







- **Policy:** To adopt and implement a building energy code.
- Project: To retrofit four public buildings, utilizing audits and benchmarking tools.





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Deep Dive Case Study: Mexico City

- September 2014 commitment from Mexico City gov't to:
 - Implement a building energy code
 - Retrofit public buildings
- Launch workshop for common vision March 2015
 - 100 multi-stakeholder participants including city government, federal government, businesses, finance, civil society and consulting
- Action plan underway: 4 workgroups chaired by Mexico City government staff and a local partner, managed by WRI Mexico
 - August 2015 technical workshop on building retrofits and finance
 - Recommendations on action by government and stakeholders delivered in October 2015; Actions announced at COP 21 in Dec.
 - Program implementation phase 1: January-December 2016

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- June: energy code adopted; Dec: 4 public building audits complete
- Phase 2 ongoing: code implementation capacity building, retrofitting, additional public buildings audits



Tanya Muller, Secretary of the Environment, discussing Mexico City's leadership actions



Mayor Mancera at COP21 Buildings Day





Mexico City, Mexico



Policy: Adopt and implement energy code for private buildings *Project:* Retrofit of 4+ municipal buildings

March - August 2015: Launch and technical workshops of local BEA partnership; working groups formed



Sept 2016: Bids requested on audits of 4 public buildings. Jan 2017: Audits on buildings completed.

- Launch of city-wide energy saving challenge for large buildings
- Training programs for implementation of building energy code.
- Refinement of funding model for public building retrofits

October 2015: Working group recommendations delivered to City



June 2016: Revised construction regulations adopted, referencing technical norm with energy code for first time TODAY

April 2017: Funds committed for retrofits of 4 buildings and audits of 15 additional buildings. Target set to audit 30% of city's 2400 municipal buildings..













Defining the Project & Policy

Define Project and Policy

City: Mexico City

Sector: Buildings

Action objectives: Create a more competitive, affordable and livable Mexico City through implementing improvements in building efficiency which reduce costs and pollution.

| | Policy | Project |
|---------------------|---|---|
| Impact type(s): | GHGs, local pollutants, energy savings | GHGs, local pollutants, energy savings, cost savings |
| Fuels assessed: | Electricity, Natural gas | Electricity |
| Type of Action: | Implementation of new building code | Retrofitting 4 public buildings |
| Geographic | citywide | 20% public buildings estimate |
| coverage: | | |
| Status of action | Implementation phase | Implementation phase |
| Implementing | Public Administration of the City of Mexico | SEDEMA |
| organization(s): | | |
| Implementation | 2018 – 10% compliance; 2019 – 30%; 2020 – 50% | 2018 |
| period: | compliance; 2022 and beyond – 80% compliance | |
| Assessment period: | 2018 to 2050 | 2018 to 2030 or longer |
| Type of assessment: | Ex-ante | Ex-ante |
| Action Description: | Decree amending, adding and repealing various | Using energy efficiency as a strategy to solve several of the |
| | provisions of the Federal District construction and | problems of energy consumption in public sector buildings |
| | building regulators | |





Defining the Assessment Boundary

Policy Effects

| Measures included | GHG Effects included in analysis | Not included |
|---|--|--|
| Solar water heating | Reduce GHG emission due to installing solar water heating | Increase/decrease GHG emissions from manufacturing activities Increase GHG emissions from installation activities Increase GHG emissions from rebound effects |
| Efficient heating/cooling improvements | Reduce GHG emissions due to heating/cooling efficiency improvements | Increase/decrease GHG emissions from manufacturing activities Increase GHG emissions from energy use for remodeling activities Increase GHG emissions from rebound effects |
| Efficient lighting | Reduce GHG emissions from reduced energy use due to efficiency improvements | Increase GHG emissions from disposal and recycling activities Increase GHG emissions form rebound effects Increase/decrease GHG emissions from manufacturing activities |
| Electric water pumps | Reduce GHG emissions from reduced energy use due to efficiency improvements from new pumps | Increase/decrease GHG emissions from manufacturing activities Increase GHG emissions from energy use for remodeling activities Increase GHG emissions from rebound effects |
| Project Effects | | |
| Measures included | GHG Effects included in analysis | Not included |
| Efficient appliances | Reduce GHG emissions from reduced consumption of grid- supplied energy for lighting and computing | Increase GHG emissions from rebound effects Increase GHG emissions from installation activities Increase GHG emissions from disposal and recycling activities |
| Install sensors | Reduce GHG emissions from reduced consumption of grid- supplied energy use due to use of motion sensors | Increase GHG emissions from rebound effects Increase/decrease GHG emissions from manufacturing activities Increase GHG emissions from installation activities Increase GHG emissions from disposal and recycling activities |





Methods and assessment

• Current phase: data collection and methodology selection

