



Sustainability Framework

“Our shared vision for Lombard is a community of excellence exemplified by its government working together with residents and businesses to create a distinctive sense of spirit and an outstanding quality of life.”



The purpose of this Sustainability Framework is to declare policy of environmental sustainability and to comprehensively view the environmental goals and programs in the Village of Lombard. This framework was originally adopted by the Board of Trustees on May 6, 2010.

Dividing the environment into components provides a framework for viewing existing programs and the opportunities for future actions. The components necessarily overlap - actions undertaken in one also affects others.

Components:

Air, Greenhouse Gasses, Water, Transportation, Land Use, Waste Diversion, Food & Energy Use



Timeline of Major Sustainable Actions/Programs:

Longstanding

Recycling Extravaganza

Lombard PRIDE Day and Trails Cleanup

2007

Numerous clean air actions started (no/low VOC materials, anti-idling policy, fleet changes, public education campaign)

2008

Rain Barrel Reimbursement Grant Program

River Sweep

Earth Hour

Greenest Region Compact

2009

US Mayors Climate Protection Agreement

Compost Bin Reimbursement Grant Program

Sustainable Energy Plan for Village facilities



De-icing practices for low salt use
Added 36 bike parking spaces downtown

2010

Village Board passes Sustainability Framework

Green Building Handbook

Streetlight Policy changed to include LEDs

Stormwater filters installed

Walk to School Day

CUB Energy Saver Program

2011

Churchill Woods Dam removed

Solid Waste Contract revised for smaller toters

Invasive plant species removal on bike trails

2012

100% Carbon-Free Electricity Contract (1-yr)

Climate Action Plan

Energy Impact Illinois Grant Program



Monthly Electric Waste Collections
Document Shredding Event
Green Earth Institute Co-op Distribution Site
St. Charles Road Pedestrian Crossing

2013

Great Western Trail Bridges
Arbor Day Tree Tags
Charlotte-Martha Alley permeable asphalt

2014

EarthRight Mosquito Control Program
Public Works Parking Lot permeable
pavers/native landscaping
Terrace View Pond, Vista Pond & Morris Pond
expanded/native landscaping
Household Hazardous Waste 1-day event



2015

Hammerschmidt Commuter Parking Lot

permeable pavers/native landscaping

Downtown pedestrian tunnel

2016

Pedestrian/Bike Plan

Illinois Prairie Path Beacons at Main Street

Ponds Naturalization Program

Madison Street Bike Lane

2017

Greenest Region Compact 2

Corrugated Plastic Sign Recycling Program

2018

Curbside Composting Program

2019

Central Station Solar Panels/Native Grasses

Downtown Bike Shelter

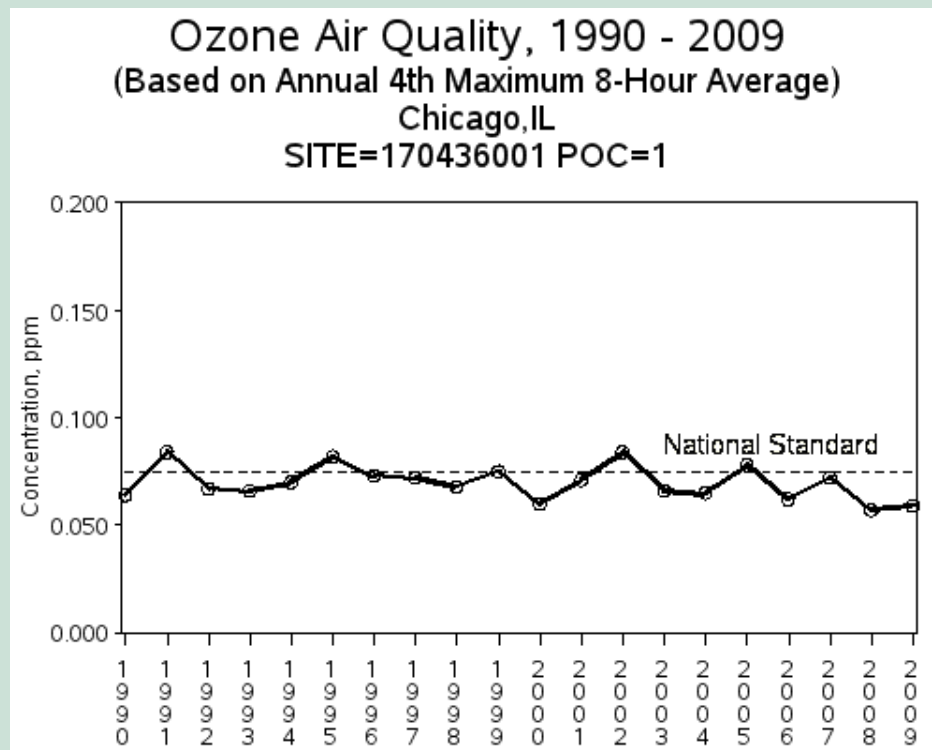


Air



Issue: The Chicago metro region suffers from ground-level ozone, also known as smog.

Goal: To prevent ozone-action days by reducing nitrogen oxides (NO_x), volatile organic compounds (VOC) and particulate matter.





Actions Accomplished and Continuing: The Village had been active in Clean Air Counts, a program through the Chicagoland Metropolitan Mayors Caucus. The Village obtained the silver level based on monthly clean air information on TV-6 and in the Pride resident newsletter, a gas can replacement program, using no/low-VOC paints and cleaning products, an anti-idling policy for Village vehicles, and placing anti-idling signs at school pick-up areas and at-grade rail crossings. The latter also resulted in a Partners for Clean Air award from the Illinois EPA. The Village currently has 3 hybrid cars and has downsized vehicles as possible. This has increased the overall mpg by 15% since 2007.





Actions to Pursue: Although the Clean Air Counts program has ended, the Village will continue to use TV-6, the Pride newsletter, press releases, and social media to promote awareness and suggestions for improving our local air quality.





Greenhouse Gases



Issue: *Greenhouse gas emissions are causing a trend of global climate change and resulting environmental consequences.*

Goal: *To reduce greenhouse gases, measured as the entire carbon footprint of Lombard, by 2% annually from 1990 levels by 2015.*

Greenhouse Gases: *Carbon Dioxide occurs from burning and other chemical reactions and it is removed by plants. Methane occurs from the production and transport of fossil fuels and the decay of organic waste. Nitrous Oxide occurs from agricultural and industrial activities and burning. Fluorinated gases are from industrial processes.*



An Energy and Emission Profile was completed for the Village by the Center for Neighborhood Technology (CNT) in 2009. The Profile quantifies the energy demands and emission sources by sector, which will be used to create targeted programs for reductions. As the carbon footprint was not indexed in 1990, 2005 values will be used instead as a benchmark. Values are expressed in MMT, million metric tons, of CO₂e (carbon dioxide emissions):

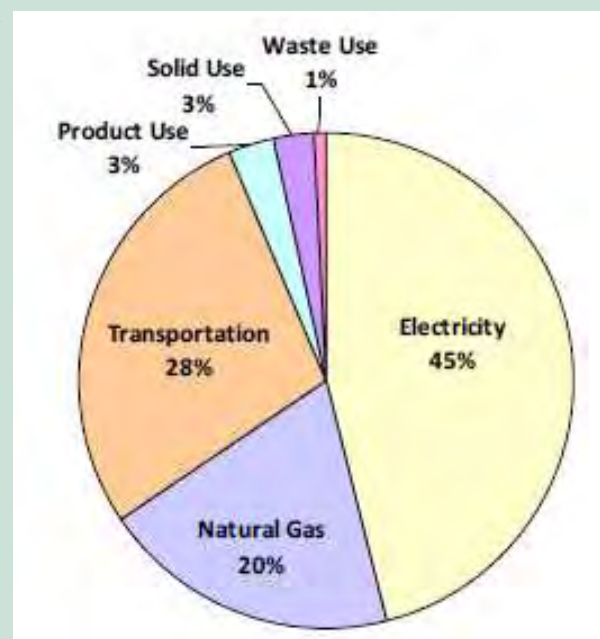
<u>SECTOR</u>	<u>MMT CO₂e</u>	<u>% of TOTAL</u>
<i>Electricity</i>	<i>0.336</i>	<i>45</i>
<i>Natural Gas</i>	<i>0.143</i>	<i>20</i>
<i>Transportation</i>	<i>0.204</i>	<i>28</i>
<i>Product Use</i>	<i>0.023</i>	<i>3</i>
<i>Solid Waste</i>	<i>0.019</i>	<i>3</i>
<i>Waste Water</i>	<i>0.005</i>	<i>1</i>
TOTAL	0.729	100



The 2013 goal was to obtain a 7% reduction in CO₂e, or 0.051 MMT, which is almost 56,000 English tons. This is the equivalent to removing 9,750 passenger vehicles from the roads (5.23 MT CO₂e per vehicle), or 17,200 tons of recycling instead of landfilling (2.97 MT/ton recycled), or 7,100 kWh of electrical use (7.18×10^{-4} MT/kWh).

Actions Accomplished: *In 2009 and 2013, the Village Board endorsed and the Village President subsequently signed the US Mayors Climate Protection Agreements.*

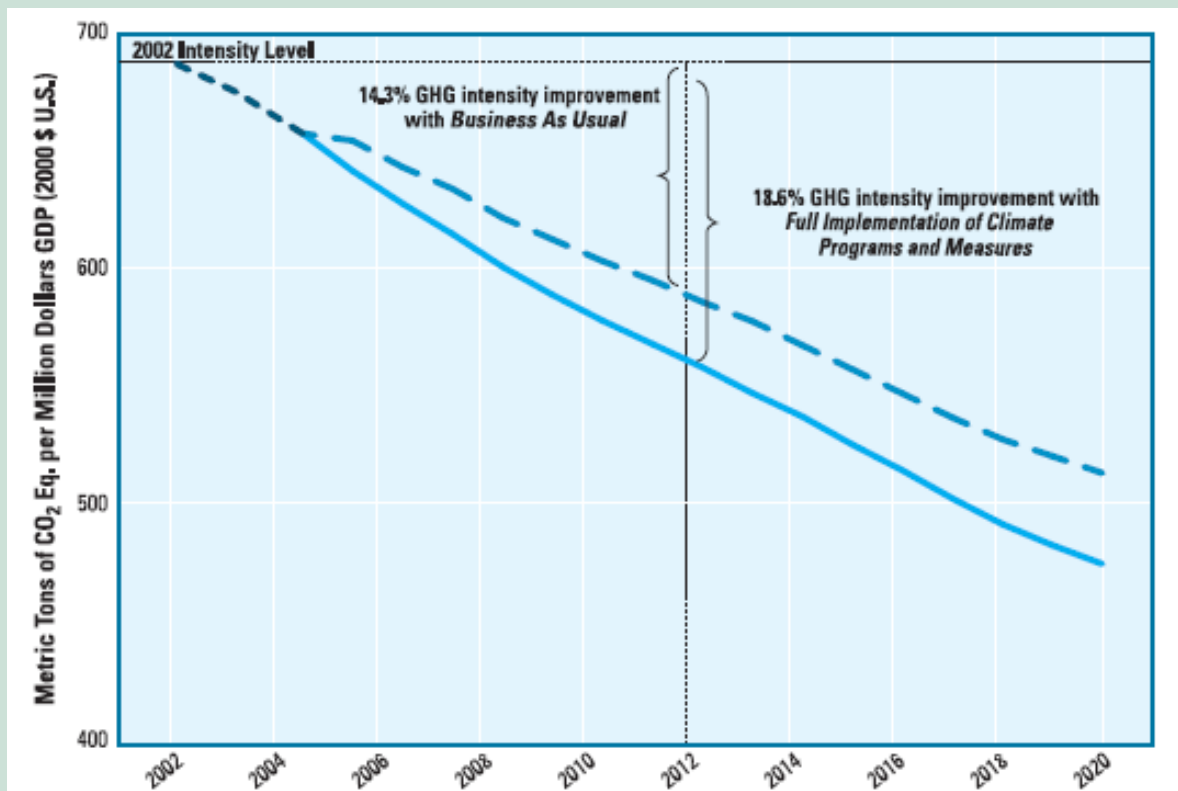
The Village has also joined the Cool Cities Program. Many of the actions in the Air, Waste and Energy Use chapters also pertain to Greenhouse Gases.





The Environmental Concerns Committee oversaw the creation of a climate action plan in 2012. Subsequently, the Village Board approved a one-year electricity aggregation contract for 100% carbon-free sources for the community, thereby lowering the carbon footprint to 25% below the 1990 footprint.

Actions to Pursue: *Actions continue on many fronts – see the Climate Action Plan for details.*





Water



Issue: Clean and abundant water preserves the health and economic vitality of our community.

Goal: To use our Lake Michigan water volume wisely and prevent pollution in our stormwater runoff, groundwater, ponds, streams and rivers.

Actions Accomplished and Continuing:

Regarding water conservation measures, the Village started a first-of-its-kind reimbursement program in 2008 incentivizing over 450 rain barrels to date. The Village has also signed the DuPage Water Commission's pledge and mailed brochures to high-use customers to promote water conservation and residential education.



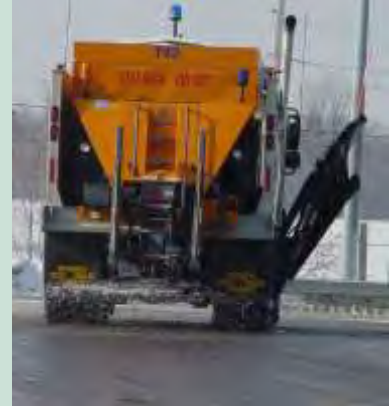
Regarding stormwater runoff, the Village administers the stringent requirements of the DuPage Countywide Stormwater and Floodplain Ordinance and incorporates Best Management Practices in its operations and the permitting of construction projects. Two stormwater filters were installed in 2010 to remove suspended particles, oils & grease from the municipal yard.

The Village supports the DuPage River Salt Creek Workgroup to achieve Total Maximum Daily Loads goals set by the IEPA. Low oxygen levels, suspended solids and chlorides are targeted. The Workgroup successfully facilitated the removal of the Churchill Woods dam in 2011 to eliminate the single worst water quality impairment on the river.





The Village participates in the River Sweep each Spring to remove debris from the East Branch of the DuPage River.



The Village “anti-ices” streets and “pre-wets” salt to increase safety and to reduce salt use by half of former amounts.

Actions to Pursue: The Village will continue the existing activities and will incorporate BMPs in future private development and capital projects. A protective catch basin will be installed in the Public Works maintenance yard to better protect two downstream ponds, Sugar Creek, and Salt Creek.





Transportation



Issue: Transportation options are essential to get students to school, workers to jobs, shoppers to stores, and disabled citizens to services. Transportation is a major influence on our land use, air quality, energy consumption and time management.

Goal: To provide a variety of transportation options for the people and businesses to balance needs and costs in an effective and efficient manner while limiting environmental impacts.

Actions Accomplished and Continuing: The 2016 Pedestrian/Bike Plan is being implemented, including the bike lanes on Madison Street and safety improvements on Westmore-Meyers Road.



In 2012, a pedestrian crossing was constructed in the downtown on St. Charles Road at Lincoln Street. A tunnel under the Union Pacific tracks was completed in 2015.



The Village partners with School Districts 44 and 45 for the annual Walk to School Day. The Village is also part of the Healthy Lombard coalition that aims to increase physical activity.

Actions to Pursue:

The Pedestrian/Bike Plan recommends bike lanes, bike boulevards, traffic calming, signage etc. to be programmed in the Capital Improvement Plan. A bicycle storage shelter will be installed in the downtown in 2019.





Land Use



Issue: *Wise and intentional land use planning facilitates society's needs while preserving and even enhancing the environment.*

Goal: *Facilitate good environmental stewardship through the Village's Comprehensive Plan and building, planning and zoning codes.*

Actions Accomplished and Continuing: *The Village staff, Plan Commission and Zoning Board of Appeals work to achieve the Board of Trustees' policies that are encapsulated in the zoning map and Code Book of Ordinances. These documents are periodically reviewed and updated to account for new technologies and policies.*



The Village is a recipient of the Growth Award from Tree City USA with nearly 18,000 parkway trees worth \$40M. The Village has removed all infested parkway ash trees and is replanting.

The Village's Green Building Handbook explains the 2009 International Energy Conservation Code and the benefits of sustainable building materials, technologies and practices.

The Village Code allows native landscaping, which reduces stormwater runoff, mower emissions, and pesticide/fertilizer pollution. The Village does not apply pesticides or fertilizers. Native landscaping was used for the Public Works Parking Lot and also the Hammerschmidt Parking Lot. Signage will be placed to promote such practices.





Native landscaping was used for projects at Terrace View Pond, Vista Pond and Morris Pond.

The Village coordinates about 100 volunteers to remove invasive buckthorn, garlic mustard, and trash on the Illinois Prairie Path and Great Western Trail during the Spring Lombard PRIDE cleanup as well as each Fall.

Actions to Pursue: Pesticide-free and fertilizer-free techniques for maintaining open spaces should be chosen where feasible, especially in large open spaces such as parks, detention basins, and fields.

Turf grass is being continually replaced with native grasses in the Village's detention basins.





Waste Diversion



Issue: Waste hauling requires labor and fuel intensive trucking as well as increasingly more distant and expensive landfill space.

Goal: Decrease the volume of refuse and yard waste removed from properties.

Actions Accomplished and Continuing: The Village's recycling rate has consistently been 30% of the curbside weight. This ranks well with other municipalities due in large part to the structure of the refuse & recycling contract. The contract allows comingling of an unlimited quantity and wide variety of recyclables.





A program began in 2011 to provide free weekly recycling service for a 96-gal



toter for every business. Also, a new contract provision now allows all residents to obtain a 35-gal toter in lieu of the standard 64-gal toter with the incentive of a 20% cost reduction.

The Village's annual Recycling Extravaganza collects an average of 2 tons of scrap metal, 2 tons of wood, 1 ton of paint, 60 bicycles, 300 pairs of shoes, 75 car batteries, 2 tons of books, 1 box truck of building supplies/tools, 2 semi trailers of furniture/appliances/clothing, and many flags, hearing aids, glasses, garden pots, crutches and wheelchairs.



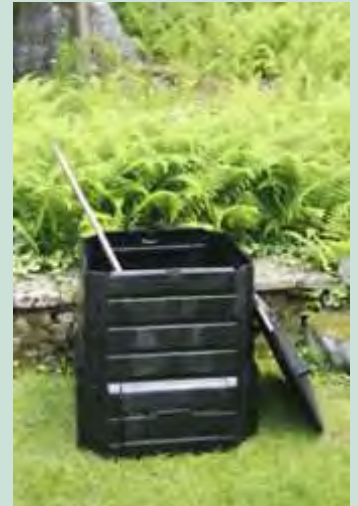


The Village's Compost Bin Grant Program has funded over 250 compost bins since 2009.

An optional curbside composting program began in 2018.

Participating residents pay an annual fee for a grey toter serviced weekly that may be filled with lawn waste and biodegradable food scraps.

A program began in 2017 to recycle corrugated plastic signs after major elections.





In 2014, the Village hosted the State's Household Hazardous Waste 1-day event. This enabled 1,000 households to dispose of dangerous substances.



A unique at-your-door HHW and electronics collection is part of the 2016-2024 Waste Management Contract, enabling residents a convenient and free option to the permanent collection site in Naperville.

Actions to Pursue:

Due to the expiration of a State law in 2016, electronics collection costs increased to the point that it is no longer offered free of charge. A sustainable no-cost method of recycling electronics will hopefully eventually be realized.

Commercial composting is being explored.



Food



Issue: *Locally grown and distributed food can be more nutritious and requires less energy to transport and store than long-distance sources.*

Goal: *To increase the production and availability of locally grown food.*

Actions Accomplished and Continuing: *The Lombard Park District has a community garden and there is a vibrant farmers market at Yorktown Mall. The Green Earth Institute, a not-for-profit located in Naperville, has partnered with the Lombard Historical Society to distribute farm-fresh organic vegetables at the Victorian Cottage at 23 W. Maple Street. There is also a private effort to establish a local food co-op.*



The Zoning Code was amended in 2012 to allow gardening on vacant lots.



Actions to Pursue:

Additional efforts to promote home gardening could be pursued, possibly with the Park District, U of I Extension and the Lombard Gardening Club. There is also opportunity for additional community garden space to meet popular demand.

Numerous Community Supported Agricultures (CSAs) have begun to establish distribution locations in Lombard. Most of these are for-profit farms that are being promoted on social media and at markets, schools and churches.



Energy Use



Issue: Reducing the Village's energy use would lower costs for all of the Village's residents and businesses as well the Village's carbon footprint for greenhouse gas emissions.

Goal: To reduce electricity and natural gas consumption for all Village facilities and operations, and to promote available programs to assist private properties.

Actions Accomplished and Continuing: The Village contracted for a Sustainable Energy Plan in 2009. That Plan is only summarized here but it is available from the Village's Public Works Department.





The Energy Sustainability Plan focused on the Village Hall but the recommendations were also extrapolated to the other facilities: establish an energy mandate, benchmark against comparable communities, conduct energy audits of all facilities, identify an Energy Coordinator & an Energy Implementation Team, create energy conservation reward/recognition programs, include energy use in operating procedures, reduce facility energy use during off hours, fully implement preventative/predictive maintenance, install motion sensors, replace remaining metal halide and halogen bulbs, reduce hallway & wall lighting, replace the HVAC automation and evaluate progress & update goals annually. HVAC systems and lights have been upgraded in the Village Hall, Police Station and in the three Public Works Buildings.





The Village has revised its Street Lighting Policy to include LED streetlights. LED lights use only 10% of the electricity needed for high pressure sodium bulbs. The Village has been replacing incandescent traffic signals with LED units, and anticipates the complete change-out by 2020.

The Village provides energy tips to homeowners through TV-6 and a column in the resident newsletter.

In 2019, solar panels are being installed on the roof of the new Central Water Station in the downtown, next to the fire station.





The Village has partnered with the Citizen's Utility Board to promote their Energy Saver Plan. This has since been discontinued.

The Village promotes the Energy Impact Illinois Grant Program, which offers substantial grants for homeowners to insulate and seal drafts.

The Village began a LED and luminescent "Exit" sign replacement program in 2010 that saves participating businesses money in 11 months.

Actions to Pursue: *Besides switching Village lights to LED, there is opportunity for energy reductions on commercial properties. The Village's Zoning Code allows businesses to lower parking lot lighting levels when closed to general use.*





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