

Anaerobic Digestion - the digestion of organic materials by microorganisms in the absence of oxygen; occurs in digesters at water treatment facilities, landfills, etc.

Best Management Practices (BMPs) - based on three criteria: concentration (of pollutants), volume, and total load; stormwater treatment techniques that address water contamination while minimizing their impact on the environment. Examples include green or eco-roofs, permeable pavement and rain gardens.

Bio-fuels - fuel that is produced from biological matter. Examples include ethanol, biodiesel and methanol.

Bioswale – a shallow plant lined incline that naturally treats stormwater, utilizing plants that are well adept to filter water, slow the erosion of sediment, and lower groundwater contamination from chemicals in surface runoff.

Building Operator Certification (BOC) - certification program that teaches building operators how to maximize energy efficiency in buildings.

Car-share Program - a service that provides vehicles to users, usually based on an hourly fee, and includes all expenses of the vehicle in the fee. These programs allow users to have the advantages of a car, without all of the responsibilities that come with owning one. Examples include I-Go and Zipcar.

Carbon Offset - a credit that can be bought to “offset” greenhouse gas emissions, mainly carbon dioxide, through various projects such as tree plantings and renewable energy.

Carbon Sequestration - process of removing atmospheric carbon dioxide and storing it through biological process (trees, plants) or through underground storage.

Chicago Climate Exchange (CCX) - a market-based system that mandates members to lower greenhouse gas emissions by 6% and, if in non-compliance, allows those emissions credits to be traded through the use of carbon offsets; those who lower emissions greater than required are able to sell their excesses as credits to others or bank them.

Clean Air Counts - a regional initiative in Northeastern Illinois to reduce ozone-producing emissions, with the goals of improving air quality and enabling economic development.

Climate Action Plan - a plan developed by a community to lower greenhouse gas emissions through various measures, prioritizing efforts that will prove the most cost-effective in reducing emissions or will have the greatest impact.

Climate Change - a change in the climate, usually referred to when discussing global warming, that is observed over a period of decades and is based on the historical climate of an area.

Climate Leaders Program – a free EPA program that assists companies in reducing their greenhouse gas emissions through first tracking them and then agreeing to lower them; technical assistance is provided to partners in the program.

ComEd’s Load Response Program – under ComEd’s direction, participating electric users reduce power consumption for a specified number of hours and for a specified number of days during peak-

usage season (summer season); includes voluntary load response (10kW reduction on demand) and capacity-based load response (100kW reduction on demand).

Community and Economic Development Association of Cook County (CEDA) - association that seeks to improve the quality of life for low-income families and individuals.

Compact Fluorescent Lamp (CFL) - a condensed fluorescent bulb that is designed to fit common incandescent light fixtures; uses about 25% of the electricity (14 watt CFL is comparable to a 60 watt incandescent) and lasts up to ten times longer than a conventional bulb.

Compost - the digestion of organic material from waste to an end-product of fertilizer.

Deconstruction - during deconstruction buildings are disassembled, rather than demolished, in an attempt to salvage and reuse quality building materials.

Electronic Waste (e-waste) - waste from electronic technologies; computers, TVs, appliances, etc.

Energy Audit - a do-it-yourself or professional assessment of a home or business that identifies cost-effective opportunities to improve energy efficiency.

Energy Star – a joint program formed between the United States Environmental Protection Agency and the United States Department of Energy to identify and label high efficiency building products.

Evanston Climate Action Fund – an “offset” fund administered by the Evanston Community Foundation to aid in implementing recommendations of the Evanston Climate Action Plan that will improve the energy efficiency of low-income homes and nonprofit buildings.

Evanston’s Green Living Festival – an Evanston-based yearly festival that includes speakers, vendors and how-to demonstrations on environmentally friendly lifestyles.

Filter Strips - an area of land that is used in runoff areas to prevent the erosion of valuable soils.

Food Co-ops - member owned and operated food stores that focus on consumer needs; foods are usually grown organically or locally.

Fossil Fuels - fuel that has been formed over millions of years through the burial of organic material remains that have decomposed into such forms as coal, oil, and natural gas.

Geothermal - energy that is transferred from the below the earth’s surface, relying on the earth’s constant temperature below the surface; also refers to energy generated by an electric plant that transfers hot spots close to the surface to create power from steam.

Global Warming - the recent increase in average surface temperatures worldwide that is very likely due to the release of anthropogenic greenhouse gases since the Industrial Revolution; thought to be produced largely by the increase of carbon dioxide.

Green Alleys - Defined by the City of Chicago: permeable pavements (reduce runoff), high albedo pavements (reduce heat island effect) and recycled pavements (reduce waste by reusing certain materials).

Green or Eco Roof - a vegetative roof cover that lowers building energy usage by insulating it from heat, naturally absorbs and treats stormwater and creates habitat in urban environments.

Green/High-Performing Buildings - buildings that are designed to be energy-efficient, utilize/produce renewable energy, water efficient, reuse materials and have healthy indoor environments.

Greenest Region Compact of Metropolitan Chicago - a compact signed by cities in the Chicago metro region to improve the environment through three strategies: water conservation, e-waste recycling, and energy efficient lighting. Initiated by the Metropolitan Mayor's Caucus.

Greenhouse Effect - the atmospheric effect that radiates some reflected infrared waves back to earth and leads to warming of the planet; minor fluctuations in the amounts of greenhouse gases can warm or cool the planet depending on their percentages within the atmosphere.

Greenhouse Gas Emissions - any emissions that are released by humans (though naturally occurring in the environment), mainly through the combustion of fossil fuels, and have a warming potential as they persist in the atmosphere contributing to the greenhouse effect.

Heat Island Effect - the heating effect that occurs in the urban environment because of the lack of natural forms of heat absorption and leads to increases in daytime as well as nighttime temperatures.

Hybrid Vehicle - vehicles that use both a combustible form of fuel (gasoline, ethanol, etc.) and an electric motor to power it. Hybrid vehicles use less gasoline than a traditional combustion engine and some even have an electric plug-in to charge the battery.

Hydroelectric - energy made by the using the power of flowing water and using it to power turbines that create electricity

International Energy Conservation Code (IECC) - codebook that outlines energy conservation measures for buildings (residential and commercial) based on international standards.

Kyoto Protocol - a legally binding international agreement that mandates from a 5% minimum reduction in six greenhouse gas emissions (carbon dioxide, methane, nitrous oxide, sulfur hexafluoride, hydrofluorocarbons, and perfluorocarbons) to 15%, depending on the country, and must be achieved by the 2008-2012 period. The intent is to stabilize greenhouse gas emissions worldwide (particularly carbon dioxide) to curb the affects of climate change.

Leadership in Energy and Environmental Design (LEED) - a certification program that is based off of a point system that is verified by a third party; the more points a project accumulates the more environmentally sustainable it is. Qualification, starting with the lowest rated to highest is Certified, Silver, Gold, and Platinum.

Light-emitting diode (LED) - type of high-efficiency lighting that uses 50-70% less energy than conventional lighting.

Low-Flow Showerhead - a showerhead that is more water-efficient than regular ones, usually defined as 2.5 gpm (gallons per minute) or less.

Metric Tons of Carbon Dioxide Equivalent (MTCO₂E) - a system that converts the warming potential of each greenhouse gas to a common equivalent of carbon dioxide.

Mixed-Use - development that includes a residential component and a commercial component; mixed-use development encourages higher density living by allowing residents easy access to services.

Multi-Modal Transportation Plan - a plan that encourages the use of various forms of transportation including walking, biking, driving, public transport, car-share, etc.

Native Plants - plants that have naturally adapted to a specific environment/climate and require minimal to no maintenance.

Off-Peak Thermal Storage - a cooling system that utilizes real-time electric pricing through the nighttime production and storage of ice for next day cooling purposes, therefore reducing the A/C load (and cost) during high use periods.

Permeable Materials - in the context of Best Management Practices (BMPs) for stormwater, it includes paving materials that lower surface runoff and allow stormwater to penetrate the surface.

Plasma Arc Gasification - a waste-to-energy technology that works by passing trash through a super heated plasma arc and disassociates it into elemental gases and solid waste (slag); the goal is to reduce solid waste sent to landfill and produce electricity.

Real-Time Pricing - electricity pricing that is based on time-of-day usage, rather than a flat rate. Real time pricing allows users to shift their energy use to low use times (such as evening and weekend hours) to take advantage of lower rates, while alleviating the demand on the electric grid at high use times (such as extremely hot days).

Renewable Energy - energy that is produced from a source that is of a limitless or renewable supply. Examples include wind, solar, hydroelectric, geothermal and wave energy.

Section 8 Vouchers - vouchers that are available to very low income residents that are used for rent payments in privately owned rental housing, typically covering 30-80% of those costs.

Smart Energy Design Assistance Center (SEDAC) - a state funded resource for public and private entities that gives advice and analyses to those seeking energy efficiency; managed by the University of Illinois Urbana-Champaign and 360 Energy Group.

Solar Photovoltaic - a type of solar energy that produces electricity through the use of a solar panel.

Solar Thermal - a type of solar energy that transfers the sun's rays to heat; mainly used for heating water.

Stormwater Management - the management of stormwater through various measures such as native plants, proper diversion, etc. that lead to less stormwater getting into the sewage system.

Telecommuting - computer-based work that can be done remotely outside a central office environment, usually done at the employees home, but can also include telecommuting centers or other locations.

Urban Forest Effects (UFORE) Analysis - computer model that was developed to help understand the benefits of the urban forest and its effects.

US Mayors Climate Protection Agreement - agreement that was initiated by Seattle Mayor Greg Nickels on February 16, 2005 (Day of the Kyoto Protocol Agreement) and includes three requirements to signatories: 1) Strive to meet or beat the Kyoto Protocol targets in their own communities, through actions ranging from anti-sprawl land-use policies to urban forest restoration projects to public information campaigns; 2) Urge their state governments, and the federal government, to enact policies and programs to meet or beat the greenhouse gas emission reduction target suggested for the United States in the Kyoto Protocol -- 7% reduction from 1990 levels by 2012; and 3) Urge the U.S. Congress to pass the bipartisan greenhouse gas reduction legislation, which would establish a national emission trading system.

Waste to Energy - process of converting solid waste to energy through combustion.

Waste Vegetable Oil (WVO) - waste oil, mainly a byproduct of food services, that is filtered and used as fuel; can be extracted or used in pure form.