

building a green los angeles

FRAMEWORK FOR THE CITY'S GREEN BUILDING PROGRAM

why build green?

In May 2007 Mayor Antonio Villaraigosa issued a Climate Action Plan (Plan) to reduce greenhouse gas emissions 35% below 1990 levels by 2030. Greenhouse gas emissions, which include carbon dioxide (CO₂), are now globally recognized as the leading contributor to the dangers of global warming.

The Plan, initiated by the City Council motion and the Mayor's direction to department heads, identifies how the City will achieve the new goals. Specifically referenced is the importance of reducing the environmental impact of buildings.

Buildings consume up to two-thirds of the City's electricity. In addition, they use a significant fraction of water and other natural resources, as well as contribute 12% of landfill waste. The electrical demand of buildings constitutes over 32% of the city's annual carbon dioxide emissions of 52 million metric tonnes. Given that the City permits thousands of new construction and remodel building projects per year, improvements to building layout, design and material selection, combined with the installation of more efficient fixtures, appliances, and heating and cooling systems could contribute to significant savings of electricity, gas, and water consumption and a reduction in the quantity of solid waste leading to our landfills.

The Program addresses five key areas:

- > **SITE-LOCATION** - SITE PLANNING, LANDSCAPING, STORMWATER MANAGEMENT, CONSTRUCTION & DEMOLITION RECYCLING
- > **WATER EFFICIENCY** - EFFICIENT FIXTURES, WASTEWATER REUSE, EFFICIENT IRRIGATION
- > **ENERGY & ATMOSPHERE** - ENERGY EFFICIENCY, CLEAN/RENEWABLE ENERGY
- > **MATERIALS & RESOURCES** - MATERIALS REUSE, EFFICIENT BUILDING SYSTEMS, USE OF RECYCLED & RAPIDLY RENEWABLE MATERIALS
- > **INDOOR ENVIRONMENTAL QUALITY** - IMPROVED INDOOR AIR QUALITY, INCREASED NATURAL DAYLIGHTING & IMPROVED THERMAL COMFORT/CONTROL



what is the green building program?

SUMMARY

The Program establishes three main components: the Green Building Team, the Standard of Sustainability, and the Standard of Sustainable Excellence. The Program was approved by the City Council and signed by the Mayor on Earth Day, April 22, 2008.

GREEN BUILDING TEAM

The City recognizes that green building is an emerging and evolving field and therefore relatively unfamiliar to many in the building design and construction industries. Therefore, the Program establishes the Green Building Team to hold public meetings and address technical issues, to review and suggest modifications to the Los Angeles Municipal Code, to oversee the Standards of Sustainability and Sustainable Excellence, and to establish and maintain city staff education and an educational public outreach program. In addition, the Team will provide an annual Green Building Report Card.

STANDARD OF SUSTAINABILITY (MANDATORY FOR LARGE PROJECTS)

Threshold: The Standard of Sustainability establishes a requirement for non-residential projects at or above 50,000sf of floor area, high-rise residential (above six stories) projects at or above 50,000sf of floor area, or low-rise residential (six stories or less) of 50 or more dwelling units within buildings of at least 50,000sf of floor area to meet the intent of the Leadership in Energy and Environmental Design® (LEED®) Certified level. The Standard also applies to existing buildings that meet the minimum thresholds described above when redevelopment construction costs exceed a valuation of 50% of the existing building's replacement cost.

Requirement: The project must include a LEED® Accredited Professional (LEED® AP) on the project team, and demonstrate that the project has met the intent of the US Green Building Council's (USGBC) LEED® Certified level. Formal certification by the USGBC is not required. The Standard for non-residential/high-rise residential projects will be effective on November 1, 2008. The Standard will apply to low-rise residential projects on May 1, 2009.

STANDARD OF SUSTAINABLE EXCELLENCE (VOLUNTARY FOR PROJECTS OF ANY SIZE - LARGE AND SMALL)

Threshold: The Standard of Sustainable Excellence establishes an incentive program for projects that register with the USGBC's LEED® program, contract with a LEED® AP, and can demonstrate how the project will achieve LEED® certification at a Silver or higher level.

Incentives: The Program establishes expedited services within the Department of City Planning (General Planning form CP-4039 available online at <http://cityplanning.lacity.org>) and the Bureau of Engineering (213-482-7474). The Department of Building and Safety provides priority plan check processing (888-LA4-BUILD), and Priority Service Planning is offered by the Department of Water and Power (Water Service: 213-367-1178, Electric Service: 213-367-1716).



RESOURCES

CITY OF LOS ANGELES DEPARTMENTS

Bureau of Engineering's Sustainable Design Implementation Program
<http://eng.lacity.org/projects/sdip>

Bureau of Sanitation
www.lacity.org/SAN

Community Redevelopment Agency
www.crala.net

Department of Building & Safety
www.ladbs.org

Department of City Planning
<http://cityplanning.lacity.org>

Department of Housing
www.lacity.org/lahd

Department of Neighborhood Empowerment
www.lacityneighborhoods.com

Department of Public Works
www.lacity.org/DPW

Department of Transportation
www.lacity.org/LADOT

Los Angeles Department of Water & Power
www.ladwp.com

Environmental Affairs Department
www.lacity.org/EAD

Urban Forestry Division
www.lacity.org/BOSS/UrbanForestryDivision/index.htm

UTILITY REBATE PROGRAMS

Los Angeles Department of Water & Power
www.ladwp.com

Metropolitan Water District
www.mwdh20.com

Southern California Gas Company
www.socalgas.com/energy_efficiency

GREEN BUILDING BASICS

Eco-Home Network
www.ecohome.org

Environmental Building News
www.buildinggreen.com

Environmental Design & Construction Magazine
www.edcmag.com

Global Green USA
Green Building Resource Center
www.globalgreen.org/gbrc/index.htm

Green Home Guide
www.greenhomeguide.com

Greener Buildings
www.greenerbuildings.com

Healthy Building Network
www.healthybuilding.net

Home Energy Saver
www.homeenergysaver.lbl.gov

LACOMAX
www.ladpw.org/epd/lacomax

Natural Resources Defense Council
www.nrdc.org/cities

Rocky Mountain Institute
www.rmi.org

US Department of Energy
Energy Efficiency & Renewable Energy
www.eere.energy.gov/buildings

TOOLS FOR BUILDING GREEN

BEES (Building for Environmental & Economic Sustainability)
www.bfrel.nist.gov/oe/software/bees.html

California Integrated Waste Management Board
Sustainable Building Tool Kit
www.ciwmb.ca.gov/GreenBuilding/

Construction Waste Calculator
www.wastematch.org/reuse/calculator.htm

Southface Energy Institute
www.southface.org



RESOURCES (cont.)

Low Impact Living
www.lowimpactliving.com
Sustainable Works
www.sustainableworks.org

Whole Building Design Guide
www.wbdg.org

MATERIALS & PRODUCTS

Environmental Home Center
www.environmentalhomecenter.com

GreenSpec Directory
Building Green's Product Directory
www.buildinggreen.com

Oikos-Green Building Products & News
www.oikos.com

GREEN BUILDING PROGRAMS

Build It Green
www.builditgreen.org

California Green Builder Program
www.cagreenbuilder.org

Collaborative for High-
Performance Schools (CHPS)
www.chps.net

Energy Star
www.energystar.gov

Green Communities Initiative
www.enterprisefoundation.org/resources/green

Leadership in Energy &
Environmental Design (LEED)
www.usgbc.org/LEED

INDUSTRY ORGANIZATIONS

American Institute of Architects
www.aia.org

American Planning Association
www.planning.org

The American Society of Landscape Architects
www.asla.org

California Building Industry Association
www.cbia.org

THIRD PARTY CERTIFIED MATERIALS & PRODUCTS

California Integrated Waste
Management Board Recycled-Content
www.ciwmb.ca.gov/rcp

Carpet & Rug Institute
www.carpet-rug.com

Forest Stewardship Council
www.fscus.org

GreenGuard
www.greenguard.org

Green Seal
www.greenseal.org

Scientific Certification Systems
www.scscertified.com

US Environmentally Preferable Products Database
www.epa.gov/oppintintr/epp

LANDSCAPING & HABITAT

California Native Plant Society
www.cnps.org

Hollywood Beautification Team
www.hbteam.org

Korean Youth Community Center
www.kycccla.org

Los Angeles Conservation Corps
www.lacorps.org

Los Angeles County Landscaping Guidelines
http://ladpw.org/wmd/watershed/la/larmp_construction_gdlns.cfm

North East Trees
www.northeasttrees.org

TreePeople
www.treepeople.org

Theodore Payne Foundation
www.theodorepayne.org

green building program standard of sustainable excellence

(VOLUNTARY FOR PROJECTS OF ANY SIZE)

Incentives

Projects are eligible for priority processing services within the Department of City Planning and expedited services within the Bureau of Engineering. The Department of Building and Safety provides priority plan check processing and Priority Service Planning is offered by the Department of Water and Power.

The following information refers **only** to the Department of City Planning procedure.

Subject Projects

The Standard of Sustainable Excellence establishes an incentive program for projects that register with the United States Green Building Council's (USGBC) Leadership in Energy and Environmental Design® (LEED) program, contract with a LEED Accredited Professional (LEED AP), and demonstrate how the project will achieve LEED certification at a Silver level or higher. For more information about LEED, please visit www.usgbc.org.

LEED

LEED is comprised of various Rating Systems designed by the USGBC that establish green development standards. The existing Rating Systems include: New Construction (NC), Existing Buildings (EB), Commercial Interiors (CI), Core and Shell (CS) and Homes. Rating Systems in pilot include: Retail, Healthcare, Neighborhood Development and Homes for Multifamily.

Each Rating System has its own Checklist. Projects must attain the minimum number of points required to meet LEED at the Silver level. Applicants may select the Rating System best suited to their project, including the ones still in pilot phase. The various LEED Checklists can be obtained at www.usgbc.org. A project shall be evaluated based upon the version in effect on the date that the project registered with the USGBC.

obtaining priority processing

When filing a case at the planning counter, the applicant will check the "LEED Silver" box on the Master Land Use Permit Application in the Project Description section. The applicant must also attach the following documents to the application:

1. **LEED Checklist:** The project's preliminary LEED Checklist that demonstrates that the number of points the project intends to pursue will make it eligible to obtain LEED Silver Certification or higher.
2. **Declaration:** A signed declaration from the Owner(s), Architect of Record and LEED AP asserting that the project has been registered with the USGBC, will be designed and constructed to meet the LEED standard for Silver or higher and will obtain formal certification. The declaration (CP-4040) is a Planning Department General Form that can be accessed online at <http://cityplanning.lacity.org>
3. **USGBC Registration and Paid Invoice:** Documentation that the project has registered with the USGBC and that the required fees have been paid to the USGBC.

standard of sustainable excellence clearance procedure

Submit Plans to Department of Building & Safety (DBS)



Department of City Planning (DCP) Clearance:

The DCP will need to issue a green building clearance in order for projects to receive a building permit. Applicants may obtain the clearance at the Site Plan Review Office located on the 6th Floor of 200 N. Spring Street, Los Angeles, or on the 4th Floor of 6262 Van Nuys Boulevard, Van Nuys. Appointments are required for both offices, and can be made by calling 213-978-1219 (Downtown) or 818-374-9923 (Valley). In order to obtain clearance, the following materials must be provided:

1. **LEED Checklist** - The project's LEED Checklist that demonstrates that the project attains the Silver level or higher.
2. **Declaration** - A signed declaration from the Owner(s), Architect of Record and LEED AP asserting that the project has been designed and will be constructed to meet LEED at the Silver level or higher, and will obtain formal Certification from the USGBC. The declaration (CP-4039) is a Planning Department General Form that can be accessed online at <http://cityplanning.lacity.org>.
3. **Stamped and Signed Drawings/Plans** - A complete set of plans stamped and signed by a licensed architect or engineer that has the LEED Checklist and declaration copied onto the first page. Each applicable plan sheet must be signed by the LEED AP verifying that the plans are consistent with the submitted checklist. The drawings/plans may be subject to audit.
4. **Filing Fee** - The fee set forth in Section 19.01 Y.

Exemption: At the time of the clearance request, projects that demonstrate that they have received confirmation from the USGBC that each of the project's Design Review credits has been designated as "Anticipated" shall be exempt from the aforementioned audit and fee.



Permit Issuance by DBS

(DBS will require clearance from DCP prior to issuing the building permit)



Following construction of the building and within 30 days of receipt of the LEED certification, a copy of the LEED certificate shall be submitted to the Site Plan Review Office.

green building program standard of sustainability

(MANDATORY FOR LARGE PROJECTS)

Requirement

- Meet the intent of the US Green Building Council's (USGBC) Leadership in Energy and Environmental Design (LEED®) Certified level. (Formal certification by the USGBC is not required.)
- Project team must include a LEED® Accredited Professional (LEED® AP). Information about local consultants can be obtained at: www.usgbc.org.
- Both by-right and discretionary projects must receive clearance prior to the issuance of a building permit.

Subject Projects

Effective November 1, 2008:

- A new non-residential building or structure of 50,000 gross square feet or more of floor area; or
- A new mixed use or residential building of 50,000 gross square feet or more of floor area in excess of six stories; or
- The alteration or rehabilitation of 50,000 gross square feet or more of floor area in an existing non-residential building for which construction costs exceed a valuation of 50 percent of the replacement cost of the existing building; or
- The alteration of at least 50 dwelling units in an existing mixed-use or residential building seven stories or more, which has at least 50,000 gross square feet of floor area, for which construction costs exceed a valuation of 50 percent of the replacement cost of the existing building.

Effective May 1, 2009, in addition to the above thresholds:

- A new mixed use, or residential building of six or fewer stories consisting of at least 50 dwelling units in a building, which has at least 50,000 gross square feet of floor area, and in which at least 80 percent of the building's floor area is dedicated to residential uses; or
- The alteration of at least 50 dwelling units in an existing mixed-use or residential building six stories or less, which has at least 50,000 gross square feet of floor area, for which construction costs exceed a valuation of 50 percent of the replacement cost of the existing building.

EXEMPTIONS

Projects whose plans were accepted by the Department of Building and Safety (DBS) for plan check and/or had filed and had deemed complete an entitlement application (with the exception of CEQA review) with the Department of City Planning (DCP) prior to the effective date of this Standard.

LEED

LEED® is comprised of various Rating Systems designed by the USGBC that establish green development standards. The existing Rating Systems include: New Construction (NC), Existing Buildings (EB), Commercial Interiors (CI), Core and Shell (CS) and Homes (H). Rating Systems in pilot include: Retail, Healthcare, Neighborhood Development and Homes for Multifamily.

Each Rating System has its own Checklist. Projects must attain the minimum number of points required to meet the intent of LEED® at the Certified level. Applicants may select the Rating System best suited to their project, including the ones still in pilot phase. The various LEED® Checklists can be obtained at www.usgbc.org. A project shall be evaluated for LEED® intent based upon either the version in effect when either the project submits for a building permit or, in the case that a project registers with the USGBC, the version in effect on the date that the project registered with the USGBC.

standard of sustainability clearance procedure

By-Right Projects

Discretionary Projects



Submit Plans to the Department of Building & Safety (DBS)



Department of City Planning (DCP) Clearance:

The DCP will need to issue a green building clearance in order for projects to receive a building permit. Applicants may obtain the clearance at the Site Plan Review Office located on the 6th Floor of 200 N. Spring Street, Los Angeles, or on the 3rd Floor of 6262 Van Nuys Boulevard, Van Nuys. Appointments are required for both offices, and can be made by calling 213-978-1219. In order to obtain the clearance, the following materials must be provided:

1. **LEED® Checklist** - The project's LEED® Checklist that demonstrates that the project meets the intent of the selected LEED® Rating System at the Certified level or higher.
2. **Signed Declaration** - A signed declaration from the Owner(s), Architect of Record and LEED® AP stating that the plans and plan details have been reviewed, and that the Project meets the intent of the criteria for certification of the selected LEED® Rating System at the Certified level or higher. The declaration [CP-4038] is a Planning Department General Form that can be accessed online at <http://cityplanning.lacity.org>.
3. **Stamped and Signed Drawings/Plans** - A complete set of plans stamped and signed by a licensed architect or engineer that has the LEED® Checklist and declaration copied onto the first page. Each plan sheet must be signed by the LEED® AP verifying that the plans are consistent with the submitted checklist.
4. **\$268 Fee** - The fee set forth in Section 19.01 Y.

* May be subject to audit. A third-party audit will be conducted for every seventh project that is submitted for clearance. The project's LEED® Checklist, construction drawings, and specifications will be reviewed to confirm the project has met the intent of LEED®. Should the audit result in a list of corrections, the applicant will need to return the corrected project documentation in order to obtain the clearance.

OR

Satisfactory Completion of Design Review by USGBC - At the time of the clearance request, projects that demonstrate that they have received confirmation from the USGBC that each of the project's Design Review credits has been designated as "Anticipated" shall be exempt from the aforementioned audit and fee.



Permit Issuance by DBS

(DBS will require clearance from DCP prior to issuing the building permit)

green building program

green building team

The Green Building Team will be chaired by the Mayor's Office and include representation from the Office of the Chief Legislative Analyst, Council President, and chairs of the Planning and Land Use Management Committee and Energy and Environment Committee, as well as the departments of Building and Safety, City Planning, Community Redevelopment Agency, Environmental Affairs, Fire, Housing, Public Works, and Water and Power. The Team shall also include members from a variety of other municipal agencies and utilities as issues warrant.

The Team shall hold monthly public meetings to discuss issues and challenges pertinent to green building as well as specific project innovations. This could include suggested new or revised codes, new technologies or materials, or departmental conflicts. The Team will hold its public meetings on the first Wednesday of each month. The meetings will be held at 3pm in City Hall East, Room 351A.

TECHNICAL ISSUES

The Team shall serve as a clearinghouse of city expertise on issues related to green building. The Team shall provide staff with clarifications to technical issues related to green building construction.

LOS ANGELES MUNICIPAL CODE

The Team shall review and suggest modifications on an on-going basis to remove obstacles to green building. These code changes will require a separate outreach and approval process.

STANDARD OF SUSTAINABILITY

Every two years the Team shall recommend any necessary adjustments to the Program's thresholds.

STANDARD OF SUSTAINABLE EXCELLENCE

The Team shall review annually the package of incentives and their effectiveness in encouraging projects to pursue Sustainable Excellence.

STAFF EDUCATION

The Team shall develop education protocol to be utilized by all of the departments represented on the Team.

PUBLIC OUTREACH

The Team shall develop and maintain a public outreach program for, but not limited to, architects, engineers, developers, land use attorneys, contractors, builders, employers, and City residents.

ANNUAL REPORT CARD

The Team shall produce an annual report card that will recognize exemplary projects and innovations as well as reference overall Program achievements, concerns and impediments. The first Report Card will be issued by April 22, 2009.