

Overview of Links between NDCs and Building Energy Efficiency

Webinar
Linking Building Energy Efficiency and Nationally Determined Contributions (NDCs)
January 11, 2017

MEREDYDD EVANS

PACIFIC NORTHWEST NATIONAL LABORATORY



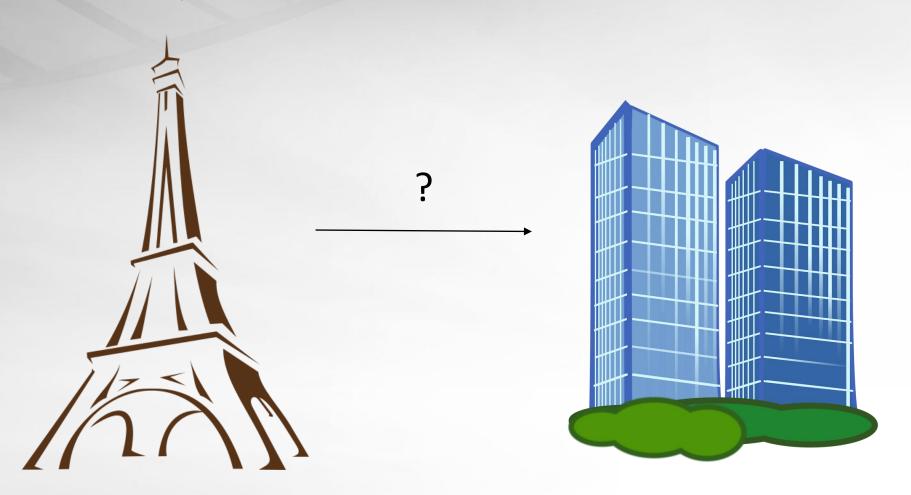
190 Parties accounting for ~97% of global emissions have submitted INDCs

Buildings account for ~1/3 of global final energy use and global emissions*



How to Link NDCs with Building Energy Efficiency







Investigation into How Buildings are Incorporated in NDCs

- We examined NDCs and tallied up the number of countries that mention building energy efficiency and building codes
- We also investigated NDC implementation plans (when available) to see how buildings are addressed and what strategies were used



NDCs and Buildings – The Numbers

53*	Number of NDCs that mention building efficiency (excluding EU)
38	Number of NDCs that reference building energy codes (excluding EU)
11	Number of NDCs that reference existing building policies and measures (excluding EU)
12	Number of countries that have an NDC implementation strategy (in past two years) Most countries have not fleshed out plans yet.
63%	Coverage of global building energy consumption of NDCs that mention building efficiency (excludes EU)

^{*6} additional countries mention building efficiency in their climate strategies



NDCs and Buildings – The Numbers

Countries with highest demand

Country	Building Energy Consumption* (Mtoe)	NDC Reference Building Energy Efficiency	NDC Reference Building Codes	NDC Implementation Strategy
United States	470.8	✓	✓	✓
China (PR of China and Hong Kong, China)	470.3	✓	✓	✓
India	203.4	✓	✓	
Russian Federation	137.7			
Japan	112.9	✓	✓	
Nigeria	95.8			
Germany	93.6	**	**	✓
France	66.6	**	**	✓
Indonesia	65.4			



octic

Strategies used for leveraging domestic policies on building energy efficiency

- Building energy codes for new and existing stock
- Energy efficiency resource standards
- Rating systems
- Renovation targets
- Energy consumption goals



Path Forward

- How to best link national and subnational
- How to best link environment with construction
- Other avenues for action
 - Public-private partnerships
 - Commitments from companies, industry, and professional organizations



Questions?

Meredydd Evans m.evans@pnnl.gov