Anticipating Adaptation in Philadelphia's Energy Assistance Sector

Alison Kenner, Briana Leone, Morgan Sarao, Andrew Rosenthal Center for Science, Technology, and Society, Drexel University

#### **Presentation Contents**

- 1. Defining energy vulnerability
- 2. Energy vulnerability in Philadelphia, PA, US
- 3. Energy assistance programs and organizations
- 4. Studying energy vulnerability during COVID-19
- 5. Documented impacts
- 6. Conclusions and future research

#### What is energy vulnerability?

Energy Vulnerability literature conceptualizes situations where middle-to-low income families struggle with meeting their utility bills

Three dimensions of energy vulnerability according to Walker and Day (2013):

- 1. An assemblage of social, technological, and natural processes;
- 2. Fluctuates across space and time, both in its composition and production;
- 3. Inherently tied to the times in which it is analyzed and can either be dynamic or constant.



# 37M Households

Experiencing utility/energy insecurity in the United State, as of 2015

Also includes: 13M having no heat; 17M receiving shutoffs; 25M giving up food/medicine to pay utilities.

#### Utility Insecurity in Philadelphia





Map created 2018 from UESF dataset.





Map created in 2018 from 2011-2016 ACS Census Data and Legal Clinic intake data.

#### **Energy Assistance Organizations & Programs**

- Comprise of a wide array of social service and community organizations
- Administer governmental and utility programs that address energy poverty
  - Low Income Housing and Energy Assistance Program (LIHEAP) -> Bill Payment Assistance
  - Weatherization Assistance Program (WAP)
  - Customer assistance through utility companies
- LIHEAP and WAP are both federal programs
  - Funding is administered to the states
  - LIHEAP is part of U.S. Department of Health and Human Services
  - WAP is part of the U.S. Department of Energy

#### **Energy Coordinating Agency**

- Energy Coordinating Agency is a non profit energy assistance organization that operates in Philadelphia founded in 1983 to address fuel poverty
- The Energy Coordinating Agency operates as a unique model of energy assistance provision
  - They offer numerous services such as job training and placement, energy courses, in and home assessments and repairs for low-income customers.
  - Their energy assistance programs are situated within 15 neighborhood energy centers
- You can also apply for LIHEAP and WAP through them as is common of energy assistance organizations
- Their funding primarily comes from federal grants and LIHEAP



#### Knights Green Jobs Training Center







#### Neighborhood Energy Centers

- Fifteen in Philadelphia
- NEC clients can apply for federal <u>and</u> local utility company assistance programs
- They can also learn conservation techniques and receive financial counseling
- NEC clients can also learn about apply for a wide array of assistance programs to combat the conditions of poverty.
- The ability to seek various kinds of assistance, all within walking distance, has been identified as vital to success.



#### **Research Questions**

- How have Shelter-in-Place and Stay-at-Home orders impacted household energy needs and related utility bills?
- How has COVID-19 impacted energy assistance organizations and the programs they administer?
- How are energy vulnerabilities compounded during the COVID-19 pandemic?
- Will the number of energy insecure households expand?

#### Philadelphia's Internet Insecurity



Note: Broadband includes cable, fiber optic or DSL service with an internet subscription Map: DYLAN PURCELL / Staff \* Source: U.S. Census Bureau, 2014-18 American Community Survey

#### **Coronavirus Pennsylvania: Gov. Wolf Extends** Moratorium On Evictions, Foreclosures Through July 10

**By Alexandria Hoff** May 7, 2020 at 10:16 pm Filed Under: coronavirus, Local, Local TV, Pennsylvania News

#### CORONAVIRUS PANDEMIC

#### Coronavirus prompts PECO and other utility providers to suspend shut-offs

By Jake Blumgart · March 13, 2020

Pennsylvania Real-Time News

#### **Utilities won't be shut off in Pennsylvania** amid coronavirus pandemic

Updated Mar 17, 2020; Posted Mar 13, 2020

COVID-19 Working & The Economy

COVID-19 in Philly: City water department extends shut-off moratorium

By Special to the Capital-Star - April 29, 2020



### Bibliography

Benscoter, J. (2020). Utilities won't be shut off in Pennsylvania amid coronavirus pandemic. *Pennsylvania Real-Time News*. Retrieved from: https://www.pennlive.com/news/2020/03/utilities-wont-be-shut-off-in-pennsylvania-amid-coronavirus-pandemic.html

Blumgart, J. (2020). Coronavirus prompts PECO and other utility providers to suspend shut-offs. *WHYY: PBS*. Retrieved from: https://whyy.org/articles/coronavirus-prompts-peco-and-other-utility-providers-to-suspend-shut-offs/

Day, R. and Walker, G. (2013). Household energy vulnerability as 'assemblage'. *Energy Justice in a Changing Climate : Social Equity and Low-Carbon Energy*, edited by Karen Bickerstaff, et al., Zed Books, 2013. ProQuest Ebook Central, http://ebookcentral.proquest.com/lib/drexel-ebooks/detail.action?docID=1426831.

Hetrick, C. and Purcell, C. (2020). Thousands of Philly students are stuck at home without internet after coronavirus closed schools. *The Philadelphia Inquirer*. Retrieved from https://www.inquirer.com/education/coronavirus-students-digital-divide-philadelphia-comcast-20200403.html

Hoff, A. (2020). Coronavirus Pennsylvania: Gov. Wolf extends moratorium on evictions, foreclosures through July 10. *CBS3 Philly*. Retrieved from

https://philadelphia.cbslocal.com/2020/05/07/coronavirus-pennsylvania-gov-wolf-extends-moratorium-on-evictions-foreclosures-by-2-months/

Special to the Capital Star. (2020). COVID-19 in Philly: City water department extends shut-off moratorium. *Pennsylvania Capital Star*. Retrieved from https://www.penncapital-star.com/covid-19/covid-19-in-philly-city-water-department-extends-shut-off-moratorium/

Watt, D. (2018). *Geospatial Analysis of Utility Insecurity in Philadelphia*. Azavea. Retrieved from https://www.azavea.com/blog/2018/09/19/understanding-utility-insecurity-the-case-of-the-missing-data/

#### Thanks!

Contact us:

The Energy Vulnerability Project ali.kenner@gmail.com https://housingenergy.info/



## COVID-19 Impacts on the Energy Industry in Philadelphia

- Shelter-in-place and stay-at-home orders have halted ECA's fee-for-service work, placing them in a financially precarious position
- The CARES act includes an additional \$900 million for LIHEAP crisis funding, however there are concerns around how the most vulnerable of households in Philadelphia, who may not have access to the internet, will be able to learn about and apply for this assistance.....
- Utility companies in Philadelphia have turned services back on in households where service was previously disconnected due to nonpayment, which will lead to even higher cumulative debts that vulnerable residents will owe at the end of the state's utility shut-off moratorium
- The end date for Pennsylvania's utility shut-off moratorium is unclear due to the evolving conditions of the pandemic, which complicates ECA's ability to create a plan for assisting vulnerable residents when billing and service disconnections resume

## Maps Depicting Energy Burdens in the United States

