

# Scaling Up Retrofits of Existing Homes

**ACEEE Energy Efficiency & Climate Policy Forum 2020**

December 3, 2020



## KARA SAUL RINALDI

President/CEO, AnnDyl Policy Group

- ▶ Kara is the President and CEO of the AnnDyl Policy Group, an energy and environmental policy strategy firm.
- ▶ Kara has over twenty-five years of experience in advocacy strategy development, lobbying and media relations and has directed national policy, communications, and grassroots campaigns spearheading education efforts with the Administration and Congress on tax, appropriations, and authorization issues for national and international corporations as well as NGOs. Kara has testified before Congress and authored numerous papers on energy efficiency, climate change, and smart technology.
- ▶ Prior to starting AnnDyl, Kara worked on climate and energy policy at Environmental Resources Management, Owens Corning, the Alliance to Save Energy, and World Wildlife Fund. She also worked in the offices of Rep. Lynn C. Woolsey (D-Calif.) and Sen. Barbara Boxer (D-Calif.).

# Why Focus on Existing Homes?

- ▶ **140 million residential buildings in U.S.**, over 70% built before 1990.
- ▶ Residential sector accounts for 21% of total U.S. energy use, **20-25% of GHG emissions.**
- ▶ Residential buildings are also the largest contributors to **peak demand** in many areas.
- ▶ NREL study found that cost-effective retrofit measures could reduce carbon emissions in the single-family housing stock by 24%.

# Key Challenges to Address

1. Upfront costs
2. Trained worker shortage
3. Energy burdens & support for low- and moderate-income
4. Data access and Measurement
5. Valuing Energy Efficiency

# High Upfront Costs

- ▶ **High up-front Costs of Energy Efficiency and Advanced Technology deter customers from choosing EE.** Deep retrofits that can achieve the greatest energy savings (long-term payback) also have the highest upfront costs.
- ▶ **Solutions:** carefully crafted rebates/tax credits to incentivize homeowners and landlords to upgrade their buildings
  - **HOPE for HOMES Act** – *more on this later!*
  - **25C** – Modernize and expand the 25C tax incentive for residential energy efficiency (116<sup>th</sup> – Home Energy Savings Act, S2588)
    - ❖ **Raise credit** from current 10% to 15% of eligible expenditures, up to \$1,200, for the installation of energy efficient cooling and heating systems, windows, insulation, water heaters and other products.
    - ❖ **Transition to performance-based credit** (proposed in Wyden tax plan)

# Need for Trained Workers

- ▶ Workforce development & job training are needed to prepare American workers with the technical skills needed to do residential retrofits.
- ▶ Small businesses that are the backbone of the EE industry need help to train new hires and existing employees (esp. since they have been hard hit by the pandemic).
- ▶ **Solutions:** support for training, apprenticeships
  - Blue Collar to Green Collar Jobs Development Act (116<sup>th</sup> - HR 1315)
    - ❖ **Energy Workforce Grant Program** – job training, career pathways, particularly for transitioning workers, people of color, other underrepresented groups
    - ❖ Similar program included in Sen. Heinrich's Clean Energy Jobs Act (S. 2393) and the Senate energy bill (American Energy Innovation Act)
  - Grant program focused on apprenticeships included in GREEN Neighborhoods Act (HR 8021)
  - **HOPE Training Program** in HOPE for HOMES Act
  - **DOL code** for residential energy efficiency upgrade technician

# Equity: Addressing High Energy Burdens & Helping Low- and Middle-Income Families

- ▶ 67% of Low-Income households have a high energy burden.
- ▶ Average U.S. homeowner spends more than \$2,000/year on energy bills.
- ▶ Many low-income homes also face issues such as mold, leaky roofs, asbestos, and other deteriorated conditions that can prevent installation of important efficiency measures.
- ▶ **Solutions:** increase and expand WAP and LIHEAP, provide additional incentives for American families.
  - **Reauthorize and expand WAP** (116th – Weatherization Enhancement and Local Energy Efficiency Investment and Accountability Act, HR 2041)
  - Raise income eligibility for **LIHEAP**, allow states to use 30% of funding for WAP
  - **HOPE for HOMES** – rebate amounts doubled for moderate income households.



# Data Access

- ▶ **Lack of data access to monetize energy efficiency and create better home evaluation for upgrades stifles innovation, specialized retrofits, and EM&V.**
- ▶ Access to utility data is key to enabling accurate measuring and modeling:
  - Identifying cost-effective energy-saving opportunities
  - Measuring performance
  - Driving innovation, behavior changes
- ▶ However, utilities control that data and, in many cases, do not readily provide access to customers or allow them to grant access to third party providers.
- ▶ **Solutions:** DOE should develop best practices for access to utility data.
  - **Access to Consumer Energy Information or “E-Access” Act** (116th – HR 5796)
    - ❖ DOE would develop best practices for customers' access to their own energy data. This will support state energy conservation plans and provides for the establishment of voluntary guidelines so that PUCs may require utility data access be provided.



# Valuation of EE

- ▶ Without appropriate consideration in the appraisal, real estate, and mortgage lending processes for the value of EE upgrades, homeowners cannot recoup the value of their investments at the time of sale or refinancing.
- ▶ Improving valuation of EE will help homeowners get a fair payback for investments that save energy and reduce emissions, and it will drive future demand for retrofits.
- ▶ **Solutions:** value EE in real estate transactions, support benchmarking and otherwise improve transparency of home energy consumption.
  - **Sensible Accounting to Value Energy “SAVE” Act** (116<sup>th</sup> – included in Welch-McKinley HR 3962 and GREEN Neighborhoods Act HR 8021)
    - ❖ Requires all federal mortgage agencies to implement enhanced loan eligibility based on energy cost savings from efficiency upgrades, improving the accuracy of mortgage underwriting.

# Deep Dive: HOPE for HOMES

## ▶ “Home On-line Performance-based Energy-efficiency” (HOPE) Contractor Training - \$500 million

- ▶ Provide online training opportunities for residential efficiency workers to support contractor companies in pandemic situation and in areas of the country with limited training.
  - ❖ **Grants to contractor companies:** \$1,000 per employee (max. \$10,000)
  - ❖ **Trainee stipend:** \$1,000 (for completing **90 hours of training**)
  - ❖ **Provider organization grants:** \$20,000 to provide training online

## ▶ “Home Owner Managing Savings Act” (HOMES) - \$6 billion

- ▶ Partial System Rebates - \$1,500 for HVAC replacement with insulation, air sealing
- ▶ Performance Rebates - \$2,000-\$4,000 (for at least 20-40% savings)
  - ❖ Modeled & Measured options
  - ❖ State administered
- ▶ Passed the House twice in 116<sup>th</sup> (HR 2, HR 4447) with modifications.
- ▶ Sign on letters and additional information: <https://www.building-performance.org/hope4homes>

# Deep Dive: Weatherization

- ▶ **Weatherization Enhancement and Local Energy Efficiency Investment and Accountability Act** (S 983/HR 2041) would update and strengthen the program supporting innovation in weatherization practices through a new competitive grant and modernizing the program to incorporate the latest cost-effective technology and services:
  - ▶ *Health benefits* - allows DOE to incorporate more than just energy savings into the SIR.
  - ▶ *Renewables* – expands eligibility to include renewable technology.
  - ▶ Increases allowable administrative cost to 15% to allow for training and technical assistance.
  - ▶ Allows homes to be re-weatherized after 15 years to keep up with aging building needs.
- ▶ Other needed improvements:
  - ▶ Increase authorization to \$3 billion per year.
  - ▶ Coordination with LIHEAP: all homes receiving LIHEAP must receive a referral to WAP, allow LIHEAP funds to be used for weatherization.
  - ▶ Increase Average Cost Per Unit (ACPU) to \$10,000 to allow more funding to be provided per house upgraded.

Thank You!

**Kara Saul Rinaldi**  
President & CEO  
AnnDyl Policy Group  
202.276.1773  
[kara@anndyl.com](mailto:kara@anndyl.com)