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NRDC's Sustainable Operations

Innovation-Driven Solutions to Reducing Heating-Related
Greenhouse Gas Emissions



October 2017

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Natural Resources Defense Council

NRDC works to safeguard the earth—its people, its plants and animals, and the natural systems on which all life depends.



550 scientists, lawyers, and policy advocates

2 million+ members and online activists

7 offices

Areas of Work

Climate Change

Health

Communities

Oceans

Energy

Water

Food

The Wild

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NRDC Facilities & Administration Team Mission

“Through superior stewardship our facilities foster a collaborative and inclusive workplace. By prioritizing the planet we will continue to inspire our community to strive for the highest level of environmental standards and a sustainable future.”

NRDC committed to greening our offices in 1988 (five years before LEED) and we are still pushing the envelope.



San Francisco

- LEED Gold CI
- LBC Petal Certification

Bozeman

- No certification yet (<5 employees)

Chicago

- LEED Platinum CI
- LBC Petal Certification

New York (HQ - owned)

- LEED Platinum CI

Washington, D.C.

- LEED Platinum CI

Santa Monica (owned)

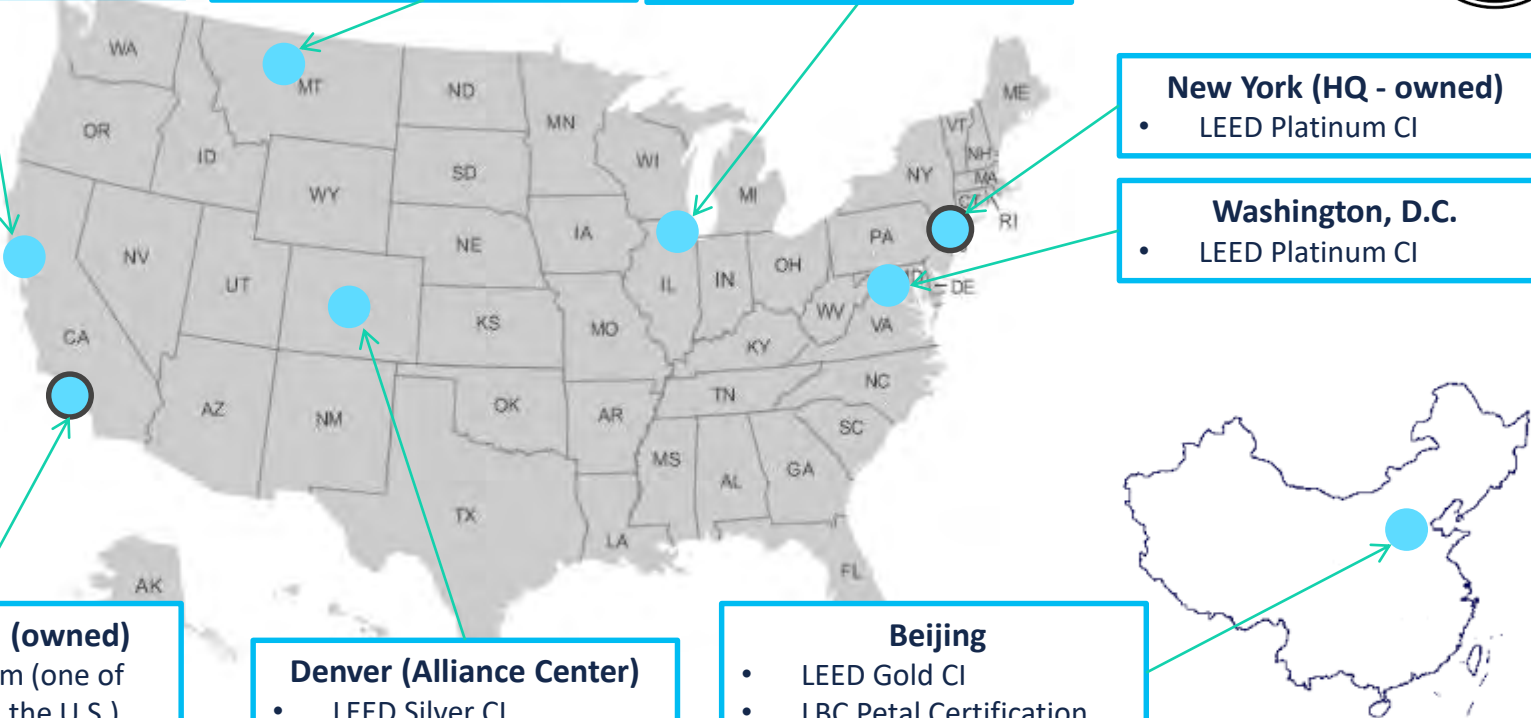
- LEED Platinum (one of first bldgs. in the U.S.)

Denver (Alliance Center)

- LEED Silver CI

Beijing

- LEED Gold CI
- LBC Petal Certification



We see our offices as physical spaces and change agents



BUILDING GHG

A yellow rounded square containing a black icon of a factory with a cloud containing the text "CO₂".

AIR QUALITY

A black icon of a plant growing in a circular container with soil.

PROCUREMENT

A black icon of a wooden plank with a wood grain pattern.

TEAM ADOPTION

A black icon of two stylized figures holding a horizontal bar.

COMMUNITY BUILDING

A black icon of three stylized human figures.

WATER

A black icon of a water tap with a single drop of water falling.

MEASUREMENT & VERIFICATION

A yellow rounded square containing a black icon of a bar chart with four bars and a line graph with four points.

TRAVEL GHG

A black icon of an airplane flying through a cloud containing the text "CO₂".

ORGANIZATIONAL EDUCATION

The NRDC logo, featuring a shield with a bear and a star, with the text "NRDC" above it.

PROVIDE ADVICE

A black icon of two speech bubbles above two stylized human figures.

WASTE

A black icon of a trash can.

CONSTRUCTION

A black icon of a house with a leaf growing from the roof.

ORGANIZATION COLLABORATION

A black icon of four hands holding a globe.

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Heating-related Energy and GHG reduction initiatives

Prior to detailed measurements:

- New windows throughout the building
- Renovation of the 8th floor to an open plan

With detailed measurements:

- Set points & timing adjustments
- Boiler controls
- Air sealing (closed equivalent of 10 square foot hole)
- Conversion to B100 biodiesel
- Installation of electric immersion heater for fire sprinkler water tank

Conversion to B100 Biodiesel

- Recycled used cooking oil
- Biogenic, non-fossil carbon emissions
- No changes required to boiler other than a few gaskets
- Virtually eliminated GHG emissions from heating in NY HQ



Electric immersion heater for fire sprinkler water tank

- Water tank for fire suppression sprinkler system is exposed on rooftop, stagnant and at higher risk of freezing than flowing water.
- After air sealing, building retained heat well, but boiler would be triggered to keep sprinkler water from freezing.
- Installation of an electric immersion heater meant the tank no longer required boiler for heat.



30% reduction in heating fuel use per heating degree day

Weather-adjusted heating fuel usage (kWh / HDD), floors 6-12, Oct. - Mar.

