CITY OF LOS ANGELES

2022 COMMUNITY GREENHOUSE GAS INVENTORY REPORT

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Executive Summary

In 2022, Los Angeles achieved a significant milestone in its environmental efforts, with community-wide greenhouse gas (GHG) emissions falling 30% below the 1990 baseline, as depicted in Figure 1. The City is making progress towards its interim targets of a 50% reduction by 2025 and a 73% reduction by 2035. These efforts are part of a broader, ambitious plan encapsulated in Los Angeles' Green New Deal, which sets the ultimate goal of reaching carbon neutrality by 2050. This commitment reflects the City's proactive approach to combating climate change and fostering a sustainable future.

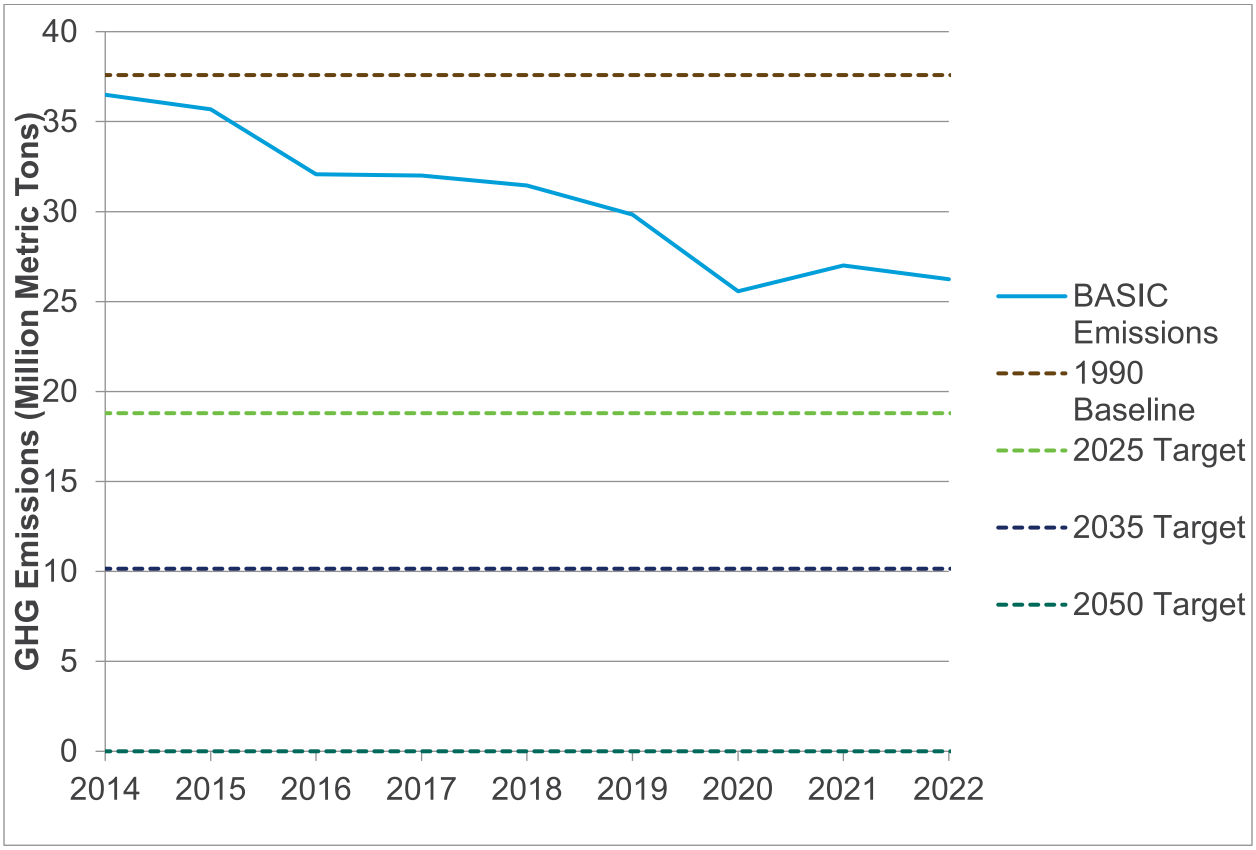

Figure 1. Emissions Progress Compared to Targets

In 2022, Los Angeles observed a notable shift in its community-wide greenhouse gas (GHG) emissions, which encompass emissions from the stationary energy, transportation, and solid waste sectors. The total emissions for the year were recorded at 26.2 million metric tons of carbon dioxide equivalent (MMT CO_2e), indicating a reduction from the previous year's figures. It's important to note that the dip in emissions observed in 2019 and 2020 can be largely attributed to the global COVID-19 pandemic, which led to reduced economic activity and travel, thereby temporarily impacting GHG emissions.

Table 1. BASIC Emissions by Sector (Million Metric Tons CO_2e)

	1990	2017	2018	2019	2020	2021	2022	1990 vs 2022 Percent Change
Stationary Energy	26.0	19.6	19.0	17.7	16.8	16.8	15.6	**-40%**
Transportation	10.4	11.1	11.1	10.7	7.4	9.0	9.3	**-11%**
Waste	1.2	1.3	1.3	1.3	1.3	1.2	1.3	**12%**
Total Emissions	37.6	32.1	31.3	29.8	25.6	27.0	26.2	**-30%**

As detailed in Table 1, the stationary energy sector saw a substantial decrease of 40% in emissions compared to the 1990 baseline, reducing to 15.6 MMT CO_2e in 2022. The transportation sector, which emitted 9.3 MMT CO_2e, experienced an 11% decrease from 1990 levels. The waste sector showed a modest increase of 12% compared to 1990, settling at 1.3 MMT CO_2e. Overall, these sectors contributed to a total decrease of 30% in GHG emissions compared to the 1990 baseline. This trend reflects the City's ongoing efforts to mitigate environmental impact and showcases a successful decoupling of emission levels from urban growth and development.

Figure 2 illustrates that despite an increase in gross domestic product (GDP) from 2021, the ratio of emissions per GDP unit has continued its downward trend. This ongoing reduction in emissions relative to economic output effectively demonstrates the decoupling of greenhouse gas (GHG) emissions from economic growth, indicating progress towards a more sustainable and less carbon-intensive economy.

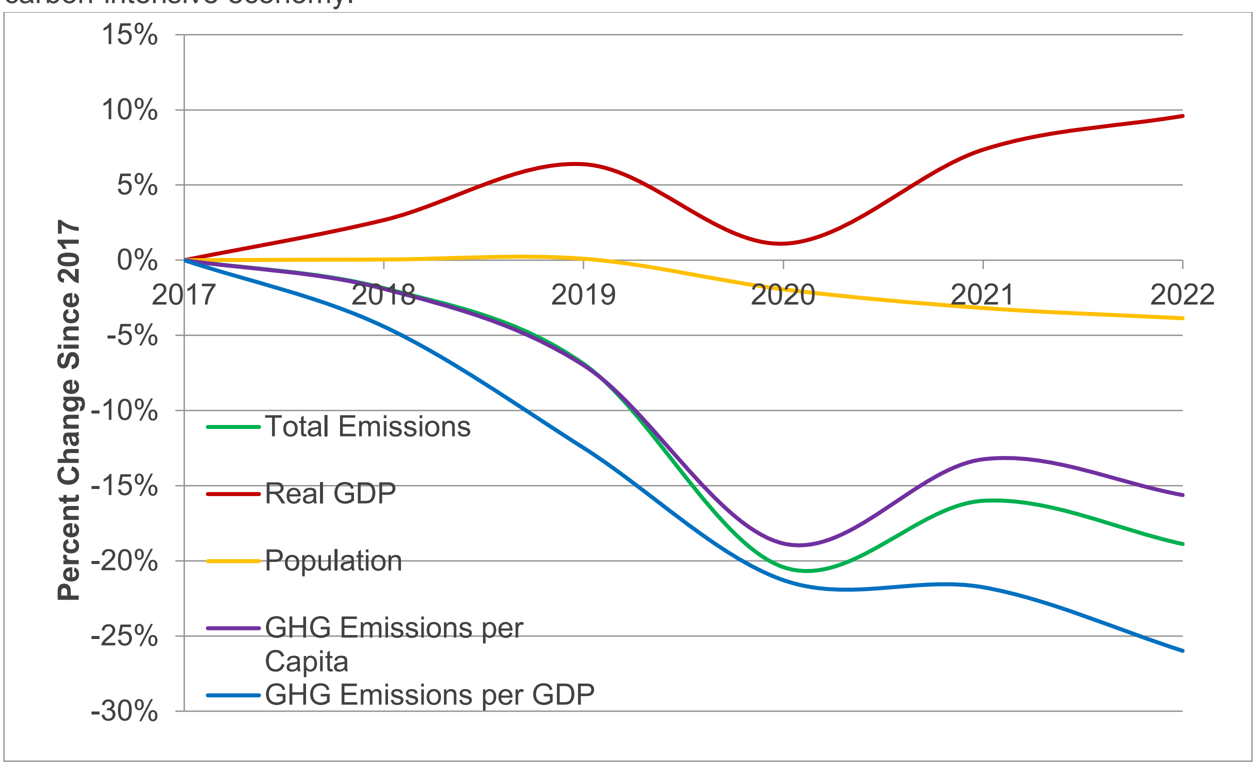

Figure 2. Emissions Trends and Metrics

1. Introduction

Climate change, a critical global challenge, requires decisive local actions. The City of Los Angeles is at the forefront of this battle, implementing robust measures to curb greenhouse gas (GHG) emissions and mitigate climate impacts. LA Sanitation and Environment (LASAN) plays a vital role in the City's climate strategy. Understanding the quantity, sources, and trends of Los Angeles' GHG emissions is crucial for effective climate action. This knowledge enables policymakers and stakeholders to take targeted and adaptive measures against climate change. LASAN's annual, detailed community GHG inventories are instrumental in gaining this insight and tracking the City's progress toward its ambitious climate objectives.

Since 2019, as originally requested by the Mayor’s Office of Sustainability (MOS), LASAN has been responsible for preparing the City of Los Angeles’ annual Community GHG Inventory. This task included enhancing the previously prepared inventories from a BASIC to a BASIC+ rating, a change necessitated by the availability of more comprehensive data sources. The BASIC+ inventory offers a deeper understanding of Los Angeles' emissions scenario because it includes industrial processes, product use, agriculture, forestry, and other land uses, along with Scope 3 emissions from stationary sources and transportation sectors.

To date, LASAN has compiled community-wide inventories for the years 2014-2022, in addition to the baseline year of 1990, as established in the City’s Sustainable City pLAn. This report presents the 2022 Community GHG Inventory values alongside the updated values for the City’s prior inventories, offering insights into the City's emission trends over time and using the 1990 figures as the benchmark for all reduction percentages.

2. Methodology

LASAN compiles the City of Los Angeles' Greenhouse Gas (GHG) inventory adhering to the standards set by the C40's Global Protocol for Community-Scale Greenhouse Gas Emissions (GPC), a globally recognized framework. This approach integrates two key methods: the scopes framework and the city-induced framework, accommodating emissions generated both inside and outside the City's borders. The inventory accounts for five GHGs: carbon dioxide (CO_2), methane (CH_4), nitrous oxide (N_2O), hydrofluorocarbons (HFCs), and perfluorocarbons (PFCs), each with a specific Global Warming Potential (GWP). GWP measures a gas's heat-trapping ability relative to CO_2. For a consistent assessment, emissions of these gases are converted to CO_2 equivalents (CO_2e) throughout this report.

Table 2. Greenhouse Gas Global Warming Potential Factors

Greenhouse Gas	Formula	GWP*
Carbon Dioxide	CO_2	1
Methane	CH_4	25
Nitrous Oxide	N_2O	298
Hydrofluorocarbons	HFCs	124-14,800
Perfluorocarbons	PFCs	7,390-12,200
*100- year time horizon.		

This inventory employs the Intergovernmental Panel on Climate Change's (IPCC) AR4 GWP values, aligning with the California Air Resources Board's (CARB) methodology for the statewide California Greenhouse Gas Emissions Inventory (see Table 2).

2.1 Scopes

Scope 1 emissions are from sources located within the City boundary (in-boundary activities). These can also be considered “territorial” emissions because they are all produced within the geographic boundary. Scope 2 emissions occur from the use of grid-supplied electricity, heat, steam, and/or cooling within the city boundary. Scope 3 emissions are from sources outside the city boundary because of actions occurring within the city boundary (out-of-boundary activities).

2.2 BASIC vs BASIC+

The GPC categorizes two levels, BASIC and BASIC+ (see Figure 3). BASIC encompasses Scopes 1 and 2 emissions from stationary energy and transportation, and Scopes 1 and 3 from waste. BASIC+ extends this to include industrial processes, and product use (IPPU), and agriculture, forestry, and other land use (AFOLU), plus Scope 3 emissions from stationary energy and transportation sectors. Although BASIC+ offers a broader emission perspective, the City has limited direct control over these additional sectors. This report discusses all sectors under BASIC+, but tracks progress towards L.A.'s Green New Deal goals using BASIC emissions.

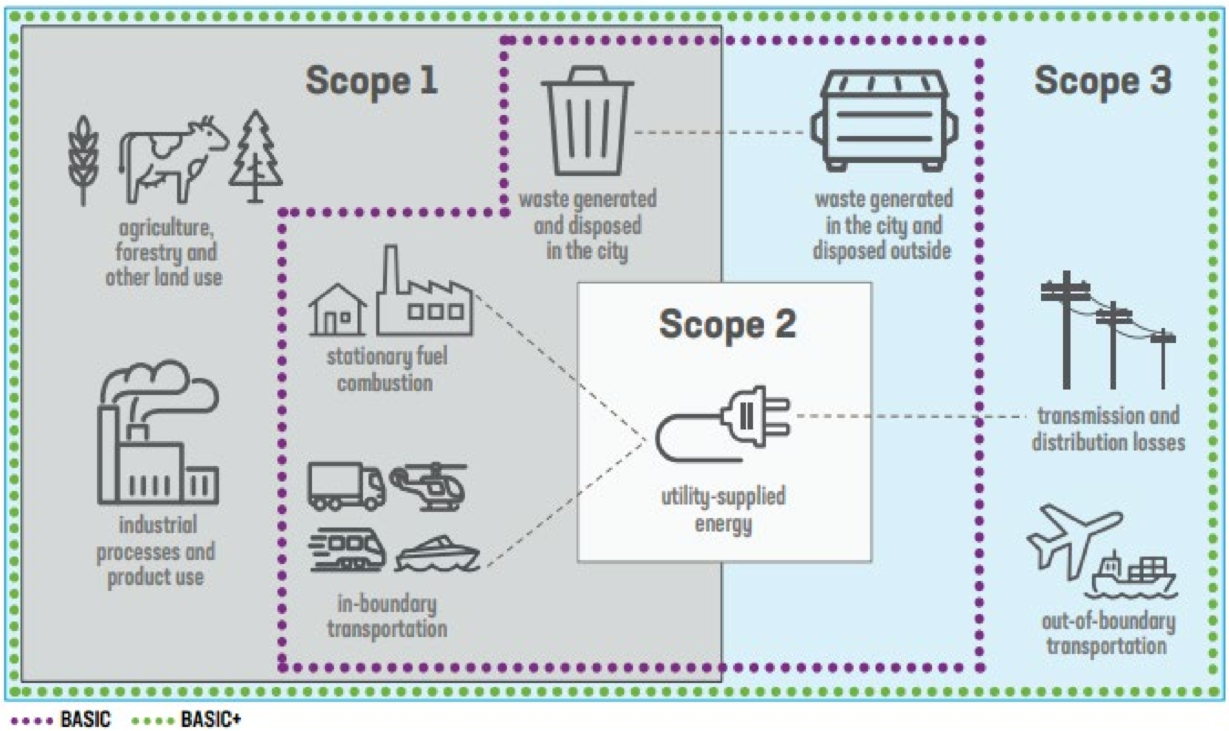

Figure 3. Sources Included in BASIC and BASIC+

2.3 Data Collection and Providers

LASAN's inventory preparation involves collaboration with multiple departments and agencies, ensuring a comprehensive data collection process. Table 3 summarizes these data contributors.

Table 3. Community GHG Inventory Data Providers

Data Provider	Data
City Department	
LASAN	Solid waste characterization; compost tonnage; biosolids; wastewater treatment
LADWP	Residential, commercial, institutional, and industrial electricity consumption; transmission and distribution losses; water services-related electricity consumption, power generation fuel consumption, EV charging electricity consumption
LAWA	Commercial jet fuel usage
POLA	Local harbor craft fuel usage
LA Animal Services Department	Livestock estimates
Regulatory Agency	
CARB	EMFAC2021 Model for vehicle fuel efficiency; off-road transportation emissions estimate; fuel estimate for vessel bunkering; industrial facilities involved with mineral, chemical, or metal production; ODS usage
South Coast Air Quality Management District (SCAQMD)	Industrial fuel consumption, landfill flaring
EPA	Refinery feed flaring; industrial facilities involved with mineral, chemical, or metal production
California Geologic Energy Management (CalGEM)	Oil and gas wells
FAA	Local aircraft fuel usage
CalRecycle	Solid waste disposal tonnage
CDFA	Fertilizer usage
Other	
Energy Information Administration (EIA)	Residential, commercial, and industrial wood and ethanol consumption
SoCal Gas	Residential, commercial, and industrial natural gas consumption
SCE	Utility's electricity emission factor
Google Environmental Insights Explorer	On-road VMTs
Amtrak	Annual trips estimate
Metrolink	Annual trips estimate
Burlington Northern Santa Fe (BNSF) Railway	Fuel usage
Union Pacific	Fuel usage
LA Metro	Rail propulsion electricity usage
International Council for Local Environmental Initiatives (ICLEI)	Land use change emissions estimate

3. Findings by Sector

The following sections present findings from the City's 2014-2022 Community GHG Inventories. Every year, LASAN continues to update the community GHG inventory to incorporate new procedures, as well as make improvements to data collection processes, methodologies, emissions factors, and quality assurance. Inventories from previous years are updated and revised to reflect these changes and to maintain a consistent time series following recommendations from the IPCC for developing GHG inventories. Therefore, the new inventory may report different emission levels than previous inventory reports.

As shown in Figure 4, the largest sector in Los Angeles' Community GHG Inventory (at the BASIC level) is the stationary energy sector, accounting for 60% of total emissions, followed by the transportation sector and the waste sector.

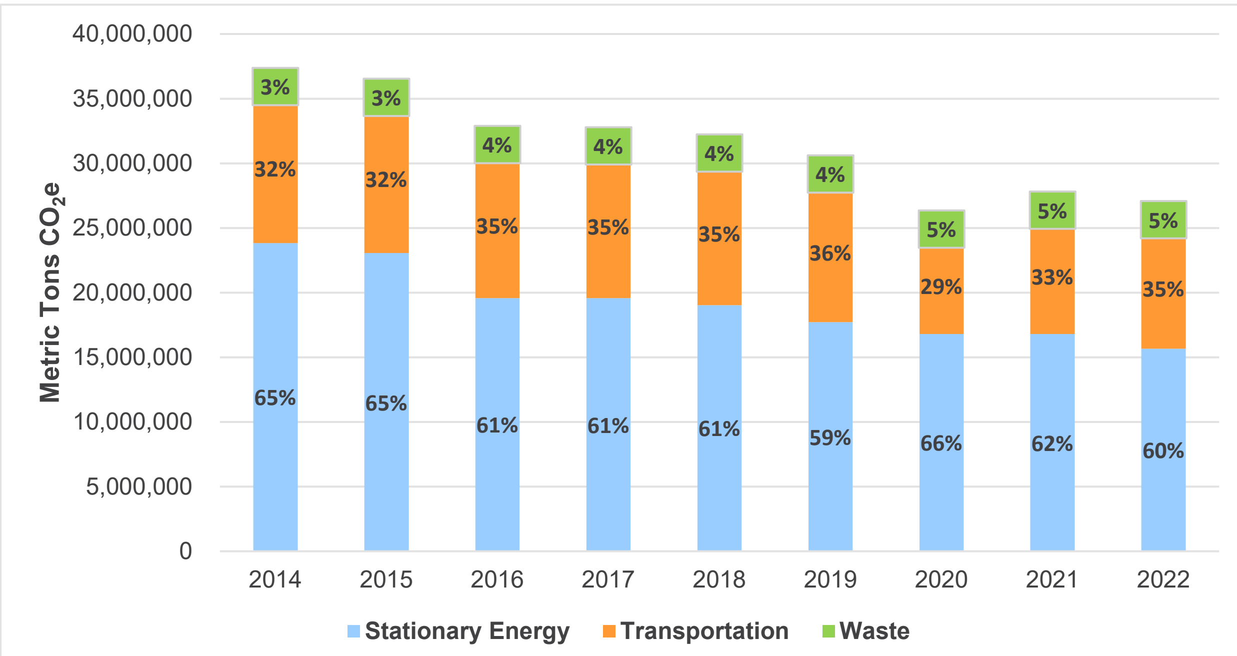

Figure 4. Basic Emissions by Sector

Between 2014 and 2022, Los Angeles saw significant changes in greenhouse gas (GHG) emissions in key sectors. In the stationary energy sector, emissions decreased from 23.8 million metric tons in 2014 to 15.6 million in 2022, a substantial reduction reflecting the City's energy efficiency and sustainable energy initiatives. The transportation sector, identified as the second-largest contributor to emissions, has shown a gradual decline compared to the 1990 baseline. Notably, a significant drop occurred in 2020, largely attributed to the COVID-19 pandemic. However, since the end of 2020, there has been a slow but steady upward trend in emissions. Waste sector emissions, while a smaller portion of the total, remained relatively stable, accounting for about 5% of the City's emissions throughout this period. These trends demonstrate Los Angeles' effective strategies in reducing its environmental impact in major emission-generating sectors.

3.1 Stationary Energy

The stationary energy sector includes fuel combustion and fugitive emissions that occur while generating, delivering, and consuming useful forms of energy (such as electricity or heat). The five main subsectors are residential buildings, commercial and institutional buildings and facilities, manufacturing industries and construction, energy industries, and fugitive emissions from oil and natural gas systems.

Table 4. BASIC Stationary Energy Emissions by Subsector (MT CO_2e)

	Residential buildings	Commercial and institutional buildings and facilities	Manufacturing industries and construction	Energy industries	Fugitive emissions from oil and natural gas systems	Total Stationary Energy Emissions
2014	6,585,035	8,460,163	3,995,230	4,587,057	214,610	23,842,094
2015	6,543,251	8,218,274	3,918,539	4,161,174	213,396	23,054,634
2016	5,394,410	6,226,515	3,446,961	4,294,149	216,983	19,579,017
2017	5,212,031	5,885,760	3,817,250	4,437,001	215,680	19,567,722
2018	5,099,756	5,902,502	3,324,850	4,494,205	216,611	19,037,923
2019	5,023,171	5,536,819	2,724,736	4,219,939	216,173	17,720,837
2020	5,039,695	4,700,410	2,660,925	4,201,503	211,973	16,814,505
2021	4,848,815	4,896,054	2,706,020	4,131,840	208,662	16,791,392
2022	4,641,986	4,856,690	1,840,049	4,061,659	207,544	15,607,928

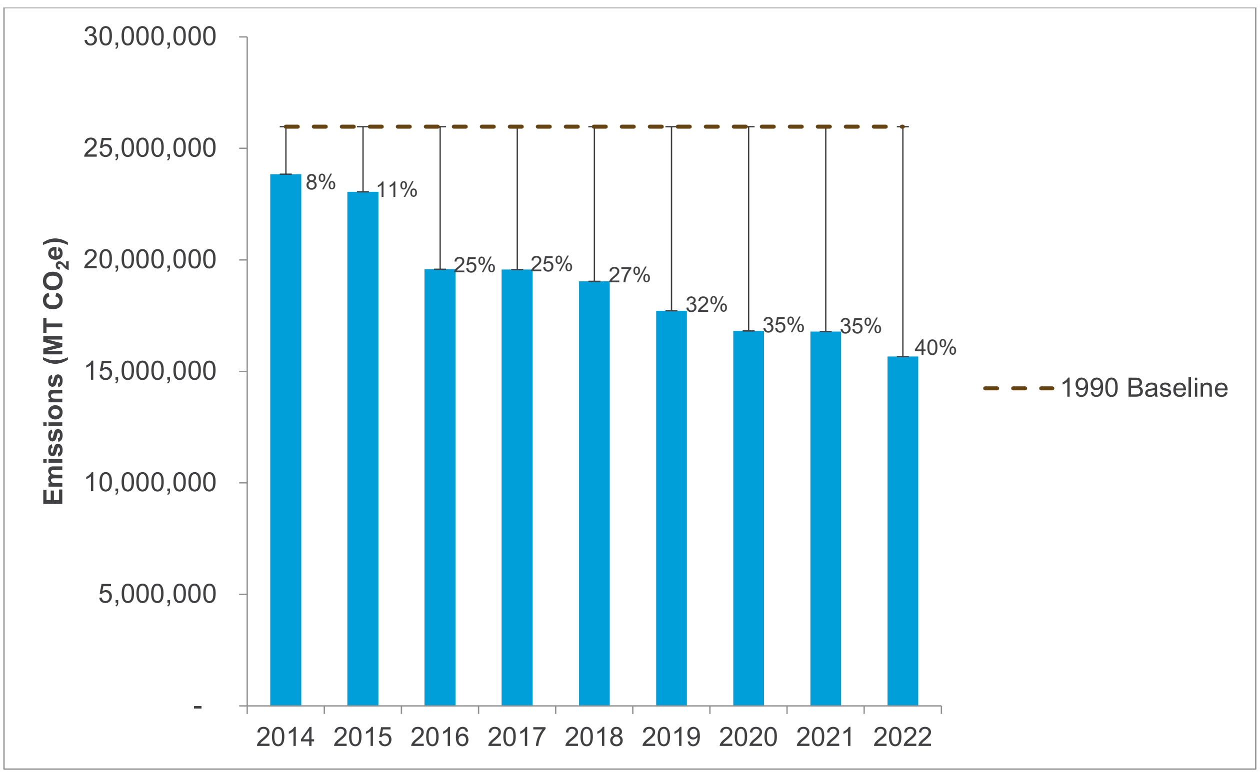

Figure 5. BASIC Stationary Energy Sector Emissions Reductions from Baseline

While Figure 5 shows a 5% decrease in emissions between 2021 and 2022, overall emissions in this sector have decreased by 40% since 1990 (Figure 5) with reductions primarily driven by decarbonization of the electricity grid.

Between 2014 and 2022, the carbon emissions intensity of the City's electricity has decreased by 47% (Figure 6).

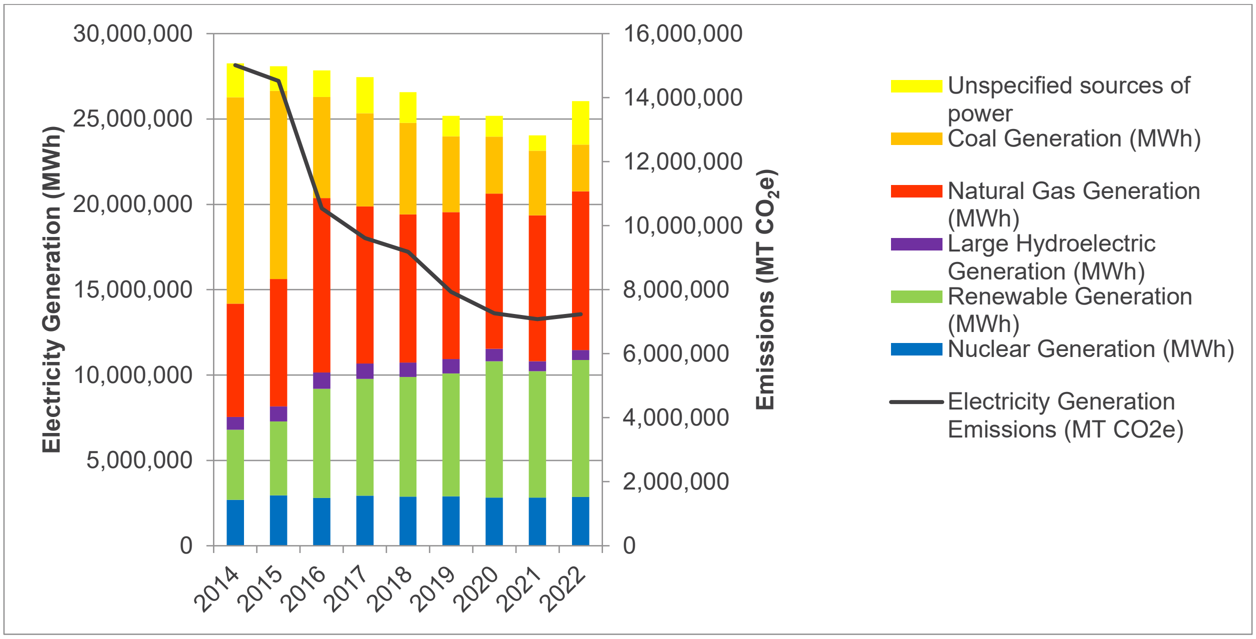

Figure 6. Electricity Generation Portfolio vs Emissions[1]

This decarbonization trend will continue as LADWP works towards supplying 100% renewable energy by 2045 as outlined in the LA100 plan and the Los Angeles' Green New Deal. The City of Los Angeles continues to advance towards its ambitious targets outlined in the Green New Deal, striving to reach its clean energy objectives potentially by 2035. While considerable progress has been made, achieving these goals necessitates further actions, specifically in decarbonizing buildings, enhancing energy efficiency across all sectors, and curtailing fuel combustion in industrial activities. The increased emissions going from the BASIC level in Table 4 to the BASIC+ level in Table 5 are primarily attributed to electricity transmission and distribution losses.

Within the stationary energy sector, emissions from residential and commercial buildings have shown a steady decline, as indicated in Table 5. However, it is the manufacturing industries and construction subsector, with a significant emission reduction in 2022, that draws attention. This year, emissions reported were 1,879,337 MT CO_2e, a notable decrease. A substantial part of this reduction is attributed to a single refinery, which reported approximately half the emissions typically recorded between 2014 and 2022. It is crucial to note that the verification of this data with the South Coast Air Quality Management District (AQMD), the provider of the emission data for the facility, has not yet occurred at the time of this report. This step is essential for ensuring

[1] Power generation and emissions data provided by LADWP.

the accuracy of the emissions decline and for understanding the underlying factors contributing to it.

Table 5. BASIC+ Stationary Energy Emissions by Subsector (MT CO_2e)

	Residential buildings	Commercial and institutional buildings and facilities	Manufacturing industries and construction	Energy industries	Fugitive emissions from oil and natural gas systems	Total Stationary Energy Emissions
2014	7,199,130	9,659,486	4,132,757	4,587,057	214,610	25,793,040
2015	7,100,858	9,311,586	4,031,961	4,161,174	213,396	24,818,912
2016	5,774,009	6,971,781	3,522,091	4,294,149	216,983	20,779,566
2017	5,559,937	6,440,128	3,886,707	4,437,001	215,680	20,583,289
2018	5,428,269	6,564,167	3,379,549	4,494,205	216,611	20,082,810
2019	5,316,558	6,079,030	2,770,620	4,219,939	216,173	18,663,914
2020	5,334,948	4,851,102	2,701,097	4,201,503	211,973	17,300,622
2021	5,130,246	5,454,444	2,744,493	4,131,840	208,662	17,669,685
2022	4,913,838	5,483,767	1,879,337	4,061,659	207,544	16,604,462

3.2 Transportation

The transportation sector includes GHG emissions from fuel combustion and electricity used for transportation activities. The sector covers five subsectors: on-road transportation,[2] railways, waterborne navigation, aviation, and off-road transportation.

Table 6. BASIC Transportation Emissions by Subsector (MT CO_2e)

	On-road transportation	Railways	Waterborne navigation	Aviation	Off-road transportation	Total Transportation Emissions
2014	11,128,431	98,421	55,892	17,336	239,507	11,539,586
2015	10,980,018	99,356	61,013	16,792	300,569	11,457,748
2016	10,827,904	82,100	58,348	14,906	276,693	11,259,952
2017	10,750,193	83,800	62,331	17,959	224,603	11,138,885
2018	10,605,673	85,269	66,092	16,828	321,258	11,095,119
2019	10,296,705	86,196	60,884	16,157	328,534	10,788,476
2020	6,961,453	76,900	60,734	14,068	327,406	7,440,562
2021	8,486,904	68,835	53,521	15,565	336,063	8,960,887
2022	8,836,599	66,992	50,811	15,116	342,143	9,311,662

Overall, emissions in this sector have decreased by 11% since 1990 (Figure 7), primarily from on-road transportation.

The data from Table 6 spans from 2014 to 2022, with on-road transportation showing a significant reduction in 2020 due to decreased travel during the California Stay at Home Order. A rebound occurred in 2021, with VMTs increasing by about 21.9% from the 2020 values, indicated by the rise in on-road emissions from 6,969,242 MT CO_2e in 2020 to 8,496,451 MT CO_2e in 2021. Strategies to reduce these emissions further include vehicle electrification, grid decarbonization, and improved public transport to decrease VMTs.

In contrast, the BASIC+ transportation emissions, detailed in Table 7, are significantly higher due to the inclusion of commercial cargo ship fuel in the waterborne navigation subsector and aircraft fuel in the aviation subsector. Although these activities fall outside the City's direct regulatory control, efforts are underway to mitigate their impact. For instance, Los Angeles World Airports (LAWA) is collaborating with tenants to promote the use of sustainable aviation jet fuel. Similarly, the Port of Los Angeles (POLA) is implementing initiatives to encourage oceangoing vessels to utilize shore-side electricity instead of diesel while docked, further contributing to emission reduction efforts in these sectors.

[2] Los Angeles' GHG inventory now uses Google's Environmental Insights Explorer (EIE) for more accurate transportation emissions data, as endorsed by C40 and ICLEI. This reflects a shift from previous demand model-based reports, providing detailed annual Vehicle Miles Traveled (VMT) and emissions updates in line with GPC standards, with historical data revised accordingly.

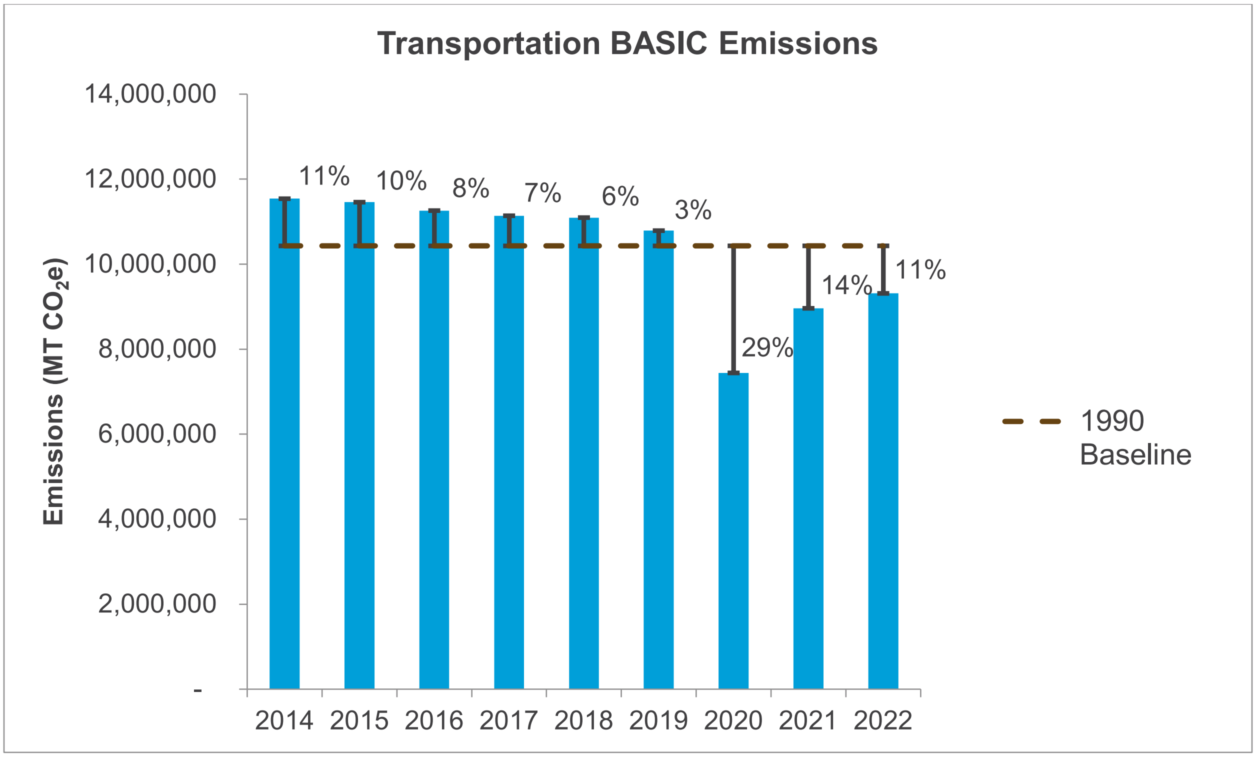

Figure 7. BASIC Transportation Sector Emissions Reductions from Baseline

Table 7. BASIC+ Transportation Emissions by Subsector (MT CO_2e)

	On-road transportation	Railways	Waterborne navigation	Aviation	Off-road transportation	Total Transportation Emissions
2014	11,130,442	205,088	2,866,564	15,837,678	162,034	30,201,806
2015	10,983,242	201,855	3,494,079	17,009,219	220,511	31,908,906
2016	10,834,904	187,229	4,479,269	18,323,514	194,183	34,019,099
2017	10,757,908	188,836	3,075,527	19,147,217	198,780	33,368,269
2018	10,615,163	197,534	3,964,351	19,559,534	234,565	34,571,148
2019	10,306,268	212,470	4,243,487	19,401,839	239,977	34,404,040
2020	6,969,242	187,027	2,929,032	11,451,145	237,695	21,774,141
2021	8,496,451	182,407	2,715,701	13,986,468	244,659	25,625,686
2022	8,474,522	181,187	2,082,160	15,219,316	342,143	26,299,327

3.3 Waste

The waste sector is responsible for emissions stemming from the disposal and treatment of both solid waste and wastewater, with processes such as decomposition and incineration as primary contributors.

Table 8. Waste Emissions by Subsector (MT CO_2e)[3]

	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
2014	1,046,584	5,798	14,670	44,841	1,111,893
2015	1,111,432	6,871	13,314	46,839	1,178,456
2016	1,157,181	11,692	15,581	44,471	1,228,924
2017	1,228,286	5,189	3,890	49,616	1,286,980
2018	1,262,352	9,454	2,596	51,317	1,325,719
2019	1,267,111	8,363	2,262	53,344	1,331,079
2020	1,256,478	6,650	3,451	49,154	1,315,733
2021	1,186,929	8,213	3,158	48,453	1,246,753
2022	1,250,175	6,672	19,202	49,859	1,325,907

Landfill disposal, particularly of solid waste, dominates the sector's emissions, accounting for over 95% of the total (refer to Table 8). Public education campaigns and behavioral changes are critical in sustaining the reduction of waste-related emissions. It's important to note that waste sector emissions comprise about 5% of the City's total emissions, highlighting the potential for further emission reductions with continued effort and community engagement.

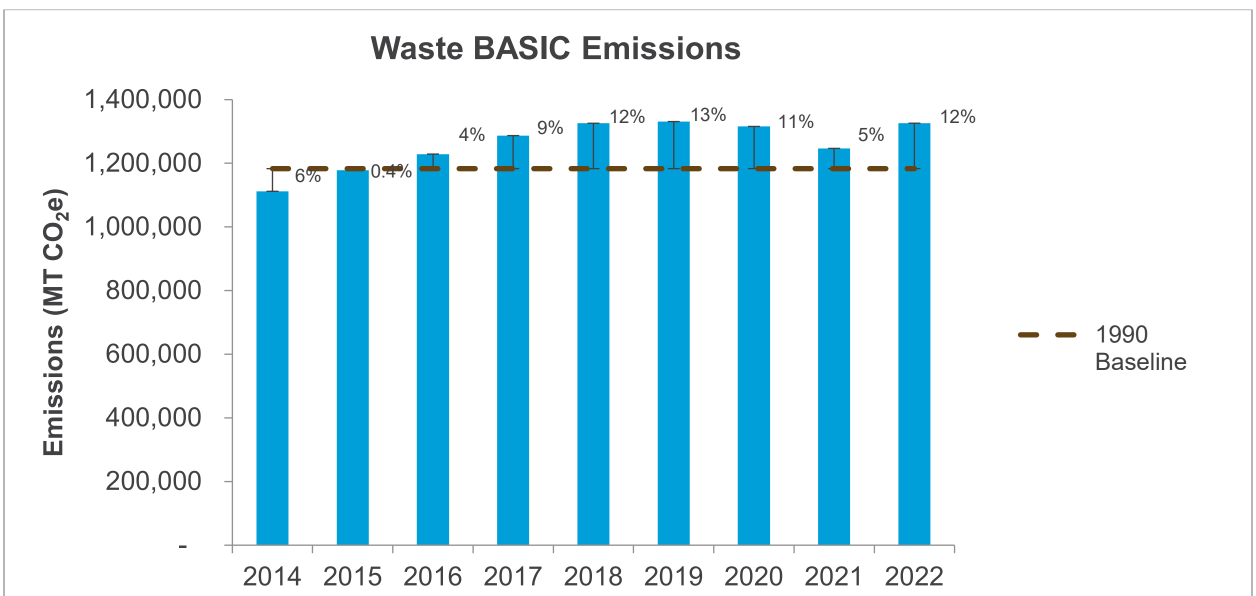

Figure 8. BASIC Waste Sector Emissions Reductions from Baseline

[3] For the waste sector, BASIC and BASIC+ emissions are the same (see Figure 3).

Figure 9 shows how waste composition significantly affects emissions levels; the different materials have varying organic content that decomposes at different rates. Paper and cardboard make up 23% of the City's waste by volume, yet they contribute to 53% of emissions from landfilled waste. Organic waste, while constituting 26% of the waste stream, accounts for 37% of emissions. These two categories alone represent 90% of emissions from landfilled waste, underscoring the importance of targeted waste reduction in these areas.[4]

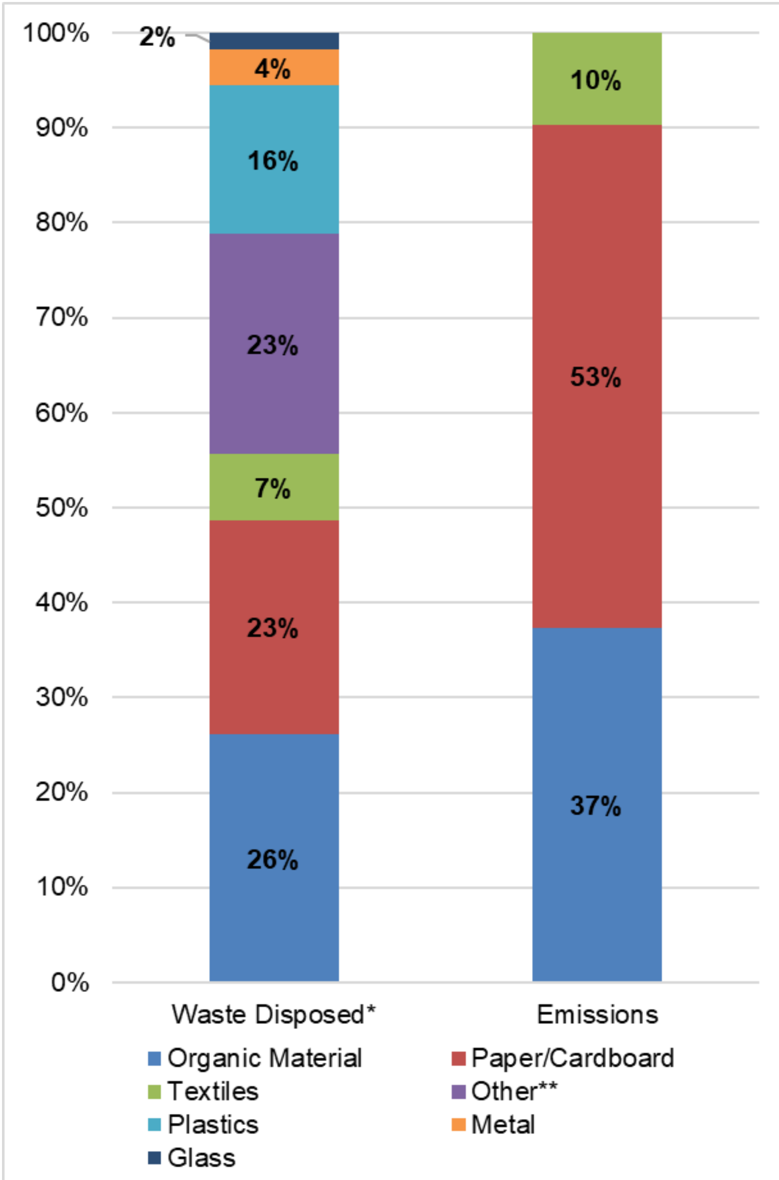

Figure 9. Landfilled Waste Characterization vs. Emissions

*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.

[4] Waste characterization obtained from *Sunshine Canyon Landfill Comprehensive Waste Characterization Study,* May 2016.

3.4 Agriculture, Forestry, and Other Land Use

The AFOLU sector is characterized by GHG emissions from several sources, including land-use changes, enteric fermentation in livestock, and agricultural nutrient management. In the City's emissions framework, these emissions are detailed only in the BASIC+ inventory, not the BASIC total. While carbon sequestration data is captured for reference, it isn't factored into the net emissions for BASIC+.

The AFOLU sector is characterized by GHG emissions from several sources, including land-use changes, enteric fermentation in livestock, and agricultural nutrient management. In the City's emissions framework, these emissions are detailed only in the BASIC+ inventory, not the BASIC total. While carbon sequestration data is captured for reference, it isn't factored into the net emissions for BASIC+.

Table 9. AFOLU Emissions by Subsector (MT CO_2e)

	Livestock	Land		Aggregate Emission Sources		Total (sources)
	Sources	Sources	Sinks	Sources	Sinks	
2014	4,418	12,165	(112,706)	5,616	(79,865)	22,198
2015	4,418	12,165	(112,736)	5,689	(80,407)	22,271
2016	4,418	12,165	(112,541)	5,506	(63,510)	22,089
2017	4,418	11,581	(112,797)	6,018	(34,888)	22,016
2018	4,418	11,492	(112,827)	7,517	(45,678)	23,427
2019	4,418	11,344	(112,523)	32,810	(72,411)	48,572
2020	4,418	11,286	(112,729)	8,681	(76,818)	24,384
2021	4,275	11,224	(112,609)	12,144	(66,524)	27,643
2022	4,275	11,115	(112,716)	28,211	(58,158)	43,601

The emissions source in this sector is primarily from synthetic fertilizer, and the increase in emissions in 2022 is driven by an increase in synthetic fertilizer usage (Figure 10), which is also the case for 2019. The City's organic waste recycling and healthy soils programs support increasing composting production and application to enhance soil carbon sequestration, while providing additional benefits including water conservation, soil microbial health, erosion control, and air quality benefits. Compost can provide an alternative to using synthetic fertilizers.[5]

[5] LA Sanitation and Environment. Healthy Soils Strategy for the City of Los Angeles. https://www.lacitysan.org/san/sandocview?docname=cnt067543

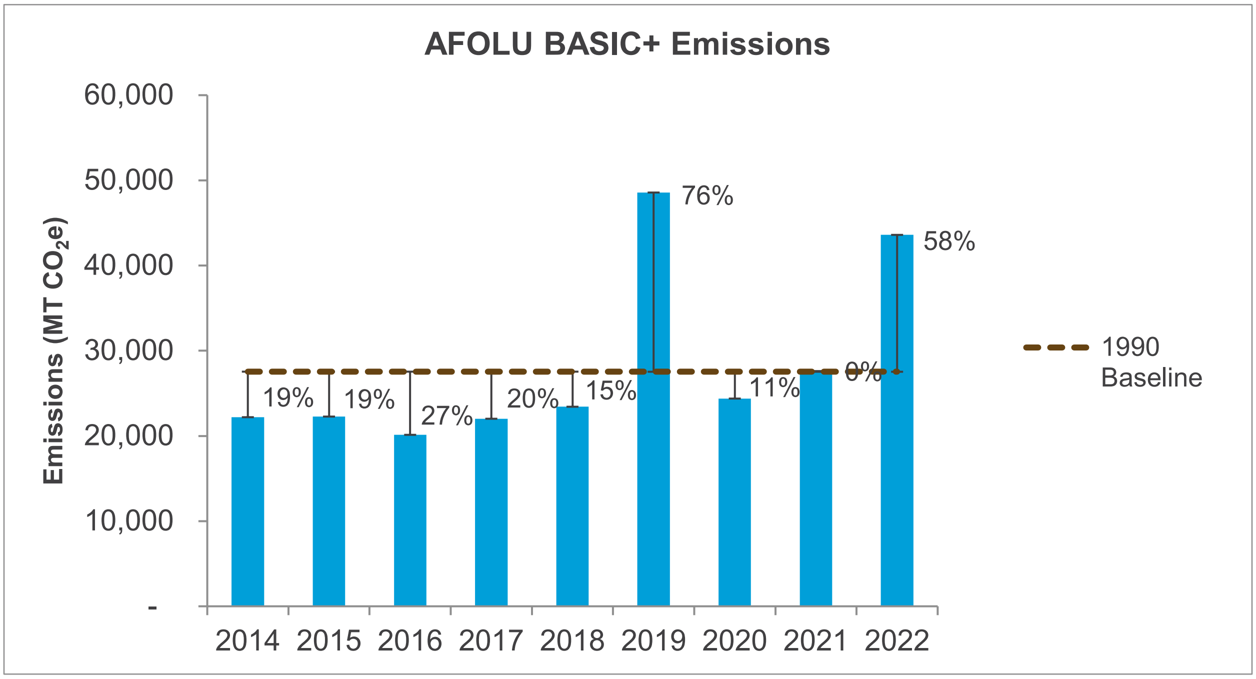

Figure 10. AFOLU Sector Emissions Reductions from Baseline

3.5 Industrial Processes and Product Use

The IPPU sector captures emissions from non-energy related industrial processes[6] and the use of products not related to energy generation. This includes emissions from substitutes for ozone-depleting substances (ODS), such as hydrofluorocarbons (HFCs) and perfluorocarbons (PFCs), widely used in refrigeration, air conditioning, foam production, and fire suppression systems. These emissions are part of the BASIC+ standard and thus are not included in the BASIC emissions tally.

Table 10. IPPU Emissions by Subsector (MT CO_2e)

	Industrial Processes	Product Use	Total IPPU Emissions
2014	-	1,790,652	1,790,652
2015	-	1,879,750	1,879,750
2016	-	1,925,515	1,925,515
2017	-	2,009,201	2,009,201
2018	-	2,050,501	2,050,501
2019	-	2,067,530	2,067,530
2020	-	2,071,863	2,071,863
2021	-	2,061,848	2,061,848
2022	-	2,058,893	2,058,893

A substantial portion of the IPPU emissions stems from the use of HFCs and PFCs. To mitigate this, the City is exploring policy options to incentivize the adoption of alternative cooling technologies, like cool roofs and cool pavements, which offer the dual benefits of reducing heat absorption and lowering cooling demands. The California Air Resources Board (CARB) is also proactive in this area, developing regulations that encourage the use of substances with a lower climate change potential.

Given the vast technological and industrial changes since 1990, the baseline year for IPPU emissions provides limited insights for comparison. The sector has evolved, with new processes and technologies emerging that were not present three decades ago, which now contribute to GHG emissions. For instance, emissions from IPPU in 1990 were recorded at a mere 10,000 MT CO_2e, contrasting sharply with the over 2 million MT CO_2e reported in recent years.

Thus, while historical data offer context, the focus must be on current and future actions. Efforts to find alternatives to ozone-depleting substances are paramount. This includes identifying new chemicals or methods that serve similar functions or devising innovative strategies to reduce the need for refrigerants and cooling agents altogether.

[6] Industrial process facilities are in the mineral, chemical, and metal production industries. No industrial facilities within Los Angeles meet the thresholds for reporting to statewide and national regulatory agencies, including CARB and the US EPA. As a result, industrial process emissions are not in this inventory. This does not necessarily mean there are no industrial process emissions, only that there are no facilities that meet the reporting thresholds.

The IPPU sector's evolution underscores the necessity for a dynamic and responsive approach to environmental management, one that acknowledges past practices while aggressively pursuing current opportunities for emission reductions.

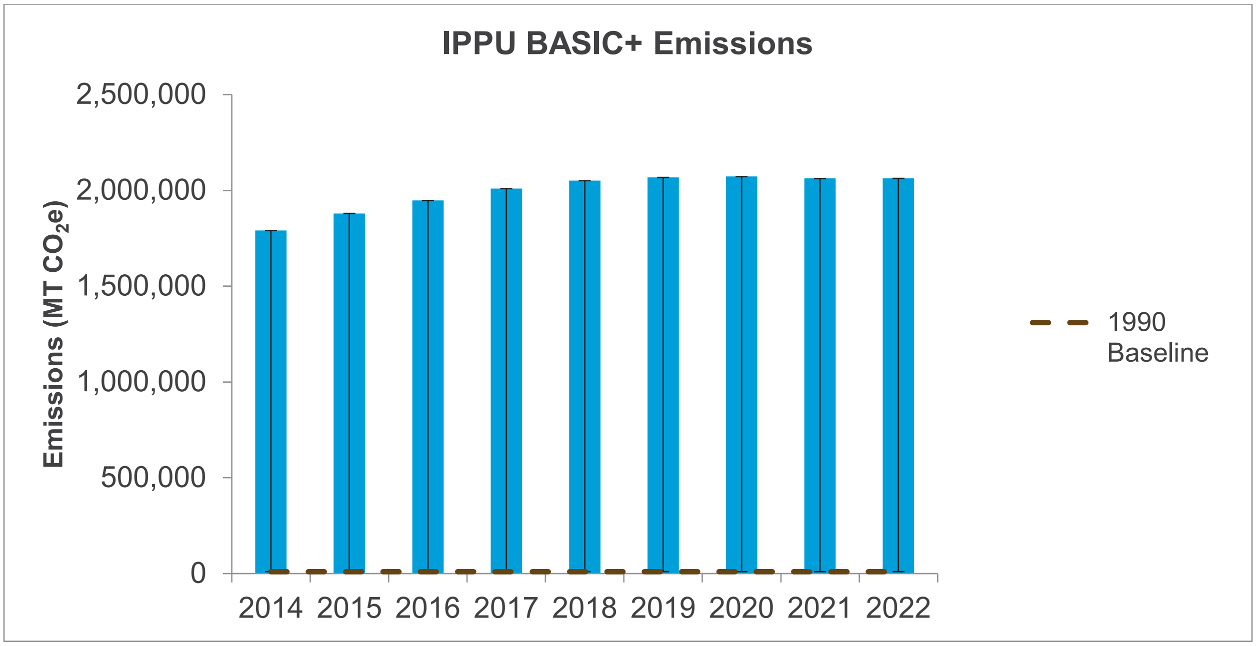

Figure 11. IPPU Sector Emissions Compared to Baseline

4. Conclusion

Los Angeles' determination and strategic action in combating climate change are evidenced by the significant decrease in greenhouse gas emissions recorded in the 2022 Community GHG Inventory. With a 30% reduction from the 1990 baseline, the City not only demonstrates its commitment to a sustainable future but also its capability to surpass targets, setting a precedent for urban climate initiatives globally.

The stationary energy sector, having achieved a 40% reduction, has been a cornerstone of this success, largely due to concerted efforts to decarbonize the energy grid. The transportation sector, despite a 4% increase over 2021, is down 11% compared to 1990 and remains a focus for ongoing advancements in electrification and sustainable transit solutions. Although the waste sector saw a slight increase, initiatives to enhance recycling and reduce landfill emissions are in effect to address these challenges.

This report underscores the City's success in decoupling emissions from economic growth, as shown by the continual drop in emissions per GDP unit. This indicates not only an improvement in environmental performance but also an advancement towards a greener economy that does not compromise economic vitality.

As Los Angeles moves forward, it will continue to innovate and implement targeted climate strategies, guided by the Green New Deal's vision for carbon neutrality by 2050. LASAN, supported by the Mayor’s Office of Sustainability, remains committed to refining the City's GHG inventory and fostering policies that enable these ambitious goals to be realized. The City's journey toward sustainability serves as a testament to what can be achieved through dedicated action, and it will continue to be a beacon of environmental stewardship for cities worldwide.

5. Preparers

LA Sanitation & Environment (LASAN), recognized as a national leader in environmental services and programs, is a critical partner in the City's climate response and in advancing the path towards the City's climate goals. LASAN is committed to proactively addressing climate change and supporting climate action in line with our mission to protect public health and the environment.

Building on nearly a decade of experience, LASAN's Climate Action Program supports the City's path towards carbon neutrality as outlined by the Sustainable City pLAn. LASAN collaborates with City departments, policymakers, and outside agencies on climate-related reports and activities.

For more information about the Climate Action Program, please contact us at san.climateaction@lacity.org or (213) 485-3640 or visit us at www.lacitysan.org/climateaction.

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