

# TAKING THE NANOPULSE

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## **The nano-economy: time to reap the rewards**

**20+ years of planting seeds. Now a bumper crop of jobs is ready.**

BY SCOTT E. RICKERT

In a recent speech I made to business leaders in Boston, I explained that perched atop 26 years of experiences I've stacked up in nanobusiness, I have a pretty good view to the horizon. You know what I see? Decades of investment by government and the private sector have grown into a field of economic opportunity, now ripe with good jobs.

Better yet, I see the harvesting equipment has just been delivered: the Advanced Manufacturing Partnership. It's a new public-private consortium charged with investing more than \$500 million in nanotechnology and other emerging technologies. The goal? Convert scientific knowledge to factory floor output – and high quality jobs – faster.

Business builders like Dow, Ford, and Proctor and Gamble have come to the table with MIT, Stanford and other universities, to join with the National Economic Council, Office of Science and Technology Policy and the President's Council of Advisors on Science and Technology.

The group's scope is wide, but three goals apply directly to nano-commercialization:

- Reducing the time to make advanced materials for manufacturing.
- Developing new technologies to get manufactured goods designed, built, tested and to market faster.
- Creating an infrastructure and shared facilities that open up opportunities for small and mid-sized innovators.

Best of all, the talk is being backed up with serious investments, including:

- \$300 million in domestic manufacturing in critical national security industries. That includes high-efficiency batteries and advanced composites – where nanotech leads.
- \$100 million for the research, training and infrastructure to develop and commercialize advanced materials at twice the speed and a greatly reduced price.
- \$12 million from the Commerce Department for an advanced manufacturing technology consortium charged with streamlining new product commercialization.
- \$24 million from the Defense Department for advances in weaponry and programs to reduce development timetables that

enable entrepreneurs get into the game.

- \$12 million for consortia to tackle common technological barriers to new product development – the way earlier partnerships approached nanoelectronics.
- A group of the nation's top engineering schools will collaborate to accelerate the lab-to-factory timetable with AMP connecting them to manufacturers.

The result? The brightest scientific minds and hardest working entrepreneurs on the planet have brought us fresh jobs, ripe for the picking. Already, the U.S. accounts for around 35% of the global nanotechnology markets, estimated at \$1.6 trillion during 2009-2013, according to a report by Research and Markets. With AMP, that growth can continue.

As the Partnership takes shape, I'd like to add my two cents in advice for organizers: keep AMP a partnership, not a handout. In the toughest economy in 80 years, organizations are appreciative of government stimulus. But I have a deep concern that we can easily become addicted to it and start building business models to earn grants, not profits.

The truest judges of business are people with their own resources at risk – private sector investors and businesses. I know it can be a ruthless, but keeping the focus on the private sector is the best way to weed out the bad ideas and fertilize the strong. If our officials set their sights on simply providing a little more sunlight to all small and medium-size enterprises, the best nanotechnology companies will rise on their own.

What's your take? How could AMP help your product development? Your growth? America's economy? Let me know at [nanotech@industryweek.com](mailto:nanotech@industryweek.com).

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