

The Mercury News

Now is the not the time to retreat from green tech

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I am as excited about the rise of the green-tech industry as the next Silicon Valley geek. Deploying our financial and engineering resources to address one of humanity's most pressing problems represents the valley's innovative spirit at its best.

But lately, this dynamic industry seems to be losing some steam. SunPower suffered a rough first quarter this year as the financial crisis crimped sales. At the same time, the venture capital industry beat a hasty retreat from investing in this sector, which had been the leading category of venture capital last year.

And with state and federal governments swimming in red ink, there are genuine concerns about whether taxpayers can be asked to fund the investments in research and tax credits that would all help kick-start the green-tech sector.

There are plenty of good moral and environmental arguments to be made about why now is not a time to retreat in supporting this industry. But given the state of the economy, perhaps the more compelling argument is the economic one, and at just at the right time, the Pew Charitable Trusts delivered an evenhanded report last week that examines in detail the impact on jobs this industry has had in just a short time.

"The Clean Energy Economy: Repowering Jobs, Businesses and Investments Across America," finds that from 1998 to 2007, this nascent industry accounted for 770,000 new jobs. While that may sound tiny in a U.S. economy with 140 million jobs, it already is more than the biotechnology sector (200,000) and gaining on employment in the traditional energy sector (1.27 million).

More important, for that decade, green-tech jobs grew by 9.1 percent, compared with only 3.7 percent for overall job growth. Granted, it's from a much lower base, but it's still an impressive start.

If anything, the Pew study is underestimating the impact. Pew created the study in partnership with **Collaborative Economics of Mountain View**. And they intentionally took an extremely conservative and thorough approach to documenting actual jobs.

That's a welcome approach, considering that job estimates for this industry have been prone to hype, especially from politicians looking to score easy points. Just last week I got an e-mail from Gov. Arnold Schwarzenegger's office touting a university study claiming that more aggressive clean-tech policies could create 500,000 new jobs in California. Actually, the study examines several different scenarios that could create a range of jobs from 14,000 and up, over the next 40 years. To get to the biggest number, you have to embrace some pretty aggressive assumptions and believe a lot of factors will fall into place.

But there's no need to overreach when examining the impact of this industry.

In this case, Pew and **Collaborative Economics** took a couple of smart steps in putting this study together. First, they decided to measure actual jobs by looking back, rather than creating some complicated models that make all sorts of assumptions going forward. And second, they measured only "direct jobs," meaning jobs that had a direct bearing on improving the environment, rather than lumping all sorts of secondary or "indirect" jobs that may or may not be having a positive impact on the environment.

For instance, they counted the job of someone who designs an energy-saving widget, but they don't necessarily count the jobs of people at companies who claim they are trying to be more green by installing that widget.

This may all seem a bit wonky, but I'd argue that putting together some reasonable numbers is more than just an academic curiosity. Such analysis matters because our governments and investors make all sorts of decisions based on them.

The Pew reports sums this up perfectly when it said: "Policymakers, business leaders and the public need credible, reliable data to ground their policy deliberations and choices, and to understand where emerging economic opportunities lie. They also need a clear, concrete and common definition of what constitutes the clean-energy economy so they can track jobs and businesses and gauge the effectiveness of public policy choices and investments."

Not surprisingly, there's widespread disagreement over what constitutes a green job. And Pew acknowledges: "There are no perfect data sets with which to count jobs or businesses in the clean-energy economy, and accurately counting this emerging economic activity is difficult."

The good news is that there's no need to oversell the impact of the green-tech industry on our economy. It's real. And most important, at a time when we need to critically examine every dollar we spend, it's clearly an investment worth making.