



livability means:

healthy citizens and a healthier environment
for all of Evanston

Evanston Livability Plan

May 2014





The Evanston Livability Plan is a community driven blueprint for Evanston's next climate action goal and implementation strategies. The Plan focuses on engaging the community to support a livable Evanston where livability means healthy citizens and a healthier environment for all of Evanston.

The Evanston Livability Plan was developed in collaboration between the City of Evanston Office of Sustainability and Sustain Evanston. Sustain Evanston is an informal network of citizens and organizations who support initiatives and projects to improve the sustainability of Evanston. Sustain Evanston is made up of more than 20 organizations that are based in Evanston or have a large presence in the Evanston community and are working in the areas of the environment, climate change and sustainability. Facilitated by the Office of Sustainability, Sustain Evanston meets roughly two times per year to share information about ongoing efforts and to engage in collaborative sustainability projects.

In November 2012, Sustain Evanston engaged in an interactive process to select projects that the network could work together to implement. The top priority project selected by the network was to develop a next greenhouse gas reduction goal for Evanston and organize to achieve that goal. A subcommittee of Sustain Evanston was developed to begin this work. Citizens' Greener Evanston is a member of Sustain Evanston and took the lead in subcommittee developing this report. More information about the groups which are a part of Sustain Evanston can be found on Evanston Green Buzz evanstongreenbuzz.org.



Introduction

Evanston is a beautiful city, graced by nature with tall trees and an extraordinary lakefront. It is also a highly engaged community, aware of its uniqueness but also conscious of how its actions contribute to the larger whole.

Concerned about the advancing crisis of climate change, Evanston signed the U.S. Mayors Climate Protection Agreement in 2006, thereby pledging to achieve the greenhouse gas (GHG) emissions-reduction target set by the Kyoto Protocol. For Evanston, this translated into a goal to reduce emissions 13% by 2012 relative to a 2005 baseline Phase 1 goal. In a unique collaboration of City staff and community volunteers, Evanston in 2008 then became one of the first communities in the country to develop a Climate Action Plan to achieve its goal.

The good news is that Evanston reached the 13% emissions-reduction goal in mid-summer 2013. This is a huge accomplishment. How did it happen? The largest factor was the shift to 100% renewable electricity for residents and small businesses through Community Choice Electricity Aggregation in 2012. Not only is this program reducing Evanston's carbon footprint, it is saving participating households money, too -- an average of \$250/household over the first 12 months. A win/win situation!

Next most important were actions taken by the City of Evanston, which, by the end of 2012, had reduced GHG emissions from its operations by 32% below 2005 levels. City operations, however, account for only 2% of total Evanston emissions. The community's emissions decreased only 8% below 2005 levels in that same period (even with six months of green power through the aggregation program). This reflects reductions in the commercial sector's energy usage, offset somewhat by increases in residential energy use and transportation emissions. A full report of Evanston's Climate Action Plan implementation can be found at www.cityofevanston.org/sustainability.

We met the climate action plan goal, not by mobilizing Evanston residents to make their homes more energy efficient or to change their day-to-day behaviors, but rather through the City's initiatives to reduce its own energy use and by the decision of voters and the City Council to embrace 100% renewable energy for Evanston residents and small businesses.

Our challenge today is to frame the community's next emissions-reduction goal and then, working together, to make it happen.



Photo by: Louis Perlia

Phase II Goal

The achievement of the Evanston's first climate action goal — together with the recognition that much more remains to be done to curb climate change — has emboldened Evanston's sustainability community to set a more ambitious goal for the next four years: a **20% reduction in GHG emissions by 2016** (relative to the 2005 baseline).

The 20% reduction goal aligns with the GHG Mitigation objective in the STAR Community Rating System, a self-reporting framework for evaluating a community's progress against a set of standardized sustainability measures. The GHG Mitigation objective for the STAR framework is an 80% reduction in community-wide GHG emissions by 2050 (baseline unspecified). The reduction in emissions that Evanston has achieved through aggregation puts our community on the path to achieve this 80% goal. A 20% reduction by 2016 falls on this trend line.

The Evanston Livability Plan has gained wide-spread support in Evanston's environmental community and is consistent with the City's tradition in environmental leadership. An initial list of organizations who have endorsed the Plan are provided at the end of the report. A complete list can be found at www.evanstonlivability.org/our-goal. The City of Evanston Office of Sustainability and Sustain Evanston will continue to engage the wider Evanston community in supporting the goal of a 20% reduction in GHG emissions by 2016 and participating in the following action plan. Action Plan Research and planning indicate that this goal is significant and achievable. **Fundamental to realizing this goal, however, is retaining 100% green power for residents and small businesses.**

Based on 2012 emissions figures adjusted for projected reductions after 12 months of green electric power (i.e., through June 2013), total Evanston GHG emissions will have decreased by 128,743 MTCO₂e (metric tons of carbon dioxide equivalent) since 2005, from 1,028,366 to 899,623 — a 12.5% reduction. To meet a reduction goal of 20% by 2016, the community will need to reduce GHG emissions roughly **2% each year** for four years, for a **total additional reduction of 76,930 MTCO₂e**.

Here are proposed emissions-reduction targets for each major source of GHG emissions:






	2005 Baseline Emissions (in MTCO ₂ e)	2012 Emissions (in MTCO ₂ e)*	Reductions Needed to Reach Goal	2016 emissions total when 20% goal is met
Electricity — Residential	154,524	75,269	7,658	67,611
Natural gas — Residential	114,674	120,070	5,000	115,070
Electricity — Commercial	366,025	319,145	25,400	293,745
Natural gas — Commercial	224,266	211,300	21,380	189,920
Transportation	144,318	157,203	16,162	141,041
City of Evanston	24,559	16,636	1,330	15,306
TOTAL	1,028,366	899,623	76,930	822,693

* Figures for residential (75,269 MTCO₂e) and commercial (319,145 MTCO₂e) electricity are 2012 emissions adjusted for estimated reductions with 12 months aggregation.



Five-Part Strategy

Five major areas have been identified in which to focus Evanston's emissions-reduction efforts. To achieve our goal, we will need active participation from citizens, businesses, the City and the major institutions like the school districts and hospitals. The five focus areas are:

-  **Residential Green Power**
-  **Business Green Power**
-  **Building Retrofits**
-  **Transportation Change**
-  **City and Other Major Institutions**

Residential Green Power

Evanston has entered into a second one-year contract for 100% renewable electricity for residents (and small businesses) who do not opt out of the municipal aggregation plan.

Strategy: Maintain 100% green power for residents and small businesses

Although the price of electricity supplied by Commonwealth Edison has dropped significantly since Evanston's aggregation program began, the price of the 100% green power to be supplied under the second-year contract (through August 2014) remains lower than that of ComEd. This may not always be the case, however. The City is working to develop other ways in which the aggregation program can be leveraged to help reduce Evanston's carbon footprint. Retaining 100% green power is the foundation of Evanston's emission-reduction strategy for the long-term and is key to making a meaningful impact on climate change.

Annual emissions-reduction target: 1,915 MTCO₂e

What it will take each year:

- Evanston City Council maintains 100% green power program
- An addition 500 residential customer/year participate in the aggregation program.



Business Green Power

Many Evanston businesses are too large for the community aggregation program but are too small to have leverage in contracting for a lower-cost electrical supply.

Strategy: Develop and implement a green power program for medium-sized business.

Alternate electricity suppliers, including the City's selected supplier for the aggregation program 2014-2017, offer 100% renewable energy supply. We will work with these suppliers to make a cost effective program available to Evanston businesses. A number of businesses have signed up for these programs already.

Annual emissions-reduction target: 6,350 MTCO₂e

What it will take each year:

- An alternate electricity supplier offers businesses a green power program
- Over four years, 1/6 of Evanston's 2,500 small commercial/industrial, non-aggregation accounts sign up for the business green power program.



Building Retrofits

Buildings are one of the two biggest sources of Evanston GHG emissions. There is a tremendous opportunity to make Evanston's old and in efficient buildings more energy efficient, not only reducing GHG emissions but saving a building owners money as well.

Strategy: Improve building efficiency through an intensive retrofit program.

Implementation of this strategy began in fall 2012 with a series of house parties to introduce Energy Impact Illinois, a program offering low-cost home energy assessments and generous instant rebates to cover the cost of weatherization improvements. Promotion of the assessment and rebate program expanded during the Nicor Gas Energy Efficiency Program Community Challenge between Evanston and Oak Park in spring 2013.

Lessons learned and partnerships formed during the community challenge will help the 20% Campaign engage more home and business owners in other retrofit programs, including the Nicor/ComEd Home Energy Savings Program.

Annual emissions-reduction target: 560 MTCO₂e (single-family residential)
690 MTCO₂e (multi-family residential)
5,345 MTCO₂e (commercial)

What it will take each year:

- Energy retrofits for 280 single-family homes.
- Energy retrofits for multi-family units yielding emissions reductions of 690 MTCO₂e.
- Small business/large commercial retrofits/upgrades for reductions of 5,345 MTCO₂e.



Transportation Change

Transportation is the other big source of local GHG emissions.

Strategy: Reduce transportation emissions through system innovations and behavior change.

The 20% Campaign will promote system innovations aimed at making alternatives to the private automobile more attractive and will encourage Evanstonians to try different modes of travel that produce fewer GHG emissions.

System Innovations: Walking, cycling, transit, and car-sharing need to capture a much larger share of trips by Evanstonians. For this to happen, the alternatives to car use need to become more competitive with the private automobile with regard to cost, convenience, and safety. Only then will Evanston residents shift to lower-emissions transportation modes at the scale necessary to address climate change.

Behavior Change: A new “livability means:” outreach campaign is encouraging Evanstonians to reduce their transportation-related emissions by walking more (walkability), biking more (bikeability), and using public transit (commutability). The 20% Campaign is also exploring web-based alternative transportation tools to enable residents to track their trips and to provide incentives for lower carbon transportation behaviors.

Annual emissions-reduction target: 4,040 MTCO₂e

What it will take each year:

- A reduction over four years of 42.36 million vehicle miles traveled (VMT) by Evanstonians annually. This translates into a reduction of 1,428 miles per household, with 100% participation, or 2,856 miles/household with 50% participation.
- A collection of data and a genuine community discussion about the requirements for, and barriers to, a reduction in auto travel, followed by a combined effort to engineer solutions to the identified barriers.
- A serious effort to track transportation on a real time basis and to reduce the use of the personal auto to reach the goals set forth.



Photo by: Karen Cone

City and Other Institutions

The city's seven largest employers — City of Evanston, Northwestern University, NorthShore Evanston Hospital, Saint Francis Hospital, School District 65, School District 202, and Rotary International — are working collaboratively as the Evanston Green Ribbon Committee to advance strategies outlined in the Climate Action Plan.

Strategy: Secure commitments from all seven major employers to reduce their emissions by 2%/year through 2016.

Annual emissions-reduction target: 333 MTCO₂e for the City and meaningful reduction goals from the other major institutions in Evanston

What it will take each year:

- Lighting, building, and fleet efficiencies for the City
- Upgrade and efficiency measures for the other major institutions





Outreach and Engagement Theme



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Given that achieving a 20% reduction in Evanston GHG emissions is largely dependent on engaging residents and encouraging them to make behavioral changes, has been developed that illustrates the connection between carbon-reducing actions and the quality of life in our community. **livability means:** was selected at the February 2013 Sustain Evanston meeting as the official theme of this four-year call to climate action.

Not only does this theme communicate the many ways in which Evanstonians can help reduce the community's collective carbon footprint, it also links the 20% emissions-reduction goal with the City of Evanston's vision statement, "Creating the most livable city in America."

Playing off of the suffix -ability, the theme puts forth a new lexicon to define the characteristics of a livable community. The 20% Campaign has chosen to begin with the six -abilities shown here as they are particularly relevant to the campaign's focus on building efficiency and transportation change. The sixth category, enjoyability, encourages people to explore Evanston's many amenities and in turn spend less time using energy at home. As the 20% campaign evolves, new -abilities will be added to reflect the community's engagement and broaden the definition of what livability means to all of us.

More information on each-ability and tips on action steps to take can be found at evanstonlivability.org.



bikeability



commuteability



saveability



walkability



renewability



enjoyability

An Invitation to Climate Action

Achieving this new climate action goal depends on all of us, acting individually and collectively.

Organizations

Sustain Evanston and the City of Evanston Office of Sustainability invite all Evanston organizations to sign on to the campaign by:

- Endorsing the 20% emissions-reduction goal
- Committing to engaging their members in reducing their carbon emissions
- Distributing periodic campaign communications to their members
- Designating an organizational liaison to the campaign

Organizations and their members are encouraged to participate in the campaign in whatever ways are most meaningful to them. One organization may want to focus on helping members improve the energy efficiency of their homes/apartments while the members of another may be more interested in forming walking groups or car pools. Other organizations may want to pursue other emissions-reduction strategies not detailed in this action plan, for example, planting trees or native gardens.

There are a variety of ways in which organizations and their members can act to reduce their carbon footprints, and the Campaign Working Group stands ready to support them and to facilitate the sharing of ideas and new strategies that emerge in the months ahead.

To endorse the campaign -- or to learn more about what that might mean -- please contact campaign@greenerevanston.org

Individuals

The Sustain Evanston 20%-by-2016 Campaign Working Group also invites individual Evanstonians to participate in the campaign by :

- Endorsing the 20% emissions-reduction goal
- Committing to taking specific action steps to reduce their carbon footprint
- Reporting periodically on their progress

In addition, individuals interested in helping to implement the various campaign strategies will be warmly welcomed. Aspects of the campaign where assistance is needed include building efficiency, transportation alternatives, marketing/communications, and community outreach.

To participate in the campaign -- or to learn more about what you can do to help Evanston achieve the 20% emissions-reduction goal -- please contact campaign@greenerevanston.org



Evanston Livability Plan Endorsements

Audubon Chicago Region
Citizens' Greener Evanston
Evanston Environmental Association
Evanston Environment Board
Evanston Interreligious Sustainability Circle
Evanston Rebuilding Warehouse
Evanston Utilities Commission
League of Women Voters of Evanston
St. Nicholas Church Green Team

A complete list can be found at: www.evanstonlivability.org/our-goal



25 kW Array of Solar Panels on Evanston's High Lift Pump Station Roof



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