POWERING THE ECONOMY



The Economic Contributions of PECO to the Greater Philadelphia Region and the Commonwealth of Pennsylvania

MARCH 2015

ECONOMY LEAGUE OF GREATER PHILADELPHIA
WITH ECONSULT SOLUTIONS, INC.

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SUMMARY OF FINDINGS

Economic & Fiscal Impacts of PECO's General Operations

- Through PECO's general operations, which include activities related to the transmission and distribution of electric and natural gas service, the company supports significant economic activity within the Greater Philadelphia Region and the Commonwealth of Pennsylvania.
  - In 2014, PECO employed more than 2,400 people, and the total economic impact of its general operations activities supported $4 billion in total output in the Greater Philadelphia tri-state region. These activities generated approximately 8,750 full time jobs, and $730 million in labor income.
  - Similarly, PECO's operations supported economic activity in the Commonwealth of Pennsylvania. Statewide, PECO's operations supported $4.5 billion of total output, 9,600 jobs, and $760 million in labor income.
- That economic activity also supported state and local government operations through the taxes paid by PECO and its employees, or generated through the indirect and induced economic impacts of its spending.
  - PECO directly paid or collected and remitted on behalf of its customers and employees nearly $188 million in state and local income/franchise, payroll, property, sales and use and utility taxes in Pennsylvania.
  - The indirect and induced economic activities supported by PECO's operations in Pennsylvania generated $17 million in state taxes.

Economic Impact of PECO Smart Ideas Energy Management Program

- Through PECO Smart Ideas, the company provides customers with financial incentives and energy efficiency programs to reduce energy consumption and expenditures.
- In 2014, the PECO Smart Ideas program resulted in nearly $75 million in customer savings through a combination of direct rebates, incentives, and energy consumption savings. Since the program's inception in 2009, PECO's residential and commercial customers have saved more than $408 million.
- In 2014, the residential savings generated by these programs made available $42.3 million in additional disposable income that households could then spend in the local economy. This additional disposable income generated nearly $48 million in total output and supported 330 jobs and $17 million in labor income in southeastern Pennsylvania.

Charitable Giving & Community Volunteer Programs

- In 2014, PECO supported the communities in its service territory through more than $5.3 million in contributions to a variety of charities and nonprofit organizations.
- PECO employees serve on the boards of more than 150 nonprofits across the region; and in 2014, employees recorded nearly 14,000 volunteer service hours to support communities throughout the region.
- PECO's charitable contributions are dedicated corporate funds and do not affect the costs paid by customers.

INTRODUCTION

PECO engaged the Economy League of Greater Philadelphia (Economy League) and its partner, Econsult Solutions, Inc. (ESI), to estimate the company's economic contributions to the local economy. The analysis included PECO's direct economic impact as well as the indirect and induced impacts on the following geographies:

- PECO's service territory includes all or parts of Bucks, Chester, Delaware, Lancaster, Montgomery, Philadelphia and York counties in Pennsylvania;
- The Greater Philadelphia tri-state region encompassing Bucks, Chester, Delaware, Montgomery, and Philadelphia counties in Pennsylvania; Burlington, Camden, Gloucester, Mercer and Salem counties in New Jersey; and New Castle County in Delaware;
- The Commonwealth of Pennsylvania.

The economic impacts were estimated using background data provided by PECO to the Economy League and ESI. The information provided is consistent with the data that PECO provides to utility and other regulatory agencies. That data was applied through an IMPLAN Input-Output model that was customized for this project. IMPLAN represents an industry standard approach for undertaking economic impact studies and is commonly used to estimate the economic impacts generated by projects, companies and industries.

The analysis focused on three areas of PECO's economic contribution to the region:

- **General Operations**—PECO purchases goods and services to provide electric and natural gas transmission and distribution services. General operations spending includes operations and maintenance expenses, capital investments, customer care, and corporate and administrative services.
- **Energy Management Programs**—The company offers a suite of energy efficiency programs through PECO Smart Ideas to help customers and businesses reduce energy consumption, increase energy savings, and contribute to a more sustainable environment.
- **Charitable Giving**—PECO has a strong tradition of community leadership. The company contributes funds, in-kind services and manpower to organizations and institutions that enhance the quality of life throughout the service territory.

Key Terms & Concepts

This report examines three key effects that together make up the aggregate economic impact of PECO employment and spending in the utility's service territory, the Greater Philadelphia tri-state region, and in the Commonwealth of Pennsylvania. They include:

- **Direct Impact**—The economic activity directly associated with PECO's operations. This includes the revenue generated by PECO, the people directly employed by PECO, and the wages and salaries paid to those employees.
- **Indirect Impact**—The impacts that are generated in industries that supply goods and services to PECO. This includes spending by PECO for materials and equipment associated with its annual maintenance and capital investments, as well as third-party contracted services.
- **Induced Impact**—The impacts that result from the spending of wages and salaries by the direct and indirect employees on typical household consumption. This includes spending on housing, retail, and food and entertainment.
- **Total Economic Impact**—The sum of the direct, indirect and induced impacts.

After calculating PECO's direct, indirect and induced impacts through the IMPLAN model, that impact is measured in a variety of ways. The report looks at the following economic impacts:

- **Employment**—The number of jobs supported
- **Labor Income**—Wages and salaries paid to workers
- **Output**—The market value of goods and services provided, frequently reflected as revenue or sales by businesses
- **Taxes**—Property and wage taxes paid to local jurisdictions and taxes collected and paid by PECO to the Commonwealth of Pennsylvania.

GENERAL OPERATIONS ECONOMIC IMPACTS

PECO and its more than 2,400 employees serve nearly 1.6 million electric customers and more than 500,000 natural gas customers across 2,100 square-miles in southeastern Pennsylvania. In addition to providing electric and natural gas service, PECO also assists customers in managing their energy usage and costs, and provides support and assistance to hundreds of nonprofit and community organizations through its charitable giving and sponsorship programs.

PECO is responsible for transmitting and distributing electricity and natural gas to customers located in southeastern Pennsylvania. The company's general operations activities include those related to the company's electricity and natural gas transmission and distribution, maintenance and capital investments, customer service, and corporate and administrative services.

FIGURE 1: PECO EMPLOYEES BY LOCATION OF RESIDENCE

NUMBER OF EMPLOYEES	TOTAL EMPLOYEES
Total PECO Employees	2,458
Live in PECO Service Territory (Bucks, Chester, Delaware, Lancaster, Montgomery, Philadelphia and York counties)	2,017
Live in Greater Philadelphia Tri-State Region	2,355
Live in Commonwealth of Pennsylvania	2,088

PECO provides electric service to nearly 1.6 million customers in Bucks, Chester, Delaware, Montgomery, Philadelphia and York counties in southeastern and southcentral Pennsylvania. Those 1.4 million residential and more than 150,000 commercial and industrial customers receive their electricity through a network of 23,000 miles of transmission and distribution wires, connected by 1,132 substations. PECO invests about $500 million each year to enhance the company's electric system through capital investment projects and ongoing preventive maintenance.

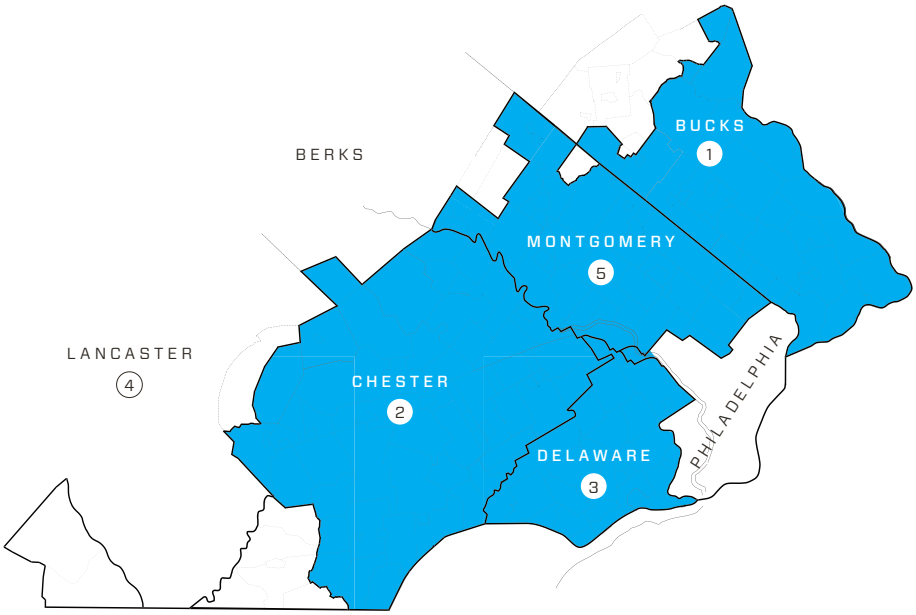
PECO also provides natural gas to more than 500,000 customers in Bucks, Chester, Delaware, Montgomery and Lancaster counties. The nearly 462,000 residential and more than 43,000 commercial customers are served by 12,000 miles of natural gas mains and service lines, and 31 natural gas gate stations. In 2014, PECO invested $90 million in equipment inspections, repairs and replacements, and preventive maintenance work to ensure safe and reliable service for customers.

The following sections will provide a snapshot of how these crucial activities impact the overlapping economies of PECO's service territory, the Greater Philadelphia tri-state region (including counties in Pennsylvania, New Jersey and Delaware) and the Commonwealth of Pennsylvania. The analysis will explain how PECO's operations support employment, labor income, and overall economic activity and spending in the form of total output. These are in the form of PECO's direct activity, the indirect economic activity that is supported as a result of the spending of PECO's suppliers and contractors, and the induced economic activity that is supported as a result of the spending of the direct and indirect employees.

FIGURE 2: PECO SERVICE TERRITORY: FACTS AND FIGURES

REGION	TOTAL POPULATION	RESIDENTIAL ELECTRIC CUSTOMERS	COMMERCIAL ELECTRIC CUSTOMERS	RESIDENTIAL NATURAL GAS CUSTOMERS	COMMERCIAL NATURAL GAS CUSTOMERS	PECO EMPLOYEES BY RESIDENCE
Bucks	626,976	199,877	23,575	76,956	9,149	258
Chester	509,468	184,884	21,756	67,093	7,914	303
Delaware	561,973	232,918	23,321	164,470	12,496	479
Lancaster	529,600	N/A	N/A	156	22	16
Montgomery	812,376	242,740	28,377	153,264	13,740	478
Philadelphia	1,553,165	568,046	54,928	N/A	N/A	482
York	438,965	3,694	287	N/A	N/A	1
TOTAL	**4,063,958**	**1,432,159**	**152,244**	**461,939**	**43,321**	**2,017**

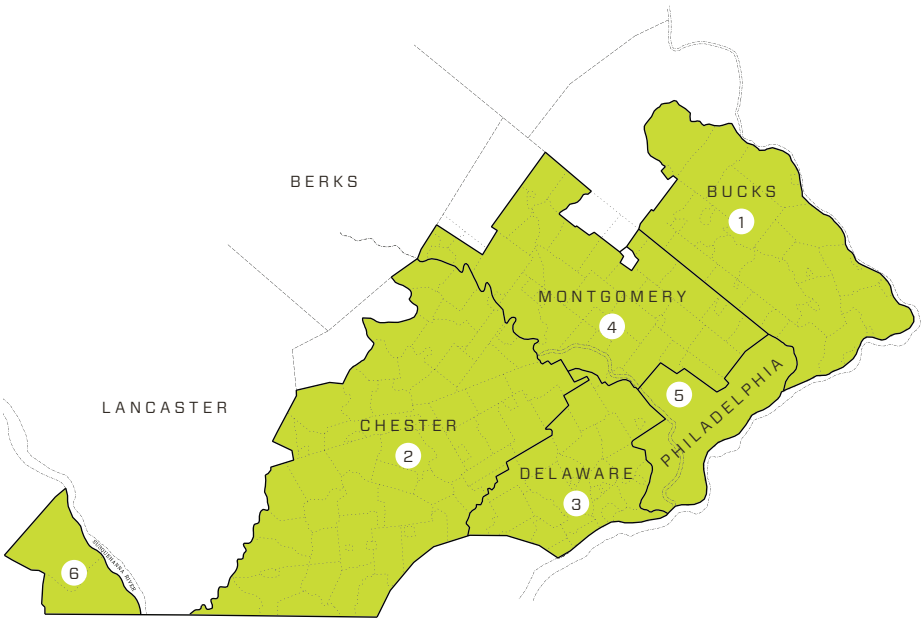
MAP 1A: STUDY AREA: NATURAL GAS TERRITORY SERVED | PECO



1. Bucks County
2. Chester County
3. Delaware County
4. Lancaster County
5. Montgomery County

Note: Municipalities that appear in the boundary above indicate that PECO service is supplied to one or more customers in that municipality and does not indicate 100% service area saturation.

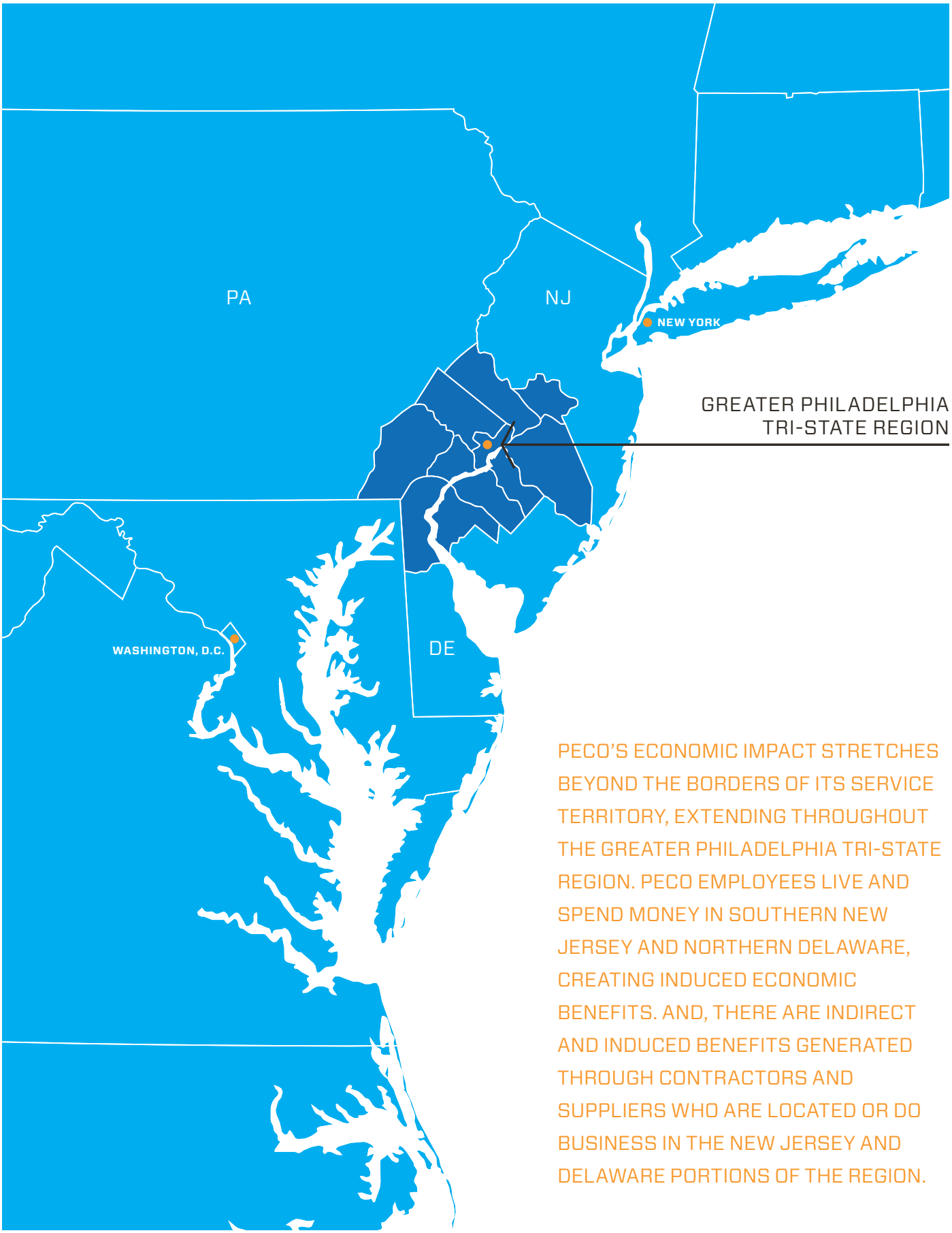
MAP 1B: STUDY AREA: ELECTRIC TERRITORY SERVED | PECO



1. Bucks County
2. Chester County
3. Delaware County
4. Montgomery County
5. Philadelphia Division
6. York County/Delta

Note: Municipalities that appear in the boundary above indicate that PECO service is supplied to one or more customers in that municipality and does not indicate 100% service area saturation.

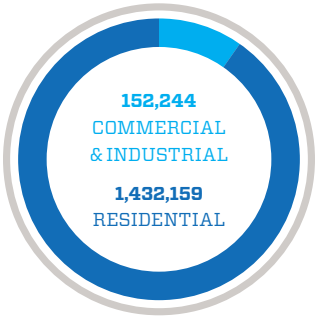
MAP 2: GREATER PHILADELPHIA TRI-STATE REGION



PECO'S ECONOMIC IMPACT STRETCHES BEYOND THE BORDERS OF ITS SERVICE TERRITORY, EXTENDING THROUGHOUT THE GREATER PHILADELPHIA TRI-STATE REGION. PECO EMPLOYEES LIVE AND SPEND MONEY IN SOUTHERN NEW JERSEY AND NORTHERN DELAWARE, CREATING INDUCED ECONOMIC BENEFITS. AND, THERE ARE INDIRECT AND INDUCED BENEFITS GENERATED THROUGH CONTRACTORS AND SUPPLIERS WHO ARE LOCATED OR DO BUSINESS IN THE NEW JERSEY AND DELAWARE PORTIONS OF THE REGION.

General Operations Economic Impact: PECO's Service Territory

ELECTRIC



1,584,403
TOTAL
ELECTRIC
CUSTOMERS

ELECTRIC OPERATIONS STATISTICS

23,000 MILES
OF ELECTRICAL WIRE

472
SUBSTATIONS

$500 MILLION ANNUALLY
TO IMPROVE THE ELECTRIC SYSTEM INFRASTRUCTURE, INCLUDING PERFORMING MAINTENANCE AND UPGRADING EQUIPMENT

ELECTRIC CAPITAL INVESTMENTS

VEGETATION MANAGEMENT

$35 MILLION ANNUALLY
IN TREE PRUNING AND OTHER VEGETATION REMOVAL AROUND APPROXIMATELY 2,400 MILES OF AERIAL POWER LINES

NATURAL GAS



505,260
TOTAL
NATURAL GAS
CUSTOMERS

NATURAL GAS OPERATIONS STATISTICS

12,000 MILES
OF NATURAL GAS MAINS AND SERVICE LINES

31
NATURAL GAS
GATE STATIONS

$90 MILLION ANNUALLY
FOR EQUIPMENT INSPECTIONS, REPAIRS AND REPLACEMENTS, AND PREVENTIVE MAINTENANCE WORK

NATURAL GAS CAPITAL INVESTMENTS

In 2014, PECO's operations generated $3.1 billion of revenue within the seven counties that comprise PECO's electric and natural gas service territory. This revenue supported 2,017 direct jobs in PECO's service territory and nearly $282 million in wages and salaries.

PECO's direct economic activity generates demand for goods and services from local companies that ripple through the regional economy and generate additional economic impacts. The total economic impact generated by PECO's annual operations in southeastern Pennsylvania resulted in more than $4 billion in output, 7,400 total jobs, and $622 million in total labor income.

This implies an employment multiplier of 3.7, meaning that every direct PECO job generates 2.7 additional jobs in the local economy. And, every dollar of PECO's output generates 30 cents of additional output in the local economy, and 20 cents of additional labor income. *See Figure 3.*

The scale and scope of PECO's operations make its size similar to those of some entire industries in the region. PECO's direct output alone is similar to the total direct output of the following regional industries:

- *Architectural, Engineering, and Related Services—$3 billion*
- *PECO—$3.12 billion*
- *Non-Residential Construction—$3.4 billion*
- *Medical and Diagnostic Labs and Outpatient Ambulatory Care—$3.5 billion*

FIGURE 3: PECO GENERAL OPERATIONS ECONOMIC IMPACTS, 2014 ($ IN MILLIONS)

STUDY AREA & IMPACT	DIRECT	INDIRECT	INDUCED	TOTAL
PECO SERVICE TERRITORY				
Employment	2,017	3,213	2,174	**7,403**
Labor Income	$281.7	$229.2	$111.4	**$622.3**
Output	$3,094.0	$629.5	$303.3	**$4026.8**

PECO's economic impact reaches each of the seven counties it serves. The total employment impact ranges from 24 jobs in York County to 1,512 jobs in Philadelphia County. Total output impact ranges from $2.7 million in Lancaster County to more than $940 million in Philadelphia County. *See Figure 4.*

FIGURE 4: PECO GENERAL OPERATIONS ECONOMIC IMPACT BY COUNTY, 2014 ($ IN MILLIONS)

STUDY AREA & IMPACT	DIRECT	INDIRECT	INDUCED	TOTAL
BUCKS COUNTY				
Employment	258	440	266	**964**
Labor Income	$37.7	$24.7	$11.2	**$73.5**
Output	$524.5	$63.4	$32	**$619.9**
CHESTER COUNTY				
Employment	303	494	276	**1,073**
Labor Income	$45.5	$34.0	$13.8	**$93.3**
Output	$565.1	$78.0	$36.5	**$679.5**
DELAWARE COUNTY				
Employment	479	451	455	**1,385**
Labor Income	$68.9	$28.9	$21.9	**$119.6**
Output	$538	$83.7	$61.4	**$683.1**
LANCASTER COUNTY				
Employment	16	1	13	**30**
Labor Income	$2.4	$0.0	$0.5	**$3**
Output	$1.1	$0.1	$1.5	**$2.7**
MONTGOMERY COUNTY				
Employment	478	540	397	**1,415**
Labor Income	$71.7	$40.3	$21.3	**$133.3**
Output	$702.6	$88.2	$55.7	**$846.5**
PHILADELPHIA COUNTY				
Employment	482	638	392	**1512**
Labor Income	$55.4	$48.9	$22.7	**$127**
Output	$745.1	$136.2	$59.3	**$940.6**
YORK COUNTY				
Employment	1	17	5	**24**
Labor Income	$0.1	$0.9	$0.2	**$1.2**
Output	$17.6	$2.0	$0.6	**$20.2**

FIGURE 5: EMPLOYMENT IMPACTS BY INDUSTRY

	TOTAL INDIRECT & INDUCED EMPLOYMENT IMPACTS
Accommodation & Food Services	703
Construction	747
Professional—Scientific & Tech Services	619
Health & Social Services	496
Retail Trade	444
Finance & Insurance	408
Administrative & Waste Services	412
Transportation & Warehousing	349
Other Services	248
Real Estate & Rental	229
All Other Industries	635
TOTAL	**5,481**

PECO's economic impacts on its service territory are robust and are distributed across a range of local industries. The impacts are influenced by the fact that, as a utility company, PECO has considerable maintenance expenditures and capital investment that circulate throughout the region. The industries with the largest employment impacts because of PECO purchases and contracts include Accommodations and Food Services; Construction; Professional, Scientific, and Technical Services; Health and Social Services and Retail Trade. *See Figure 5.*

General Operations Economic Impact: Greater Philadelphia Tri-State Region & The Commonwealth of Pennsylvania

PECO's economic impact stretches beyond the borders of its service territory, extending throughout the Greater Philadelphia tri-state region. PECO employees live and spend money in southern New Jersey and northern Delaware, creating induced economic benefits. And, there are indirect and induced benefits generated through contractors and suppliers who are located or do business in the New Jersey and Delaware portions of the region. At the regional level, PECO's 2014 operations supported more than $4.2 billion in total economic output, 8,754 jobs (including 2,355 direct PECO jobs for regional residents) and more than $730 million of labor income.

Similarly, some of PECO's spending extends beyond the local economy and is captured by the Commonwealth. At the statewide-level, PECO's operations support $4.5 billion of total output, more than 9,600 jobs, and more than $760 million in total labor income.

This implies a statewide employment multiplier of 4.6, meaning that for every direct PECO job, another 3.6 are supported across the Commonwealth. Every dollar of PECO's output generates an additional 45 cents of output across the state, and 24 cents of labor income.

PECO'S ECONOMIC IMPACT STRETCHES BEYOND THE BORDERS OF ITS SERVICE TERRITORY, EXTENDING THROUGHOUT THE GREATER PHILADELPHIA TRI-STATE REGION. PECO EMPLOYEES LIVE AND SPEND MONEY IN SOUTHERN NEW JERSEY AND NORTHERN DELAWARE, CREATING INDUCED ECONOMIC BENEFITS.

FIGURE 6: PECO GENERAL OPERATIONS ECONOMIC IMPACTS, 2014 ($ IN MILLIONS)

STUDY AREA & IMPACT	DIRECT	INDIRECT	INDUCED	TOTAL
GREATER PHILADELPHIA TRI-STATE REGION				
Employment	2,355	3,110	3,289	**8,754**
Labor Income	$332.1	$222.8	$175.2	**$730.1**
Output	$3,094.0	$628.1	$489.0	**$4,211.1**
PENNSYLVANIA				
Employment	2,088	4,618	2,927	**9,632**
Labor Income	$291.8	$326.5	$145.3	**$763.7**
Output	$3,094.0	$1,012.2	$403.9	**$4,510.1**

One of the key factors in the impact experienced within Pennsylvania is PECO's growing use of Marcellus Shale natural gas in its natural gas delivery function. PECO purchases more than 75 percent of the natural gas that it distributes to its customers from the Marcellus Shale formation. In 2014 this amounted to more than $187 million of additional spending in Pennsylvania. This spending supports significant economic and employment impacts throughout Pennsylvania. We estimate that PECO's purchase of Marcellus Shale gas supported more than $357 million in additional output, 1,538 jobs and nearly $90 million in labor income in Pennsylvania.

Fiscal Impact: Pennsylvania

PECO's economic activity in Pennsylvania also supports state and local government operations through the taxes paid by PECO and its employees, or generated through the indirect and induced economic impacts of its spending. PECO directly paid or collected and remitted on behalf of its customers and employees nearly $188 million in state and local income/franchise, payroll, property, sales and use and utility taxes in Pennsylvania.

The indirect and induced economic activities generated by PECO's operations in Pennsylvania supported $17 million in state taxes.

FIGURE 7: STATE AND LOCAL TAXES PAID ($ IN MILLIONS)

TAXES PAID	PAID BY PECO	COLLECTED & REMITTED BY PECO	TOTAL
TOTAL PENNSYLVANIA STATE & LOCAL TAXES	$137	$50.9	**$187.9**

Reliability of Service

In addition to the economic benefits resulting from PECO's general operations and provision of service, the region's residents and businesses also count on PECO to provide reliable service and to respond quickly to system issues or outages. A reliable energy provider reduces business downtime, and reduces costs to consumers as a result of outages. PECO's reputation for reliable service allows its customers to count on the company's service and thus benefit economically, and add to the quantifiable economic impact demonstrated in this report. For businesses and residents in southeastern Pennsylvania, PECO is exceeding state benchmarks for reliability. According to the Pennsylvania Public Utility Commission's *2013 Electric Service Reliability* report, PECO ranks highly among electric utilities in meeting the following performance benchmarks:

- **Customer Average Interruption Duration Index (CAIDI)** measures the average power restoration time (minutes) for every customer who lost power during the year. PECO restored power on average 43 minutes more quickly than PUC standards allow.
- **System Average Interruption Frequency Index (SAIFI)** measures the average frequency of power interruptions for every customer served during the year. PECO customers experienced fewer than half the power outages allowed by the PUC standard.
- **System Average Interruption Duration Index (SAIDI)** measures average outage duration time (minutes) for every customer served during the year. PECO customers were without power less than 1/3 of the standard time allowed.

By all three measures, PECO exceeded both benchmark and standard expectations, with shorter and less frequent service interruptions, and faster restoration of service.

FIGURE 8: PECO ELECTRIC RELIABILITY METRICS, 12 MONTH AVERAGE, 2013 (MOST RECENT AVAILABLE)

ELECTRIC RELIABILITY METRICS	DEC-13	BENCHMARK	STANDARD	% BETTER THAN BENCHMARK	% BETTER THAN STANDARD
CAIDI	91	112	134	19%	32%
SAIFI	0.69	1.23	1.48	44%	53%
SAIDI	63	138	198	54%	68%

"ELECTRICITY AND NATURAL GAS POWER OUR LIVES, DRIVE INNOVATION, STRENGTHEN THE ECONOMY AND INCREASE OUR STANDARD OF LIVING. WE TEND TO TAKE IT FOR GRANTED UNTIL POWER IS DISRUPTED. THEN EVERY MINUTE COUNTS."

—EDISON ELECTRIC INSTITUTE

ENERGY MANAGEMENT PROGRAMS ECONOMIC IMPACTS

PECO offers a wide range of energy management and incentive programs. As part of its PA Act 129 requirements, PECO implemented PECO Smart Ideas, a suite of energy efficiency programs. Through PECO Smart Ideas, the company offers energy management and incentive programs to both consumers and businesses in an effort to reduce energy consumption, increase energy savings, and contribute to a more sustainable environment.

Since June 2009, PECO Smart Ideas has resulted in:

- $83.3 million in direct customer incentives
- $78.3 million in indirect customer incentives
- $246.4 million in energy consumption savings

In 2014, these programs for both residential and commercial customers resulted in:

- $15.3 million in direct incentives (rebates)
- $25.1 million in indirect incentives (light bulb discounts, installed measures)
- $36.4 million in energy consumption savings through reduced customer energy bills

The savings generated by the energy management and incentive programs make available additional disposable income that households can then spend on household consumption activities. In 2014, PECO Smart Ideas programs helped residential customers reduce their energy usage by nearly 122.4 million kWh and saved $15.6 million in energy costs. The various direct and indirect incentive programs saved residential customers an additional $26.7 million.

In 2014, PECO Smart Ideas generated 305,100 MWh of savings. This is equivalent to:

- *Eliminating energy consumption in 30,379 homes—assuming usage of 10,000 kWh per year per home*
- *Taking 27,800 passenger vehicles off the road for one year*
- *Planting 318,700 trees*
- *Eliminating 333 million miles driven*

Together, the various residential programs generated more than $42.3 million in savings for residential customers throughout PECO's service territory. If we assume that all $42.3 million is spent by customers, this savings resulted in $47.8 million in total output and supported 330 jobs and $17.2 million in labor income in southeastern Pennsylvania.

FIGURE 9: SUMMARY OF PECO SMART IDEAS ENERGY SAVINGS PROGRAM

	2014	PROGRAM INCEPTION TO DATE
TOTAL MWH OF ELECTRICITY SAVED	305,100	1,827,000
REBATES PROCESSED	43,700	419,700
AUDITS COMPLETED	12,100	50,100
ENERGY EFFICIENT LIGHT BULBS SOLD	1,889,400	10,688,700
CUSTOMER SAVINGS GENERATED	$76.8 million	$408.0 million
Direct Rebates	$15.3 million	$83.3 million
Indirect Incentives	$25.1 million	$78.3 million
Energy Consumption Savings	$36.4 million	$246.4 million

FIGURE 10: PECO SMART IDEAS SAVINGS PROGRAM OFFERINGS

RESIDENTIAL PROGRAMS	BUSINESS PROGRAMS
Appliance recycling rebates	Equipment incentive for efficiency retrofits
Rebates for installing smart home equipment	Construction incentives for use of sustainable design
Efficient lighting discounts	Business solutions for installation of energy savings measures
Incentives for energy audits	Multi-family solutions for in-unit installation of energy efficiency improvements
Provide energy saver kits for 5th graders to take home and have parents / guardians install measures	Incentives for installation of combined heat and power systems
Rebates for new electric vehicles purchases	Rebates for new electric vehicles purchases
Incentives for remote A/C management	Incentives for remote A/C management (small business customers)
Incentives for upgrading gas furnaces or boilers	Incentives for upgrading gas furnaces or boilers
Incentives for natural gas conversion	Incentives for natural gas conversion

CHARITABLE GIVING PROGRAM

PECO has a strong tradition of community leadership. Having provided more than $5.3 million in 2014 to nonprofits located in southeastern Pennsylvania, the company contributes dollars, in-kind services and manpower to organizations and institutions that enhance the quality of life for customers living within its service territory.

PECO has made a commitment to invest in its community by building partnerships with, and providing support for, educational, environmental, arts and culture, and community development organizations.

PECO employees serve on the boards of more than 150 nonprofits across the region; and in 2014, employees recorded nearly 14,000 volunteer service hours to support communities across the service territory. According to PECO, this number included not only individual activities where PECO employees served as mentors, coaches and members of nonprofit boards, but also included a variety of company-sponsored group projects that made a significant impact.

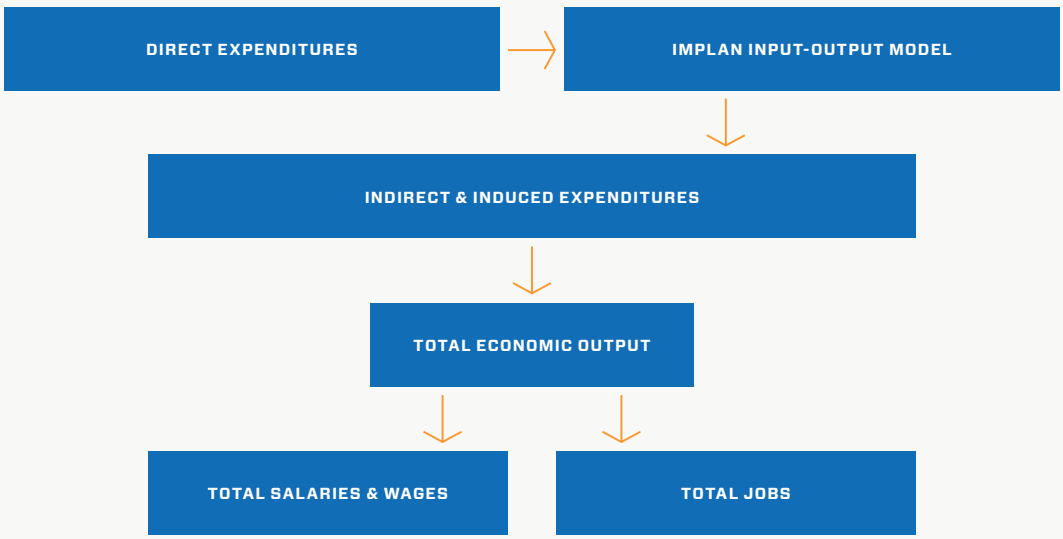
APPENDIX

Econsult Solutions, Inc. (ESI) utilized the IMPLAN input-output model to conduct the economic impact analysis. The impacts were estimated separately for PECO's service territory, the Commonwealth of Pennsylvania, and individually for each of the counties that comprise PECO's service territory.

PECO provided background data on revenue, annual spending, employment, wages and salaries, charitable giving, and energy savings. ESI supplemented the PECO-provided data with industry data sources, where appropriate. The direct outputs were then fed into the model constructed by Econsult Solutions and based on IMPLAN data. The model accounts for any direct spending that may leak out of the local economy. The model produced a calculation of the total expenditure effect on the regional economy. This total effect includes PECO's initial direct expenditure effect, as well as the ripple effects—the indirect and induced expenditure effects that are generated in the local economy.

The methodology and input-output model used in this economic impact analysis are considered standard for estimating such expenditure impacts, and the results are typically recognized as reasonable and plausible effects based on the assumptions (including data) used to generate the impacts. In general, any economic activity can be described in terms of the total output generated from every dollar of direct expenditures. If an industry in a given region sells $1 million of its goods, there is a direct infusion of $1 million into the region. These are referred to as *direct expenditures.*

FIGURE 11: FLOWCHART OF INPUT-OUTPUT METHODOLOGY FOR ESTIMATING ECONOMIC IMPACT



Source: Econsult Solutions, Inc. (2013)

However, the economic impact on the region does not stop with that initial direct expenditure. PECO's regional suppliers have also been called upon to increase their production to meet the needs of the company to produce the $1 million in goods sold. Further, suppliers of these same suppliers must also increase production to meet their increased needs as well. These are referred to as *indirect expenditures*. In addition, these direct and indirect expenditures require workers, and these workers must be paid for their labor. These wages and salaries will, in turn, be spent in part on goods and services produced locally, engendering another round of impacts. These are referred to as *induced expenditures.*

Part of the total expenditure effect is actually the increase in total wages and salaries (usually referred to as earnings), which the model can separate from the expenditure estimates. Direct payroll estimates are fed into the "household" industry of the input-output model. Impacts of this industry are estimated using the personal consumption expenditure breakdown of the national input-output table and are adjusted to account for regional consumption spending and leakages from personal taxes and savings. The

direct, indirect, and induced earnings represent a component of the total economic impact attributable to wages and salaries. Finally, the model calculates the total expenditures affecting the various industries and translates this estimate into an estimate of the total labor (or jobs) required to produce this output.[1]

GLOSSARY OF TERMS FOR INPUT-OUTPUT MODELS

Multiplier Effect—the notion that initial outlays have a ripple effect on a local economy, to the extent that direct output lead to indirect and induced output.

Economic Impacts—total expenditures, employment, and labor income generated.

Direct Output—initial outlays usually associated with the project or activity being modeled; examples: one-time upfront construction and related expenditures associated with a new or renovated facility, annual expenditures associated with ongoing facility maintenance and/or operating activity.

Direct Employment—the full time equivalent jobs associated with the direct output.

Direct Labor income—the salaries and wages earned by employees, contractors, and proprietors as part of the direct output.

Indirect Output—indirect and induced outlays resulting from the direct output; examples: vendors increasing production to meet new demand associated with the direct output, workers spending direct labor income on various purchases within the local economy.

Indirect Employment—the full time equivalent jobs associated with the indirect output.

Indirect Labor income—the salaries and wages earned by employees, contractors, and proprietors as part of the indirect output.

Total Output—the sum total of direct output and indirect output.

Total Employment—the sum total of direct employment and indirect employment.

Total Labor income—the sum total of direct labor income and indirect labor income.

Source: Econsult Solutions, Inc. (2014)

Fiscal Impact Model

The IMPLAN model provides estimates of the economic impact of a new project or program on the regional economy. It does provide only a rough estimate of the combined fiscal impact of the increased economic activity on state and local governments. Consequently, Econsult has constructed a model that takes the output from the IMPLAN model and generates detailed estimates of the increases in state and local tax collections that arise from the new project. Those revenues are in fact a part of the total economic impact of a new project that is often ignored in conventional economic impact analyses.

The IMPLAN model provides estimates of direct, indirect, and induced expenditures, labor income, and employment within the defined region. The Econsult fiscal impact model combines the IMPLAN output with the relevant tax types and tax bases associated with the jurisdiction or jurisdictions for which fiscal impact is being modeled. Specifically, the estimated labor income supported by the direct, indirect, and induced expenditures generated by the model are used to apportion the net increase in the relevant tax bases and therefore in those tax revenue categories. The resulting estimates represent the projected tax revenue gains to the jurisdiction or jurisdictions as a result of the increased business activity and its attendant indirect and induced effects.

SOURCES

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Lahr, Michael. "Input-Output Analysis: Technical Description and Application." Rutgers University Edward J. Bloustein School of Planning and Public Policy

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[1] *In the input-output model, the estimate of increased employment will always be in terms of the employment required for a given level of production, usually referred to as person-years of employment. As such, these estimates cannot be interpreted as specifying permanent jobs.*

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