










Energy Efficiency Plans for South Bay Cities



Working Group #3 Meeting
Task 3: Status Update & Community Electricity
Analysis
June 18, 2014

Presented by **ATKINS**

Update Schedule

	2014												2015							
	J Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	
0. Kickoff	 2/19: Introduction to the Project																			
1. Assessment and Planning			 4/16: Present A+P Report																	
2. EECAP Template																				
3. Inventories Forecasts, and Targets					 6/18 Status Update and Electricity Analysis				 8/20: IFT Findings and Measures Introduction											
4. Measures Report and Tool Framework									 10/15: Present Reduction Strategies Progress											
5. Draft EECAP and Tool													 2/18: Present Reduction Strategies Initial Findings	 4/15: Present Reduction Strategies Initial Findings						
6. Final EECAP and Tool																				
7. EECAP Adoption																		 6/18: Present Final Report and Tool	 8/20: Project Report and Wrap-up	

Task 1: Assessment + Planning Report

- Reports distributed to cities
- Comments received from 8 cities
- Request comments by June 20
- Final Reports will be provided with updated schedules in July

What does the City get?

- ✓ Provide input to process
- ✓ Work program timeline

Task 3: Inventories, Forecasts, and Targets

- Update 2005, 2007 inventories
- Add 2010 and 2012 inventories
- Forecast emissions in 2020 and 2035
- Identify reduction targets

Task 3: Data Collection

	Data Collection Responsibility		
Data	Atkins to obtain	COG to obtain	Cities to obtain
Community Data			
Demographics	X (SCAG; obtained)		X Cities to verify data
Electricity		X (Edison; obtained)	
Natural Gas		X	
VMT	X (SCAG; obtained)		
Water	X		City-owned water services: - El Segundo, Inglewood, Lomita, Manhattan Beach, Torrance
Solid Waste	X (CalRecycle online)		
Wastewater	X (obtained)		
Off-road Equipment	X (ARB OFFROAD model online; obtained)		

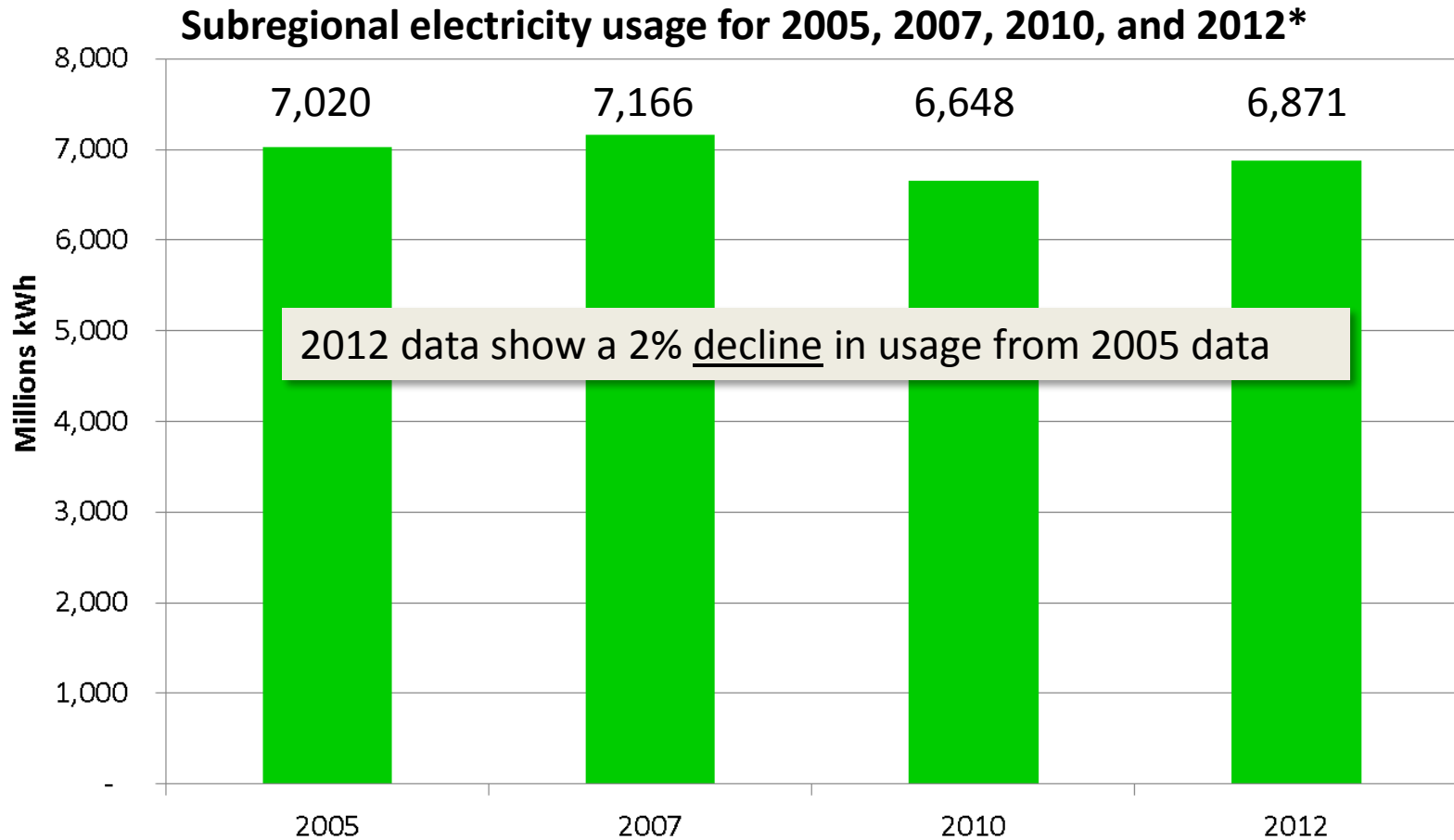
Task 3: Data Collection

	Data Collection Responsibility		
Data	Atkins to obtain	COG to obtain	Cities to obtain
Municipal Data			
Electricity		X (EEMIS; obtained)	
Natural Gas			X (SoCalGas; obtained)
Water			X (if possible)
Number of staff			X (in data request)
Employee commute			X
Solid Waste			X (in data request)
Stationary equipment			X (in data request)
Vehicle fleet			X (in data request)
Off-road equipment			X (in data request)

Task 3: Data Collection

- Data Collection Ongoing
 - Municipal: Request Municipal data by June 30
 - Community: Water Companies may contact city staff
- Anticipating Completion of Inventories in late Summer

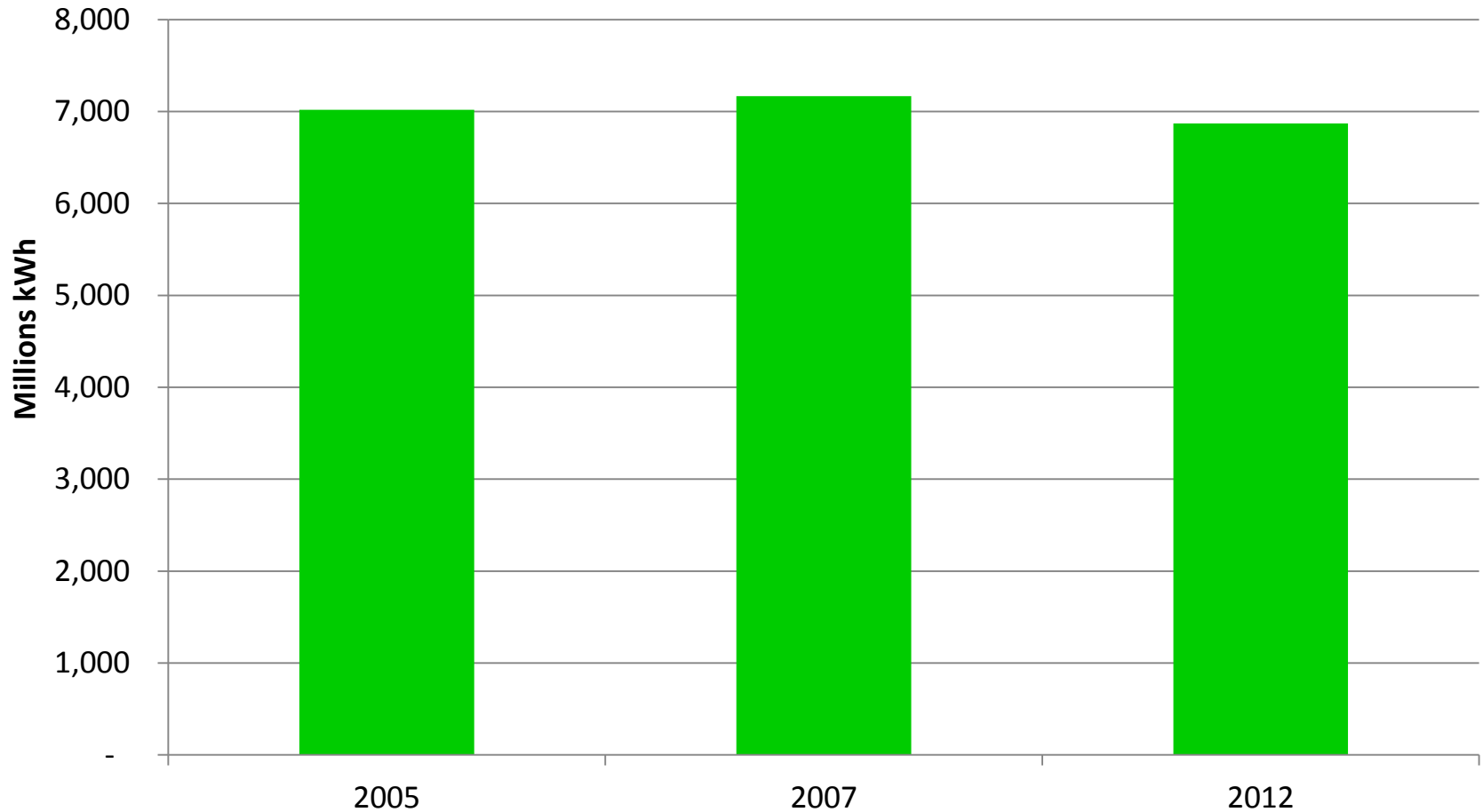
Task 3: Electricity Analysis



*Data are aggregated for 15 cities within the South Bay subregion and are preliminary.

Task 3: Electricity Analysis

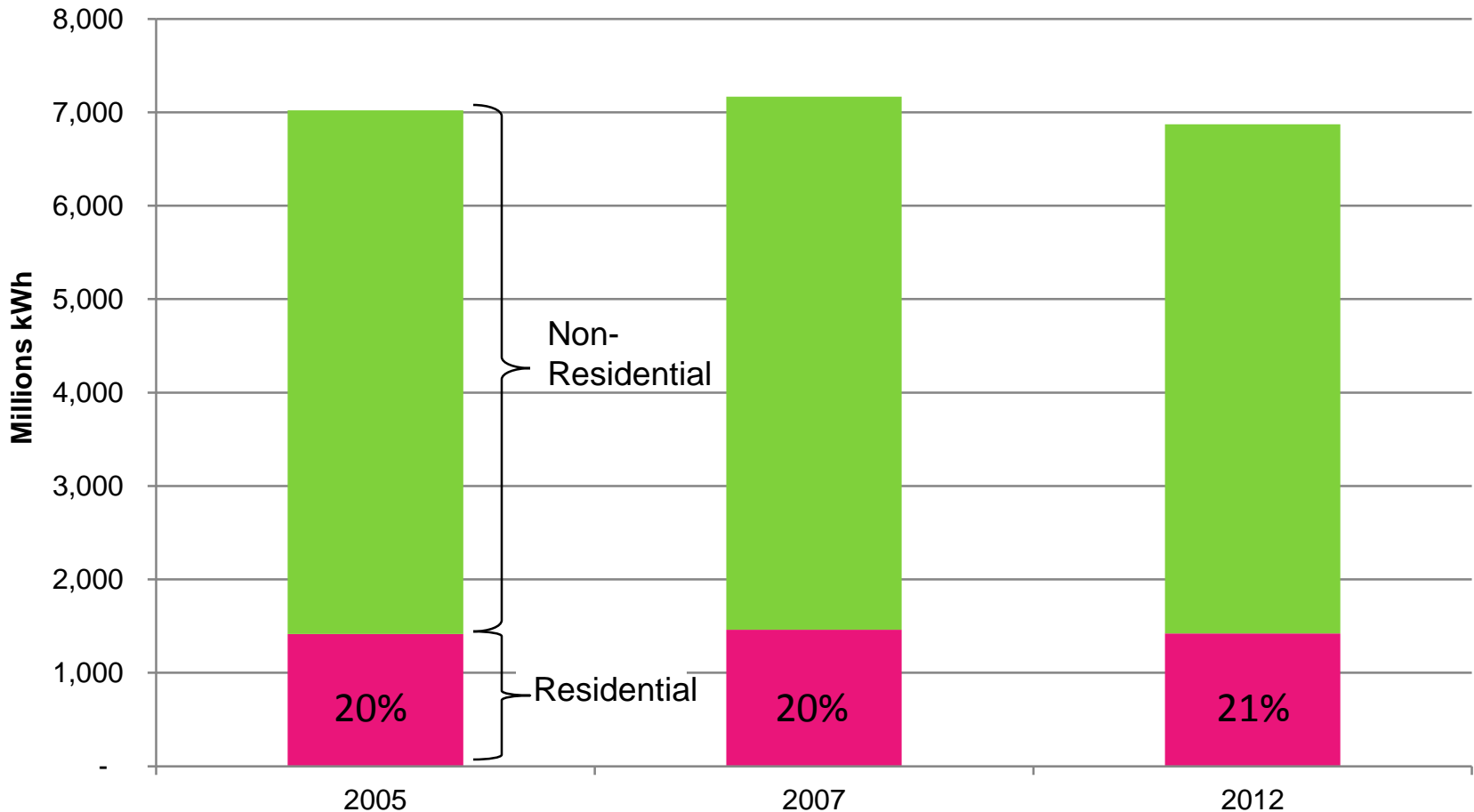
Subregional electricity usage for 2005, 2007, and 2012*



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Task 3: Electricity Analysis

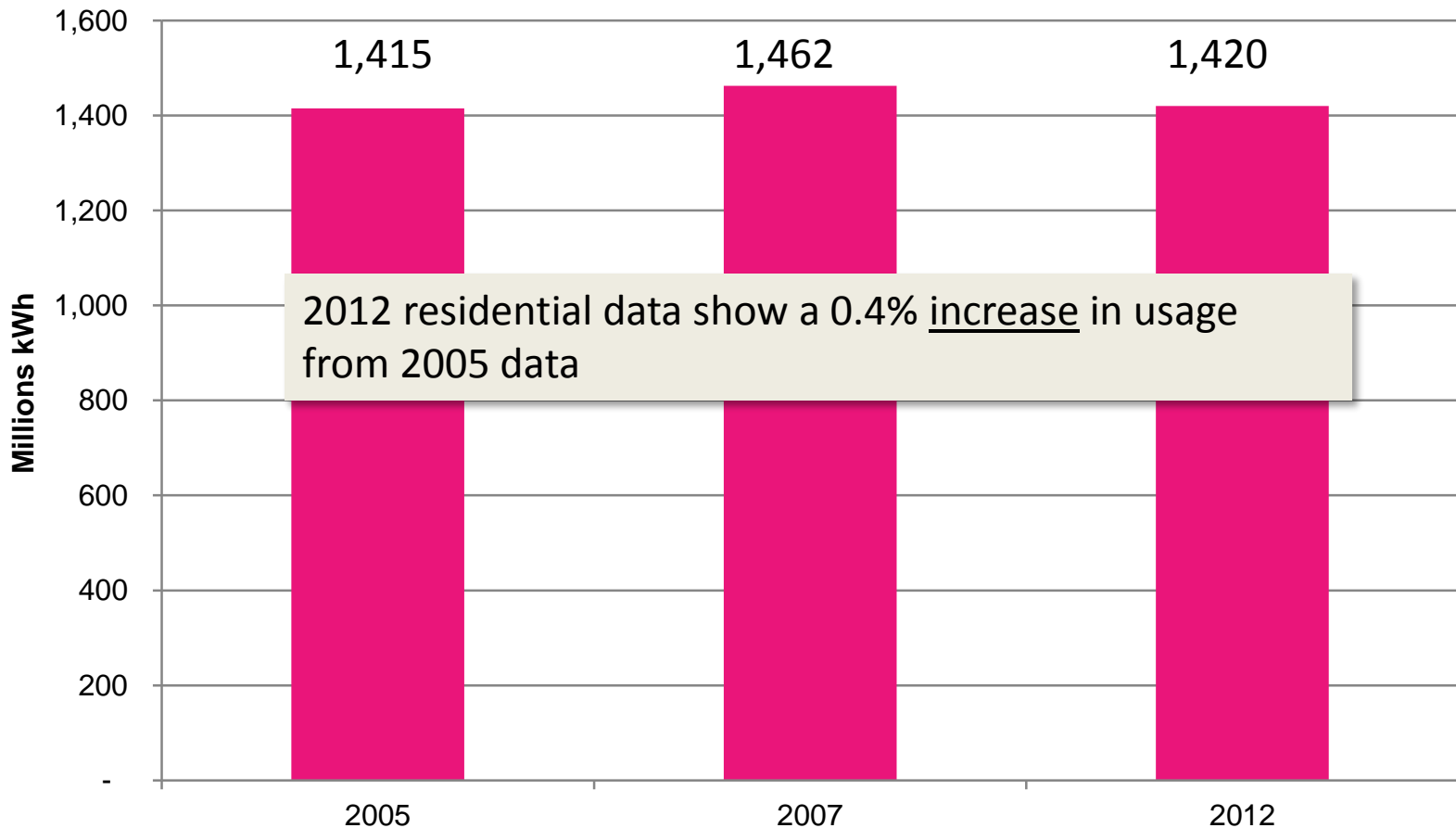
Subregional electricity usage for 2005, 2007, and 2012*



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Task 3: Electricity Analysis

Subregional residential electricity usage for 2005, 2007, and 2012*



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Example Residential Energy Efficiency Measures

Existing Development

Required Actions

- Point-of-Sale EE audit or retrofit ordinance

Incentivized Actions

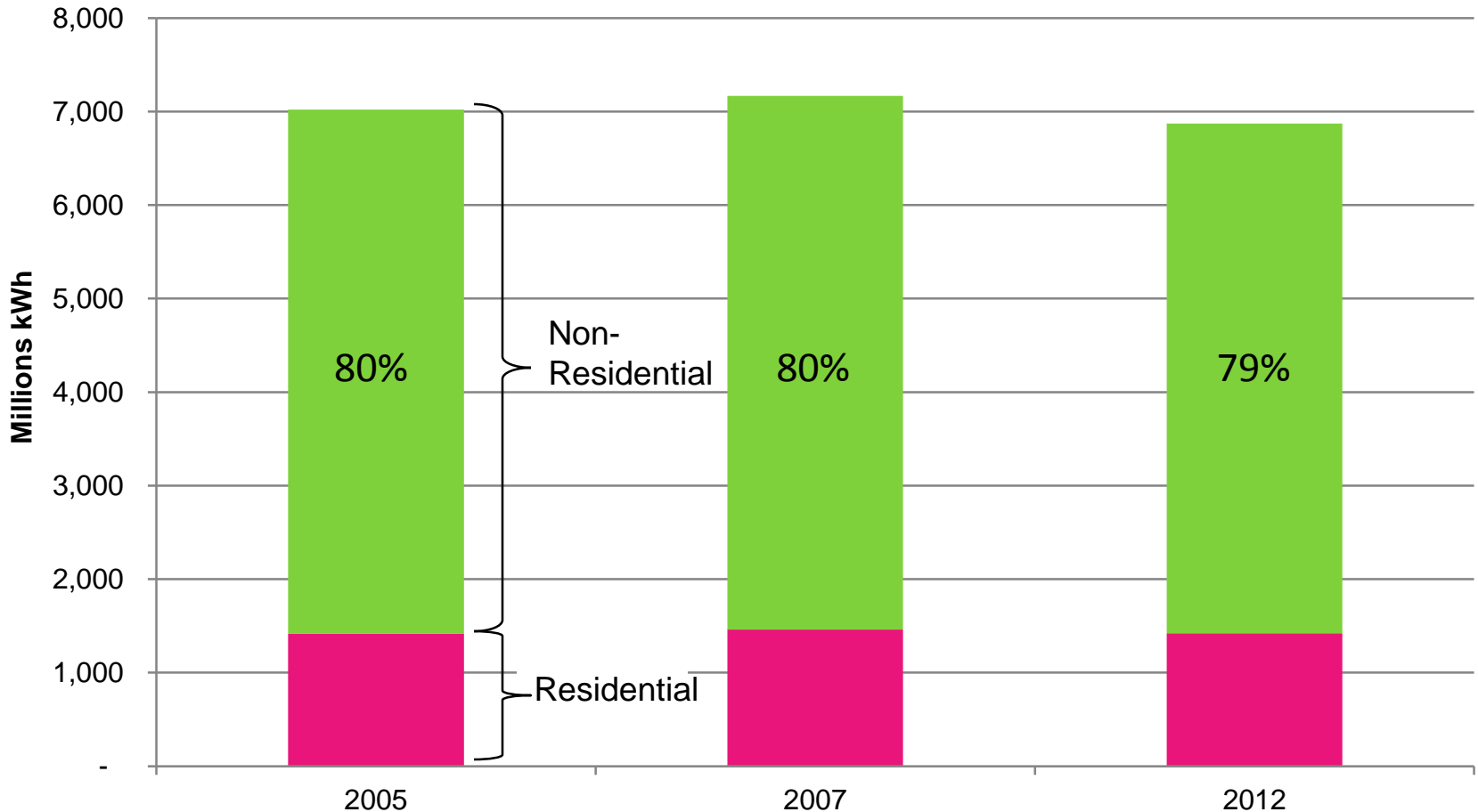
- Financing programs (HERO)
- Appliance trade-in
- Explore bulk purchasing of solar/EE equipment
- 0%-interest loans for low-income residents
- Direct install program for low-income residents
- Revise zoning to remove barriers for solar/EE

Education/Outreach

- Free In-home audits
- Outreach existing Edison programs
- Work with NGOs to provide better access to information
- Develop an App or centralized online resource / resource center with information

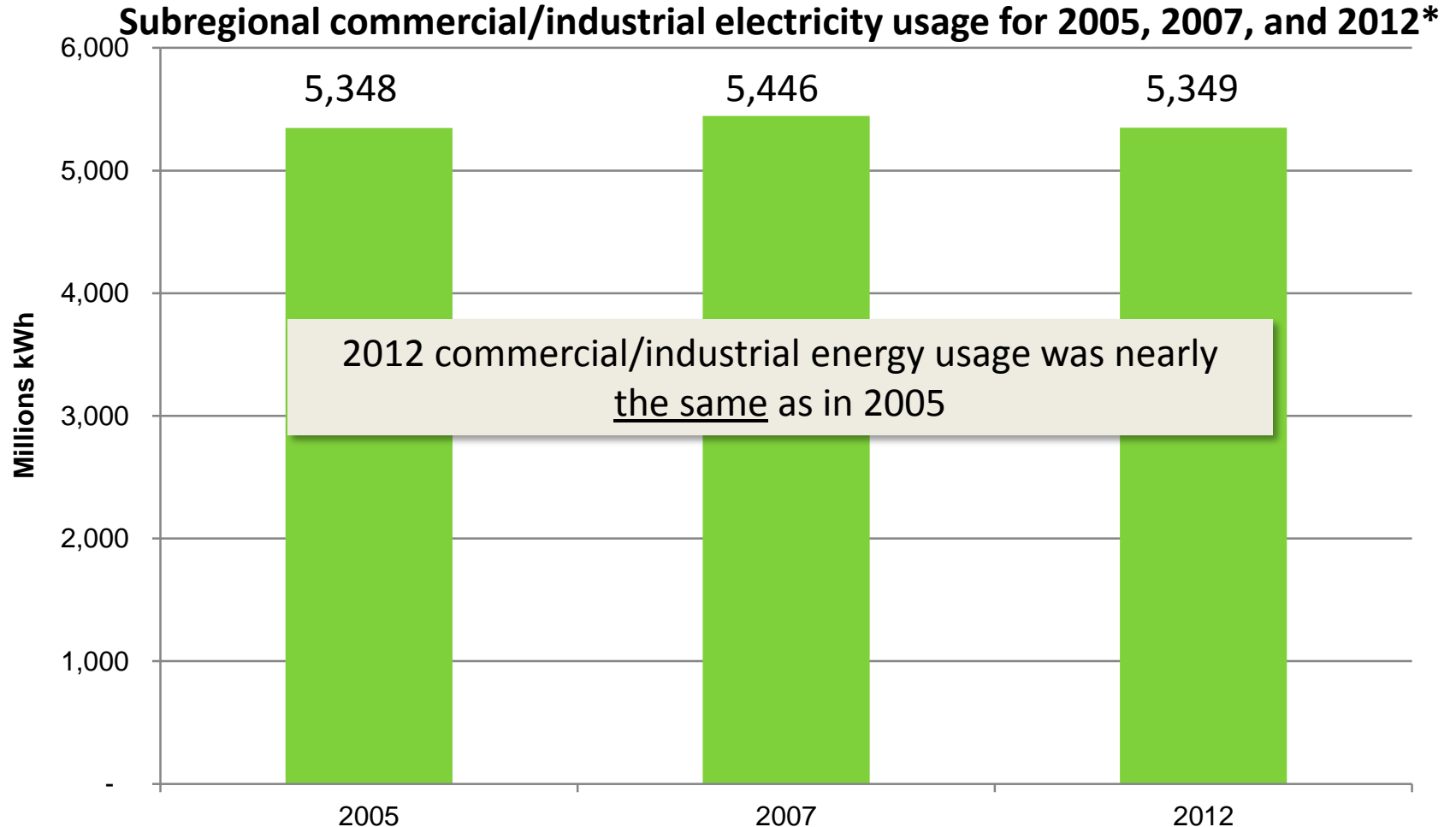
Task 3: Electricity Analysis

Subregional electricity usage for 2005, 2007, and 2012*



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Task 3: Electricity Analysis



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Example Commercial/Industrial Energy Efficiency Measures

Existing Development

Required Actions

- Required audits through business licensing
- Require renovations to exceed code standards
- Require reflective/cool roofs
- Require public energy benchmarking

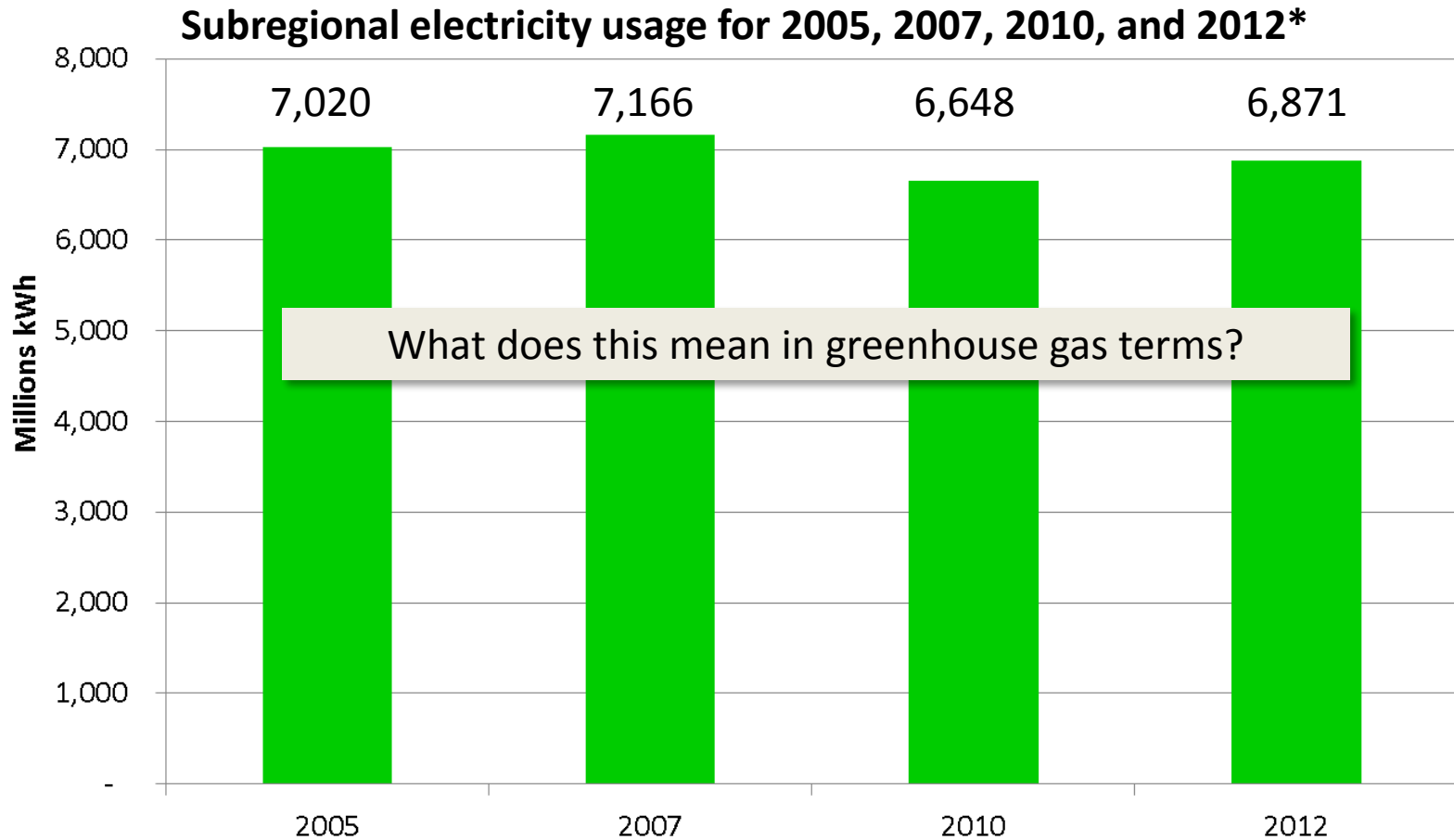
Incentivized Actions

- Financing programs (Figtree)
- Green Building Incentive Program
- Business tax credit for solar installations
- Explore bulk purchasing of solar/EE equipment
- Maintain reasonable fees for plan check of solar installations
- Revise zoning to remove barriers for solar/EE

Education/Outreach

- Voluntary audits
- Outreach existing Edison programs
- Work with NGOs to provide better access to information
- Develop an App or centralized online resource / resource center with information

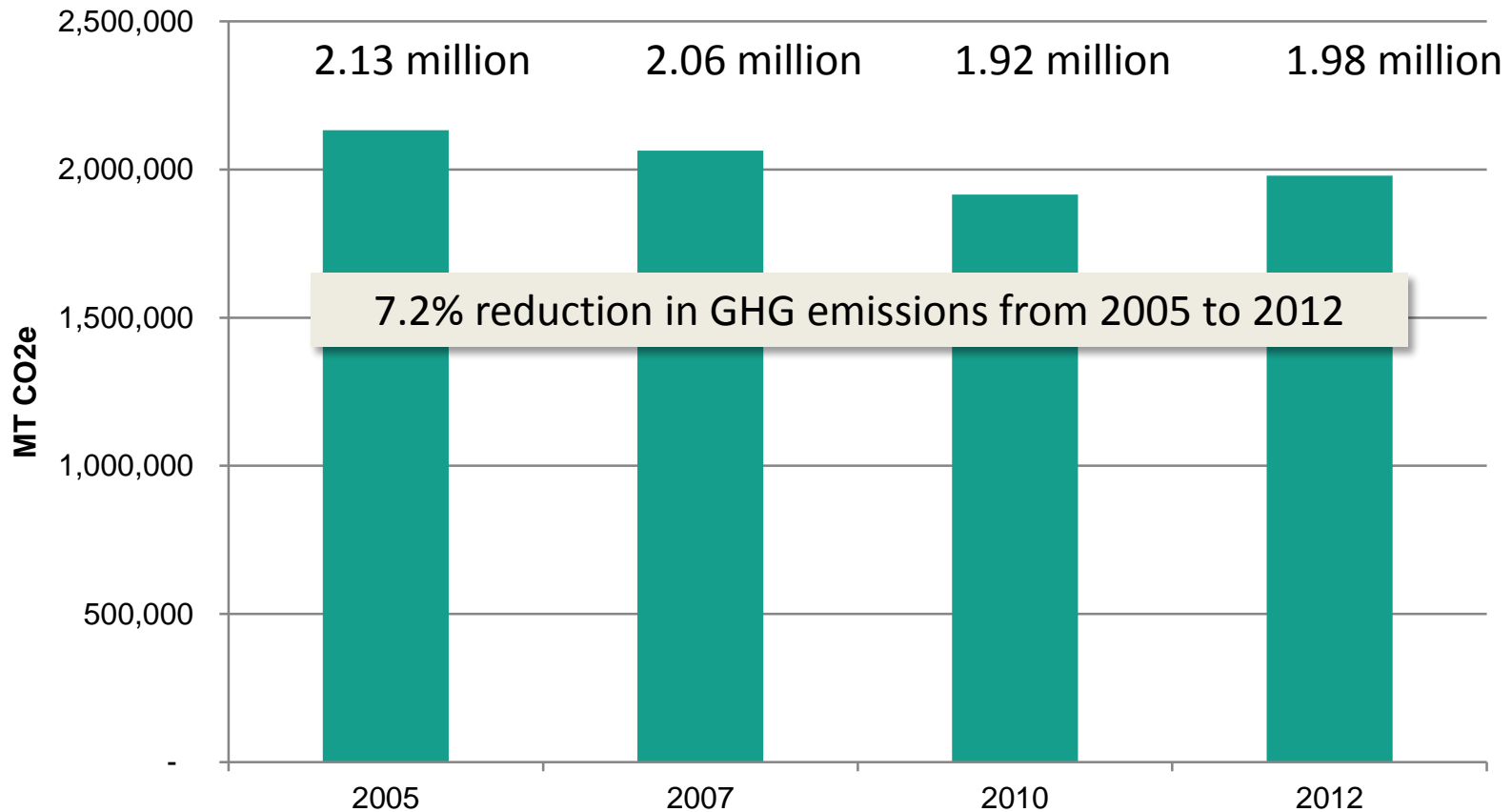
Task 3: Electricity Analysis



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Task 3: GHG Analysis of Electricity

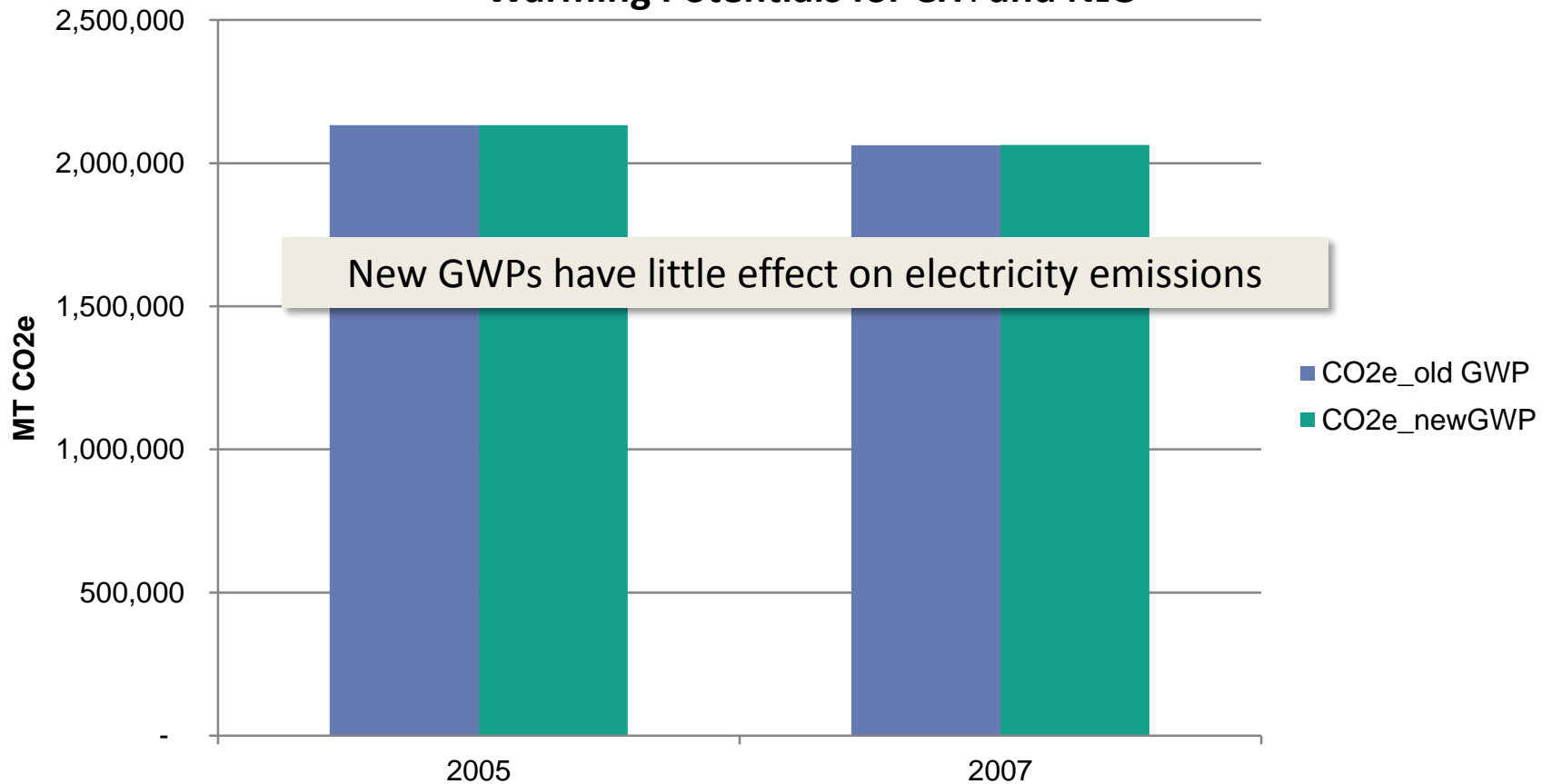
Subregional GHG emissions from the electricity sector for 2005, 2007, 2010, and 2012*



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Task 3: Change in GWPs

GHG emissions comparison with previous and revised Global Warming Potentials for CH₄ and N₂O*

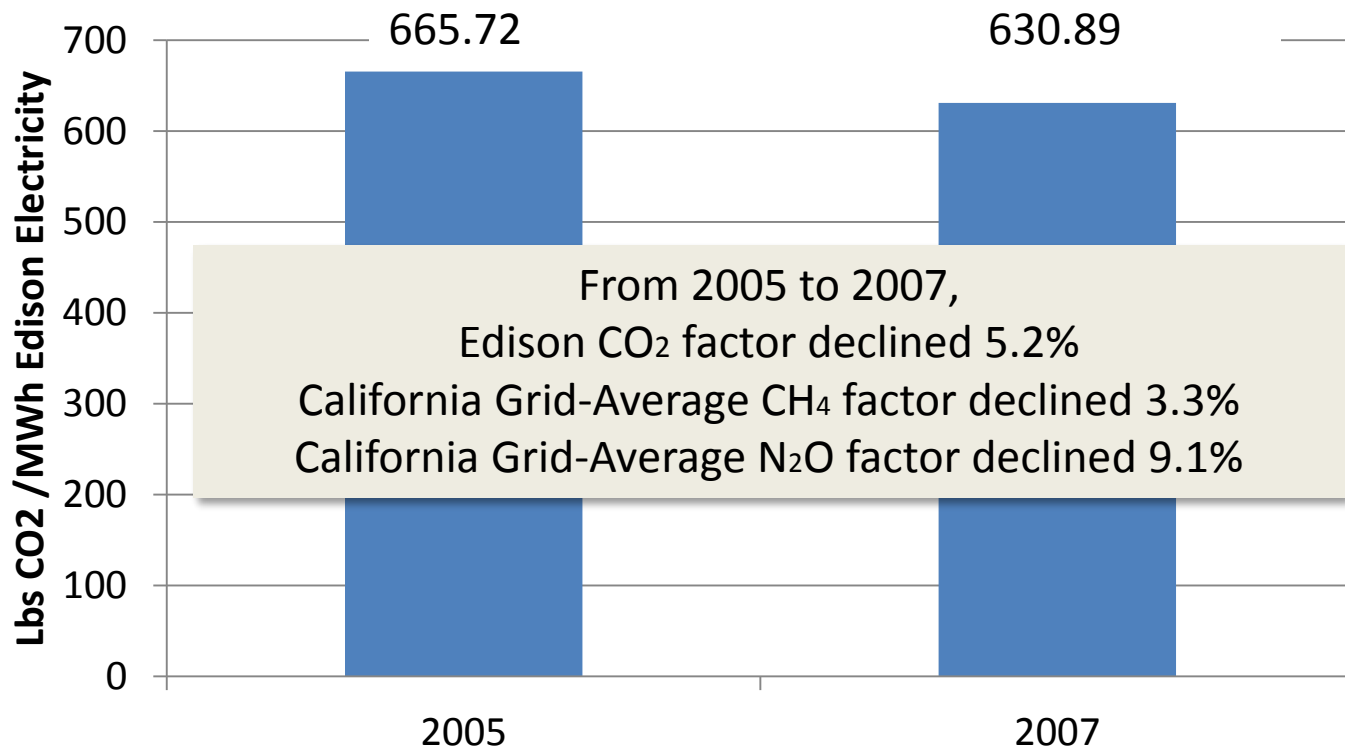


New GWPs have little effect on electricity emissions

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Task 3: Change in Emission Factors

Carbon Dioxide emission factors used for electricity-sector GHG emissions*



*Data are aggregated for 15 cities within the South Bay subregion and are preliminary. Emission factors are not available past 2007 for Southern California Edison.

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