

Released: June 8, 2012 | Updated: June 19, 2012

# Cracker Plant Tax Credit Expensive for Taxpayers While Promising Few Permanent Jobs

Legislature should delay action until hearings can be held and all the details are scrutinized

Governor Tom Corbett's administration has proposed giving \$1.65 billion in state tax credits over 25 years to companies that build and operate ethylene cracker plants in Pennsylvania. Only one company, Shell Oil, currently has plans to develop such a plant in the gas-rich Marcellus Shale. The proposed tax credit would be a windfall for Shell, whose parent company, Royal Dutch Shell, is the second largest company in the world<sup>i</sup>, with revenue of \$484 billion in 2011 and profits of \$31 billion.<sup>ii</sup>

The new Resource Manufacturing Tax Credit does not impose any requirements, such as additional jobs or new capital investment, as a condition for receipt of the credit. A report on the effectiveness of the credit would be due in 2042.

The Resource Manufacturing Tax Credit is not the only tax benefit Shell will receive under the governor's plan. Act 16 of 2012, enacted in March, exempts Shell's cracker facility site in Beaver County from corporate income and property taxes for 15 years. During that time, Shell will likely have unused Resource Manufacturing Tax Credits that it will be able to sell for cash — up to \$66 million a year.

Act 16 requires Shell to create 400 jobs. This is consistent with the jobs created at similar cracker plants. If the Resource Manufacturing Tax Credit is enacted, the 400 permanent jobs at the plant will come at a hefty price to taxpayers, \$165,000 per year per job, or \$4.125 million per job over the 25-year life of the program. Shell also expects 10,000 construction jobs to be created during site development, but that would be a short-term boost to employment.

While proponents have claimed this project will create tens of thousands of jobs, much of those are estimates of jobs that might be created in spinoff industries or in unrelated businesses, like restaurants and shops. The job numbers are speculative and dependent on the decisions of other companies that are not receiving this special tax credit. With the precedent of such generous tax treatment for Shell, other companies might demand tax credits as well.

To the extent that the cracker facility does attract jobs to the region, the workers who fill them will hail from Ohio and West Virginia as well as Pennsylvania, but only the commonwealth's taxpayers will be paying for Shell's tax breaks.

The proposed tax credit had been kept secret until recently, and there are still many unanswered questions. The credit has become part of the 2012-13 budget negotiations, but lawmakers should delay any action on this proposal until public hearings can be held and more time is allowed to review the complex details.

## **Origin of the Cracker Credit**

Pennsylvania has been engaged in a bidding war with Ohio and West Virginia to lure Shell Oil to build its cracker plant in Southwestern Pennsylvania. Ohio, which cut school funding by \$1.8 billion in the current state budget, reportedly offered \$1.4 billion in subsidies for the plant. Ohio Governor John Kasich flew to Texas to make the bid. West Virginia Governor Earl Ray Tomblin also made a trip to Texas, after offering Shell a 25-year property tax abatement valued at more than \$300 million.

In March, Shell announced it had signed a land option agreement to evaluate a site in Monaca, Pennsylvania, a town in Beaver County.<sup>iii</sup> Around that time, the bill that would become Act 16 was making its way through the General Assembly, and lawmakers modified it to include the new tax free zone for Shell.

In defending the proposed Resource Manufacturing Tax Credit, the Corbett administration first argued that it would be offered to any cracker plant. It later revised its statements to suggest that Shell will back out of the deal if the second credit is not adopted.

Legislation establishing the tax credit authorizes up to \$66 million in credits each year for 25 years (from 2017 through 2042) to a plant or plants that process ethane, a derivative from natural gas. The tax credit would be earned at a rate of \$0.05 per gallon of ethane purchased by the processing facility. The draft legislation authorizing the credit imposes no other requirements on companies applying for the credit. Companies are not required to create jobs or commit to other investment to be eligible for the credit.

## Tax Credits for a Company that Pays No Taxes

The cracker tax credit is on top of generous tax exemptions already authorized by the General Assembly for the Shell plant. A specially-created Keystone Opportunity Expansion Zone (KOEZ) was authorized in Act 16 of 2012<sup>iv</sup> for the site chosen for the Shell cracker plant in Beaver County. Under Act 16, the cracker plant and its affiliates would qualify for 15 years of almost tax-free operation, paying no income or property taxes and limited sales tax. To qualify for the KOEZ benefits, the plant and its affiliates would have to invest a combined \$1 billion in plant facilities and employ 400 full-time workers.

## The Cracker Plant and Jobs

What is a cracker plant? Cracker plants are large-scale industrial plants that take molecules of ethane ( $C_2H_6$ ) from natural gas or other sources and "crack" or break them into ethylene ( $C_2H_4$ ) in a process similar to petroleum refining. Ethylene is widely used in chemical manufacturing – including plastics.

<u>Why is it locating here?</u> Ethane is common in liquid-rich natural gas (wet gas) that is common in southwestern Pennsylvania. Currently, ethane in wet gas produced in the Marcellus Shale region must be shipped to plants in Texas or Louisiana for processing. Locating processing plants close to deposits like the Marcellus Shale will make it less expensive to process the hydrocarbon – and likely cheaper for customers who use the products. V

As an additional incentive to the company, Pennsylvania has reportedly offered to pay the cost of environmental cleanup at the site, currently hosting the country's largest zinc smelter. A report on Capitolwire.com cites several former environmental officials commenting that the plant has been subject to regulatory scrutiny for many years, estimating clean up costs at "in the seven figures."

How many jobs will the Shell plant create? Claims about the number of jobs created by the facility vary widely and have grown over time. In May, an editorial in the *Pittsburgh Post-Gazette* stated that "(o)ptimistic estimates say that 10,000 jobs could be generated during construction and several hundred permanent workers would be needed to operate the plant." Department of Community and Economic Development Secretary Alan Walker stated that the plant will generate 15,000 to 20,000 – if you count "related" employment. A review of employment at other cracker plants suggests that the number of permanent jobs in the facility would be closer to 400 – the number of jobs required in the KOEZ legislation. This has been confirmed by further administration explanation, based on an estimate produced by the American Chemistry Council – an industry trade group, with the remaining jobs to be generated through spin off employment in other industries. It is important to note that tax credits are generally awarded based on direct employment by the firm receiving the subsidy – not from spin off employment in other companies and sectors.

No new cracker plant has been built in the United States since 2001, although in recent years, several companies have announced plans to build such plants as shale gas has become more abundant and cheaper. In each of the cases announced so far, the number of permanent jobs created after the original construction phase is several hundred, not tens of thousands.

In Texas, Chevron Phillips announced a \$5 billion cracker plant project that would be complete in 2017. The new facility is expected to employ 400 people and produce an additional 10,000 engineering and construction jobs while the plant is being built.<sup>xi</sup>

Sasol, a South African company, announced a larger plant in Louisiana that would "entail a capital investment of approximately \$8-10 billion and produce direct employment of approximately 850 jobs with average salaries of about \$89,000, not including benefits. [Louisiana Economic Development] estimates that the project also would result in approximately 4,000 indirect jobs, which means the total impact of the project would be nearly 5,000 new jobs in Southwest Louisiana."xii

Dow Chemical plans to build a new "world scale steam" ethylene production facility at Dow's sprawling Texas Operations complex. The company claims that the Texas project will employ up to 2,000 workers at its construction peak. The plant itself will create 150 permanent jobs for a project cost of \$1.7 billion, according to a statement from Texas Governor Rick Perry.

ExxonMobil is also building in Texas. News reports indicate that the "company estimated the expansion at its Baytown complex about 30 miles east of Houston would provide about 10,000 construction jobs, then 350 permanent jobs once new facilities are up and running. Exxon anticipates a 2016 start-up." \*\*vi\*

# **Special Treatment for Shell Oil**

Recent reviews by the Legislative Budget and Finance Committee (LBFC) have found a spotty track record when it comes to the accountability of Pennsylvania's KOZ program as well as several of the state's tax credit programs. A 2009 report found that claims about jobs creation and capital investments related to KOZs were not adequately documented and appeared to be overstated. Vii In a 2010 report, LBFC found that the Department of Community and Economic Development (DCED) did little to monitor 18 tax credit programs or to verify the results of those taxpayer investments.

What standards there are for such programs are relaxed even further for the cracker plant. For one, the rules laid out in Act 16 are different from and more generous than those governing other KOZ and KOEZ businesses. For DCED to award one of the remaining 15 KOEZs, it would need a business to create or retain 1,000 jobs in exchange for 10 years of tax benefits. Shell gets a different deal. Under Act 16, the company would only have to create 400 jobs to receive tax benefits for 15 years – and some of those jobs could be created by one or more affiliates of the company operating in other KOEZ zones. If the cracker plant and its affiliates fail to create the 400 jobs, the tax exemption period drops from 15 years to 10 years, but is not eliminated.

The new cracker tax credit ends or "sunsets" in 2043. The enabling legislation requires no evaluation of the credit program until after it ends three decades from now, severely limiting its accountability and effectiveness.

Senator Elder Vogel, Jr. of Beaver County has proposed a slightly different version of the cracker credit plan (SB 1563) to address some of these concerns. Under the Vogel plan, the cracker facility would still receive a tax credit of \$0.05 per gallon of ethane purchased for conversion into ethylene, but the program limits would be determined by the General Assembly on an annual basis. The General Assembly would be able to request a report on the effectiveness of the incentive prior to 2043. While this would provide more ongoing legislative oversight, it could also allow an even more expensive program, as the annual cap may be set higher than \$66 million.

## Déjà vu All Over Again

The proposals designed to woo Shell are reminiscent of the agreement Pennsylvania (under Governor Tom Ridge) and the City of Philadelphia (under Mayor Ed Rendell) made with shipbuilder Kvaerner in 1997. Faced with closure of Philadelphia's Naval Shipyard, the City and Commonwealth lured Kvaerner with more than \$200 million in grants and another \$20 million in low-interest loans, in addition to roughly \$200 million in assistance from the City of Philadelphia and other sources. In exchange, Kvaerner was to make an initial capital investment of \$15 million, with further investments over time, build three ships by 2003, and employ 500 workers.

In 2000, then-Auditor General Robert Casey, Jr. issued a scathing performance audit of the deal, citing too little investment required by the shipbuilder, excessive use of state grants rather than loans, and a state commitment of funding that exceeded \$300,000 per job – far in excess of normal subsidy standards. xix

Over a period of years, actual employment at the shipyard rose to over 1,000 and, to date, the shipyard has built 16 ships. However, the flow of state dollars hasn't stopped. When orders for ships dried up in 2010, the workforce was cut back to about 400 workers and subcontractors, and more state assistance was needed. To help the operation stay in business, the shipyard operator (now Aker) was pledged another \$42 million in state assistance in late 2010 by outgoing Governor Rendell, which was approved by incoming Governor Corbett in early 2011. \*\*

## **Conclusion**

Tax credit programs should be evaluated as stringently as appropriations – and by that standard, the proposed tax credit for Shell fails. At a time when the state is imposing new asset tests for food stamp recipients and increased accountability for other safety net benefits, the Corbett administration proposes an unaccountable economic development incentive that will last for generations.

The proposed tax credit on top of the creation of the special KOEZ for the Shell plant creates a bad precedent. Would a second company wishing to build a cracker plan in the state receive a similar package of incentives?

Making tax policy based on estimates of indirect and imputed jobs, rather than real permanent jobs that can be counted is risky – and expensive. The only commitment to taxpayers in this arrangement is 400 permanent new jobs at the cracker site, and temporary construction jobs associated with the plant. The proposal is, in effect, paying Shell a dividend based on an assumption that other companies will come to the region — although those companies are likely to want their own tax breaks as well.

## **Recommendations**

- Bring this decision out of the darkness and into the light. The General Assembly should better scrutinize this proposal and hold hearings to ensure the public has the full facts and understands the full cost and the potential benefits of the proposal.
- Stop the bidding war. Competition for the cracker plant among Pennsylvania, Ohio and West Virginia has been great for Shell, but not so good for taxpayers. Recognizing that the economies of these states are already intertwined and the likelihood that benefits (to the degree there are any) will not respect state borders, the governors of all three states should go back to the drawing board with a joint proposal that doesn't overpay for a plant that was coming to the region anyway.
- Ask for credible job numbers. The public should be clearly informed about the arrangement and the
  actual commitment made by Shell and the company should be held accountable. Using speculative
  numbers shortchanges the public.

The Pennsylvania Budget and Policy Center is a non-partisan policy research project that provides independent, credible analysis on state tax, budget and related policy matters, with attention to their impact on working families.

#### **Endnotes**

Fortune Global 500, 2011, reported online at CNN Money from the July 25, 2011 issue of *Fortune Magazine*, <a href="http://money.cnn.com/magazines/fortune/global500/2011/snapshots/6388.html">http://money.cnn.com/magazines/fortune/global500/2011/snapshots/6388.html</a>.

Royal Dutch Shell plc, 4th Quarter and Full Year 2011 Unaudited Results, February 2, 2012, <a href="http://www-static.shell.com/static/investor/downloads/financial\_information/quarterly\_results/2011/q4/q4\_2011\_qra.pdf">http://www-static.shell.com/static/investor/downloads/financial\_information/quarterly\_results/2011/q4/q4\_2011\_qra.pdf</a>.

Shell Oil Company (US), "Shell signs agreement to evaluate petrochemical site in Pennsylvania," March 15, 2012, <a href="http://www.shell.us/home/content/usa/aboutshell/media\_center/news\_and\_press\_releases/2012/03152012\_pennsylvania.html">http://www.shell.us/home/content/usa/aboutshell/media\_center/news\_and\_press\_releases/2012/03152012\_pennsylvania.html</a>.

Text of Act 16 of 2011 (formerly Senate Bill 1237, Regular Session 2011-2012) can be found here: <a href="http://www.legis.state.pa.us/cfdocs/billinfo/BillInfo.cfm?syear=2011&sind=0&body=S&type=B&bn=1237">http://www.legis.state.pa.us/cfdocs/billinfo/BillInfo.cfm?syear=2011&sind=0&body=S&type=B&bn=1237</a>.

v American Chemistry Council, "ACC: Dow Chemical Investment in Gulf Coast Ethane Cracker Affirms U.S. Manufacturing Renaissance," April 19, 2012, <a href="http://www.americanchemistry.com/Media/PressReleasesTranscripts/ACC-news-releases/ACC-Dow-Chemical-Investment-in-Gulf-Coast-Ethane-Cracker-Affirms-US-Manufacturing-Renaissance.html">http://www.horsehead.net/facility\_content.php?ID=12</a>.

vi Horsehead Corporation website, <a href="http://www.horsehead.net/facility\_content.php?ID=12">http://www.horsehead.net/facility\_content.php?ID=12</a>.

vii Pittsburgh Post-Gazette Editorial Board, "Gas Central: The Pa. cracker site is brimming with promise," Pittsburgh Post-Gazette, May 9, 2012, <a href="http://www.post-gazette.com/stories/opinion/editorials/gas-central-the-pa-cracker-site-is-brimming-with-promise-517310/">http://www.post-gazette.com/stories/opinion/editorials/gas-central-the-pa-cracker-site-is-brimming-with-promise-517310/</a>.

Peter L. DeCoursey, "Capitolwire: Legislature wants answers, facts on \$1.65 billion cracker tax credit," Capitolwire.com, June 5, 2012, <a href="http://www.capitolwire.com/default.asp?tabstucknum=30">http://www.capitolwire.com/default.asp?tabstucknum=30</a> (subscription required). iXTimothy Puko, "Cracker plant jobs may be way off," Pittsburgh Tribune-Review, June 15, 2012, <a href="http://triblive.com/news/2008446-74/jobs-state-plant-permanent-shell-industry-corbett-numbers-tax-billion">http://triblive.com/news/2008446-74/jobs-state-plant-permanent-shell-industry-corbett-numbers-tax-billion</a>.

Houston Business Journal, "Chevron Phillips to build ethane cracker at Baytonw plant," December 14, 2011, http://www.bizjournals.com/houston/news/2011/12/14/chevron-phillips-to-build-ethane.html.

Bernardo Fallas, "Dow Chemical's new cracker at Freeport, Texas, to cost \$1.7 billion," Platts, April 19, 2012, http://www.platts.com/RSSFeedDetailedNews/RSSFeed/Petrochemicals/6202631.

viv Dow Chemical Company, "Dow to build new ethylene production plant at Dow Texas Operations," April 19, 2012, <a href="http://www.dow.com/news/company/article/?id=/company-news/dow-build-new-ethylene-production-plant-dow-texas-operations#.T85FSFKwVds">http://www.dow.com/news/company/article/?id=/company-news/dow-build-new-ethylene-production-plant-dow-texas-operations#.T85FSFKwVds</a>.

<sup>xv</sup> Jack Kaskey, "Dow to build ethylene plant in Texas on cheap gas prices," Bloomberg Businessweek, April 19, 2012, http://www.businessweek.com/news/2012-04-19/dow-to-build-ethylene-plant-in-texas-on-cheap-gas-prices.

wi Michael Graczyk, "Exxon Mobil considering Baytown expansion," Associated Press reported online at Bloomberg Businessweek, June 1, 2012, <a href="http://www.businessweek.com/ap/2012-06/D9V4F0MG0.htm">http://www.businessweek.com/ap/2012-06/D9V4F0MG0.htm</a>.

Legislative and Budget Finance Committee, An Evaluation of the Keystone Opportunity Zone (KOZ) Program, June 2009, <a href="http://lbfc.legis.state.pa.us/reports/2009/36.PDF">http://lbfc.legis.state.pa.us/reports/2009/36.PDF</a>.

Legislative and Budget Finance Committee, *Pennsylvania's Tax Credit Programs*, June 2010, http://lbfc.legis.state.pa.us/reports/2010/49.PDF.

xixxix Auditor General of Pennsylvania, A Performance Audit of Commonwealth Spending For the Kvaerner-Philadelphia Naval Shipyard Project Through January 14, 2000,

http://www.auditorgen.state.pa.us/archives/Performance/KvaernerRpt.html#find1-A.

xx Linda Loyd, "Pa. OKs \$42 million for Aker Shipyard," Philadelphia Inquirer, February 18, 2011, <a href="http://articles.philly.com/2011-02-18/news/28553821">http://articles.philly.com/2011-02-18/news/28553821</a> 1 manuel-manny-stamatakis-aker-philadelphia-shipyard-gary-gaydosh.

<sup>&</sup>lt;sup>x</sup> Gabriel Nelson, "Natural Gas: Shale boom has Appalachia dreaming of industrial renaissance," Greenwire (available online at Energywire), E&E Publishing, December 15, 2011, <a href="http://www.eenews.net/public/Greenwire/2011/12/15/2">http://www.eenews.net/public/Greenwire/2011/12/15/2</a>.

xii Office of Governor Bobby Jindal, "Sasol announces gas-to-liquids complex," Posted on KPLCtv.com on September 13, 2011, <a href="http://www.kplctv.com/story/15452188/sasol-announces-selects-calcasieu-parish-as-location-for-potential-8-10-billion-gas-to-liquids-complex">http://www.kplctv.com/story/15452188/sasol-announces-selects-calcasieu-parish-as-location-for-potential-8-10-billion-gas-to-liquids-complex</a>.