

Boulder Housing Partners

Energy Conservation & Sustainability Plan

September 2008

Purpose of the Plan

The term “sustainability” has many different meanings to many different people. For BHP, the concept of sustainability is directly tied to the performance and comfort of our affordable housing units. In this context, sustainable housing can be thought of as housing in which systems (energy, heating/cooling, water, and social aspects), longevity, and productivity are integrated into each unit’s design, allowing it to function long into the future with a minimum of upkeep and human attention. These housing units will use resources efficiently and provide cost savings, and will in general be nicer places to live, for longer. Sustainable housing is well-designed, durable, comfortable, and non-wasteful.

Utility costs are a significant and growing expense for BHP properties, and there is an ongoing need to understand and analyze our resource use and consumption. As well, significant funding is needed to fund improvements over time and support staff in addressing energy and other sustainability issues. At the same time, there are significant opportunities to educate constituents about the need to conserve energy and water, and to reduce waste by fostering and promoting sustainable behaviors.

Putting this all together, with this sustainability plan we can become a proactive leader in Boulder by reducing energy and resource use in the multi-family housing sector, building more sustainable housing, and reducing our effects on climate change.

Draft Sustainability Plan

	Energy (Electric and Gas)		Water	Solid Waste	Indoor Air Quality	Greenhouse Gas Emissions
Metrics	kWh	Therms	Gallons	Tons	Quality of Indoor Air/Thermal Comfort	Tons CO2e
5-Year Goals	Reduce energy consumption by 15 percent.		Reduce water use by 15 percent.	Achieve a 60 percent diversion rate (recycling, composting).	Increase indoor air quality and comfort.	Reduce greenhouse gas emissions by 15 percent.
Strategies by Metric	<p>Monitor energy consumption and act on opportunities to reduce energy use.</p> <p>Seek best practices in energy conservation.</p> <p>Audit and weatherize all properties over the next 5 years. Conduct 2008 audits for Midtown, Woodlands, and Bridgewalk.</p> <p>Install compact fluorescent bulbs and de-lamp (remove bulbs) where it is safe to do so.</p> <p>Pursue low and no-cost energy conservation measures.</p> <p>Purchase Energy Star products.</p> <p>Implement energy modeling.</p>		<p>Conduct 2008 audits for Midtown, Woodlands, and Bridgewalk.</p> <p>Increase efficiency of outdoor irrigation systems.</p> <p>Retrofit indoor fixtures with higher efficiency fixtures.</p>	<p>Conduct 2008 audits for Midtown, Woodlands, and Bridgewalk.</p> <p>Convert to on-demand trash hauling.</p> <p>Explore composting opportunities.</p>	<p>Use low/no VOC products (paints, cabinets, carpets) in new construction and retrofits.</p> <p>Enhance indoor air quality through integrated design of new construction.</p> <p>Provide for increased passive and/or mechanical ventilation in new construction and remodeling/retrofits.</p>	<p>Focus greenhouse gas emission reduction efforts on energy, solid waste, and water.</p>

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Cross-cutting Strategies	<p>Identify incentives for housing portfolio groups and staff.</p> <p>Foster, promote, and reward sustainable behaviors within housing portfolio groups.</p> <p>Providing training to staff on sustainable design/construction and property maintenance.</p> <p>Share and communicate improvements and conservation information.</p> <p>Create an organization-wide conservation campaign and culture.</p> <p>Create a template for producing green requests for proposals.</p>				
Partners	<p>Staff, tenants, and regional partners.</p> <p>Boulder Office of Environmental Affairs, Governor’s Energy Office, Longs Peak Energy Conservation, Center for Resource Conservation, and Housing and Urban Development.</p> <p>Xcel Energy Seminole Gas</p>	<p>City of Boulder Water</p>	<p>Eco-Cycle Western Disposal</p>	<p>Boulder County Environmental Health</p>	<p>City of Boulder Climate Action Plan</p>
Funding	<p>Use resource-saving projects (energy, water) to finance future projects and/or incentivize tenants.</p> <p>Transfer utility billing to tenants over the long term.</p> <p>Enhance funding partnerships with local, regional, state, and national sources.</p> <p>Seek rebates and billing at favorable rates.</p> <p>Energy performance contracting under Housing and Urban Development.</p>				

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	<p>Pursue energy tax credits.</p> <p>Pursue solar reward rebates.</p>				
Data Management by Metric	<p>Collect and evaluate usage and cost data from utility providers.</p> <p>Establish an energy use baseline.</p> <p>Provide monthly data to BHP Energy Team and property managers.</p>	<p>Collect and evaluate data from Boulder Water.</p> <p>Establish a water use baseline.</p> <p>Develop an annual water budget application for all properties.</p>	<p>Collect and evaluate utility data from Eco Cycle and Western Disposal.</p> <p>Establish a solid waste generation and recycling baseline.</p>	<p>Begin compiling an indoor air quality baseline.</p>	<p>Establish a greenhouse gas baseline.</p>
Cross-cutting Data Management Strategies	<p>Correct utility data errors.</p> <p>Provide quarterly utility consumption and ROI reports.</p> <p>Establish go to person for utility billing reps.</p> <p>Develop capital improvement projects with energy audits.</p>				