The success of India as a major emerging power in the coming years will rely heavily on its ability to achieve and maintain energy security. Much like China, India’s energy demands will continue to present it with difficult choices as the country attempts to balance its development and growing power with a host of environmental and political issues. These include a reliance on oil from unstable areas of the world, a lack of diverse energy options, potential conflict with China, and the adverse environmental effects of Delhi’s current energy policies. As a member of India’s Petroleum and Natural Gas Regulatory Board, Sudha Mahalingam shared her insights on India’s energy challenges at a public forum organized by the Rising Powers Initiative at the Sigur Center for Asian Studies in December 2011.

The Reliance on Oil and the Need for Energy Diversification
Along with China, India accounts for most of the increase in global oil demand at a time when oil supplies may be peaking. Much of the oil that remains is found in the OPEC countries of the Middle East. Other sources of oil, such as the tar sands of Canada, are very difficult for India to access. Therefore, as oil will remain one of India's chief sources of energy for the foreseeable future, Delhi will remain highly reliant on potentially unstable countries for its energy needs. This reliance could threaten India's oil supply in the event that a confrontation erupts in the Strait of Hormuz.

Given the problems posed by issues such as unrest in the Middle East, as well as perennial threats to India's oil refineries by potential terrorist attacks its coasts, Ms. Mahalingam advocated an "all of the above" approach to energy. Besides oil, alternative sources such as natural gas, hydropower, and nuclear power are being explored. The least realistic of these options is nuclear power, not exclusively because of safety concerns, but also economic realities. Although India has stated its objective to ramp up nuclear power by 15,000 megawatts over the next 20 years, this is very unlikely to happen, given the costs and time involved with shipping and building plants. Therefore, the most realistic energy scenario in the short-term is the continued use of oil, coal, and to some extent, alternative sources of energy.

An Inevitable Collision between India and China?
India’s enormous energy needs, as well as its continued reliance on oil, have inevitably put the country in direct competition with China. India is at a competitive disadvantage in several ways. Overseas oil acquisition is a stated policy for both countries; however, Chinese companies are granted more autonomy while often receiving greater government support than their Indian counterparts. Chinese banks make energy-backed loans, which help secure oil for Chinese companies, all while profiting financially. For many reasons, not least of all government regulations, Indian oil companies do not receive such benefits. In addition, China has gained access to more oil producing assets in far more countries than India has. Beijing has also developed mutually beneficial economic relationships with these countries through the provision of funding for infrastructure and other development projects. One potential area of conflict lies in the South China Sea, where China has been flexing its naval strength in order to secure natural resources, including oil. India and China have already publicly disagreed over who has the legal right to explore different areas of the Sea. However, Ms. Mahalingam was quick to dismiss the theory of inevitable conflict, citing cooperation that has already been occurring between India and China in the oil-rich countries of Angola and Sudan.
Political and Environmental Concerns
By investing in countries like Angola and Sudan, however, India has been criticized for ignoring human rights. Moreover, because it uses coal on a massive scale and is responsible for a large percentage of greenhouse gas emissions, India has been called on to curb its use of heavily pollutant fuels, particularly coal. In defense of these policies, Ms. Mahalingam reiterated that India cannot afford to be as selective as other more developed countries when seeking overseas oil assets. Furthermore, given that 60% of India's massive population is often left without power, the government has an obligation to address its citizens' needs as its first priority. This includes the importing and burning of coal.

The Way Forward for India
Looking ahead, one can expect the continued use of coal and oil as primary energy sources for India, although attempts to burn coal more responsibly are already underway. India will continue to import oil heavily from the Middle East. At the same time, India is currently embarking on several initiatives in pursuit of greater energy security. These include the establishment of a strategic petroleum reserve as well as price and regulatory reform. Ultimately, any discussion of a rising India should include the challenges posed by its enormous energy needs.

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