009/infirc754.pdf>

<sup>13</sup> Statement on Civil Nuclear Cooperation with India. IAEA Information Circular // Arms Control Association. 2008.

URL: [http://www.armscontrol.org/system/files/20080906\\_Final\\_NSJ\\_Statement.pdf](http://www.armscontrol.org/system/files/20080906_Final_NSJ_Statement.pdf)

<sup>14</sup> Nuclear Power in India // World Nuclear Association. <http://www.world-nuclear.org/information-library/country-profiles/countries-g-n/india.aspx>

<sup>15</sup> Rosatom Official Website. URL: <http://www.rosatom.ru/journalist/daynews/nachato-stroitelstvo-ii-ocheredi-aes-kudankulam-indiya> (in Russian).

<sup>16</sup> Rosatom to Commence Work on Site for New NPP Units in India in 2017 // RIA Novosti. June 2, 2017.

URL: <https://ria.ru/atomtec/20170602/1495653105.html> (in Russian).

The Russian side insists that the current legislation does not apply to the first stage of the Kudankulam NPP, as the Civil Liability for Nuclear Damage Act was adopted after the intergovernmental agreement was signed. However, unlike Russian legislation, Indian legislation operates retrospectively, meaning that the law could be applied to the first two power units. As for the remaining power units, the sides reached a compromise solution for nuclear liability to be guided by their respective legislation. But this does not remove the contradictions. The fact is that Russia aligns with international norms, stipulating that the operator (in this case NPCIL) assumes full responsibility, while India, whose domestic legislation takes precedence over international law, reserves the right to hold the Russian supplier responsible.

### COOPERATION IN OIL AND GAS

Russia fell into the area of interests of India's state-owned Oil and Natural Gas Corporation (ONGC), which had been actively expanding into foreign markets since the 1990s with a view to gaining access to major oil and gas assets. Since 2001, OVL (ONGC Videsh Limited, a subsidiary of ONGC) has been part of the international consortium on the development of the Sakhalin-1 project, which is being implemented on the basis of a production sharing agreement.

While the Indian side's cooperation in Sakhalin can on the whole be viewed as positive, the Indian investors have not achieved all their goals with regard to the project. It is not economically viable to transport oil produced in Sakhalin to India. And it is still impossible to export the gas produced there due to the lack of the necessary capacity to liquefy the gas and the drawn-out conflict between Rosneft (OVL's partner in the Sakhalin project) and Gazprom, which wants to protect its gas export privileges.

Attempts by Indian oil companies to become part of other major projects in Russia – the development of the Shtokman Field, the Trebs and Titov Oil Fields, and Yamal LNG – failed time and

again either because of strict Russian regulation with regard to direct foreign investments into strategic industries (including the oil and gas industry), or due to competition from richer and better equipped companies from China and the West.

The breakthrough in terms of the participation of Indian companies in major upstream projects in Russia came in May 2016 with OVL's purchase of a 15 per cent stake from Rosneft in Vankor Field for \$1.27 billion. Then, in September, OVL signed an agreement on the acquisition of a further 11 per cent in the project.<sup>17</sup> Rosneft is also in discussions about the possibility of selling a 23.9 per cent share in the same field with a consortium of Indian investors that included Oil India, Indian Oil Corporation and Bharat Petro Resources.<sup>18</sup> Vankor is one of the largest continental oil fields in Russia. If the deals for the purchase of additional shares worth 11 per cent and 23.9 per cent are closed, then the project could prove to be the largest Indian investment in oil sector in Russia since Sakhalin-1.

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*In addition to expanding investment cooperation, another important trend has emerged in the Russia–India partnership in the oil and gas sector in recent years, namely, the transition from carrying out individual projects to systemic relations along the lines of “supplier–customer.”*

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In October 2012, Gazprom signed a 20-year agreement with GAIL on the annual supply of 2.5 million tonnes of LNG to India (with deliveries set to begin in 2018).<sup>19</sup> And in 2015, Rosneft signed a 10-year contract with Essar to deliver 100 million tonnes of crude oil to Vadinar refinery.<sup>20</sup> On top of this, Rosneft and its partner, the multinational commodity trading company Trafigura, purchased a stake in Essar worth \$13 billion. As part of the deal, Rosneft will receive 49 per cent of Vadinar Oil Terminal, the second largest refinery in India, as well as a network of 2700 Essar-branded petrol stations.<sup>21</sup>

<sup>17</sup> Rosneft and ONGC Sign Purchase and Sale Agreement on 11% Stake in Vankorneft // Rosneft. September 14, 2015. URL: <https://www.rosneft.ru/press/releases/item/183699/> (in Russian).

<sup>18</sup> Ibid.

<sup>19</sup> GAIL and Gazprom Marketing & Trading Singapore Sign 20-year LNG Supply Deal // GAIL. 2012. URL: <http://www.ggspl.com/5-gail-and-gazprom-marketing-trading-singapore-sign-20-year-lng-supply-deal-gazprom-to-supply-gail-2-5-million-tonnes-of-lng-per-annum-for-20-years>

<sup>20</sup> Rosneft and Essar Expand Integration // Rosneft. July 8, 2015. URL: <https://www.rosneft.ru/press/today/item/174262/> (in Russian).

<sup>21</sup> Rosneft, Trafigura to Spend \$13 Billion to Buy Indian Refiner // Bloomberg. October 15, 2015. URL: <https://www.bloomberg.com/news/articles/2016-10-15/rosneft-trafigura-to-buy-98-stake-in-essar-oil-for-13-billion>



The contracted volumes of oil and gas are sufficient to cover around 10 per cent of the gas, and 5 per cent of the oil, currently imported into India. Assuming these contracts are fully implemented, Russian companies will join the list of countries that have traditionally supplied hydrocarbons to India: Iran, Saudi Arabia, Qatar, the United Arab Emirates and Nigeria.<sup>22</sup>

In the 25-plus-year history of cooperation between India and the Russian Federation, energy has evolved from an all but forgotten carryover of the Soviet past into the main driver of bilateral economic ties, overtaking even the military and technical cooperation between the two states. Moreover, projects like the Kudankulam NPP and Sakhalin-1 have made it possible to take these relations to the level of strategic partnership.

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*Despite the positive dynamics in the development of the Russia–India energy dialogue, a serious limiting factor to further development is evident – the energy sector remains highly politicized.*

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While this may have initially proved to be an advantage (it would have been very difficult for Moscow and New Delhi to achieve the kind of results they have achieved without political will), today, the concentration of joint projects in the hands of large state-owned businesses, the strict national legislation that keeps foreign investment in the sector to a minimum, and the far from perfect investment climate all prevent private business from contributing to the development of the Russia–India energy dialogue and increasing the benefits of carrying out joint projects in this area.

## India-Russia Energy Partnership: The View from India\*

India is the world's third largest energy consumer<sup>23</sup> and a major energy importer with steadily growing demand. Russia is a key global producer and exporter of petroleum and natural gas. The two countries' needs naturally complement each other. The current energy bilateral cooperation, already strong, can significantly extend to new sources such as Liquefied Natural Gas (LNG). Building on these can be an industry in natural gas vehicles and renewable energy, enabling economic instruments, such as energy benchmarks, and a policy framework, including labour mobility, to develop a skills corridor in energy.

### ENERGY PRIORITIES FOR INDIAN POLICYMAKERS

India will have the fastest growth in demand among the major global energy markets for several years. Indian policymakers face two major challenges to meet that demand.

The first challenge is securing imports and pricing. India's annual energy consumption, currently at

723 million tons oil equivalent (MTOE), has grown at a compounded rate of 5.75% over the last decade (2007-2017). By 2040, India's oil demand is expected to rise to 10 million barrels/day (bpd) from 4 million bpd at present. Consumption of natural gas is projected to increase to 175 billion cubic meters (bcm), up from 50 bcm at present.<sup>24</sup> Most of this demand will be met via imports – and must be at an affordable price that doesn't hurt India's economic growth.

The second challenge is connected to cleaning the energy mix. Coal has a 57% share in India's energy mix – double the global average.<sup>25</sup> Environmental concerns – urban air quality and global warming – require India to reduce its reliance on coal. Renewable energy at home is cheaply available, but is intermittent. The easy and immediate option is the affordable import of natural gas, which can complement renewable energy to replace coal and can also be used as a vehicle fuel instead of oil – both of which will cut air pollution.

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<sup>22</sup> BP Statistical Review of World Energy 2017. URL: <http://www.bp.com/content/dam/bp/en/corporate/pdf/energy-economics/statistical-review-2017/bp-statistical-review-of-world-energy-2017-full-report.pdf>

<sup>23</sup> India Energy Outlook // International Energy Agency 2015.

URL: [https://www.iea.org/publications/freepublications/publication/IndiaEnergyOutlook\\_WEO2015.pdf](https://www.iea.org/publications/freepublications/publication/IndiaEnergyOutlook_WEO2015.pdf)

<sup>24</sup> Ibid.

<sup>25</sup> BP Statistical Review of World Energy June 2016 // British Petroleum. June 2016.

URL: <https://www.bp.com/content/dam/bp/pdf/energy-economics/statistical-review-2016/bp-statistical-review-of-world-energy-2016-full-report.pdf>

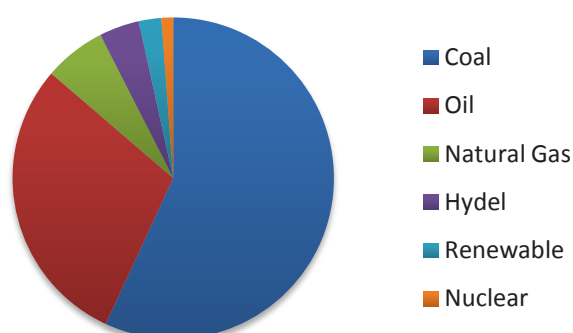


FIGURE 1. INDIA'S ENERGY MIX

### ENERGY RISKS FOR INDIAN POLICYMAKERS

India relies on imports for 81% of its petroleum and 44.5% of its natural gas requirement. In physical terms, India imported 1.35 billion barrels of oil and 18 million tons of LNG during fiscal year (FY) 2017.<sup>26</sup>

*This dependence will only increase, and the high price of imported energy, which can hurt economic growth, is the key risk for India.*

High energy prices are expected due to the cycle of demand-supply mismatch and geopolitical upheavals.

Energy prices are vulnerable to cyclicalities as well as short-term shocks. India has been hit by both in the past decade. Worldwide spending on oil exploration and production has been cut back sharply (in 2015 and 2016) due to the low price of oil, even as demand continues to grow. This can lead to a repeat of the earlier cycle (2004-2014), when years of under-investment pushed up prices. India's gains from the low oil price of the past three years will disappear when the cycle turns as it has not locked in these prices over the long term.

The Persian Gulf countries, Nigeria and Venezuela are all important suppliers of petroleum globally and to India. They are also vulnerable to internal or external unrest. A conflict in a major oil

exporter can cause a short-term disruption and a price spike. This has happened in the recent past, when IS overran oil fields in Iraq and Libya, pushing up oil prices.

### INDIA-RUSSIA ENERGY TIES: CURRENT STATE

The India-Russia energy collaboration is centred on nuclear energy and oil investments.

*Russia accounts for less than 1% of India's energy imports – India's energy imports from Russia are under \$1 billion.<sup>27</sup>*

Collaboration in new areas, such as LNG, natural gas mobility, renewable energy and financial markets for energy, could significantly promote the Russia-India partnership.

Indian oil companies have multiple investments in Russian oil fields – investment so far exceeds \$10 billion.<sup>28</sup>

TABLE 1: INDIAN INVESTMENTS IN RUSSIAN OIL &amp; GAS

Project Name	Indian Partner	Stake (%)
Sakhalin 1 Project	OVL	20
Imperial Energy	OVL	100
License 61	OIL-IOC	50
Vankorneft	OVL, BPCL, OIL-IOC	49
Taas Yuriakh	BPCL, OIL-IOC	29.9

Source: Gateway House

A consortium, led by Russia's state-owned Rosneft, has acquired a controlling stake in a 20-million ton petroleum refinery in Western India for \$12.9 billion.<sup>29</sup>

Russia is also providing technology for India's Kudankulam Nuclear Power Project, currently the largest nuclear power plant in India, and is a supplier of nuclear fuel to India too.

<sup>26</sup> Calculated by the author. Snapshot of India's Oil & Gas Data // Petroleum Planning & Analysis Cell, Government of India. June 2017.  
URL: [http://ppac.org.in/WriteReadData/Reports/201707280142534471233SnapshotofIndiasOilandGasData\\_June2017.pdf](http://ppac.org.in/WriteReadData/Reports/201707280142534471233SnapshotofIndiasOilandGasData_June2017.pdf)

<sup>27</sup> Country wise India's imports by Principal commodity // Ministry of Commerce and Industry, Government of India. 2013.  
URL: <http://commerce.gov.in>

<sup>28</sup> Compiled by Gateway House.

<sup>29</sup> Rosneft and Investment Consortium Led by Trafigura Sign Agreements to Acquire 98% in Essar Oil // Essar. October 15, 2016.  
URL: [http://www.essar.com/article.aspx?cont\\_id=ZpsxL0U0Qs0](http://www.essar.com/article.aspx?cont_id=ZpsxL0U0Qs0)

<sup>30</sup> BP Statistical Review of World Energy June 2016 // British Petroleum. June 2016.  
URL: <https://www.bp.com/content/dam/bp/pdf/energy-economics/statistical-review-2016/bp-statistical-review-of-world-energy-2016-full-report.pdf>



## INDIA AND RUSSIA: TOWARDS THE FUTURE

As Russia's primary market, the EU, turns to renewable energy,<sup>30</sup> Russia needs new customers for its oil and gas exports. Investing in downstream assets in energy importers, such as India, can help secure new customers.

### COLLABORATING ON LNG

Russia needs to find new markets for its gas as the EU seeks alternative sources of supply and the United States becomes a gas supplier. Converting Russia's energy export infrastructure is a solution: converting natural gas into LNG and exporting it via tankers potentially opens up the world market for Russia. So far, Russia has only one operational LNG terminal at Sakhalin, with another under construction.<sup>31</sup>

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#### *For India, LNG is the only viable mode of importing natural gas.*

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India has four operational LNG import terminals – at Dahej, Hazira, Dabhol, and Kochi; with nine more proposed. These terminals can be the destination for some of Russia's gas exports.

### SHARING OF TECHNOLOGY/EXPERTISE

Technology movement has so far been from Russia to India. Since the 1960s, India has been the recipient of Russian technology as Russia is a technology power. More recently, the Kudankulam Nuclear Power Plant, being built with Russian collaboration, is an example.

However, India too has strengths in technology that can be mutually beneficial, namely in wind energy and natural gas mobility.

Russia's abundance of fossil fuels has left renewable energy virtually unexplored. In 2015, only 0.024% of Russia's total energy requirement

was met by renewable energy. That compares with 2.3% for India.<sup>32</sup>

Russia has massive wind energy potential, which has so far remained almost entirely untapped. Russia's large capacity of gas fired power, which can be started/stopped quickly, is an ideal complement for wind power, which fluctuates. Using renewable energy will reduce consumption of natural gas, which can be exported.

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#### *India has a large base and indigenous know-how for manufacture of wind turbines, blades and associated equipment.*

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It has set up the world's fourth largest wind energy generation capacity on this manufacturing base.<sup>33</sup>

Besides, India has over 3 million natural gas vehicles on its roads<sup>34</sup> – with large fleets in multiple cities. Use of Compressed Natural Gas (CNG) instead of liquid fuels will mean less air pollution in cities. A shift to CNG will also bring down consumption of oil, which can then be exported. Oil is relatively simpler to export to global markets and doesn't require the expensive and specialized infrastructure.

There is expertise in creating CNG infrastructure, converting existing vehicles to CNG and in building new vehicles that run on CNG straight from the assembly line in India. This is not merely an issue of technology, but also needs the 'software': setting up a customer-centric business, with high levels of service at pumps, having pumps at proper locations and a well trained staff.

### LABOUR MOBILITY

From 1992 to 2009, Russia's population declined from 149 million to 142 million: the actual decline in population was 12.6 million, partly

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<sup>31</sup> IGU World LNG Report // International Gas Union. 2016. URL: <https://www.google.co.in/url?sa=t&rct=j&q=&esrc=s&source=web&cd=2&cad=rja&uact=8&ved=0ahUKEwiqzcifdLVAhXhLY8KHavrCfQQFggtMAE&url=http%3A%2F%2Fwww.igu.org%2Fdownload%2Ffile%2F2F2123&usq=AFQjCNHNu-nmL-patVthD04g0UWtOuREDMw>

<sup>32</sup> Calculated by the author. BP Statistical Review of World Energy June 2016 // British Petroleum. June 2016. P. 41. URL: <https://www.bp.com/content/dam/bp/pdf/energy-economics/statistical-review-2016/bp-statistical-review-of-world-energy-2016-full-report.pdf>

<sup>33</sup> Year End Review – MNRE // Government of India. The Ministry of New and Renewable Energy. December 18, 2016. URL: <http://pib.nic.in/newsite/PrintRelease.aspx?relid=155612>

<sup>34</sup> Current Natural Gas Vehicle Statistics // NGV Global Knowledgebase. August 8, 2017. URL: <http://www.iangv.org/current-ngv-stats>

<sup>35</sup> Growth and Labour Sufficiency in Russia // World Bank. July 2011. URL: <http://siteresources.worldbank.org/INTECA/Resources/RussiaGrowthAccountingLaborJuly122011%29.pdf>

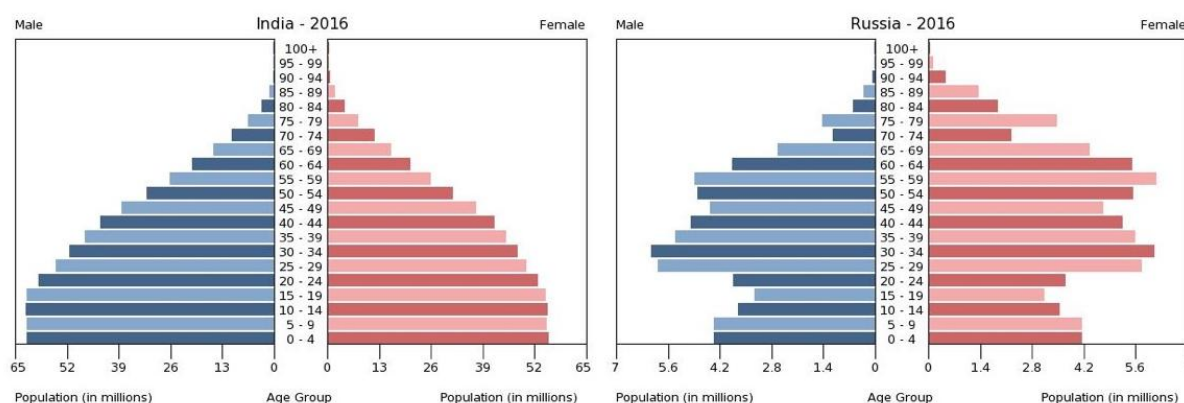


FIGURE 2. POPULATION PYRAMID FOR INDIA AND RUSSIA

compensated by migration. By 2030, labour force participation in Russia will fall by one-seventh, or another 10 million.<sup>35</sup> To keep its economy humming, Russia will need labour across the board: skilled technicians for the oil industry, construction workers and also in agriculture, which is an important export sector and can grow much more.

India, with its young population, can provide an answer. Over 7 million Indians currently work in the oil exporting countries of West Asia,<sup>36</sup> in sectors including oil and gas, construction and the services industry. The turbulence in that region is starting to send some of those skilled workers home. Creating a similar labour corridor between India and Russia can benefit both countries.

The other sector where Russia can use Indian labour is agriculture. Russian agriculture has benefited from the weak rouble – Russia became the world's largest exporter of wheat in 2016, for the first time in a century.<sup>37</sup> With ample land and water, Russia is well placed to be a major food supplier globally. Increased food exports will also help Russia diversify its export basket away from oil and gas. Farm products overtook weapons as the second largest export from Russia in 2016.

In addition, remittances from Indian workers can even help the trade balance, which is strongly in favour of Russia – and this will be more so as India starts to import Russian LNG.

### ENERGY BENCHMARKS

The deepest and most liquid exchanges for trading oil futures are in the U.S. and UK – and they use indigenous WTI and Brent as global benchmarks. However, these benchmarks no longer represent the global oil trade and the global oil market,<sup>38</sup> which is in Asia.

India and Russia can co-create a new Asian Oil benchmark corresponding to a basket of Asian crudes and trade it on a non-Western exchange; this will reduce the Western dominance of energy financing, and can mitigate the impact of sanctions.

India has a mature and well-regulated financial sector – and Indian commodity exchanges such as MCX can provide a platform for producers and consumers of oil and gas to hedge their long-term exposure via financial instruments. For Russian companies such as Rosneft and Gazprom, hedging their sales will also reduce the impact of price fluctuations on profitability.

<sup>36</sup> Annual Report 2015-16 // Ministry of External Affairs, Government of India. 2016.  
URL: [https://www.mea.gov.in/Uploads/PublicationDocs/26525\\_26525\\_External\\_Affairs\\_English\\_AR\\_2015-16\\_Final\\_compressed.pdf](https://www.mea.gov.in/Uploads/PublicationDocs/26525_26525_External_Affairs_English_AR_2015-16_Final_compressed.pdf)

<sup>37</sup> Russia Becomes World's Wheat Exports Leader With Over 25Mn Tonnes Supplied // Sputnik International. March 20, 2017.  
URL: <https://sputniknews.com/russia/201701261050035505-russia-wheat-export-leader>

<sup>38</sup> Reassessing Brent Benchmark for Crude Oil // Akshay Mathur, Gateway House. May 12, 2014.  
URL: <http://www.gatewayhouse.in/reassessing-brent-benchmark-for-crude-oil>

## RECOMMENDATIONS BY RIAC

**1.** Given the fact that Russia and India have similar views with regard to a more just world order, including the international architecture of energy security, it would be short-sighted to limit the energy partnership to a purely bilateral agenda. Russian and Indian energy companies could operate very successfully outside of their respective countries. There are plans to supply raw materials to Essar oil refineries in India from Venezuela, where a joint venture between Rosneft and Venezuela's PDVSA is currently extracting. This particular deal is an example of building a global supply chain that will include Rosneft's foreign production assets, as well as the oil refining capacity of Essar and the well-developed distribution network in India.

When it comes to implementing bilateral projects, Russian and Indian energy companies have already formed strong working relationships. Transforming these ties into a strategic partnership could be beneficial for both sides, helping create mechanisms for the mutualisation of risk in long-term capital-intensive projects. The joint work being carried out by Rosneft and OVL on the Vietnam Shelf could serve as an example of such a partnership.

Partnership with Russia could also give Indian companies a boost in terms of increasing their chances when competing for foreign assets.

For Russian companies, an alliance with partners in India would open up the South Asian, Southeast Asian and East African markets.

**2.** Russian companies should consider Indian investors as potential partners in the development of the resources on the Continental shelf of Russia and of other hard-to-recover reserves, especially considering the lack of Western financing. According to the Ministry of Natural Resources and Environment of the Russian Federation, as of early 2016, Russia had 585 million tonnes of explored oil reserves and 10,489 billion cubic metres of natural gas on the Arctic shelf.

A possible scheme for cooperation between Russian and Indian companies would be for Rosneft and Gazprom to set up a joint venture on the one hand (other Russian companies do not satisfy the criteria established by Russian legislation for the right to carry out operations on the Arctic shelf) and Indian oil and gas companies on the other. The joint venture would act as the operator of the deposit and operate on the basis of an agreement with the Russian license holder for the field (that is, Rosneft and Gazprom).

However, neither Russian, nor especially Indian companies have the technical capabilities to carry out drilling operations in the Arctic region. A technological partnership with western oil and gas giants is therefore necessary, so only minor shares in joint ventures may be allocated to Indian companies.

**3.** Nuclear cooperation is also a prospective area of mutual interest. Unlike China, Russia supports India's efforts to become a member of the Nuclear Suppliers Group. Indian nuclear equipment suppliers will target countries that are closer to home, for example Sri Lanka and Myanmar, where they will compete not so much with Rosatom, but rather with Chinese companies that are getting ready to expand into the international market. Given India's lack of experience in developing projects overseas and its rich history of nuclear cooperation with Russia, it is likely that Russia could expect to participate in joint projects in third countries. However, taking into account the fact that the decision to admit India into the club of nuclear suppliers should be made on the basis of consensus, Indian companies receiving access to the international market in the near term is unlikely.

**4.** Multilateral financial institutions such as the BRICS New Development Bank can boost the investment attractiveness of long-term energy projects.

The BRICS Bank was established to finance energy and infrastructure projects. It is likely that in the future BRICS Bank investments will expand to include the creation and modernization of the electric, oil and gas transport infrastructure, which is of great social importance.

**5.** The renewable energy sources (RES) market is enjoying a real boom period in India, while it has barely even begun to form in Russia. The government of the Russian Federation has set the goal of increasing the share of renewables in the energy balance up to 4.5 per cent (currently it accounts for circa 1 per cent) and has introduced measures to stimulate the use of green energy. In order to achieve this goal, the Government has adopted a package of incentives that involves holding tenders for Capacity Delivery Agreements (CDAs) guaranteeing a return on investment and even a certain amount of profitability. However, as payment for the CDA, the developer must ensure that equipment for the power generation facility is produced locally (after 2019, the minimum level of localization will be set at 65 per cent). As the Russian RES market is in the initial stages of the development, a certain exchange of experience would be useful for Russian companies and regulatory bodies as to how to organize auctions for the selection of production capacities and then how to integrate these capacities into the network for future operation. With the softening of the requirements of Russian legislation on the localization of RES manufacturing, the Russian market could be of interest to Indian companies – the wind turbine supplier Suzlon, for example.

## RECOMMENDATIONS BY GATEWAY HOUSE

### LNG

1. Indian energy companies, such as Indian Oil and GAIL, can be invited to invest in new/proposed LNG terminals and associated gas fields in Eastern Russia. Russia's Pacific Coast is an ideal location from which to ship LNG to India.
2. Russian gas major Gazprom can be brought in as an investor in India's LNG import terminals and downstream projects, which will use the gas (such as power, fertilizer and city gas).

### RENEWABLE ENERGY

3. Indian wind energy equipment manufacturers, such as Suzlon, Regen, RRB and Inox, can be invited to invest in Russia, in partnership with local companies. The local partners can be power generation companies with gas-fuelled power plants, of which Russia has plenty.

### NATURAL GAS VEHICLES

4. Indian companies, such as Mahanagar Gas and Indraprastha Gas, can be ideal partners to create city gas distribution systems in Russia, in partnership with its utilities. The Russian partners must be companies, set up specifically to provide city-level services, for clear management focus.

The Russian government can respond with friendly policy measures, such as, shifting public transport of major cities to CNG, as was done in Delhi and Mumbai in India. This will enable other associated Indian companies, which make the equipment for CNG fuelling stations and CNG conversion kits for regular vehicles, to set up operations in Russia.

The final step will be to bring Indian companies such as Tata Motors, Mahindra & Mahindra and Ashok Leyland, which make CNG-fuelled trucks, buses, and cars, to set up manufacturing in Russia. This can happen only after there is sufficient CNG infrastructure and consumer demand for vehicles.

### LABOUR MOBILITY

5. Russia can open immigration to Indian farmers and agricultural workers to have them work on farms, and skilled workers for sectors such as oil and gas. This can follow the model of Indian workers in West Asia, who can live and work freely, but cannot easily become citizens. This will help circumvent concerns of a demographic shift taking place through migration.

### ENERGY BENCHMARKS

6. Rosneft and Gazprom can start hedging their India sales on an Indian exchange such as the MCX. Companies, such as Indian Oil and GAIL, which import oil and gas on long-term contracts, can similarly start hedging their purchases. The state-owned companies can help launch this project and will provide the critical mass to succeed.

Oil exporters from West Asia and oil importers from East Asia too can be brought into this exchange to help make it an 'Asian benchmark'. To be truly representative, this benchmark must be a blend of crudes from Russia and West Asia, corresponding to the import basket of buying countries, such as India, China, Republic of Korea and Japan.



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