

Greenhouse Gas Inventory Metrics

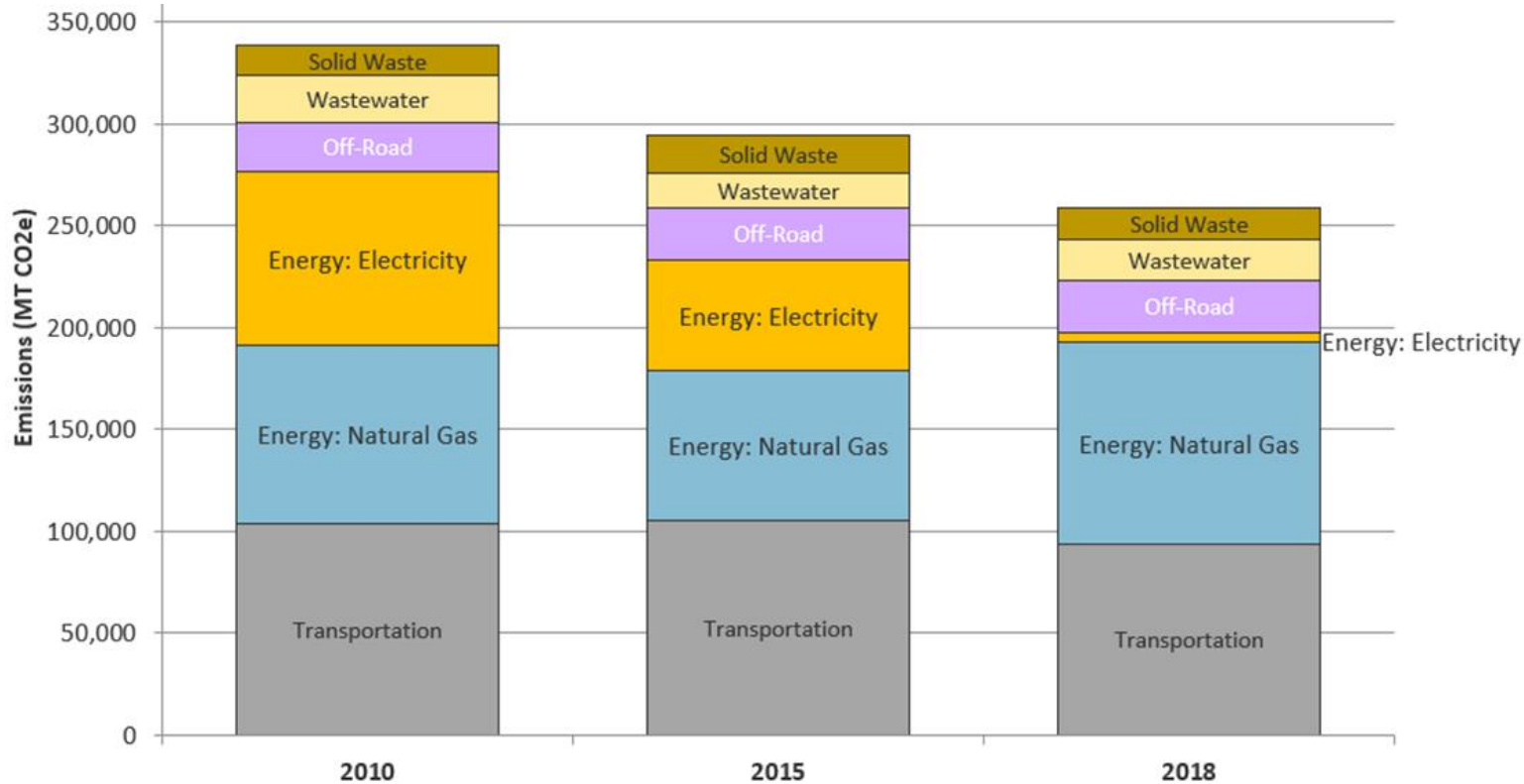
Sustainability Commission

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June 18, 2020



Greenhouse gas emissions citywide



Common Reporting Framework

Table 1. GCoM categorisation of emission sources

Sectors and sub-sectors	Included?		Note	IPCC ref. no.
	Direct emissions	Indirect emissions		
Stationary energy				
Residential buildings	Required	Required	This covers emissions from fuel combustion and use of grid-supplied energy by buildings, equipment and facilities within city boundary (including transportation and waste facilities), as well as fugitive emissions from production, transformation and distribution of fuels. Emissions from sources covered by a regional or national emissions trading system should be identified and described. See section 3.6.1 for detailed guidance and requirements.	1A4b
Commercial building and facilities	Required	Required		1A4a
Institutional buildings and facilities	Required	Required		1A4a
Industrial buildings and facilities	Required	Required		1A1, 1A2
Agriculture	Required	Required		1A4c
Fugitive emissions	Required			1B1, 1B2
Transportation				
On-road	Required	Required	This covers emissions from fuel combustion and use of grid-supplied energy for all modes of transportation activities within city boundary (for waterborne and aviation, cities only need to report journeys fully confined within the city boundary). On-road and rail travel should additionally be disaggregated by municipal fleet, public transport, private and commercial transport. See section 3.6.2 for detailed guidance and requirements.	1A3b
Rail	Required	Required		1A3c
Waterborne navigation	Required	Required		1A3d
Aviation	Required	Required		1A3a
Off-road	Required	Required		1A3e
Waste				
Solid waste disposal	Required		This covers non-energy related emissions from disposal and treatment of waste (incl. wastewater) generated within the city boundary, as a result of aerobic or anaerobic decomposition of waste, or incineration. Emissions from waste-to-energy, where waste/wastewater material is used directly as fuel or converted into a fuel, should captured under the Stationary Energy sector. See section 3.6.3 for detailed guidance and requirements.	4A
Biological treatment	Required			4B
Incineration and open burning	Required			4C
Wastewater treatment and discharge	Required			4D
Industrial Process and Product Use (IPPU)				
Industrial Process	Optional		This covers non-energy related emissions from industrial processes, the use of certain products and non-energy use of fossil fuels. See section 3.6.4 for detailed guidance and requirements.	2A, 2B, 2C, 2E
Product Use	Optional			2D, 2F, 2G, 2H
Agriculture, Forestry and Other Land Use (AFOLU)				
Livestock	Optional		This covers non-energy related emissions produced in the digestive processes of livestock and emissions/removals as a result of land use and management. See section 3.6.5 for detailed guidance and requirements.	3A
Land use	Optional			3B
Other AFOLU	Optional			3C, 3D
Energy Generation				
Electricity-only generation	Required		This means disclosure of information on activity and emissions specifically related to energy generation within the city boundary or outside the boundary but can be controlled or influenced by the city. It is for information only and not added to the total emissions.	1A1
CHP generation	Required			
Heat/cold generation	Required			
Local renewable generation	Optional	Optional		

- Global Covenant of Mayors
- **Every 2 years**
- Energy, transportation, waste
- Carbon dioxide, Methane, Nitrous oxide

Energy Data Gaps (15/15 Rule)

2014 CPUC issued D14-05-016

- Triggers:
 - <15 customers
 - >15% of total consumption
- Issues:
 - Data aggregated or omitted
 - Multiple years affected
 - Gaps: **nonresidential** usage (natural gas and electricity)
- Solutions:
 - 2018 Inventory: combined SVCE & PG&E data sources
 - SVCE working on options (i.e. request rule modification, protocol for sharing data with cities)

Spotlight on: Direct Access electricity

Carbon content varies by electricity source	
Source	Emissions Factor (pounds CO2 per MWh)
Statewide avg. (2016)	518
PG&E (2018)	206
SVCE (2018)	4

- Info needed: **kWh** (usage) and **Emissions Factor** (carbon content)
- Data gaps for multiple years due to 15/15 Rule
- Apple development agreement requires disclosure of GHG emissions, energy produced and consumed

Sustainability Division

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CUPERTINO

Staff update on single use plastics outreach and FY 2020-21 City Work Program item on single use plastics policy

- Ordinance postponed until 21-22 (COVID)
- Draft model ordinance language exists
- Adding info piece to outdoor dining special permit process (reusables safe)
- Interested to begin engagement with stakeholders in meantime
- “Single use plastics” vs “Non-reusables”