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DAVOS, SWITZERLAND — It is shaping up to be the Great Game of the 21st century. To top officials and business executives here at the World Economic Forum, Topic A this year was the race to develop greener, cleaner technology, which is emerging as one of the critical factors in reshaping the world economy as emerging powers snap at the heels of battered Western economies. With the United States and China sizing each other up across the Pacific and Europe seeking to maintain its economic stature, it is a battle for potentially millions of jobs and trillions of dollars in export revenues. The outcome — which pits a venture capital-driven market approach relying on government subsides against a top-down system of state capitalism — has the potential to influence how economic and political systems evolve. Concern that China may be edging ahead in potentially lucrative growth sectors like renewable energy was palpable here, where senior officials from the United States and Europe warned that the West could not afford to be complacent.

"Six months ago my biggest worry was that an emissions deal would make American business less competitive compared to China," said Senator Lindsay Graham, a Republican from South Carolina who has been deeply involved in climate change issues in Congress. "Now my concern is that every day that we delay trying to find a price for carbon is a day that China uses to dominate the green economy." He added: "China has made a long-term strategic decision and they are going gang-busters." Christine Lagarde, the French finance minister, agreed. "It's a race and whoever wins that race will dominate economic development," she said. "The emerging markets are well-placed."

The global economic downturn, which hit the aging developed world far harder than fast-growing emerging markets, has focused attention on the job-creating potential of green technology, seen by many here as the next industrial revolution. In the energy sector alone, the deployment of new technologies, like wind and solar power, has the potential to support 20 million jobs by 2030 and trillions of dollars in revenue, analysts estimate. Ms. Lagarde estimated that as many as 240,000 jobs could be added in France over the next few years, helping offset the 400,000 lost last year in the slump. While new energy sources will initially be more expensive than fossil fuels, politicians in the West, mindful of a stagnant or shrinking manufacturing base, are

hopeful that clean technology offers a way of rebuilding older industrial areas by creating a comprehensive green supply chain.

The quest for a new comparative advantage, economists say, is all the more urgent as the crisis has left the financial-services sector reeling — a sector that was long considered one of the last bastions of Western sophistication. From China's perspective, experts here said, climate change offers the opportunity to leapfrog Western competitors. "The low-carbon economy is the future," said David Li Daokui, a professor at the Center for China in the World Economy in Beijing.

But others cautioned against framing the development of alternative energy as a pure competition. If the United States and China "work together we can deal with almost all the major global crises," said Robert Hormats, the U.S. undersecretary of state for economic, energy and agricultural affairs. He stressed that success in clean technologies was not a "zero-sum game." But he agreed with those who see green technologies as important job generators. "Don't leave the jobs on the table — the Chinese get it," he said.

Moreover, the quest for sustainable energy and industrial processes is playing out against the backdrop of vastly different economic and political systems. In China, the government poured an estimated \$440 billion into clean energy last year. It is investing heavily in renewable energy and nuclear power. It also is pursuing efforts to make extraction of its vast coal reserves cleaner. Already home to one-third of the globe's solar-energy manufacturing capacity and 400 solar-energy companies, China is expected to surpass Spain this year as the No. 3 country in terms of wind power installations, behind Germany and the United States.

William Rhodes, senior vice chairman of Citigroup and board vice chairman of the National Committee on U.S.-China relations, predicted that Beijing's research into storing carbon emissions underground could soon lead to a major breakthrough. In the United States, meanwhile, President Barack Obama faces an uphill battle in Congress to pass politically-sensitive legislation aimed at capping carbon emissions. "China has the type of centralized industrial policy that we can't match and don't want in the United States or the European Union," said Fred Krupp, president of Environmental Defense, a U.S. advocacy group. "What we have to compete with China is the power of our marketplace. A clear and declining cap on carbon emissions will send the essential market signal to industry, and that will engage our market directly in this competition."

Mr. Krupp said it was Washington must make the next move since the Copenhagen climate talks last month failed to produce a binding global deal, because China may be in no rush to unleash America's renowned capability for innovation. That could prove disastrous not only to the environment, analysts said, but also to the economic prospects of today's advanced industrial nations. Said John Chipman, director of the International Institute for Strategic Studies in London: "Climate change has become a theater of geopolitical competition."

Adopted from Race is on to Develop Green, Clean Technology by Katrin Bennhold, New York Times (1/29/2010).

Questions:

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