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Whatever the economic climate, clean energy grows

By **Michael Butler and Ted Bernhard** March 7, 2008

Like everyone else, we're running the numbers, searching for clues and looking for empirical evidence in an effort to understand which way the economy is headed.

We have high hopes for the emerging post-petroleum era, so we're especially focused on the impact a recession might have on the current revolution in sustainable industries.

But after conducting several analyses we believe The New Energy Economy will hold up reasonably well – even if the tide turns and a severe downturn washes over us.

Of course, the effect of a downturn on sustainable industries will depend on the type of recession.

A deep recession in the United States that drags the rest of the world into the economic doldrums will clearly have consequences. Slower growth in India, China and – to a lesser extent – Asia and Europe will meaningfully decrease the cost of oil. A significantly lower oil price will reduce some of the urgency to find alternative sources of fuel.

The Impact on Financial Markets

A deep recession in the U.S. would also likely shut the IPO window; exits for venture-capital-backed companies would also be fewer and at lower valuations. Historically, a slower exit environment has had a meaningful impact on the pace of venture-capital and private-equity investing.

In addition, a deep recession would affect the credit markets and significantly impact the pace of new infrastructure projects because project finance debt would be very difficult to obtain. One possible exception: waste-to-energy transactions where the input is trash, long-term contracts for the input are in place, and the technology employed is already proven in the marketplace.

Bio-diesel and ethanol projects will also have a hard time in a deep recession, largely because of uncertain end-user demand; material science deals involving new technology that's years away from commercialization probably won't make the cut either.

If there's a deep recession, investors will look for sustainable industry companies that are capital efficient and have a short timeline to positive cash flow status. Companies that focus on efficiencies and have software solutions that produce attractive ROIs for customers should also continue to attract investment capital. And efficiencies applied to the building sector should remain as a sweet spot.

An Extended Period of Prosperity

The good news is that the setback will be temporary – even if there's a deep recession that slows sustainable industries. We believe that there is a 20-30 year secular uptrend waiting for renewable energy enterprises on the other side of the downturn.

A recession triggered, in part, by higher oil or fossil fuel prices will actually help sustainable industries for a variety of counter-cyclical reasons.

First, higher energy prices will highlight the excessive cost of our fossil-fuel dependency; as a result, companies will begin searching for ways to manage these costs and the accompanying volatility risks. This will mean hiring people for new positions in clean technology or even setting up new divisions focused on sustainable energy.

For their part, investors will finally come to terms with the fact that there is a fundamental long-term problem in the energy sector; we believe they will step up by investing in new technologies, start-ups and early-stage companies that solve some of these problems. This will create more jobs in well-capitalized clean technology companies.

Rising Energy Costs Stimulate Innovation

Third, a number of companies that were not economically viable at cheap oil or energy prices will quickly become economically viable. A wide variety of transportation innovations on the fuel side or the vehicle side, for example, will become cost competitive versus traditional products. This will lead to expanded sales and new hiring for those companies. The same pattern will take place in green building / energy efficiency.

Recessions traditionally signal economic transition, and although they frequently cause financial dislocation, they also usually lead to a new clarity of thinking.

If a downturn strikes this time, we believe consumers, companies and communities will realize that sustainable solutions are, in many cases, far more cost effective; they'll also see the job-creating potential of renewable energy; and in the end, the vast promise and sweeping potential of The New Energy Economy will become apparent to one and all.