OBAMA COMES TO MI TO CELEBRATE KOREAN TECHNOLOGY

Let me start by saying I'm thrilled the Obama Administration has focused stimulus and energy efficiency funds to support a number of new battery plants in and around Michigan. For all my complaints about the Obama Administration, it has used the auto bailout as an opportunity to support new technology for the auto industry. But I think Obama's upcoming visit to Holland, MI (Crazy Pete's hometown in West Michigan) to attend the ground-breaking of a new LG Chem-Compact Power battery factory offers a bittersweet lesson.

> South Korea-based LG Chem is building the \$300-million, 650,000-square-foot battery plant in Holland that is set to start operating in 2012. LG Chem and its Troy-based subsidiary Compact Power are behind the battery system to power the Chevrolet Volt, the nation's first massmarket extended range plug-in electric vehicle, which will launch later this year.

LG Chem has received \$151.4 million in grants from the Department of Energy for its Holland plant.

The factory, which will be able to make 15 million to 20 million battery cells a year, is one of at least five battery plants built in Michigan. Johnson Controls, through its joint venture with French battery company Saft, also is converting one of its existing factories in Holland into a lithium-ion battery plant.

No details were immediately released about the timing of the event and whether it will be open to the public. The government has distributed more than \$2 billion in grant money to advanced battery manufacturing to create a base for high-tech battery making in the United States.

Today, most of the world's advanced batteries come from Korea, Japan and China.

Last month, the groundbreaking of Dow Kokam's advanced battery plant in Midland attracted Vice President Joe Biden.

The preliminary coverage of the event has noted how unusual it is for a President to attend the groundbreaking for what is effectively a foreign firm. (h/t Leen) Yet no one-at least as far as I've seen-has faulted the White House decision to attend. That's because, here in MI, we're desperate for the jobs. And even those outside of MI point to battery technology as one of the many technologies in which the US lags-at its great cost.

There's even a big benefit to the auto industry: in my meetings with GM on the Volt, they told me they'll save \$200 per car in battery shipping costs once they can source locally. It's one of the places GM anticipates beginning, over time, to bring production costs down so the Volt and related follow-on cars will one day be profitable.

But the opening of these battery factories in the US should be read in tandem with this excellent article from Intel founder Andy Grove.

Grove's article focuses on our inability to scale new technologies.

Clearly, the great Silicon Valley innovation machine hasn't been creating many jobs of late – unless you are counting Asia, where American technology companies have been adding jobs like mad for years. The underlying problem isn't simply lower Asian costs. It's our own misplaced faith in the power of startups to create U.S. jobs. Americans love the idea of the guys in the garage inventing something that changes the world. New York Times columnist Thomas L. Friedman recently encapsulated this view in a piece called "Start-Ups, Not Bailouts." His argument: Let tired old companies that do commodity manufacturing die if they have to. If Washington really wants to create jobs, he wrote, it should back startups.

Mythical Moment

Friedman is wrong. Startups are a wonderful thing, but they cannot by themselves increase tech employment. Equally important is what comes after that mythical moment of creation in the garage, as technology goes from prototype to mass production. This is the phase where companies scale up. They work out design details, figure out how to make things affordably, build factories, and hire people by the thousands. Scaling is hard work but necessary to make innovation matter.

The scaling process is no longer happening in the U.S. And as long as that's the case, plowing capital into young companies that build their factories elsewhere will continue to yield a bad return in terms of American jobs.

Grove uses advanced battery technology as one example to show the problem with shipping all US manufacturing overseas because it no longer invests in scaling up new technologies. When we shipped our electronics production overseas, we shipped with it the evolving technology tied to it, which eventually included the all-important battery technology. With some technologies, both scaling and innovation take place overseas. Such is the case with advanced batteries. It has taken years and many false starts, but finally we are about to witness massproduced electric cars and trucks. They all rely on lithium-ion batteries. What microprocessors are to computing, batteries are to electric vehicles. Unlike with microprocessors, the U.S. share of lithium-ion battery production is tiny.

That's a problem. A new industry needs an effective ecosystem in which technology knowhow accumulates, experience builds on experience, and close relationships develop between supplier and customer. The U.S. lost its lead in batteries 30 years ago when it stopped making consumer-electronics devices. Whoever made batteries then gained the exposure and relationships needed to learn to supply batteries for the more demanding laptop PC market, and after that, for the even more demanding automobile market. U.S. companies didn't participate in the first phase and consequently weren't in the running for all that followed. I doubt they will ever catch up.

So here we are today (or more accurately, Thursday) with the President celebrating the opening of a new factory—almost entirely subsidized by the state and federal government—owned by a foreign company.

Mind you, given both the employment and technological urgency, I'm not complaining. Inviting foreign companies and their superior technology into the country is how China has fast-tracked its auto industry, for example.

But I'm also aware that we need to be doing this proactively, not just reactively. And we need to invest in other technologies. I'm acutely aware

that the plan Obama has laid out for Gulf recovery includes neither an industry to replace fishing (or drilling) until the Gulf recovers, nor a ready app like battery technology that the government can use as a hook for investment. I'm also aware that NV-which passed MI in unemployment rate for the first time last month-not only has no such industry (frankly, NV probably still is tops in the world in excessive tourism), but no one is even talking about looking for such an investment!

We're finally doing what we need to do to play catch up in one of our base industries. At the same time, we need to be thinking of how to use government investment to help NV and the Gulf and—at the same time—restore American competitiveness.