The Impact of Solar Energy on the Direct Use of Natural Gas

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American Public Gas Association

Who is APGA?

1,028 Publicly Owned Gas Systems in U.S.

730+ are APGA Members

- States Served: 37 states
- 31 public gas systems in Florida
- Serve approximately 5 million customers
- Employees: 21,000
- Miles of Main: 120,000

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The Benefits of Direct Use

- Reliable
- Affordable
- Abundant / Domestic
- Direct-Use: 92% Efficient
- Reduces consumer energy costs
- Reduces greenhouse gas emissions
- Resilient

Push for Electrification

- Decarbonization
- All electric/renewable grid
- Push in some US states (e.g., California, New York, Washington) and Canada
- Policies aim at aggressive CO2/GHG reductions
- NRECA – “Environmentally Beneficial Electrification”
- Lawrence Berkeley National Lab – The key to meeting GHG goals is “widespread electrification of passenger vehicles, building heating, and industry heating.”

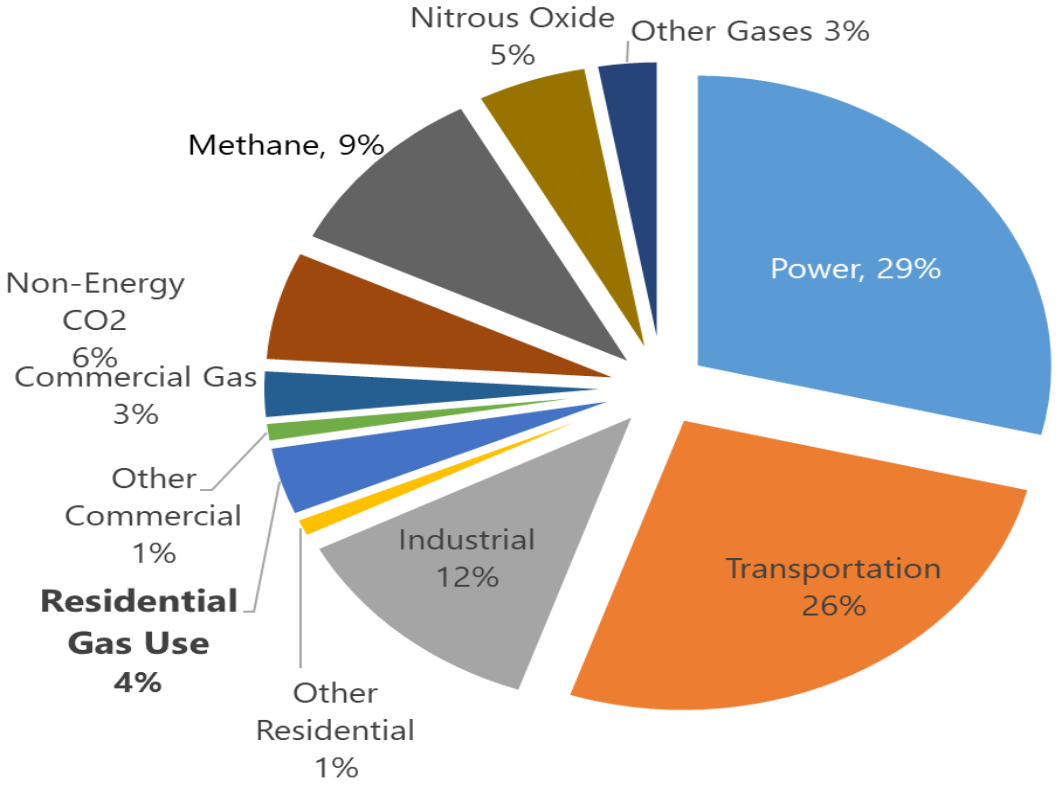
Green New Deal

- 10 year national mobilization with the goal of:
  - Meeting 100 percent of the power demand in the United States through clean, renewable, and zero-emission energy sources
  - Repairing and upgrading the infrastructure in the United States, including . . . by eliminating pollution and greenhouse gas emissions as much as technologically feasible
  - Building or upgrading to energy-efficient, distributed, and 'smart' power grids, and working to ensure affordable access to electricity

Green New Deal

- Upgrading all existing buildings and building new buildings to achieve maximal energy efficiency, water efficiency, safety, affordability, comfort, and durability, including through electrification
- Overhauling transportation systems in the United States to eliminate pollution and greenhouse gas emissions as much as is technologically feasible, including through investment in:
  - zero-emission vehicle infrastructure and manufacturing;
  - clean, affordable, and accessible public transportation;
  - and high-speed rail

GHG Emissions



Impacts of Electrification

- American Gas Association Study “Implications of Policy-Driven Residential Electrification”
  - Will policy-driven electrification actually reduce emissions?
  - How will policy-driven residential electrification impact natural gas utility customers?
  - What will be the impacts on the power sector and on electric transmission requirements?
  - What be the overall cost of policy-driven residential electrification?
  - How do the costs of policy-driven residential electrification compare to other approaches to reducing greenhouse gas emissions?

Impacts of Electrification

Key Findings –

- Converting 60% of natural gas, propane and fuel oil homes to all electric is estimated to cost between $590 billion and $1.2 trillion
- Significant Financial Impacts – Household annual energy costs increase between $750 and $910 per year
- Limited Benefits – could reduce greenhouse gas emissions by only 1 to 1.5% of U.S. emissions by 2035

Solar Energy and Natural Gas

- Compatible?
- Natural gas appliances reduce electricity demand
- Paired with rooftop solar can significantly reduce a home electricity bill
- Role of renewable natural gas?

Corporate Tax Reform and Pipeline Rates

- Tax Cuts and Jobs Act of 2017 lowered the corporate tax rate from 35% to 21%
- All pipeline rates recovered from ratepayers an income tax allowance assuming a 35% rate
- APGA sent letter to FERC urging quick action to reduce rates to reflect lower tax rate
- Commission approved order requiring pipelines to address the effect of the tax cuts
- Pipelines had 30 days to make a filing
- FERC acting on pipeline 501-G filings

QUESTIONS?

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