The global energy equation has changed dramatically in recent years, thanks in large part to the impact of the shale-gas revolution. To get a handle on how the expectations of huge gas exports may shape the geopolitical future, The Wall Street Journal's John Bussey talked to Daniel Yergin, author and Vice Chairman of IHS Inc. Edited excerpts of their conversation follow.

New Muscle

MR. BUSSEY: Give us a geopolitical map of the world. What are the rising and diminishing powers?

MR. YERGIN: We're seeing a rebalancing of global oil supply in which we're going to have a north-south and south-north flow in the Western Hemisphere. That means that the Middle East and Asia, and particularly China, are going to be much more connected. That raises very
interesting questions about who's responsible for guarding the sea lanes and so forth.

Obviously, the immediate energy problem is Ukraine, which has just seen, in three days, its gas price double, and the country has no money. The West will provide money to Ukraine so they can pay their gas bill to Russia. It's sort of back to the end of the Cold War. Energy security's back on the agenda for the Europeans. And for the U.S., it's the first time that our energy position is different. There isn't this sense of vulnerability, but rather the sense that there's a new dimension to what we do. There's new muscle to it. Gas exports will come in three, four, five years. By 2021, the U.S. may be one of the three largest LNG [liquefied natural gas] exporters in the world.

MR. BUSSEY: Is your expectation that the U.S. will be a major player in gas exports?

MR. YERGIN: Absolutely. We've seen a pivot on global energy policy in the U.S. Before, it was, "Do we want to export any of this?" Now, it's much more, "Hey, this is good for our economy and it's good for our foreign policy."

MR. BUSSEY: Some say exporting gas is the last thing we should do because it will raise the price domestically at a time when U.S. manufacturing needs are constrained by supply. Our view is that the market is not constrained by supply, as was the case in the past, but by demand. People keep looking at the numbers; they keep getting bigger, for the gas supply.

OPEC's Role

MR. BUSSEY: Does OPEC still have clout, just not as much with the U.S.?

MR. YERGIN: We've got to divide between gas and oil. Certainly this means the U.S. becomes a big player. All the major Asian countries, including the Chinese, want the U.S. as part of their portfolio, and this gives an additional dimension to the U.S. role in the world.

On oil, I think the Saudi point of view is, "Demand's going to go up, so we're not worried about the U.S. supplanting us." But there is the question—and obviously, the president was just in Saudi Arabia—what's going to be the interest of the U.S. in the region? What does it mean for the security of countries along the Persian Gulf that face Iran?
Among renewable sources of electricity, hydroelectric power is expected to remain predominant in 2040, though less so than now, with solar growing the fastest and wind registering the biggest gain in share of electricity generation.

**Projected global net renewable electricity generation by energy source in billions of kilowatt-hours**

- Hydroelectric: 83%
- Wind: 438%
- Geothermal: 233%
- Solar: 1229%
- Other: 158%

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