



By Robert Pollin

ECONOMIC PROSPECTS

Financing the Green Economy as an Answer to Casino Capitalism

THE CONVERGENCE OF A PROFOUND ECONOMIC CRISIS AND THE INAUGURATION OF Barack Obama as President has created both tremendous challenges and opportunities for progressives in the United States. Two of the overarching economic issues around which progressives will need to struggle are: first, how to build a clean energy economy, creating millions of good jobs in the process; and second, how to create a financial system focused on channeling money toward productive investment as opposed to destabilizing speculation.

In fact, the link between these matters becomes clear once we pose the simple question: how can we pay for the transition to a clean energy economy? Realistically, there is no way to construct a clean energy economy—driven by solar, wind, and geothermal power and biomass fuels, and operating at dramatically higher levels of energy efficiency—unless trillions of dollars are channeled into this project over the next 20 years.

Considered on an annual basis, it is reasonable to assume that a green investment program should be in the range of \$150 billion per year. This is roughly equal to 1 percent of the United States gross domestic product (GDP) or equal

to the current level of our spending on the Iraq war. A green investment program of this size would create about 2.5 million new jobs within the U.S. economy. But as long as Wall Street continues to squander trillions chasing speculative profits and generating financial bubbles—i.e. variations on the housing market, stock market, and emerging economy bubbles that we experienced just over the past decade alone—there will not be enough money available to adequately finance a clean energy transformation.

There are only two possible ways to finance a clean energy transition—public funding, with money coming from either the U.S. or individual

states' treasuries; or private funding, with money coming from private businesses and households. We often think about large-scale economic policy initiatives as necessarily being funded by the federal government. In fact, both public and private sources of funds will be needed to build a clean energy economy. But the key will be to ensure that private funds are channeled into green investments and away from fossil fuels.

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PUBLIC FUNDING

WITH PUBLIC FUNDING, THE TWO WAYS TO raise funds are through increasing revenues or taking money out of existing government programs. Government borrowing to finance green investments—i.e. deficit spending—is a perfectly viable strategy in the short term. Indeed, in the current economic slump, government deficit spending is the most effective approach to inject new spending into the economy, targeted at green investments and jobs. But beyond the short run, government borrowing must be repaid with interest.

This brings us back to the two basic funding sources, increasing revenues or transferring funds from existing programs. Both possibilities should be pursued. But as we will see, it will be difficult to find enough money—reaching to the \$150 billion per year level—from any

combination of public sources. A more realistic figure for public funding may be closer to about \$50 billion, i.e. one-third of the total needed.

In terms of increasing revenues, the most widely discussed proposal is the so-called cap-and-trade system that I discussed my last *New Labor Forum* column. This would set limits on total carbon emissions. Energy companies would receive permits from the government establishing how much fossil fuel energy they could produce. The government can raise money through a cap-and-trade system by selling the permits at an auction. This would enable only those companies paying top dollar to have the legal right to produce oil, natural gas, or coal.

The carbon permit auctioning system could be a major new source of revenue for the U.S. Treasury. Estimates range between \$75 and \$200 billion per year generated by a measure similar to that which Congress debated last year (before being killed by Senate Republicans).

However, setting limits on the production of oil, natural gas, and coal through the cap-and-trade system will also mean that energy companies will raise prices for consumers. The government could compensate consumers for the higher gas and coal prices by rebating the cap-and-trade revenues back to them. This would be an eminently fair use of the auction revenues. People working in the oil, gas, and coal industries would also have fair claims to significant adjustment support, after the cap-and-trade requirements forced these industries to contract. These demands on the cap-and-trade auction revenues would then deplete the public funds available to finance clean energy investments. The amount left over to finance green investments would almost certainly fall significantly below \$50 billion.

In terms of funds available from already existing spending areas, the military budget is the most obvious pot to raid. The military budget now amounts to about \$600 billion, of which Iraq alone accounts for \$150 billion. Ending the Iraq war and creating a peace dividend would be good politics, good economics, and good ethics. But it is not clear that it will be politically feasible under the Obama administration, especially as it appears committed to escalating military spending levels in Afghanistan and Pakistan.

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Even if it were politically viable to capture a \$150 billion peace dividend by ending the Iraq war, we cannot assume that all the newly available funds should be channeled into clean energy investments. Some significant share of any such funds would have to be devoted to financing universal national health insurance, education, poverty reduction, and non-energy-related infrastructure projects, including major upgrades of our stock of bridges and levees.

PRIVATE FUNDING

THE IDEA OF MOBILIZING PRIVATE CREDIT markets to support social objectives is hardly original. As one major example, the very idea of middle- and working-class families owning their own homes became a reality only during the New Deal, after the U.S. government created a highly subsidized

and regulated market for individual-family mortgages. As with the old housing finance system, a combination of regulations and subsidies—sticks and carrots—can provide a major source of funding to finance the clean energy transition. The stick would be asset-based reserve requirements, while loan guarantees would be the carrot. How would they operate in tandem?:

- *Asset-based reserve requirements.* These are regulations that require financial institutions to maintain a supply of cash as a reserve fund in proportion to other assets they hold in their portfolios. Such requirements can serve both to discourage financial market investors from holding an excessive amount of high-risk speculative assets, and as a cash cushion for the investors to draw upon when market downturns occur. The same policy instrument can also be used to push financial institutions to channel credit to projects that advance social welfare, such as those promoting green investments. Policy-makers could stipulate that, say, at least 5 percent of financial institutions' loan portfolios should be channeled to green investment projects. If the financial institutions fail to reach this 5 percent quota of loans for green investments, they would then be required to hold this same amount of their total assets in cash.

As of 2007, total borrowing by U.S. households and businesses was approximately \$2 trillion. This means that, if 5 percent of total borrowing were designated for green investments, that would amount to \$100 billion a year—an amount covering about two-thirds of the \$150 billion annual green investment program.

- *Loan guarantees.* The purpose of of-

fering loan guarantees would be to significantly lower the risks of borrowing for green investment projects. This would then also significantly lower the interest rates that borrowers would have to pay when they seek funds to finance green investments. The U.S. government is already committed to offering \$10 billion in loan guarantees for clean energy investments. Let's assume that the full \$100 billion of green investment loans stipulated by the asset reserve re-

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quirements also operated under the loan guarantee system.

Let's now also allow that the level of government guarantee is 75 percent of the total principal on these loans. Note, crucially, that under such an arrangement, private lenders would still face significant risk—i.e., on 25 percent of the credit they had extended—and would therefore have to evaluate investment proposals based on their potential for profitability.

How much would this loan guarantee program cost the government? As with any other insurance policy, the government's costs would be zero as long as borrowers do not default on their guaranteed loans. But of course some borrowers will default; the key question is how many. If we assume a default rate of 4 percent—roughly equal to the rate of the government's existing loan guarantee programs—the total payouts that the government would have to make would amount to about \$3 billion per year. This is less than 1 percent of total federal spending.

HOW IT HANGS TOGETHER

OVERALL, WE CAN ROUGHLY ENVISION THE financial requirements for the epoch-making project before us, of building a clean energy economy, and generating millions of good jobs in the process. Thinking of this as an annual investment project of about \$150 billion, a feasible financing breakdown would be about \$50 billion coming out of public funds, and the other \$100 billion coming from private investments.

The \$100 billion in heavily regulated and subsidized private lending would also represent one important step toward transforming our financial system—to raise the level of support for productive investment in the U.S., and to move Wall Street away from the casino logic that has been dominant for a generation. By itself, a subsidized and regulated private green investment segment of the U.S. financial market, operating at a level of about \$100 billion per year, will represent only a modest step toward stabilizing the overall \$2 trillion U.S. credit market, to say nothing of the additional sectors of the financial markets engaged in trading stocks, bonds, and derivative instruments. Nevertheless, establishing a well-functioning green investment sector can serve as both a reminder and an example: it will remind us of the positive investment opportunities being lost by allowing financial markets to operate without significant regulations; and as an example of the broader approach needed to restore the principle that the capital development of the U.S. economy can no longer be guided by the logic of the casino. ■