

MEMO

Date: October 5, 2022
To: Board of Directors
From: Michael Colgrove, Executive Director
Subject: Planning Assumptions for the 2023 Budget

Each year Energy Trust planning and program staff identify assumptions underlying budget and action plans, including factors influencing the Oregon economy and market conditions influencing customers and programs. These assumptions are used as context for the organization and programs as we build and finalize action plans and budgets. The context section of each program action plan reflects critical economic and market factors influencing that program.

This memo summarizes major factors expected to influence 2023 outcomes for both the State of Oregon and Energy Trust. These areas include inflation, changes in employment, population and migration trends, sector-specific impacts, utility avoided cost updates, efficiency measure baseline changes and changes to programmatic realization rates. These factors are influencing Energy Trust's 2023 Budget and 2023-2024 Action Plan.

Executive Summary

The key economic factors influencing Energy Trust's programs in 2023 are high inflation, supply chain issues and equipment availability, and energy efficiency industry related labor shortages.

In 2022, Oregon is no longer in recovery mode and now is entering economic expansion. The state is nearing full employment of workers in the job market and average wages and manufacturing production are higher than pre-pandemic levels. However, these macroeconomic trends are predicted to slow down as recession conditions increase.

For Energy Trust programs, inflation is impacting program delivery as consumers are facing higher equipment prices and decreased spending power. Shortages of raw materials and key equipment components such as microchips are impacting the supply chain, leading to manufacturers not being able to keep up with the demand of equipment for many efficiency projects. Statewide trends in employment are promising but not directly reflected by Energy Trust's market intelligence for energy efficiency programs. More specifically, certain energy efficiency sectors are facing employment shortages where companies are having a difficult time staffing to full capacity, ultimately leading to unmet demand for goods and services.

1. State of Oregon Economic Impacts

Recession

State economists suggest that even though we have not entered a recession yet, the country could enter a recession by the end of next year. In previous 2022 Oregon Economic Reports, it was predicted that inflation would slow down starting in 2023. However, it is likely that if inflation does not slow down as predicted, the country could enter a recession. Slow economic growth combined with high inflation and rising interest rates are all indicators of entering a recession. From the Q3 Oregon Economic Report:

“Importantly, right now the fundamentals still look to be sound. Employment and industrial production are growing. Personal income and consumer spending are rising quickly but struggling to outpace the fastest inflation the U.S. has experienced since the early 1980s. These indicators – employment, production, income, and sales – are the main data points that the National Bureau of Economic Research (NBER) uses to identify when recessions begin and end. Despite the crosscurrents so far in 2022, the data overall do not support the U.S. economy currently being in recession.

While it may feel reassuring that knowing “this too shall pass” in terms of the immediate state of the economy, the risks are still clearly to the downside. The possibility that the current bout of inflation is more persistent than expected increases the probability that the Federal Reserve will ultimately have to raise interest rates even higher and hold them there for a longer period of time. This combination increases the likelihood of tipping the economy back into recession in the future.”¹

If inflation does not slow as expected, and the Federal Reserve raises rates even further, Oregon state economists suggest a mild recession beginning in late 2023.

Inflation

Inflation is currently at a 40-year high and poses the greatest overall risk to Oregon’s economy. Increases in the cost of living, especially for housing and transportation costs due to high oil prices, impact people with low incomes the most, as they may live paycheck to paycheck and may spend down their savings or go into greater debt.

As stated above, a recession scenario is possible if inflation does not slow down but it is also still possible that inflation could start to slow down in 2023 for three main reasons. First, the Federal Reserve has raised interest rates twice in 2022 to slow down excess demand, which ultimately slows down inflation. By increasing the cost of financing, businesses and households will spend less money and demand will become more in line with existing supply. Second, the price of goods and oil are expected to decline. For example, used car prices increased nearly 50% in the early pandemic when compared to pre-pandemic levels. However, those increases have fallen about 4% already in 2022 and are expected to continue to decline. Third, household incomes are expected to start declining. Household budgets will not be growing as quickly as before therefore allowing demand to be more in line with expected supply.²

¹ Oregon Economic and Revenue Forecast, September 2022, Page 5/71, <https://www.oregon.gov/das/OEA/Documents/forecast0922.pdf>

² Oregon Economic and Revenue Forecast, June 2022, Page 9/65, <https://www.oregon.gov/das/OEA/Documents/forecast0622.pdf>

These trends that contribute to an expected decline in inflation may have contradictory impacts on Energy Trust programs. On one hand, it is expected that consumers will have less access to borrowed funds and less discretionary spending power. On the other hand, the real price of goods may start to fall again. As a result, Energy Trust will need to keep an eye on whether the demand Energy Trust programs has been seeing for the last few years will persist long enough for supply chains to stabilize to provide goods to match the demand.

The housing market also started to see a slowdown in 2022 that will continue into 2023. From the Q3 Oregon Economic and Revenue Forecast:

“The primary reason for the sharp slowdown in the housing market is the large increase in mortgage rates. At the end of 2021, the typical 30-year mortgage rate was about 3%. Fast forward to this summer and mortgage rates are in the high 5% range. Higher interest rates combined with continued price appreciation, results in a big increase in the monthly mortgage payment needed to buy a home today. By a lot of estimates, the increased payment is about 30-40 percent depending on the market. This drop in homeownership affordability effectively cut the potential buyer pool in half here in Oregon. Significantly fewer households today can afford the median priced home compared to just a handful of months ago. The big decline in demand and sales is due to more households being priced out at current rates. This affordability crunch has a few big implications including a large decline in home sales as buyers retrench, which will likely be followed by modest declines in home prices and new housing starts as the market adjusts. All the while, these changes will increase pressure and competition for lower-priced units, and in the rental market.”³

Employment, Wages and Population

Oregon employment has almost fully recovered from COVID-19 pandemic lows, and there are more individuals employed today than before the pandemic began.⁴ However, there is still a labor shortage in Oregon as businesses in the state are looking to fill 100,000 job openings with only 80,000 unemployed Oregonians. There were three main shifts in employment that happened during the pandemic, according to the Oregon Office of Economic Analysis:

“The first is that self-employment is up. About 20,000 more Oregonians are self-employed today than in the years leading up to the pandemic. Second, there are around 16,000 fewer multiple jobholders today. Workers are more likely to be able to get by working one job today with wages and hours worked increasing in a tight labor market. Both of these trends mean the number of Oregonians with a job is higher than the underlying payroll job counts indicate. The third shift in the labor market during the pandemic is an increased number of workers quitting their jobs. The so-called Great Resignation is a misnomer. Employees are not quitting their jobs and dropping out of the labor force, but rather employees are quitting one job and switching to a different job. From an economic perspective, we hope that switching jobs results in an overall better labor match. This could be in terms of skill set, geographic location, hours worked, but at a minimum it is likely for a pay raise. Today in Oregon there are about 5,000 more quits per month than pre-pandemic.

Combined, all three of these shifts during the pandemic leave businesses with more job vacancies today, even if their desired staffing levels are the same as pre-pandemic. Business

³ Oregon Economic and Revenue Forecast, September 2022, Page 13/71, <https://www.oregon.gov/das/OEA/Documents/forecast0922.pdf>

⁴ Oregon Economic and Revenue Forecast, June 2022, Page 10/65, <https://www.oregon.gov/das/OEA/Documents/forecast0622.pdf>

owners and human resource managers must work harder today just to maintain a similar sized workforce as they used to have.”⁵

These shifts in employment left two main sectors with the lowest employment numbers in the state:

“While it is clear the good news outweighs the bad, there are two weak spots in Oregon’s recovery: primary metal manufacturing employment is down 25% and transportation equipment is down 13%. Combined, all other subsectors are fully recovered and individually they are all at least close to a full recovery or better.”⁶

These employment trends may have direct impacts on Energy Trust’s ability to meet its 2022 goals. First, labor shortages in the trade ally and new construction sectors are delaying projects and negatively impacting pipelines. Additionally, if labor shortages continue over the next few years, trade allies and program delivery contractors may have a hard time filling positions, and this could impact future goals over the next few years.

Wages are also higher overall than pre-pandemic levels, however per-worker wage trend increases are starting to slow down as employers become somewhat less desperate to fill open positions. Overall, Oregon’s average per-person wage is expected to increase 5% in 2022 compared to 2021, but ultimately lower to a 3%-4% annual increase over the next few years, which is more in line with pre-pandemic levels.⁷

Finally, Oregon’s Q2 2021 Economic and Revenue Forecast showed a projected annual population growth rate of 0.74% between the years 2020 and 2029,⁸ however that is expected to slow down if we enter a recession as population growth generally slows during recession conditions. One major industry risk associated with declining population growth and migration is the high cost of housing, which is due to a combination of factors including high interest rates and low housing stocks as represented by Oregon having underbuilt housing by 111,000 units over the last several decades.⁹ Increased housing costs may dampen future growth as fewer people can afford to live here, lowering net in-migration and the size of the labor force.

The downward trends in wage growth could be a positive indicator in the ability for our industry to fill open positions. However, if Oregon migration and population trends continue to slow down, that could negatively impact Oregon’s economy by reducing potential for innovation due to decelerated influx of talented workers.

2. Other Influencing Market Factors

Supply Chain

Global supply chains have been heavily impacted by the pandemic over the past few years, and the war in Ukraine has put additional pressures on the supply chain in some areas. One outcome of these drivers is a global shortage of microchips,¹⁰ which are used in a variety of energy efficiency and

⁵ Oregon Economic and Revenue Forecast, June 2022, Page 11/65, <https://www.oregon.gov/das/OEA/Documents/forecast0622.pdf>

⁶ Oregon Economic and Revenue Forecast, June 2022, Page 17/65, <https://www.oregon.gov/das/OEA/Documents/forecast0622.pdf>

⁷ Oregon Economic and Revenue Forecast, June 2022, Page 4/65, <https://www.oregon.gov/das/OEA/Documents/forecast0622.pdf>

⁸ Oregon Economic and Revenue Forecast, May 2021, Page 37/70, <https://www.oregon.gov/das/OEA/Documents/forecast0521.pdf>

⁹ Oregon Economic and Revenue Forecast, June 2022, Page 17/65, <https://www.oregon.gov/das/OEA/Documents/forecast0622.pdf>

¹⁰ <https://www.cnn.com/2022/07/20/global-chip-shortage-continues-amid-inflation-rising-rates-and-war-idx.html>

renewable energy generation equipment. However, the direct impacts to Oregon's industry from the war are expected to be minimal as Oregon is not a major trading partner with these regions.

In some cases, Oregon may see some benefits from general supply issues. For example, local wheat farmers may see more income since Russia and Ukraine are large wheat producers. The Oregon wood products industry may also see income increases as Russia is a large supplier of logs for China and other countries. Finally, the overall American economy is less dependent on energy as the economy is spending less energy per unit of output than in previous times in history. Oregon is also unique in this area as it has significantly reduced energy intensity in recent years, becoming the only state to go from above-average U.S. energy intensity to below-average U.S. energy intensity.¹¹

Energy Trust Program Supply Chain Notes

Energy Trust programs have seen negative impacts on projects as a result of supply chain issues. Gas prices, raw materials and skilled labor shortages are all contributing to project delays. Examples of specific program-level issues witnessed in 2022 include:

- Project cost quotes are only good for 24 hours due to dynamic and rapidly changing costs in the market.
- High demand for some projects are leading contractors to increase bids as a mechanism to manage high demand. Customers are still committing to projects but timelines for completing are increasing.
- Raw material shortages are leading to equipment delays.

Manufacturing

Overall industrial and manufacturing production are at the highest levels since the Great Depression. Recent high consumer demand is helping keep those levels stable as Oregon manufacturing and production is currently 5% higher than pre-pandemic levels. Furthermore, Oregon's manufacturing employment is just 1% lower than pre-pandemic levels except for the metals manufacturing and transportation equipment industries, which have seen a decline in employment of 25% and 13% respectively. However, there are some near-term risks that may impact the general positive trends. If consumer spending and sales slow due to inflation and recent high consumer demand starts to level off, production and employment trends may start to soften or start declining.

Environmental Factors

In 2021, Oregon experienced extreme heat events and forest fires that impacted Energy Trust customers. While the fires in 2022 were not as extreme as last year, the impacts of extreme weather can negatively impact individuals and businesses in Oregon. Energy Trust will continue to provide incentives for cost-effective cooling measures and develop partnerships with other organizations that support populations impacted by these events. Furthermore, Energy Trust will work with communities and entities that are seeking to build renewable energy and energy efficiency solutions into their planning to help them become more resilient in the face of these threats. Finally, utility companies are being pressured to start modeling extreme weather events in their forecasting to better predict generation and demand needs on their systems.

¹¹ Oregon Economic and Revenue Forecast, June 2022, Page 11/65, <https://www.oregon.gov/das/OEA/Documents/forecast0622.pdf>

Funding Options for Customers

The Inflation Reduction Act (IRA) represents the largest ever federal investment in clean energy. Over its 10-year life, the IRA is expected to help millions of Americans benefit from energy efficiency and renewable energy. Many details of the law – including how customers will receive these benefits and what equipment will be covered – have not been finalized. Staff will be following the process to better understand the details as they are developed and provide updates as more information becomes available.

3. Factors Influencing Energy Trust

Below are factors influencing Energy Trust action planning and budgeting for 2023 and 2024. This list does not include program-specific factors. Please see the context section in each program action plan for more information at the program level.

Program Pipelines

The forecast for Q2 2022 indicates that Energy Trust expects to achieve 94% of its 2022 electric efficiency goal, 84% of its Oregon gas efficiency goal, 136% of its Washington gas efficiency goal, and 145% of its renewable generation goal.¹²

Supply chain issues and equipment shortages continue to be the main factors contributing to the forecasted shortfalls in Oregon efficiency programs. These issues are sector and technology specific and don't impact all programs the same way. For example, gas fryers have a current bonus in the Existing Buildings program, but customers can't get the equipment. Residential measures like smart thermostats and HVAC units are being promoted but customers are having issues either getting the equipment or having to pay higher prices than expected. Finally, New Buildings projects that are typically one to two years out are getting delayed into two- to four-year projects due to the supply chain and not being able to efficiently install and commit to project timelines.

Portland Clean Energy Fund

On July 20, 2022, Portland City Council voted to approve Portland Clean Energy Community Benefits Fund's (PCEF's) second package of recommended funding proposals, awarding more than \$100 million to fund 65 projects in the clean energy, regenerative agriculture/green infrastructure, workforce development fields. These projects include energy efficiency and renewable energy improvements in residential, multifamily and commercial properties, workforce development and contractor support for green energy technologies and practices, green infrastructure support for agricultural projects, and innovation and planning grants to promote cutting edge climate ideas and planning efforts. Energy Trust anticipates this additional investment of PCEF money in these projects will result in coordinated project work that will contribute additional savings when these projects are complete.

¹² Energy Trust 2022 reporting as of 7/29/2022.

Diversity, Equity and Inclusion (DEI)

Energy Trust is continuing to prioritize its DEI initiative, which strives to ensure all customers can directly benefit from our services, including people with low and moderate incomes, communities of color and rural communities. In 2022, Energy Trust adopted a new Diversity, Equity and Inclusion Plan with a greater focus on community engagement. Implementing this community engagement in 2023 will require more staff training, development and learning opportunities to support cultural awareness and prepare staff to more effectively engage diverse communities.

Carbon Reduction

The Department of Environmental Quality's Climate Protection Program launched in 2022 and will limit emissions from some of the most significant sources in Oregon, including large stationary sources, transportation fuels, and other liquid and gaseous fuel such as natural gas.¹³ They are to achieve a 90% reduction in emissions by 2050 over the baseline. This policy has resulted in gas utilities asking Energy Trust to pursue additional natural gas savings through increased funding for energy efficiency programs. Energy Trust continues to work with gas utilities during the 2023-2024 budget process to finalize savings and budget forecasts.

PGE and Pacific Power must meet targets set in the 100% Clean Electricity law (HB 2021 that passed in 2021). The targets are to achieve a 100% reduction in emissions by 2040 over the baseline. Energy Trust is updating its carbon reporting and budgeting process for 2023. This includes more detailed carbon mitigation reporting which will now be at a measure level and included in the budgeting process. These changes will help Energy Trust and the Oregon Public Utility Commission better manage progress toward Oregon's carbon reduction goals.

Peak Demand Savings

Due to the changing value and landscape of peak demand savings as new generation mixes enter the grid, the Oregon Public Utility Commission asked Energy Trust to refine our ability to quantify the time-based peak impacts of Energy Trust's energy efficiency and renewable energy programs to report and forecast our peak reduction impacts on a kilowatt basis. We are in the process of working with electric utilities to better understand how they value peak and how to best integrate time-based peak data to update our peak demand reporting and planning methods. We expect to implement these changes in 2023 for our annual reporting and budgeting processes.

Distribution System Planning and Peak Load Management

Distribution System Planning (DSP) is the process that utilities undergo to plan and build out their distribution systems to provide energy at its point of delivery. On the electric side, this has historically been focused on wires, poles and other electric equipment that is added or reinforced to keep pace with growing loads at the point where electricity is consumed. On the gas side, the historical focus has been on expanding the pipes that supply and distribute gas to the point where it is consumed.

More recently, utilities have been reconsidering other methods that can be used to reduce peak loads to defer investments in local system reinforcements. PGE and Pacific Power have been participating in the OPUC Distribution System Planning docket (UM 2005). As an outcome of this docket, PGE and Pacific Power have been tasked with thinking about how they can defer investments in their

¹³ Oregon DEQ Action on Climate Change: <https://www.oregon.gov/deq/ghgp/Pages/capandreduce.aspx>

electric system expansions with distributed energy resources that include energy efficiency, renewable energy and batteries along with other resources such as demand response and electric vehicles.

Energy Trust has coordinated with PGE and Pacific Power to help them understand how Energy Trust programs can contribute to their DSP goals. This includes thinking on how Energy Trust might eventually work with these utilities to implement locally targeted energy efficiency and renewable energy efforts alongside other distributed energy resources to offset local loads to defer system expansions that would otherwise be necessary to keep pace with growing loads. Energy Trust anticipates that these efforts will continue to expand for both electric and gas utilities and Energy Trust expects that we will be coordinating with the utilities to help them implement pertinent energy efficiency and renewable energy solutions.

Energy Trust has already worked with Pacific Power and NW Natural on a few targeted efforts to offset peak loads in these utilities' service territories through Targeted Load Management (TLM), which is also branded by NW Natural as Geographically Targeted Energy Efficiency (GeoTEE). PGE and Pacific Power will need to stand up two pilot efforts in order to meet the requirements of UM 2005, and Energy Trust expects to provide energy efficiency and renewable energy and battery offerings as components of these pilots using learnings from previously implement TLM projects. The gas utilities have also expressed interest in exploring sites in 2023 that can also be targeted using a TLM/GeoTEE framework.

Northwest Energy Efficiency Alliance

Energy Trust will continue to fund Northwest Energy Efficiency Alliance in Oregon and will continue to collaborate with other funding partners in pursuit of electric and gas market transformation.

4. Planning Assumptions Influencing Energy Trust Efficiency Programs

Avoided Costs

Avoided costs for Oregon energy-efficiency measures were updated in 2022 for 2023 measure and program planning.

Based on the measure mix for 2020 and part of 2021, Oregon saw an average decrease in electric avoided costs of 0.7% and an average increase in gas avoided costs of 32%. The increase in gas avoided costs are from the large increases in the carbon policy compliance values for Oregon gas utilities. On average, electric savings in Oregon will have slightly less value per kilowatt hour and gas savings will have more value per therm. The higher average savings per therm will help offset increasing savings baselines for some gas measures and will help keep these gas measures cost-effective.

For Washington, gas avoided cost values saw an average increase of 6.6% for 2023 measure and program planning.

Prescriptive Measure Baselines

The following information will be used by Energy Trust's Planning team to describe measure changes that would most impact program forecasting and performance in 2023 from a measure development standpoint (e.g., changing baselines, codes, etc.) for measures with high impacts on savings goals.

Key changes to baselines, codes and standards for measures for 2023:

- The U.S. Department of Energy will enforce the Energy and Independence Security Act (EISA) of 2007 in 2023. This makes the baseline for most screw in A-lamp style bulbs LEDs. Residential, commercial and industrial programs are all sunseting measures targeting broad audiences for all bulbs covered by EISA. Market research demonstrated that most new boilers are condensing. We increased the baseline assumptions resulting in decreased gas savings from boilers.
- Updates to our residential window baselines as well as new information regarding window savings have decreased gas and electric savings estimates for windows. Windows are now not cost-effective and are pending an OPUC exception.

Energy-Efficiency Program Savings Realization Rates

Realization rates are the percentage of savings estimated to have occurred based on post-installation evaluation review. Realization rates from prior years are used to adjust future savings forecasts. The updates below are compared to 2021 program-level results.

Electric realization rates:

- Commercial Existing Buildings:
 - Decreased for the standard, custom and SEM tracks
 - Stayed the same for the Pay for Performance track
- Commercial New Buildings:
 - Decreased for the system based and whole buildings tracks
 - Increased for the market solutions track
- Production Efficiency:
 - Decreased for the custom, streamlined and Strategic Energy Management tracks
- Vary by measure for Residential program

Gas realization rates:

- Commercial Existing Buildings:
 - Decreased for the standard, custom and SEM tracks
 - Stayed the same for the pay for performance track
- Commercial New Buildings:
 - Decreased for the system based, whole buildings and market solutions tracks
- Production Efficiency:
 - Decreased for the custom and streamlined tracks
 - Stayed the same for the SEM track
- Vary by measure for Residential program

Line Loss Assumptions

Transmission and distribution system power losses, or line losses, represent the electric energy lost or wasted as a result of transmitting and distributing energy from a generating source to the location where it is consumed. Line losses for 2023 for residential sites (including multifamily housing sites) will have assumed line losses of 7%, commercial sites will have assumed line losses of 7% and industrial sites will have assumed line losses of 5%.

Summary

The COVID-19 pandemic led to economic uncertainty in 2020 and 2021 that significantly impacted employment and production. However, macroeconomic trends in 2022 are indicating that Oregon's wages, employment and production are now stabilizing and nearing pre-pandemic levels. The greatest risk to Oregon's recovery is a possible recession where consumer spending and household budgets start to soften or decline leading to a possible erosion of some of Oregon's macroeconomic gains over the last 2.5 years.

Energy Trust programs have experienced significant market disruptions due to COVID-19 as well as record high inflation. Moreover, supply chain issues for efficient equipment, shortages of skilled labor to install this equipment, and unstable project bids and pricing are leading to significant project delays in 2022.

The impacts of these disruptions on Energy Trust programs will persist into 2023, and programs will need to carefully track program activity and forecast accordingly based on these outcomes. Energy Trust will continue to balance energy goals with dynamic budgets while continuing to address underserved markets targeted by DEI initiatives to acquire all cost-effective energy efficiency and reduce the above-market costs of renewable energy.

MEMO

Date: October 5, 2022
To: Board of Directors
From: Michael Colgrove, Executive Director
Subject: Measure Cost-Effectiveness Exceptions Status as of September 8, 2022

In response to the Oregon Public Utility Commission's request to provide the status of Energy Trust requests for cost-effectiveness exceptions, this memo summarizes energy efficiency measures that have received exception approval from the OPUC.

Background

Commission Order No. 94-590 in Docket UM 551 specifies that the Total Resource Cost (TRC) test and Utility Cost Test (UCT) must be used to determine if energy efficiency measures and programs are cost-effective. The same order allows for measures that are not cost-effective to be included in utility programs if it is demonstrated that at least one of the following conditions is met:

- A. The measure produces significant non-quantifiable, non-energy benefits. In this case, the incentive payment should be set at no greater than the cost-effective limit (defined as present value of avoided costs plus 10%) less the perceived value of bill savings, e.g., two years of bill savings.
- B. Inclusion of the measure will increase market acceptance and is expected to lead to reduced cost of the measure.
- C. The measure is included for consistency with other demand-side management programs in the region.
- D. Inclusion of the measure helps to increase participation in a cost-effective program.
- E. The package of measures cannot be changed frequently, and the measure will be cost-effective during the period the program is offered.
- F. The measure or package of measures is included in a pilot or research project intended to be offered to a limited number of customers.
- G. The measure is required by law or is consistent with commission policy and/or direction.

Summary of Measures with Exceptions That Will Be Offered in 2023

The OPUC has granted exceptions for nine measures that will be offered in 2023 in Existing Buildings (including multifamily), New Buildings and Residential programs. Twelve more exception requests are pending.

Exceptions that will be active in 2023 are summarized in Table 1.

Table 1 List of Measure Exceptions That Will Be Active in 2023

Program	Measure	Order Number	Date Granted	Expiration Date
Residential	No cost DHP pilot	22-024	1/25/2022	3/31/2025
Residential	DHP with supplement fuels	22-024	1/25/2022	3/31/2025
Existing Buildings (multifamily)	DHP zonal heat HZ1	22-024	1/25/2022	3/31/2025
Residential	DHP zonal heat HZ1	22-024	1/25/2022	3/31/2025
Residential	Manufactured home replacement	21-312	9/21/2021	3/31/2025
New Buildings	Custom and market solutions tracks excused from TRC testing	21-258	9/8/2021	3/31/2024
Residential	Gas heated new manufactured homes	NA – minor	7/16/2020	12/31/2023
Residential	Clothes washers (gas-only service area)	NA – minor	9/02/2015	N/A
Multiple	Pilots under \$500,000	15-029	1/29/2015	N/A
Residential	Extended capacity heat pump conversion from electric furnaces	pending	pending	pending
Existing Buildings (multifamily)	Windows in large multifamily buildings replacing double pane (electric and gas)	pending	pending	pending
Residential	Windows in single family homes (electric and gas)	pending	pending	pending
Existing Buildings (multifamily)	Windows in small multifamily buildings (electric and gas)	pending	pending	pending
Residential	Wall insulation (electric)	pending	pending	pending
Existing Buildings (multifamily)	Wall insulation (electric)	pending	pending	pending
Residential	Floor insulation in single family homes (electric)	pending	pending	pending
Existing Buildings (multifamily)	Floor Insulation in small multifamily buildings (electric)	pending	pending	pending
Residential	Floor insulation in manufactured homes (electric and gas)	pending	pending	pending
Residential	Attic insulation in manufactured homes where some insulation is already present (electric and gas)	pending	pending	pending
Residential	Heat pumps in manufactured homes fixed price promotion	pending	pending	pending
Multiple	Hybrid HVAC retrofit pilot	pending (not yet requested)	pending (not yet requested)	pending (not yet requested)

Portion of Energy Trust Savings From Measures With Exceptions in 2021 and 2022

The following table represents the portion of total Energy Trust savings from measures with exceptions for 2021 and 2022 (year-to-date through September 8, 2022).

Table 2 Savings and Incentives from Measures with Exceptions in 2021 and 2022 Through September 8, 2022

Program Year	Electric savings (kWh)	% of total electric savings	Gas savings (therms)	% of total gas savings	Incentives (\$)	% of total incentives
2021	4,503,457	1.15%	56,091	0.74%	\$2,587,300	3.59%
2022 year to date	2,835,716	2.52%	15,592	0.65%	\$1,043,717	4.02%

In 2020 with Order 20-018, the New Buildings program was granted an exception for custom whole building, Path to Net Zero and Market Solutions projects permitted under the 2019 and future commercial building codes to not use the TRC test. A similar exception was granted in 2021 through 2023 with Order 21-258. Due to the long lead time of New Buildings projects, only six custom whole building and 18 market solutions projects have been completed under this exception to date. Projects completed under these exceptions are expected to make up a larger portion of savings and incentives in future years.

Exception History

There are 132 measure exceptions on record granted by the OPUC since 2012 when counted per measure group and per program. Past memos reported this value differently.

Of the 132 measure exceptions, 55 are considered minor. A minor exception is one where the total dollars and savings associated with the measure are less than 5% of total annual program activity and TRC is greater than 0.8. Minor exceptions do not require commission approval and are approved by OPUC staff.

Measure exceptions were approved by the OPUC according to the criteria outlined in the Background section above. Table 3 identifies how many exceptions were granted based on each criterion. Some measures meet multiple criteria.

Table 3 Number of All-Time Exceptions Granted Based on Measure Exception Criteria

Exception Criteria	Number of Instances
A	43
B	28
C	54
D	50
E	8
F	8
G	7

MEMO

Date: October 5, 2022
To: Board of Directors
From: Michael Colgrove, Executive Director
Subject: Energy Efficiency Levelized Cost Trends and Managing Future Costs

Levelized cost is defined by Energy Trust as a measure of the average net present cost of the savings from an energy efficiency resource over the lifetime of the respective resource. Energy Trust portfolio-wide levelized costs vary over time due to changes in the mix of efficiency measures and relative expenditures and due to revisions to energy savings and measure lives.

Levelized cost is an incomplete indicator of the value of energy saved because it does not reflect the difference in value energy has during different time periods, such as a peak hour or week. It only shows the cost of savings over the lifetime of the measure. It also doesn't factor in other benefits. However, it is a useful shorthand indicator of cost trends. Levelized cost trends have typically been of interest to stakeholders as Energy Trust's savings portfolio evolves and new strategies and approaches are under development.

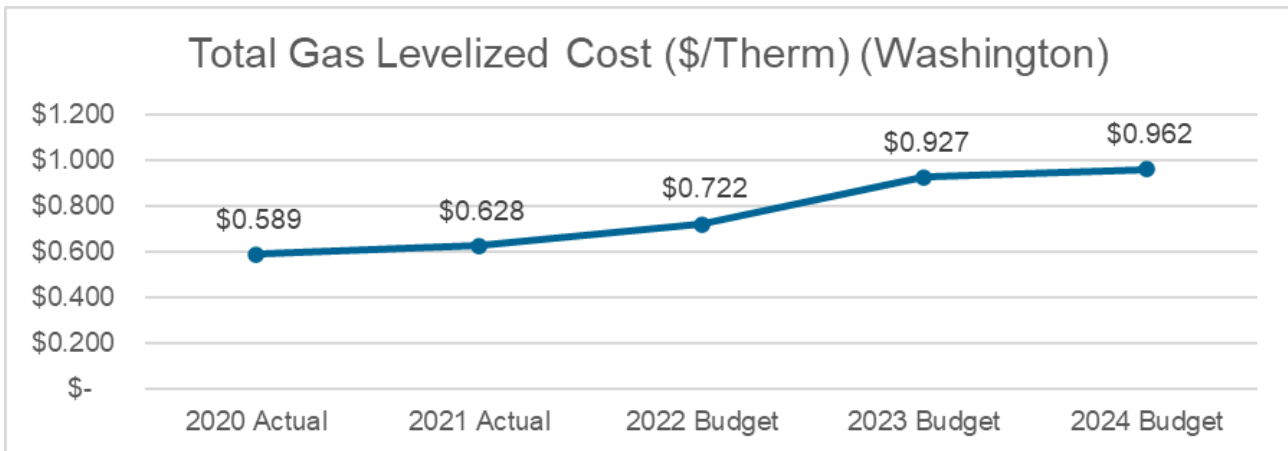
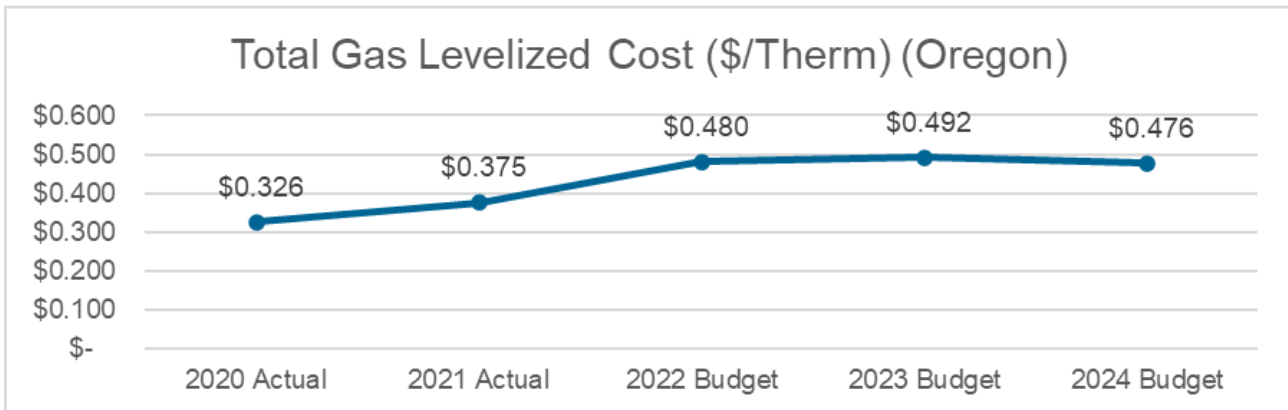
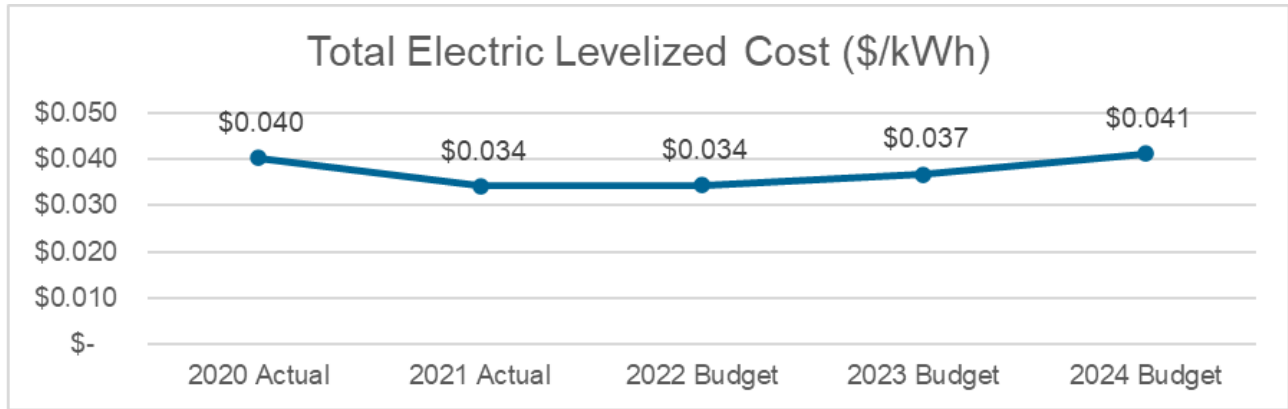
This memo provides detail on levelized costs and identifies actions to manage levelized costs over time.

Levelized Costs in 2023 Budget and 2023-2024 Action Plan

The 2023 budget delivers electric savings at a cost of 3.7 cents per kilowatt hour (kWh) and gas savings at a cost of 49.2 cents per therm (Oregon only) levelized. This is a 7% increase (0.3 cents/kWh) over 2022 budgeted electric levelized costs and a 3% increase (1.2 cents/therm) over 2022 budgeted gas levelized costs. Both electric and gas portfolios remain cost-effective.

Levelized cost for NW Natural Washington programs in 2022 is 92.7 cents per therm, a 28% increase over 2022 gas levelized costs. Nevertheless, the savings Energy Trust acquires for Southwest Washington natural gas customers remains cost-effective.

The 2024 budget projection shows Oregon electric levelized costs further increasing by 0.4 cents/kWh or 12% from 2023. Oregon gas levelized costs are projected to decrease slightly to 47.6 cents per therm in 2024, a decrease of about 3%. Projected levelized cost for NW Natural customers in Southwest Washington in 2024 is projected to increase to 96.2 cents/therm, an 4% increase from 2023.



Levelized Cost Drivers

In Oregon, the relatively small changes in budgeted levelized costs from 2022 to 2023 and 2024 are driven by many factors—there is no dominant driver for the changes. In 2023 we are investing in several enhancements to program offerings, outreach and delivery, as detailed in the action plans, so that we are prepared to achieve additional savings in 2024 and beyond as supply chain issues and labor shortages ease. This increases costs in 2023 that will result in increased savings in later years. New, more efficient equipment and building standards reduced some program savings, but a portion of those savings will be claimed as market transformation through Northwest Energy Efficiency Alliance. There

are several planned changes in the volumes of different measures across programs, and some new efficiency measures have entered the portfolio. Evaluation results used in forecasting indicate increased savings for some measures and programs in 2023, and decreased savings for others. The increase in electric levelized cost from the infrastructure investments described above and the code changes is obscured in 2023 by one very large and inexpensive New Buildings project that drives down levelized costs. That project balances the upward influence of the new investments. In 2024, without this megaproject, the cost increases would be visible in the average.

For Oregon natural gas investments, the increase is visible in 2023, but levelized costs decrease in 2024 as savings volume increases relative to fixed costs.

For programs serving NW Natural customers in Southwest Washington, 2023 levelized costs increase significantly. Energy Trust's portfolio in Washington only serves residential and commercial customers, so levelized costs are not moderated by the relatively lower-cost savings from industrial customers as they are in Oregon. In 2023, commercial savings are forecast to decrease as several-projects resulting from school bonds are completed in 2022. Commercial savings are also impacted by the loss of the measure for gas fryers (due to improved federal efficiency standards) and a decline in savings for condensing boilers (due to improved measure analyses). Residential savings have decreased because of downward adjustments in savings per installation for thermostats and windows, as well as reduced program savings due to more efficient new home and building efficiency codes.

Strategies to Manage Levelized Costs

Managing levelized costs over time requires that we continuously work to find new sources of savings, adjust program design and delivery methods, and ensure efficient and effective operations.

- 1) **Finding new sources of savings**—by conducting and evaluating pilots, participating in the Northwest Power and Conservation Council's Regional Technical Forum and investing in emerging technology through NEEA—helps us manage levelized costs in the long-term. While these investments may add cost per unit of savings in the short-term, the resulting future measures will contribute to a portfolio of reasonably priced, cost-effective savings over time.
- 2) **Adjusting program design and delivery methods** enables Energy Trust to find more efficient methods of reaching and serving customers and unlocks new pathways to acquiring savings from customers, either from customers we have not yet served or those who can invest again for the next increment of savings. Energy Trust periodically solicits proposals for major program delivery contracts to tap the market for new approaches to serve customers and ensure delivery efficiencies for ratepayers. Additionally, Energy Trust is currently exploring how partnerships with community-based organizations and other community entities, such as cities and counties, can help engage new customers we have historically underserved. While these partnerships require an investment of time and resources, we believe they will unlock savings that, over time, will contribute to a portfolio of reasonably priced, cost-effective savings.
- 3) **Ensuring efficient and effective operations** enables us to continue processing high volumes of transactions, maintain strong customer service and ensure transparency and accountability through public reporting. Every year we identify system and process enhancements that reduce manual data entry, save time for customers and staff, and streamline administrative processing.

The Information Technology and Operations Support action plans identify additional activities to improve staff productivity and systems efficiency.

We will continue to invest in ongoing improvements to organizational processes for business planning, budgeting, decision-making and innovation. These changes help us make decisions, explore new ideas and develop new program approaches more efficiently. They also ensure we apply limited staff resources to highest priority work.

- 4) **Leveraging other sources of funds.** Energy Trust is investing in relationships and partnerships that leverage complementary sources of funds, particularly to address the efficiency needs of customers with low incomes, communities of color and rural customers. Sources of funding may include state and local government programs such as the Portland Clean Energy Community Benefits Fund, state programs to increase availability of cooling, foundations, and tax credits and local initiatives funded through the federal Inflation Reduction Act and Infrastructure Investment and Jobs Act.

Energy Trust also hopes to expand co-investment with utilities in programs that both save energy and create demand response opportunities for utilities. Thus far, successes have included co-funding of low-income weatherization with one community action agency (a second has agreed to work with us), the Manufactured Home Replacement initiative, PGE receiving a significant research grant with Energy Trust as a subcontractor, and coordination with PGE on the installation of thermostats in homes. Thus far these initiatives have the potential to increase the reach of Energy Trust programs to more customers and reduce savings costs.

MEMO

Date: October 5, 2022
To: Board of Directors
From: Michael Colgrove, Executive Director
Subject: Long-Range Forecast for Other Renewables and Solar Projects

Energy Trust’s renewable energy programs provide incentives to generation projects primarily utilizing solar, hydropower and biopower technologies. Because projects take time to construct, the program has contractual incentive obligations that stretch over multiple years. This memo provides visibility into existing contractual obligations.

Other Renewables

The Other Renewables program provides incentives to projects using non-solar renewable generation technologies, primarily focusing on in-conduit hydropower and biopower. These projects often have long construction timelines, requiring Energy Trust to commit and set aside funding several years before projects are completed and begin generating electricity. Incentive payments are usually partially paid upon a project successfully reaching commercial operation, with the rest of a committed incentive paid over the first several years. This results in incentive funds being held in reserve over a period that may last five years from incentive commitment to final incentive payment.

Compared to previous years, fewer incentive funds are committed for installation payments for custom renewable energy projects. This is attributable to the completion of installation payments for two large municipal biopower projects in 2022. Also, figures in the following tables reflect forecast data through September 20, 2022.

In Portland General Electric service area, Energy Trust has a pending commitment for one generation project.

Installation Incentive Funding Commitments: Portland General Electric Service Area

Project	Generation	Expected payments	Scheduled payment dates
City of Beaverton – Sexton Mountain pressure reduction valve hydropower <i>(Funding agreement pending)</i>	0.05 aMW	\$300,000 upon commercial operation	September 2023
		\$150,000 based on reaching generation milestone	September 2024
TOTAL	0.05 aMW	\$450,000	

In Pacific Power service area, Energy Trust has an existing commitment of incentives for one generation project. This project is under construction and expected to reach commercial operation in Q4 2022.

Installation Incentive Funding Commitments: Pacific Power Service Area

Project	Generation	Expected payments	Scheduled payment dates
Three Sisters Irrigation District—McKenzie (hydropower)	0.1 aMW	\$465,000 upon completion Four payments of \$100,000 based on reaching milestones	October 2022 October 2023 October 2024 October 2025 October 2026
TOTAL	0.1 aMW	\$865,000	

In addition to contractual commitments of installation incentives, Energy Trust has existing commitments of **project development assistance incentives**. Project development assistance incentives are used for technical studies, feasibility studies and other kinds of pre-development work that helps projects mature to the point where they are ready to apply for an installation incentive.

Project Development Assistance Incentive Commitments for Hydropower and Biopower Projects in PGE and Pacific Power territories

	Q4 2022	2023	2024	2025
Portland General Electric	4 projects \$214,237	2 projects \$175,424 REC registration costs paid to PGE for 4 projects: \$3,540	REC registration costs paid to PGE for 4 projects: \$3,540	REC registration costs paid to PGE for 4 projects: \$3,540
Pacific Power	10 projects \$310,745	8 projects \$103,177	n/a	n/a
TOTAL	14 projects \$524,982	14 projects \$282,141	4 projects \$3,540	4 projects \$3,540

Solar

The Solar program has existing approved projects in various stages of design and construction. Following is a summary of these incentive obligations for both utilities including expected aggregated generation (aMW) and incentive dollars. This table shows commitments as of July 1, 2022, for projects expected to be paid after December 31, 2022. It does not include project commitments expected to be made in the second half of 2022. The generation and the incentive dollars in the table have not been reduced from the total existing applications to reflect expected project cancellations. Historically, about 10% of residential applications and about 20% of commercial applications result in canceled incentive reservations.

Aggregated Incentive Commitments for Solar Projects

	2023
Portland General Electric	\$1,037,448 0.31 aMW
Pacific Power	\$350,324 0.17 aMW
TOTAL	\$1,387,772 0.48 aMW

MEMO

Date: October 5, 2022
To: Board of Directors
From: Michael Colgrove, Executive Director
Subject: Community Solar Incentive Commitments

Energy Trust currently provides three types of support for community solar projects using public purpose charge funds: development assistance, installation incentives for community solar projects and coaching for nonprofits and governments interested in community solar.

Supporting community solar projects helps Energy Trust reach people who do not have access to rooftop solar including renters, people with low incomes or people whose homes have too much shading for a rooftop solar installation. Following is a summary of these two programs and existing commitments.

Community Solar Development Assistance

In 2019, Energy Trust began to offer community solar development assistance incentives to support public and nonprofit organizations developing community solar projects for participation in the Oregon Community Solar Program as well as private companies developing small community solar projects. The objective of community solar development assistance funds is to increase the feasibility and success of community-driven projects and provide public and nonprofit organizations with additional support so that they have an equitable opportunity to participate in the community solar market. The Renewable Energy Advisory Council advised that these are the types of projects most in need of early-stage assistance.

A project may receive up to \$20,000 for expenses and activities such as staff time needed for pre-development work, permitting, market analysis, site-leasing, grant writing, feasibility studies, pre-design and design work, and other early-stage project development activities that help projects overcome market barriers. This is a critical role that Energy Trust has played for all renewable technologies in the territories it serves.

At this time, Energy Trust has existing Solar Development Assistance incentive commitments to four projects. Following is an aggregated summary. All of these projects are expected to complete their development activities by the end of 2023.

Utility	Project Count	Current Committed Energy Trust Incentives	Capacity (AC)
Pacific Power	*4 projects	\$47,600	2,867 kW
Portland General Electric	*0 projects	\$0	0 kW

*In addition to the projects listed in the table, Energy Trust has received two applications for funding from projects that have yet to make a specific funding request. One of these projects is in PGE service area and one is in Pacific Power service area.

Installation Incentives

In 2021, Energy Trust's Solar program established a competitive solicitation for providing installation incentives for community solar projects under 360 kW in capacity that serve customers historically underrepresented in public processes and solar programs. The objective of the competitive solicitation was to fund as many qualified projects as possible from the budget available for this offering. Projects that met requirements for serving a significant number of underserved customers were ranked, with preference for the smallest incentive requests. Projects that were selected received a preliminary incentive reservation. Projects have six months to finalize their application, trade ally partnership and design in order to secure a two-year incentive reservation. Once projects complete construction and installation incentives are paid, generation from these projects will be included in Energy Trust's quarterly and annual reports.

In September of 2021, Energy Trust announced that five projects received incentive awards totaling \$533,000. As of September 2022, two of those projects have completed construction and received their incentives. The table below shows commitments to the remaining three projects yet to complete construction.

Utility	Project Count	Committed Energy Trust incentives	Capacity (AC)
Pacific Power	3 projects	\$380,000	1,013 kW
Portland General Electric	0 projects	0	0

In August of 2022, Energy Trust made \$1 million available to community solar projects that make more than the minimum required 10% of subscription capacity available to customers with low incomes. Energy Trust has committed \$399,991 to a project under this program. Contracting is underway.

Community Solar Coaching Assistance

In May of 2022, Energy Trust partnered with Bonneville Environmental Foundation to offer direct coaching and technical assistance for qualified entities that are interested in pursuing a community solar project. Areas of potential support will vary based on the needs of the project, but could include general education and planning, partnering support, site selection review, understanding project finances, development of outreach plans, or general trouble shooting and consultation.

Energy Trust has committed up to \$24,000 for coaching assistance for any nonprofits, community-based organizations, tribes, renewable energy cooperatives and public agencies that are interested. As of September 2022, Energy Trust has paid Bonneville Environmental Foundation \$2,025 for time spent speaking to various entities. At this time, no projects have been allocated project hours for technical assistance.

MEMO

Date: October 5, 2022
To: Board of Directors
From: Michael Colgrove, Executive Director
Subject: Staffing for 2023 Budget and 2023-2024 Action Plan

Energy Trust's staffing budget balances the cost of the staffing resources needed to accomplish 2023 goals. This memo provides background and information about staffing planning and considerations in 2023.

1. Background

Energy Trust employees are the basis of the organization's strategic and operations management and accountability. Energy Trust's staffing planning is guided by its 2020-2024 Strategic Plan and annual organizational goals. The plan envisions a future for Energy Trust that furthers its core mission of energy efficiency and renewable energy resource acquisition through continued innovation and expanded program participation to reach all eligible customers, particularly those that Energy Trust has historically underserved. The plan also envisions deeper relationships with customers, communities, utilities, OPUC and policymakers to strengthen Energy Trust's capacity to quickly and effectively provide solutions and respond to opportunities in the evolving clean energy future.

In planning for the 2023 budget, Energy Trust management undertook an extensive business and staffing planning exercise that supports the following 2023 organizational goals:

- Customers will save and generate energy and reduce costs in 2023 and beyond as a result of Energy Trust's investments in their clean energy projects and upgrades.
- Utility partners, communities and policy implementers will achieve their objectives by leveraging Energy Trust's clean energy solutions that reduce greenhouse gas emissions, support grid management and deliver additional societal benefits.
- Customers and stakeholders will gain future benefits from Energy Trust's investments in preparing for a more dynamic and complex energy industry.

To minimize staffing cost growth, Energy Trust has taken every opportunity to examine needs across the organization using the annual business plan as the primary reference. Through this process, lower priority work is eliminated each year to make room for work that is tied to annual and strategic plan goals. We identify staffing gaps, and managers plan for re-alignment of staff resources as needed. Energy Trust has and will continue to change staffing positions and shift roles and responsibilities consistent with emerging organizational needs and new priorities. This process occurs during staffing planning and when any vacant position arises during the year.

Energy Trust's proposed 2023 staffing budget is based on identifying priority work to accomplish 2023 goals and make progress toward strategic plan focus areas by matching staffing capacity to that prioritized work. This plan provides program, support and administrative functions for all programs and services Energy Trust delivers in Oregon and Southwest Washington. It also includes multiple contracted and grant-funded initiatives outside core OPUC grant-funded work such as the Oregon Community Solar Program subcontract, PGE Smart Battery Pilot, Oregon

Landlord-provided Cooling Spaces contract, the Federal Emergency Management Agency Solar Energy Resilience for Vulnerable Communities grant and others.

2. 2023 Staffing Planning

Planning for staffing needs in 2023 required Energy Trust leadership to address significant new staff turnover and workload challenges. It also required planning to support new priorities emerging from policy implementation by the Oregon Public Utility Commission and new objectives of utilities, communities and customers related to energy efficiency and renewable energy.

Energy Trust and, by extension, the utility ratepayers, have historically benefitted from the organization's highly engaged staff and low staff turnover. However, Energy Trust has not been immune to the effects of the current competitive and tight labor market and has experienced an annualized turnover rate, excluding interns, of 15% compared to our five-year historical average rate of 9%. Given that Energy Trust accomplishes its mission through human rather than physical capital, the increased rate of turnover represents a significant risk to Energy Trust. This risk manifests itself in several ways:

- Potential to disrupt core business activities, which have expanded in recent years.
- Diminished capacity to evolve planning and program approaches, accelerate acquisition, successfully reach underserved customers, and leverage data analysis in new and innovative ways.
- Reduced bandwidth to lead and position energy efficiency as the resource of choice in the new energy future.

Through departing staff exit interviews and regular staff engagement surveys, Energy Trust has developed an understanding of attrition root causes. The reasons for leaving Energy Trust most often cited in these exit interviews are dissatisfaction with workload and salary. This information aligns with staff engagement surveys that highlight high workload and a market compensation study completed in 2021 that revealed Energy Trust compensation is not competitive with comparable organizations. Based on this staff feedback and the 2021 market study, Energy Trust took steps in 2021 and 2022 to address compensation concerns and took initial steps to address workload. The 2023 draft staffing budget and projected 2024 staffing budget reflect additional positions needed to further address ongoing workload imbalances across the organization and to provide adequate and stable staffing resources to support Energy Trust's work.

3. Total Staffing Costs and Cost Drivers for the 2023 Budget

In the proposed 2023 budget, total staffing costs across all major funding sources represent 9.7% of total costs. The increase in staffing costs across all major funding sources from 2022 to 2023 is 22.1%. We note these figures in the draft budget represent an initial staffing plan with ideal onboarding dates. However, through discussions with the OPUC and utilities *after* the draft budget was submitted, we have since revised our staffing plan to mitigate cost and rate impact and phase those impacts in over time. The revised plan described below in the New Staff section responds to that input from the OPUC and utilities. We expect that Energy Trust's final proposed budget in December will therefore reflect a lower total cost and a lower cost increase from 2022 to 2023.

Energy Trust's two largest funding sources are: Oregon ratepayers under the OPUC grant agreement and Washington programs funded by NW Natural under oversight by the Washington Utilities and Transportation Commission. Additional funding comes from smaller contracts and grants for design and implementation services and other activities related to our

core focus, all of which support clean energy solutions for the benefit of customers. The following table provides a breakout of staffing costs by major funding source. Staff costs in administrative and other shared services have been allocated across funding sources.

Staffing Costs by Major Funding Sources

Program	2020 Actual	2021 Actual	2022 Budget	2023 Budget	2024 Budget
OPUC Programs	\$ 14,788,938	\$ 15,265,717	\$ 17,456,639	\$ 20,644,598	\$ 22,271,461
NWN Washington	\$ 342,134	\$ 392,518	\$ 386,615	\$ 481,608	\$ 545,787
Contracts/Grants	\$ 239,380	\$ 280,276	\$ 464,645	\$ 922,177	\$ 891,582
Development	\$ 7,722	\$ 13,577	\$ -	\$ 286,300	\$ 304,211
Gas Transport	\$ -	\$ -	\$ -	\$ 26,200	\$ 274,278
Total	\$ 15,378,174	\$ 15,952,088	\$ 18,307,899	\$ 22,360,884	\$ 24,287,319

Healthcare Costs

Healthcare benefits continue to be the largest cost driver in Energy Trust's benefit package. Energy Trust has agreed to a rate hold, or zero percent increase, in medical premiums for 2023. Considering the renewal rates across all employee benefits for 2023, the cost of providing benefits to employees will increase by 4% in 2023. Subsequent to the development of this draft budget, Energy Trust learned additional information through the annual benefit renewal process and now projects a conservative 10% increase in healthcare premiums for 2024 based on industry trends and discussions with our insurer.

Staff Compensation

Energy Trust reserves a pool of funds in our annual budget to make compensation adjustments for performance, promotions, range placement, equity and to align with the market as needed. The 2023 staffing budget includes a 5% pool for these types of adjustments. This will allow for possible promotions, merit and modest compensation increases needed to compete with a competitive labor market and to accommodate other pay adjustments, if needed, to ensure pay equity compliance.

Based on a market study completed in late 2021, Energy Trust has repeatedly reviewed staff compensation levels and deployed available staffing budget to support competitiveness in compensation consistent with Energy Trust's compensation philosophy. The market compensation study provides market data for Energy Trust's existing positions against current pay practices and levels within comparable organizations. It helps Energy Trust understand whether salaries are competitive within the industry and for the organization's geographical location. Energy Trust learned that, on average, the market value of some of our positions has increased faster than salary ranges have increased at Energy Trust, validating staff concerns expressed through surveys and exit interviews and impacting the organization's ability to attract and retain talent. In Q4 2022, Energy Trust will continue to target some compensation increases where they are most needed as part of our multi-year effort to better align with the market.

New Staff

Energy Trust is proposing seven new staff positions in 2023 and currently projects 8.5 additional positions will be proposed in 2024. The 2024 projection may be adjusted through 2024 business planning and re-prioritization. All proposed positions will help balance workload within the

organization, especially in areas where new work has emerged. In the table below, the positions are grouped and described according to how they will support the organization’s ability to absorb new priorities of interest to the Oregon Public Utility Commission, utilities and the communities and customers we serve.

Proposed New FTE by Focus Area

Focus Area	FTE		Description
	2023 Proposed	2024 Projection	
Gas savings and decarbonization	2	3	These positions are essential for Energy Trust to support the utilities in maximizing their greenhouse gas reduction impacts and achieving their decarbonization goals. They are focused on the work related to valuing and targeting carbon from our Planning group, support the Operationalization of Peak and Carbon Tracking and Reporting project in our Programs and Project Management teams, and support programs in building on existing infrastructure to increase savings.
Support for program outreach to historically underserved customers and customers with energy burden	2	2.5	These positions will enable Energy Trust to achieve savings by supporting and advancing our program outreach to historically underserved customers and those with energy burden. They focus on supporting engagement and project development with Oregon’s federally recognized tribes; support community engagement in program and planning processes; and provide internal tools, tracking and reporting for diverse contracting under our supplier diversity program.
Net peak and distribution systems planning	2	1	These positions enable Energy Trust to engage in innovative program design targeting increased efficiencies in utility distribution systems as well as peak load reduction, and in particular net peak. The positions are focused around adding usage and emission data analysis and engineering capacity, as well as program design and management to our Planning and Evaluation and Programs teams.
Systems enhancement and improvement	1	2	These positions build the human, systems and process infrastructure required to deliver on key priorities. Key investments are required in data and systems to sustain our current operations and position ourselves for acceleration. Project and change management expertise is required to execute these projects efficiently and to a high standard. Additional project management support is needed to deliver an expanded budget process (HB 3141) with additional engagements and deliverables.
TOTAL	7	8.5	

Staffing Costs Detail by Year

The following table provides employee cost drivers in the preceding three years, and our proposed budget levels for 2023 and 2024, for the total company. It also details costs specific to the OPUC grant and the OPUC staffing cost performance measure. As noted previously, the

amounts shown in the tables below are reflective of our initial staffing plan which was revised since the draft budget was developed. We expect that Energy Trust's final proposed budget will reflect both lower total costs and a lower cost increase from 2022 to 2023 associated with the revised staffing plan described above.

Employee Cost Drivers by Year

	2020	2021	2022	2023	2024
	Actual	Actual	Approved Budget	2023-24 R1 Draft	2023-24 R1 Draft
Total Company Employee Cost	\$ 15,378,174	\$ 15,952,088	\$ 18,307,899	\$ 22,360,884	\$ 24,287,319
Drivers:					
Employee count (FTE)	112	115.5	118.25	146.55	147.55
Interns (FTE)	4	3	4	2	2
RAY fellows (FTE)	0	2	2	2	2
Compensation adjustment pool	5.00%	3.00%	5.20%	5.00%	5.00%
Benefits rate increase	5.00%	20.00%	8.00%	4.00%	4.00%
Oregon PUC Grant Funded Employee cost and Performance Measure					
Employee Cost	\$ 14,788,938	\$ 15,265,717	\$ 17,456,639	\$ 20,644,598	\$ 22,271,461
Year over Year \$ Change	\$ 1,323,249	\$ 476,779	\$ 2,190,923	\$ 3,187,959	\$ 1,626,863
Year over Year % change	9.83%	3.22%	14.35%	18.26%	7.88%
Maximum % increase allowed by Performance Measure	9.00%	9.00%	9.00%	9.00%	9.00%
Maximum increase allowed by Performance Measure	\$ 1,211,912	\$ 1,331,004	\$ 1,373,915	\$ 1,571,098	\$ 1,858,014

*The 2021 budget versus 2020 actual increase in Oregon PUC staff cost of 9.1% was due to 2020 actuals spending below plan, with certain positions vacant for part of the year.

4. Compliance with OPUC Staffing Cost Performance Measure

The current OPUC performance measure caps Energy Trust's year-over-year staffing cost increase at 9%. The staffing costs proposed in the draft 2023 budget that pertain to OPUC grant-funded work increased 18.41% over budgeted staffing costs for 2022. For the reasons noted above, we expect that this year-over-year rate of growth will decrease in our final budget but that it will remain above the performance measure cap of 9%. Energy Trust plans to work with OPUC staff in 2023 to reform this performance measure given the business imperatives of stabilizing staffing and meeting expanding expectations of OPUC, utilities and the communities we serve.

MEMO

Date: October 5, 2022
To: Board of Directors
From: Michael Colgrove, Executive Director
Subject: Administrative and Program Support Costs for Draft 2023 Budget and 2023-2024 Action Plan

Background

This memo provides information about the nature and purpose of administrative and program support costs to support stakeholder review of the budget. All organizations, no matter the size or purpose, have administrative costs. Administrative costs are necessary to lead the organization, support the board of directors, execute strategic direction, engage with stakeholders, manage risk, comply with laws and regulations, manage funds responsibly and manage employees, among other things.

Nonprofit entities are required to categorize costs by function as program, management and general or fundraising. These functional costs are reported in a nonprofit's financial statements and Form 990 tax return. According to generally accepted accounting principles, shared costs such as building rent and technology should be allocated among programs and administration.

Energy Trust's reporting of administrative costs is informed by the oversight of, and grant agreement with, the Oregon Public Utility Commission. The OPUC oversees Energy Trust expenditures for serving Oregon customers of PGE, Pacific Power, NW Natural, Cascade Natural Gas and Avista with energy-efficiency and renewable energy programs.

The OPUC performance measure includes both administrative costs and program support costs, which is a more expansive definition than typical for other nonprofits. The performance measure limits this total to less than 8% of utility revenue. The performance measure also caps administrative and program support cost increases to no more than 10% from year to year. Energy Trust activities outside the scope of the OPUC grant agreement are not included in the calculation under the OPUC performance measure.

Under this definition, administrative costs include management and general costs and general marketing, communications, outreach and policy services costs. Program support costs include the program share of office space and equipment, IT services and general expenditures by programs such as travel, conferences and materials.

What is considered to be a reasonable level of administrative costs varies by industry, organization size, complexity and development stage. While there is no one right answer, there are benchmarks published by nonprofit watchdog organizations. An example is Charity Navigator's 15% threshold for nonprofits categorized as "general." One component of Charity Navigator's financial health rating methodology is administrative expense as a percent of total expenses, and "general" nonprofits are awarded a 10/10 "score" for this component if the ratio is below 15%.

Energy Trust's Draft 2023 Budget and 2023-2024 Action Plan includes administrative and program support costs of \$19.2 million, or 8.4% of total expenditure, which compares favorably to the 15% benchmark established by Charity Navigator for "general" organizations even while using a broader measure of administrative cost.

Detail of Administrative and Program Support Costs Subject to the OPUC performance Measure in Draft Proposed 2023 Budget

	OPUC Grant Funded Expenditure		
	Total	Program	Administrative and Program Support
Incentives	111,325,839	111,325,839	-
Program Delivery Contractors	68,319,012	68,319,012	-
Employee Salaries & Fringe Benefits	20,644,598	9,936,221	10,708,377
Agency Contractor Services	2,636,942	1,204,484	1,432,458
Planning and Evaluation Services	3,917,643	3,890,262	27,380
Advertising and Marketing Services	3,958,040	2,694,826	1,263,214
Other Professional Services	6,907,583	5,690,277	1,217,305
Travel, Meetings, Trainings & Conferences	678,101		678,101
Dues, Licenses and Fees	276,333		276,333
Software and Hardware	865,748		865,748
Depreciation & Amortization	234,424		234,424
Office Rent and Equipment	1,214,875		1,214,875
Materials Postage and Telephone	116,468		116,468
Miscellaneous Expenses	10,978		10,978
Expenditures	221,106,583	203,060,921	18,045,662

Historical View of Administrative and Program Support Costs Subject to the OPUC Performance Measure

	2020 Actual	2021 Actual	2022 Budget	2023 Budget	2024 Projection
Annual Revenue	175,576,793	190,375,240	199,755,933	214,566,332	214,662,978
Administrative and program support costs	12,166,182	12,448,812	15,297,123	18,045,662	18,917,408
As a percent of revenue	6.9%	6.5%	7.7%	8.4%	8.8%
Increase from prior year	743,894	282,630	2,848,311	2,748,539	871,746
Increase percentage	6.5%	2.3%	22.9%	18.0%	4.8%

Year-over-Year Trends in Administrative and Program Support Costs

The growth rate for planned Administrative and Program Support costs exceeds the OPUC performance measure, currently capped at 10%, for both 2022 (22.9%) and 2023 (18.0%). The growth rate from 2023 to 2024 is projected to fall under the performance measure cap.

For 2022, this is driven by significant reductions in certain cost categories in 2021 below what had been budgeted. These reductions had the effect of reducing the baseline against which 2022 performance will be compared. The decreases were related to factors described in the 2021 Amended Budget Briefing Paper; namely, bonus incentives offered in 2020 in response to unprecedented pandemic conditions drove unexpectedly high levels of participation in early 2021, which required mid-year corrective actions. These actions included reductions in program support cost to cool market demand and minimize planned spend. Those actions were not repeated in 2022, which had the effect of increasing the year-over-year percentage change.

The planned 18% increase in Administrative and Program Support Costs from 2022 budget to 2023 budget is primarily driven by the planned increase in Energy Trust's staffing costs, which in turn are driven by the factors described in the staffing memo included in this budget package. Other non-

staffing initiatives and activities that are increasing Administrative and Program Support Costs in 2023 include:

- Fully integrating the new organizational Supplier Diversity Program in our procurement processes to encourage greater contracting with firms certified by the Oregon Certification Office for Business Inclusion and Diversity and use the new Supplier Diversity Tracking Tool to establish a contracting baseline and goals.
- Launching requirements gathering, a request for proposals, vendor selection and contracting for a new Enterprise Financial System to be implemented in 2024, which will modernize our financial information system architecture, increase financial process efficiencies and improve planning and forecasting capabilities.
- Implementing the career development framework and program developed in 2022 to improve recruitment and retention by providing staff greater clarity on advancement and development opportunities based on skills, behaviors and competences.
- Increasing costs in Other Professional Services, primarily relating to commercial and industrial sectors for community partner funding, workforce development, market and DEI research, and contract transition.
- Reverting to more typical levels of travel, both within our region and to industry events and conferences. Travel spending had been reduced for the prior two years due to the impacts of the COVID-19 pandemic.
- Increasing office rental costs as scheduled according to our lease agreement, which extends through 2025. In 2023, the Energy Trust executive team will begin assessing long-term space needs and developing a strategy to meet those needs in a cost-efficient manner.

Administrative and Program Support Cost as a Percent of Revenue

At 8.4% and 8.8% respectively, both the Draft 2023 Budget and 2024 Projection are showing Administrative and Program Support costs as a percent of revenue in excess of the 8% cap set forth by the OPUC. This is driven by a combination of the year-over-year increases in Administrative and Program Support costs described above and expected negative revenue adjustments driven by significant carryover of net assets from 2022. As noted in the background section, Energy Trust remains very efficient in terms of administrative costs compared to total costs when compared with peer nonprofits.

MEMO

Date: October 5, 2022
To: Board of Directors
From: Michael Colgrove, Executive Director
Subject: Net Assets for the 2023 Budget and 2023-2024 Action Plan

This memo provides information about the net assets of the organization to provide context and rationale on the 2023 net asset levels. Net assets are the amount by which Energy Trust's assets exceed its liabilities, and they are tracked by discrete funding source. Budgeted revenues, which are a key input in determining budgeted net assets, are still being determined via ongoing funding negotiations with Energy Trust's funding utilities. As such we expect the budgeted net assets levels shown below will change for the final budget.

Background

Energy Trust maintains four categories of net assets for specific purposes:

- Efficiency program reserves by utility are held to offset additional spending or year-to-year rate fluctuations
- Renewable program reserves by utility are held to ensure funds are available to meet outstanding commitments that will be paid in the future
- Other reserves related to non-OPUC grant agreement funding sources
- Contingency reserves
 - Operational contingency reserves are available to further mitigate fluctuations
 - Emergency contingency reserves are available for emergency use

Table 1: Multi-year View of End-of-year Net Asset Balances, Expenditure Coverage Ratio

	2020 Actual	2021 Actual	2022 Budget	2023 Budget	2024 Projection
OPUC Efficiency	20,579,271	33,419,693	13,832,352	46,238,438	31,509,129
OPUC Renewables	21,980,488	19,507,415	10,793,126	9,615,899	4,207,804
Other Net Assets	952,759	1,173,907	1,098,806	2,166,401	1,427,258
Craft3 Loans	2,300,000	2,300,000	2,300,000	2,300,000	2,300,000
Operational Contingency	2,946,818	4,982,803	4,028,579	5,321,521	5,529,521
Emergency Contingency	5,000,000	3,000,000	3,000,000	3,000,000	3,000,000
Total Company Net Assets	53,759,336	64,383,818	35,052,863	68,642,260	47,973,712
Annual Expenditures	189,509,225	183,711,515	219,537,575	228,648,041	244,402,818
Average Monthly Expenditures	15,792,435	15,309,293	18,294,798	19,054,003	20,366,901
Months Expenditure Coverage Ratio	3.4	4.2	1.9	3.6	2.4
Net Assets as a Percent of Expenditures	28%	35%	16%	30%	20%

Events Impacting Net Assets in 2023 and 2024

- In 2021, a loss analysis consultant examined the emergency reserves, revenue flows and insurance provisions, ultimately recommending \$3 million as an appropriate level for emergency reserves.
- In 2021, Energy Trust entered into a \$7 million line of credit agreement with its bank, as a last resort for funding a potential unexpected increase in demand without immediately impacting customer rates. The line of credit was renewed in 2022 and will be evaluated in 2023.

- In 2022, significant macroeconomic headwinds relating to supply chain disruption, high levels of inflation and a very competitive labor market have reduced Energy Trust's energy savings forecasted results. This reduced energy savings has led to reduced expenditures, which has had the effect of increasing net assets above planned levels.
- Budget cycle funding negotiations for 2023 and 2024 between Energy Trust and our partner utilities have considered the 2022 net assets carryover into 2023 as a significant input. Revenue adjustments will be included in 2023 and 2024, where appropriate and agreed to, and reflected in final budget.

MEMO

Date: October 5, 2022
To: Board of Directors
From: Michael Colgrove, Executive Director
Subject: Summary of Stakeholder Input from Budget Outreach

Throughout 2022, Energy Trust staff asked stakeholders for information and input to inform our annual business planning, budgeting and action planning process. This memo summarizes at a high level the input we received from multiple stakeholder groups, including our three advisory councils and five utility partners.

Stakeholder engagements were open-ended conversations with various stakeholders and guided “deep dives” into strategic priorities at advisory council meetings. Summaries of individual stakeholder engagements are available upon request and include:

- Summarized customer information gathered over the past 12 months through engagements, feedback surveys and evaluations
- Market intelligence gathered from utilities and advisory councils in April and May
- Advisory council “deep dive” discussions in June and July
 - Conservation Advisory Council topics: 1) serving rural customers, 2) balancing standardized offers and targeted enhanced offers and 3) serving small business customers.
 - Diversity Advisory Council topics: 1) community engagement and 2) rural customers.
 - Renewable Energy Advisory Council topics: 1) how to achieve equity goals in HB 3141 and 2) how to help customers access resources and funding opportunities.
- Joint budget planning sessions with utilities in July
- Quarter two forecast meetings with utilities in August

Below is a table that provides a list of the trends, opportunities, challenges and priorities identified according to the stakeholder forums where each was raised (Table 1). It is not meant to indicate all issues that stakeholders view as important, just the ones that were highlighted at the specific budget outreach engagements.

Following is a second table that indicates where the trend, opportunity, challenge or priority was incorporated into Energy Trust action plans (Table 2). While the table shows most are incorporated across one or more action plans, some topics, such as inflation, labor shortages and minimizing rate impact to customers, are not directly addressed through planned activities. Instead, they are factors that shaped Energy Trust’s forecasts of 2023 and 2024 activity across the portfolio. A small number of topics, such as whole home retrofits and reparations, are not reflected in planned activities for 2023 and 2024.

	CAC	DAC	RAC	PGE	Pacific Power	NW Natural	Cascade Natural Gas	Avista	Customers
Table 1: Trends, opportunities, challenges and priorities from stakeholders									
Access to contractors	x			x					
Access to information	x	x		x				x	x
Challenges navigating Energy Trust offers		x	x						x
Climate change and extreme weather				x	x	x	x	x	x
Codes and standards	x			x			x		
Collaboration with community-based organizations, agencies	x	x	x			x	x	x	x
Collaboration with utilities				x	x	x	x	x	
Community energy planning				x					
Community engagement	x	x	x		x	x			x
Convening and coordinating role for Energy Trust			x						
Cooling solutions			x		x				
Culturally relevant marketing and outreach	x	x	x			x			x
Customer costs	x	x		x					x
Data sharing				x	x				
Decarbonization	x		x	x	x	x	x	x	
Decreasing energy burdens		x		x			x	x	x
Demand response, peak demand and flexible load			x	x	x	x			
Disaster recovery							x		
Distributed generation			x						
Distribution system planning					x				
Education and awareness		x	x			x			x
Equity	x	x	x	x	x	x			
Evolving customer needs		x						x	
Expand low income offers	x	x	x		x		x	x	
Federal funding			x	x	x				
Green tariffs	x		x						
Housing affordability		x		x				x	x
Increasing customer interest in clean energy			x			x			x
Inflation	x		x	x	x				x
Input from more diverse voices						x			x
Labor shortages	x			x		x	x	x	x
Language barriers	x		x					x	x
Leveraged funding, co-funding	x		x	x	x	x	x	x	
Microgrids			x						
Midstream	x								
Minimize rate impacts to customers				x	x			x	
New grants and contracts			x		x				
New technology and program designs			x			x		x	
Non-energy benefits	x								
On-bill financing	x		x		x				
Outreach to tribes	x								
Policy changes			x	x	x				
Rapidly evolving customer needs					x				
Renters	x	x	x	x	x				x
Reparations		x							
Resilience	x	x	x			x			x
Rural customers	x	x				x	x		x
Small businesses	x								
Supply chain issues	x		x	x		x	x	x	x
Targeted program offers	x								
Trade ally engagement and diversification	x		x	x	x	x	x	x	
Transport gas customers						x			
Whole home retrofits								x	
Workforce development	x	x	x						x

Table 2: Stakeholder input reflected in Energy Trust action plans

	Contracted, grant funded activities	Cross sector	Existing Buildings and Multifamily	NEEA	New Buildings	Other Renewables	Production Efficiency	Residential	Solar	Washington commercial	Washington residential	DEI	General management	General marketing communications	IT	Operations support	Outreach, policy services	Planning and evaluation	Program marketing
A convening, coordinating role for Energy Trust	x																		
Access to contractors													x						
Access to information													x			x			x
Challenges navigating Energy Trust offers	x	x											x						x
Climate change and extreme weather	x																		
Codes and standards					x			x											
Collaboration with community-based organizations, agencies	x	x				x	x					x	x				x		
Collaboration with utilities	x												x				x	x	x
Community energy planning						x											x		
Community engagement		x										x					x		
Cooling solutions	x							x											
Culturally relevant marketing and outreach	x							x				x	x				x		x
Customer costs																			
Customers with low incomes			x					x											
Data sharing															x	x			x
Decarbonization	x	x	x	x	x		x	x		x	x								
Decreasing energy burdens			x					x											
Demand response, peak demand and flexible load	x						x		x										x
Disaster recovery								x	x									x	
Distributed generation	x																		
Distribution system planning		x																	x
Education and awareness	x				x	x		x	x					x			x		x
Equity	x		x			x	x	x	x			x	x	x			x		x
Expand low income offers		x						x	x										
Federal funding						x			x									x	
Green tariffs						x			x										
Housing affordability																			
Increasing customer interest in clean energy														x					x
Inflation																			
Input from more diverse voices												x						x	
Labor shortages																			
Language barriers			x											x					x
Leveraged funding, co-funding	x													x					
Microgrids						x													
Midstream		x																	
Minimize rate impacts to customers																			
New grants and contracts	x													x					
New technology and program designs	x		x					x	x										x
Non-energy benefits	x																		
On-bill financing								x											
Outreach to tribes																		x	
Policy changes														x					x
Rapidly evolving customer needs	x					x													x
Renters	x		x																
Reparations																			
Resilience	x					x			x										
Rural																			x
Small businesses			x				x												
Supply chain issues																			
Targeted program offers																			x
Trade ally engagement and diversification								x	x	x				x					x
Transport gas customers								x											
Whole home retrofits																			
Workforce development			x		x			x	x					x					