



# CITY OF LOS ANGELES 2018 COMMUNITY GREENHOUSE GAS EMISSIONS INVENTORY

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### Progress Toward Our Goals

As of 2018, Los Angeles has reduced its community-wide greenhouse gas (GHG) emissions by 24% compared to its 1990 baseline. This puts us on track for our interim target of a 50% reduction by 2025 and overall goal of carbon neutrality by 2050. The stationary energy sector (i.e., emissions associated with fuel consumption, including electricity and natural gas use, at residential, commercial, and industrial facilities) accounts for the majority of emissions, but is also the sector that has seen the largest reduction in emissions. Overall, GHG reductions come as a result of the wide array of sustainability programs and policies enacted by the City of Los Angeles to tackle the climate emergency, such as expanding our renewable energy portfolio, installing public EV chargers, and improving access to recycling services.

FIGURE 1. Emissions Progress Compared to Targets

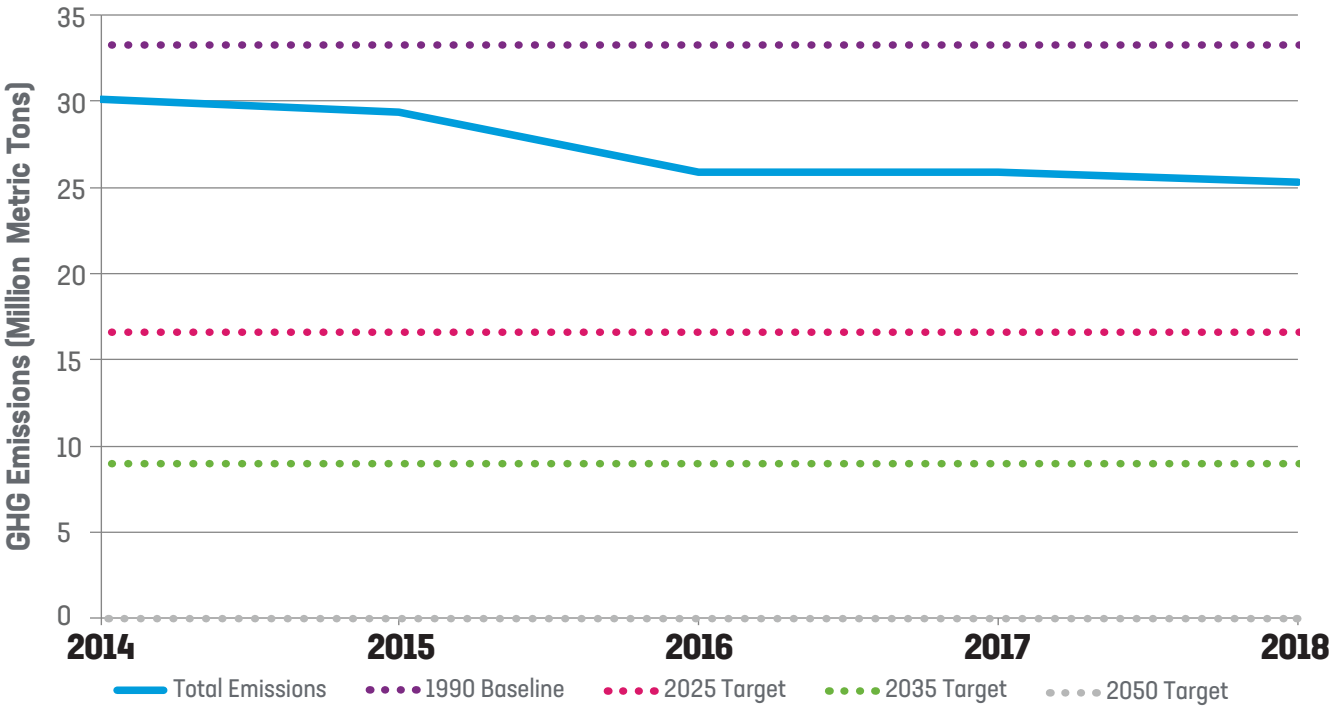


TABLE 1. Emissions by Sector (Million Metric Tons CO<sub>2</sub>e)\*

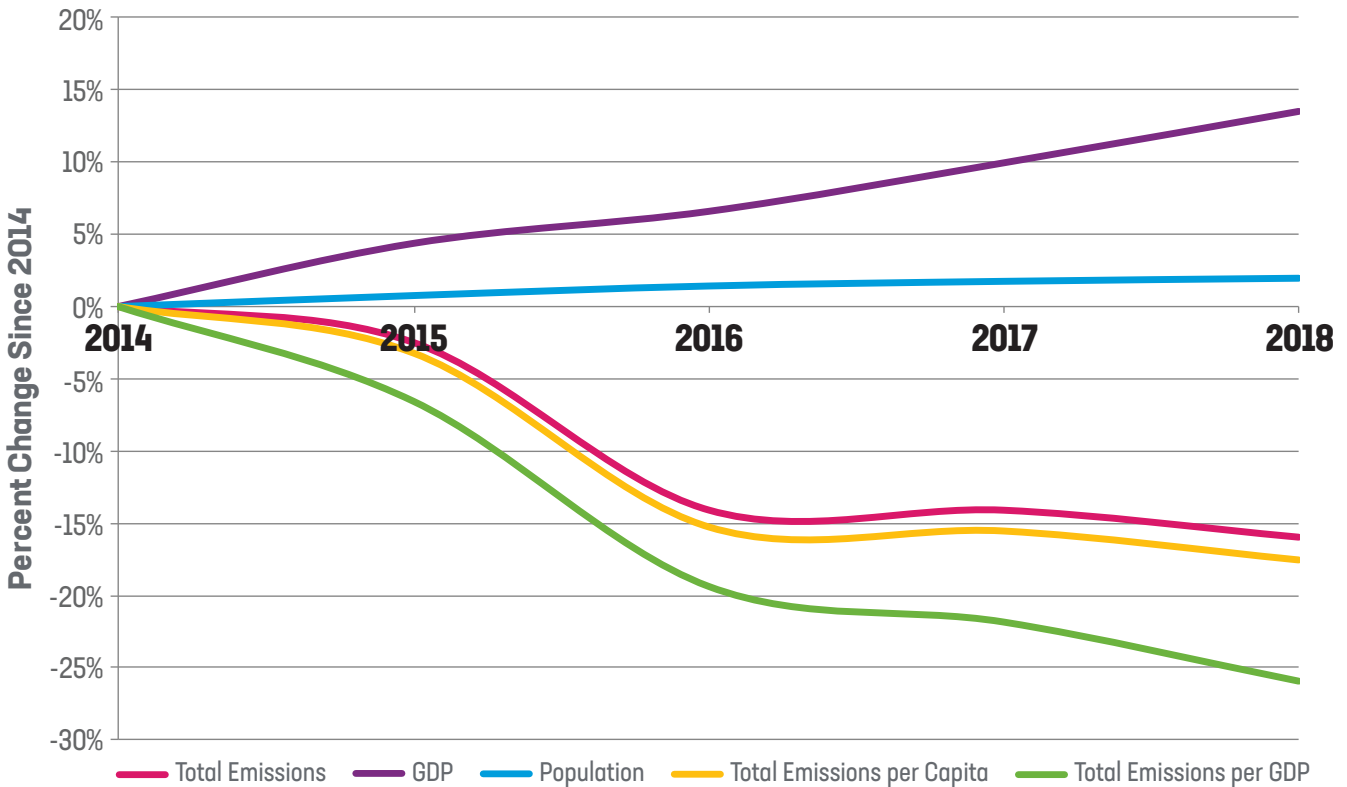
Source	1990	2014	2015	2016	2017	2018	1990-2018 Percent Change
Stationary Energy	25.65	23.72	22.93	19.46	19.45	18.92	-26%
Transportation	6.27	5.17	5.14	5.06	4.98	4.91	-22%
Waste	1.32	1.21	1.29	1.35	1.43	1.47	11%
Total Emissions	33.24	30.10	29.36	25.87	25.86	25.30	-24%

\*This table provides emissions covered under the Global Protocol for Community-Scale Emissions BASIC reporting level. BASIC generally covers emission sectors that the City can influence significantly through policies and programs. BASIC emissions are used to track the City's progress towards its carbon neutrality goals. BASIC+ includes additional scope and sectors that the City has little direct influence or control over.

### A Green Economy

The City of Los Angeles is a global leader in climate action and is committed to establishing programs and policies that will reduce Los Angeles' carbon footprint. With the release of the first Sustainable City pLAN in 2015 and LA's Green New Deal in 2019, Los Angeles has identified a path toward carbon neutrality that does not compromise economic growth. Between 2014 and 2018, emissions decreased as the economy grew, demonstrating successful decoupling of emissions and economic growth.

FIGURE 2. Growth vs. Emissions







## Climate Action in Los Angeles

Climate change is a global issue that demands local action, and the City of Los Angeles is taking aggressive measures to reduce greenhouse gas (GHG) emissions and combat further climate impacts. As the lead agency for the City’s environmental programs and initiatives, LA Sanitation and Environment (LASAN) is a critical partner in Los Angeles’ fight against climate change.

LASAN believes that effective climate action requires a concrete understanding of Los Angeles’ GHG emissions, drivers, and trends to inform a dynamic and data-driven response to climate change. LASAN’s annual, comprehensive community GHG inventories are an essential component to developing that understanding. With these inventories, LASAN provides policymakers, departments, and the public with data to understand Los Angeles’ carbon footprint, implement action, and track progress toward our climate goals. As a reflection of its commitment, the City of Los Angeles is now the first city in the United States to publish annual greenhouse gas emissions inventories consistent with the United Nations Framework Convention on Climate Change (UNFCCC) National Reporting Guidelines.

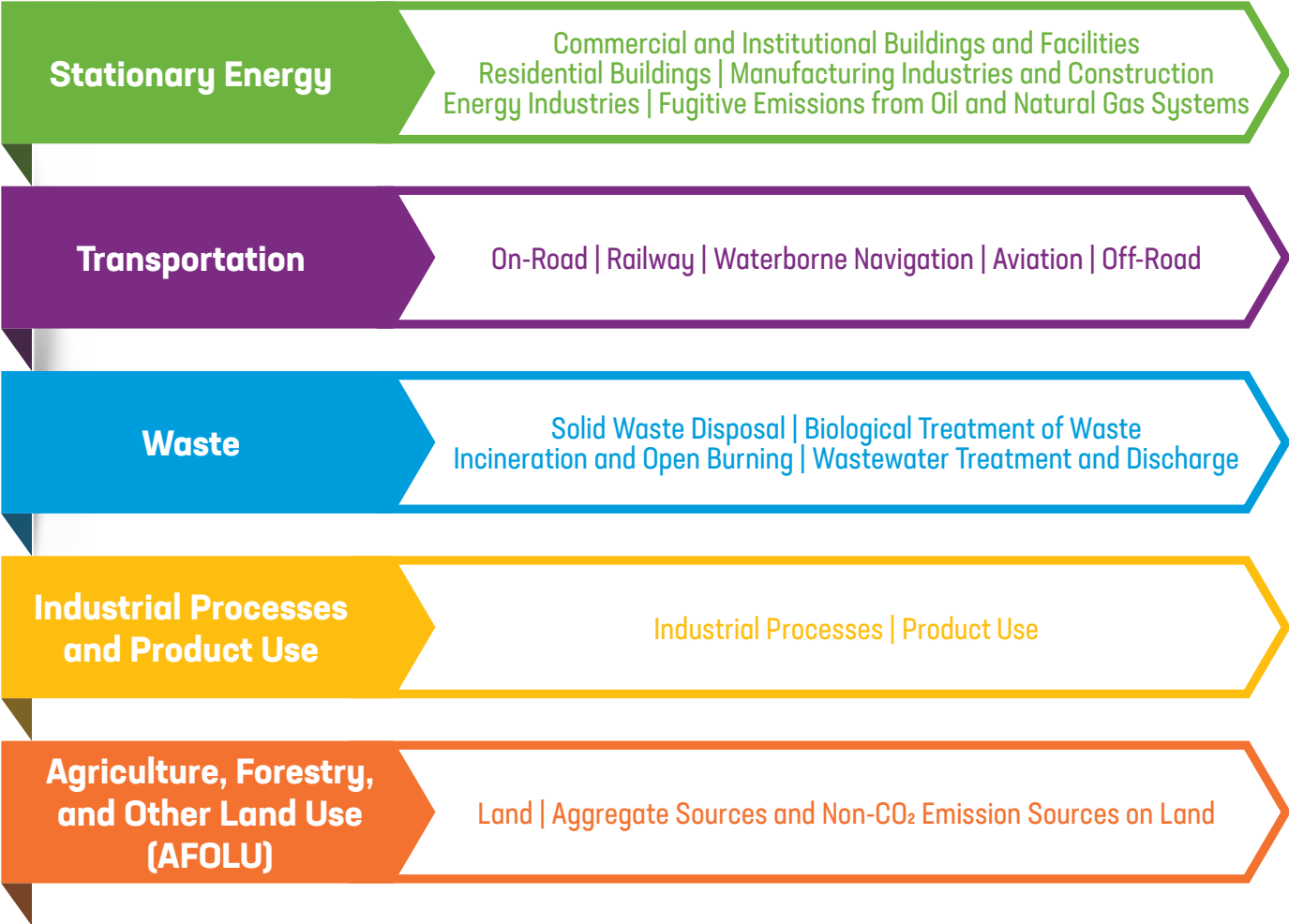
## Tracking and Quantifying Emissions

This report presents an overview of Los Angeles’ 2018 community GHG emissions and the progress we have made in reducing emissions compared to our 1990 baseline emissions. These emissions are quantified in accordance with the Global Protocol for Community-Scale Greenhouse Gas Emissions (GPC), which is used by municipalities and local governments around the world. Emissions are separated into five overarching sectors, which are further divided into subsectors.

GPC outlines two reporting levels, BASIC and BASIC+. BASIC categories generally cover emission sectors that the City can influence through policies and programs, such as the stationary energy and waste sectors. BASIC+ is more comprehensive and includes additional sources that paint a more holistic picture of emissions occurring within Los Angeles. However, the City has little direct influence or control over these additional sources. For example, commercial aviation, which is only included in BASIC+, is solely regulated by the Federal Aviation Administration (FAA). This report includes both BASIC and BASIC+ emissions. BASIC emissions are used to track progress toward the goals and targets outlined in LA’s Green New Deal. All figures and analyses refer to BASIC values, unless noted.

### EMISSION SECTORS

### SUBSECTORS



**TABLE 2.** Greenhouse Gas Global Warming Potential (GWP) Factors

Greenhouse Gas	Global Warming Potential*
CO <sub>2</sub>	1
CH <sub>4</sub>	25
N <sub>2</sub> O	298
HFCs	124-14,800
PFCs	7,390-12,200

\*100-year time horizon. This report uses GWP factors from the Intergovernmental Panel on Climate Change’s (IPCC) Fourth Assessment Report (AR4), consistent with those used to develop the City’s municipal inventory, California’s state-wide inventory, as well as national inventories submitted to the United Nations Framework Convention on Climate Change (UNFCCC).

This inventory estimates and tracks emissions of five GHGs: carbon dioxide (CO<sub>2</sub>), methane (CH<sub>4</sub>), nitrous oxide (N<sub>2</sub>O), hydrofluorocarbons (HFCs) and perfluorocarbons (PFCs). Each GHG has a global warming potential (GWP), which is the ratio of its heat-trapping ability relative to that of CO<sub>2</sub>. Using their GWPs, emissions of each GHG are converted to units of CO<sub>2</sub> equivalents (CO<sub>2</sub>e) to allow for a consistent comparison. The data in this report is presented in metric tons of CO<sub>2</sub>e (MT CO<sub>2</sub>e).





# BASIC VS. BASIC+

Activities that occur within Los Angeles are generating emissions inside and outside the City boundary. The GPC groups emissions into three scopes based on where they occur (Table 3).

The GPC has two levels for reporting community GHG inventories. The BASIC level covers all Scope 1 and 2 emissions from the stationary energy and transportation sectors, as well as Scope 1 and 3 emissions from the waste sector. BASIC+ includes all BASIC emissions plus Scope 3 stationary energy and transportation emissions. BASIC+ also includes Scope 1 emissions from two additional sectors: Agriculture, Forestry, and Other Land Use (AFOLU) and Industrial Processes and Product Use (IPPU).

Emissions covered in the BASIC reporting level include sources in the community that the City either has authority over or can influence through its various programs, policies, and initiatives. Examples of these emission sources include landfilled waste and electricity generation. The BASIC+ reporting level includes all sources covered by BASIC, as well as activities not directly under the City's influence. This broader accounting of emissions provides a more holistic understanding of Los Angeles' emissions. For example, some additional sources accounted for in BASIC+ include international shipping emissions associated with the Port of Los Angeles and aviation emissions associated with Los Angeles International Airport (LAX). These emission sources are solely regulated by the federal government.

TABLE 3. Emission Scopes

Scope	Definition
Scope 1	Emissions from sources physically located within the City boundary.
Scope 2	Emissions from utility-supplied electricity, heat, and steam within the City boundary.
Scope 3	All other GHG emissions that occur outside the city boundary as a result of activities taking place within the City boundary.

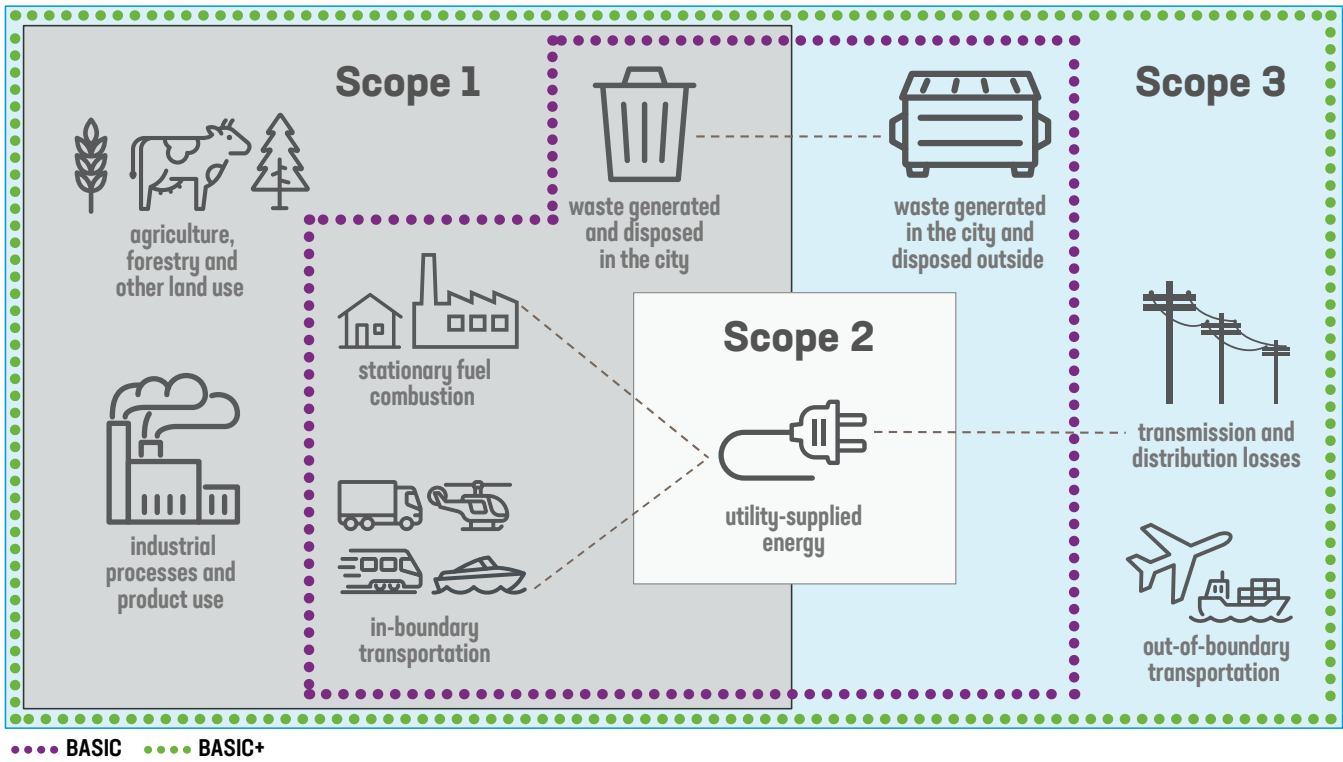
TABLE 4. Scopes Covered by GPC

Sector	Scope		
	1	2	3
Stationary Energy			
Transportation			
Waste			
AFOLU			
IPPU			

BASIC  
BASIC+  
Non-applicable

This report provides both BASIC and BASIC+ emissions totals. The City uses the BASIC values to track progress toward the carbon neutrality goals outlined in LA's Green New Deal. BASIC+ values, however, provide us with a more comprehensive understanding of emissions associated with Los Angeles. The majority of emissions added for BASIC+ are from transportation activities that are induced by Los Angeles, but cross the City's geographic boundary. Because these activities extend beyond the City's border, the City does not have significant influence over them.

FIGURE 3. Sources Included in BASIC and BASIC+





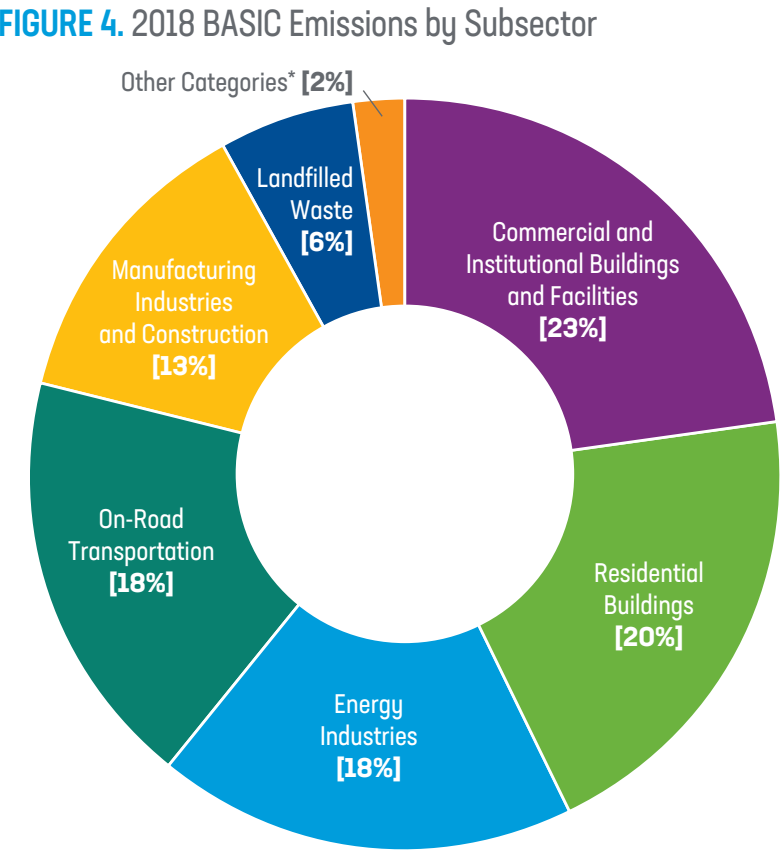


# OVERALL COMMUNITY EMISSIONS

Los Angeles is the second largest city in the United States, with a population of approximately 4 million residents covering over 500 square miles. This report accounts for emissions from sources within the City boundaries, as well as emissions occurring outside the City that are induced by activities from within. This includes residential, commercial, industrial, institutional, and municipal activities.

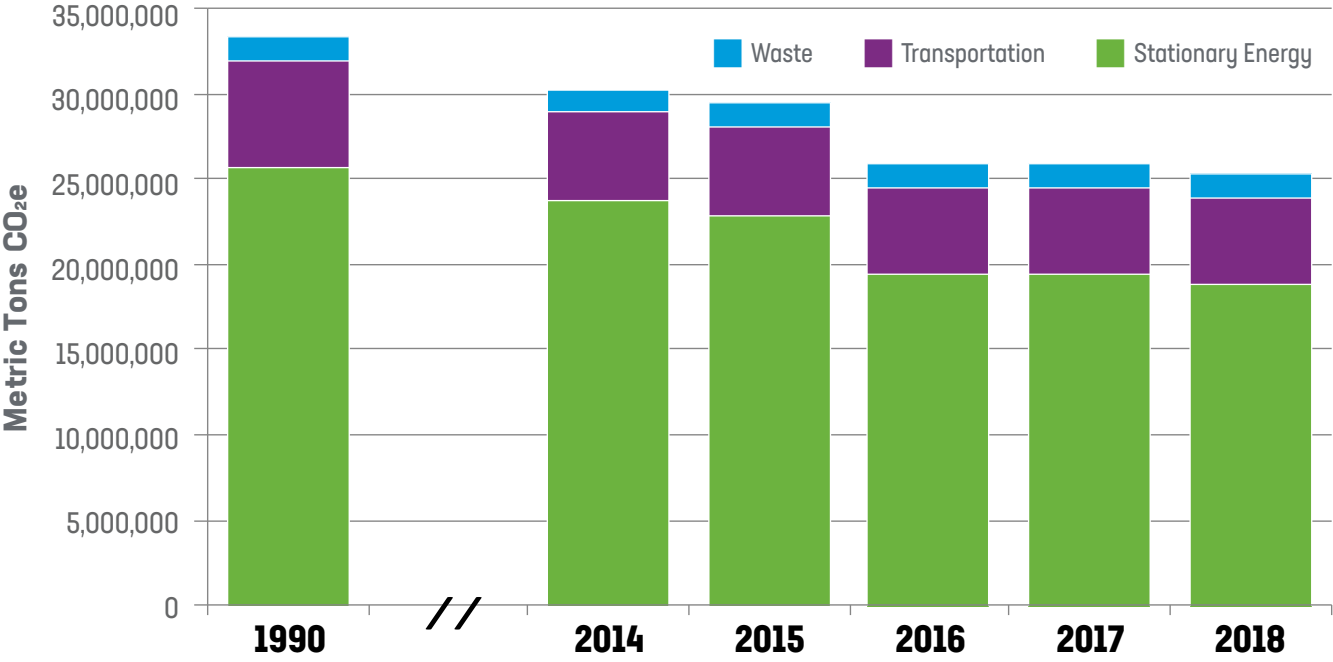
## Emission Trends and Reductions

The majority of Los Angeles' BASIC emissions are from the stationary energy sector, followed by the transportation sector. Together, these two sectors account for over 90% of total emissions. The City has made great progress reducing emissions under its control, with a reduction of 24% since 1990. One of the major drivers of emission reductions in the stationary energy sector is the City's continued efforts to decarbonize its electricity grid through the Los Angeles Department of Water and Power. Additionally, investments in energy efficiency education and implementation have reduced electricity demand even as the population has grown. The reduction in the transportation sector's emissions can be attributed to improved on-road vehicle fuel efficiency. This reduction exceeds the growth in emissions due to increases in total vehicle miles traveled.



\* Other categories include Off-Road Transportation, Fugitive Emissions from Oil and Natural Gas Systems, Railways, Waterborne Navigation, Wastewater, Aviation, Biological Waste, and Incineration

**FIGURE 5. BASIC Emissions Breakdown (MT CO<sub>2</sub>e)**





# EMISSIONS BY SECTOR

## Stationary Energy

Commercial and Institutional Buildings and Facilities  
Residential Buildings | Manufacturing Industries and Construction  
Energy Industries | Fugitive Emissions from Oil and Natural Gas Systems



## Transportation

On-Road | Railway | Waterborne Navigation | Aviation | Off-Road



## Waste

Solid Waste Disposal | Biological Treatment of Waste  
Incineration and Open Burning | Wastewater Treatment and Discharge



## Industrial Processes and Product Use

Industrial Processes | Product Use



## Agriculture, Forestry, and Other Land Use (AFOLU)

Land | Aggregate Sources and Non-CO<sub>2</sub> Emission Sources on Land







# STATIONARY ENERGY

The stationary energy sector includes GHG emissions that result from energy-related activities, such as emissions associated with stationary fuel combustion within the City or utility-supplied electricity.

The stationary energy sector is composed of five main subsectors:

- » **Residential Buildings:** Emissions from energy use in households.
- » **Commercial and Institutional Buildings and Facilities:** Emissions from energy use in commercial building/facilities and public buildings, such as schools, hospitals, government offices, street lighting, and other public facilities.
- » **Manufacturing Industries and Construction:** Emissions from energy use in industrial facilities and construction activities, except those included in the energy industries subsector.
- » **Energy Industries:** Emissions from energy production and use in energy industries, e.g., refineries, coal companies, and oil and gas drilling and production.
- » **Fugitive Emissions from Oil and Natural Gas Systems:** Fugitive emissions from all oil and natural gas activities occurring in the City. Emission sources may include fugitive equipment leaks, evaporation losses, venting, flaring, and accidental releases.

Emissions from the stationary energy sector are predominantly a result of electricity and natural gas consumption. Commercial and institutional facilities are the largest source of emissions, followed by residential buildings, energy industries, manufacturing industries and construction, and fugitive emissions from oil and natural gas systems.

FIGURE 6. Stationary Energy Sources Included in BASIC and BASIC+

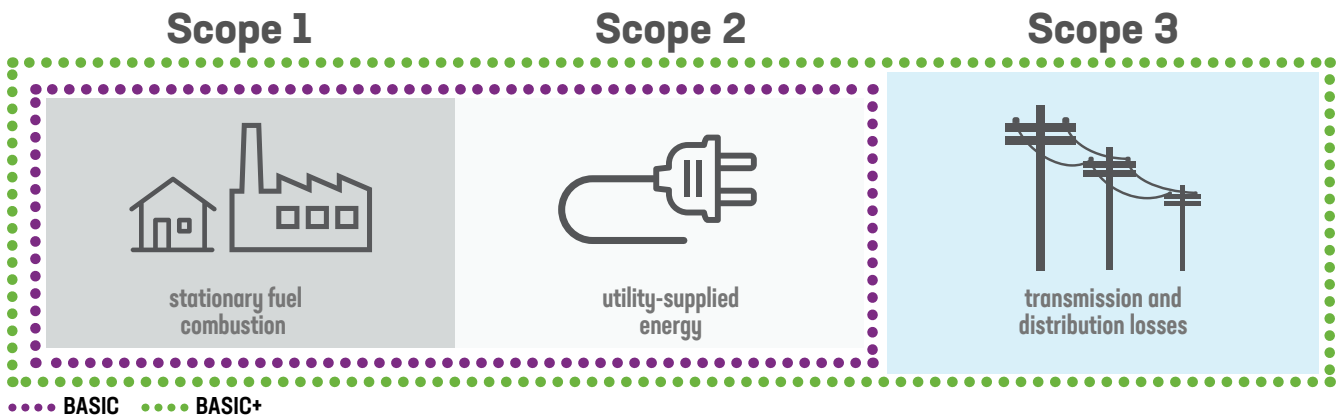


TABLE 5. Stationary Energy Emissions by Subsector (MT CO<sub>2</sub>e)

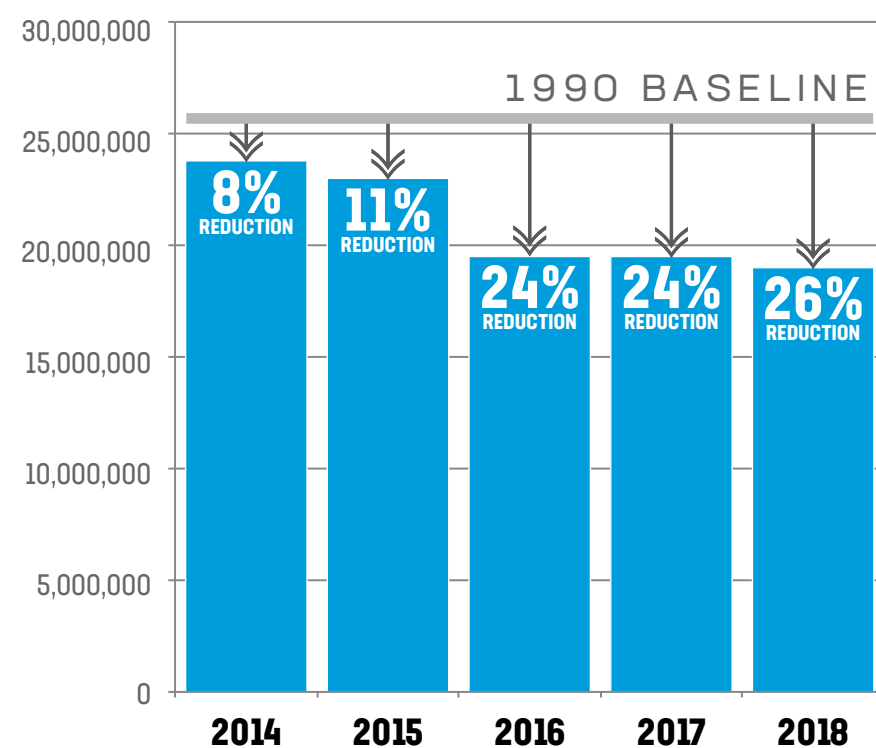
	Residential Buildings	Commercial & Institutional Buildings & Facilities	Manufacturing Industries & Construction	Energy Industries	Fugitive Emissions from Oil & Natural Gas Systems	Total Stationary Energy Emissions
1990	7,190,000	9,900,000	4,300,000	4,150,000	120,000	25,660,000
2018	5,100,000	5,900,000	3,320,000	4,490,000	99,000	18,909,000
Percent Change	-29%	-40%	-23%	8%	-18%	-26%
BASIC+ 1990	7,640,000	11,110,000	4,510,000	4,150,000	120,000	27,530,000
BASIC+ 2018	5,430,000	6,560,000	3,380,000	4,490,000	99,000	19,959,000



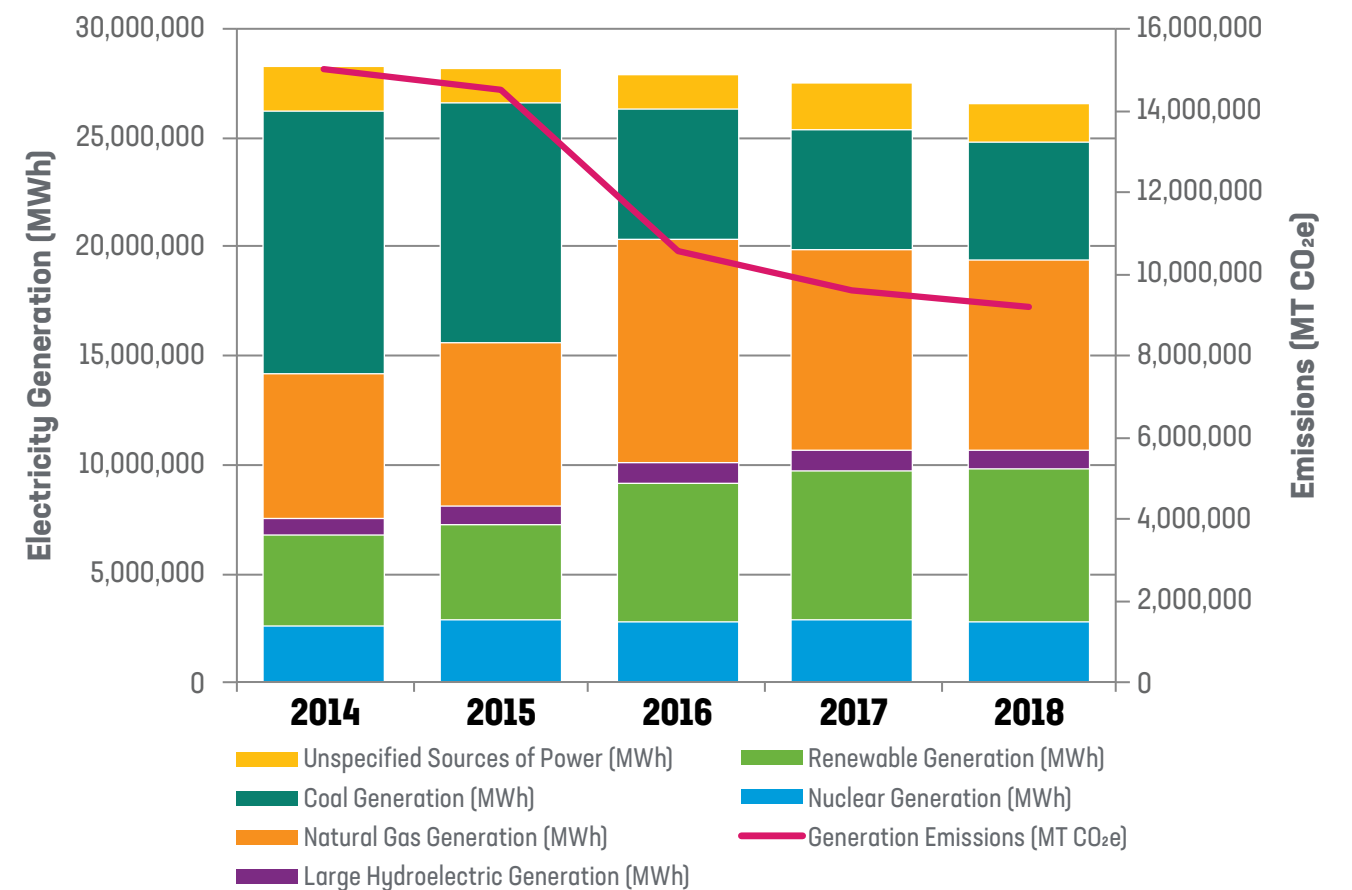


Overall emissions in the stationary energy sector have decreased by 26% when compared to 1990 levels. This is the largest decrease amongst all sectors and is largely driven by decarbonization of the electricity grid and increased energy conservation. This trend is expected to continue as the City continues to invest in renewable energy, energy efficiency, and building electrification.

**FIGURE 7.** BASIC Stationary Energy Sector Emissions (MT CO<sub>2</sub>e)



**FIGURE 8.** Electricity Generation Portfolio vs Emissions



The City is committed to transitioning its power generation from fossil fuels to cleaner energy sources, while still providing reliable electricity to over 1.4 million customers. Between 2014 and 2018, the carbon intensity of LA's electricity grid has decreased by 35%. In other words, the GHGs released per megawatt-hour of electricity generated in LA have gone down by over 35% between 2014 and 2018. Emissions will continue to decrease as the City makes progress on its commitment to supplying 100% renewable electricity by 2045.

### Recent Accomplishments

- » In 2018, Los Angeles had the most EnergyStar certified buildings of any city in the U.S.A., due to the establishment of the Existing Building Energy and Water Efficiency (EBEWE) Program.
- » In 2018, the City completed the Beacon Battery Energy Storage System which supplies 250 megawatts (MW) of solar energy alongside a 20 MW lithium-ion battery storage system.





# TRANSPORTATION

The transportation sector includes GHG emissions produced directly by fuel combustion and indirectly from utility-supplied electricity used for transportation activities.

The transportation sector is composed of five subsectors:

- » **On-Road Transportation:** Emissions from vehicles used to transport passengers or freight on roads, thoroughfares, or highways. This includes electric and fuel-powered cars, trucks, buses, etc.
- » **Railway:** Emissions from locomotives used to transport passengers or freight including Metro light rail operations.
- » **Waterborne Navigation:** Emissions resulting from waterborne transportation, primarily associated with the Port of Los Angeles, including both harbor craft and marine ocean-going vessels.
- » **Aviation:** Emissions from air travel including fixed-wing aircraft and helicopters.
- » **Off-Road Transportation:** Emissions from vehicles and equipment designed for travel on unpaved terrain, often used for construction, agriculture, or recreation. Off-road vehicles include airport ground support equipment, agricultural tractors, forklifts, etc.

In this sector, the largest source of BASIC emissions comes from the on-road transportation subsector, and is followed by off-road transportation, railways, waterborne navigation, and aviation. Los Angeles has reduced transportation emissions under its influence by 22%.

Railway emissions have increased between 1990 and 2018 largely as a result of growing public passenger train services available to Angelenos. Since 1990, the Los Angeles County Metropolitan Transportation Authority (Metro) has expanded from only one light rail line to four light rail and two subway lines. Overall, this growth in public transit services significantly reduces emissions when compared to the emissions from on-road vehicles that would be needed in the absence of expanded public transit services.

FIGURE 9. Transportation Sources Included in BASIC and BASIC+

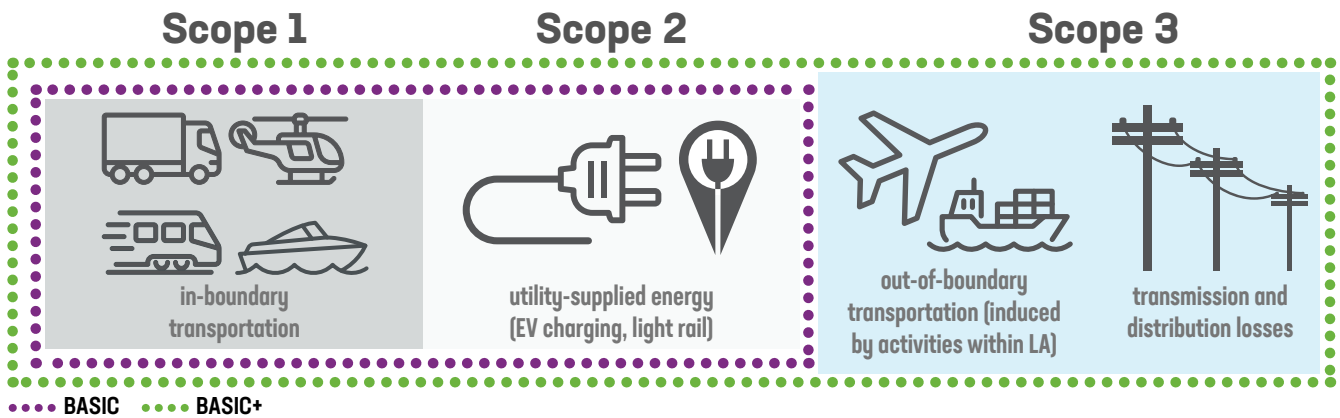


TABLE 6. Transportation Emissions by Subsector (MT CO<sub>2e</sub>)

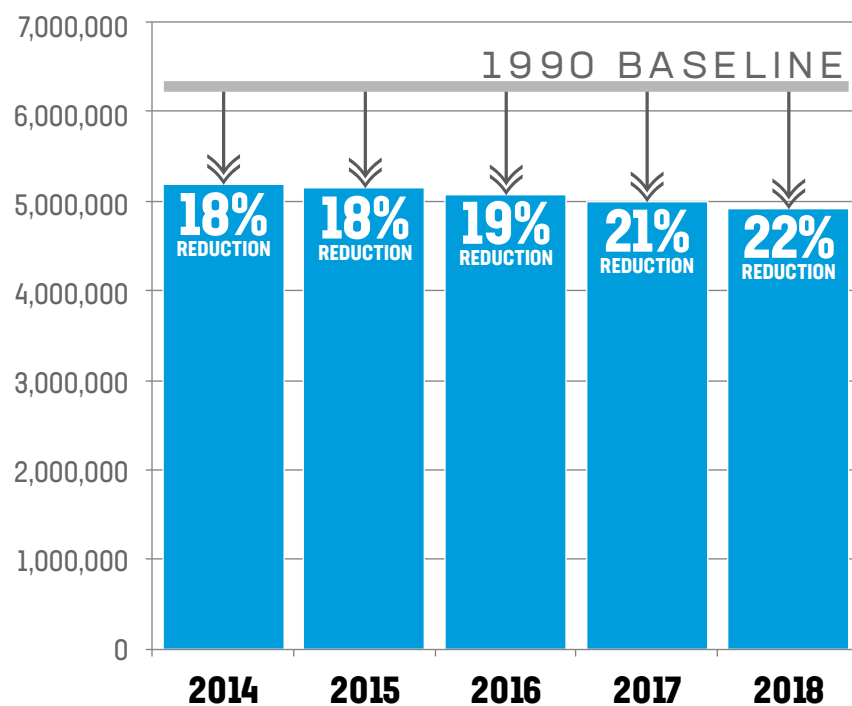
	On-Road Transportation	Railways	Waterborne Navigation	Aviation	Off-Road Transportation	Total Transportation Emissions
1990	6,030,000	25,000	36,000	12,000	170,000	6,273,000
2018	4,470,000	87,000	66,000	17,000	270,000	4,910,000
Percent Change	-26%	248%	83%	42%	59%	-22%
BASIC+ 1990	6,030,000	74,000	9,540,000	14,430,000	170,000	30,244,000
BASIC+ 2018	4,480,000	190,000	4,410,000	19,560,000	270,000	28,910,000





The decrease in on-road emissions is driving this sector's emission reductions and is mainly a result of improvements in vehicle fuel efficiency. Light-duty passenger vehicles make up the majority of the City's on-road emissions and their fuel economy has improved by over 50% since 1990.

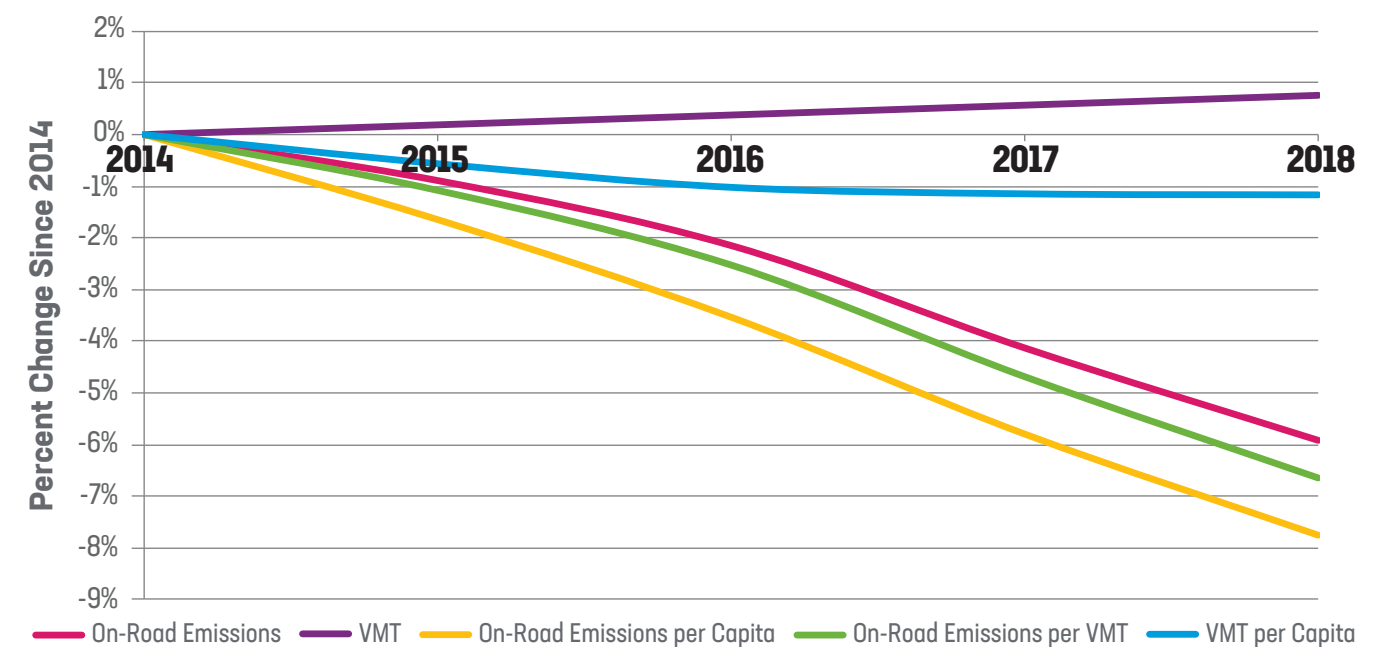
**FIGURE 10.** BASIC Transportation Sector Emissions (MT CO<sub>2</sub>e)



Between 2014 and 2018, vehicle miles traveled (VMT) increased slightly while on-road emissions per mile decreased by 6%. VMT per person has also decreased, which means that more people may be using public transit, taking shorter trips, or carpooling. This trend in on-road emissions is expected to continue as policies and programs are implemented to further increase fuel efficiency and increase adoption of low- and zero-emission vehicles.

While emissions from commercial aviation and international shipping activities are outside the regulatory authority of the City, Los Angeles World Airports (LAWA) and the Port of Los Angeles (POLA) are working to establish initiatives and programs to reduce emissions associated with these activities. Examples include procuring lower-carbon jet biofuels and providing shore-side electricity as an alternative power source for ships at berth.

**FIGURE 11.** Vehicle Miles Traveled vs On-Road Transportation Emissions



## RECENT ACCOMPLISHMENTS

- » In 2016, United Airlines and LAX became the first airline and airport to use biofuels on a commercial scale in the United States. Since then, the use of biofuels has continued to increase and in 2018, airlines at LAX purchased and used over 3.7 million gallons of biofuels for flights departing from LAX.
- » In 2017, Los Angeles launched BlueLA, a 100% electric car-sharing program, which focuses on serving disadvantaged communities.
- » As of 2018, 75 Alternative Maritime Power (AMP) vaults have been installed at the Port of Los Angeles, more than any other port in the world. AMP allows oceangoing vessels to plug into shore-side electrical power instead of running on diesel while at berth.





# WASTE

The waste sector includes GHG emissions associated with waste management and treatment activities.

The waste sector includes emissions from four main subsectors:

- » **Solid Waste Disposal:** Emissions from solid waste generated within Los Angeles and disposed of at landfills. Landfill gas flaring emissions are also included.
- » **Biological Treatment of Waste:** Emissions from composting and anaerobic digestion of organic waste, such as food waste and wastewater sludge.
- » **Incineration and Open Burning of Waste:** Emissions from the destruction of waste through burning.
- » **Wastewater Treatment:** Emissions from the wastewater treatment process at the four water reclamation facilities operated by the City. This includes process emissions and emissions from effluent discharge.

Most emissions in this sector come from solid waste disposal, which accounts for over 95% of the waste sector’s total emissions. The remainder of emissions are from wastewater treatment, biological treatment of waste, and incineration. Overall emissions for this sector have increased 11% since 1990.

**TABLE 7.** Waste Emissions by Subsector (MT CO<sub>2</sub>e)\*

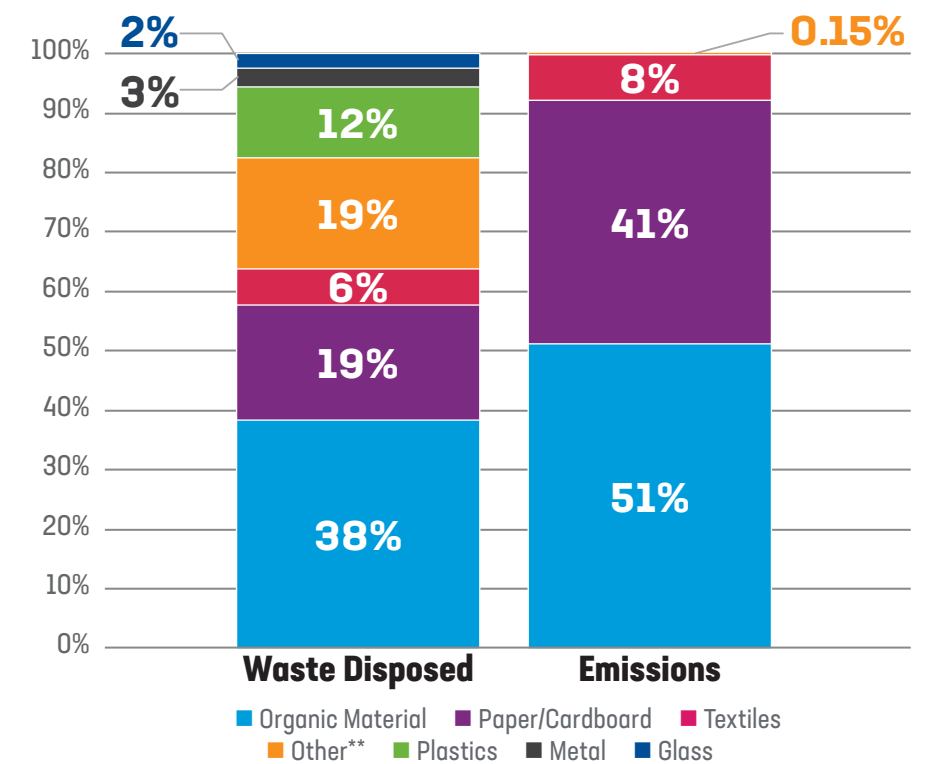
	Solid Waste Generated in the City	Biological Waste Generated in the City	Incinerated and Burned Waste Generated in the City	Wastewater Generated in the City	Total Waste Emissions
1990	1,260,000	4,000	11,000	48,000	1,323,000
2018	1,410,000	9,000	3,000	51,000	1,473,000
Percent Change	12%	125%	-73%	6%	11%

\*BASIC and BASIC+ emissions are equivalent for the Waste sector.





**FIGURE 13.** Landfilled Waste Characterization vs. Emissions\*

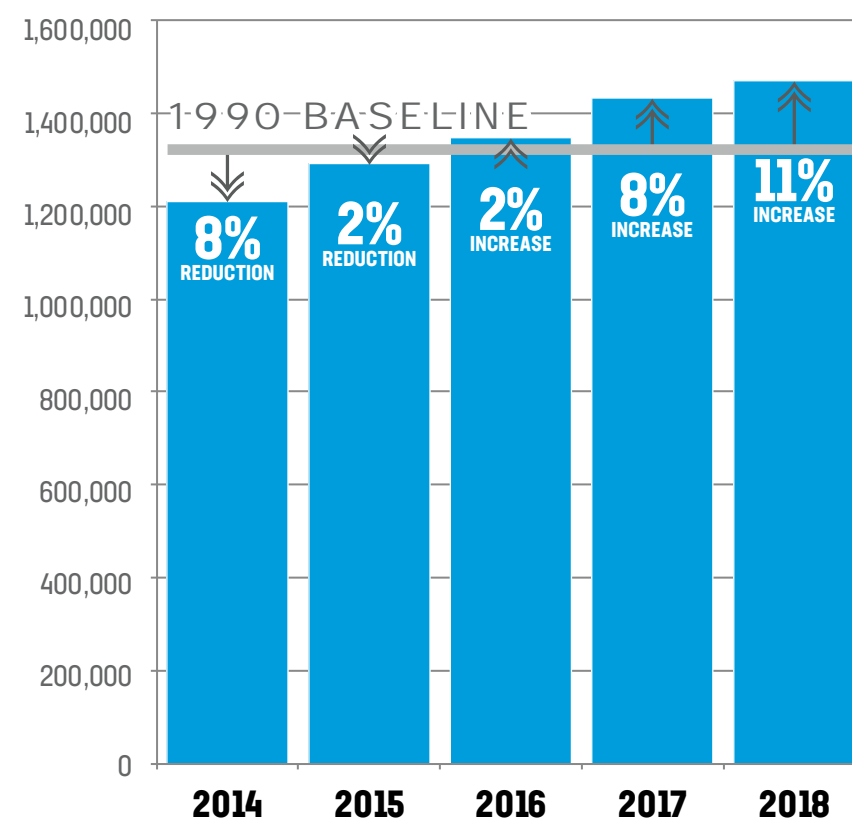


\* Percentages may not total to 100 percent due to rounding.

\*\* Other includes rubber and leather, electronics, gypsum board, inert material, household hazardous waste, special waste, and mixed residue

The increase in emissions in this sector is driven by increases in solid waste disposal, much of which can be attributed to population and economic growth. The City recognizes that transforming waste management is a critical component of sustainability and an integral part of the effort to reduce GHG emissions. Shifting to more sustainable waste practices is a collective effort, and the City is implementing an array of initiatives aimed at increasing adoption of practices that reduce landfilled waste.

**FIGURE 12.** BASIC Waste Sector Emissions (MT CO<sub>2</sub>e)



Emissions from landfills are largely affected by the composition of waste, as different types of waste generate different amounts of GHGs. Organic waste (e.g., wood, yard trimmings, and food waste) makes up 38% of the City's waste, but is responsible for approximately 51% of its landfill emissions. Similarly, paper and cardboard constitute 19% of the City's waste, but are responsible for 41% of the City's landfilled waste emissions. Combined, these two categories account for over 90% of the City's total landfilled waste emissions, highlighting the importance of both recycling and diverting organic waste from our landfills. The City is in the process of implementing an array of programs to reduce organic waste going to landfills and improve recycling rates.

### Recent Accomplishments

- » In 2014, Los Angeles banned plastic carryout bags.
- » In 2017, the City launched recycLA, a public-private partnership that provides recycling services to all commercial and industrial businesses, institutions, and multi-family buildings.
- » In 2018, the City began Curb Your Food Waste LA, a pilot program across the City that educates residents on how to shop smarter, waste less, and separate food scraps for collection in their yard trimming bins.





# AGRICULTURE, FORESTRY, AND OTHER LAND USE

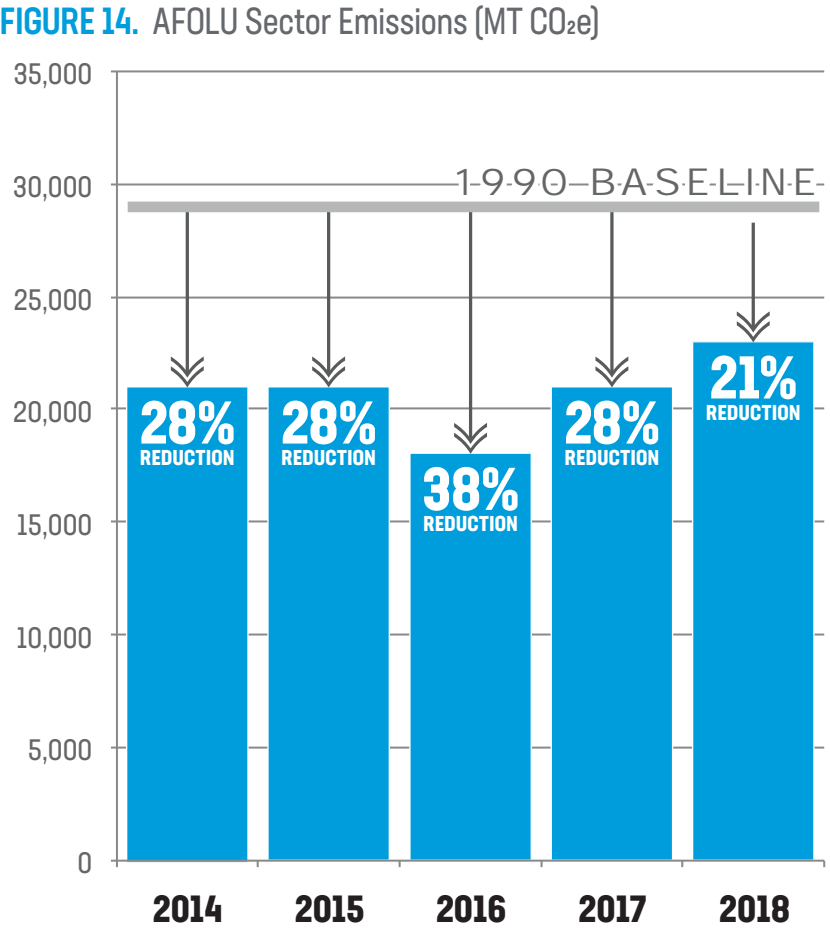
The agriculture, forestry, and other land use (AFOLU) sector include emissions produced by various land-related activities, such as land-use changes that alter the composition of soil or nutrient management for agricultural purposes.

The AFOLU sector includes emissions and sinks from two main subsectors:

- » **Land:** Emissions and removals from land-use changes, such as forest land converted to developed land.
- » **Aggregate Sources and Non-CO<sub>2</sub> Emission Sources on Land:** Emissions from other activities related to land, including biomass burning (forest fires), urea application, and fertilizer addition to managed soils.

Agricultural activities are typically GHG “sources,” which emit GHGs into the atmosphere. Land use, changes in land use, and land management practices may either be “sources” of GHGs or “sinks” of GHGs. Sinks remove CO<sub>2</sub> from the atmosphere and keep it out of the carbon cycle.

Since 1990, emissions from the AFOLU sources have decreased by 21%. This reduction is primarily a result of decreased nitrogen fertilizer application to managed lands. During the same time, carbon sinks have increased primarily due to an increase in Los Angeles’ urban tree canopy.



The City is increasing its efforts to expand the urban tree canopy and green space in Los Angeles as a way to sequester carbon dioxide, improve air quality, and transform our communities. The City currently maintains nearly one million trees in its parks, open spaces, and public right-of-way. These trees provide canopy cover for over 32,000 acres, which is key to providing shade and cooling during Los Angeles’ extreme summers. A study by the City, in collaboration with the World Resources Institute and the County of Los Angeles, estimates that the urban forest in Los Angeles sequesters approximately 100,000 metric tons of carbon dioxide annually.

TABLE 8. AFOLU Emissions by Subsector (MT CO<sub>2</sub>e)\*

	Subsector	1990	2018	Percent Change
Land	Sources	14,000	11,000	-21%
	Sinks**	(112,000)	(113,000)	1%
Aggregate Sources and Non CO <sub>2</sub> Emission Sources	Sources	15,000	12,000	-20%
	Sinks**	(49,000)	(53,000)	8%
Total Emissions**		29,000	23,000	-21%

\*The AFOLU sector is only covered under BASIC+ accounting.

\*\*This report provides GHG sinks for informational purposes only. Only GHG sources are considered in the City's total emissions.





# INDUSTRIAL PROCESSES AND PRODUCT USE

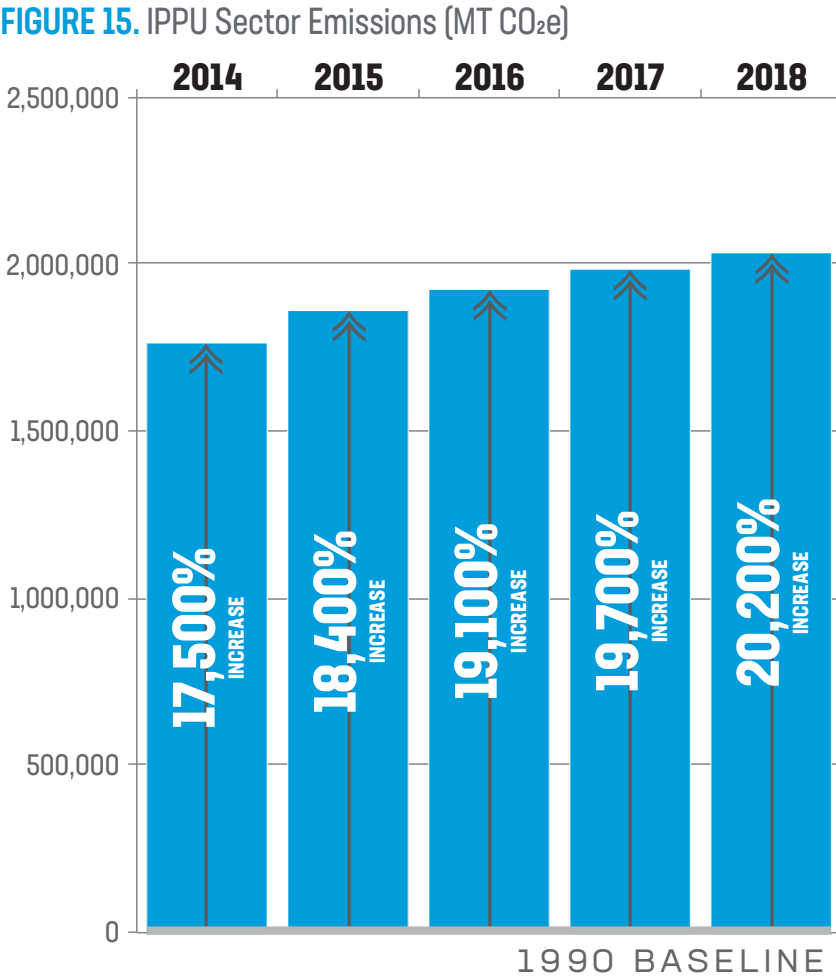
The industrial processes and product use (IPPU) sector includes GHG emissions associated with non-energy related industrial activities and product uses.

The IPPU sector is composed of two subsectors:

- » **Industrial Processes:** Production and use of mineral products and chemicals, and production of metals.
- » **Industrial Product Use:** Lubricants and paraffin waxes used in non-energy products, fluorinated compounds used in electronics production, and fluorinated gases used as substitutes for ozone depleting substances (ODS).

This sector does not include emissions from energy consumption by industries, which are instead captured under the stationary energy sector. For Los Angeles, the IPPU sector includes emissions from fluorinated gases used as substitutes for ozone depleting substances.

In 2018, all of the emissions estimated in this sector came from ODS substitution. Emissions from refrigeration and air-conditioning accounted for 92% of ODS substitute emissions, followed by foams, aerosols, and solvents. No facilities within Los Angeles meet the thresholds to report industrial process emissions to statewide and national regulatory agencies, including California Air Resources Board



and United States Environmental Protection Agency. As a result, industrial process emissions are not accounted for in this inventory. This does not necessarily mean there are no industrial process emissions being released, but that there are no facilities that meet the reporting thresholds.

Emissions from the IPPU sector have increased significantly primarily due to the Montreal Protocol. In 1987, the Montreal Protocol phased out the production of ODS, which damaged and depleted the ozone layer. These products were replaced with hydrofluorocarbons (HFCs) and perfluorocarbons (PFCs). While these new substitutes do not damage our planet’s ozone layer, they have extremely high global warming potentials (GWP). Moving forward, emissions from the use of these high GWP ODS substitutes are expected to decrease due to a variety of policy measures enacted by the state and federal government aimed at phasing out and improving management of HFCs and PFCs.

**TABLE 9.** IPPU Emissions by Subsector (MT CO<sub>2</sub>e)\*

	Industrial Processes	Product Use	Total
1990	–	10,000	10,000
2018	–	2,030,000	2,030,000
Percent Change	–	20,200%	20,200%

\*The IPPU Sector is only covered under BASIC+ accounting.





## Contact Us

LASAN is dedicated to protecting public health and the environment for all Angelenos. For more information about the Climate Action Program, please contact us at [san.climateaction@lacity.org](mailto:san.climateaction@lacity.org) or (213) 485-3640 or visit us at [lacitysan.org/climateaction](http://lacitysan.org/climateaction).

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