

THE NEWSLETTER OF THE BDO MANUFACTURING & DISTRIBUTION PRACTICE

BDO MANUFACTURING OUTPUT



SUSTAINABLE MANUFACTURING CREDITS & INCENTIVES TO KNOW IN 2016

By Tanya Erbe and John Yoak

Many states have implemented incentive programs to offset the costs incurred by manufacturers who integrate sustainability initiatives in order to better the communities in which they work, live and play.

The nature of these incentive programs varies by state and is generally tailored to a specific environmental issue. For those manufacturers looking to reap the benefits of making 2016 green, the following are a few of the notable credits and incentives that can help soften the financial and tax burden associated with the investment:

California features programs designed to incentivize the development and

deployment of manufacturing technologies that will conserve resources, as well as promote economic development and jobs. These programs include a sales and use tax exemption for manufacturers that use science, engineering or information technologies to improve existing materials, or create entirely new materials, products and processes.

California evaluates applicants and their projects on a case-by-case basis, considering several factors including whether the project develops California manufacturing facilities and the extent to which the project will reduce air or water pollution, increase efficiency or reduce consumption beyond what is required by any federal or state law or regulation. At the local level, the city of Santa Rosa offers a water-specific

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SUSTAINABLE MANUFACTURING CREDITS & INCENTIVES

Sustained Reduction Rebate for every 1,000 gallons of sustainable water use and water flow reduction achieved through hardware upgrades or new technologies.

New Jersey has also identified water pollution as an environmental concern that can be addressed through the implementation of a tax credit program. New Jersey taxpayers that purchase equipment used to treat effluent from a primary wastewater treatment facility that would have otherwise been released into New Jersey waters may take a tax credit against their corporation business tax liability, subject to certain limitations and offsets, equal to 50 percent of the cost of the equipment.

Although keeping the waterways clean is paramount, there are numerous other environmental concerns that states can address through credits and incentives. For example, **Kentucky** and **Tennessee**

offer tax credits to encourage sustainable manufacturing and environmentally friendly business practices. In Kentucky, taxpayers that make capital investments over a certain threshold to construct, retrofit or upgrade certain facilities may claim tax credits against their corporation income tax or their limited liability entity tax. This can be an especially taxpayer-friendly incentive, as the credit amount is equal to 100 percent of the tax attributable to the facility, plus up to 4 percent of the wage assessment against employees whose jobs were created by the facility. Similarly, in Tennessee, a manufacturer that makes capital investments over a certain threshold to construct, expand or remodel a facility engaged in manufacturing a product that is necessary to produce green energy may take a tax credit for certain utility charges.

Other states emphasize the importance of limiting the amount of solid waste produced within their borders. For example, **Arkansas** encourages its corporate citizens to adopt sustainable manufacturing processes by offering a 30 percent tax credit against corporate income tax for taxpayers that purchase equipment used exclusively within the state for reducing, reusing or recycling solid waste. The credit also applies to the cost of the equipment as well as charges related to installing the equipment at the taxpayer's facility.

These programs demonstrate a movement among states to continue encouraging investment in and development of sustainable manufacturing practices. The creation of incentive programs and credits at the state and local level, in turn, stimulates good corporate citizenship, from which states, taxpayers and society as a whole can benefit in 2016 and for years to come.



Tanya Erbe is the National Credits and Incentives Leader and may be reached at terbe@bdo.com.

John Yoak is a tax manager and may be reached at jyoak@bdo.com.

DID YOU KNOW...

According to the [MPI Internet of Things Study](#), sponsored by BDO, 64 percent of manufacturers believe IoT will have an impact on their businesses over the next five years.

According to [data](#) from payroll processor ADP, manufacturers shed 9,000 jobs in February, marking the first time they've cut payrolls since October 2015.

According to a [study](#) from the World Economic Forum, plastics use about 6 percent of the world's oil, with that figure expected to climb to 20 percent by 2050.

Demand for cars and trucks bounced back in February following a chill after the East Coast blizzard in January, according to [The Wall Street Journal](#).

Half of chemical management companies will expand their compliance staff over the next 12 months, while two-thirds plan to do so in five years, according to [preliminary survey data](#) by Chemical Watch.

New [research](#) from the University of Maryland suggests that manufacturing accounts for approximately one-third of GDP.

Traditional Manufacturing

Vs

Advanced Manufacturing

According to data from the Manufacturing Institute, seven out of 10 executives reported a shortage of workers with adequate technology, computer and technical training skills. Attracting the right talent to fill new and evolving positions, replace retiring baby boomers and emerge from last decade's economic downturn to compete in a rapidly changing business landscape is critical for manufacturing businesses.

What are the traits of the next generation of manufacturers?



TRADITIONAL MANUFACTURING FACILITIES REQUIRED:
High school diploma / vocational education
Emphasis on core competencies
Mechanics, assembly, machinery operation skills
Backdrop: Subsector-specific production lines, many individual work stations

ADVANCED MANUFACTURING FACILITIES DEMAND:
STEM education, college degree
Emphasis on critical thinking
Technology, business strategy, engineering
Backdrop: Tech-dominated, fewer work stations

R&D TAX CREDIT ENHANCEMENTS PROVIDE MORE CASH-SAVING OPPORTUNITIES FOR MANUFACTURERS

By Chai Hoang & Chris Bard

In December 2015, Congress passed the Protecting Americans from Tax Hikes Act of 2015 (PATH Act), extending and making permanent a number of important tax credits—including the federal research and development (R&D) credit.

The permanent extension of the R&D credit is great news for both manufacturers and the broader U.S. economy: manufacturers can continue to benefit from their investments to attempt to develop or improve their products, manufacturing processes and software; while the broader economy will benefit from the resulting innovation and boost in productivity.

The PATH Act's permanent extension is a welcome change for manufacturers who, according to IRS statistics, accounted for more than \$6.5 billion of the total \$10.8 billion in federal credits claimed by corporations in 2012. Before the PATH Act, the credit would be passed for a year or two and then expire, leaving taxpayers to wonder, often until their tax year was over, whether they'd be allowed to report a credit for the year. Now, they can consider it a permanent component of their tax planning strategies.

Designed to encourage investment in innovation, the R&D tax credit can sometimes be overlooked by manufacturers who often think that "R&D" is a bar too high to meet.

The U.S. Tax Court, however, has said that "routine engineering" and "routine software development" can qualify; and it and other courts have upheld all sorts of efforts to attempt to make things better,

MPI INTERNET OF THINGS STUDY

SPONSORED BY BDO

Manufacturers Unsure About Cybersecurity Protections and IoT R&D Credit Opportunities

Manufacturers Eager, Yet Unprepared to Operate in an IoT-Enabled Environment



- 63%** of respondents believe IoT will have an impact on their businesses over the next 5 years
- 76%** will increase the use of smart devices or embedded intelligence in production processes in the next 2 years
- 34%** have no plans to develop an IoT strategy for processes or products

Manufacturers Need Stronger Cybersecurity Measures

- 49%** of manufacturers are unsure or not confident in their ability to prevent a cybersecurity breach
- 45%** do not have or are unsure if they have an information security policy in place addressing Internet-connected devices that are not used as a computing or communications platform
- 44%** do not have or are unaware as to whether or not they have the ability to detect and identify unauthorized Internet-connected devices

Tax Credits and Incentives Could Help Manufacture New Opportunities

On Dec. 18, 2015, President Obama signed the PATH Act of 2015, which includes provisions not only making the Research & Development (R&D) tax credit permanent, but also enhancing its value for manufacturers.

Just **17%** of manufacturers said they were planning to claim tax credits and incentives for their IoT investments

For those manufacturers who are unaware or not planning to claim credits and incentives for IoT investments, the reasons include:

- 45%** Lack of documentation
- 18%** Expected benefit too small
- 11%** ROI
- 11%** Associated costs

faster, cheaper or greener, e.g., specifying and integrating existing components into an overall design for a new system, evaluating the efficiency of a third party's technology to perform within an existing production process and engaging in scale-up activities to resolve engineering uncertainties not eliminable through testing on smaller processes or equipment.

This is true regardless of what's being manufactured: paper; food; apparel; chemicals; furniture; plastics—it doesn't matter. All of these industry subsectors have reported millions of dollars of R&D credits, and they've enjoyed the tax savings, reduction in effective tax rates and increase in earnings and cash flows that R&D credits can bring.

A WORD FROM JAY DUKE...



Jay Duke, leader of BDO's National Advisory Services and National Franchise practice

It is my honor to announce that **Rick Schreiber, Memphis Assurance office managing partner and National Leader of the firm's Manufacturing & Distribution practice**, has been elected to the National Association of Manufacturers (NAM) board of directors, effective March 1, 2016. He joins the NAM board to advance a robust, pro-growth manufacturing policy agenda.

As many of you know, the NAM is the largest industrial trade association in the United States with more than 14,000 members and is the nation's most influential advocate for manufacturing. It is at the forefront of every important policy debate for manufacturers. Executives on the NAM board, which comprises leaders representing companies of all sizes in every industrial sector, are the driving force behind the

NAM's advocacy efforts and work to create a favorable policy climate for manufacturers across the country. Board members provide national and global perspectives on the impact of federal government action on their companies' ability to grow and prosper. In addition, board members contribute their leadership and expertise to the NAM's policy-development process.

Not only is this a well-deserved honor for Rick, his appointment to the NAM's board of directors puts BDO on the map domestically and internationally as an important player in the manufacturing space. In addition to Rick's election to the board of directors, BDO has a national partnership with the NAM, sponsoring several events across the country in key BDO M&D markets. To read more about the Executive Insights program that BDO sponsors, please click [here](#).

Once again, congratulations Rick!

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R&D TAX CREDIT ENHANCEMENTS

And with two other changes to the credit, smaller manufacturers have more opportunities to take advantage as well.

For taxable years beginning after December 31, 2015, eligible small businesses can use research credits to offset Alternative Minimum Tax (AMT). An "eligible small business" is generally a privately held corporation, partnership or sole proprietorship with less than \$50 million in average annual gross receipts for the three preceding taxable years. Prior to this change (with one exception in 2010), R&D credits could offset only regular tax liability, rendering them of no value in the current year. With the passage of the PATH Act, though, manufacturing companies and their shareholders may receive cash benefits that had been previously inaccessible due to AMT obligations.

The second change is beneficial for startup manufacturers. It enables qualified small businesses to offset up to \$250,000 of their portion of federal payroll taxes for up to five years. A "qualified small business" is generally a corporation, S corporation or partnership that (1) had gross receipts of less than \$5 million for the taxable year and (2) did not have gross receipts for any taxable year before the five-taxable-year period ending with the current taxable year. This enhancement can provide cash savings for startups to continue to invest in innovation, hire personnel and finance new technologies—all activities that align with the credit's original intent.

Now that manufacturers can expect the credit to remain available for years to come, they can more effectively plan their long-term trajectory and make key investments to continue their forward momentum. For

those manufacturing companies that have been claiming the R&D credit, now is a great time to make sure nothing is left on the table. Recent changes to what software-development activities qualify have created just one area where re-examination can provide substantial benefits. And for startups and smaller businesses, as we've seen, the new credit modifications offer opportunities that didn't exist previously.



Chai Hoang is a senior associate with BDO's R&D Tax Services practice for the Northeast U.S. region, and may be reached at choang@bdo.com.



Chris Bard is the national leader for BDO's Specialized Tax Services Research and Development (R&D) practice, and may be reached at cbard@bdo.com.

PErspective in MANUFACTURING



The U.S. plastics industry is enjoying record growth, driven

by strong performance in the transportation, healthcare and packaging end markets, as well as persistently low natural gas and oil prices, according to *Plastics News*.

Plastics manufacturing accounts for roughly 5 percent of global oil consumption—and as oil prices drop, so does the cost of plastics manufacturing. A report by the Society of the Plastics Industry (SPI) released in December showed plastics jobs grew from 940,000 in 2014 to 1.7 million in 2015, and shipments rose from a record \$427.3 billion in 2014 to an even more impressive \$583.7 billion in 2015.

Three recent plastics-related private equity deals—all announced this

February—suggest that the booming sector is becoming increasingly attractive to financial investors. Private equity firm Olympus Partners bought commercial melamine serviceware company G.E.T. Enterprises for several hundred million dollars, and plans to use the company as an acquisition platform. Olympus has bought and sold several plastics-related companies over the last few years and intends to boost its stake in the sector further, *Plastics News* reports.

Arsenal Capital Partners' Polymer Solutions Group (PSG) announced it had purchased Flow Polymers from private equity firm Geneva Glen Capital, which had bought the firm in 2010. Arsenal formed PSG in August 2015 with the acquisition of Peach State Labs. The deal is Arsenal's 15th plastics-related acquisition since 2012, according to *Plastics News*.

Audax Private Equity announced the purchase of Preferred Compounding from Wingate Partners for an undisclosed sum. Since being acquired by Wingate in 2010,

the Barberton, Ohio-based company had grown into the second largest custom rubber compounder in North America, *Reuters* reports. The Middle Market Growth Program, managed by Antares and LStar Capital, provided a senior secured unitranche credit facility to finance the deal.

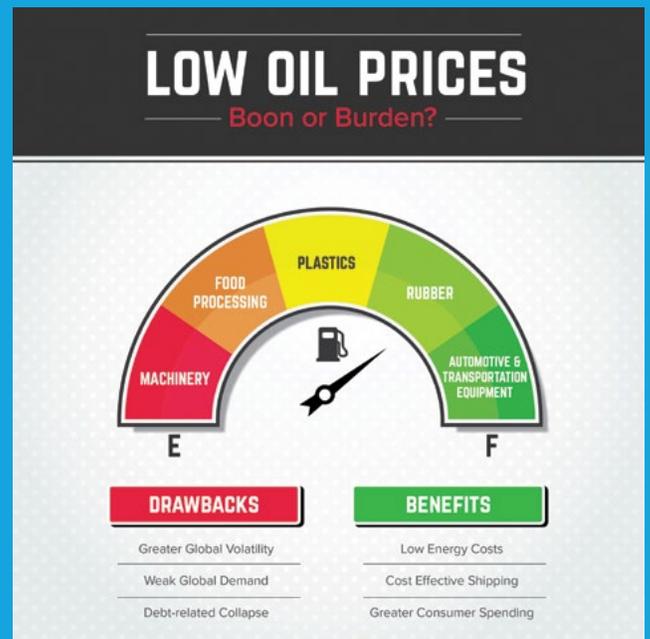
Private equity firms that bought plastics companies following the global financial crisis are coming to the end of their investment cycles. As they look to exit their investments and return profits to their limited partners, they are finding willing buyers amid a sector poised for further growth. With vast amounts of dry powder in their stores and no immediate rebound in sight for oil prices, the plastics industry is providing promising investment opportunities for private equity firms with an interest in the sector.

PErspective in Manufacturing is a feature examining private equity investment in the manufacturing industry.

Sources: *Plastics News*, *Rubber News*, *Reuters*, *PE Hub*, *Private Equity Wire*

HOW LOW CAN THEY GO? A Look at How Oil Prices Could Impact Manufacturers

It is generally believed that low oil prices are good for business and great for the overall economy. Savings at the pump give consumers greater financial flexibility and can spur increased spending, which ultimately benefits most sectors' bottom lines. For manufacturers, however, the deflated prices, which are still down nearly **70 percent** from a recent peak in June 2014, have spurred nuanced effects. Some manufacturing segments like the automotive industry have benefited, while some, like the machinery sector—reliant on equipment orders from oil and drilling operations—can be financially burdened by the implications of low crude oil prices. At the end of the day, how a company will be impacted largely depends on its product, as well as several other factors. The infographic to the right provides a snapshot on how a few industries could be affected and the overall advantages and drawbacks for the industry as a result of low oil prices.



MARK YOUR CALENDAR...

APRIL

April 4-6

NAM Annual Public Affairs Conference

Omni Amelia Island Plantation Resort
Amelia Island, Fla.

April 10-13

Food Automation & Manufacturing Conference & Expo 2016

Sanibel Harbour Marriott
Fort Myers, Fla.

April 27-29

Associated Equipment Distributors Financial/HR Symposium*

Loews New Orleans Hotel
New Orleans

MAY

May 3-5

2016 IndustryWeek Manufacturing & Technology Conference & Expo

Donald E. Stephens Convention Center
Rosemont, Ill.

May 10-12

Front End of Innovation 2016

Boston World Trade Center and
Seaport
Boston, Mass.

May 16-19

RAPID 2016 (North America's Largest 3D Manufacturing Event)

Orange County Convention Center
Orlando, Fla.

JUNE

June 5-7

Women in Technology Summit

DoubleTree by Hilton
San Jose, Calif.

June 6-9

Manufacturing 4.0: The New Rules of Leadership

Omni La Costa Resort & Spa
Carlsbad, Calif.

June 7-8

NAM 2016 Manufacturing Summit

The Mandarin Oriental Hotel
Washington D.C.

For more information on these and other service offerings for the manufacturing and distribution industry, please contact one of the service leaders below:

CONTACT:

RICK SCHREIBER

Manufacturing & Distribution
Practice Leader
901-680-7607 / rschreiber@bdo.com

LARRY BARGER

Senior Director, Assurance, Pittsburgh
412-434-8203 / lbarger@bdo.com

MATT BECKER

Tax Partner, Grand Rapids
616-802-3413 / mkbecker@bdo.com

BRIAN ECCLESTON

Assurance Partner, New York
212-885-8220 / becclleston@bdo.com

SEAN HENAGHAN

Assurance Partner, Chicago
312-233-1803 / shenaghan@bdo.com

ISSY KOTTON

Assurance Partner, Los Angeles
310-557-8266 / ikotton@bdo.com

CATHY ROZANSKI MCNAMARA

Assurance Partner, Detroit
248-244-6524 / crozanski@bdo.com

FRED ROZELLE

Assurance Partner, Detroit
248-244-6544 / frozelle@bdo.com

JOHN TUCCI

Assurance Partner, Woodbridge
732-750-0900 / jtucci@bdo.com

BDO MANUFACTURING & DISTRIBUTION PRACTICE

BDO's Manufacturing & Distribution practice consists of multi-disciplined professionals, well versed in compliance and consulting matters. Our professionals have many years of experience in financial reporting and accounting, tax and auditing issues and are continually updating their knowledge and, therefore, are dedicated to giving timely and accurate advice.

ABOUT BDO

BDO has been a valued business advisor to manufacturing and distribution companies for more than 100 years. We work with a variety of companies from all industrial sectors, ranging from global manufacturing and distributors to startup and niche manufacturing corporations, on a myriad of accounting, consulting, tax and other financial issues.

BDO's national tax professionals possess an in-depth knowledge of the intricacies of a full spectrum of tax services. From International Tax and Transfer Pricing to State and Local Tax services and beyond, our dedicated team of professionals operate nationwide to provide a comprehensive suite of services to address our client's needs.

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