PennFuture

PennFuture Policy Memo
Energize PA: The Last Piece of the Puzzle to Lock-in Fossil Fuels in Pennsylvania

Draft: June 6, 2019

Speaker of the House Mike Turzai, along with a coalition of legislators, business interests, and labor unions announced a package of bills dubbed *Energize PA*. The goal of the package is to attract petrochemical businesses to Pennsylvania with a suite of subsidies and regulatory rollbacks. While the package is not to be confused with a previous plan for drilling in state parks and forest lands, *Energize PA* represents the largest legislative effort to date to lock-in fossil fuels in the Commonwealth's economy for decades to come.

PA's Economic Vision for Fossil Fuels

Energize PA represents an increasingly popular alternative economic vision for Pennsylvania's economy, reflecting the rapid change in the state's energy landscape during the last couple of decades. For nearly a century, the coal industry dominated, but in the early 2000's Pennsylvania incentivized clean energy technologies to attract new businesses, lower carbon emissions, and reduce energy prices This included passage of an Alternative Energy Portfolio Standard, investments in energy efficiency through Act 129, and a number of grant and loan programs for renewable energy.

By the early 2010's, politicians allowed the clean energy incentives to stagnate or continue unfunded and instead threw their support behind the burgeoning unconventional natural gas industry developing throughout the Marcellus Shale. Policymakers enacted a weaker impact fee per well rather than a more conventional severance tax on gas production. New policies to regulate methane leakage problems from gas infrastructure have been weak or limited. And legislators have consistently threatened efforts to weaken the Department of Environmental Protection through funding cuts or deregulation.

Legislative majorities in Harrisburg enacted these policies to, in their opinion, grow the economy, but it instead overproduced and artificially suppressed gas prices. The industry and supportive policymakers responded in two ways. First, the gas industry aggressively pushed for more pipeline capacity to move the overproduced gas out of state for sale. Taking advantage of a tangle of federal and state agencies overseeing pipeline construction, the gas industry has quickly built out a web of projects that are starting to move gas, but they have done so while also creating significant public safety and environmental problems.

Second, gas industry and legislators are trying to advance policy efforts to boost natural gas consumption. Policymakers took a significant first step in doing so by enacting a $1.6 billion subsidy in 2012 for Shell to build an ethane cracker plant in Beaver County, which is currently under construction. This project has acted like a clarion call to the petrochemical industry and their legislative champions and is the basis for their economic analysis.

In context, *Energize PA* is an effort to double down on nearly a decade of preferential policy support for the natural gas industry—first for production and transportation, now for consumption—and lock-in gas and petrochemical infrastructure. This vision has enamored not only local politicians, but also economic development experts at state agencies that have been more than willing to provide analytical backing for a petrochemical buildout, including research stating that the Marcellus Shale can sustain *four additional* ethane cracker plants in addition to the facility under construction in Beaver County.

Turning Pennsylvania Natural Gas into a Plastics Hub

At its most basic level, the goal of *Energize PA* is to make Pennsylvania a global petrochemical and plastics manufacturing hub. According to IHS Markit, up to 40% of the natural gas captured in the Marcellus Shale from fracking contains natural gas liquids, including condensable hydrocarbons like ethane, propane, and butane. These liquids are common feedstock materials for developing plastics resin, which is used in a broad set of manufacturing. The market opportunity is all based on location—about 73% of U.S. and Canadian plastic resin demand falls within a 700-mile radius of southwestern Pennsylvania—putting gas liquid producers in Texas, Louisiana, and the Middle East at a competitive disadvantage.

For example, the cracker plant in Beaver County will turn one of these liquids, ethane, into ethylene and then into polyethylene, a basic resin used in the manufacturing of plastic bags, hospital equipment, automobiles, pharmaceuticals, clothing, bottles, and toys, among other products. This resin would be shipped to existing manufacturing in the region. It will also be used to entice existing manufactures to expand into the Commonwealth so that they are closer to their feedstock source as well as take advantage of low-cost natural gas for energy.

Another natural gas liquid, propane, can also be used as either a direct heating fuel or, more importantly to the vision of *Energize PA*, as a feedstock for the creation of propylene and polypropylene, which is an even more sought-after plastics resin. Experts believe that the propane captured from Marcellus drilling will most likely be sold in the heating fuel market but also believe that there are opportunities to develop propane dehydrogenation facilities to turn a portion of the feedstock into polypropylene. The future for this opportunity is murkier than ethane because global supply of propane-sourced feedstocks is already high.

Natural gas can also be used as a feedstock to produce ammonia and urea, which is an alternative to using oil for production. Much of manufacturing market that uses ammonia and urea is for developing fertilizers, which is widely used in the state as well as in the Midwest. Nonetheless, experts believe that Pennsylvania's opportunity to move into the ammonia and urea market will not come until after 2025, when demand is expected to balance today's oversupply of product. This window of opportunity could shift if the price of oil increases above $65 per barrel and sustains that price, increasing the cost of producing ammonia and urea from oil.

Leveraging Pennsylvania Natural Gas into a Broader Industrial Hub

While the policy and economic narrative in Pennsylvania remains focused on plastics manufacturing, it's important to note that the business community is looking at this issue more broadly. Natural gas from the Marcellus Shale is keeping energy prices low in the Commonwealth, providing an incentive to other energy-intensive industries whose profit margins are often determined by their energy costs.

In particular, the business community has listed seven additional industries that could be attracted to Pennsylvania with preferential policies. This includes data centers, glass manufacturers, fabricated materials facilities, cement plants, inorganic chemicals used as solvents, aluminum, and steel.

The market potential for each of these industries is different and it is assumed most are not real possibilities until after 2025, which is why politicians have not mentioned these options at the same boisterous level as they have for plastics. Nonetheless, it is important to keep these industries in mind because each brings its own unique set of environmental and pollution challenges.

Summary of the *Energize PA* Legislative Package

Energize PA is a collection of eight pieces of legislation from policymakers representing districts in the Marcellus Shale field. The policies are loosely sourced from recommendations made in a 2017 report commissioned by Chevron and Peoples Gas titled *Forge the Future: Pennsylvania's Path to an Advanced, Energy-Enabled Economy*. The report details Pennsylvania's strengths and barriers to expanding the gas industry, calling on public-private collaboration to "translate our energy potential into sustained, broad-based prosperity for the state and the region."

House Bill 1100 – Establishing an Energy and Fertilizer Tax Credit (Rep. Aaron Kaufer)
In its simplest form, HB 1100 would establish the same tax credit provided to the Shell Cracker Plant for other large manufacturers that use Pennsylvania-resourced natural gas, but with lower requirements. The tax credit would provide a $0.05 per gallon subsidy for the production of ammonia, urea, and methanol, up to a total 20% of the petrochemical manufacturers tax liabilities for manufacturers that do the following:

- Builds a facility in Pennsylvania through an investment of at least $1 billion;
- Hires at least 1,000 full-time equivalent jobs during the construction phase of the project (the cracker plant credit required at least 2,500 jobs);
- Purchases and uses Pennsylvania-sourced natural gas to manufacture petrochemicals or fertilizers.

The bill also allows a petrochemical company to sell or transfer their tax credit to another upstream or downstream petrochemical company if they assess they can't use the tax credit any longer (e.g. the tax credit would result in a refund, they receive another tax credit they must use before this one is eligible, etc.).

PennFuture Position: Strongly Opposed

House Bill 1101 – Expand Net Loss Deduction (Rep. Natalie Mihalek)
A net operating loss is when a company's expenses are greater than its revenue. Under these circumstances, a company can deduct that loss from future tax liabilities. Companies could feature a net loss if significant investments are made, such as big infrastructure projects. Early-stage companies could incur years of losses as they invest in product development. As a result, the net loss deduction is viewed as a key business incentive for both new businesses and traditional businesses looking to expand.

Under existing Pennsylvania law, a company can deduct their net loss in tax years after 2018 for up to 40% of their tax liability. The deductions can be carried forward 20 years, if necessary. HB 1101 would increase that tax liability cap from 40% to 45% in 2020 and 50% in 2021 and beyond.

PennFuture Position: Neutral. A 10% increase in net loss deduction would encourage the development of environmentally harmful industry but could also be used to encourage renewable projects with high upfront costs, including wind farms.

House Bill 1102 – Establish Keystone Energy Enhancement Zones (Rep. Joshua Kail)

Whereas HB 1100 would subsidize, through the state tax code, the construction of petrochemical businesses building projects in the state, HB 1102 would subsidize these same businesses through local and municipal taxing authorities. This bill is nearly identical to bills proposed by Speaker Turzai during the past two sessions. The bill has three main pieces to it:

1. The creation of a *Keystone Energy Authority*, a new government entity tasked with supporting the natural gas and petrochemical industries.
2. The creation of a *Keystone Energy Enhancement Fund* to provide a revenue stream for operating the *Authority* and *Enhancement Zones* program.
3. The establishment of *Keystone Energy Enhancement Zones* to provided tax subsidies to petrochemical businesses in Pennsylvania.

The *Keystone Energy Authority* would be a new government entity tasked with the goal of "furthering the development of manufacturing business, petrochemical business and other downstream business opportunities through the increased use of natural gas produced in this Commonwealth." The *Authority* would fulfill this goal by executing the following powers:

- Develop and execute the *Keystone Energy Enhancement Zone* program;
- Act as the main point of contact with any petrochemical company applying with Pennsylvania for its Keystone Energy Enhancement Zone;
- Develop a report identifying the challenges that exist across the Commonwealth to expand natural gas transmission and distribution infrastructure, while also providing recommendations on how to address these challenges including legislative and regulatory policies;
- Identify corridors for safe and efficient siting of natural gas transmission and distribution pipelines to *Enhancement Zones*;
- Coordinate with all relevant regulatory agencies and recommend policies to streamline natural gas permits;
- Investigate and hold hearings on any issues important to the *Authority* carrying out its objectives;
- Execute its business like any other state authority, including making contracts and creating bylaws.

The *Authority* would hire a staff but be governed by a seven-person board serving two-year terms. One member would be appointed by the Governor and six would be appointed by the House and Senate leadership. The *Authority* would cease operations in 2032.

The bill also creates a *Keystone Energy Enhancement Fund* (i.e. a special fund) so the legislature can direct revenue to the *Authority*. To start, the bill would transfer $500,000 from the General Fund, presumably to hire staff and begin operations.

Lastly, the bill creates the *Keystone Energy Authority* that would administer up to 20 *Keystone Energy Enhancement Zones* throughout the Commonwealth that would provide a 10-year tax abatement for all local taxes to petrochemical companies building infrastructure in the zone. The zones also provide a similar ten-year tax exemption for state sales and personal income taxes accrued while a part of the zone.

Municipalities must approve an ordinance or resolution agreeing to offer this tax abatement in order to be eligible to become a zone. They must also include deteriorated property and propose how local regulations will be eased for petrochemical businesses. A major requirement for businesses to be eligible for the tax abatement in a zone is that it must offer an apprenticeship program and follows relevant federal law related to hiring illegal aliens.

PennFuture Position: Strongly Opposed.

House Bill 1103 – Expand Pipeline Investment Program (Rep. Jonathan Fritz)
In 2016 and 2017, the legislature—at the behest of Sen. Gene Yaw—transferred funds from the High-Performance Building Program to a newly created Pipeline Investment Program. The Building Program provided matching loans and grants to small businesses to support the construction of high-efficiency buildings. The legislature defunded this program by burying the changes in the Fiscal Code and transferred the funds to the new pipeline program that provides grants to businesses that are connecting their facilities to natural gas distribution lines.

HB 1103 expands the *Pipeline Investment Program* so that it can also provide grants to large residential projects and combined heat and power facilities. It also increases the maximum amount available for each grant from $1,000,000 to $1,500,000.

PennFuture Position: Strongly Opposed.

House Bill 1104 – Establish Registry of Abandoned Manufacturing Sites (Rep. Tara Toohil)
DCED manages an online registry called *PA Site Search* that catalogues vacant lands and building spaces available for leasing and purchase. It aims to be a one-stop shop that allows businesses to assess opportunities for expansion. HB 1104 would expand the registry (or create a new registry) that includes abandoned manufacturing sites and brownfields, which policymakers believe are not fully catalogued under the existing site. While packaged for petrochemicals, the bill is written broadly and could be beneficial for other clean industrial uses, including installing utility-scale solar generation.

PennFuture Position: Support. The bill is broadly written, and similar abandoned sites can also be used for renewable energy projects, including utility scale solar.

House Bill 1105 – Create a Consolidated Standards Permit (Rep. Eric Nelson)
HB 1105 aims to mimic a policy utilized in Ohio that offers a *Consolidated Standard Permit* for remediating a polluted site, which policymakers believe will speed up the permitting process and incentivize site remediation (and thus speed up redevelopment of abandoned lands). In Ohio, a business looking to remediate a site can voluntarily choose to apply for a consolidated permit—one permit to obtain all necessary approvals, permits, and licenses for environmental regulations.

HB 1105 aims to create the same consolidated permit in Pennsylvania and even uses some of the same language from Ohio's policy. The consolidated permit would cover approvals for the following environmental regulations:

- Clean Streams Law
- Air Pollution Control Act
- Solid Waste Management Act
- Infectious and Chemotherapeutic Waste Law
- Storage Tank and Spill Prevention Act

If a company obtains this permit, they would be deemed to be in compliance with all of these regulations for the intended site remediation. The bill also places a 120-calendar day limit on how long DEP has to review the application.

What makes HB 1105 different than the Ohio version is key language that "requires that…all of the substantive requirements applicable to those activities under any of those chapters, rules, acts, or regulations and that complies with any agreements the director of environmental protection has entered into with the United States environmental protection agency under those acts or regulations." In other words, the Ohio consolidated permit specifically requires that the rules held in the environmental regulations it is superseding must be included. HB 1105 does not include this language, leaving it up to DEP to decide what to include in the consolidated permit.

PennFuture Position: Opposed as currently written. The bill provides a potential loophole to allow those gaining the general permit to not meet the environmental standards of the individual permits.

House Bill 1106 – Allows for deemed approval of permits (Rep. Michael Puskaric)
For the last two years, numerous House and Senate legislators have introduced or attempted to advance so called *deemed approval* language for environmental permits. In essence, this language states that if DEP doesn't take action on a permit application within a certain period of time, the permit is automatically approved. The policy language was in response to long permit review times at the southwest DEP regional office that has taken in the bulk of fracking-related permits since unconventional drilling took off in Pennsylvania.

HB 1106 is no different than past attempts to advance this language. In particular, the bill requires that for all environmental permits, general permits, and plan approvals, the DEP must:

- Take no more than 30 days to issue, modify, renew, transfer, or refuse to issue an environmental permit;
- Return any permit application that is found to be administratively incomplete within 10 days of its receipt;
- Engage with a "referee," which is chosen from a list of three provided by the Environmental Hearing Board's master list of referees, to resolve any dispute between the applicant and the DEP;
- Automatically approve a permit if it fails to adhere to the timelines written in the legislation.

Unfortunately, as has been shown in the past through DEP data and case studies, the delay in permit review falls largely on incomplete permit applications. A review by DEP in 2017 found that, for example, 60% of erosion and sedimentation permits were submitted incomplete. The assessment concluded that DEP simply, "cannot rely on licensed professionals to submit technically sound, legally defensible application materials in the very first submission." Implementing a deemed approval process does not solve this root cause and actually increases the likelihood that deficient permits will be issued.

In fact, a program to address this issue already exists. DEP's *Permit Decision Guarantee Program*, which was established in 2012, provides for an intensive process to ensure applications are submitted complete and permits are approved as quickly as possible. The program requires a pre-application meeting of all those involved in the permitting process so that everyone is aware of what is needed in the application. DEP then completes a first-level review of the application within 10 days. If complete, DEP provides its technical review, which must be completed within 130 to 150 days, depending on the permit. If DEP does not meet this deadline, the Secretary becomes involved to complete the process and issue a denial or approval.

PennFuture Position: Strongly opposed. The bill does not address the core problem of outside engineers submitting incomplete applications and provides a pathway for these deficient permits to be accepted.

House Bill 1107 – Establishes a Pennsylvania Permitting Commission (Rep. Timothy O'Neal)
HB 1107 aims to address the same problem HB 1106 purports to fix—permit review delays—through the creation of a *Permitting Commission.* The *Commission* would be a new government entity tasked with administering "the permitting and plan approval processes vested in the [DEP] by law." In other words, the bill would remove the permitting review and approval process from DEP and create a new agency to take on those activities. DEP would continue to enforce permits.

Specifically, the *Commission* would:

- Develop and implement individual and general permitting and plan approval requirements for environmental laws;
- Take prompt action on applications to issue, modify, renew, or transfer permits;
- Develop simplified application, permit, and plan approval forms;
- Promulgate regulations allowing for permits by rule;
- Establish recordkeeping requirements and permit fees;
- Enter into agreements with County Conservation Districts to assist in permitting;
- Establish any necessary advisory committees, as needed.

The new *Commission* would be funded by transferring all appropriations, equipment, files, and other materials currently used by DEP to carry out permitting activities. Displaced DEP employees will be interviewed by the *Commission* before they interview outside candidates, but there are no guarantees of a transfer.

The *Commission* will be governed by a five-member Board, appointed by the Governor and voted favorably by a two-thirds vote in the Senate. The members would serve 10-year terms. At least two of the members have to be professional engineers. The Board cannot exceed a 3-2 voting majority of the Governor's party affiliation.

PennFuture Position: Strongly opposed. The bill would create a politicized commission to review and accept permits.