## Why unbridled oil consumption in the Middle East could pose a threat to the region and beyond. By Keith Johnson

From the American point of view, the biggest energy revolution in recent years has been the explosion in domestic supplies of oil and gas that has catapulted the United States into the top ranks of global energy producers.

But globally, one of the most important, if less visible, energy revolutions has been the ongoing explosion in demand for oil in the Middle East, still the epicenter of oil production and exports. The region's surge in demand over the past decade, and the likelihood of further increases in its consumption over the next 20 years, raise serious concerns about Middle Eastern countries' ability to keep exporting large volumes of oil. That could upend global oil-market balances, seriously erode the finances and domestic stability of important countries in the region, and spark even more regional instability.

That's one reason that U.S. and international policymakers have been increasingly reaching out to counterparts across the Middle East, urging leaders there to shift gears before it's too late, by, for example, reducing the generous energy subsidies that encourage the rampant use of oil and oil-generated electricity.

"The more they consume, the less they're going to be able to export, and that's the main source of revenue for most of the governments," Dennis Ross, a diplomat who's worked in several presidential administrations, told Foreign Policy. "Something's got to give."

The choice is stark and risky: If Middle Eastern countries don't rein in their popular energy subsidies, their future economic lifelines will be threatened. If they do, they risk roiling domestic populations already energized by the Arab Spring.

Over the past decade, oil consumption in the Middle East has skyrocketed because of the region's growing populations, relatively strong economic growth and increasing need to generate more power for its own use. While China's seemingly insatiable appetite for oil

grabbed all the headlines in recent years, Middle Eastern oil consumption was just behind the Middle Kingdom's.

China, with the world's second-largest economy, consumed an extra 5 million barrels of oil a day between 2002 and 2012; the entire Middle East, whose non-petroleum economy is on par with Spain, increased oil consumption by 3 million barrels a day. Europe, in contrast, shrank its oil consumption by 1 million barrels a day over the same period.

That is eating away at the barrels that are available for export. According to statistics from BP, the Middle East exported more than 80 percent of the oil it produced in 2002. A decade later, it was exporting only 70 percent. That trend is also present in North Africa. Across both regions, most of the production gains over the past decade have gone to meet rising domestic consumption, according to a <u>recent report</u> by Securing America's Energy Future.

Publicly, regional leaders say they're aware of the problem and getting a handle on it. But the ugly truth is that most of the factors driving that consumption boom haven't gone anywhere and probably won't for years to come. *Foreign Affairs* recently noted that Saudi Arabia could by the late 2020s consume more oil than it exports. BP expects the region to add almost 5 million barrels of oil in demand over the next twenty years, even as it expects Middle Eastern exports to remain essentially "static."

Why, with relatively small populations and economies, are Middle Eastern countries guzzling so much oil? While there are plenty of examples of energy consumption run amok -- from Dubai's indoor <u>ski slopes</u> to Saudi Arabians' tendency to leave air conditioners running while on vacation -- the chief culprit is simple inefficiency. That shows up most clearly in power generation and use, and the profligate use of subsidized fuel for transportation.

Electricity generation is the most egregious demonstration of Middle Eastern oil consumption -- but also among the easiest to fix, on paper. Saudi Arabia, despite efforts to

tap more natural gas for power generation and an increasing interest in renewable energy such as solar power, still gets about half its electricity by burning \$100 barrels of oil.

"It's probably the most inefficient and expensive way to generate electricity right now," said Gary Clark, a commodities analyst with Roubini Global Economics in London. Regionally, he said, power generation accounts for about 25 percent of oil consumption.

That's why countries like Saudi Arabia and the United Arab Emirates are starting to consider across-the-board economic reforms to address the problem. The payoff could be huge: One study estimates that improvements in Saudi power generation, efficiency, and transport <u>could save</u> almost 2 million barrels a day of oil by 2025 -- allowing Riyadh to reap enormous amounts of new money.

They're also looking at alternative sources of energy, including nuclear power. When you're paying \$200 to produce a megawatt-hour of electricity with oil, nuclear starts to look like a bargain. The UAE's landmark <u>nuclear deal</u> with the United States, the first nuclear cooperation agreement between the United States and an Arab nation, came about solely because of the small Gulf nation's rising domestic oil consumption. And it explains why even more ambitious nuclear plans, such as Saudi Arabia's <u>hopes</u>to spend \$80 billion on 16 nuclear reactors, are getting Washington's blessings even as Iran's nuclear program has triggered a Western effort to use punishing sanctions to destroy the Iranian economy.

A few countries, led by the UAE, are also diving into renewable energy, especially solar. Abu Dhabi even houses the International Renewable Energy Agency.

Meanwhile, Saudi Arabia has <u>established</u>a royal center for atomic and renewable energy, and even the Saudi oil minister talks up the prospects of solar power when he visits the United States. Other countries, from Qatar to Kuwait, are also looking into the prospects of renewable energy providing cheaper (and, incidentally, cleaner) power than their current mix.

Still, the transformation of the power sector appears to be lagging behind the explosion in electricity demand, according to the International Energy Agency's World Energy

Outlook. That's especially true with the huge seasonal swings in electricity demand caused by the need for summertime air conditioning; Saudi Arabia alone uses up close to a million extra barrels a day for <u>cooling</u>in the summer. Coming to grips with institutional weaknesses -- such as ministries with dueling mandates -- as well overcoming a dearth of reliable data on energy use could help governments across the Gulf region finally start to implement smarter energy policies, Chatham House<u>concluded</u> recently.

The bigger, and much tougher, problem to tackle is the artificially cheap fuel prices that encourage residents to drive gas-guzzling cars as often as they want, and as far as they want.

"They provide cradle-to-grave energy subsidies as a kind of obligation of the regimes to the public, as a social contract," said Ross. Gasoline in Saudi Arabia, for example, costs about 45 cents a gallon, hardly an inducement to fuel-efficient vehicles.

The IEA estimates that subsidies for oil and oil products in the Middle East cost about \$112 billion in 2012 -- or 13 percent of everything those countries made by exporting oil in the first place. Counting subsidies on electricity and natural gas, governments across the Middle East and North Africa are shelling out more than \$240 billion a year, the International Monetary Fund estimates.

While U.S. and international policymakers for years have railed about fossil-fuel subsidies, and made calls for their rollback a staple of G-8 gatherings, that's easier said than done.

Many in the region consider fuel subsidies practically a birthright. Furthermore, countries that have rolled back subsidies have found it tough going; Iran's halting efforts to partially liberalize energy prices have been anything but smooth. Morocco just ended its own fuel subsidies -- but only under pressure from the IMF, while neighboring Tunisia had to scrap plans to raise energy prices due to popular protests. Saudi's economy minister publicly attacked energy subsidies' role in "distorting" the economy last spring -- but little has been

done since. The UAE's efforts to rein in subsidies stalled after 2010, though the oil minister recently raised the need to cut <u>energy subsidies</u>, at least for expatriates.

The task for Saudi Arabia is even harder, because it has acquired a host of financial obligations outside its borders. Bruce Reidel of the Brookings Institution estimates that Riyadh's external commitments, including support for tottering allies such as Egypt, Pakistan, Bahrain and Yemen, now totals about \$30 billion a year. "The cost of supporting the counter-revolution in the Arab and Islamic worlds adds greatly to the challenges facing the House of Saud in the years ahead," he wrote in a new<u>Brookings study</u> released Thursday.

But if the Middle East does not come to grips with its rising oil consumption, the implications could be dire. Saudi Arabia's crucial role in global oil markets comes both from the sheer volume of its exports, and the fact that it maintains "spare capacity" that it can essentially turn on and off as needed, making it a sort of central banker of oil markets. The greater the domestic consumption, the less potential spare capacity in OPEC's biggest producer. And that could lead to higher and more volatile oil prices, which would be bad news for the entire global economy.

Internal stability could also be threatened. Countries in the Middle East, as well as petrostates like Russia and Venezuela, have come to rely on exceedingly high oil prices in order to balance their budgets and meet domestic commitments. That has worked for the last few years because oil prices are, in real terms, about as high as they have been in a century.

But the rapid increase in oil production in the United States and Canada, coupled with the emergence of additional production in Brazil, Iraq, and possibly even Iran, has OPEC members worried about too much oil in the near future. That could send prices down to levels that would be great for the global economy -- but terrible for oil-dependent budgets. Only exporting greater volumes could make up for the lower price-per-barrel, but greater domestic consumption threatens those extra barrels.

"If the oil market becomes more flush, it's going to create problems for them, and they're going to have to make choices that, so far, high oil price have allowed them to avoid making," Ross said.

To date, U.S. policymakers have been trying to increase Washington's cooperation with Middle Eastern countries on issues such as energy conservation, energy efficiency, nuclear power, and renewable energy. The UAE inked a civilian nuclear cooperation deal with the U.S. in 2009. The State Department's roving energy ambassador, Carlos Pascual, spent last weekend in Abu Dhabi, talking up renewable energy. And Ernest Moniz, the U.S. energy secretary, just met with Saudi officials, including a tour of the King Abdullah atomic and renewable energy center, to chat up the prospects for greater U.S.-Saudi cooperation on clean energy and efficiency.

All of that underlines one simple truth: No matter how much oil flows out of Texas and North Dakota, the U.S. won't be disengaging from the Middle East anytime soon. The more things change, the more things stay the same.

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http://www.foreignpolicy.com/articles/2014/01/23/running\_on\_empty