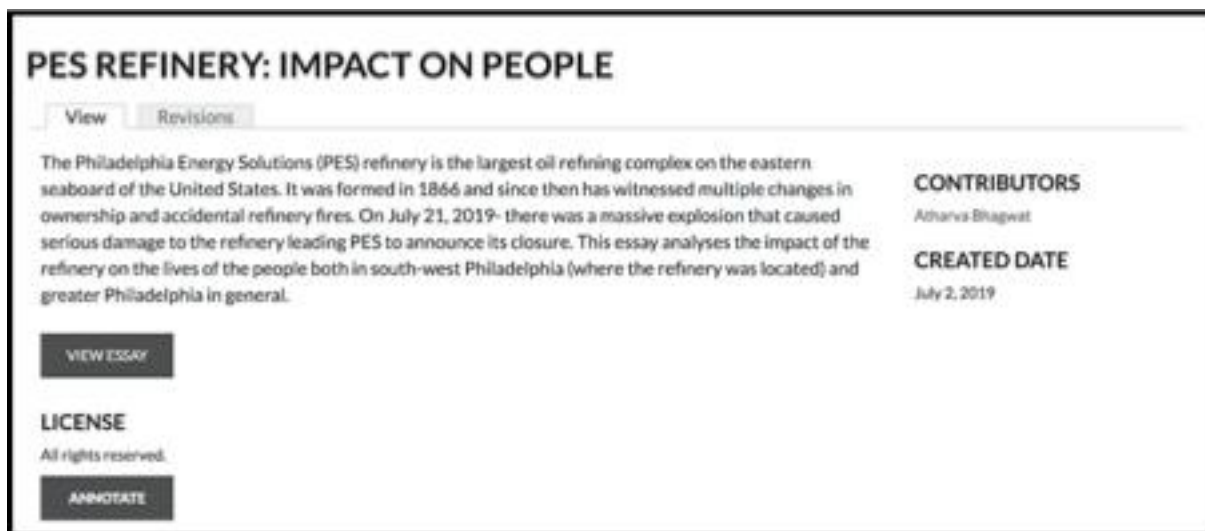


Research Analytics from PECE Project

One of the main goals of PECE is to get researchers using the same questions when they analyze their data (i.e. data can be documents, news articles, research papers, interviews, or videos). The PECE community has a tradition of developing shared analytics; you can get a feel for this on the [Disaster STS site](#) and also on the [STS Infrastructures site](#). While we won't be formally using this feature (though you can access it on housingenergy by clicking on the 'Annotate' button as seen below), I wanted to share with you some question sets to give you some guidance for working with and analyzing artifacts. When you analyze your artifacts, you can answer any of these questions in the 'critical commentary' field of your artifacts. I recommend starting your analysis (i.e. the critical commentary field) with a 'how, what, where, when' type opening, and then maybe choosing a few of the below questions to answer, or creating your own!



The screenshot shows a web interface for an artifact titled "PES REFINERY: IMPACT ON PEOPLE". At the top, there are tabs for "View" and "Revisions". Below the title, there is a paragraph of text: "The Philadelphia Energy Solutions (PES) refinery is the largest oil refining complex on the eastern seaboard of the United States. It was formed in 1866 and since then has witnessed multiple changes in ownership and accidental refinery fires. On July 21, 2019- there was a massive explosion that caused serious damage to the refinery leading PES to announce its closure. This essay analyses the impact of the refinery on the lives of the people both in south-west Philadelphia (where the refinery was located) and greater Philadelphia in general." To the right of the text, there are two sections: "CONTRIBUTORS" with the name "Atharva Bhagwat" and "CREATED DATE" with the date "July 2, 2019". At the bottom left, there are three buttons: "VIEW ESSAY", "LICENSE" (with the text "All rights reserved." below it), and "ANNOTATE".

Table of Contents:

Analyzing an organization Analyzing a design Analyzing a research article Analyzing a document Analyzing a report Analyzing an interview Analyzing a policy I Analyzing a neighborhood Analyzing a policy II

p. 2 p. 2-3 p. 3-4 p. 4 p. 4 p. 5-6 p. 6-7 p. 7-8 p. 8-9

Research Analytics from PECE Projects

Analyzing an organization

Modified from [Alli Morgan's analytic](#), DSTS, August 2016

What is the aim of this organization?

What does their membership look like; who are their members; does this sustain the organization?

How is the organization staffed to support programming?

What has this organization done – through research or legislation, for example-- that illustrates how they approach energy vulnerability?

What funding enables their work and possibly shapes their way of thinking about energy vulnerability?

Does this person, group or organization claim to have a new or unique way of addressing energy vulnerability? Does this approach point to or suggest problems with other approaches?

What social ecology does this group or organization work within, and how did it shaped their way of conceiving energy vulnerability?

What events or data seem to have motivated their ways of thinking about energy vulnerability?

What data or reports have they collected or used to support their approach to energy vulnerability?

What does this person, group or organization seem to find methodologically challenging or concerning in dealing with energy vulnerability?

What research has the organization produced or drawn on in their initiatives – in the last year, and over the last decade?

What kinds of technology and infrastructure do they rely on?

Analyzing a Design

By Alli Morgan, DSTS, September 2016

2

Research Analytics from PECE Projects

Who developed this product?

Where is the product designed to be used?

Has the design been implemented? If so, describe if it has been successful.

How much does this product cost? Is this attainable for the imagined user?

What types of skill or training do users need to effectively use this product?

How does the product work? What materials is it constructed from?

How was development funded?

Why is this product considered to be particularly innovative, or not?

What is problematic with the design?

How has the media discussed this product? (provide weblinks or citations)

Is this product filling a gap in the market, or does it have much competition from other products?

Analyzing a research article

Modified from [Alli Morgan's analytic](#), DSTS September 2016

Who are the authors, where do they work, and what are their areas of expertise? How is the author professionally situated in respect to energy vulnerability? Note any other publications/research foci that are of relevance to The Energy Vulnerability Project.

What are the main findings or arguments presented in the article?

What were the methods, tools and/or data used to produce the claims or arguments made in the article or report?

What three (or more) quotes capture the message of the article or report? Describe at least three ways that the argument is supported.

What three points, details or references from the text did you follow up on to advance your understanding of the complexities of the subject?

3

Research Analytics from PECE Projects

Can you learn anything from the article or report's bibliography that tells us something about how the article or report was produced?

How (if at all) is energy vulnerability addressed in the article or report?
Where has this article or report been referenced or discussed?

Analyzing a document

Modified from [Ali Kenner's analytic](#), DSTS, July 2019

How does the document define energy vulnerability? (Quote examples)
What problems are identified in the energy assistance document?
What kind of data sets are used in the document?
To what extent and in what ways is 'energy vulnerability' identified as an opportunity? What goals or benefits are described in the document?

What type of document is this?

How does the plan make use of research? Does it propose further research?

How is vulnerability defined and described in the plan?

Analyzing a report

Modified from [Alli Morgan's analytic](#), DSTS, August 2016

Who published the report?
What actors were behind the report? (government ordered report, NGO report, etc.) How does the report address matters of energy vulnerability?
What are the components of the report?
What implications does the report have for technical professionals?

4

Research Analytics from PECE Projects

How does the report expose problems and present solutions?

Over what period was data for the report collected?

What event/series of events called for this report?

Describe how this report has traveled. Has it been used in news reports, cited by health officials, or used as the basis of other studies?

Analyzing an interview

Modified from [Alli Morgan's analytic](#), TAF, June 2016

What three (or more) quotes capture the main argument of the interview?

What social ecology does this person work within and how did it shaped her/his way of thinking about and engaging with energy vulnerability and energy governance?

What were the main themes of the interview?

Is the interviewee a personal acquaintance, recommended by another colleague/interviewee or searched independently?

Additional interesting points made in the interview Why is this person of interest to this project?

What kinds of governance are (implicitly or explicitly) called for in the way they think about energy vulnerability?

What events or data seem to have motivated their ways of thinking about and engaging energy vulnerability, social service, and energy governance?

Describe three ways in which the argument was supported (scientific data, cultural elements, political approach, etc.).

What does this person find methodologically challenging or concerning in dealing with energy vulnerability?

What in this person's history might have shaped the way they think about or/and engage with energy vulnerability?

5

Research Analytics from PECE Projects

What organizations or professional fields has the interviewee been involved with?

Does this person claim to have a new or unique way of addressing energy vulnerability? Does this approach point to or suggest problems with other approaches?

Analyzing a policy

By Ali Kenner, TAF, July 2017

What other policies are referenced in the plan? In what context and to what end are the plans referenced?

What organizations helped develop the policy?

What stakeholders, communities, and populations are mentioned? What role do they play in the policy document?

How are stakeholders involved in the policy and its implementation?

What core terms anchor the policy? (health, environment, sustainability, vulnerability, etc.)

When was the policy written and how many drafts were circulated before finalized? Were these drafts publicized?

How does the policy make use of science? Does it propose further research? Who is the intended audience for the policy?

Who wrote the policy? What are their titles, affiliations, and expertise?

What problems are identified in the policy?

How will implementation be evaluated? Are other follow-up mechanisms described? What are the top level goals of the policy?

What are the intended outcomes of the policy? Are they measurable?

Who wrote the policy? What are their titles, affiliations, and expertise?

6

Research Analytics from PECE Projects

What stakeholders, communities, and populations are mentioned? What role do they play in the policy document?

What state or federal agencies govern the jurisdiction and issues addressed by the policy? How does the policy make use of science? Does it propose further research?

What organizations helped develop the policy?

What jurisdiction does the policy cover?

Does the policy mention how actions will be funded?

What other policies are referenced in the plan? In what context and to what end are the plans referenced?

When was the policy written and how many drafts were circulated before finalized? Were these drafts publicized?

Describing a neighborhood By Ali Kenner, TAF, April 2017

What are the boundaries of your neighborhood? Are there different kinds of boundaries? Planning district? Census tract? Zip code? Civic Association? Precincts? - that shape the boundaries of your neighborhood?

Are there environmental hazards in your neighborhood? (Can be any scale.)

What planning district is your neighborhood part of? Has the neighborhood undergone a planning process in the last 3-5 years (by a civic association, community development corporation, or the city)?

How does this artifact call out your planning district or neighborhood as distinct from others? What are the challenges facing your neighborhood? What are its assets?

How much do homes cost in your neighborhood? What kind of homes are there (condos, rowhomes, victorian, something else?)

How much vacant land is there in your neighborhood and where can you buy food?

7

Research Analytics from PECE Projects

What politicians are responsible for your neighborhood? Does it seem like the neighborhood is politically active?

Who lives in your neighborhood? What are the demographics? What are the primary health risks in your neighborhood?

Give three examples that describe how your neighborhood has been impacted by a planning process.

How many schools, hospitals and parks, daycares, afterschool programs or rec centers are in your neighborhood?

What kinds of employment opportunities exist in your neighborhood and how is the access to public transportation and safe bike lanes/paths?

Who lives in your neighborhood? What are the demographics?

Analyzing a policy II

Modified from [Alli Morgan's analytic](#), DSTS, August 2016

Who drafted this policy?

What is the policy and what does it aim to achieve?

Describe the history of the policy. Was it created in response to or to support existing policy or legislation?

Who does the policy apply to? (i.e. residents of Pennsylvania, globally, physicians) How does (or doesn't) the policy address vulnerable populations?

How has the policy been received by the public? (media reports, etc.)

How does the policy address matters of public health?

What implications does this policy have for energy assistance professionals?