FIRST CAPITAL FINANCIAL

WORLDSOURCE FINANCIAL MANAGEMENT INC.
Sponsoring Mutual Fund Dealer

As the world economy wakes back up, shortages and price spikes are affecting everything from the supply of Taiwanese chips to the cost of a French breakfast. One kind of bottleneck though deserves special attention: the supply-side problems, such as scarce metals and land constraints the threaten to slow the green energy boom. Far from being transitory, these bottlenecks risk becoming a recurring feature of the world economy for years to come, because the shift to cleaner energy is still in its infancy. Governments must respond and enact market-focussed legislation that will increase capacity, by encouraging more private sector investment. If they don't, governments stand little chance of keeping their promises to reach "net-zero" emissions.

"I cook everything with an alternative energy source, so it may take a while."

The sudden shift in how resources are allocated is causing stresses and strains as demand surges for raw material and a scramble occurs for the few projects with regulatory approval. The price of a basket of five minerals used in electric cars and power grids has soared over 100% in the past year. Timber mafias are roaming Ecuadorean forests to find balsa wood used in wind-turbine blades. In February a British auction of sea-bed rights for offshore wind farms brought in $12 billion, because energy firms rushed to get exposure whatever the cost. Market watchers fear that supply shortages over years could lead to higher inflation.

The figures for the coming decade are mind-concentrating. To stay on track for net zero, by 2030 annual production of electric vehicles needs to be ten times higher than it was last year and the number of roadside charging stations thirty one times more. Global mining firms will have to raise the annual production of critical mineral by 500 percent, and an estimated two percent of America's land mass will have to be blanketed in turbines and solar panels.

All of this will require vast amounts of investment: some $35 trillion over the next decade, *equivalent to a third of the global fund-management industry's assets today*. The system best equipped to deliver this is the network of cross-border supply chains and capital markets that has revolutionized the world since the 1990s. Yet even this system is under delivering, with energy investment running at about half the level required, and skewed towards a few rich countries and China.

The main reason for the investment shortfall is that it takes too long to get projects approved their expected risk and returns are still too opaque. Governments are making things worse by using climate policy as a vehicle for other political objectives. President Joe Biden's nascent green plan prioritizes union jobs and local manufacturers. This mix of blurred goals and soft protectionism hobbles the necessary investment. Governments must be more hardheaded and catalyze a bigger surge in private investment. This includes streamlining regulations and centralizing decision making, which invariably will be disappointing to local NIMBYs and conservationists. More, governments can help companies and investors deal with risks. They can provide certainty in some areas by guaranteeing minimum prices for power generation, and low-cost financing to help low-income consumers bear the higher costs of green energy.

Green bottlenecks are a sign that decarbonization is at last shifting from being a theoretical idea to a reality. The investment opportunities here are generational, and why sustainable energy plays an important role in our model portfolios. It is our position that aligning green energy priorities with investor priorities will combine to solve the supply-chain issues to the benefit of both the planet and investor's bottom lines.

Be safe, be well!

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