

MANUFACTURING & TECHNOLOGY NEWS

COVERING INNOVATION, GLOBALIZATION AND INDUSTRIAL COMPETITIVENESS

PUBLISHERS & PRODUCERS, P.O. BOX 36, ANNANDALE, VA 22003

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Friday, September 28, 2007

Volume 14, No. 17

Technology Administration Goes 'Poof'

The Commerce Department's Technology Administration, which bills itself on its Web site as being "the only Federal agency working to maximize technology's contribution to America's economic growth," has quietly shut down. The political appointee who was in charge departed as of Oct. 1, and the last five remaining employees are scrambling to figure out what to do with themselves, along with all of the agency's old reports, files and even its Web site: www.technology.gov.

TA, which was created during the competitiveness crisis in the late 1980s, has been led by some of the nation's most articulate and successful technologists, including Dr. Mary Good, who is past president of the American Chemical Society and created the Alliance for Science and Technology Research in America.

But the agency stagnated during the latter part of the Clinton administration, becoming a political dumping ground for inept appointees. When George W. Bush became president, both Republican controlled houses of Congress tried to kill the agency. Bush asked Congress to eliminate the agency in his last two budget requests, and Congress finally obliged.

The agency died "largely because of

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'Made In America' Show Host Wants Manufacturing To Be On Political Agenda

The recently created Alliance for American Manufacturing (AAM) has hired the country's leading manufacturing celebrity and is taking him on the road to sell the importance of manufacturing to voters in the early presidential primary states. **John Ratzenberger**, host of the Travel Channel show "Made In America," and famous for his role as Cliff Clavin in "Cheers," led a town hall meeting in Manchester, N.H., on Sept. 25 on the issue. He will follow that with similar events over the coming months in Iowa, Ohio, Pennsylvania, New York, Chicago and South Carolina.

The 75-minute event in Manchester "was terrific," says Scott Paul, executive director of AAM, a partnership between the United Steelworkers and the management of the companies for which they work. "It was a great start. It was a full crowd and it garnered a lot of press including a story in the Union Leader the next day that was terrific."

AAM publicized the event through the local steelworkers union, the state AFL/CIO, local business networks, presidential campaigns and student groups. It ran a full-page ad in the Union Leader and Ratzenberger conducted radio and television interviews prior to the event.

The idea is to get people to start asking the presidential candidates what they plan to do to make manufacturing in America a competitive pursuit. Among those in attendance were staff of the presidential campaigns, local state representatives and senators and city mayors.

"I had a number of people who came up to me afterwards who were so emotional saying, 'I have been waiting for so long for something like this,'" says Paul. "They were thrilled and honored to

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India To Compete With China For Mfg. Plants

India will challenge China as a global leader in manufacturing within the next three to five years, according to a survey of 340 of the world's largest manufacturing companies done by Capgemini.

"Some of the main manufacturing locations in China are becoming too expensive relative to other countries in the world, which includes India," says the survey. "While 43 percent of the companies that offshored manufacturing activities to India have not achieved their initial objectives, the main barrier to success has been a lack of manufacturing and supply chain infrastructure."

If the Indian government makes significant investments in its infrastructure "it will soon become the destination of choice for manufacturing worldwide," says Roy Lenders, vice president for consulting services at Capgemini.

The surge of manufacturing in the eastern part of China has led to rising wages and real estate costs. Wages are now about double the average wage in neighboring countries. "Moving to other parts of China may not be a solution as a lack of infrastructure would mean a significant rise in transport costs," says Capgemini, which had sales last year of 7.7 billion euro, has 80,000 employees and specializes in outsourcing.

India should be able to capitalize on its experience in providing outsourcing services to many large multinational companies looking for cheap manufacturing locations, and it has a more open policy with regard to market entry than does China.

For now, companies that have outsourced manufacturing operations are more pleased with their choice of China than India. Eighty-three percent of the companies that offshored activities to China have achieved or outperformed their expected benefits, as compared to 69 percent for India, the Capgemini survey found. "However, this varies widely depending on the activity. In India, 67 percent of companies have outperformed their expected benefit for IT offshoring, while less than half have not achieved their benefit for manufacturing offshoring. In contrast, about 90 percent of executives indicated that they have achieved the expected or better-than-expected benefits in China for manufacturing offshoring activities."

China's Furniture Industry Is Booming

China's furniture industry is booming, with exports reaching \$17.4 billion last year, making China the world's largest exporter of furniture, according to the China Building Decoration Association and reported by the Xinhau press agency. Exports of furniture are projected to increase to \$48 billion by 2010. "The mushrooming furniture industry has also driven expansion of the woodworking machinery industry," says Xinhau.

Green Investors Want Companies To Disclose Pollution Liabilities

A coalition of 22 groups including institutional investors, state officials with fiscal management responsibilities and environmental groups have filed a "landmark" petition asking that the Securities and Exchange Commission require publicly-traded companies to fully disclose financial risks from climate change. The institutional investors involved in the petition manage more than \$1.5 trillion in assets and include state treasurers and CFOs from California, Florida, Maine, New York, North Carolina and Oregon.

"The SEC needs to do more to protect investors from the risks companies face from climate change, whether from direct physical impacts or new regulations," said Mindy Lubber, president of Ceres, a coalition of investors, environmental and public interest groups. "Shareholders deserve to know if their portfolio companies are well positioned to manage climate risks or whether they face potential exposure."

Climate change can affect corporate performance in ways ranging from physical damage to facilities and increased costs of regulatory compliance, to opportunities in global markets for climate-friendly products or services that emit little or no pollution. "Those risks fall squarely into the category of material information that companies must disclose under existing law to give shareholders a full and fair picture of corporate performance and operations," says the petition.

"Despite a groundswell of demand from investors for more information in climate risks, corporate disclosure has been scant and inconsistent," says the coalition. "Exxon Mobil Corp. included only one cursory reference to climate change in its entire 2006 annual filing with the SEC. Allstate Corp., which insures one in eight homes in the U.S. and reported over \$4 billion in losses from Hurricanes Katrina and Rita, did not mention climate change at all in its latest annual filing. Full disclosure by Texas utility TXU on its potential exposure from climate change-related risks would have revealed the extensive financial exposure resulting from the company's proposal to build 11 new coal-fired power plants without limitations on the extensive global warming pollution. TXU's business plan would have increased carbon dioxide emissions 78 million tons annually, and invested considerable capital in long-term high-polluting resources. Investors are entitled to a rigorous assessment of regulatory and financial risks related to climate change so they can evaluate which business plans are reckless and which are prudent in managing these risks."

To view the petition and 22 petitioners, go to <http://www.ceres.org/pub/docs/Full%20Petition.pdf>.

Government Pricing Will Determine Future Of Carbon Sequestration

The sequestration of carbon emitted from electric generating plants and industrial facilities depends on the amount that it will cost to pollute carbon dioxide, according to the Congressional Budget Office. Using technology to capture carbon is still in its infancy but could be used throughout the country depending on the price of CO₂. At \$15 to \$90 per metric ton, there would be enough economic incentive to substantially reduce carbon emissions, with the higher the cost, the greater the potential for reduction.

The United States produces one-quarter of the 32 billion metric tons of carbon dioxide released into the atmosphere every year by humans. Total capacity for underground storage of CO₂ in the United States is estimated at between 1.2 trillion and 3.6 trillion metric tons, says CBO. "Thus, the United States has the technological potential to offset roughly...a few hundred years' worth of emissions through carbon dioxide capture and storage."

If the price of carbon is high enough, it will also spur the development of different land-use practices such as re-forestation and no-till agriculture. "Biological" sequestration has the potential to sequester about 40 billion to 60 billion metric tons of CO₂ in the United States over the next 50 years, says CBO.

The use of carbon sequestration on a scale that could help reduce the atmospheric concentration of greenhouse gases "is still experimental and is likely to be fairly expensive," says CBO. "Nevertheless, carbon dioxide capture and storage (CCS) appears to have the technological potential to store very large quantities of CO₂ relatively securely."

The costs of sequestering carbon dioxide are not easy to predict, ranging from \$15 to \$70 per metric ton, depending on the type of power plant and its proximity to a storage site.

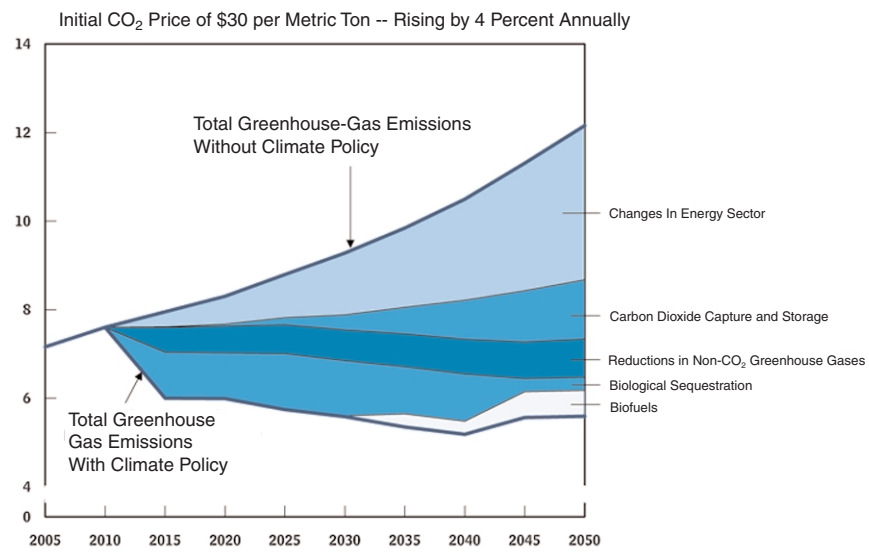
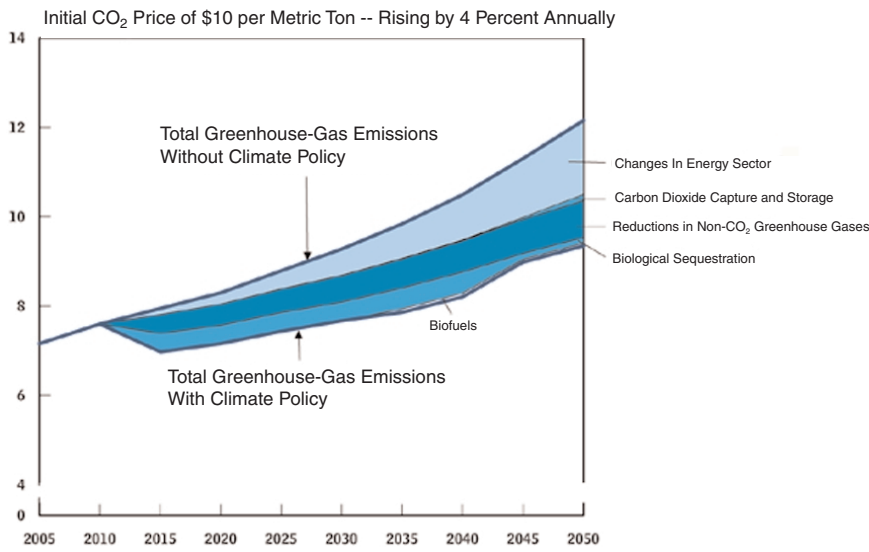
"Estimates of the incremental costs

of carbon dioxide capture and storage for integrated gasification combined cycle (IGCC) plants, when using non-revenue-generating geologic storage sites, range from about \$15 to \$50 per metric ton," says the CBO. "When those plants can take advantage of opportunities for enhanced oil or methane recovery, the range of costs declines to between -\$5 per metric ton (meaning that CCS would save a plant money) and \$30 per metric

ton." Costs for capturing CO₂ from natural gas combined cycle or pulverized coal plants would be higher, from between \$40 to \$90 per metric ton with non-revenue-generating storage, and about \$20 to \$70 per metric ton with enhanced oil or methane recovery. "In the end, the additional cost of carbon dioxide capture and storage

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Reduction of Annual U.S. Greenhouse-Gas Emissions Associated With Different Mitigation Strategies and CO₂ Prices



Ratzenberger... (From page one)

be part of it and to have their work in manufacturing valued in a way that they had never seen before.”

AAM has been keeping track of the issue as it relates to the presidential campaign through news searches and by watching all of the debates. The candidates have not been talking much about it. “What we find is that when the candidates do talk about it, they get an incredible reception with it,” says Paul. “What we’re trying to do is spur a competition of ideas on manufacturing and what needs to be done.”

The group does not want to undervalue the importance of labor and environmental provisions in trade agreements, product safety issues raised by outsourcing production to China or China’s cheating on its currency. Instead, it wants candidates to look at the issue from a broader context — “that it’s critical to our economy to make dramatic changes in our policies now and for them to be aware of the impact that their economic, trade, tax, energy and environmental

policies will have on manufacturing,” says Paul. “They need to filter them through that context.”

AAM handed out buttons that read “Keep It Made In America” along with a card that had three questions for people to ask the presidential candidates:

- As president, how will you save American manufacturing jobs?
- What specific policies will you support to strengthen the American manufacturing base, which is vital to our economic and national security?
- What steps will you take to enforce our trade laws and hold cheating countries like China accountable?

Ratzenberger was receptive to AAM’s invitation to lead the charge. He said he liked the idea of labor and management working together in a group like AAM, and that the message needed to get out. He immediately signed up for the assignment.

Ratzenberger has toured dozens of manufacturing plants in America. He spoke with *Manufacturing & Technology News* editor Richard McCormack about his involvement in the campaign and what he’s learned from doing his show. Here’s what he had to say.

Q: When you travel around the country doing segments for your show, do you meet many people concerned about the state of manufacturing in the United States?

Ratzenberger: Absolutely. Even if I’m out and about in a shopping mall people are coming up and thanking me for doing my “Made in America” show. I think it is my job to build an awareness that we don’t live in a vacuum — that producing things isn’t done by magic.

Q: When you talk to manufacturers, do you get the sense from them that the United States is on the brink of losing its industrial base, and is there concern?

Ratzenberger: It’s not just losing our industry, but the whole kit and caboodle. We have six to 10 years to re-institute shop courses and teach kids a work ethic. We’ve taken that away from kids. Sociologists call this generation of parents helicopter parents because they’re always hovering. They’re not letting kids go outside and play. It’s part of childhood to fall out of a tree and break your arm.

Q: How did you come upon manufacturing as a cause?

Ratzenberger: It’s part of my DNA. I was born and grew up in Bridgeport, Conn., which was a premier factory town. It was the jewel in the crown of the industrial Northeast. During the war it was called the Arsenal of Democracy. Everyone I knew worked in a factory — all my family — and they were really proud of it. Then I went off into my world and traveled around and saw pictures of factory workers or skilled artisans on TV shows or in movies and they’re made to look like idiots, as though the real heroes of the civilization are actors or rock stars or sports celebrities. That’s not the case. Somebody has to build the basketball court. Bruce Springsteen knows that somebody has to build his guitar. Those are the real heroes. So this is not a

Johnny-come-lately thing: this is in my DNA.

Q: Why is your concern making you get politically active?

Ratzenberger: The town hall meetings are aimed at getting this on the presidential candidates’ radar: to have people start asking them these questions because they’re talking about everything else. Interesting enough, every time you read the paper, whether it’s Hillary talking about health care or Rudy talking about national security, it all comes back to manufacturing and jobs and getting kids involved at an earlier age. Getting the kids outside is the answer because they get into tinkering and inventing and fixing their own bicycles or building a tree house, and they can show off their broken arm and brag about it.

Q: Do you think Americans understand the link between the poor health of our industrial base and our bridges falling down, or the fact that there are 46 million people without health insurance or that the Social Security system could go bust?

Ratzenberger: We’re going to talk about our infrastructure in the Town Hall meetings. It’s just a theory of mine, but 20 years ago if you had a good master welder or somebody who actually worked in the steel industry go and looked at the underside of the [Minneapolis] bridge, they would have said, “You know, this bridge should be shut down.”

But now you have engineers and city workers who have no hands-on experience, who are going to charts and computers and saying, “Well according to the computer, this should last another 50 years.”

A skilled craftsman could glance at it and say this bridge is going to fall apart, you have to shut this bridge down. We’re still living on the infrastructure built by those guys and it’s 50 years old.

(Continued on next page)

Ratzenberger... (From page four)

Q: The largest public works project on the East Coast of the United States is the Rt. 95 bridge over the Potomac River between Virginia and Maryland. One bridge: that's it. What do you want the presidential candidates to do other than talk about this issue?

Ratzenberger: Enforce the trade laws that are already in place that they're not enforcing, and put tariffs on Chinese goods. If it's world trade and a free marketplace, then have their stuff priced right around where our stuff is priced. And then people will buy based on quality. Do you want a crib built by people in America who understand that kids and grandkids are going to be sleeping in that crib or by a bunch of workers who are making 12 cents an hour and could care less about your kid?

Q: The economists in Washington hear the tariff word and go ballistic: you're going to cause a major worldwide depression and you're a protectionist.

Ratzenberger: Protectionist is not a bad word. You have a family with a couple of kids running around — you protect your family. You love the kids on the street and you think the world of the other families and you think they're great people. But I'm not going to sacrifice my own children because it benefits somebody else on the street. I protect my family. We protect our neighborhood. Our neighborhoods protect our cities. On and on, stretch that out: we should protect our country.

Q: As a reporter in Washington, D.C., listening to politicians, they're having a tough time getting anything done on the issue.

Ratzenberger: Where's the money coming from? They don't want tariffs on the goods coming in. The companies are making money and they're supporting the presidential candidates. Of course they're not going to do anything. They're going to sell us down the river.

Q: You have traveled the whole United States putting a camera in dozens and dozens of manufacturing operations. What stands out?

Ratzenberger: The one thing that is very impressive is that it is usually companies that are run by the owner/founders or the direct descendents of the man who founded the company — they are the ones who get it. They get that they are part of the community and they get the fact that they need to make all of their parts right in their own foundries. And they do. That's what keeps them strong and keeps their communities intact because these people are forward thinking. They are not at the behest of the stockholders or the holding company out of New York or Chicago telling them what to do. They show up to work every day. They know the name of everybody in their factory, and they're strong. They are making great products.

If shipping from China stops like it will one day, they won't go bankrupt; they won't go under. They are the people we turn to and ask, "How do you do what you're doing?" And they'll say: "Make everything yourself or

have all American vendors."

Even the flak jackets that our soldiers wear aren't being made by Americans. We're not making the armor plating, our steel industry isn't making it.

Q: Going to these town hall meetings puts you on a busy schedule.

Ratzenberger: Yeah, but it's worth it. You know, I think it's like the town crier when he comes out and says, "All is well." Well, I'm out there saying, "Folks, we have a problem." And if nobody listens, then at the end of the day I'll say okay. I know the good fishing spots. I tried to warn you. I did what I could.

Q: Are people listening?

Ratzenberger: Oh, yeah. People are starting to realize that it's America that makes the quality products. Things you can rely on and that aren't going to fall apart and injure your kids.



Ratzenberger: "If nobody listens, then at the end of the day I'll say okay. I know the good fishing spots."

Sequestration... (From page three)

will depend on the types of plants that would be built in the absence of limits on CO₂ emissions, which would vary with the relative cost of producing electricity at different types of plants at different points in time," says the CBO.

If the price of CO₂ began at \$30 per metric ton, capture and storage would "enter the strategy mix within a decade," says CBO. "By 2050, it would account for more than 20 percent of annual greenhouse-gas reductions — second only to other energy sector mitigation activities, which would contribute about 50 percent of annual reductions."

Carbon sequestration alone will not solve the problem of global warming, and "considering any one strategy in isolation is likely to overstate its potential contribution," says CBO. "Examining mitigation strategies as a group highlights the fact that their collective potential alters their relative importance. Ultimately, society can achieve more at a lower cost with a wider mix of approaches — taking advantage of the least costly options early on and, when those are exhausted, exploiting more expensive options as CO₂ prices rise."

The report "The Potential for Carbon Sequestration in the United States" (Pub. No. 2931) is located at www.cbo.gov.

NEW PLANTS OPENING AND OLD PLANTS

NEW PLANTS IN THE UNITED STATES

Evergreen Solar has started construction of a \$165-million solar manufacturing plant in Devens, Mass. The plant will increase the company's production of solar panels in Massachusetts to 75 megawatts and its employment in the state to more than 600. The company currently has a prototype production plant in Marlboro, Mass. Evergreen, which sold \$100 million in solar products last year, has received \$23 million in grants from the state of Massachusetts to build its plant on state-owned property in Devens. It also received up to \$17.5 million in low-interest loans along with a 30-year lease on the property in Devens. The plant should start shipping solar panels by the third quarter of 2008 and reach full production by early 2009.

UltraCell Corp. of Livermore, Calif., a developer of formed methanol fuel cells for mobile power applications, has announced plans to open a manufacturing plant in Dayton, Ohio. UltraCell, which has an exclusive license with Lawrence Livermore National Lab, is the first U.S.-based fuel cell company to open its own manufacturing plant in the United States, says the company. Organizations involved in bringing UltraCell to its 20,000-square-foot plant in Dayton include the Dayton Regional Development Coalition; the Entrepreneur Center, a business incubator; the Edison Material Technology Center; the Third Frontier Project, a ten-year, \$1.6-billion initiative to expand Ohio's high-tech research capabilities; the Edison Welding Institute; the University of Dayton Research Institute; Battelle Memorial Institute; and the Ohio Fuel Cell Initiative, a \$103-million program aimed at creating jobs in the sector.

Sanofi Pasteur has opened a new 140,000-square-foot influenza vaccine manufacturing facility in Monroe County, Penn. The facility will create 100 jobs and cost \$150 million. The Pennsylvania Financing Authority provided a \$5-million "PennWorks" grant to the Pocono Township to make sewer improvements at the site.

NEW PLANTS IN CHINA

AU Optronics Corp. of Taiwan has opened a 250,000-square-meter manufacturing plant in Xiamen, South China, to make LCD modules for fast-growing companies in the Xiamen Special Economic Zone. The plant will have an estimated production capacity of 500,000 units per month for large-sized LCD modules and 5,000,000 units per month for small-and -medium sized LCD modules. The company currently has 3,500 employees in Xiamen. AU Optronics Corp. is one of the world's largest manufacturers of large-size thin film transistor liquid crystal display panels with approximately 20 percent of global market share and revenues of \$9 billion in 2006.

Chinese company **LDK Solar**, a maker of multicrystalline solar wafers, has broken ground on a new polysilicon manufacturing plant in Xinyu City, China. The company's new plant will put it on a trajectory of producing 6,000 metric tons of polysilicon by the end of 2008 and 15,000 metric tons by the end of 2009. The plant is located near company headquarters and is adjacent to its solar wafer manufacturing facility. Production of polysilicon will enable the company to become "the largest and lowest cost wafer producer in the solar industry," says company CEO Xiaofeng Peng.

Netlist Inc., a Calif.-based designer of memory subsystems for computing and communications, has started production at a new manufacturing facility in Suzhou, China, the company's first overseas manufacturing plant. The 40,000-square-foot facility located in the "export processing zone" in the Suzhou Industrial Park will initially employ 75 people. It was designed for test operations related to Netlist's memory products. Victor Koo, a former executive of Solectron Corp. has been named to lead Netlist's China operation as general manager.

Rakon, a manufacturer of high-performance quartz and crystal components, has announced plans to build a new manufacturing facility in southern China. The Auckland, New Zealand-based company says Asia represents its largest market, with 65 percent of revenue, and that its time to have a production presence there in order to "maintain competitive costs and geographically position ourselves right on the doorstep of what is a massive market," says the company.

Ford Motor Co. has opened its second assembly plant in China. The facility in Nanjing will have an initial annual production capacity of 160,000 vehicles, and is a joint venture between Mazda and Chinese state-owned Changan Automobile Group. The plant boosts Ford's total auto production capability in China to 410,000 vehicles per year. So far this year, China has exported more than 500,000 vehicles, up by 70 percent over the same period in 2006.

Siemens AG has opened a new transducer manufacturing plant in Dalian, China, according to the Xinhua news agency. The plant will produce transducers to be used in petrochemical, power, paper-making and food industries in China, and for export markets. Siemens has set up 70 joint ventures in China employing over 43,000 people, according to Xinhua.

NEW PLANTS IN VIETNAM, SINGAPORE

General Electric has announced plans to build a \$50-million manufacturing plant in Vietnam to produce equipment for its power generation division. The factory will employ more than 400 people and will be located

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New & Old Plants... (From page six)

near Vietnam's third largest city, Hai Phong. "The components produced in Vietnam will be sent to the company's manufacturing and service facilities around the globe for use in finished products," says GE Energy. GE was attracted to the city because of the availability of skilled workers and "strong support from the national and local governments mak[ing] Vietnam a very attractive choice for our new manufacturing center," said Lawrence Blystone, vice president of supply chain for GE Energy. The plant will be located near the Hai Phong seaport, "which offers excellent logistics potential for our new factory," said Kovit Kantapasara, GE Energy's country executive for Vietnam.

FormFactor Inc., a Livermore, Calif.-based maker of semiconductor chip testing equipment, has announced plans to spend \$200 million expanding its Singapore manufacturing operations. The facility will eventually employ more than 1,000 people. The company will build a 300,000-square-foot factory to expand its wafer probe card manufacturing capacity and improve its customer service and support operations in Taiwan, Korea and Japan.

NEW PLANTS IN INDIA, SRI LANKA

Dell has started production of its new computer assembly line in Sriperumbudur, near Chennai, India. The company's first Indian-made computer was sold to Infosys Technologies, one of Dell's largest customers in India. The Sriperumbudur facility now has a single assembly line with a capacity of 400,000 units per year on a single shift basis. The company has enough land at the site to ramp up production to 2.5 million units per year. Dell hopes the plant will help increase its share of the Indian market, which stands at 6 percent. The Sriperumbudur facility is Dell's third manufacturing plant in the Asia-Pacific region and is the company's third plant to go on stream this year, with one in Brazil and another in Poland. The company built the Indian plant in eight months.

India is getting ready to release a "Special Incentive Package Scheme" to attract **semiconductor manufacturing companies**. "Already scores of companies including SemIndia and Hindustan Semiconductor Manufacturing Corporation (HSMC) have announced their plans to set up chip-making units in the country," according to the "Hindu Business Line" publication in India. HSMC has teamed up with Infineon Technologies to license technology and build a \$4-billion fab. SemIndia has announced plans for a \$3-billion wafer plant in India to make chips using technology licensed from Advanced Micro Devices. Moser Baer has announced plans to establish a \$250-million thin-film solar fab in the Noida special export zone. California-based Signet Solar says it will invest \$2 billion to manufacture solar photovoltaic modules in India. Reliance Industries is considering investing \$6 billion over five years in semiconductor manufacturing

facilities in India to make chips for mobile phones, computers, and liquid crystal displays and PV cells.

Sanden Vikas, an India-based maker of automobile air conditioners, has announced plans to build a \$25-million plant in India to produce energy efficient variable compressors for car air conditioners. The plant will produce one million units per year. SVL is a joint venture between Vikas Group and Japan's Sanden Corp. established in 1982. Its compressor sales have increased by six times over the last six years, says SVL Managing Director Praveen Agarwal. The company sells to Honda, General Motors, Maruti Suzuki, Ford, Tata Motors, Mahindra & Mahindra and Fiat, among others.

Tata Group, which started India's first airline in the 1930s, is planning to build a factory to make aircraft components for the export market. The company is buying land at a special economic zone in Nagpur next to Boeing's planned \$100-million maintenance, repair and overhaul (MRO) facility. The Tata Group had started Tata Airlines in 1932. It was taken over by the government and renamed Air India. Boeing has said India will require 911 airplanes worth \$86 billion over the next 20 years. India's domestic aviation market is expected to grow by 20 percent a year over the next five years.

Sabinsa Corp. of Piscataway, N.J., has built a \$6-million factory in Hyderabad, India, to manufacture herbal extracts and phytochemicals for world markets including the United States, Europe and Japan. The 200,000-square-foot plant and its 100 employees will also serve as headquarters for Sabinsa's research and development operations. The company employs 100 scientists developing herbal extracts, "cosmeceuticals," minerals and specialty fine chemicals. It is Sabinsa's sixth manufacturing plant in India.

MAS Holdings has started building a manufacturing plant in Thulhiriya, Sri Lanka, to produce lingerie for British retailer Marks & Spencer (M&S). The Sri Lanka-based company with 41,000 employees says the plant is part of its "Plan-A" initiative, a 200-million pound sterling plan in which M&S aims to make its operations in the UK and Republic of Ireland carbon-neutral by 2012.

The 110,000-square-foot factory will receive support from M&S, which will provide advice on sustainable construction through its experience of developing "green" stores in the UK. The factory will be surrounded by "green-belts" of native plants as part of a comprehensive biodiversity plan. Incentives will also be offered to management and employees to promote the use of bicycles and reduce fuel consumption. Solar-electric, solar-thermal, wind and methane through sewage treatment will be used as renewable energy sources on site. Energy saving equipment including LED task lights will be used to reduce energy consumption. Rainwater storage is also planned for the full roof area.

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NEW PLANTS IN EASTERN EUROPE, RUSSIA

Kimberly-Clark Corp. has announced plans to build its first manufacturing facility in Russia to produce products under the Huggies and Kleenex brands. "Russia is a strategically important market for Kimberly-Clark due to its rapid economic growth and the long-term potential of its health and hygiene categories," said Tom Davis, president of the company's Middle East, Eastern Europe and Africa group. "Local manufacturing is a key element of our strategy."

The factory will be located on 100 acres in Stupino, approximately 60 miles southeast of Moscow. It will create approximately 150 jobs with additional jobs being added as increased manufacturing capacity comes on line over the next few years. Consumer spending and retail sales in both Russia and Eastern Europe have been growing at double-digit rates for the past several years and are projected to grow at high single-digit rates for the next decade, says the company.

PolyOne Corp., a \$2.6-billion Cleveland, Ohio-based maker of specialized polymer materials, has opened a new color concentrates manufacturing facility in Kutno, Poland, to serve rapidly growing markets in Eastern Europe. The plant is located on the main Berlin-to-Moscow transportation route and will serve rapidly growing markets in Eastern Europe. It is PolyOne's second manufacturing facility in Eastern Europe. The company opened its first facility in Gyor, Hungary, in 1998. The new facility includes a laboratory to develop and test products to customer specifications.

NEW PLANTS IN MEXICO

Whitepath Fabtech, a Ellijay, Ga.-based supplier of heating and cooling equipment components, will open a 35,000-square-foot factory in Ramos Arizpe, Coahuila, Mexico, to supply Carrier Corp. with control panels for HVAC systems. The company will hire about 75 workers.

Greenheck Fan Corp. of Shofield, Wisc., has announced plans to build a manufacturing facility in Saltillo, Coahuila, Mexico, to produce ventilation equipment for the heating and cooling market. The company has contracted with the Offshore Group for 34,822 square feet of industrial space in the La Angostura Industrial Park. Greenheck, which is 60 years old this year and employs 2,600 people, expects to hire up to 75 workers during the first phase of the project.

PLANTS CLOSING IN THE U.S. & BRITAIN

Albany International Corp. will close its press fabric manufacturing facility in East Greenbush, N.Y., and stop manufacturing dryer fabrics at its headquarters in Albany, N.Y., laying off 225 employees. "This planned action is a business necessity, driven by existing and expected market conditions, and in no way reflects on the performance of the affected employees, who will be

offered severance and outplacement assistance," says the company. "The plant closings are the result of the continuing consolidation of customers in the U.S. and Canada and the need to balance the company's paper machine clothing manufacturing capacity in North America with anticipated paper mill demand. Similar steps have been taken by the company over the last few years in both Europe and North America as the global paper and paperboard industry continues to shift capacity from traditional paper markets to new emerging markets." Albany International is the world's largest producer of custom-designed paper machine fabrics and process belts that are essential to the manufacture of paper and paperboard.

The last U.S. manufacturer of air-conditioning window units is moving its production to Mexico. **Friedrich Air Conditioning Co.** has announced its intention to close its San Antonio manufacturing plant and move the work to Monterrey, Mexico. At least 263 workers will be laid off when the production line shuts down on Nov. 16. The company says that low-priced air conditioners from China are forcing it to move out of the United States. It is the first time in the company's 124-year history that it has had to close its U.S. production. "It's sad," said Jane Deming, Friedrich marketing services manager. "The costs were just too much. We have been working at this for five to 10 years. We've done everything we could do. There is nothing that could have been done differently that has not been tried. It's just the way this industry has evolved." More than nine million air conditioners were imported into the United States last year.

Hartmann, a manufacturer of luggage and leather goods, has announced plans to close its manufacturing facility in Lebanon, Tenn., and lay off 90 workers. The company will keep its headquarters and local retail outlet in Lebanon. "While this decision has been extremely difficult, the outcome is necessary for Hartmann to remain cost competitive and thereby sustain its competitive advantage and level of quality in the luggage and travel goods industry," said company president and CEO David Herman. A "rapidly declining base of American raw materials suppliers played a large role in the decision," said a spokesman for the company, which had \$32 million in sales in 2006.

IBM has laid off 450 workers at its U.S. computer chip manufacturing facilities, including 300 at its Poughkeepsie and East Fishkill, N.Y., facilities, and another 90 at its plant in Burlington, Vt. The layoffs are part of IBM's recent merger of its semiconductor technology and manufacturing businesses into a single unit and are the result of eliminating duplication and a slowdown in its sale of chips, which were down by 9 percent in the second quarter. IBM has also announced that it will reduce its U.S. payroll by another 1,300 employees, many of whom were employed in its Global Services outsourcing unit.

(Continued on next page)

USTR Seeks Help Identifying Trade Barriers

The United States Trade Representative is asking companies to provide it with cases where foreign countries have used standards to block imports. "Of concern are impediments materially affecting the actual and potential financial performance of an industry sector, as well as any practices that violate U.S. trade agreements," says the USTR. "Submissions should contain estimates of the potential increase in exports that would result from the removal of the barrier." The USTR will use the information in its annual National Trade Estimate Report on Foreign Trade Barriers.

USTR seeks information on the following types of trade barriers:

- Standards, testing, labeling and certification including the refusal to accept U.S. manufacturers' self-certification of conformance to foreign product standards, and environmental restrictions;
- Import policies;
- Government procurement;
- Export subsidies;
- Lack of intellectual property protection;
- Services barriers;
- Investment barriers;
- Anti-competitive practices with trade effects tolerated by foreign governments;
- Trade restrictions affecting electronic commerce; and
- Other barriers that encompass more than one category or that affect a single sector.

Comments can be sent via e-mail by Nov. 8 to FR0717@ustr.eop.gov or via fax to Gloria Blue, executive secretary, Trade Policy Staff Committee at 202-395-6143.

New & Old Plants... (From eight)

Hexion Specialty Chemicals has announced plans to close its manufacturing operations in Clayton, UK, and shift production of pressure-sensitive adhesives to its plant in the Czech Republic. It will also divest itself of its foam control agents. Hexion says the site is capacity-constrained and costs are too high.

Pfizer has announced plans to close its last British manufacturing plant at Sandwich, Kent, and lay off 420 workers. The world's largest drug manufacturer will stop manufacturing in Britain for the first time in 53 years. The company says it will shift production to the United States, Ireland and outsource other processes to third parties. Pfizer will maintain a research and development operation at the location, employing 3,000 people. Pfizer has cut its global network of factories from 93 in 2003 to 60.

Technology Administration Is Officially Gone... (From page one)

the record of the incumbents who really didn't care about technology," says one Capitol Hill aide who was involved in creating the Technology Administration in 1988. Democrats in Congress with jurisdiction over the agency didn't make a fuss "because nothing will happen with regard to technology with this administration and it's a chance to start over if we do take the White House back in 2009," he said. "There have been four phases of the Technology Administration, and there wasn't going to be a fifth."

The agency couldn't survive the ennui, and was written out of existence in the America Competes Act (HR-2272), signed by President Bush on August 9. Upon the stroke of his pen, the agency officially no longer existed, stunning those who worked there, along with the last political appointee in charge, Robert Cresanti.

According to those who are now vacating the premises, Cresanti learned of his agency's sudden demise while on a business trip in Texas. But with his agency gone, Cresanti was out of a job. His position as undersecretary no longer existed. As such, it was not clear if the government could pay for his return trip to Washington. To make matters worse, Cresanti was headed on vacation the following week and would not get paid for the time he was away. Upon his return, the Commerce Department provided him with a temporary GS-15 position that paid one-third less than his undersecretary salary.

In his September 28 departure letter, Cresanti wrote: "I am grateful to the President for allowing me to serve my country while pursuing some of my life's great passions...while helping make America the place for technology companies to spawn, grow and thrive....Leaders from around the globe strive daily to understand and capture what underpins the success of technology in the United States. They recognize the value of what we have wrought and seek to learn from it."

At one point, the Technology Administration had a staff of more than 50 employees, coordinating such projects as the commercialization of space, the Partnership for the Next Generation of Vehicles, a Japanese technical literature translation service, the National Medal of Technology, and projects studying the competitive posture of dozens of industries.

It ran into a firestorm of controversy two years ago upon its refusal to publish a congressionally mandated report on outsourcing. It was finally released after *Manufacturing & Technology News* submitted a Freedom of Information Act request. The \$335,000-report had been doctored by political appointees and was only 12 pages long. It said virtually nothing about the challenges U.S. workers face in the growing competition for high-tech service and manufacturing jobs, further embarrassing the Bush administration during a time its political appointees were being accused of altering the scientific findings of the government's scientific and technical staff.

"When the President and the administration and your own department want to do away with you, you can't speak up for yourself," says one departing employee of TA. "It doesn't really work."

SBA Seeks Nominations For Meaningless Regs

The Small Business Administration's Office of Advocacy is asking companies and trade associations to provide it with the most unnecessary and onerous federal regulations that are in need of reform. The "Top 10 rules nominated by small business owners, trade associations, and others will be transmitted to appropriate federal agencies for review and reform," says the agency. Added Thomas Sullivan, SBA's chief counsel for advocacy: "Complying with all federal regulations now costs our economy \$1.1 trillion per year; that's more per household than the cost of healthcare." To nominate your least favorite regulation go to <http://www.sba.gov/advo/r3/>, or send an e-mail to advocacy@sba.gov, or call Keith Holman at 202-205-6936.

Applied Materials Enters Solar Mfg. Industry

Applied Materials Inc., the world's largest supplier of computer chip manufacturing machines, has entered the solar industry by acquiring HCT Shaping Systems of Switzerland for \$483 million. HCT, a privately held supplier of precision wafering systems, makes tools used to manufacture crystalline silicon substrates for the solar industry. Applied Materials has been attempting to break into the fast-growing solar power industry for the past year. The acquisition of HCT should allow Applied to sell cheaper and more efficient thin-film crystalline silicon solar manufacturing equipment, says Applied president and CEO Mike Splinter. "HCT's technology is critical to our roadmap since it complements our high-throughput deposition systems and will enable customers to scale up production and reduce costs." With its acquisition, Applied estimates that it will sign contracts worth more than \$600 million.

— BY HELEN HILIOS

BLS Has Record Geothermal Auction

The Bureau of Land Management's competitive auction of geothermal sites on public lands in Nevada and California in mid August generated nearly \$20 million in bids, "including the highest per-acre bid in history," says the BLS. The agency's second competitive sale of geothermal leases "signals significant expansion of this renewable, low-emission source of energy," says BLS. The agency auctioned 43 parcels in Nevada and six in California, including 2,700 acres in the Geysers geothermal field, which brought in more than \$8 million. A 470-acre parcel in California generated a bid worth \$14,000 per acre from Binkley Geo Resources of Santa Monica, Calif. The amount surpassed the previous record of \$11,000 per acre in a 1982 sealed-bid sale of a 440-acre Geysers parcel. The second highest bid for a California parcel in the latest auction generated \$420 per acre.

In Nevada, 122,849 acres sold for nearly \$11.7 million. The highest bid was for a 5,120-acre parcel from Ormat Nevada in Reno, for \$510 per acre. Other Nevada parcels brought per-acre bids of \$300 or more.

NIST Names Last ATP Winners

The National Institute of Standards and Technology (NIST) has made the final awards in its long-running Advanced Technology Program. The program, which is being phased out in favor of a new "Technology Innovation Program," selected 56 proposals to pursue innovative industrial research and development projects including many with a focus on manufacturing. The total amount of federal funding to be awarded to the 69 companies and one non-profit organization participating will be \$139 million, with an industry cost share of up to \$104 million. Forty-eight projects are led by small businesses. To view the projects, go to http://www.nist.gov/public_affairs/releases/atp_2007_awards.html.

Quotable:

"If you don't have strong manufacturing, if you lose that, you can't pay for anything else — you can't pay for social programs, you can't pay for defense. Our standard of living is falling for the first time. Our role in international markets and the strengthening of our economy is in a crisis. I won't call it a war, but it's a crisis because our whole way of life depends on it and the whole importance of the United States and what it stands for in the world depends on it. For God's sake, we have to concentrate on making things."

— Ernest Ambler, former director of the National Bureau of Standards, June 15, 1987

MANUFACTURING & TECHNOLOGY NEWS (ISSN No. 1078-2397) is a publication of

Publishers & Producers, P.O. Box 36, Annandale, VA 22003. On the Web at: www.manufacturingnews.com.

PHONE: 703-750-2664. FAX: 703-750-0064. E-MAIL: editor@manufacturingnews.com.

Annual Subscription Price: \$495. Frequency: Twenty-two times per year.

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