



PUGET SOUND ENERGY

The Energy To Do Great Things

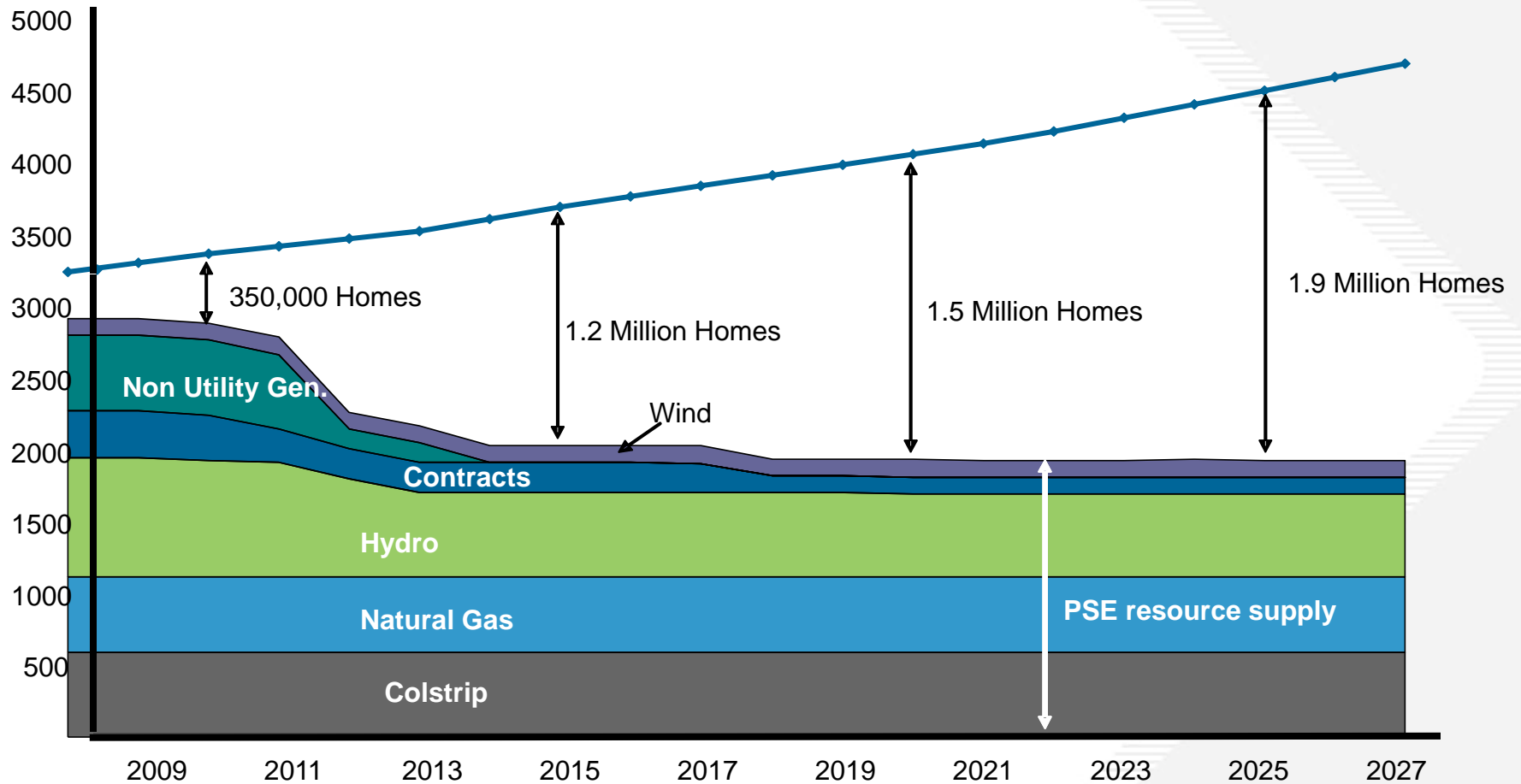
Does Gas Make Sense?

Puget Sound Energy (NYSE:PSD)

- Pacific Northwest Investor Owned Utility
- Gas & Electric utility
- Headquartered in Bellevue, Washington
- 1.7 Million Electric Customers
 - ◆ 2300 megawatt average load
 - ◆ 4900 megawatt winter peak
- 600,000 Gas Customers

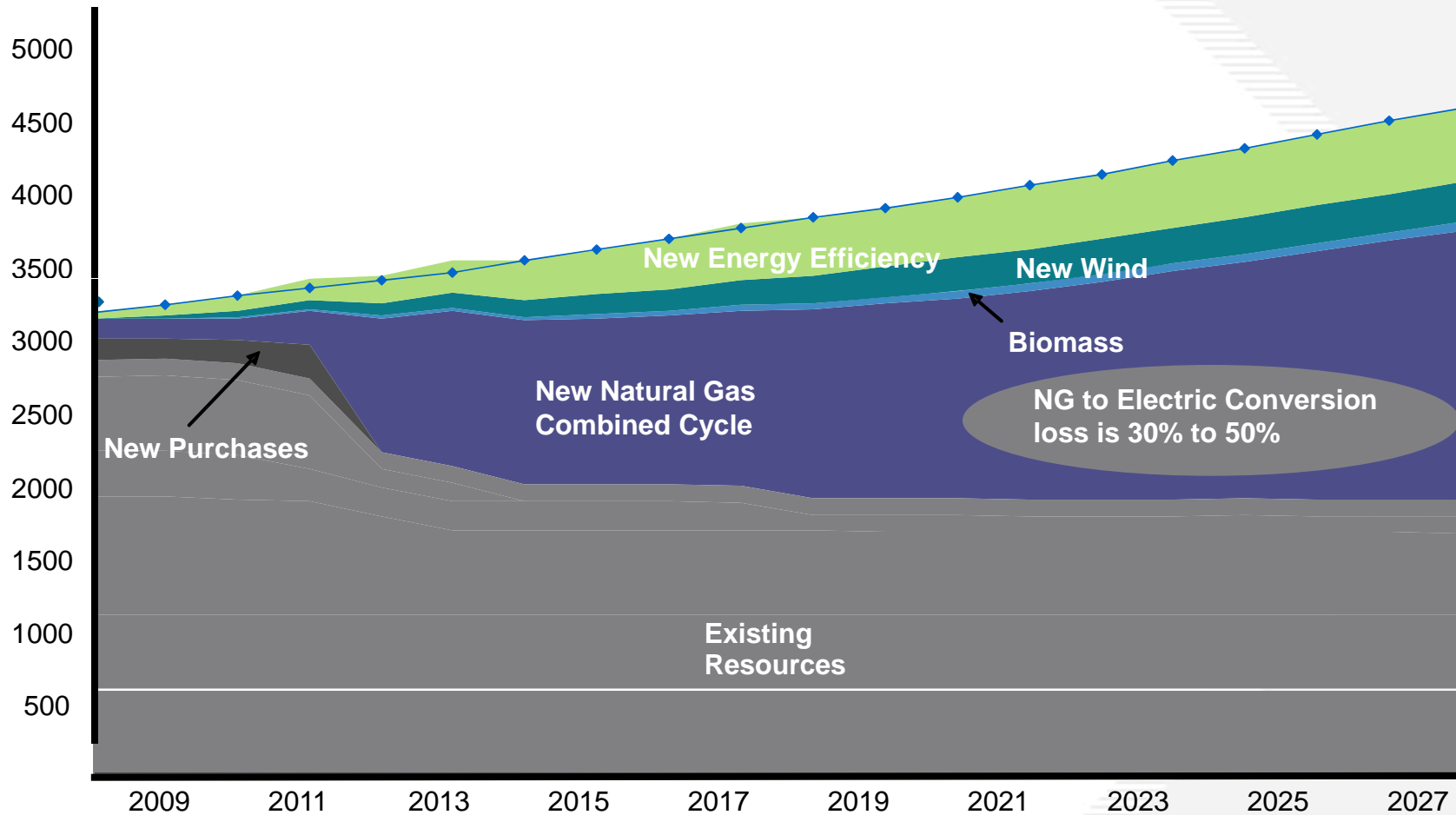
A vibrant and growing economy....

Supply and Demand



A Gassy and Windy Future.....

Supply and Demand



Yet many unanswered questions....

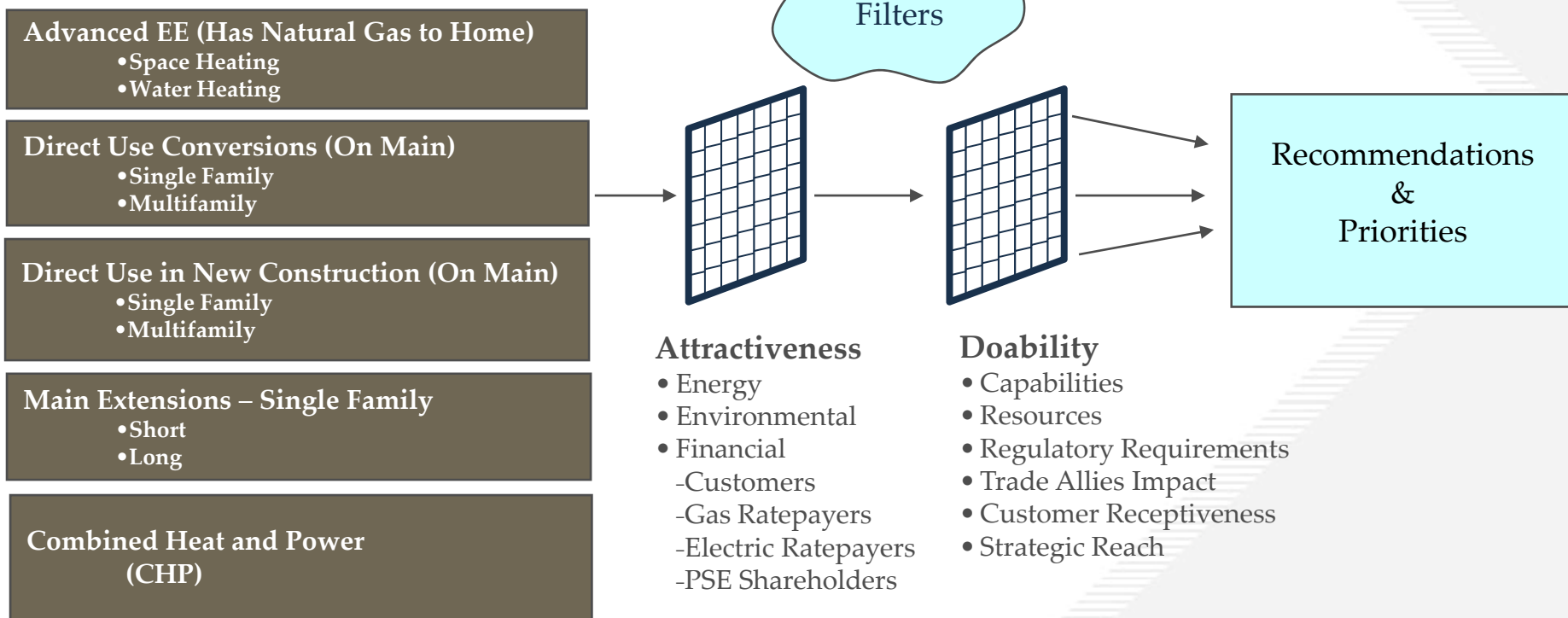
- Is direct use of natural gas the right choice for PSE's bottom line?
- Is direct use of natural gas the right choice for our Customers bottom line?
- Is direct use of natural gas the right choice for Energy Efficiency?
- Is direct use of natural gas the right choice for Carbon reduction?
- Are customer service & corporate policy aligned?

Objective

Optimize customers' end-use energy consumption while furthering corporate and customer, financial, environmental, and social responsibilities.

The approach analyzed the “*Total Resource Efficiency* **” (gas and electric) and the viability of direct use of natural gas across strategic options.

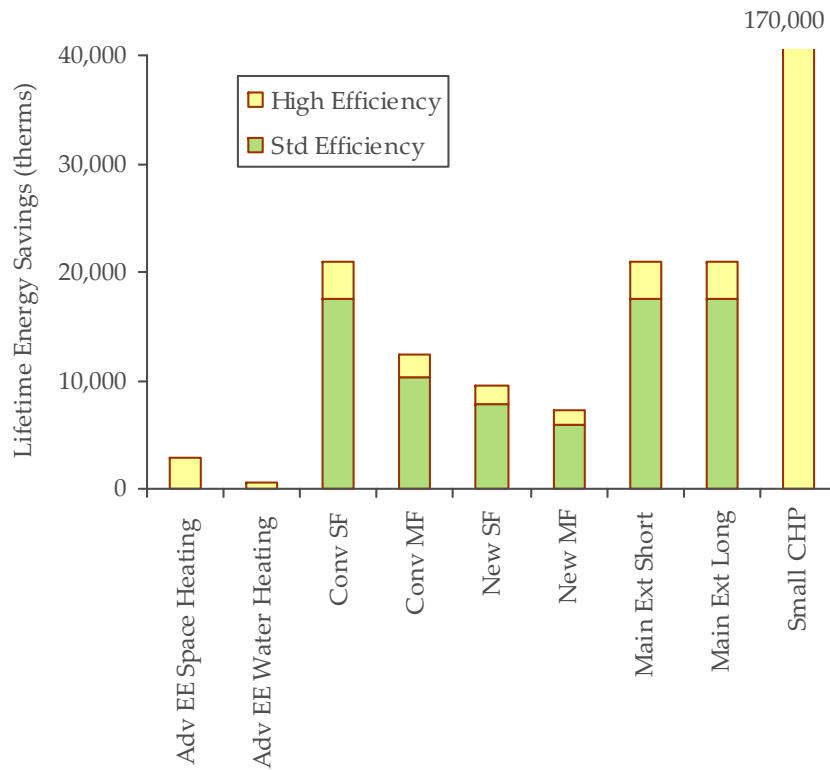
Top 5 Options



* Total resource efficiency defined as meeting customer energy needs with the optimal energy resource (electricity or gas) from a total energy perspective (BTUs).

In all cases, advancing direct use of gas has overall energy benefits, as compared to central gas fired generation.

Energy - Therm Savings per Unit

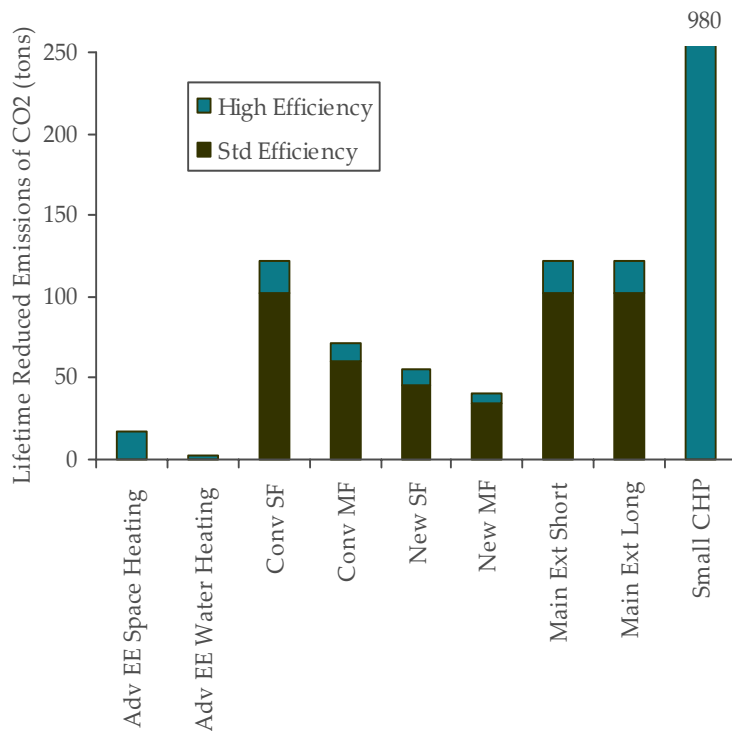


- Uses less energy than central gas fired generation
- Optimizes the use of our resources

Note: Lifetime considers benefits over 30 year period.

In all cases, advancing direct use of gas has overall environmental benefits, as compared to central gas fired generation.

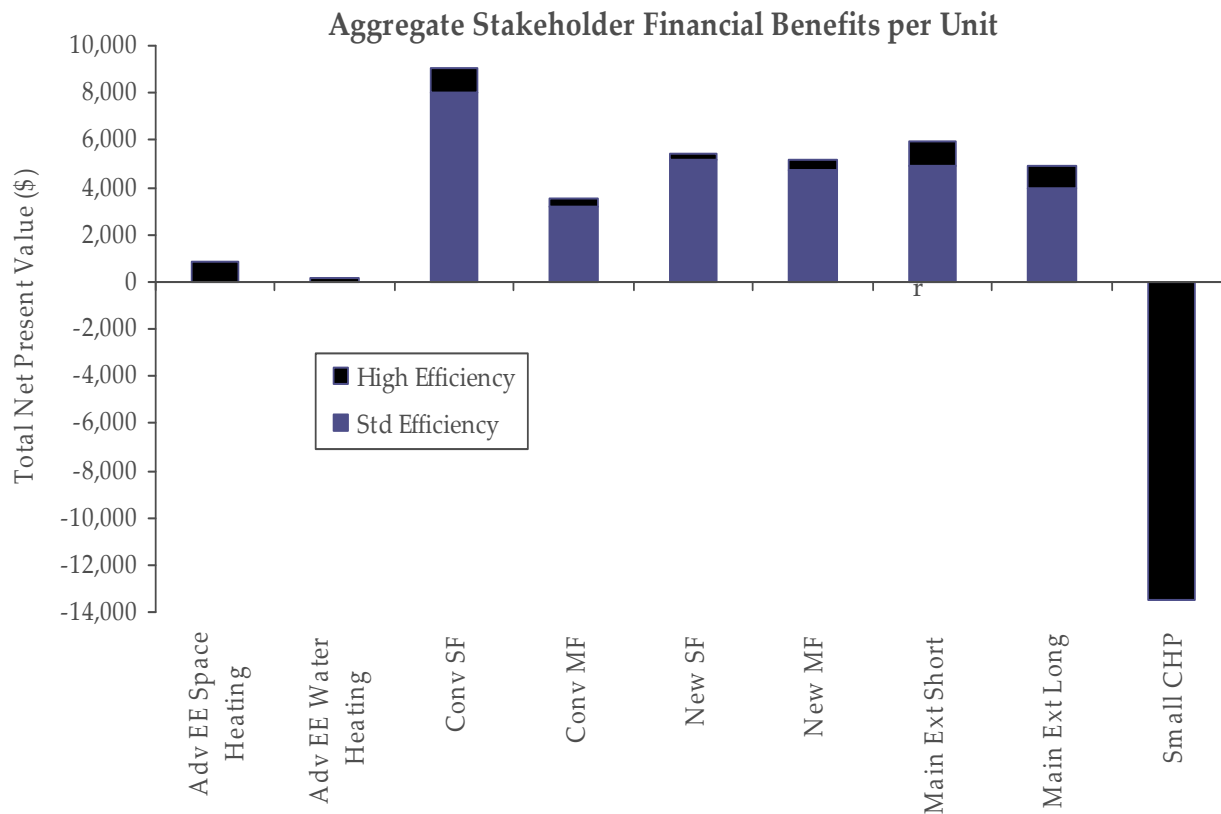
Environment - CO2 Reduction per Unit



- Reduced CO2 emissions
- Supportive of “greening” strategies
- Potential carbon tax savings
- Fosters good relations with environmental stakeholders
- Equivalent CO2 reduction to parking ~1 car

Note: Lifetime considers benefits over 30 year period.

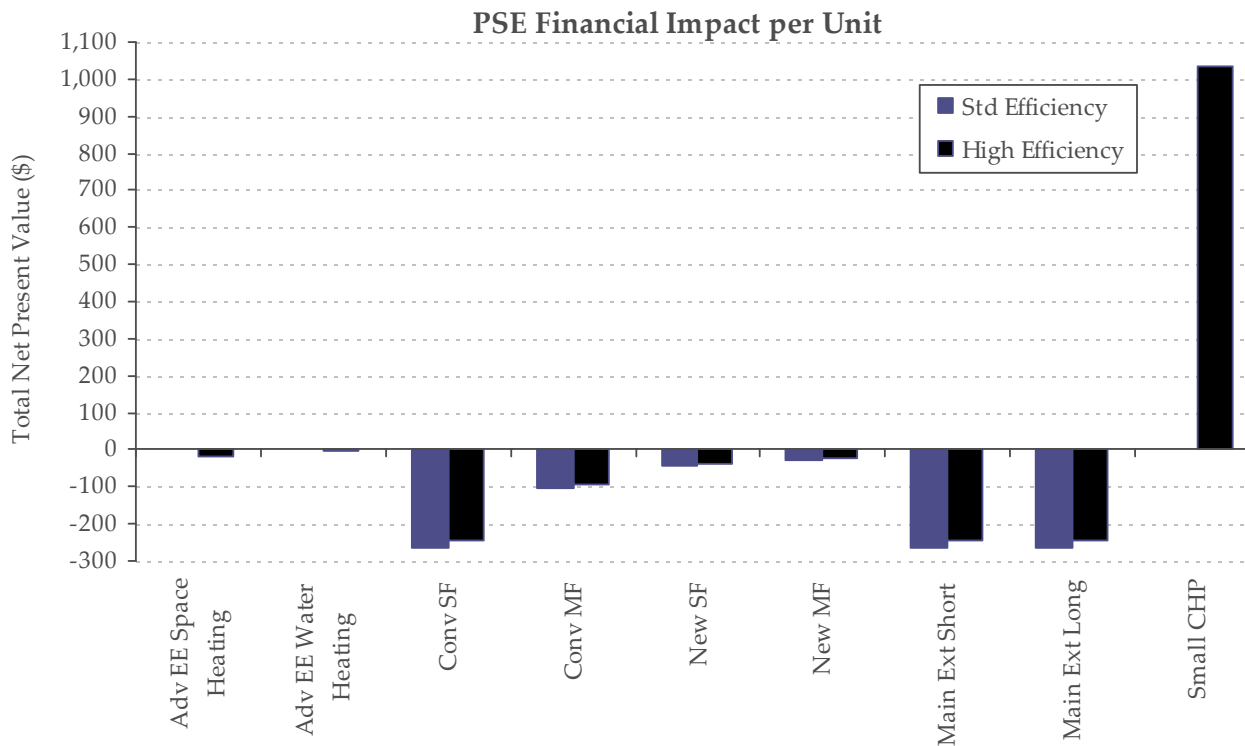
All strategic options have an aggregate positive financial impact to stakeholders, with the exception of CHP



- Reduces need to acquire high cost new electric generation
- Avoids risk associated with new generation
- Provides downward pressure on both gas and electric rates
- Saves on customer energy bills

Note: Total Net Present Value considers the cash flows to all key stakeholders: PSE shareholders, gas ratepayers, electric ratepayers, customers and developers.

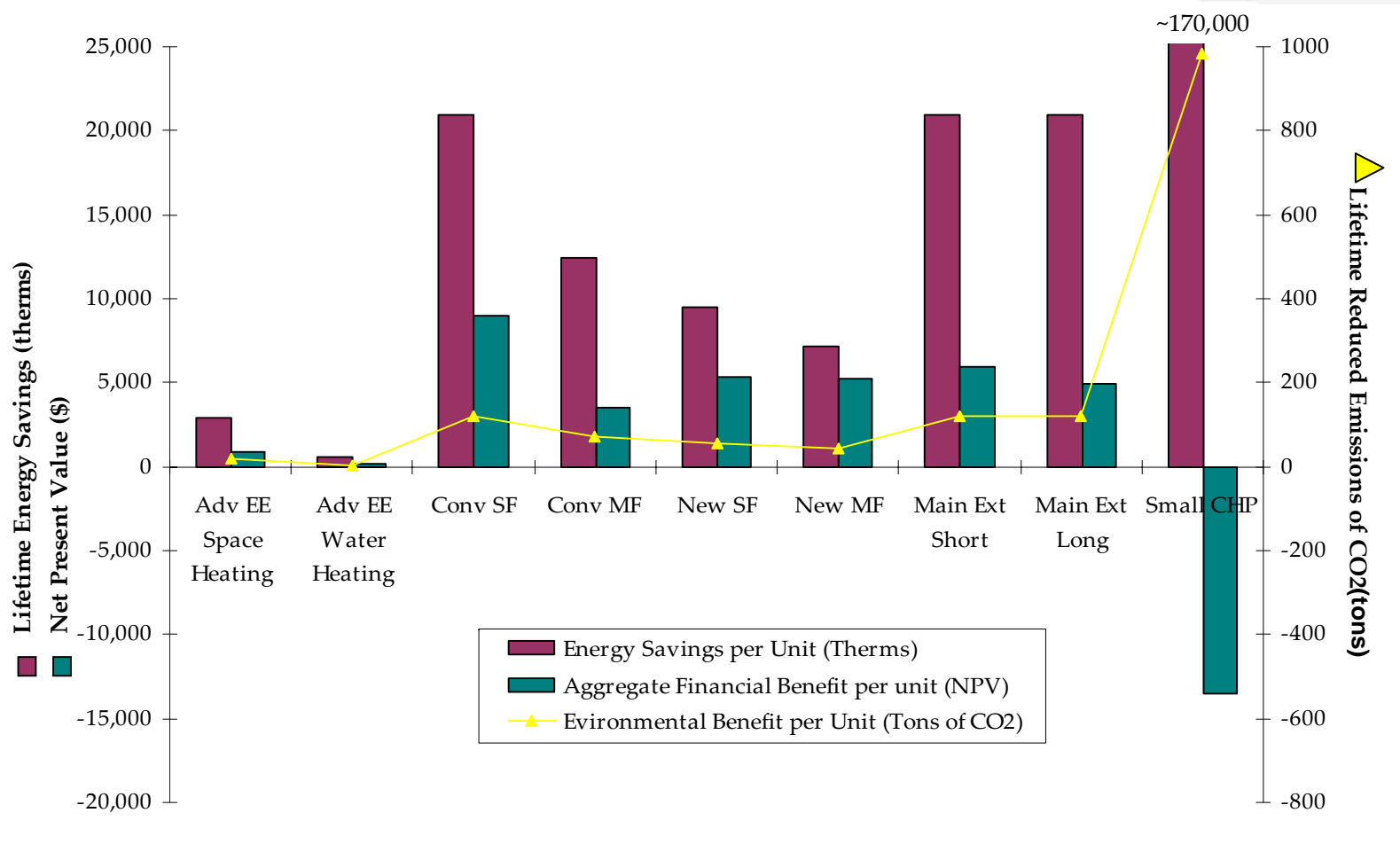
PSE shareholders have a small negative financial impact from the strategic options that may warrant consideration of a recovery mechanism; only CHP has a positive impact.



- Produces small negative financial impact first year and prior to rate cases
- After rate cases, the net financial impact to PSE shareholders is neutral
- Provides a low cost electric resource, while optimizing the use of existing gas infrastructure
- Potential for regulatory mechanisms to make shareholders whole

Note: Total Net Present Value considers the cash flows to all key stakeholders: PSE shareholders, gas ratepayers, electric ratepayers, customers and developers.

Each strategic option provides overall energy, environmental, and financial benefits except CHP due to the high first cost. Single family conversions provide the greatest opportunity to maximize all.

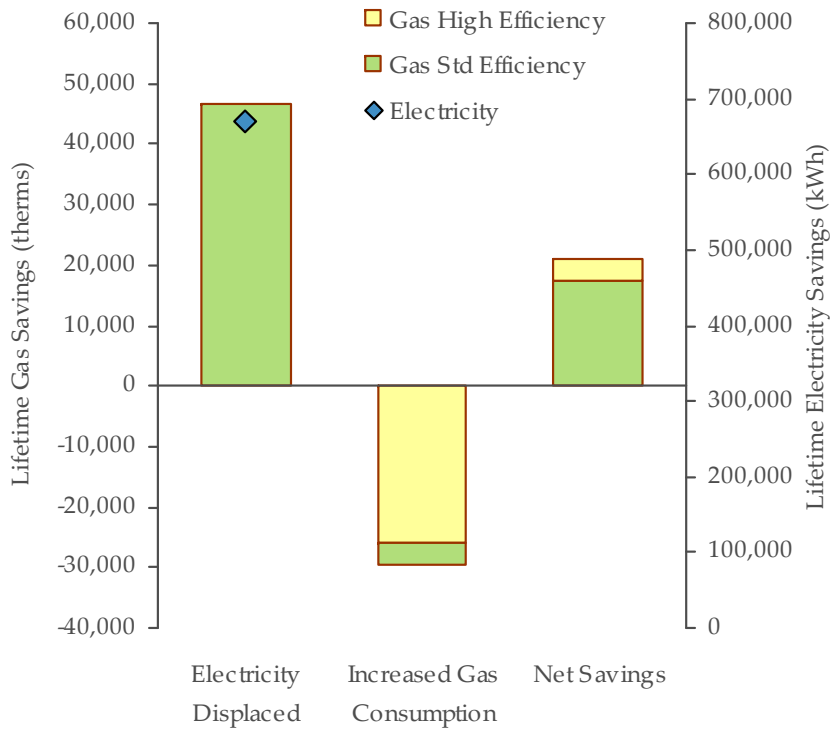


Strategic options were reviewed with the intent to ensure parity in the distribution of costs and benefits to all stakeholders.

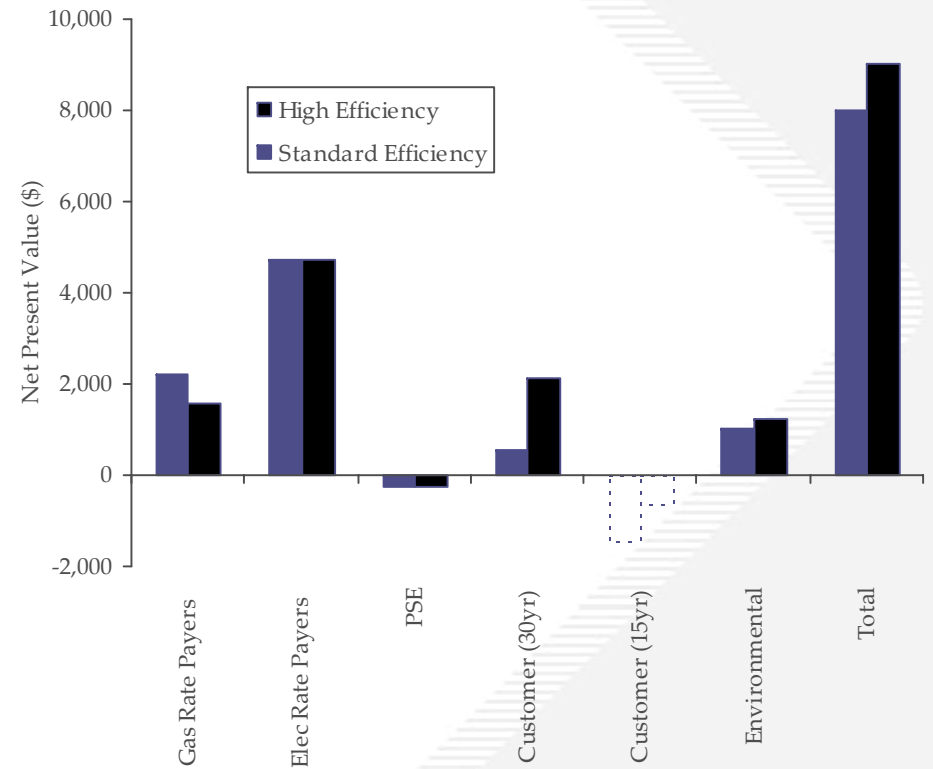
- *Gas Rate Payers*
- *Electric Rate Payers*
- *PSE*
- *Customer (15 year payback view)*
- *Customer (30 year payback view)*
- *Environment*
- *Total*

In single family conversions, gas and electric rate payers get most of the value driven by avoided electricity costs and larger gas volume.

Conversion SF - Energy Benefits per Home



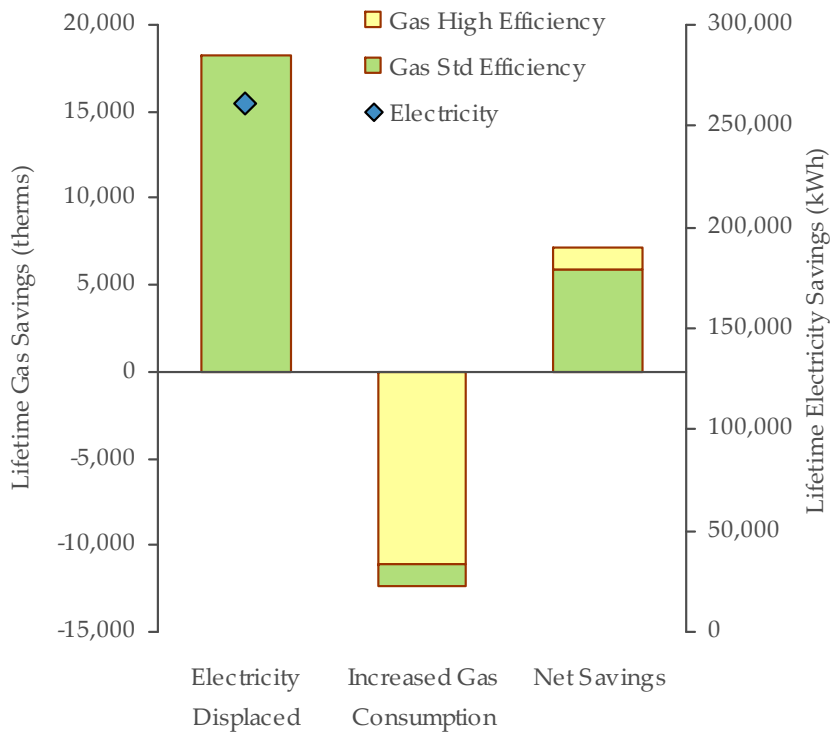
Conversion SF - Financial Benefits per Home



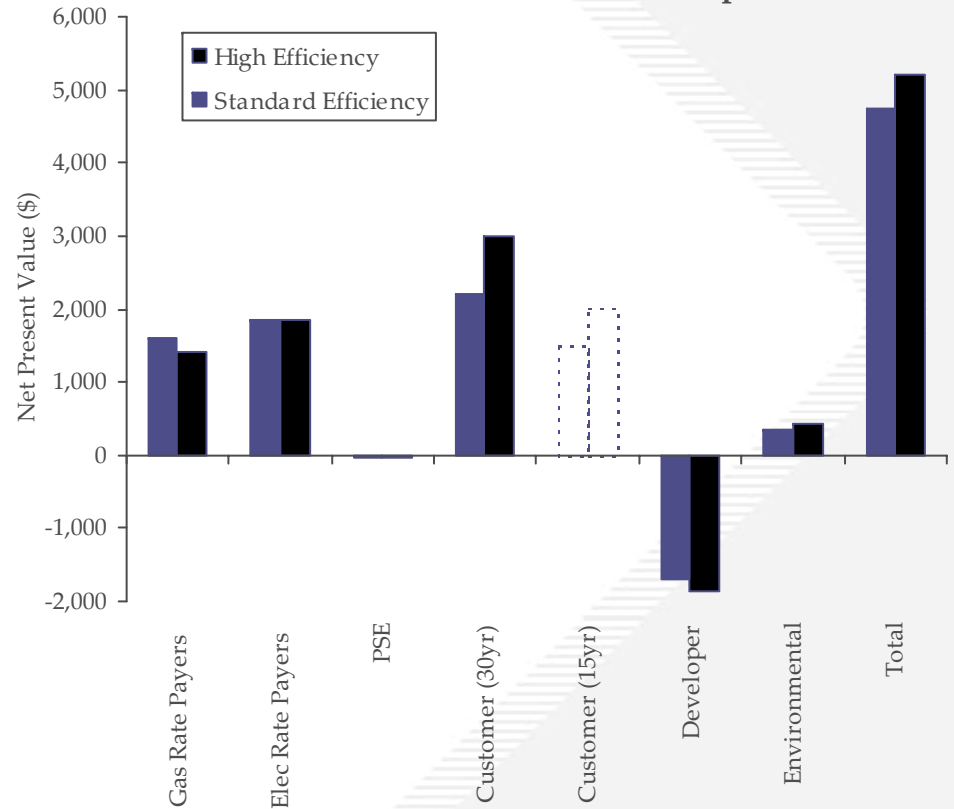
Notes: Assumes 2,500 sqft single family existing home with current space heating central forced air electric load of 16,500 kWh and water heating load of 4,300 kWh. Assumes new gas service on main, replace functioning electric space and water heating with standard or highly efficient gas furnace (78% or 90%) and water heater (.59 or .64). All main service installation costs covered by gas ratepayers. 30 year timeframe for all stakeholders. 15 year customer timeframe shown for comparison purposes but not included in total. CO2 emissions valued at \$10/ton. See appendix for calculation tables.

In new construction multifamily, the customer is getting most of the value driven by lower energy costs without an upfront investment.

New Construction MF - Energy Benefits per Unit



New Construction MF- Financial Benefits per Unit



Notes: Assumes 1,500 sqft multifamily new home with equivalent space heating electric load of 4,322 kWh and water heating load of 3,800 kWh. Assumes new gas service on main, multifamily with 100 units per building, commercial meter for building, incremental investment over individual electric space and water with standard or highly efficient gas central space (78% or 90%) and water heating (.59 or .64). All main service installation costs covered by gas ratepayers. 30 year timeframe for all stakeholders. 15 year customer timeframe shown for comparison purposes, not included in total. CO2 emissions valued at \$10/ton. See appendix for calculation tables.

Plan of Action

- Direct use Initiative
- Dedicated staff
- Aggressively expand energy efficiency
 - ◆ Fully integrate with Electric Energy Efficiency
- Streamline new customer construction and operations.

Conclusions

- *Efficient direct use of natural gas produces energy, environmental and aggregate financial benefits for both PSE and rate payers.*
- *Findings are consistent with PSE's commitment to solutions that balance customer needs, Company needs, and environmental concerns.*
- *Gas service and conversions are beneficial to gas and electric rate payers by providing downward pressure on rates.*
- *Electric to gas conversions represent the largest opportunity to capture energy, environmental and financial benefits.*
- *The regulatory lag associated with the gas infrastructure may warrant consideration of a regulatory mechanism.*

THANK YOU!