

# BRENDLE GROUP

2010 Annual Sustainability Report



## message from the team



*Brendle Group's new headquarters*



*Dear Reader,*

*Brendle Group is pleased to present our 2010 Annual Sustainability Report. On the following pages we share with you our continuing journey toward sustainability in 2010, our fourth year of annual reporting of our progress.*

*With the closeout of yet another busy year, 2010 also marked a new chapter in Brendle Group's history with the design and renovation of our new headquarters and permanent office in Old Town Fort Collins, Colorado. The project sheds light on the tremendous potential for conducting cost-effective deep green retrofits in an existing building, from energy efficiency upgrades and water efficient fixtures to extensive use of salvaged and recycled content materials. We officially moved in to our new building at the end of December 2010, just in time to kick off 2011 with a renewed commitment to showcasing sustainability in our own operations and leading by example.*

*As focused as we were on transitioning to our new home, our ongoing work and operations in 2010 continued to pose new challenges and opportunities. On the positive side, we reached a long-term goal of becoming a certified zero waste organization by reaching a solid waste diversion rate of over 90 percent, while our vehicle miles traveled for business trips fell from the previous year. Our challenges, however, will be to reverse the uptick in electricity and natural gas use in 2010 – partially caused by requiring energy to heat and light our new building during renovations as well as our then existing building – as well as addressing our still rapidly increasing air miles traveled. To help confront these challenges, we re-organized and re-invigorated our sustainability team – Team Community and Organizational Sustainability (CaOS) – to further focus on our operations as well as on our community support for sustainability through charitable contributions, pro-bono services, and team-oriented community events.*

*By the time we're ready to issue our next annual sustainability report for 2011, you can expect big changes from us. We'll not only have a year's worth of experience and data from our new building, we also plan to revise the goals, strategies and implementation steps in our award-winning Sustainability Management System, the framework for our sustainability efforts, so that we can look to tackle the next big sustainability challenges. We hope you'll follow us as we go.*

*Thank you for continuing to share the journey with us.*

*Sincerely,*

*The Brendle Group Team*

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## A GUIDE TO READERS

Like its predecessors, this annual sustainability report continues to share some of our most significant accomplishments and lessons learned since first implementing our Sustainability Management System in 2005. We report our progress in six topic areas: greenhouse gas emissions, energy, waste reduction and recycling, purchasing, transportation, and community impacts. Information for this report was collected through a review of our records and input from staff.

## OUR PURPOSE

Apply our engineering and consulting talents to create lasting impacts that sustain and inspire our communities and our world.

## OUR MISSION

Within five years, we will identify, lead, and catalyze with our regional clients and partners the next significant innovation in sustainability, sharing our success with an international audience.

## OUR CORE VALUES AND BELIEFS

- ❖ Client satisfaction and repeat clients are the most important factors toward the long-term success of our business.
- ❖ We will strive to understand the unique needs of each client and to provide the mix of innovative, relevant, and world-class services that deliver the best solutions for the best value.
- ❖ We commit to sustainability in our own operations and willingly serve as a test bed for the emerging philosophies, policies, and technologies that we promote among our clients to help sustain and restore the planet.
- ❖ We are committed to our local community and will prioritize work, collaboration, and charity that help build a healthy and sustainable local living economy in the communities we serve.
- ❖ Recognizing the magnitude of the issues our planet faces and the complexity of truly sustainable solutions, we will operate collaboratively, rather than competitively, with other service providers working for a more sustainable future.



## about brendle group

Brendle Group, Inc. is an environmentally focused engineering consulting firm that leads by example, inspiring and empowering organizations to make thoughtful choices about the resources they use and helping them create realistic road maps for sustainability. Founded in 1996, Brendle Group serves clients nationwide, leveraging the strength of what its clients do well with their sincere desire to do more for people, profit, and planet.

As a pioneer in the now flourishing field of sustainability, we offer clients over a decade of experience in the fields of energy, climate change, water conservation, sustainable design, and sustainability management.

We continue to be committed to conducting our operations conscientiously and are mindful of the people and ecosystems impacted by our work. We use four principles to guide our sustainability planning and actions: Right Aim, Attention, Conviction, and Collaboration. By adopting these four principles as policy, we seek to earn the trust and respect of our clients by being accountable for the impacts of our own operations. Likewise, we encourage our own suppliers to embrace sustainability while we reward higher performers with our business.

## our sustainability management system

Brendle Group developed its first Sustainability Management System (SMS) in 2005. Our SMS encompasses all of our business operations and practices, data management processes, and documentation. Our goals in developing the SMS were to systematically and comprehensively evaluate the magnitude of our impacts, determine priorities, set targets, implement strategies, and measure results.

As part of our SMS, we developed a specific vision statement of what sustainability looks like for us, both in the present and the future. In addition to having certified climate-neutral operations and measuring and reporting on our progress, our vision included the following:

- ❖ By 2010, we will be certified zero-waste (a goal we reached in 2010).
- ❖ On an ongoing basis, we will explore what it means to be restorative and apply what we learn to our SMS as it evolves.
- ❖ Our progress will be reflected in an increasingly progressive mix of services to our clients.

To help us reach this vision, we developed specific objectives, targets, and strategies for each of our top priorities determined from our baseline analysis. The SMS also includes specific metrics for measuring progress toward our goals in the areas of energy, waste reduction and recycling, purchasing, transportation, and social issues.

Finally, while we are a small engineering services firm, we reach many clients and community members through our services, community work, speaking engagements, and other points of contact. As a result, we view our efforts to work toward sustainability as an opportunity to showcase what can be done, even by a small services firm, to be a catalyst for change.



### UPDATING OUR SMS & ANNUAL REPORTING

With six years of operation under the vision, objectives, targets, and strategies developed in 2005, in 2011 Brendle Group's Team Community and Operational Sustainability (CaOS) is finalizing an update to our SMS framework and documentation. We have revisited our vision, explored our areas of impact and influence, and developed new challenges and stretch goals for ourselves. Particularly with a focus on the operation of our new building, the updated SMS framework will help us continue to push the envelope of sustainability as it relates to a small services firm and where we can both leave the lightest footprint and best leverage change. Stay tuned for more updates about our SMS in 2011.



## our progress at a glance

### TRACKING OUR PERFORMANCE

#### ENVIRONMENT

- ❖ Energy use
- ❖ Fuel consumption (vehicle and air travel)
- ❖ Solid waste generated/diverted
- ❖ Greenhouse gas emissions
- ❖ Materials purchased

In 2011, with an ability to track water use in our new home, we will add water consumption to our environmental performance dashboard, along with potential other metrics.

#### SOCIAL & ENVIRONMENTAL IMPACTS

- ❖ Revenue generated
- ❖ Community jobs created/saved
- ❖ Cost savings identified for clients
- ❖ In-kind community services

Aspect	2006	2007	2008	2009	2010
<b>Number of full-time employees</b>	3.5	4.5	6.9	10.2	11.9
<b>Gross greenhouse gas emissions per employee (metric tons CO2e)</b>	1.52	1.12	1.71	3.37	4.45
<b>Electrical energy use per employee (kWh)</b>	829	817	580	675	722
<b>Natural gas energy use per employee (therms)</b>	24	56	41	68	43
<b>Solid waste landfilled per employee (lbs)</b>	55	47	19	14	10
<b>Office solid waste diversion rate (%)</b>	69	49	76	82	92
<b>Vehicle miles traveled</b>	120	1,098	6,840	19,493	13,385
<b>Air miles traveled</b>	4,864	1,000	7,466	30,046	69,462
<b>Total gross greenhouse gas emissions (metric tons CO2e)</b>	5	5	12	34	53
<b>Cumulative carbon offsets purchased (metric tons CO2e)</b>	16	16	16	48	120

# our greenhouse gas emissions

A key step towards implementing our SMS in 2005 was to establish climate neutral status for our own internal operations. To claim climate neutral status, we must have a net zero impact on the planet's climate, meaning that our net greenhouse gas emissions are zero.

Our total greenhouse gas emissions continued to increase from 34 tons in 2009 to 53 tons in 2010 - a significant jump in emissions that was also accompanied by an increase in almost two new full-time equivalent staff members. As was the case in 2009, travel continued to play a significant role in our greenhouse gas emissions. In 2010, travel accounted for 75 percent of our emissions - the same percentage as in 2009 - although the proportion of airline miles to this total increased with a more than doubling of airline miles from 2009. While we continued to offset these emissions with the purchase of carbon offsets, we will continue to be diligent in finding ways to minimize our travel impacts.

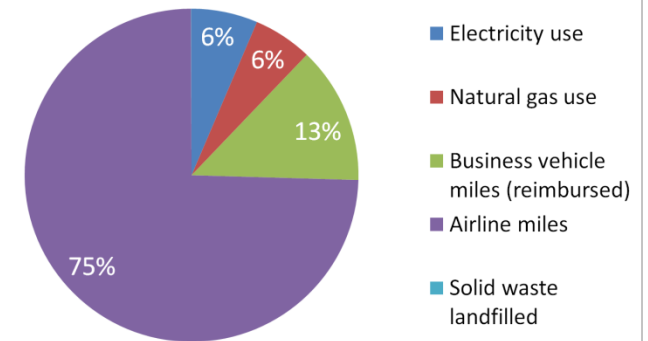
As with previous years, after identifying actions to minimize our own emissions, we quantified and offset our remaining emissions by purchasing offsets through the Climate Neutral Network and its partner for working with small businesses - NativeEnergy, LLC, which sponsors wind power projects on Native American tribal lands. We continue to track our greenhouse gas emissions from year to year to ensure that our operations remain climate neutral. We also intend to continue to explore opportunities for locally-based offsets, such as purchasing shares in a proposed local community solar garden in our home town of Fort Collins.

## EXPLORING ALTERNATIVES TO AIR TRAVEL

One technology that offers promise to combat air travel-related greenhouse gas emissions is video conferencing. While our status as a small firm has made full-scale adoption of this technology challenging, we have begun to develop this capacity and have integrated video-conferencing technology into our new home so that we can offer our clients and partners a more carbon-friendly alternative in 2011 and moving forward.

Metric	2007	2008	2009	2010
Total Greenhouse Gas Emissions (tons)	5	12	34	53
Gross GHG Emissions Per Employee (tons)	1.1	1.7	3.4	4.4

**2010 Brendle Group Greenhouse Gas Emissions by Source - Weight Basis**



## CLIMATE NEUTRAL NETWORK

In May 2005, Brendle Group received its membership as a CLIMATE COOL™ corporation through the Climate Neutral Network and its partner for working with small businesses - NativeEnergy, LLC. Brendle Group was the first known CLIMATE COOL member in Colorado. In 2011, as part of our SMS update, we will revisit our options for climate neutral certification to ensure our choices reflect the most relevant and effective options for our operations moving forward.

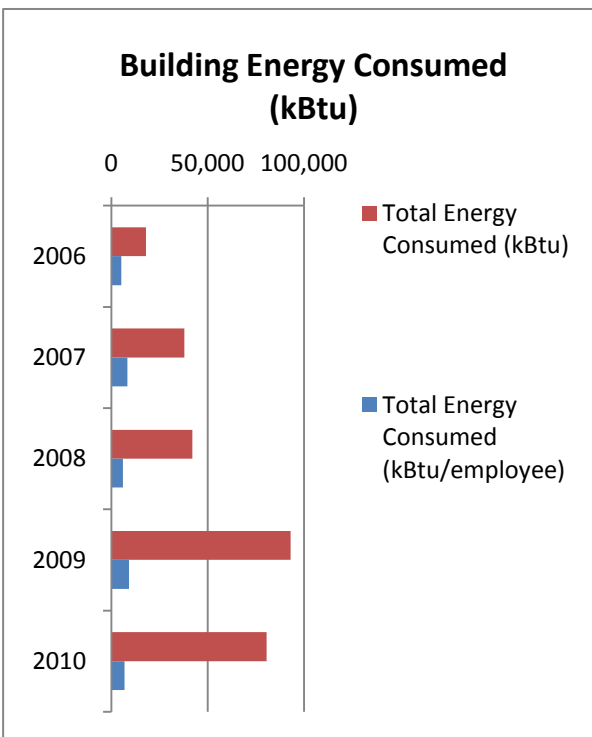


## energy

While in 2010 we were focused on designing a high-performing, energy efficient renovation for our new office, finding ways to increase our energy efficiency continued to be an ongoing focus of our existing office operations. While we added nearly two new full-time equivalent positions, we continued to realize the potential to improve our energy performance, particularly through actions such as greater reliance on task lighting and natural daylight and minimizing the use of overhead lighting.

Our total electricity use increased from 6,903 to 8,562 kilowatt hours between 2009 and 2010. While some of this use was attributed to continuing to grow our staff, after declining between 2007 and 2008, actual electricity use per employee continued to uptick again between 2009 and 2010 as had been the case the previous year, from 675 to 722 kWh per person. Our use of natural gas decreased from 68 therms per person in 2009 to 43 therms per person in 2010. This resulted in an overall decrease in total energy consumption per person.

Our move into a significantly more efficient permanent new home in late 2010 is providing an opportunity to continue this trend in downward energy consumption per employee and to showcase energy efficiency and renewable energy technologies to our partners and community.

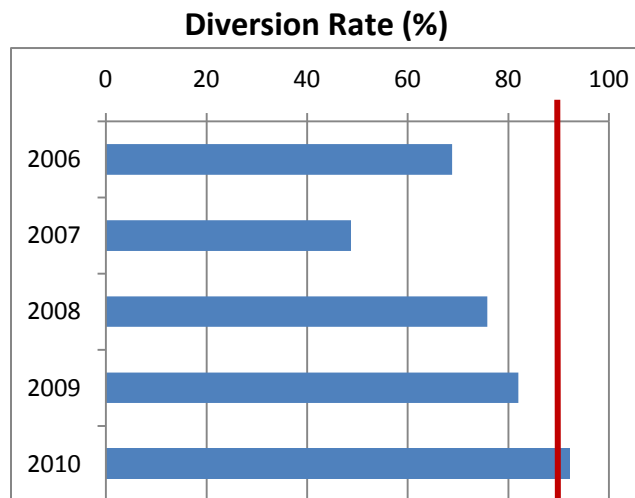


## waste reduction and recycling

When we prepared our SMS in 2005, we evaluated what it would take for Brendle Group to become a zero waste organization and committed to becoming a certified member of the Zero Waste International Alliance by 2010. This goal meant sending no waste to landfills (technically defined as diverting at least 90 percent of our waste), supporting product take-back programs, purchasing reused and recycled material products, and selecting less toxic and wasteful products, among other principles.

In 2010, we reached this important milestone, becoming a Certified Zero Waste organization. We continued to routinely recycle office paper, paperboard, aluminum, glass, e-waste, and plastics in our office. We also continued to contract with a local vendor to recycle our printer cartridges and expanded our system to compost our office food waste.

Our diversion rate in 2010 was approximately 92 percent, an increase over 2009 that puts us officially at the definition of a zero waste organization. This increase was aided by continuing our composting program, ratcheting up our recycling efforts, and being more mindful about the recyclability of products in our purchases.



*We notify our vendors that we give preference to businesses that employ sustainability in their operations. Every check to our sub-consultants and vendors carries the message, “Our goal is to support sustainability. How are you helping us with our goal?”*



Sustainability is not just about our direct consumption of resources, it's also about what we purchase and the performance of our suppliers. In our SMS we committed to purchasing recycled content paper and office supplies, recycled and refilled toner cartridge refills instead of new cartridges, and compact fluorescent bulbs and Energy Star equipment. We continue to notify our vendors that we give preference to businesses that integrate sustainability in their operations.

In 2010 we increased paper use, a trend continued from the previous year we hope to address by encouraging employees to minimize paper use through greater use of electronic documentation. The paper we purchased in 2010 continued to contain at 100 percent recycled content, typically 100 post-consumer recycled content, although occasionally we chose to use 30 percent post-consumer content paper when 100 percent post-consumer content was unavailable. All new electronic equipment purchased for the office (printer, computers, monitors) was certified by the U.S. Environmental Protection Agency's ENERGY STAR™ program for their more efficient use of energy. Several new purchased laptop and desktop computers were certified Silver and Gold by the Electronics Purchasing Environmental Assessment Tool (EPEAT), while we recycled a desktop computer, CRT and LCD monitors as well as various small electronics.



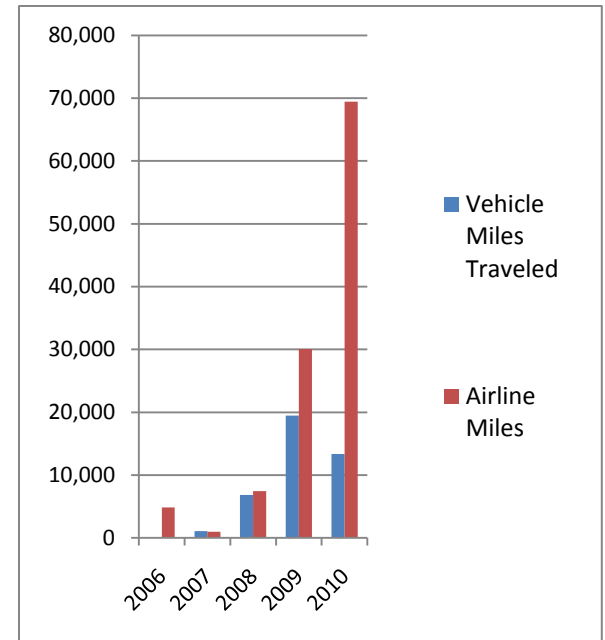
## transportation

Our transportation impacts include our vehicle trips to and from business-related meetings and our company air travel. In our SMS we committed to using hybrid vehicles and carpooling where possible for work-related meetings and to provide opportunities for our employees to telecommute.

The significant jump once again in our air travel from 2009 to 2010 highlights our continuing biggest challenge to minimizing our greenhouse gas emissions. Air travel associated with our portfolio of out-of-state work once again grew in 2010 with new and continuing projects in North Carolina, Utah, Nebraska, and Wyoming. Staff speaking engagements and presentations out of state as well as out of the country also grew in 2010, including a speaking engagement in Guadalajara, Mexico and attendance at the World Climate Solutions conference in Copenhagen.

Vehicular travel actually slightly fell in 2010 compared to 2009 with the completion of our project with Denver Water, which required extensive travel to and from Denver to complete water efficiency assessments in over 200 schools in the Denver area.

Air travel still poses particular challenges not only from the magnitude of its impacts, but also the ability to minimize such impacts without the use of carbon offsets. As we continue to grow and are awarded more out-of-state projects, our air travel is expected to increase, compelling us to find ways to minimize impacts by combining trips, increasing use of teleconferencing where feasible, and eliminating unnecessary trips.



### BRENDLE GROUP'S TEAM CAOS

In 2010 we re-committed to promoting sustainability in the communities we serve as well as in our own operations by reorganizing our internal sustainability team into “Team CaOS” – Community and Organizational Sustainability. The team’s new title highlights the continued importance of not only supporting sustainability in our own operations, it recognizes the importance of giving back to communities through a combination of pro-bono work, charitable contributions, and participating in community events as a team. To find our more, visit our community page at [www.brendlegroup.com/community](http://www.brendlegroup.com/community).

In many respects, the social aspects of sustainability are harder to define than the environmental aspects, yet they offer the greatest opportunity for distinguishing ourselves as a big vision, sustainable small business. Tuning in to our social aspects fosters a sense of our own place in the community and our role in promoting mutual benefits in all of our relationships. As a service provider, fostering right relationships is the lifeblood of our organization.

The social aspects of sustainability apply to our direct relationships with our stakeholders – clients, employees, vendors, sub-consultants, and business operation contacts – but also indirectly to our suppliers’ employees, communities in which we do business, and government and civil society. In our SMS, we pledged to deliver more services focused on sustainability with even greater benefits, to ensure that our work fits with the world around us, and to be hopeful about the future and know that our efforts make a difference. While we identified our clients and suppliers as our highest priority, we also recognized the importance of our employees, partnering organizations, and our community.

While part of our commitment to our clients and suppliers in our SMS was to communicate our results through annual sustainability reports, we also track the more quantifiable aspects of our work and its social impacts. By the end of 2010, Brendle Group had assessed over 46 million square feet of building space over our company history, identifying significant opportunities to save energy and water, divert solid waste, and reduce greenhouse gas emissions.

In 2010 we continued our active student internship program, hiring and training engineering interns from Colorado State University to support various projects to provide them with a rich and rewarding professional development experience. We also provided support to several community organizations, from the Colorado chapter of the U.S Green Building Council to Team Sugarbee and the Rocky Mountain Sustainable Living Association.

Finally, our employees continued to log hours of community service as pro-bono work though Brendle Group and on their own time. It is through these actions that we remain connected with our community and remind ourselves of our priorities to help build a robust, healthy, environmentally sound, and sustainable local economy in Colorado and beyond.

## our vision: 2011 and beyond

The year 2011 promises to be a turning point for Brendle Group in many ways.

We've had the opportunity to build out and move into our company's permanent home, creating new ways to showcase sustainability and test new ideas and innovations. Our staff continues to work with organizations such as the Colorado Clean Energy Cluster to forge new international partnerships focused on clean energy and technologies. And we'll continue to expand our work into new frontiers and markets.

In all of these exciting developments, there's a responsibility to take our own growing impacts to environmental, economic, and social systems seriously, and humility in leading by example, when every accomplishment leads to even more questions about what is possible.

