

CDM for the urban sector: updates on simplification and standardization

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“Mitigation in the building sector”
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Mandate and Goal

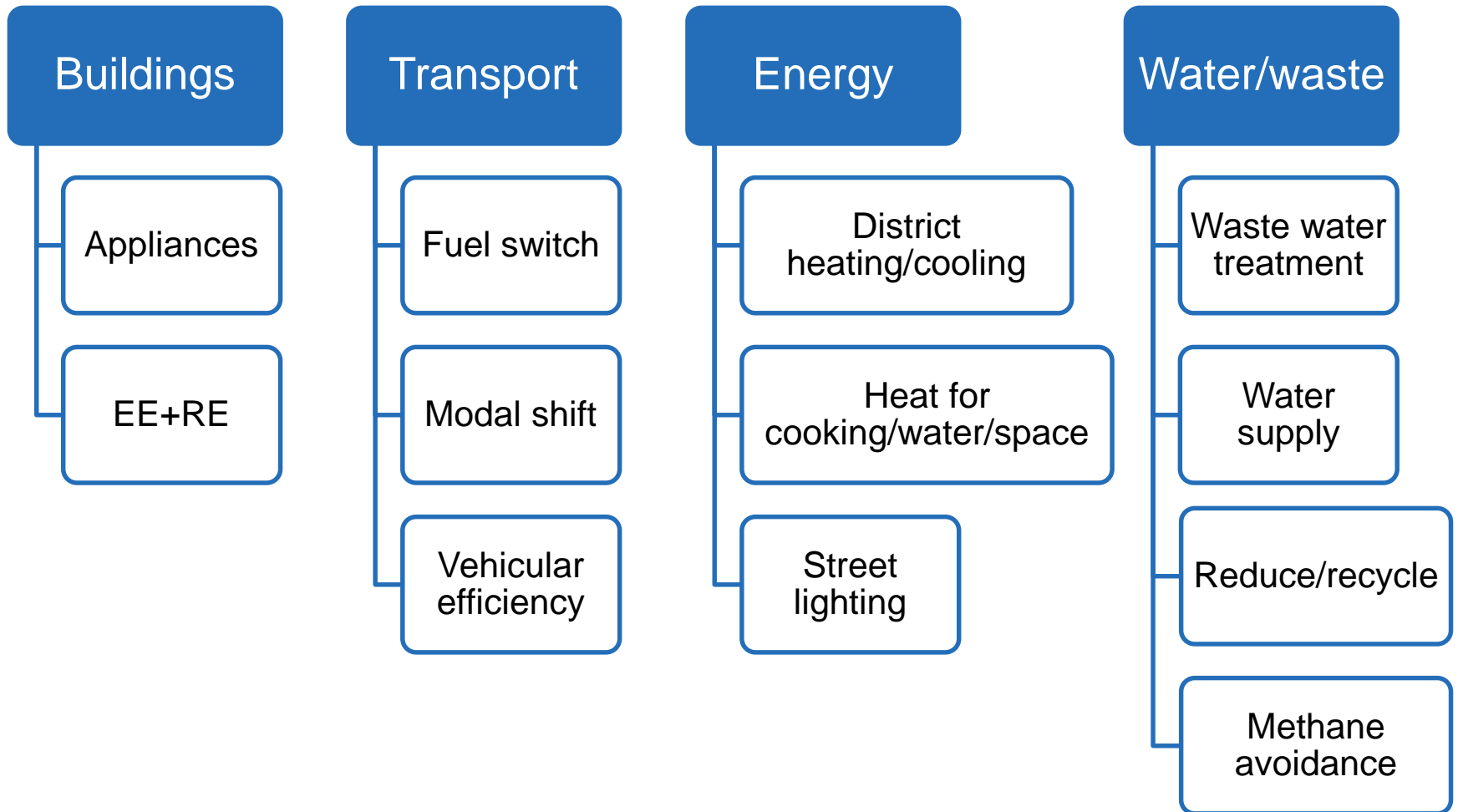
CDM EB tasked development of:

Guidelines for 'CDM project activities and PoAs in the urban context'

- Enabling multiple measures/technologies under one PoA
- Standardized and simplify parameters for reduced transaction costs
- Provide innovative approaches for additionality demonstration



Scope of the Guidelines



Content of the Guidelines

Baseline setting and MRV

- Methodologies
- Tools

Interactive effects/double counting

- Analysis of real cases
- EB guidance

Additionality demonstration

- Sectoral benchmarks – penetration of technology, energy intensity, etc.
- City-wide benchmark – tCO₂/capita

Example

- Sample PoA-DD
- Focus on buildings



Content of the Guidelines

Possible Standardization of parameters

- Standardized baselines (buildings, appliances, transport, grid emission factors)
- Excellence in Design for Greater Efficiency (EDGE) by IFC
- Climate Action for Urban Sustainability (The CURB tool)
- The Tool for Rapid Assessment of City Energy (TRACE)



New standardized frameworks. RAC

Coverage

- SB for electricity consumption
- SB for refrigerant emissions

Data source

- Standards and labelling database
- Commercial marketing data
- Manufacturers (industry) data

Aggregation

- Entire market
- Segment of the market



New standardized frameworks. RAC

Refrigerator new sales

- Annual electricity consumption of BL refrigerators
- Specific annual electricity consumption (SEC)
- Energy Efficiency Index (EEI)

Air conditioner new sales

- Energy Efficiency Ratio (EER)
- Seasonal Energy Efficiency Ratio (SEER)

Refrigerator replacement

- Refrigerators testing at the recycling facility
- Name plate data
- Average specific electricity consumption of replaced refrigerators



Road Testing. Refrigerators in Ghana

- 2440 models of refrigerators and 5000 refrigerators in recycling facility
- 90th percentile would be a rigorous baseline (equivalent to EU class A++)

Threshold of models in sale in shops	number of models in sale below threshold	EEI	SEC	SEC thresholds for six volume classes		
90 th percentile	244	28.11	0.75	1.28	1.11	0.81
				0.69	0.66	0.63
80 th percentile	488	30.57	1.00	1.70	1.48	1.08
				0.92	0.88	0.84
Top 40%	960	42	1.5	2.55	2.22	1.62
				1.38	1.32	1.26



New standardized frameworks. Buildings

Possible sources of benchmarks

- Building codes
- Labelling energy efficient buildings
- ISO 8995: for minimum lighting requirements
- ASHRAE 55-2010: for temperature comfort levels
- Common Carbon Metrics



New standardized frameworks. Buildings

Challenges

- Coverage: one city - one SBL
- Aggregation based on type of buildings
- Data collection
- Occupancy rate

Standardized parameter

- kWh/(m².year)
- kWh/(m².person.year)
- kWh/(person.year)



THANKS

