



# IMPROVING ENERGY EFFICIENCY IN THE BUILT ENVIRONMENT

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# Energy Efficiency:

- World's largest energy supply resource, possessing never ending reserves
- Lowest cost supply option – cheaper than nuclear, coal, gas, or renewables
- Is challenging to implement – the only supply option that consumers are expected to capitalize

# Develop a Grand Strategy



- Public investment is not sustainable – after all, we can't just give each other an efficient refrigerator

## Change the Rules in Energy Markets

- **Government's Role:** create a commercial market
  - Establish policies, change regulations and create programs that overcome barriers

# Foundational Elements



- **Redirect Public Investment** – away from energy subsidies to targeted assistance to low income families & weatherization
- **Bring together critical stakeholders:**
  - **Municipal Government** – action happens at the local level
  - **Business Community** - improving building efficiency is a potential economic development tool, ask business what government can do to overcome barriers
  - **Utility Industry** – help utilities to change their business model to one that provides consumers the full range of energy services, not just power
  - **Educational Institutions** - to create the required workforce

# Guiding Principles



- Set requirements, facilitate private sector investment and innovation, and let the market work out the best solutions
- Require and reward consistent performance improvement, not how much money is spent
- Influence investments in new infrastructure when it is designed, rather than waiting to retrofit or replace it

# Policy Options that Work

## Codes

- building energy codes
- appliance standards

## Targets

- building efficiency
- government procurement

## Awareness

- determine baseline, collect data
- competitions and awards
- voluntary and mandatory audits
- ratings and certification
- Energy use disclosure certificates
- public awareness campaigns

## Incentives

- grants and rebates
- risk mitigation guarantees
- revolving loan funds
- energy performance contracting
- tax incentives
- tax-lien financing

## Utilities

- utility public benefits fund
- on-bill financing
- revenue decoupling
- advanced metering infrastructure
- dynamic pricing of electricity
- demand response

## Capacity Building

- direct technical assistance
- workforce training

# Initial Focus Areas



- **Build Institutional Capacity** – Establish national government energy efficiency office responsible for meeting performance targets
- **Create Codes and Standards** -- Establish strong building energy codes and enforcement for all new construction; put in place strong appliance and equipment minimal energy standards
- **Low Income Weatherization** – provide energy efficiency services to those that cannot afford to make improvements
- **Municipal Action** – support the development of municipal capacity to address energy efficiency