

# Ill Wind From China

## *Rapid Growth Brings Pollution, Higher Gas Prices*

*By Jan Mazurek*

When Americans think of Chinese exports, we usually think of things that carry “Made in China” stickers—toys, shoes, consumer electronics, and the like—rather than pollution. But China is in fact starting to send us high volumes of smog, acid rain, mercury, and greenhouse gases, too. These foul byproducts of its superheated economic growth do not stay confined within any geographic borders. They are contributing to environmental devastation not just in China, which has many of the world’s most polluted cities,<sup>1</sup> but also here in the United States and around the world. For example, researchers at Harvard University recently discovered that a plume of dirty air over New England was comprised of chemicals that could only have originated in China.<sup>2</sup> Particularly worrisome are coal power plant emissions of mercury, a toxin that is especially dangerous for pregnant women and children.

China is fueling its frenetic economic expansion—a growth rate that has reached 8 percent per year, and is expected to rise even higher—with prodigious consumption of energy, including its own abundant supplies of coal, and, increasingly, imported oil and natural gas. In addition to the environmental impact, China’s voracious appetite for that energy is responsible for the lion’s share of the surge in demand that is driving up world crude oil prices.<sup>3</sup> As a result, American consumers are feeling the pinch in the form of escalating prices at the gas pump.

Beijing’s emergence as a major consumer of oil and gas also has important ramifications for international relations and U.S. security. Just as the United States is finally moving away from its old discredited policy of propping up despotic,

oil-rich regimes to assure “a stable supply of energy,” China seems bent on taking our place. It has, for example, forged close ties in recent years with some of the world’s least savory regimes: Iran, Syria, Sudan, and Venezuela. Most recently, as Europe and the United States have worked together to persuade Iran to give up its nuclear weapons programs, China has undercut them by dropping broad hints that it will veto any attempt by the United Nations to impose economic sanctions on Tehran.

These developments expose the basic weakness of the Bush-Cheney administration’s petro-centric and insular energy policies. For all their talk of “energy independence,” it is impossible for the United States to escape the reality of global interdependence when it comes

***“One person with a belief is a social power equal to ninety-nine who have only interests.”***

**—John Stuart Mill**

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to assuring a healthy environment and abundant, affordable energy. Yet the White House, abetted by the Republican Congress, clings obstinately to a narrow set of unilateralist positions that prevent America from doing anything serious to stop global warming, curtail mercury emissions, or reduce our dangerous dependence on oil. In recent years, Americans have reaped the bitter fruits of the administration’s “go-it-alone” approach to national security. We must not make the same mistake now on energy and the environment.

The shear scale of China’s energy consumption—which, while growing rapidly, is still far below our own—underscores the futility of the Bush-Cheney energy policy, which would perpetuate America’s dangerous de-

pendence on oil. China and other developing nations’ needs will overwhelm the marginal gain in domestic oil production that could be achieved by drilling in Alaska’s Arctic National Wildlife Refuge (ANWR). Forecasts from the U.S. Department of Energy indicate that the amount of oil available in ANWR, which will take at least 10 years to recover, would represent roughly 5 percent of our domestic oil consumption, and just a little more than 1 percent of the world’s consumption.<sup>4</sup>

Meanwhile, the United States sits sullenly on the sidelines as the rest of the world grapples, however imperfectly, with the challenge of global climate change. The Kyoto Protocol to the United Nations Framework Convention on Climate Change, the

international agreement to limit greenhouse gas emissions, such as carbon dioxide, recently took effect. America is not a party to that effort, as President Bush withdrew U.S. support as one of his first acts in office. It is true that the original treaty was deeply flawed, asking too much of the United States and too very little of developing nations, such as China or Brazil. However, by unilaterally withdrawing from negotiations, rather than working on new agreements intended to fix those flaws, the United States defaulted on its responsibility as the world's largest economy to provide global leadership on climate change. In addition, the administration missed a similar opportunity to do anything serious at the international level about the growing environmental and health threat posed by mercury emissions.

The president might have redeemed his decision to withdraw the United States from Kyoto by offering his own plans to reduce U.S. greenhouse gas emissions. Instead, he has stubbornly refused to embrace any plan for controlling carbon, the biggest contributor to climate change. This is especially lamentable because a well-crafted strategy to control greenhouse gases would be the best possible tool not only to combat global warming, but also to accelerate our independence from foreign oil. Tailpipe emissions from cars, trucks, and heavy industrial equipment remain a leading source of air pollution and account for roughly one-third of U.S. carbon dioxide (CO<sub>2</sub>) emissions.<sup>5</sup> Presently, however, no technologies exist to capture greenhouse gases such as CO<sub>2</sub> from tailpipes. The only way to curb CO<sub>2</sub> from vehicle exhaust is to build vehicles that consume less carbon-containing fuel.

Yet, rather than encourage companies to make and consumers to buy cars that can kick our gasoline habit, or work with our international partners to formulate multilateral treaties that take into account the environmental

challenges posed by China and other developing nations, the centerpiece of the Bush administration's policy is simply to find more domestic supplies of oil. The Progressive Policy Institute supports a principled approach to domestic oil and gas production that balances our need to expand energy supplies with our obligation to conserve

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such national treasures as ANWR.<sup>6</sup> However, we also recognize that domestic supplies alone are inadequate to either achieve independence from imported oil or even effectively insulate U.S. consumers from market factors, such as growing demand from China.<sup>7</sup>

The environmental, energy, and strategic challenges posed to the United States by China's growing appetite for energy vividly illustrate why it is high time for the president and Congress to revise their go-it-alone approach and instead come to terms with the reality of our global energy and environmental interdependence. No country exists in a vacuum. The consumption, output, and environmental refuse of one roaring national economy sends ripple effects throughout the world. We must shape our national policies—and engage with the rest of the world to shape international policies—accordingly.

## **Smoggy Skies, Changing Climate**

The thick pall of pollution over China's cities, reminiscent of scenes found in Charles Dickens novels, stems primarily from coal-fired power plants and factories, though

emissions from auto exhaust also play an increasing role. Coal combustion releases a stew of pollutants into the air, including particles that cause respiratory problems and acid rain. In particular, two substances released from China's coal combustion—mercury and CO<sub>2</sub>—are complicating efforts to combat these pollutants here in the United States.

China's environmental problems are posing an increasing challenge to us here in America, primarily because China is ill-equipped to address them domestically. Although it has tough environmental laws on the books, to date Chinese institutions that administer environmental problems are perceived by most observers as among the weakest.<sup>8</sup>

While Chinese environmental authorities are trying to encourage plants to install costly pollution control technologies, they are so understaffed, underfunded, and overwhelmed by the rate of power plant construction that they are inclined to accept monetary fines from polluters in lieu of environmental compliance. Even when authorities crack down on

polluters, as they did when they recently suspended construction of 26 new power plants for paperwork violations, their intent may not be to clean up the air so much as to slow

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what many consider to be overheated economic growth.<sup>9</sup>

China's rapid industrialization not only harms its own environment, but also takes a considerable bite out of its growth. The World Bank estimates that environmental degradation costs China between 8 percent and 12 percent of its Gross Domestic Product

(GDP).<sup>10</sup> In contrast, the cost of environmental protection in the United States—a slightly different measure—is estimated to be around 2 percent of GDP. Indeed, Chinese planners worry that environmental degradation ultimately will serve as a source of social instability.

China's accelerating reliance on coal carries other costs, too. Coal mining causes extremely high mortality rates among Chinese miners. More than 4,000 were killed in the first nine months of 2004, making the nation's mining industry the world's most dangerous.<sup>11</sup>

And, although China increasingly is looking to add emission-free energy sources such as nuclear power and hydropower, the hazards associated with coal combustion and coal mining only promise to get worse. Coal currently accounts for 65 percent of China's primary energy consumption.<sup>12</sup> The country has more than 2,000 coal-fired power plants online and plans to add 562 more in the next eight years—which would give it nearly one-half of the world's total.<sup>13</sup>

## **Fish Full of Mercury**

The coal power plants such as those in China so heavily rely on emit mercury from their smokestacks. The mercury eventually settles from the air onto the ground and is washed into rivers, lakes, and streams, where fish accumulate it in their fat cells. People are exposed when they eat those fish. High levels of mercury exposure, particularly in children, can cause memory loss, attention deficit disorders, and even mental retardation.<sup>14</sup>

There is no definitive data to show exactly how much mercury Chinese plants are emitting, but some analysts believe they are the world's biggest source. Scientists already estimate that more than one-third of the mercury in the United States originates from other countries, such as China. So as the volume from China grows, it will pose an

increasingly serious threat for the United States and the rest of the world.

The scale of the mercury problem in the United States is already grave. For example, the Environmental Protection Agency (EPA) recently warned that one-third of America's lakes and nearly one-quarter of its rivers are so contaminated with mercury that women and children should avoid eating fish from those sources. To begin controlling the problem, the EPA recently issued a rule to combat domestic power plant emissions of mercury.

But that will do nothing to curtail mercury emissions from plants in places such as China, where they remain largely unregulated. In fact, the Bush administration has been overtly hostile to serious international regulatory efforts. The most recent example of that hostility happened in February 2005, when the European Union (EU) brought a treaty to regulate mercury to the United Nations. The measure was defeated in large part because of resistance from the Bush administration, which instead advanced a system of voluntary partnerships. In the face of America's stiff opposition to enforceable worldwide mercury controls, the United Nations had no other choice but to adopt the administration's less stringent approach.

## It Is Getting Hot in Here

Whereas mercury poses immediate health risks to people, especially children, power plant emissions of CO<sub>2</sub> released when coal is combusted are largely harmless at the ground level. However, most scientists agree that those emissions are gradually altering weather systems as they trap heat in the Earth's upper atmosphere.

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China produces about 13 percent of the world's total CO<sub>2</sub>, making it the second largest emitter after the United States, which accounts for close to one-quarter of the world's total.<sup>15</sup> On a per-capita basis, China's

emissions are comparatively low. In fact, in 2001 its per-capita emissions were lower than the world average, and 11 times lower than per-capita emissions in the United States.<sup>16</sup> But those numbers are changing with China's growing economic output. By 2024, Chinese emissions are expected to account for

nearly 18 percent of the world's total.<sup>17</sup>

Unlike the United States, China is a signatory to the Kyoto Protocol. However, in the first phase of Kyoto's implementation, which runs through 2012, it is not subject to mandatory emissions caps. That provision—which exempts all developing nations from mandatory caps in the first phase of implementation on the grounds that imposing strict caps too soon would unduly hamper their growth—was one of the main U.S. objections to Kyoto. To help developing countries meet their requirements, Kyoto contains a provision that allows companies in developed countries to meet their emissions limits by investing in new, clean factories in developing countries. In the view of many American skeptics, such provisions would have added up to an unfair competitive economic advantage for developing nations over the United States.

Kyoto certainly has flaws. But by walking away from it without offering the world a better alternative—and then by failing to establish effective domestic greenhouse gas regulations in the United States—the Bush administration has only made matters worse. For one thing, at recent meetings about

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Kyoto's implementation in Buenos Aires, Chinese leaders said the Bush administration's persistent refusal to accept binding CO<sub>2</sub> limits "reduces the incentives for U.S. companies to

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invest in the kind of clean-energy projects that China wants to attract."<sup>18</sup> Such projects could help reduce China's future emissions, for the whole world's benefit. Additionally, with America as a willful outlier and China excused by Kyoto's initial grace period, neither of the world's two biggest sources of greenhouse gases currently have any mandatory caps on their emissions.

As PPI noted in a recent report, if the United States is serious about global climate change, it has a duty to contribute to the development of a superior successor to Kyoto.<sup>19</sup> The EU currently is in the process of considering new emissions reduction targets for Kyoto's post-2012 compliance period (which runs from 2020 through 2050). Despite the Bush administration's recalcitrance, U.S. climate change experts have also been sketching out a post-2012 system.<sup>20</sup> Most agree that an alternative should do a better job than Kyoto of setting emission reduction goals and timetables. It also should focus on newly industrialized nations, on the grounds that it is cheaper to start from scratch with cleaner factories and cars than it is to retrofit and replace old ones.

Since the E.U. is still in the process of considering post-2012 timetables, it is not too late for the Bush administration to accelerate the completion of a climate change plan and offer it to the international community to demonstrate U.S. commitment to cooperate with our partners on global environmental threats.

## **The Economic and Strategic Effects of China's Energy Needs**

In addition to complicating efforts to combat mercury pollution and global warming, China's growing energy demand is hitting U.S. consumers squarely in the pocketbook. And, by securing oil and natural gas contracts from countries like Iran, whose interests are not aligned with ours, China's ravenous energy appetite is creating geopolitical challenges for U.S. foreign policymakers.

### **Skyrocketing Oil Prices**

In 2004, when crude oil prices started their march past the \$50-a-barrel mark, oil analysts initially attributed the steep increases primarily to Saudi decisions to constrain crude oil output, as well as to legitimate concerns of unsettled political conditions in oil-producing nations such as Iraq, Russia, and Saudi Arabia. What took oil analysts (and oil markets) by greater surprise, however, were unexpected increases in demand, most notably from China. In 2004, Chinese demand grew by 850,000 barrels per day and was the largest contributor to the surge in the world's consumption.

Crude oil prices have nearly doubled in the past two years as the strong growth in consumption has made it hard for the industry to keep up. The Organization of Petroleum Exporting Countries (OPEC) lifted its output to a 25-year high last year in a bid to put as much oil on the market as possible and meet a surge in demand that few had anticipated. Yet, crude oil prices remained persistently high.

According to a recent report by PPI's Ron Minsk, oil price increases caused the typical American household to spend \$360.25 more per year for gasoline during the past four years

than during the previous four years.<sup>21</sup> Soaring oil prices have also put a damper on U.S. stock markets, which have sputtered this year.

World consumption is expected to grow 1.7 percent in 2005, about one-half of last year's 3.3 percent growth. But another unexpected spike in demand from China, or sudden cuts in global supplies, could send prices even higher while production capacity, pipelines, and refineries remain very tight, according to the International Energy Agency (IEA), a Paris-based advisory group to 26 industrialized countries.<sup>22</sup>

Some oil analysts have criticized the IEA for failing to adequately anticipate the impact on oil prices from the growing Asian demand, particularly that of China.<sup>23</sup> In response, the agency's most recent report stated: "Most forecasters, the IEA included, expect oil demand growth to slow in 2005 from the torrid pace of 2004. But what happens if it doesn't? Given that last year's demand growth came as a complete surprise to market participants, how can one dismiss concerns that demand growth might once again be underestimated?"<sup>24</sup>

In response to the IEA's report, some analysts say the agency is still underestimating how much more oil China will consume this year. The agency said it expected demand there to grow by 360,000 barrels per day in 2005, to 6.73 million barrels per day. In an interview published in the *Indian Express*, Barclays Capital oil analyst Kevin Norrish is quoted as saying, "[The IEA] massively underestimated growth for China last year and are underestimating growth again this year. The fact is the Chinese economy is strong and growing."<sup>25</sup>

While a number of factors clearly contribute to high oil prices, including unsettled political conditions in oil-producing nations such as Iraq, Russia, and Saudi Arabia, we ignore the effect of persistent and growing Chinese demand to our peril.

## Growing Geopolitical Tensions

Although China was long self-sufficient in meeting its oil needs, it is increasingly becoming one of the world's largest oil importers, accounting for more than one-half of the growth in world oil demand in 2002 and 2003.<sup>26</sup> That number is only expected to increase. The IEA expects China to import 82 percent of its oil by 2030.<sup>27</sup> To satisfy its growing energy appetite, the Chinese government and state-owned energy firms have started to scour the globe to secure more oil and natural gas supplies.

As reported in the *Los Angeles Times*, China's so-called "go out" strategy seeks to avoid an over-reliance on one or two major suppliers and instead diversify to obtain oil from a number of sources. The plan calls for developing oil exploration plans with 27 other countries.<sup>28</sup> Among them are Kazakhstan, Venezuela, Sudan, Iraq, Iran, Peru, and Azerbaijan. As the U.S. Department of Energy points out, however, "despite efforts to diversify its sources of supply, roughly one-half of China's imported oil comes from the Middle East, with Saudi Arabia alone accounting for 17 percent in 2003."<sup>29</sup>

Unlike their Western rivals, Chinese energy firms reportedly are far less reluctant to negotiate deals with regimes deemed by the United States to be politically unstable or objectionable.<sup>30</sup>

As a result, China's growing energy dependence promises to generate geopolitical headaches for U.S. foreign policymakers.<sup>31</sup> Consider:

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□ China, which holds a U.N. Security Council veto, has been working to forge alliances with Tehran to secure oil and natural gas supplies. In November 2004, China said it did not want the Bush administration to press the council to debate Iran's nuclear program. One month prior to that move, it signed a preliminary accord with Iran worth \$70 billion to \$100 billion, under which China will purchase Iranian oil and gas and help develop Iran's Yadavaran oil field near the Iraqi border. Earlier this year, China also agreed to buy \$20 billion in liquefied natural gas from Iran over 25 years.<sup>32</sup>

□ Venezuela supplies up to 15 percent of U.S. oil imports. Those purchases account for approximately 60 percent of Venezuela's oil output. But Venezuelan President Hugo Chavez has emerged as an ardent anti-American. As acrimony between Chavez

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and the United States continues to mount, the Chavez regime increasingly is looking to hedge its bets by striking oil deals with China. It signed such an agreement last December. Although China does not currently have

the refining capacity to deal with Venezuela's high-sulfur oil, the agreement has sparked concern in U.S. foreign policy circles about the potential for Venezuela to either cease or significantly decrease its oil sales to America. Such concerns were further fueled in February when President Chavez publicly stated his displeasure that Venezuelan oil is “subsidiz-

ing Mr. Bush.” Although Venezuela has repeatedly insisted it does not intend to cease oil sales to the United States, Chavez is clearly looking to diversify Venezuela's oil markets and reduce its dependency on the American market.

□ China is also working to secure energy supplies from Syria, Angola, and Sudan at a time when geopolitical tensions between these countries and the United States are heightened by the threat of jihadist terrorism, and concerns about civil wars and genocide. Beijing, for example, has resisted calls for the United Nations to intervene more vigorously to stop the slaughter of civilians in Sudan's Darfur region—which former U.S. Secretary of State Colin Powell has labeled as genocide.

As these examples show, while China's “go out” strategy may be a prudent way for it to promote a more stable supply of oil for the Chinese economy, its policy ultimately may exacerbate a number of potential sources of geopolitical instability.

## **Conclusion**

Although debates about China to date largely have revolved around the issue of what rapid economic growth there means for U.S. jobs, it is time for U.S. policymakers to also consider the environmental and economic costs of China's mounting energy needs. To date, energy and environmental policy debates in the United States have primarily focused on dubious proposals to make us less dependent on imported oil by increasing domestic drilling. But a U.S. energy policy predicated on drilling in ANWR—which will meet only a small percentage of our needs—is all the more laughable in the face of China's looming oil demand.

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As PPI has noted in previous reports, we support a principled approach to drilling for oil on public lands here at home.<sup>33</sup> But we also recognize that America simply lacks the necessary reserves to meet its current demand for oil.<sup>34</sup> A prudent energy policy must therefore also attempt to reduce oil demand. To do that, PPI has embraced a number of short- and long-term solutions, including the greater use of oil substitutes such as ethanol and bio-diesel, hybrid vehicles that use less gasoline, and development of hydrogen fuel cells.<sup>35</sup> Also, PPI believes that one of the fastest and most efficient ways to reduce demand for oil is to create mandatory limits on tailpipe emissions of CO<sub>2</sub> in the United States, and to

reengage with our partners to stem CO<sub>2</sub> and other greenhouse gas emissions globally.<sup>36</sup>

Rather than focus on narrowly framed, drill-first domestic strategies, which will prove woefully inadequate to secure U.S. independence from imported oil, the case of China vividly illustrates that the Bush administration and Congress must wake up to the reality of global environmental and energy interdependence. One country's prodigious energy consumption sends ripple effects around the world. Rather than stand alone, we must reengage with our international partners to confront challenges like global warming and mercury emissions, which China's explosive growth only promises to worsen.

## Endnotes

- <sup>1</sup> "China: Environmental Issues," United States Department of Energy, Energy Information Administration, July 2003, <http://www.eia.doe.gov/emeu/cabs/chinaenv.html>.
- <sup>2</sup> Fialka, John J., Matt Pottinger, and Steve Stecklow, with contributions from Cui Rong, "A Hidden Cost of China's Growth: Mercury Migration," *The Wall Street Journal*, December 17, 2004, p. A1-A-8, <http://www.wsj.com>.
- <sup>3</sup> "China Country Analysis Briefs 2004," United States Department of Energy, Energy Information Administration, 2004, <http://www.eia.doe.gov/emeu/cabs/china.html>.
- <sup>4</sup> Minsk, Ronald E., "Don't Drain America First," unpublished memo on file with author, March, 2005.
- <sup>5</sup> Green, David L. and Andreas Schafer, "Reducing Greenhouse Gas Emissions from U.S. Transportation," Pew Center on Global Climate Change, May 2003, [http://www.pewclimate.org/global-warming-in-depth/all\\_reports/reduce\\_ghg\\_from\\_transportation/index.cfm](http://www.pewclimate.org/global-warming-in-depth/all_reports/reduce_ghg_from_transportation/index.cfm).
- <sup>6</sup> Hayes, David J., "Domestic Oil and Gas Production: Pursuing a Principled Approach," Progressive Policy Institute, June, 2002, <http://www.ppionline.org>.
- <sup>7</sup> *Ibid.*
- <sup>8</sup> Turner, Jennifer L., "Small Government, Big and Green Society: Emerging Partnerships to Solve China's Environmental Problems," *Harvard Asia Quarterly*, Spring 2004, <http://www.fas.harvard.edu/~asiactr/haq/200402/0402a001.htm>.
- <sup>9</sup> Ball, Jeffrey, "China Talks Up 'Green' Agenda on Energy Policy," *The Wall Street Journal*, December 16, 2004, p. A-14, <http://www.wsj.com>.
- <sup>10</sup> "Clear Water, Blue Skies: China's Environment in the New Century," China 2020 Report, World Bank, 1997, <http://www.worldbank.org>.
- <sup>11</sup> Cody, Edward, "Blast Traps Scores in Chinese Mine," *Washington Post*, November 29, 2004, <http://www.washingtonpost.com/wp-dyn/articles/A17356-2004Nov28.html>.
- <sup>12</sup> "China Country Analysis Briefs 2004," *op. cit.*
- <sup>13</sup> Fialka, John J., Matt Pottinger, and Steve Stecklow with contributions from Cui Rong, *op. cit.*, Clayton, Mark, "New Coal Plants Bury Kyoto," *The Christian Science Monitor*, December 23, 2004, <http://www.csmonitor.com/2004/1223/p01s04-sten.html>.
- <sup>14</sup> "What You Need to Know about Mercury in Fish and Shellfish; 2004 EPA and FDA Advice for: Women Who Might Become Pregnant; Women Who are Pregnant; Nursing Mothers; Young Children," U.S. Environmental Protection Agency, <http://www.epa.gov/ost/fishadvice/advice.html>.
- <sup>15</sup> "International Energy Outlook 2004," Energy Information Administration, U.S. Department of Energy, [http://www.eia.doe.gov/oiaf/ieo/pdf/appa1\\_a8.pdf](http://www.eia.doe.gov/oiaf/ieo/pdf/appa1_a8.pdf).
- <sup>16</sup> *Ibid.*
- <sup>17</sup> "China: Environmental Issues," *op. cit.*
- <sup>18</sup> Ball, Jeffrey, *op. cit.*
- <sup>19</sup> Mazurek, Jan and Tom Mirga, "Four Ideas for the Next Four Years: A Blueprint for Environmental Stewardship," Progressive Policy Institute, December 2004, <http://www.ppionline.org>.
- <sup>20</sup> "New Approaches on Energy and the Environment: Policy Advice for the President," Resources for the Future, November, 2004, <http://www.rff.org>; "Beyond Kyoto: Advancing the International Effort Against Climate Change," Pew Center on Global Climate Change, December 2003, [http://www.pewclimate.org/global-warming-in-depth/all\\_reports/beyond\\_kyoto/index.cfm](http://www.pewclimate.org/global-warming-in-depth/all_reports/beyond_kyoto/index.cfm); Stavins, Robert N. "Can an Effective Global Climate Treaty Be Based on Sound Science, Rational Economics, and Pragmatic Politics?" Resources for the Future, May 2004, <http://rff.org>.
- <sup>21</sup> Minsk, Ronald E., "The High Price of Oil Addiction," Progressive Policy Institute, May 2004, <http://www.ppionline.org>.
- <sup>22</sup> "Monthly Oil Market Report," International Energy Agency, January 2005, <http://www.oilmarketreport.org>.
- <sup>23</sup> Mouawad, Jad, "Oil Prices May Surge Again in '05 Energy Agency Warns," *Indian Express*, January 20, 2005, [http://www.indianexpress.com/full\\_story.php?content\\_id=63048](http://www.indianexpress.com/full_story.php?content_id=63048).
- <sup>24</sup> *Ibid.*
- <sup>25</sup> *Ibid.*
- <sup>26</sup> Barta, Patrick, Bhushan Bahree, Andrew Browne, and John Larkin, with contributions from Martin Fackler, "Asian Rivals Put Pressure on Western Energy Giants," *The Wall Street Journal*, January 5 2005, p. A-1, <http://www.wsj.com>.

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<sup>27</sup> "IEA Collaboration with India and China on Oil Security; Oil Supply Disruption Management Issues," IEA/ASEAN/ASCOPE Workshop on Cambodia, International Energy Administration, April 6, 2004, [http://www.iea.org/dbtw-wpd/Textbase/work/2004/cambodia/bj\\_session3.2-Ehara%20presentation.pdf](http://www.iea.org/dbtw-wpd/Textbase/work/2004/cambodia/bj_session3.2-Ehara%20presentation.pdf).

<sup>28</sup> Lee, Don, "China Barrels Ahead in Oil Market," *The Los Angeles Times*, November 14, 2004, <http://www.latimes.com>.

<sup>29</sup> "China Country Analysis Briefs 2004," *op. cit.*

<sup>30</sup> Barta, Patrick, *op. cit.*

<sup>31</sup> *Ibid.*

<sup>32</sup> Wright, Robin, "Iran's New Alliance With China Could Cost U.S. Leverage," *The Washington Post*, November 17, 2004, <http://www.washingtonpost.com/wp-dyn/articles/A55414-2004Nov16.html>.

<sup>33</sup> Hayes, David J., "Domestic Oil and Gas Production: Pursuing a Principled Approach," Progressive Policy Institute, June, 2002, [www.ppionline.org](http://www.ppionline.org).

<sup>34</sup> Minsk, Ronald E., *op. cit.*

<sup>35</sup> Mazurek, Jan and Tom Mirga, *op. cit.*

<sup>36</sup> *Ibid.*