

The Role of Non-governmental Organizations in Harnessing Individual Action to Reduce GHG Emissions

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American Council for an Energy-Efficient Economy



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Behavioral Pathways to Decarbonization
Panel 2: New Opportunities for an Individual Pathway

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Net Zero by 2050

A Roadmap for the Global Energy Sector

International
Energy Agency

iea

Actions that Reduce Energy

- Reducing excessive or wasteful energy use
- Transportation mode switching
- Materials efficiency gains

Key Points

Efficiency > Curtailment

Important behaviors require programs and
policies

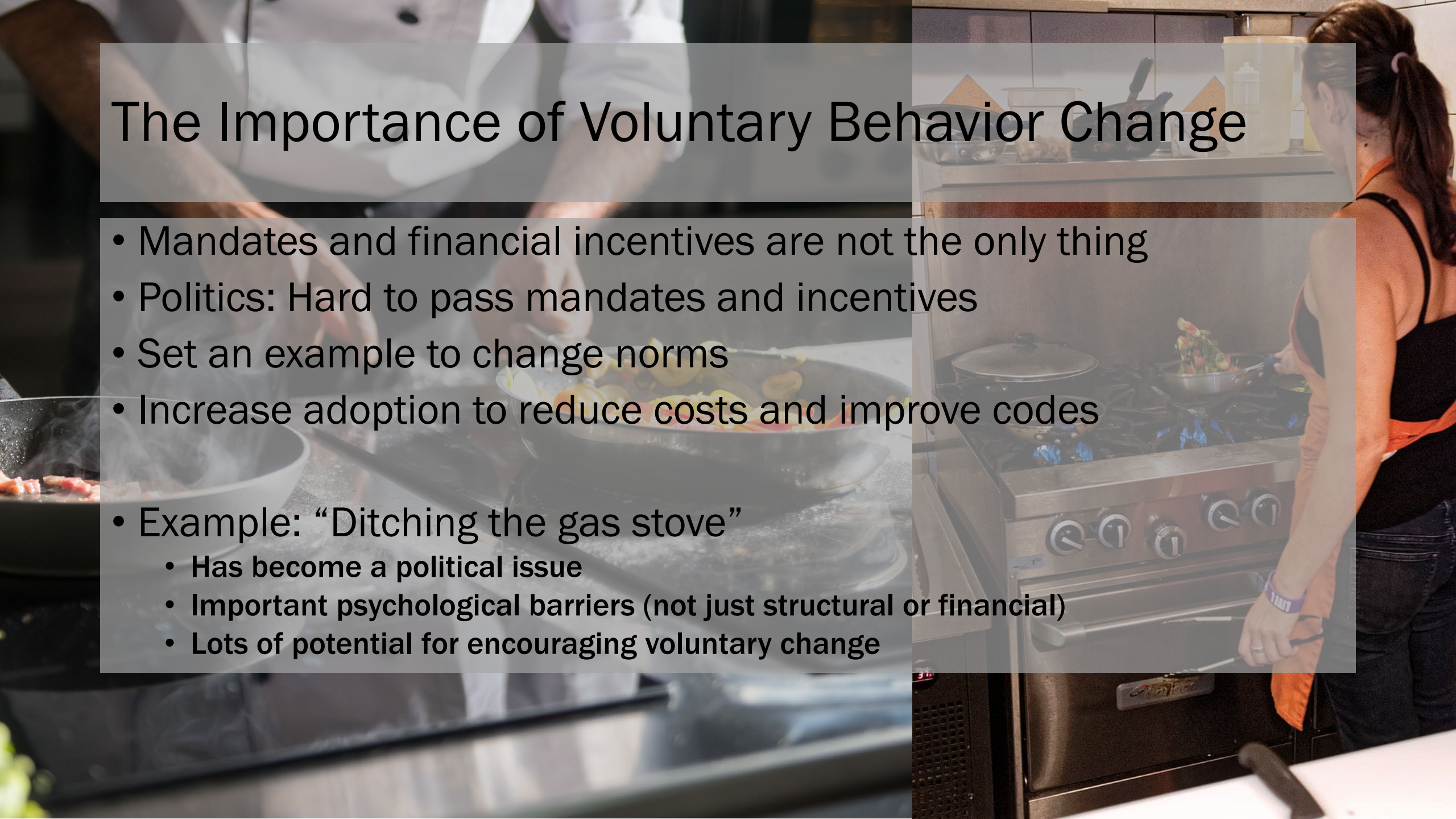
Utilities Understand This

- Energy utilities are among the biggest investors in efficiency
 - There's a business case

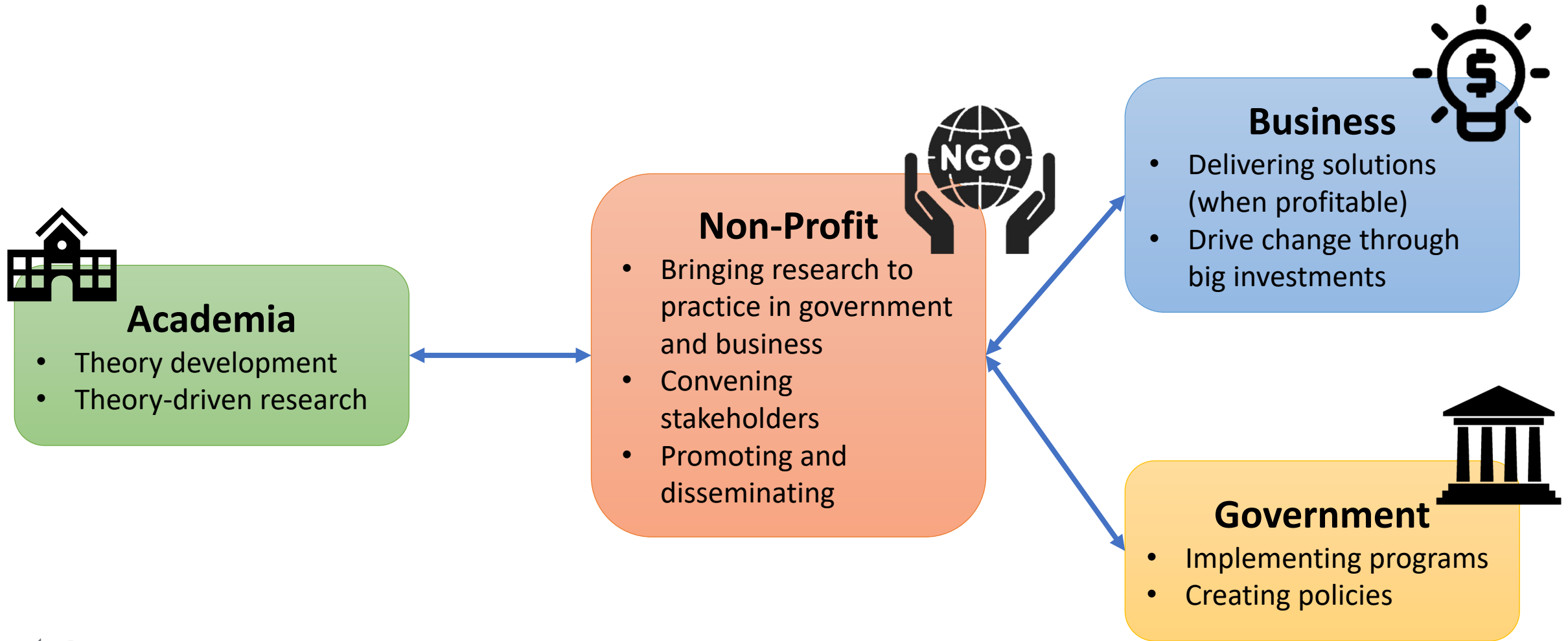
Utility-Run Behavior Programs	Estimated Savings
Home energy reports	1.2%-2.2%
Real-time feedback programs	5%-8%
Free (or cheap) energy audits	N/A
Competitions and games	~5%
Community-based programs	N/A
Strategic Energy Management	Up to 23%
Education and training programs	N/A
School-based programs	~20%

The Importance of Voluntary Behavior Change

- Mandates and financial incentives are not the only thing
- Politics: Hard to pass mandates and incentives
- Set an example to change norms
- Increase adoption to reduce costs and improve codes
- Example: “Ditching the gas stove”
 - Has become a political issue
 - Important psychological barriers (not just structural or financial)
 - Lots of potential for encouraging voluntary change



The Role of Non-Profits like ACEEE



New Opportunities: Behaviors That Need More Attention



GHG Emissions



- **Transportation**
 - Most work is on short personal trips (car, bus, walk, bike, etc.)
 - Not enough on personal long-haul travel (plane, boat, etc.)
 - Not enough on professional travel (bus drivers, truckers, taxi/ride-hailing)
- **Buildings**
 - Most work is on curtailment
 - Not enough on home energy upgrades
 - Not enough on home purchase/rental decisions
- **Industry**
 - Not enough on organizational decision-making and operations/maintenance



RentDragon

Detroit, MI

\$1200

Beds: 2

Apartments

Apartments in Sherwood Forest, Detroit MI



\$1,239 /month
2 bedrooms | 1.5 bathrooms | 1075 square feet



\$1,317 /month
3 bedrooms | 2 bathrooms | 1376 square feet



\$1,083 /month
2 bedrooms | 1.5 bathrooms | 774 square feet
Monthly energy bills: \$155



\$1,083 /month
2 bedrooms | 2.5 bathrooms | 1075 square feet
Monthly Energy Bills
\$ 88 100 112 126 146 **\$155** 178 193 213 234



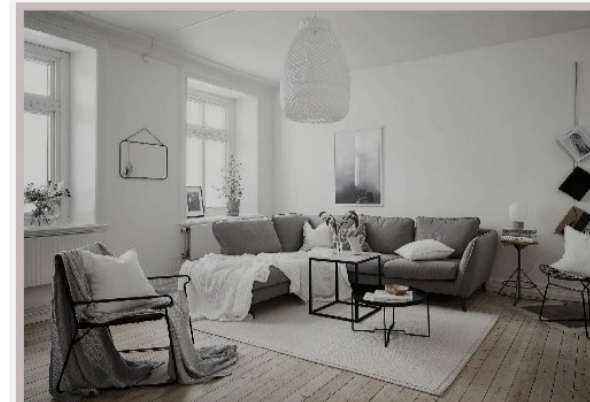
\$1,083 /month
2 bedrooms | 2.5 bathrooms | 774 square feet

1 2 ... 6

Next



\$1,317 /month
2 bedrooms | 1 bathroom | 1075 square feet
Building Energy Score: 2/10



\$1,083 /month
2 bedrooms | 2 bathrooms | 774 square feet
Building Energy Rating
1 2 3 4 5 6 7 8 **9** 10

Conclusion

- Voluntary individual action matters
- Programs and policies are needed for the most important actions
- Some of the most impactful behaviors are understudied
- Non-profits play a key role in making research have impact



Behavior, Energy, & Climate Change Conference:

Advancing behavioral research, policy, and action to speed climate solutions

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Smart Energy. Clean Planet. Better Lives.

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Thank you!

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