

**WGL** Holdings, Inc

Washington Energy Summit 2011

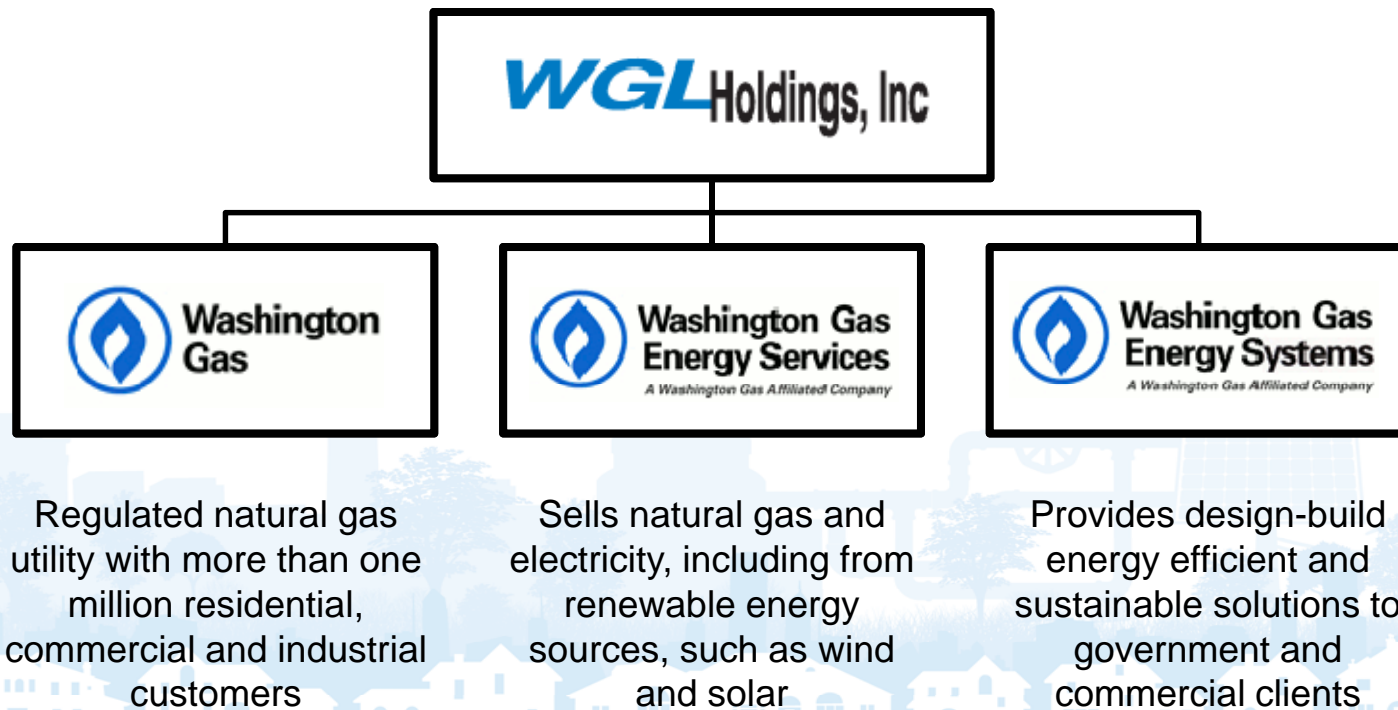
Melissa E. Adams  
Division Head, Sustainability & Business Development  
September 28, 2011



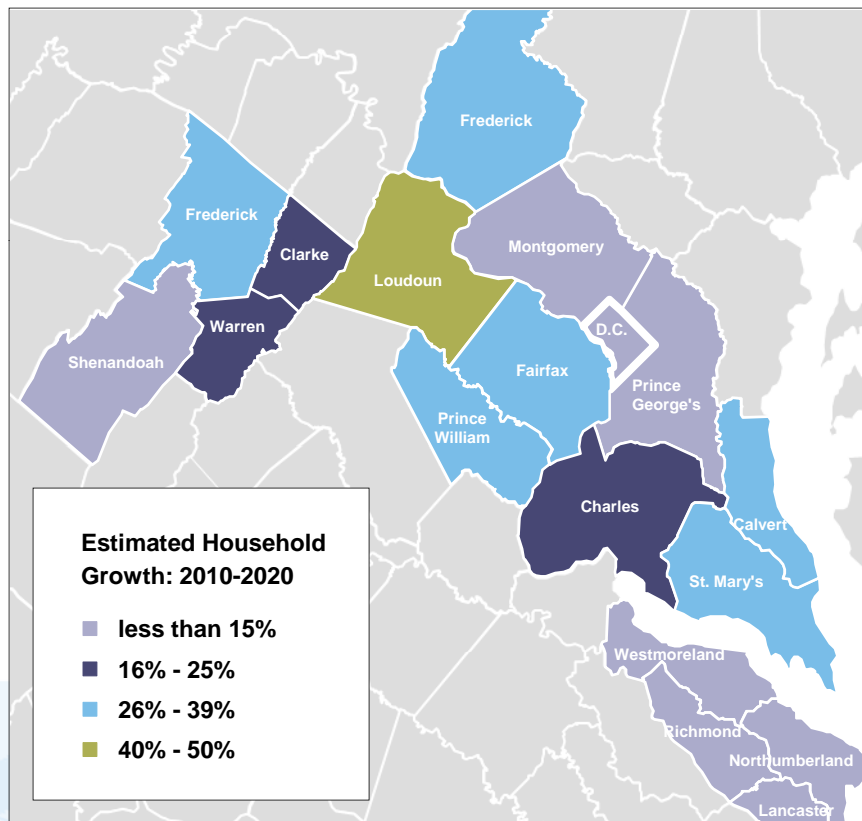
# Our Vision

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- WGL Holdings is the preferred source of clean and efficient energy solutions that produce value for our customers, investors and communities.



# Attractive Territory for District Energy and CHP



Source: Woods & Poole Economics - based on US Census data

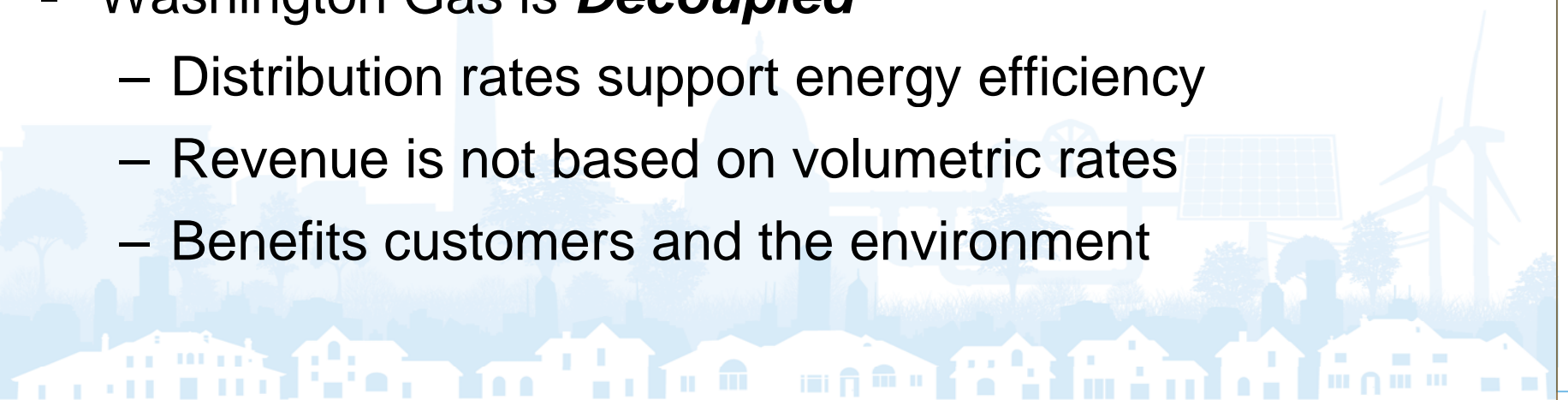
## The Greater Washington, DC Metropolitan Area

- 5th largest regional economy in the U.S.
- 7 of the nation's 15 wealthiest counties are in the region
- Increasing TOD; multi-family housing
- Resilient economy due to federal government spending
- Designated as an ozone pollution nonattainment area by the EPA

# Utility Business Model Promotes Energy Efficiency

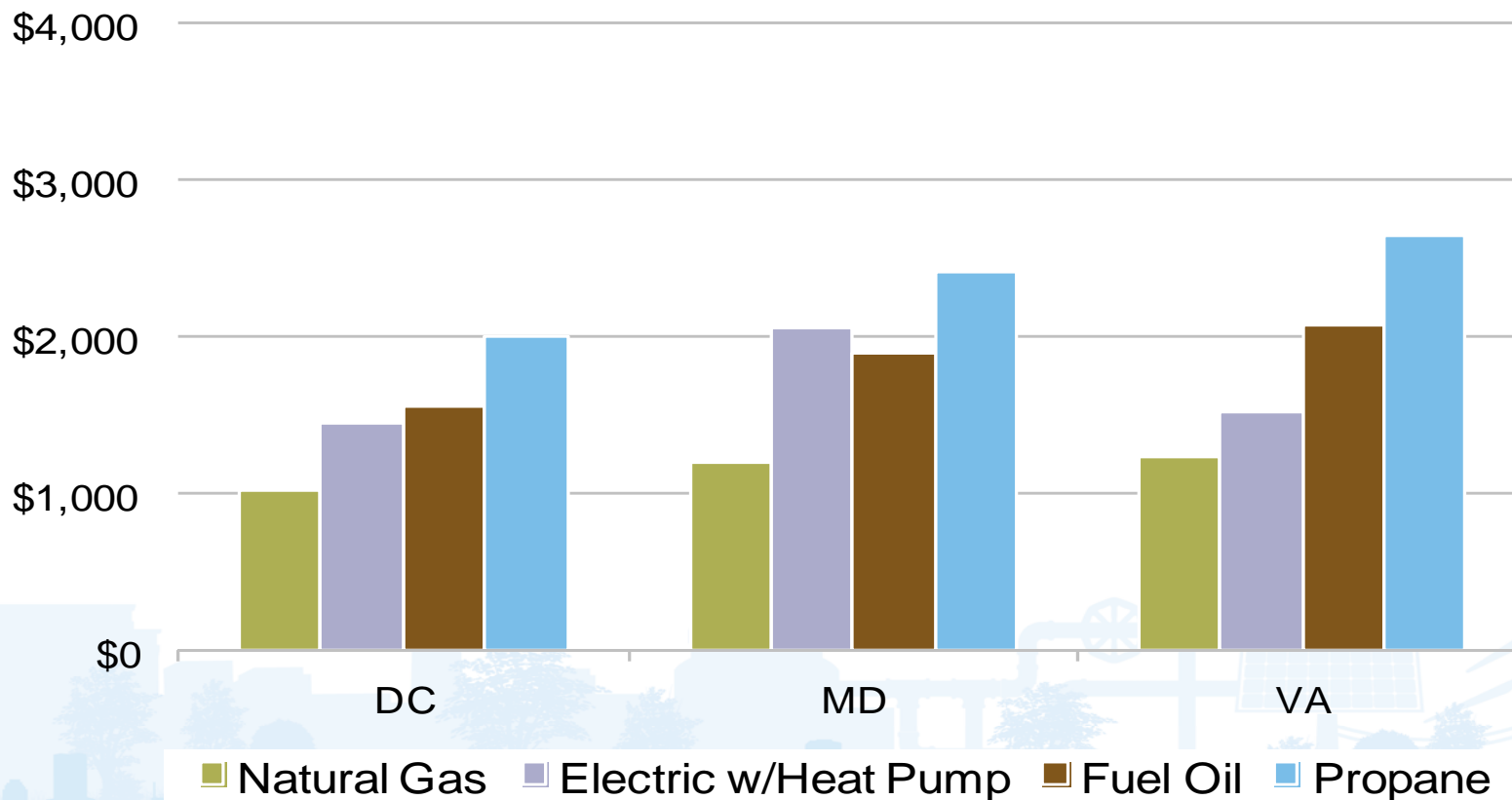
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- Washington Gas is ***Unbundled***
  - Gas distribution and gas supply charges are separate
  - Gas distribution charges are regulated by VA SCC
  - Customers may choose a competitive gas supplier
  - Utility receives no profit on gas commodity
- Washington Gas is ***Decoupled***
  - Distribution rates support energy efficiency
  - Revenue is not based on volumetric rates
  - Benefits customers and the environment



# Natural Gas: An abundant, affordable energy source

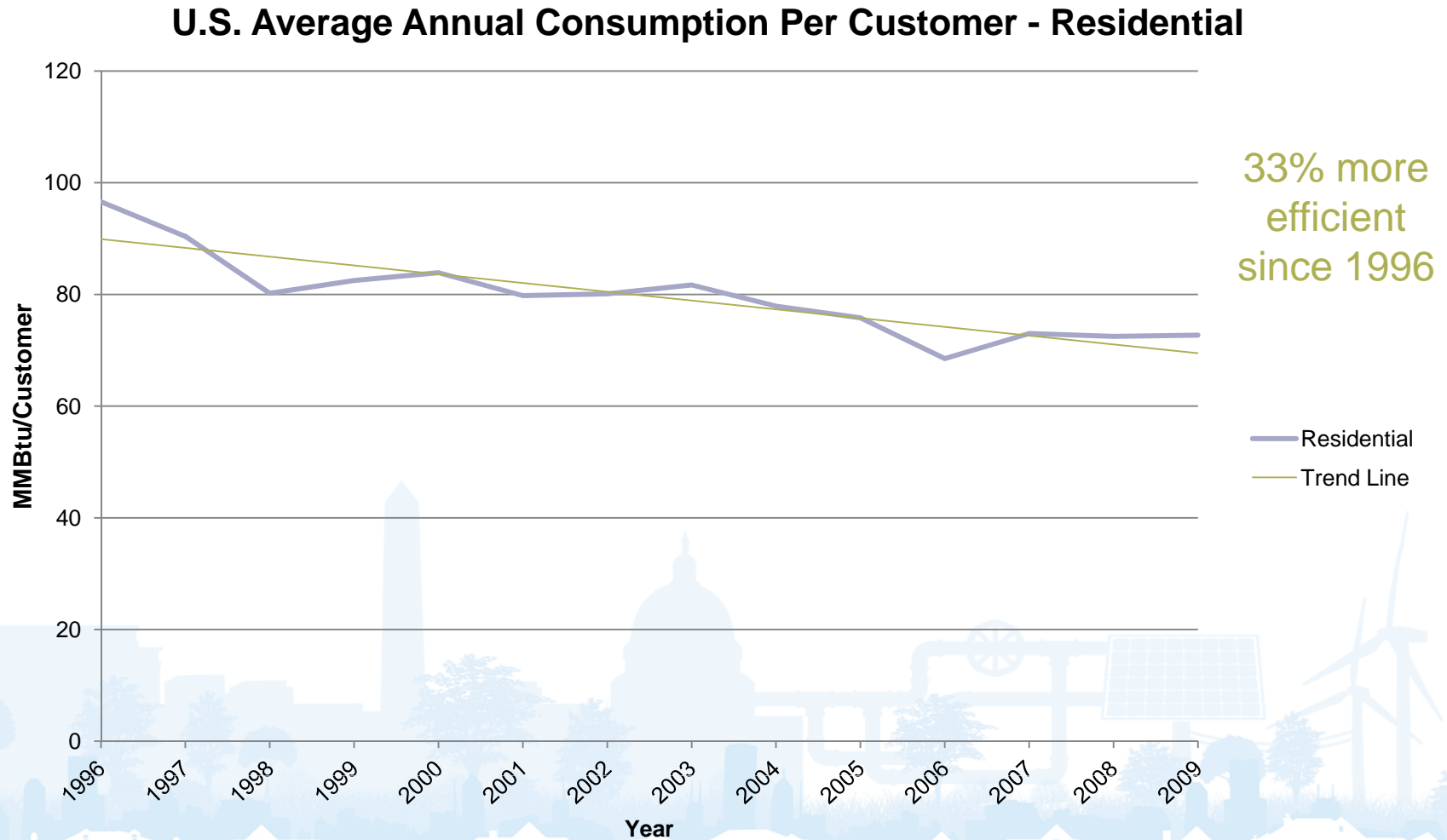
**Annual Operating Cost by Fuel**  
Residential Heat & Hot Water



Source: Washington Gas operating cost comparison model. New Construction, detached homes using natural gas for heating and water heating.

# A Winning Efficiency Track Record

## Smart Energy: Direct use consumption



Source: American Gas Association

# Full Fuel Cycle Efficiency

3 times as much energy; 33% less CO<sub>2</sub> at delivery

## Electricity

EXTRACTION, PROCESSING  
& TRANSPORTATION

100%



100 MMBtu Source Energy

CONVERSION

95%



DISTRIBUTION\*

34%



DELIVERED  
TO CUSTOMER

32%



*\*Based on 2007 actual generation mix of all energy sources*

## Natural Gas

EXTRACTION, PROCESSING  
& TRANSPORTATION

100%



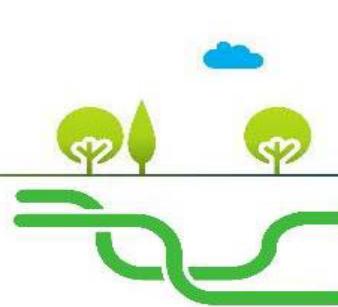
100 MMBtu Source Energy

CONVERSION



DISTRIBUTION

93%



DELIVERED  
TO CUSTOMER

92%

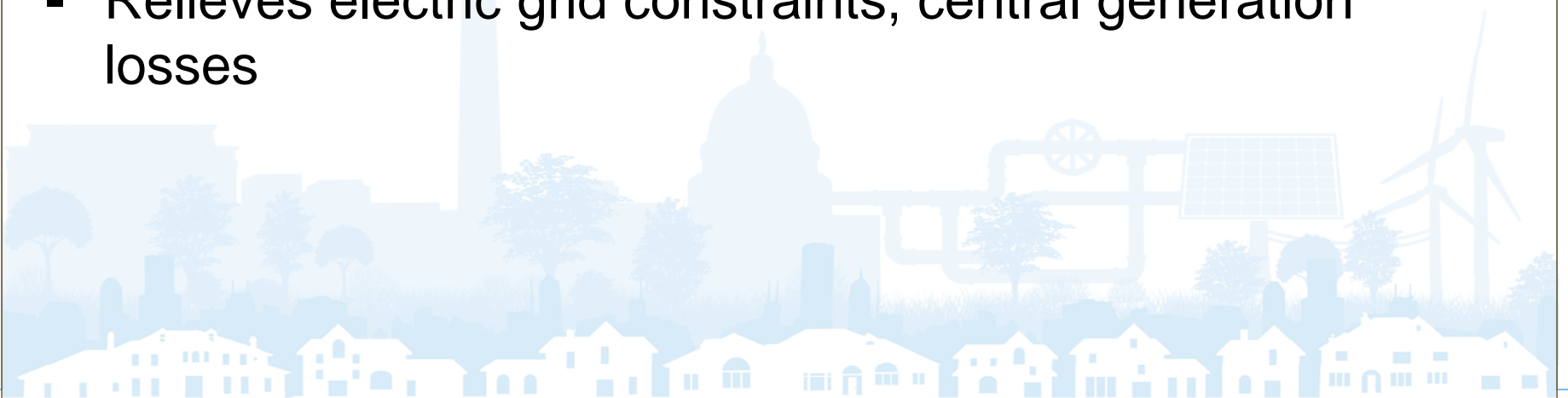


Source: American Gas Association

# Benefits of District Energy & CHP Technology

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- Proven technologies used worldwide
- Energy systems of choice on many collegiate campuses
  - The number one commercial CHP application with over 1,400 MW of installed capacity
- Efficiency and load factors; utilization of waste heat
- Relieves electric grid constraints, central generation losses





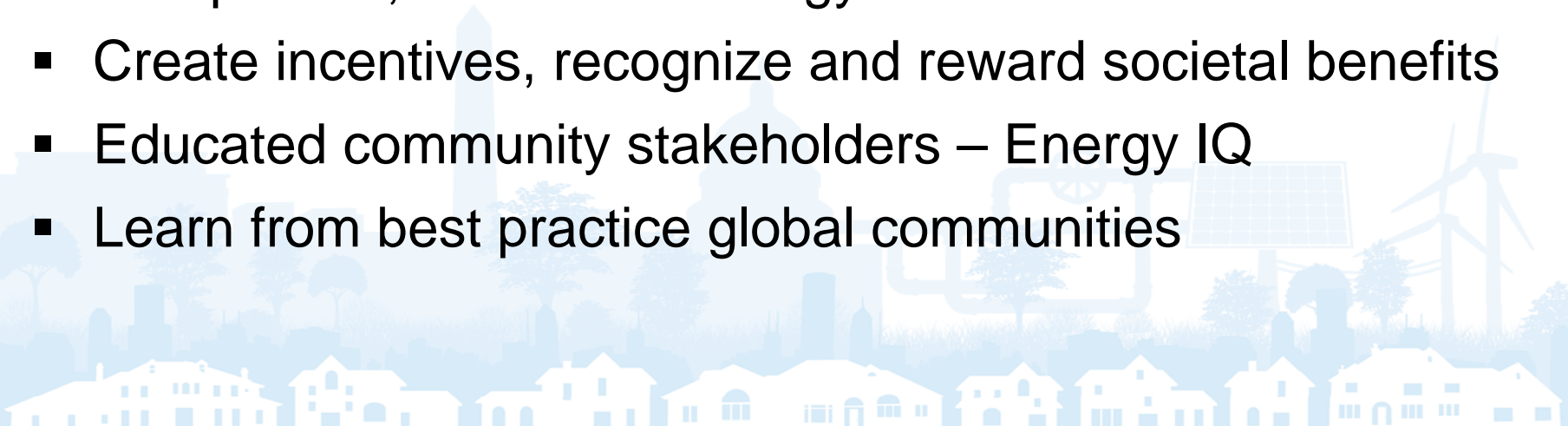
# Community Energy Planning

A process for creating an abundant, affordable, efficient, clean energy future

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Keys to success:

- Collaborative, multi-stakeholder approach
- Collective engagement on policy issues
- Remove barriers
- Competitive, unbundled energy markets
- Create incentives, recognize and reward societal benefits
- Educated community stakeholders – Energy IQ
- Learn from best practice global communities

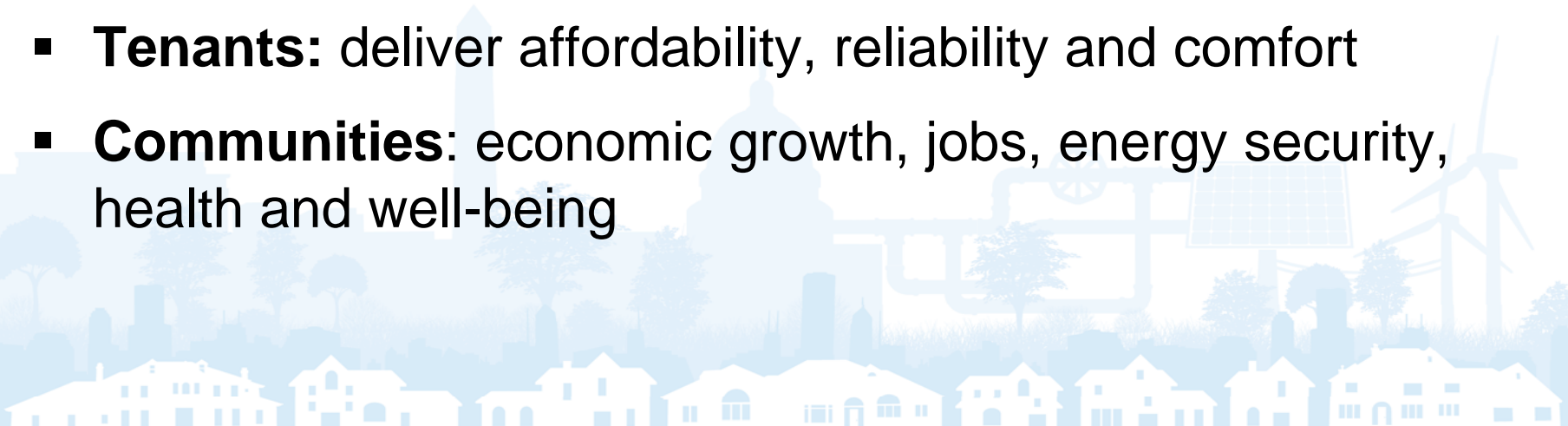


# Community Energy Plan – WIIFMs

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Create multiple winners:

- **Utilities:** energy reduction/efficiency goals, business growth, investments, resolve stranded asset issues, create new business models/markets, rate stability
- **Developers/Owners:** attractive, profitable properties
- **Tenants:** deliver affordability, reliability and comfort
- **Communities:** economic growth, jobs, energy security, health and well-being



# Navigating Towards a Sustainable Energy Future

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- Promote efficient natural resource use
  - Customer conservation and outreach programs and platforms
  - Incentives tied to appliance costs and consumer behavior
  - Fuel switch from electricity to natural gas as a DSM strategy; a common approach for combination electric/gas companies
- Implement effective building codes and standards
  - Btus or CO<sub>2</sub>e emissions per sq. foot
  - EPA Climate Portfolio Manager Tools (full-fuel cycle)
- Develop policies and regulations that support open, competitive, clean and renewable energy markets and resources
- Recognize and incorporate carbon cost externalities – including societal costs, mitigation and adaptation