Wisconsin Energy Burden Action Plan

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Disclaimer

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Introduction

The Wisconsin Public Service Commission ("Commission") has contracted with VEIC to conduct an analysis of energy burden metrics and to develop an actionable plan for short and long-term deployment of energy burden metrics in Commission programs and processes. This work builds on prior efforts by the Commission and others to understand energy burden definitions, to collect and receive energy burden data, and develop metrics relating to customer affordability more generally.

The first phase of this research was presented in the Energy Burden Metrics Report, which identified options for Wisconsin to define, calculate, and track energy burden and other affordability metrics. The report identified and discussed specific sources of data that could be used to calculate energy burden and considered tradeoffs of different sources and approaches. The research is focused on residential energy burden and affordability, though the concepts could be applied or adapted to other customer segments including small businesses if requisite data inputs were available. The Metrics Report recommends the three-pronged framework summarized here:

Energy Burden

- Establish statewide energy burden baselines.
- Examine regional average energy burdens.

Energy Affordability

- Track energy assistance and weatherization program participation.
- Track energy burden outcomes for households participating in energy assistance programs.
- Estimate and track the energy affordability gap.

Energy Insecurity

- Track utility-reported arrearages.
- Track utility-reported disconnections and notices.
- Track service loss prevention/restoration occurrences.

This Energy Burden Action Plan is the second phase of research presented. It builds off the analyses from the earlier Energy Burden Metrics Report, identifying Commission processes and other programs that may be informed by the proposed energy burden metrics. Strategies are presented for incorporating metrics into these processes. Ultimately, the goal of the Energy Burden Action Plan is to identify and discuss actionable options and feasible, targeted strategies and goals the Commission could consider that would reduce energy burden. Also identified are stakeholders likely to be impacted by efforts to reduce energy burden along with strategies and options for utilities and the Commission to continue to engage these stakeholders.

Key Terminology

The following key terminology is used throughout this report.

Energy Burden: Energy burden is the ratio between annual energy costs and annual income. It can be calculated for an individual household (i.e., dividing an individual household's annual energy costs by their annual income) or a group of households (i.e., calculating the average annual energy costs and average annual income for a group of households and dividing the average energy costs by average income).

Energy Affordability: Energy affordability indicates whether energy costs are affordable in the context of other household necessities. This often is expressed as an energy burden target, with six percent energy burden being a common target used for determining energy affordability. Under this scenario, energy burdens of six percent or less are considered affordable and those greater than six percent are considered unaffordable. However, while six percent energy burden is a common energy affordability target, it is not the only threshold researchers or policymakers have identified or set for defining energy affordability (see additional discussion under National Landscape Analysis in the Metrics Report). Nonetheless, six percent energy burden is used in this report for defining an energy affordability target and establishing an energy affordability gap.

Energy Insecurity: Energy insecurity relates to the vulnerability of households to energy expenses, often expressed in terms of disconnected energy services, late payments, and arrearages. It also can be expressed in more qualitative terms, such as forgoing other expenses to pay an energy bill or leaving the home at an unhealthy temperature because energy costs are high.

Goal

The Energy Burden Action Plan seeks to develop consistency in definitions, methods, and data sources related to energy burden and affordability. The report will provide recommendations to incorporate the energy burden metrics and data into Commission programs and processes. This plan will:

1. Identify the different processes that may be informed by energy burden metrics (which could include but are not limited to rate design, energy planning, Focus on Energy program offerings, State Energy Office programming, performance-based regulation, and bill assistance or arrearage management programs) and develop strategies for incorporating energy burden metrics into those processes.
2. Identify and discuss actionable options and feasible, targeted strategies and goals the Commission could consider that would reduce energy burden. Recommendations on how to display energy burden data to track performance on metrics must be included.

3. The plan should identify stakeholders that are likely to be substantially impacted by work done to reduce energy burden and provide options for utilities and the Commission to engage with these stakeholders with a goal towards equity.

Processes Informed by Energy Burden Metrics

The first task in developing the Action Plan was to identify and inventory the many processes and programs that may be impacted by efforts to address energy burden. These range from regulatory issues like rate cases, affordability programs, and performance-based regulation to programs with Commission oversight like Focus on Energy or Office of Energy Innovation (OEI) pilots.

There are some opportunities where the framework described in the Metrics Report might be integrated into processes relatively quickly. For example, data from the Department of Administration's Wisconsin Home Energy Assistance Program could potentially be made available through partnership and collaboration with the Division of Energy, Housing and Community Resources. These data could be presented in new rate cases providing additional context and perspective regarding impacts on low-income customers.

Conversely, the project team cautions against using the framework to replace impact analyses. For example, several of the data sources recommended for inclusion in the framework provide community-level estimates based on sampling and thus should not be used to assess projected impacts to customer bills, as that is not the purpose of those data.

The following identifies many of the programs, processes, and opportunities that may benefit from the implementation of the recommended framework found in the Energy Burden Metrics Report.[1]

Investigations Regarding Alternative Affordability Programs

There are several investigations currently considering alternative affordability programs like low-income assistance programs, percent of income payment plans (PIPPs), and others to address customer affordability and energy burden. These investigations are a relatively new strategy in Wisconsin aimed at cultivating innovative and collaborative solutions to address energy affordability.

Use of the recommended framework ensures discussions are grounded in consistent data and definitions, fostering a shared understanding across the diverse stakeholders of the challenges

[1] The Energy Burden Metrics Report includes a comprehensive overview of the recommended framework beginning on page 15 as well as a summary beginning on page 51.

and opportunities in addressing energy affordability. The framework provides a reference point for discussing merits of proposed interventions.

See Appendix A1 for specific examples of investigations.

Tariffs Regarding Arrears Management Programs

The framework incorporates arrearage and disconnection data that can inform tariffs aimed at reducing payment burdens while ensuring cost recovery for utilities. Going forward, arrears balances and disconnection rates can be tracked and monitored. Consistency in data and definitions allows robust collaboration across stakeholders.

A growing number of Wisconsin utilities have received Commission approval for tariffs related to arrears management programs (AMPs) in recent years. Many of these programs share similar structures with variations in eligibility requirements, enrollment and re-enrollment procedures.

See Appendix A2 for specific examples of tariffs for AMPs.

Wisconsin Office of Energy Innovation Programs

The Wisconsin Office of Energy Innovation (OEI) includes both the Focus on Energy program described below and the State Energy Office with responsibilities including energy statistics, energy security, and grant and pilot programming.

The proposed metrics and framework provide the ability to focus on equity considerations in program design. Regional analyses allow tailored and targeted rebate offers. The framework may also complement additional equity frameworks already utilized by other programs.

The following are specific OEI programs with Commission oversight that are tasked in some fashion with addressing affordability issues.

Focus on Energy

Focus on Energy, Wisconsin utilities' statewide program for energy efficiency and renewable energy, helps eligible residents and businesses save money while reducing energy waste. This program operates with Commission oversight including the quadrennial planning process by which program goals, priorities, and targets are set.[2]

The Commission included several order points regarding affordability and accessibility of Focus on Energy programs in its November 2022 Final Decision for Quadrennial Planning Process IV.[3] Specifically, Order Point 29 which states in full:

[2] Wisconsin State Legislature. Wis. Stat. § 196.374(3). **https://docs.legis.wisconsin.gov/statutes/statutes/196/374/3**
[3] Public Service Commission of Wisconsin. November 13, 2022. Quadrennial Planning Process IV – Final Decision. PSC Docket 5-FE-104. PSC REF# 453081. **https://apps.psc.wi.gov/ERF/ERFview/viewdoc.aspx?docid=453081**

> The Program Administrator is directed to gather additional data and conduct analysis during the first year of Quad IV to better identify underserved customers, target program offerings, and develop KPIs. This effort shall emphasize underserved customers facing the highest energy burdens as well as small business customers.

The Focus on Energy Administrator developed a framework called Communities of Focus to identify and better serve communities that have historically seen lower participation in Focus on Energy programs. This data-driven framework analyzes both Focus on Energy participation data and publicly available demographic and socioeconomic data, focusing on census tracts that exhibit characteristics associated with lower program activity.[4] This research leveraged the Department of Energy's Low-Income Energy Affordability Data (LEAD) tool for energy burden metrics.[5]

The Commission approved this framework for use within Focus on Energy in July 2024, with direction to continue refining and updating going forward.[6] It may be prudent to incorporate the proposed framework outlined in the Metrics Report, particularly if some of the long-term options described below are completed, into the Communities of Focus framework.

Inflation Reduction Act Home Energy Rebates

The Inflation Reduction Act (IRA) allocated $149 million for rebate programs in Wisconsin. The Home Efficiency Rebates (HOMES) and Home Electrification and Appliance Rebates (HEAR) are both implemented by Focus on Energy.[7] These programs are intended to primarily help low- and moderate-income households install efficiency upgrades to save energy and money. The Commission has directed that at least 60 percent of program rebates in both HOMES and HEAR shall be reserved for low-income households and that higher rebates be made available for low-income households.[8]

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[4] Public Service Commission of Wisconsin. June 24, 2024. Quadrennial Planning Process IV – Memorandum. PSC Docket 5-FE-104. PSC REF# 506180. **https://apps.psc.wi.gov/ERF/ERFview/viewdoc.aspx?docid=506180**

[5] As of the writing of this action plan, the LEAD Tool has been disabled by the U.S. Department of Energy (DOE). While the data files underlying the most recent (2022 data) update to the LEAD Tool currently are available at **https://catalog.data.gov/dataset/low-income-energy-affordability-data-lead-tool-2022-update**, the status of future updates is uncertain. The LEAD Tool was previously cited as follows:
U.S. Department of Energy. Office of Sate and Community Energy Programs. Low-Income Energy Affordability Data (LEAD) Tool. **https://www.energy.gov/scep/slsc/low-income-energy-affordability-data-lead-tool**

[6] Public Service Commission of Wisconsin. August 21, 2024. Quadrennial Planning Process IV – Order. PSC Docket 5-FE-104. PSC REF# 514798. **https://apps.psc.wi.gov/ERF/ERFview/viewdoc.aspx?docid=514798**

[7] Public Service Commission of Wisconsin. May 3, 2023. Quadrennial Planning Process IV – Order. PSC Docket 5-FE-104. PSC REF# 466844. **https://apps.psc.wi.gov/ERF/ERFview/viewdoc.aspx?docid=466844**

[8] Public Service Commission of Wisconsin. June 13, 2024. Inflation Reduction Act – HOMES Rebate Program & High-Efficiency Electric Home Rebate Program – Order. PSC Dockets 9716-FG-2023, 9717-FG-2023. PSC REF# 505286. **https://apps.psc.wi.gov/ERF/ERFview/viewdoc.aspx?docid=505286**

While it remains unseen what type of demand these programs will have, it is possible that targeted program outreach will be necessary to direct funding to communities most in need. The proposed framework could help Home Energy Rebate programs to deploy resources where customers are struggling with affordability issues.

Additional Office of Energy Innovation Programs

OEI also oversees several federally funded programs including the Energy Innovation Grant Program, Rural Energy Startup Program, and Grid Resilience Program. All these programs note specific opportunities to address customers with high energy burdens and/or customers located in underserved communities.

Commission Initiatives

The following are several key tasks or initiatives overseen by the Commission.

Strategic Energy Assessment

The Commission conducts a biennial Strategic Energy Assessment (SEA) to evaluate the state's electricity supply considering four main goals held by the Commission: ensuring adequate supply, maintaining reliability, promoting affordability, and minimizing environmental impacts. Affordability is a key objective, aiming to provide reliable electricity at the lowest feasible cost for customers. The SEA process involves collecting historical and forecasted data from Wisconsin's electric providers, analyzing system performance, and incorporating public feedback. The final SEA 2030, approved in November 2024, serves as a comprehensive resource for evaluating Wisconsin's electric system and guiding efforts to balance these priorities.[9]

The SEA discusses bill affordability directly, identifying several ongoing initiatives and activities:

- Increased efforts to address utility bill affordability in recognition that low- and moderate-income customers often face a higher energy burden.
- Gathering of more detailed, utility-specific data on energy burden in annual reports, revealing significant geographic variations across the state.
- Updated reporting guidelines that aim to provide clearer insights and help identify areas with elevated energy burden.
- Investigations (as noted above) opened for several utilities exploring strategies for reducing energy burden, including targeted affordability programs and AMPs.
- Referrals to state and community assistance programs, as well as energy efficiency resources like the Focus on Energy program and the IRA Home Energy Rebate initiatives.

[9] Public Service Commission of Wisconsin. Strategic Energy Assessment 2024-2030. November 2024. Docket 5-ES-112. **https://apps.psc.wi.gov/ERF/ERFview/viewdoc.aspx?docid=523854**

Performance-Based Regulation

The Roadmap to Zero Carbon docket 5-EI-158 included discussion around performance-based regulation.[10] The research completed as part of this Energy Burden Metrics Report and Action Plan has been informed by the findings in that docket that affordability is a high priority in considering performance-based regulation.

Performance-based regulation shifts the paradigm from revenues based on incurred costs to revenues based on performance toward key outcomes in the hopes of better aligning with public interest. In the Roadmap docket, stakeholders zeroed in on affordability as a key performance dimension. Staff from the Regulatory Assistance Project helped set out best practices and recommended the starting point for defining affordability metrics.[11] These include the following:

- Directly related to goals and outcomes
- Tracks outputs/outcomes, not inputs
- Clear and easy to understand
- Measurable, quantifiable
- Data sources are accessible and transparent
- Focused on results that are subject to utility influence
- Evaluated regularly

The framework proposed by the research team builds on the discussions and recommendations found in the Roadmap to Zero Carbon docket. The data can be used to inform historical baselines and benchmarks against which performance can be assessed, as well as to develop performance metrics considered. The metrics will allow stakeholders to proceed when appropriate.

Administrative Code Revision

When considering revisions to the Wisconsin Administrative Code via rulemaking dockets, the Commission must release economic impact assessments. These assessments are intended to provide detail on both the direct costs, as well as compliance and implementation costs, that may be incurred by parties impacted by the rule change.[12] The shared metrics and definitions put forth in the framework may allow more granular analysis of economic impacts with respect to energy burden and affordability.

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[10] Public Service Commission of Wisconsin. E-Services Portal. Docket 5-EI-158. **https://apps.psc.wi.gov/APPS/dockets/content/detail.aspx?id=5&case=EI&num=158**

[11] Regulatory Assistance Project. Metric Design Principles. August 16, 2022. Public Service Commission of Wisconsin. Docket 5-EI-158. Workshop 2. **https://apps.psc.wi.gov/ERF/ERFview/viewdoc.aspx?docid=445425**

[12] Wisconsin State Legislature. Wis. Stat. § 227.137(3)(b). **https://docs.legis.wisconsin.gov/statutes/statutes/227/ii/137/3/b**

A current example includes proposed updates to Wisconsin Administrative Code § PSC 113.0803, which regulates individual electric metering requirements, via docket 1-AC-257.[13] A notable inclusion in the proposed change is an exemption to the rule for low-income construction. The economic impact analysis initially assessed that the changes would have minimal economic impact, though stakeholder feedback is mixed, noting potential positive and negative effects that warrant further consideration. There is disagreement on what overall economic impact may occur.

Department of Administration and Public Service Commission

There are opportunities for collaboration between the Public Service Commission and the Division of Energy, Housing and Community Resources (DEHCR) located within the Department of Administration (DOA).

Data sharing between the Commission and the DEHCR presents significant opportunities to enhance DEHCR's energy assistance efforts. One key benefit would be access to more frequent utility disconnection and arrearage data, which could improve program planning and help DEHCR meet federal reporting requirements. This timely information would enable DEHCR to anticipate surges in energy assistance needs, especially at critical times like the end of the winter heating season.

More granular data, such as at the zip code level, could help DEHCR target outreach to areas with high concentrations of low-income households with high energy burdens and customers in arrears. Access to data that tracks energy burden before and after assistance could further help evaluate the effectiveness of programs like WHEAP and WAP, identifying areas for improvement and ensuring support reaches those most in need.

By analyzing arrearage and disconnection patterns, DEHCR could gain insights into trends in energy insecurity, leading to better-informed policy decisions and targeted solutions. In a broader sense, data sharing could strengthen the relationship between DEHCR and the Commission, facilitating a more coordinated approach to addressing energy affordability and creating a more comprehensive understanding of energy burden trends in Wisconsin.

As noted in the Metrics Report, DEHCR collects detailed data from households participating in their energy affordability programs.[14] Public reports provide average energy costs and energy burdens for these households, but individual household energy costs, income, and other

[13] Public Service Commission of Wisconsin. E-Services Portal. Docket 1-AC-257. **https://apps.psc.wi.gov/APPS/dockets/content/detail.aspx?id=1&case=AC&num=257**

[14] It's important to note that the households participating in DEHCR programs do not represent *all* households with high energy burdens, or all low-income households, so care must be taken in extrapolating to all such households.

characteristics are collected. These individual household data would allow more granular analysis of energy cost and burden distributions.

Some example analyses the Commission may wish to undertake specifically noted in the Metrics Report include:

- Consider share of WHEAP-assisted households with unaffordable energy burden before and after factoring in program benefits.
- Supplement the regional energy burden analysis based on public datasets with primary household data.
- Examine combined impacts of federally funded benefits and those from the state-funded public benefits charge.

The data collected by DEHCR, despite limitations, are invaluable to examining and assessing energy burden across the state. Thus, many of the strategies and recommendations put forth below include strengthening collaboration and data-sharing between the Commission and DEHCR.

Actionable Strategies and Options

The following are options and strategies the Commission may consider for addressing energy burden and improving energy affordability. Generally, these are sorted across two dimensions: ready-to-launch strategies that are feasible to begin right now, and longer-term options that would improve the framework and how it is used by the Commission but require more information and more effort to be implemented. Further distinction based on the length of time expected to complete strategies is included, noting that some ready-to-launch strategies may still occur over longer time-horizons due to development efforts.

In simple terms, the distinction between ready-to-launch strategies and longer-term strategies is whether implementation could begin within 2025. This definition was used in stakeholder sessions as outlined below to help guide discussion.

Reviewing the Framework from the Metrics Report

Recall the framework proposed in the Metrics Report included the following:

Energy Burden

- Establish statewide energy burden baselines.
- Examine regional average energy burdens.

Energy Affordability

- Track energy assistance and weatherization program participation.

- Track energy burden outcomes for households participating in energy assistance programs.
- Estimate and track the energy affordability gap.

Energy Insecurity

- Track utility-reported arrearages.
- Track utility-reported disconnections and notices.
- Track WHEAP-reported service loss prevention/restoration occurrences and HE+ HVAC service.

This framework along with several opportunities for improvement going forward were presented to a broad group of stakeholders to assess feasibility and applicability. Stakeholders agreed that the recommended data sources were appropriate, aligning with practices in other states.[15] There were concerns that certain data may be outdated and not fully reflect current energy burden realities (e.g., the Residential Energy Consumption Survey (RECS) was last fielded in 2020 though new data is expected in 2026). It was also noted that collecting consistent data from electric cooperatives remains challenging, and reliance on DEHCR data may present gaps since it only includes those receiving assistance, not the wider population of eligible but unserved households. These concerns are largely consistent with the assessment presented in the Metrics Report, and they illustrate that while these data have limitations, accessibility and availability support their inclusion over alternative sources.

Stakeholders provided important feedback on improving metrics for assessing energy burden. Many recommended using a sliding scale threshold instead of the industry standard 6%, noting that a fixed percentage might not fully capture the diverse needs of different income groups. Additionally, stakeholders proposed setting distinct energy burden thresholds for different fuel types, as utilities often supply only one type of fuel, which can overlook the household's total energy expenses. There was also a call for more detailed data collection, suggesting at least census tract-level data, if not even more granular units like census blocks. This approach would better reflect the experiences of low-income communities, especially in rural areas where poverty may not be concentrated.

Stakeholders offered several recommendations for improving metrics on energy affordability and insecurity. While recognizing the value of data from DEHCR, some participants highlighted challenges in accessing and effectively using this information. Others felt far more confident that partnering with DEHCR would be relatively seamless and provide great value. Streamlined data sharing, possibly through standardized reports, was suggested to enhance collaboration. Additionally, formalizing the tracking of utility-reported arrearage data and making it publicly available was seen as a useful step to better assess affordability issues. There were concerns

[15] A comprehensive overview of the data sources considered and included can be found beginning on page 11 of the Energy Burden Metrics Report.

about customer privacy, especially with more detailed reporting at smaller geographic levels. To address this, stakeholders recommended anonymizing data to protect individual privacy while still enabling comprehensive analysis.

Additional detail on the stakeholder engagement process can be found below.

Developing Strategies and Options

A key criterion for near-term, ready-to-launch strategies is that the information necessary is already available. These strategies largely follow the information laid out in the Energy Burden Metrics Report. The team recommends implementing a three-pronged framework to assess energy burden, energy affordability, and energy insecurity. The actions required to implement this framework and make it available to stakeholders are detailed below.

The longer-term options present opportunities that may be tailored based on priorities and direction given by the Commission. The team sought input from key stakeholders to determine relative priority, level of effort, and other considerations in presenting these recommendations. In contrast to the ready-to-launch actions, these long-term actions would require things like new or more granular data, cross-collaboration with other government departments, or enhanced data collection and reporting practices from utilities. The long-term actions that the Commission may consider in improving the framework going forward are detailed below.

The action steps proposed in this plan are developed assuming the following. First, that the Commission wishes to put a framework in place in the near-term with data already available, while pursuing improvements to the framework going forward. Second, that because the Commission wishes to develop consistency in definitions and data sources regarding energy burden, energy affordability, and energy insecurity in Wisconsin, then the Commission should make said definitions and data publicly available.

Ready-to-Launch, Quick Impact Recommendations

These tasks are ready to begin and easiest to complete. Further, these are foundational in that all subsequent recommendations can follow more easily.

1. **Continue engaging key stakeholders**. To ensure that key stakeholders – utilities, consumer advocates, governments, community-benefit organizations, etc. – are informed and able to engage in discussions regarding energy burden, affordability, and insecurity, they should be made aware of the definitions and data put forth via the proposed framework. Many stakeholders may benefit from content being prepared in less technical formats than the prior Energy Burden Metrics Report. This will improve understanding and allow effective usage of the information, advocacy for meaningful programs and interventions, and collaboration toward shared objectives.

a. Clarity and consistency. Shared understanding of these concepts means more time spent on developing solutions and less on settling definitions.
b. Improved communication. Ideas, concerns, and recommendations can be articulated in ways that other stakeholders understand.
c. Capacity building. As stakeholders gain expertise in the shared framework and data, they may be able to promote evolution toward better definitions or more robust datasets.

Included below are the types of stakeholders already identified as being most impacted by the framework put forth. Commission staff can engage these stakeholders in an ongoing fashion as progress is made.

Ready-to-Launch, Medium/Long-term Impact Recommendations

These recommendations focus on data collection and publication. While the information needed to begin these tasks is available, the time and effort required to complete them is significant. Additional staff or resources may be necessary, and integration into ongoing data processes may require additional planning.

1. **Collect data as laid out in the Metrics Report**. This includes collecting available data from the following sources:
    a. Residential Energy Consumption Survey (RECS)
    b. American Community Survey (ACS)
    c. Low Income Energy Affordability Data (LEAD) Tool[16]
    d. Wisconsin Home Energy Assistance Program (WHEAP)
    e. Utility Annual Reports

    Collecting this data will allow for baseline examination of energy burden, affordability, and security as well as the beginnings of a time series to observe trends and, more importantly, impacts of interventions over time.

    While a first draft of this has already been included in the Metrics Report, the overall data collection, modeling and analysis, and data cleaning would require **significant time and effort**.

    Create a structured approach for merging data from the different sources, ensuring consistency in geographic boundaries as appropriate, noting that geospatial granularity may vary across the datasets. Some like ACS and LEAD data are available at the census

[16] Recall that as of this writing, the LEAD Tool has been disabled by the U.S. Department of Energy. While data files underlying the 2022 update are still available, the status of the tool and any future updates is uncertain. The Metrics Report discusses the merits of the LEAD data and utility-reported energy burden data (pages 11-15) should the LEAD data prove insufficient going forward.

tract level. WHEAP project data is currently publicly available at the county level, though more granular geospatial data may be possible with additional development. While some utilities have been reporting certain energy burden data at the census tract level, the proposed arrears and disconnections data is only reported at the utility service territory level. Including different levels of geospatial granularity is acceptable in the near term, and working towards a consistently granular level of data going forward is recommended. Standardize key variables as described in the Metrics Report.

Implement a data cleaning process to address issues such as missing values, inconsistent formats, and outliers. Establish a validation procedure to ensure data accuracy before integration. For example, it would be prudent to crosscheck data sources amongst themselves or with other known sources to ensure confidence.

For example, consider the following data quality checks:

- LEAD Tool data[17] - check household counts published in LEAD data with ACS summary tables from the Census Bureau. These should match when the LEAD and ACS summary table years are aligned since the ACS is used as an input to LEAD (e.g., currently, 2022 5-year ACS data estimates are used as an input to LEAD, and so there should be consistency in the household count estimates in LEAD with, say, ACS summary table S1903 based on the 2022 5-year ACS).
- Utility data - compare data reported by utilities with household count estimates as a data quality check and/or as a data suppression check.
    - Data quality example: if a utility is reporting the number of residential customers in a census tract that are in arrears, and that number is greater than the number of households in the census tract, it would be appropriate to question the validity of the data.
    - Data suppression example: if there are very few households in a census tract, as estimated by the ACS, it might be appropriate for the Commission to suppress any data reported by a utility out of data privacy concerns.

Establish a centralized data repository, leveraging cloud-based solutions or existing data platforms used by the PSC. Ensure the data warehouse supports scalable storage, efficient querying, and secure access.

[17] At the time of this writing, the LEAD Tool has been disabled. The example presented would be relevant should the LEAD Tool be reinstated. A similar process would still be appropriate if only the raw data underlying the 2022 LEAD Tool update (currently found here: **https://catalog.data.gov/dataset/low-income-energy-affordability-data-lead-tool-2022-update**) are available going forward. Since these data have already been verified, the data quality check would help ensure proper manipulation and use of data rather than indicate an error in the LEAD Tool.

Develop a detailed guide that documents each variable in the dataset, including definitions, data sources, and any transformations applied during integration. This will support transparency and ease of use.

2. **Make the data publicly available**. To allow all stakeholders to become familiar with consistent definitions and data sources, the Commission ought to make them publicly available in a user-friendly, intuitive format. Continued stakeholder engagement could help to determine an appropriate format and level of resources needed to make it accessible. While many of these data come from public datasets, the synthesis and centralized nature of the proposed framework would yield several benefits:
    a. Improved transparency and accountability. Policymakers can evaluate the effectiveness of affordability programs and identify improvement opportunities.
    b. Enhanced program development. Programs may be more targeted to communities with higher need and outcomes across regions can be compared to both replicate successes and address unique challenges.
    c. Increased equity. Publicly available data may illustrate disparities caused any number of factors that might otherwise be missed. Stakeholders that may lack sophisticated data analysis personnel can still engage meaningfully.
    d. Support for research. While not a direct component of this study, the dataset proposed could be used by researchers to dig into related causes of or impacts from energy insecurity. Things like pandemics or economic downturns have raised awareness of energy insecurity recently and could be further studied.
    e. Public engagement. More informed customers can better participate in designing innovative programs, yielding greater trust between customers, utilities, and regulators.

Develop interactive tools and dashboards that allow users to explore the data and analyze key metrics (e.g., energy burden, arrearage rates). Create a public-facing web portal where stakeholders can access summary data, visualizations, and reports. Include options for users to download data subsets for further analysis. This is particularly valuable provided the Commission is interested in providing consistent information that all stakeholders can reference. Examples of similar dashboards can be found for Illinois[18] and Michigan[19], both of which are freely available on the regulators' website.

Develop templates for customized reports that PSC staff, advocacy groups, and other stakeholders can use to generate insights tailored to specific communities or policy needs.

[18] Illinois Commerce Commission. Credit, Collections, and Arrearages Reports Monthly Dashboard. **https://www.icc.illinois.gov/industry-reports/credit-collections-and-arrearages-reports/monthly-dashboard**
[19] Michigan Public Service Commission. Utility Customer Data. **https://www.michigan.gov/mpsc/regulatory/reports/other/utility-customer-data**

It is again important to note that development of such tools would likely require **significant time and effort** and may also incur **notable costs** for business intelligence software licensing.

Long-Term Recommendations

These include strategies that are worth considering for ongoing or subsequent improvements within the framework. These may shift due to decisions made or steps taken in the previous recommendations or may ultimately prove too costly to implement. Nonetheless, they are included to serve as guidance for future developments.

1. **Collaborate with DEHCR on data-sharing**. DEHCR already collects energy costs and income data for customers it serves through the Wisconsin Home Energy Assistance Program. While not representative of all residential customers, this is very useful primary data in examining energy burden and affordability among low-income households. The combination of utility-reported arrears and disconnections paired with actual outcomes of participants in the Home Energy Assistance Program may yield the most valuable insight.

   It is again crucial to note that the realization of these benefits is contingent upon **significant time and effort** invested by both DEHCR and Commission staff. Further, any data-sharing initiatives would require **review and approval** from a systems/IT perspective, a legal perspective, and perhaps others.

2. **Develop new reporting guidelines for data collection and reporting of utility arrears and disconnections.** Currently these data are reported annually, showing total arrears and disconnections by quarter. Higher temporal and geospatial granularity would help users identify the times and places where customers are struggling the most and allow proactive deployment of staff and resources. Again, the efforts detailed below would require significant resources and warrant a thoughtful consideration of the efforts needed relative to the benefits realized.
   a. Increase frequency of reporting. Reporting quarterly totals at the end of the year only provides the opportunity for a retrospective analysis. Providing these quarterly totals each quarter allows for more timely analysis and response. Increasing the frequency of reporting such that monthly totals are made available would greatly improve the ability to monitor trends, assess impacts from external shocks, and deploy resources more quickly.
   b. Increase geospatial granularity of reporting. Many stakeholders emphasized the need for more granular data, noting concerns that even relatively small units still mask variations and fail to capture the needs of certain populations. The current service-territory level reporting could be improved by aggregating data by

smaller geospatial units. Census tracts are a desirable unit given much of the other public data leveraged for the framework is available at this level.

Stakeholder Engagement and Feedback

A key step in developing this action plan was consultation with stakeholders. Many of these stakeholders were selected because they are likely to be directly impacted by efforts to reduce energy burden in Wisconsin. While some of the key feedback has already been summarized above, below is a complete look at how stakeholders were identified and selected, how they were engaged by the research team, and what type of feedback was received that ultimately shaped the recommendations included above. Also included are recommendations for ongoing and continued engagement.

Stakeholder Engagement

Goal: Collect feedback on Energy Burden Metrics Report and determine what recommendations are feasible as they are framed in the short term versus the long term.

Stakeholder Selection Process: Stakeholders were selected based on their engagement in dockets related to affordability metrics, arrearage and disconnection data/requirements for low-income programs, low-income energy assistance programs, and utility-specific reporting frameworks (including dockets 5-EI-158, 5-UI-120, 5-UI-121, 6690-UI-101, 3270-UI-101, 6680-UI-100, 5-TU-100, 3270-TU-100, and 5820-TE-101/5820-TG-101, 6680-TE-106). The PSC provided additional contacts from various organizations and tribal contacts to ensure the stakeholder sessions were representative of all relevant groups. To maintain focus and foster meaningful conversations, the VEIC team requested that each organization send only one representative.

Table 1: VEIC categories for the stakeholder that were included to provide feedback on the Energy Metrics Burden report.

Stakeholder Group Type	No. of Entities
Customer Advocate	6
Community Benefit Organization	7
Utility	8
Government	3
Tribe	11
Research	1
Total	**36**

Customer advocates typically focus on protecting the rights and interests of individual consumers or business entities, often addressing issues like affordability. They may work

independently or as part of a larger organization, advocating for policies that benefit costumers.

Community benefit organization are usually non-profit entities that aim to enhance the well-being of a specific community. These organizations often provide services, resources, and programs designed to improve economic opportunities for community members. They may also focus on broader systemic issues such as energy burden, affordability, and/or insecurity.

Utilities deliver electricity and gas as essential services to the public. Whether regulated by a public entity (PSC) or member-owners, they seek to provide reliable services at fair rates and maintain their infrastructure. Additionally, utilities supply extensive data to assess energy burden, affordability, and insecurity. They play a critical role in ensuring that this data is granular, consistent, and accessible for evaluating these important issues.

Government entities such as local or state agencies provide programs and policies aimed at improving energy access and affordability.

Tribes have historically been underrepresented and have lacked involvement in conversations related to energy burden, affordability, and/or insecurity. Additionally, many tribal communities experience higher energy prices, limited access to reliable energy sources, and inadequate infrastructure, all of which contribute to financial strain.

Research represents a group that does not identify with the other categories but has done extensive research in the energy affordability space.

The stakeholder engagement process is outlined here:

- To inform the Energy Burden Action Plan, VEIC conducted two 90-minute stakeholder sessions on September 19th, 2024 (Session A) and September 24th, 2024 (Session B) to collect feedback and responses to the Energy Burden Metrics Report. These dates were chosen based on a Doodle poll sent to all stakeholders (which included four options) and chose based on the highest attendance.
- All stakeholders invited to the sessions were notified in advance and given time to review the Energy Burden Metrics Report and provide feedback ahead of the stakeholder sessions.
- Feedback on the Energy Burden Metrics Report was received either through email, comments directly in a copy of the Energy Metrics Report, responses from a Microsoft Survey (Appendix A), and/or during the stakeholder sessions.
- VEIC framed options based on the following:
    - Short term recommendations - something the PSC could do within 2025.
    - Long term recommendations - ongoing and no end date to see how this can inform a framework.

Stakeholder Feedback

Stakeholder knowledge ranged from participants that were very familiar with the datasets and could speak at great lengths of details about calculations and the pros and cons of each dataset to those with little or no familiarity with the data discussed.

Table 2: Short term Energy Burden Recommendations

Recommendations	**Stakeholder Feedback**
Establish statewide energy burden baselines using the RECS and ACS.	• Baseline is needed (right tools with representative data is a priority). • Some view ACS as representative. • Only caution against RECS was it can be out of date due to periodic reporting.
Examine regional average energy burdens using the LEAD Tool.	• Some like how LEAD tool can target segments of households. • Mapping is useful for overlaying information. • Colorado is currently using this.

Additional feedback worth noting include:

- Pursue good, consistent data. For example, continuously challenged by gathering good data from electric cooperatives, whether mandated or recommended.
- Incorporate focus on racial and ethnic minorities.
- Connect to energy efficiency/weatherization.
- Examine adjusting programs around accounting for energy burden and to relieve hardship.
- Consider that tools mentioned above overlap with what other states and current Wisconsin nonprofits use to identify areas in highest need.

Table 3: Short term Energy Affordability Recommendations

Recommendations	**Stakeholder Feedback**
Track energy assistance and weatherization program participation using DEHCR data.	• DEHCR data may overcome some of the rural cooperative data issues.

Track energy burden outcomes for households participating in energy assistance programs using DEHCR data.	• Commission cannot order DEHCR to provide data. • The challenge is that many more low-income households are eligible for energy assistance than are currently receiving it, raising concerns about which households may be missing out.
Estimate and track the energy affordability gap using the RECS and ACS.	

Table 4: Short term Energy Insecurity Recommendations

Recommendations	**Stakeholder Feedback**
Track utility-reported arrearage and disconnection data provided in annual reports.	• Would like this data to be reported at the census tract. • Utilities currently report twice a year, but it is not shared publicly. Stakeholders would like access to this data but need to ensure data privacy is accommodated.
Track service loss prevention/restoration data reported by DEHCR for the WHEAP and HE+ programs.	

How the PSC should continue to include these stakeholders:

- **Format of Content:** Provide a short summary of recommendations for stakeholder feedback in a less technical format compared to the Energy Burden Metrics. This will help ensure that all stakeholders clearly understand the proposed recommendations and can provide their input effectively.
- **Timing:** Ensure prompt outreach and sufficient time for stakeholders to review and provide feedback. Provide instructions for external dissemination when necessary to prevent delays.
- **Explore other items to include in affordability:**
  - Energy efficiency
  - Renewable energy
  - Weatherization

Conclusion

The Energy Burden Metrics Report described a three-pronged framework the Commission can implement in its effort to provide consistency and clarity.

This Energy Burden Action Plan recommends that the Commission take the next steps in putting that framework in place by:

1. Continuing to engage with key stakeholders in development and evolution of definitions, processes, etc.
2. Collecting the data as described in the Metrics Report.
3. Making the data publicly available.

Further improvements could be made by:

1. Collaborating with DEHCR on data-sharing to unlock the full potential of combined data.
2. Working with utilities to update reporting processes to increase frequency of reports and geospatial granularity of data.

Appendix A. Example Processes Informed by Energy Burden Metrics

The following sections detail specific examples of utility-specific processes, programs, or other dockets.

A1 - Investigations Regarding Alternative Affordability Programs

WE Energies / Wisconsin Public Service Corporation

Commission dockets 6690-UI-101[20] and 5-UI-121[21] are exploring alternative low-income assistance programs for WE Energies (comprised of Wisconsin Electric Power Company and Wisconsin Gas) and Wisconsin Public Service Corporation (WPS), including consideration of a PIPP. This investigation emerged from a previous rate case which highlighted the need for innovative low-income support programs. The investigation aims to gather public and stakeholder input, assess legal and administrative challenges, and evaluate program design options that could improve affordability for vulnerable customers.

Work within the docket to gain insights from public input sessions and gather resources from other states provide a comprehensive overview of PIPPs, including existing programs in Illinois, Minnesota, and Pennsylvania. These programs cap customers' energy payments at a percentage of their income, aiming to reduce disconnections, lower arrears, and enhance payment compliance. However, potential barriers include questions about how program designs work within Wisconsin's legal framework, the administrative complexity of income verification, concerns about increased energy consumption, and potential impacts on non-qualifying customers.

Alliant Energy

The Commission opened docket 6680-UI-100[22] to bring Alliant Energy (the Wisconsin utility officially known as Wisconsin Power and Light) and stakeholders together to explore alternative programs aimed at enhancing customer affordability and reducing energy burden. This investigation follows concerns raised by stakeholders about the affordability of utility services

[20] Public Service Commission of Wisconsin. E-Services Portal. Docket 6690-UI-101. **https://apps.psc.wi.gov/APPS/dockets/content/detail.aspx?id=6690&case=UI&num=101**
[21] Public Service Commission of Wisconsin. E-Services Portal. Docket 5-UI-121. **https://apps.psc.wi.gov/APPS/dockets/content/detail.aspx?id=5&case=UI&num=121**
[22] Public Service Commission of Wisconsin. E-Services Portal. Docket 6680-UI-100. **https://apps.psc.wi.gov/APPS/dockets/content/detail.aspx?id=6680&case=UI&num=100**

across various customer classes, including residential, low-income, small businesses, and large industrial customers in a 2023 rate case (Docket 6680-UR-124).

Initial documentation within the investigation highlights Alliant's variety of programs to assist customers with energy costs. Alliant has its own Hometown Care Energy Fund that provides financial help to low-income customers funded by donations from utility shareholders, employees, retirees, and customers. The Enhanced Low-Income Weatherization Program provides services like insulation, furnace repairs, and appliance replacements, achieving 25-30% energy savings for participants. The investigation docket will offer stakeholders an opportunity to discuss existing programs, planned revisions that will be filed by the utility, and other affordability topics.

Madison Gas and Electric

A similar investigation to address utility service affordability concerns for Madison Gas and Electric (MGE) was initiated in Docket 3270-UI-101.[23] This investigation followed stakeholder feedback during a prior rate case (Docket 3270-UR-125), where MGE's proposed Energy Customer Assistance Program was not reasonable to authorize as proposed and MGE was directed to develop an arrears management program (detailed in the next section below) to address the need for more effective measures in addressing affordability and energy burden. The investigation docket will offer stakeholders an opportunity to discuss existing programs, planned revisions that will be filed by the utility, and other affordability topics.

A2 - Tariffs Regarding Arrears Management Programs

WE Energies / Wisconsin Public Service Corporation

The Low Income Forgiveness Tool (LIFT) program is an AMP designed to help low-income residential customers reduce and eliminate past-due energy bills.[24] The program was collaboratively developed by WE Energies, Wisconsin Public Service Corporation, and the Citizens Utility Board. Eligible customers must have received energy assistance within the past year and carry arrears of $300 or more. Participants make monthly payments at 50% of their estimated budget amount for 12 months, with one-twelfth of their arrears forgiven for each on-time payment. Successful completion of the program results in full forgiveness of the remaining arrears.

The LIFT program has undergone multiple regulatory reviews, with notable updates through various dockets. Initial development began in 2021 (though this program replaced another AMP first authorized in pilot form in 2005), followed by expansions and tariff filings in 2022. The most

[23] Public Service Commission of Wisconsin. E-Services Portal. Docket 3270-UI-101. **https://apps.psc.wi.gov/APPS/dockets/content/detail.aspx?id=3270&case=UI&num=101**
[24] Public Service Commission of Wisconsin. E-Services Portal. Docket 5-TU-100. **https://apps.psc.wi.gov/APPS/dockets/content/detail.aspx?id=5&case=TU&num=100**

recent decision in February 2024 approved the program with modifications, including lowering the $300 arrears threshold on a case-by-case basis, clarifying enrollment terms, and requiring the development of performance metrics for annual reporting. Another modification allows participants that complete the program and retain eligibility, apart from the initial arrearage amount, to continue participation in the LIFT program.

Alliant Energy

Alliant Energy launched an AMP aimed at helping low-income customers struggling with overdue utility bills, particularly in response to the economic impacts of COVID-19.[25] The program automatically enrolled eligible customers—those who had received WHEAP funds and had at least $300 in arrears for over 60 days. Upon enrollment, customers received a 25% reduction in their arrears, with an additional one-twelfth reduction for each timely monthly payment thereafter. Customers missing two consecutive payments were removed from the program but could re-enroll later.

The Commission approved the AMP as a one-year pilot in December 2020, with several modifications, including outreach to WHEAP agencies, translation services, and the development of performance metrics. The program's first-year report showed strong results, with over 6,200 customers enrolled, 3,681 successfully completing the program (though many of these completions were the result of federal stimulus funding provided to assist low-income customers with arrears), and a significant improvement in on-time payments from 6% pre-enrollment to 76% during the program. The average reduction in arrears was 40%. In its 2023 rate case, WPL requested that its pilot AMP become a permanent program in its tariff, however the Commission directed that it retain its pilot status while incorporating several modifications including expanding eligibility. This resulted in Alliant Energy filing an application in December 2024 for authority to modify its AMP tariff.[26]

Madison Gas and Electric

The "Back on Track" program, introduced in Docket 3270-TU-100, is a proposed pilot AMP by MGE to help at-risk residential customers manage and eliminate overdue account balances.[27] To qualify, customers must have over $300 in arrears for at least 60 days and must have received assistance from local energy aid programs like WHEAP or community organizations. Additionally, customers identified as Life Support Customers with medical certifications on file are eligible.

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[25] Public Service Commission of Wisconsin. E-Services Portal. Docket 6680-TE-100. **https://apps.psc.wi.gov/APPS/dockets/content/detail.aspx?id=6680&case=TE&num=106**

[26] Public Service Commission of Wisconsin. E-Services Portal. Docket 6680-TE-112. **https://apps.psc.wi.gov/APPS/dockets/content/detail.aspx?id=6680&case=TE&num=112**

[27] Public Service Commission of Wisconsin. E-Services Portal. Docket 3270-TU-100. **https://apps.psc.wi.gov/APPS/dockets/content/detail.aspx?id=3270&case=TU&num=100**

Enrolled participants have their existing arrears separated from future charges, and neither are subject to late fees or collection actions. For each of twelve consecutive on-time monthly payments, one-twelfth of the arrears balance is forgiven. Completion of the program results in a zero balance. If a participant misses a payment, they risk removal but may re-enroll after 90 days under certain conditions. MGE also offers educational resources to encourage better long-term payment habits, although these are optional.

MGE submitted the proposal for approval in May 2024. In response to data requests from the Commission, MGE provided additional details about the program. The Commission is anticipated to decide on the proposal in 2025.

Superior Water Light and Power

Superior Water, Light and Power Company (SWL&P) launched a pilot AMP approved by the PSC on September 29, 2021.[28] The program aims to assist residential customers with overdue utility bills by providing matching payments to help reduce arrears. Initially open to all residential customers with past-due balances of $200 or more, eligibility after 2021 is limited to customers receiving Low-Income Home Energy Assistance Program (LIHEAP) benefits.

Under the AMP, customers' arrears are moved into a separate payment agreement for up to 24 months. After making three consecutive on-time payments, SWL&P matches subsequent payments until the arrears are cleared. Missed payments can result in removal from the program, with restrictions on re-enrollment. The program also allows participants to use budget billing to manage current charges, helping to stabilize monthly costs.

The program includes reporting metrics like participation rates, reductions in arrears, match dollars applied, and comparisons of disconnection data. SWL&P is required to report program outcomes every two years, with an evaluation at the end of the three-year pilot. In November 2024, SWL&P requested the Commission authorize the AMP as a permanent program in its tariff, stating that it has been a good resource for customers that find themselves in financial strain.

[28] Public Service Commission of Wisconsin. E-Services Portal. Docket 5820-TE-101. **https://apps.psc.wi.gov/APPS/dockets/content/detail.aspx?id=5820&case=TE&num=101**

Appendix B. Microsoft Form Feedback Collection

To facilitate the discussion for the stakeholder sessions, VEIC asked participants to complete a form in advance. This allowed VEIC to gain insight into stakeholder perspectives and ask targeted questions about the reasoning behind their responses, while also encouraging other participants to engage by agreeing or disagreeing with the statements. The form was initially shared on September 3rd, 2004, and participants were asked to complete it by September 11th. Responses trickled in before and after the final stakeholder session (Session B) on September 24th, 2024.

Question 1: Which stakeholder group best describes your organization?

- Utility
- State Agency
- Community Benefit Organization
- Consumer Advocate
- Research
- Tribe
- Other

Figure 1: Results from question 1 (number of responses=10)

Question 2: Please drag and drop to rank the following based on your PRIORITIES to improve the **Energy Burden** framework, with 1 being the most important and 3 being the least important.

- Work with utilities to improve reporting of average electricity and natural gas costs by census tract. Top areas to address are ensuring average bills are based on customers with bill data for the full year, reporting separately on single fuel customers (natural gas or electricity) and combined fuel customers (natural gas and electricity), and ensuring quality assurance checks are in place.
- Use updated LEAD Tool estimates and examine total residential energy costs and disaggregated energy costs and burden by fuel type.
- Partner with DEHCR to analyze energy burden of WHEAP recipient households in more detailed ways than currently available through public reports.

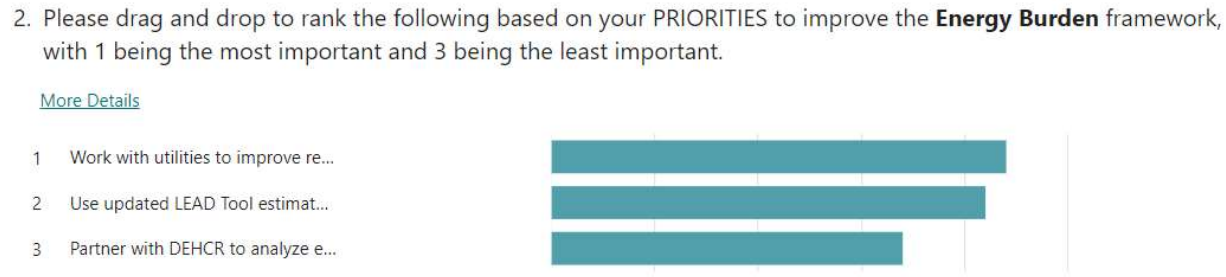

Figure 2: Results from question 2 (number of responses=10)

Question 3: Please drag and drop the following opportunities to rank them based on the level of EFFORT required to implement improvements to the **Energy Burden** framework. Rank them from 1 to 3, with 1 representing the most effort and 3 representing the least effort.

- Work with utilities to improve reporting of average electricity and natural gas costs by census tract. Top areas to address are ensuring average bills are based on customers with bill data for the full year, reporting separately on single fuel customers (natural gas or electricity) and combined fuel customers (natural gas and electricity), and ensuring quality assurance checks are in place.
- Use updated LEAD Tool estimates and examine total residential energy costs and disaggregated energy costs and burden by fuel type.
- Partner with DEHCR to analyze energy burden of WHEAP recipient households in more detailed ways than currently available through public reports.

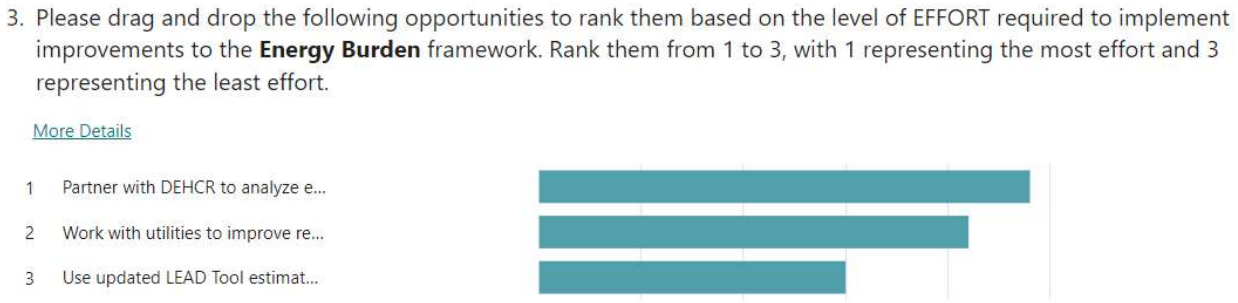

Figure 3: Results from question 3 (number of responses=10)

Question 4: Please drag and drop to rank the following based on your PRIORITIES to improve the **Energy Affordability** framework, with 1 being the most important and 2 being the least important.

- Partner with the DEHCR to examine energy burden at a more granular level for WHEAP participants, including examining distributions of individual energy costs and burden, replicating energy burden reports for non-heat electric WHEAP participants, examining data by utility provider and/or regionally, and updating DEHCR program applications to collect information on participation in affordability programs offered by the IOUs.
- Consider establishing a Wisconsin-specific energy affordability target threshold, including whether a separate threshold for different fuel types is appropriate.

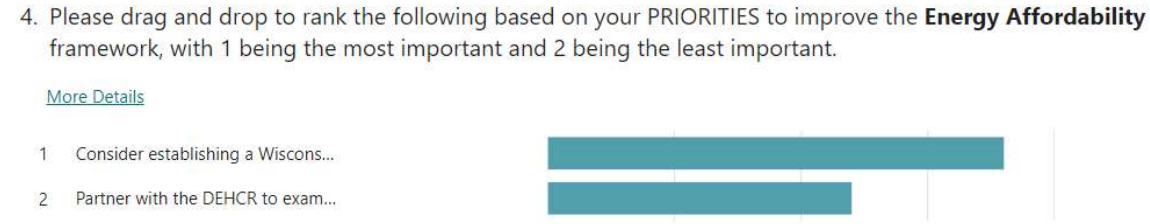

Figure 4: Results from question 4 (number of responses=10)

Question 5: Please drag and drop the following opportunities to rank them based on the level of EFFORT required to implement improvements to the **Energy Affordability** framework. Rank them from 1 to 2, with 1 representing the most effort and 2 representing the least effort.

- Partner with the DEHCR to examine energy burden at a more granular level for WHEAP participants, including examining distributions of individual energy costs and burden, replicating energy burden reports for non-heat electric WHEAP participants, examining data by utility provider and/or regionally, and updating DEHCR program applications to collect information on participation in affordability programs offered by the IOUs.

- Consider establishing a Wisconsin-specific energy affordability target threshold, including whether a separate threshold for different fuel types is appropriate.

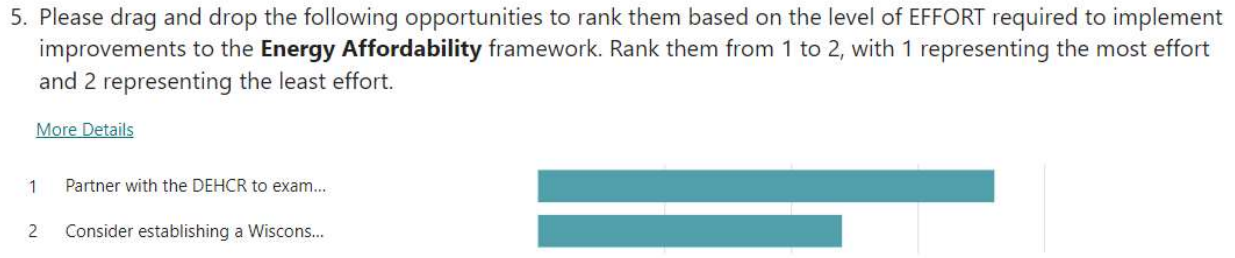

Figure 5: Results from question 5 (number of responses=10)

Question 6: Please drag and drop to rank the following based on your PRIORITIES to improve the **Energy Insecurity** framework, with 1 being the most important and 3 being the least important.

- Consider changes to the data and frequency of reporting by utilities, including reporting monthly totals on a monthly basis, disaggregating residential customers by whether they receive WHEAP assistance, reporting on nonresidential customers, reporting data by zip code or census tract, and reporting additional tracking metrics including customers on DPAs or participating in AMPs, number of reconnections, and accounts in arrears for 30, 60, and more than 60 days.
- Work with utilities to improve reporting of arrearage and disconnection data including ensuring data are reported consistently across utilities (e.g., discrete quarterly total disconnections rather than cumulative totals).
- Partner with DEHCR to examine energy insecurity at a more granular level for WHEAP participants.

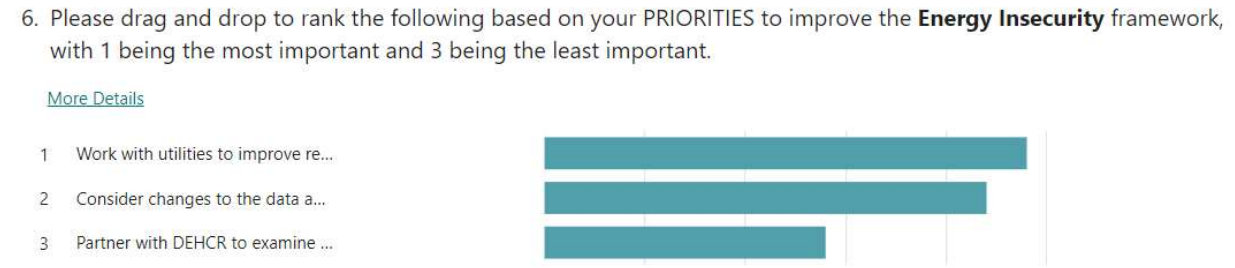

Figure 6: Results from question 6 (number of responses=10)

Question 7: Please drag and drop the following opportunities to rank them based on the level of EFFORT required to implement improvements to the **Energy Insecurity** framework. Rank them from 1 to 3, with 1 representing the most effort and 3 representing the least effort.

- Consider changes to the data and frequency of reporting by utilities, including reporting monthly totals on a monthly basis, disaggregating residential customers by whether they receive WHEAP assistance, reporting on nonresidential customers, reporting data by zip code or census tract, and reporting additional tracking metrics including customers on DPAs or participating in AMPs, number of reconnections, and accounts in arrears for 30, 60, and more than 60 days.
- Work with utilities to improve reporting of arrearage and disconnection data including ensuring data are reported consistently across utilities (e.g., discrete quarterly total disconnections rather than cumulative totals).
- Partner with DEHCR to examine energy insecurity at a more granular level for WHEAP participants.

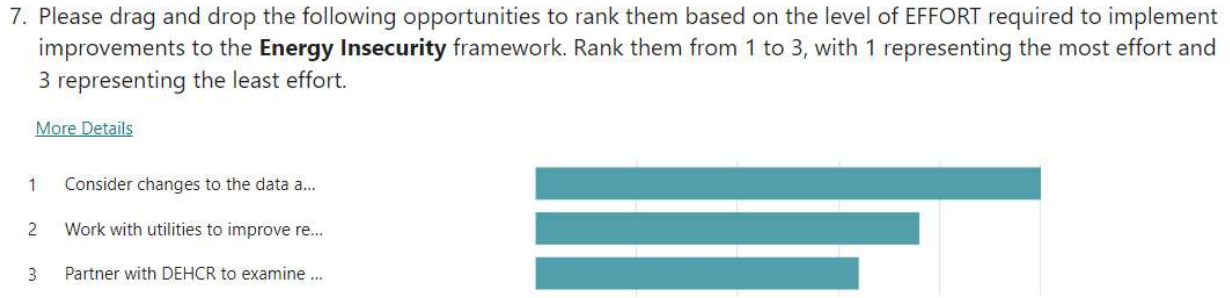

Figure 7: Results from question 7 (number of responses=10)

Question 8: If you have not provided feedback on the Energy Burden Metrics Report yet, you may do so here or email the VEIC team (open field).

8. If you have not provided feedback on the Energy Burden Metrics Report yet, you may do so here or email the VEIC team.

3 Responses

ID ↑	Name	Responses
1	anonymous	I indicated this in my email, but starting with the least effort approaches likely provides the most value to customers when compared with the costs. There is a significant amount of value in reviewing the DEHCR data more closely, which could help target areas where additional utility reporting would be helpful and help fill-in data holes. By expanding what is required to be reported by utilities provides a lot more data, but it is unclear whether if and how it would be used. Analyzing the data requires a sophisticated understanding of the complexities of utility billing, customer service rules, and assistance programs available.
2	anonymous	Sending by email
3	anonymous	I'll discuss in the session and perhaps send an email.

Figure 8: Results from question 8 (number of responses=10)

Appendix C. Slides for Stakeholder Sessions

Below are the slides that were presented in the stakeholder sessions.

1

2

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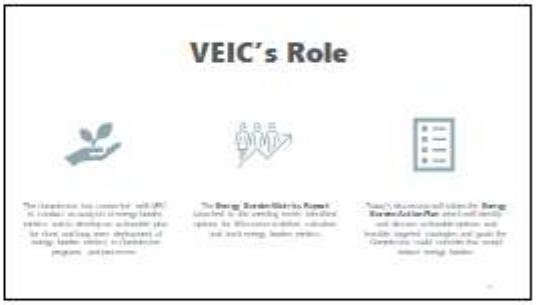

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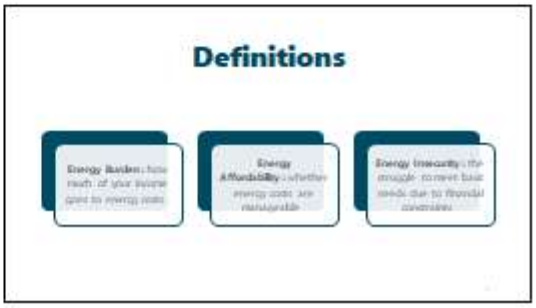

6

Data Sources

7

Division of Energy Housing and Community Resources (DEHCR)

Home Energy Plus (HE+) Program provides eligible households with assistance for electric and heating costs and energy efficiency improvements as well as HVAC and Water Conservation repairs or replacements.

Wisconsin Home Energy Assistance Program (WHEAP) assists eligible households with their heating and electric bills. It is funded by the Low Income Home Energy Assistance Program (LIHEAP) and the Public Benefits (PB) program.

8

Meeting Agreements

- Everyone has a chance to speak. Please raise your virtual hand before you speak!
- Please keep comments relatively short. If you have additional information, please feel free to email the VCC room, include your thoughts in the Microsoft Form, or comment in the chat.
- Have the space to think BIG
- Assume good intent
- We will be recording this meeting for our own notes.
- We may call on you to engage in the discussion.
- Anything else?

9

Short Term Recommendations

How can this be better?

What else do you suggest?

What are your concerns with this framework?

10

Short Term Recommendations for Energy Burden Metrics

Establish statewide energy burden baselines using the RECS and ACS.

Examine regional average energy burdens using the LEAD Tool.

11

Short Term Recommendations for Energy Affordability Metrics

12

Short Term Recommendations for Energy Insecurity Metrics

Track utility reported arrearage and disconnection data provided in annual reports.

Track service loss prevention/restoration data reported by DEHCR for the WHEAP and HE+ programs.

13

The Long Term

14

So who responded?

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Long Term Recommendations for Energy Burden Framework

- **First Priority/Least Effort:** Use updated LEAD Tool estimates and examine total residential energy costs and disaggregated energy costs and burden by fuel type
- **Second Priority/Moderate Effort:** Work with utilities to improve reporting of average electricity and natural gas costs by census tract. Top concerns address are ensuring average bills are based on customers with bill data for the full year, reporting separately on single fuel customers (natural gas or electricity) and combined fuel customers (natural gas and electricity), and ensuring quality assurance checks are in place
- **Third Priority/Most Effort:** Partner with DEHCR to analyze energy burden of WHEAP recipient households in more detailed scale than currently available through public reports

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Long Term Recommendations for Energy Affordability Framework

- **First Priority/Least Effort:** Consider establishing a Wisconsin-specific energy affordability burden threshold, including whether a separate threshold for different fuel types is appropriate
- **Second Priority/Most Effort:** Partner with the DEHCR to examine energy burden at a more granular level for WHEAP participants, including examining distributions of individual energy costs and burdens, replicating energy burden reports for non-heat electric WHEAP participants, examining data by utility provider and/or regionally, and updating DEHCR program applications to collect information on participation in affordability programs offered by the IOUs

17

Long Term Recommendations for Energy Insecurity Framework

- **First Priority/Moderate Effort:** Work with utilities to improve reporting of arrearage and disconnection data including ensuring data are reported consistently across utilities (e.g., disconnections reported cumulatively, rather than cumulative totals)
- **Second Priority/Most Effort:** Consider changes to the data and frequency of reporting, by utilities, including reporting monthly totals on a monthly basis, disaggregating residential customers by whether they receive WHEAP assistance, reporting on non-residential customers, reporting data by zip code or census tract, and reporting additional tracking metrics including customers on SSMs or participating in AMPs, number of reconnections, and accounts in arrears for 30, 60, and more than 60 days
- **Third Priority/Least Effort:** Partner with DEHCR to examine energy insecurity at a more granular level for WHEAP participants

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Other Questions?
If you have additional thoughts or insights please email: kbeaton@valc.org
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19