

Energy Security

Energy Security Discussion Paper

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The progressive tightening of global oil and gas markets over the past seven years has led to a pronounced escalation in tensions among the major energy importing countries over energy security and long-term access to global energy supplies. Oil and gas demand have continued to grow strongly, led by the United States, China, India, and the rest of the developing world, while available supplies have become ever tighter as producer governments increasingly restrict access to reserves and geopolitical events further undermine supply growth in key regions. The resulting high and volatile prices have fueled growing energy security angst of the United States, India, Japan, and China, as well as all other major consuming and importing countries.

The result has been intensification in the atmosphere of competition over access to energy supplies among the United States, Japan, India, and China along with a surge in energy nationalism. Energy is fueling a growing risk of rivalry among these countries as each pursues an increasingly “zero-sum,” unilateralist vision of its energy future in an era of perceived energy “scarcity.” At the same time, the resource nationalism of the major exporting countries further aggravates the consumers’ fears over future supply availability. The result is increasing politicization of global oil and gas markets and rising risks of market intervention and supply disruptions. In essence, the major consuming/importing countries are competing with one another for supplies, rather than working together to pursue their common interests in more stable markets and taking aim at the predatory and manipulative behavior of the exporting countries. In turn, energy competition risks aggravating broader strategic relations among the United States, India, and Japan as each behaves in mercantilist ways that feed the worst case

suspicious of the other. It is also complicating U.S. bilateral relations as Japan and India pursue oil and gas supply deals with a series of “problem states” such as Iran, Sudan, and Myanmar. These disagreements, in turn, are spilling back over into energy relations and undermining efforts at energy cooperation.

Cutting the Gordian Knot

This Gordian Knot of reinforcing mistrust and mercantilist competition can only be cut by finding ways to turn energy into a source of cooperation rather than competition. The United States, India, and Japan need to recognize and act upon their common interests in stable global energy markets and supply security, reasonable prices, and an environmentally sustainable energy future. Rather than squabbling among themselves over access to scarce supplies and control over transport routes, the three countries need to find collective ways to build trust, manage and contain the impulse toward energy competition, begin working together to promote new supplies, build new regional energy infrastructure, undermine the predatory market power of the producing states, and cooperate on developing a more environmentally sustainable long-term energy future.

Meeting the challenge will require far more creative and strategic policies from all three countries as well as increased openness to fundamental policy change. At the outset, efforts need to be rooted in the three countries’ fundamental mutual interests regarding global energy development and use. The United States, Japan, and India, despite a recent drift toward energy competition and nationalism, share a set of common interests on energy security, including the following:

- Working to achieve a relatively stable flow of energy supplies at reasonable prices;

- Achieving flexible and free global trade and transport of energy, minimizing political interference, and developing a diverse portfolio of energy transit routes;
- Working toward stability in major energy exporting regions, most importantly the Persian Gulf and Eurasia;
- Promoting development of new energy supplies as rapidly as possible, from as many countries and regions as possible;
- Promoting a diversified slate of energy sources, including oil, natural gas, coal, nuclear, hydro-electric, and renewables;
- Development of new policies and technology to promote energy efficiency and lower energy costs;
- Reducing the environmental impact of fossil fuel energy consumption and assuring a sustainable energy mix.

In the context of this broad set of common interests, the principles to work for to achieve these goals include:

- A market-based approach to supply and demand;
- Multilateral and regional cooperation for energy security;
- The diffusion of new, low cost energy saving technology;
- A commitment to demand management and competitive energy markets;
- Multilateral promotion of efficiency in energy usage;
- Cooperation in promoting improved environmental outcomes;
- Cooperation on regional stability, common regional energy solutions, and collaboration on energy diplomacy in key energy exporting regions.

Two Tracks Forward: Promoting Energy Cooperation, Managing Areas of Tension

Promoting energy cooperation and managing the propensity towards energy competition needs to occur first at the strategic and geopolitical level with new efforts toward a strategic dialogue on common energy concerns and a willingness to de-politicize the issue of energy security. The United States is the superpower of the energy world; India is becoming a new regional energy power, while Japan is the global superpower of energy efficiency. All three countries must focus on maintaining one global market, on opening up access to energy investment in all countries, and recognize that no country can achieve energy security unilaterally. This must be done bilaterally, regionally, and on a global level. Bilaterally, there needs to be newly invigorated and serious bilateral strategic energy dialogues between Japan and India and between India and the United States. Currently, bilateral energy dialogues are taking place between the United States and India and between Japan and India. However, discussions tend to take place at the expert level but rarely do these discussions constitute a strategic dialogue about finding new ways to collaborate in addressing worsening instability in global energy markets. From the U.S. perspective, it started along this path in 2005 with China through the U.S.-China Strategic Dialogue developed by then Deputy Secretary of State Robert Zoellick, in which energy security was one of the key agenda items to be addressed in a strategic discussion which ranged across the key items on the U.S.-China strategic agenda. However, this effort has faltered with his resignation. The new U.S.-China Strategic Economic Dialogue (SED), led by Treasury Secretary Paulson, includes energy on the agenda, but the Dialogue is not well-suited to discussing energy security in a strategic context. It is an economic dialogue but not really a strategic dialogue.

Also, regional infrastructure and supply solutions can only be achieved in the context of an Asian regional energy forum or organization to help manage complex regional energy needs. Current regional Asian fora do not provide the kind of setting to address major regional energy security concerns. APEC is too diverse an organization to focus on energy consuming country interests and, in any event, does not include India. None of the regional groupings include both India and China, both of whom need to be at the table to address regional energy diplomacy and security. On a multilateral level, it is important that India (and China) be included more directly in the global institutions of the oil market, most importantly the International Energy Agency (IEA). The IEA includes members of the OECD and was established in the mid-1970's to provide a multilateral mechanism for managing oil supply disruptions and promoting energy cooperation. However, the energy world has changed profoundly over the past three decades. During the 1970s most of the growth in world oil demand originated from the industrial countries of the OECD making the IEA central to the management of global oil markets. However, today by far the majority of the world's oil demand growth comes from the developing countries, with China alone accounting for roughly one-quarter of world oil demand growth over the past decade. India is now the sixth largest oil consuming country in the world. It makes little sense to have a global emergency oil management system that doesn't include two of the six largest oil-consuming countries. This will require some creative "institutional engineering" since India is not a member of the OECD and the United States and Japan need to lead in this effort. It's important to note that the IEA has been working to develop closer institutional energy relations with China and India. The new head of the IEA is from Japan and has expressed his intentions to develop a much stronger relationship with China and India. But this effort needs to be accelerated and the United States and Japan need to press this issue. Involvement in the IEA

also has the enormous benefits of bringing with it exposure to an wide range of resources and expertise on energy efficiency, demand management, technology, and policymaking expertise that would be extremely valuable in accelerating the “learning curve” of energy policymakers in India.

Furthermore, only through discussions at strategic level can there be effective efforts to manage a series of vexatious collateral issues where U.S. strategic policies intersect with the energy security interests of India and Japan. Three particular issues loom in U.S. relations with India that will need to be managed carefully to avoid new tensions in their bilateral relationship. First, India shows every intention of expanding its energy ties with Iran, including proposals for a large natural gas pipeline project via Pakistan, new proposals for large LNG investments in Iran, and potential oil development investments. While the draw of Iranian energy resources is understandably strong, given the atmosphere in Washington, D.C. regarding Iranian nuclear development and other issues, this inevitably will create new challenges for U.S.-Indian relations. Moreover, efforts to develop a large new pipeline to bring Myanmar natural gas to India are also likely to raise tensions over U.S. efforts to isolate Myanmar. Finally, India’s energy investments in Sudan will remain a potential point of disagreement, although so far U.S. attention to Sudan energy investments has been focused on China, given its position on the U.N. Security Council and capability to frustrate U.S. efforts to pressure Sudan’s government over human rights violations. It’s clear that the improving broader strategic relationship between the United States and India will help limit the potential damage of these specific energy strategy disagreements. Recent U.S. policy toward India suggests it sees India as an increasingly important regional ally and a potential counterbalance to growing Chinese power in Asia. In

fact, the United States appears to be using energy cooperation, as in the case of the new nuclear energy initiative, to help support stronger U.S.-India ties for broader strategic reasons.

Strategic disagreements over energy investments are also showing up in U.S.-Japan relations, most notably over Japan's recent oil field investment plans in Iran which provoked serious complaints from the United States. There needs to be a stronger set of bilateral strategic dialogues to find ways to manage the negative energy consequence of these broader strategic disagreements. As in the case of India, the historically strong U.S.-Japan alliance means that these energy disagreements are likely to have a limited impact on bilateral relations. The case of both India and Japan contrasts sharply with the case of China, where a broad and intensifying U.S.-China strategic rivalry tends to exaggerate the negative impact on bilateral relations of a range of global energy disagreements and conflicting policy interests.

The Solution is Demand Not Supply

While energy relations among the U.S., India, and Japan are complicated by the atmosphere of supply competition, the more effective approach to improving energy security for all three is to cooperatively address the demand side of the energy equation. The U.S. and India are two of the largest forces in rising world oil demand but, at the same time, are making only minimal efforts to slow demand growth in the face of tightening global supply conditions and an unstable supplier environment. Insecurity over oil supplies is increasingly a self-inflicted problem rooted in unrestrained demand growth and relatively low or subsidized domestic oil prices. Persistently rising demand in the United States and India (as well as China and other major developing country consumers) in the context of precarious global supply conditions delivers the economic prosperity of all the major importers into the hands of unstable, capricious, or overly cautious

producer countries. What this means is that Japan, despite its world-leading efficiency efforts, continues to face a precariously tight global oil market, high prices, and supply uncertainty despite its path breaking efforts to slow its own oil and energy demand growth.

Hence, the most effective self-help approach to energy security among the major oil consumers and importers, including the United States and India, is managing the demand side of the equation rather than pleading with unresponsive or catastrophically mismanaged supplier countries to increase production. It is the element of the equation that the United States and India can control if they can summon the political will to do so. Japan has proven this is possible without threatening economic growth. The effort needs to be both a cooperative regional and a domestic strategic effort. What is needed is no less than an Asia Pacific Strategic Energy Efficiency Initiative. This is not to be confused with a much discussed “consumer cartel” which presumably would be set up to try to negotiate more production or lower prices with OPEC and producer countries. Instead this would be a cooperative multilateral effort, led by the United States, India, and Japan, to manage rampant demand growth in the United States, India, and developing Asia. This must also include China to be effective. Demand is the one thing that OPEC and other major producers, such as Russia, cannot control and which is ultimately their Achilles’ heel. Japan can play a critical role in this by contributing its policy expertise, experience, and technology in reducing oil demand growth.

Ultimately, energy security begins at home. The United States and India can only begin to mitigate the global impact of their growing energy “footprint” by advancing domestic energy policies to slow oil demand growth and improve energy efficiency overall. Currently, Indian energy policies are heavily biased toward supply-side and statist solutions to energy shortages, rather than demand management and market-oriented strategies. Subsidized energy pricing,

inefficient state-owned monopolies in the energy industry, selective limits on foreign investment in energy, bureaucratic interference in the energy sector, cross-subsidies, and opaque and unstable policies, all work to slow new energy investments, delay efficiency improvements, subsidize high demand growth, and undermine the introduction of new, energy saving technology. Energy market reform is essential to manage demand growth more effectively and to speed investment in a new, more diversified slate of domestic energy supplies. Stronger domestic commitments to energy diversification and efficiency by leaders in India can be supported and encouraged by bilateral and multilateral cooperation, along with financial and technical assistance in which Japan and the U.S. need to take a lead role. Japan is far better qualified and credible regarding demand management policies and technology since it has been the global leader in efficiency improvement, energy efficient technology, and supply diversification since the oil crises of the 1970s.

U.S. energy policies, likewise, are heavily biased toward supply-side solutions while, at the same time, policies to slow demand growth have been feeble and timid. The United States relies heavily on market solutions, is committed to maintaining low energy prices to promote economic growth and global competitiveness, and is hamstrung by a strong political aversion to using taxation to manage energy demand growth. As a result, it has been a serious laggard on energy efficiency. For example, the United States consumes 80 percent more oil per capita than Japan and double that of the EU. But the United States has been in the lead in allowing market pricing, private investment, and competition to flourish in the energy sector and this experience needs to be promoted among policymakers in India. Both Japan and the United States have much to offer regarding clean coal technology development and diffusion. The two countries also have extensive experience and can provide assistance and encouragement on natural gas development

and markets. For example, coal-bed methane development has flourished in the United States but remains a minor factor in natural gas supplies in India. Given huge coal reserves in India, the potential for coal-bed methane development is enormous. The United States does have a joint program with India on coal-bed methane technology development but, as with most of these programs, it is small and under-funded.

Both countries have developed a growing range of bilateral energy initiatives with India, including minister/secretary-level dialogues just recently started. These discussions are focusing on many of the areas mentioned above. But these dialogues tend to be only at a technical expert level, are moving at a glacial pace, and are having almost no discernable impact on energy and oil demand growth. They are rapidly falling behind the level of effort and commitment that is needed. The dialogues need to be given high-level political support and far more resources to meet the challenge.

Therefore, an enormous boost in domestic energy efficiency needs to become a central strategic goal in the United States and India. Both need a huge dose of self-help aimed at oil and the transportation sector especially, but also coal since that threatens to be the most damaging environmentally and in climate terms. This will not be easy given the common energy pathologies in India and the United States, particularly running up against the supply-side biases of policymakers and powerful vested political and economic interests in both countries. The effort will have to overcome fragmented and unfocused energy policymaking systems in both countries, the lack of effective implementation capabilities, and powerful political resistance to paying higher energy costs.

Resistance will also come from those in both countries who argue that higher energy costs would threaten to slow economic growth and job creation. The Bush administration has

repeatedly cited economic growth and global trade competitiveness concerns for resisting higher energy prices. However, the evidence is quite to the contrary. The United States, China, India, and Asia have experienced a tripling of oil, natural gas, and coal prices over the past seven years while at the same time their economies have experienced a long, sustained and robust period of economic growth, particularly China and India. The cost of substantially greater energy efficiency would be far lower than the impact of huge energy prices experienced over the past seven years.

The Energy-Environment Nexus

A cooperative framework of a regional strategic energy efficiency initiative would also provide a powerful platform to support an energy policy mix leading to a more environmentally sustainable energy future. Almost every energy efficiency improvement discussed would have an equal benefit in terms of pollution and carbon emission reductions.

But two areas require special attention, and they are related. First, cooperative efforts to address rising coal consumption in India (and China) are paramount. This means a special collective focus by the United States, Japan, and Europe on development and transfer of clean coal technology and other coal pollution reduction equipment on a scale and at a pace not seriously envisioned presently. The increase in coal consumption and carbon emissions are rising at a rate much too fast to be managed with the current glacial pace of clean coal and carbon sequestration technology development. More resources need to be put on a regional basis into a crash program to address rising coal consumption in India, China, and the United States. For India and China, this is a particularly delicate political problem since cheap and free electricity (which is driving rising coal consumption) has become central plank of the social

contract these governments have developed with their populations. Even in the United States, cleaner coal and carbon sequestration technology will mean higher electricity prices which will be a politically difficult concept to promote.

Second, and related to the coal question, in terms of the politics of carbon emissions and climate change policy, the United States, Japan, and India are on fundamentally different policy trajectories and developing a cooperative approach to reducing carbon emissions will require extraordinary and creative efforts by leaders in all three countries. As it stands today, the outlook is not for stronger cooperation among the three, but in fact the outlook is for greater tension and conflict over how to address the carbon issue. This is true despite the recent apparent “conversion” of the Bush administration to a more constructive approach to climate change. The recently inaugurated Asia Pacific Partnership for Clean Development and Climate (APPCDC), although it is a worthy concept, appears unlikely to get any serious traction given the fundamentally different views held by the participants, in particular China but also India.

Conclusions

A fundamental shift toward tackling the geopolitical tensions in our current approaches to energy security, toward improving energy efficiency, and toward aligning our carbon and climate change policies will take courageous political leadership in Washington DC, New Delhi, and Tokyo. This is the biggest challenge. Nevertheless, without such a new and profound shift in energy security policy, all the political rhetoric and hyperbole in New Delhi, Washington, DC, and Tokyo about achieving greater energy security and improving energy/environmental outcomes will be so much arm-waving and political theatre. Without this change, we are destined to experience chronically high and volatile world oil and energy prices, unstable

supplies, growing dependence on reprehensible or collapsing political regimes, more politicized energy markets, and ultimately disastrous environmental and climate outcomes.