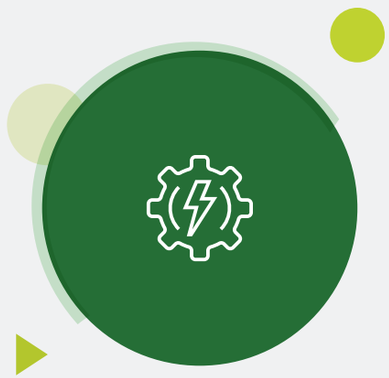
Dimensional INSIGHT®

2023

Sustainability REPORT

Sustainability Summary 2023

Electricity Usage



Burlington

52,957 kWh in 2023

Down 25.68% from 2022

Cambridge

74,723 kWh kWh in 2023

Up 11.13% from 2022

Renewable Energy

Burlington

Switched to 93% clean energy in October 2023

Cut rates by 10–15 cents per kWh

Cambridge

Fixed rate contract

Mitigated the financial impact of increased energy prices

Cost & Emissions Savings

Cost Savings

$8,472 avoided in additional electricity costs

CO_2 Reduction

4.5 metric tons of CO_2 emissions reduced through energy-saving measures

Waste Management & Recycling

All Locations

Responsible waste management and recycling options in each office

Goals for 2024

Improve data collection using automation and standardize methodologies across all sites.

Expand tracking to include Leiden's energy use and eventually water consumption and airline miles.

Establish a volunteer task force to set up automation, adopt KPIs, and introduce green policies.

Explore the possible reintroduction of a sustainability dashboard product.

Executive Summary

Dimensional Insight's inaugural sustainability report for 2023 highlights significant achievements and sets the stage for future environmental initiatives. We recently transitioned employees to remote or hybrid work and implemented energy-efficient technologies, contributing to overall operational efficiency. These strategic changes, driven by the challenges of the COVID-19 pandemic, underscored our capacity for innovation and resilience. 2023 showed modest gains built upon earlier groundwork, producing positive results for our business as well as our planet.

Future initiatives include enhancing data collection processes to better track resource usage and establishing a sustainability task force to oversee and drive these efforts. The Leiden office has set a series of benchmarks with its green initiatives, such as promoting public transport and minimizing single-use plastics. Additionally, we are exploring the reintroduction of a sustainability dashboard product, which will aid organizations in managing their carbon footprints.

This report illustrates our dedication to environmental sustainability and calls on our stakeholders to support and participate in these crucial initiatives.

Introduction

Dimensional Insight used the COVID-19 pandemic as an opportunity to re-examine all facets of our business. Although we needed to make rapid and unplanned adjustments, our leadership team put us in position to make the most out of working remotely. We overcame a number of unprecedented challenges, but COVID pales in comparison to the climate crisis. We are only beginning to come to terms with the fact that our lifestyles and our business practices are unsustainable.

Climate change is not only coming at some point in the future; it is in fact well underway, and it is unlikely to be reversible with current technologies and methods. Since 1850, the number of glaciers in Glacier National Park has decreased from 80 to 37, and those which remain have lost 34% of their surface area between 1966 and 2015. The ten warmest years of the same period have all occurred in the last decade (2014–2023), with 2024 having a good chance to establish yet another record. Our addiction to fossil fuels has greatly affected Earth's biodiversity, and many biologists have raised the alarm that our planet's sixth mass extinction event is likely to already be in progress. Humanity consistently prioritizes short-term economic growth over our long-term survival, raising the question of whether we have the motivation to solve this.

The silver lining is that if we somehow choose to get our collective act together, we still have a chance to manage the shift in climate and to mitigate the worst effects. This requires coordinated action by governments, individuals, and businesses.

Dimensional Insight is committed to leadership in innovation, environmental stewardship, and corporate social responsibility. Our sustainability program was designed from the ground up with the goal of improving our overall financial position and operational efficiency while reducing our environmental impact.

We are pleased to unveil our first annual sustainability report, a key milestone which offers a transparent look into our operations, sharing insight into our progress as well as some of our ongoing challenges. We have published this report to provide an update on what we have learned so far, and we invite questions and commentary from our many stakeholders.

Environmental Impact

Energy

Electricity generation was the greatest contributor to global carbon emissions until 2016. It has been, and will continue to be, an area of major focus for Dimensional Insight. The transportation sector is now the biggest factor, primarily because our mix of energy sources has undergone change to meet legislative mandates. According to a study by the local grid operator ISO New England, 19% of New England's energy was generated by oil and 15% was generated by coal in the year 2000. As of 2018, oil and coal each account for approximately 1% of the local energy mix, with the largest gains being made by natural gas, net imports, and renewables.

The Clean Energy Standard (CES) regulation in Massachusetts required all energy plans offered in the state to include a minimum of 46% clean energy in 2023. This increases to 50% in 2024 and scales to 80% in 2050. The Cambridge Community Electricity Program offered by the City of Cambridge met the state's requirement. Burlington was supplied by Eversource until switching to what is marketed as a 100% renewable plan (93.26% clean energy upon closer scrutiny) from Major Energy Electricity Services, LLC in October 2023. Cambridge offers the option to switch to a 100% clean energy plan, and this is something we will evaluate in 2024. A detailed breakdown of Burlington's energy mix is included as an appendix.

Environmental Impact

Energy

In the Netherlands, during the morning commute and in fair weather, 78–84% of electricity can be generated by solar, with an additional 6–10% from wind. Along with 1–2% of generation from coal, natural gas fills the gap in the morning hours and becomes increasingly important by late afternoon, when it typically becomes responsible for 43–47% of power generation in the Netherlands. Solar drops from the equation by 4 PM, and wind increases its contribution to between 21–27%. Coal generation increases to about 7%, and the remaining need is filled by imports from Norway and Belgium. This pattern continues until the following morning.

Because the scope of this initiative was limited to the United States for 2023, we are unable to share data-driven insight into electricity use in our Leiden office. We have compiled and tracked usage data from 2021 to the present time for our headquarters in Burlington, MA and our development lab in Cambridge, MA. Satellite offices in Green Bay and San Diego were closed during the pandemic, with all staff transitioning to fully remote status. Our Florida office was used sparingly and closed at the end of June 2024.. This report will present information for Burlington and Cambridge from calendar year 2023 as compared to 2022. Usage data is tracked by individual meter, then combined to present an overall picture of each site. Updates are tracked and shared monthly. Our CO_2 footprint is calculated using tools freely available from the Environmental Protection Agency.

Burlington used a total of 52,957 kWh in 2023, equating to 22.1 metric tons of CO_2, or 9,403 liters (2,484 gallons) of gasoline consumed. This annual total is down 18,297 kWh from 2022 (71,254 kWh), a year-over-year decrease of 25.68%. We avoided the equivalent of 7.6 metric tons of CO_2, or 3,248 liters (858 gallons) of gasoline.

Burlington achieved its strongest efficiency gains in Q1, with year-over-year energy reductions of 43.73% in January, 48.90% in February, and 40.28% in March. Energy use was reduced in 10 of 12 months; we experienced a slight uptick in July (2.93%), and November (26.29%).

Cambridge used a total of 74,723 kWh in 2023, equating to 31.2 metric tons of CO_2, or 13,268 liters (3505 gallons) of gasoline consumed. This annual total is up 7,481 kWh from 2022 (67,242 kWh), a year-over-year increase of 11.13%. This represents an increase of 3.1 metric tons of CO_2, or 1,329 liters (351 gallons) of gasoline.

Cambridge achieved its best figures in the months of January and June, with efficiency gains of 8.05% and 8.70%, respectively. Energy use was reduced in 4 of 12 months; we experienced the largest year-over-year increases in April (41.65%) and July (43.90%).

Combined totals come to 127,680 kWh in 2023, 10,816 kWh less than we were responsible for in 2022 (138,496 kWh). This represents a decrease in demand of 7.81% and a reduction of 4.5 metric tons of CO_2 emissions. By the end of 2022, both sites had completed independent energy assessments from the Mass Save program. 2023 saw more in-person activity in both locations as many staff transitioned from fully remote to hybrid arrangements. All our offices make use of LED lighting. Cambridge tends to have more consistent on-site attendance with a wider range of working hours. The physical layout involves floor-to-ceiling windows, which likely causes some challenges for our thermostats. The team uses powerful desktop PCs and some local servers, all of which are reviewed for modernization on a regular basis. Meeting energy efficiency standards is part of our decision-making process for purchasing computer hardware across Dimensional Insight. All customer servers and much of our own infrastructure are hosted at a co-location facility nearby, and we do not have sustainability information available to share currently.

Environmental Impact

Waste Management

The Environmental Protection Agency estimates that Americans generate on average 4.9 pounds (~2.25 kg) of waste per day. It also estimates that 75% of the waste stream is recyclable, but only 30% is recycled. Waste can be substantially reduced with education on reuse and recycling options, as well as how to use fewer resources in the first place. Our procurement process for office products and equipment should be more closely evaluated for environmental impact, with emphasis on reducing use, encouraging reuse when possible, and finally on recycling feasibility. We have made some small gains in this area, but there is room for improvement.

The Massachusetts Department of Environmental Protection has a waste ban in effect on the disposal and combustion of easy to recycle and toxic materials. This includes glass and metal containers, metals, yard waste, recyclable paper, building materials, and more. The European Union has instituted similar requirements. Burlington and Cambridge have a free recycling pickup service available on a weekly basis. This includes single-stream recycling for all plastics (types 1–7, Appendix A), glass, paper, cardboard, and some metals. Electronic waste is picked up separately by local contractors, on a quarterly schedule as well as on demand when required, typically at no cost to Dimensional Insight. Burlington and Leiden have dedicated collection points for recycling.

Environmental Impact

Location-specific Intitiatives

The Leiden office initiatives:

- Historic landmark building
- No air-conditioning, fans only
- Glass wall for draught protection
- Singe-use plastic and paper are discouraged
- Electronic billing only
- Public transportation
- Interest-free loans to purchase bicycles

The Leiden office has the privilege of being housed in an historic landmark building, which housed the local water management board for hundreds of years until only recently. As the building is a protected landmark, there is no insulation, nor is there air conditioning. A glass wall in the stairwell provides protection from draft, and staff use fans to cool down in summer months. Single-use plastic is limited, and the use of paper is similarly discouraged. All billing is done electronically. Environmentally friendly cleaning products are used. The Leiden office actively encourages the use of public transportation, going as far as to offer interest-free loans to employees to purchase bicycles. Although we are not measuring this, employees are increasingly conscious of personal diet as it relates to our environment, and the office has shifted its lunch options accordingly to offer plant-forward meals.

In an unannounced test before the pandemic, the business operations team adjusted the thermostats in **the Burlington office.** The change was hardly noticeable to the staff, but it resulted in a sudden 65.5% drop in the electricity bill from one month to the next (July to August) and a whopping 70.7% reduction year over year. At the start of the pandemic, we ended the lease on several suites on the first floor of our building. We consolidated and relocated our server room and conference rooms to the second floor.

Environmental Impact

Location-specific Intitiatives

The Cambridge office initiatives:

- Transit options: metro, bicycle, pedestrian routes
- Public transportation
- EV charging stations
- Bike racks
- Programmable thermostats
- Water-efficient fixtures
- E-waste recycling available

Programmable thermostats were installed in mid-2022, and we believe this to be largely responsible for our improved energy efficiency today. We ended the leases for two large printers in 2023 and we have no plans to replace them. We offer paperless billing to our customers, though we have not fully phased out traditional methods.

The Cambridge office is strategically located near various transit options, including metro, bicycle, and pedestrian routes. The office encourages employees to use public transportation and offers partial reimbursement for transit costs. EV charging stations are conveniently available on-site, and bike racks support cycling as a green commuting option. Programmable thermostats and water-efficient fixtures are in use, and window blinds further enhance conservation efforts. E-waste recycling pickup is available on-site.

Additionally, the flexible work environment accommodates remote workers, reducing the need for daily commutes and furthering our sustainability goals.

Financial Impact

Let's begin with the bad news. Overall, electricity for Burlington and Cambridge cost Dimensional Insight a total of $1,478 more than in 2022. Burlington's annual total came out to $402 less, while Cambridge's annual total came out to $1,880 more. Part of the reason is that while Cambridge was on a fixed rate plan, Burlington paid a floating rate through its provider, Eversource. We looked at options for fixed rate plans every six months or so, beginning in early 2022. We determined that it was not worth locking in at the outrageous rates which were available at the time. Part of our problem is that Massachusetts has the 4th highest average electricity retail rates in the continental U.S., according to the U.S. Chamber of Commerce. Other external factors which hampered the expected financial benefits of our reduced energy consumption in 2023 include:

- Increased global instability, including Russia's illegal war of aggression in Ukraine and heightened tensions throughout the Middle East.
- The unprecedented scale of liquefied natural gas exports from the United States to support European Union allies.
- The reluctance of OPEC—Saudi Arabia in particular—to increase oil production.
- Increased regulatory costs as well as general inflationary pressure on energy suppliers and distributors.
- Increasing demand for electricity in our region, driven in part by the adoption of hybrid and electric vehicles.

The good news is that we were able to avoid a larger sum through saving energy. Calculating prices for months in which we saved energy, we would have paid $8,472 more (on top of the $1,478 increase) had our demand remained static from 2022. Burlington avoided $8,149 in further increases, while Cambridge avoided $323. The other good news is that, through patience, we were able to switch suppliers for Burlington. The new fixed rate plan is more in line with energy prices before the outbreak of the Russo-Ukrainian war, representing a decrease of 10–15 cents per kWh as compared to three to six months before. As mentioned previously, this is a clean energy plan. This change kicked in during Q4 2023.

Looking Ahead

One of our goals for the future will be to improve our data collection using automation to standardize methodologies at each of our sites. We will need to improve internal coordination by formally establishing a volunteer task force. This team will set goals, adopt standard KPIs, and introduce related policies across the organization. This will increase accountability, improve the quality of our reporting to all stakeholders, improve employee engagement, potentially aid recruiting and retention, and ultimately serve to increase shareholder value. This will require continued executive support.

We would like to expand the scope of our data collection to include tracking water consumption. While we can claim with confidence that our water consumption has decreased significantly since before the pandemic—simply due to the rise of remote work having reduced in-person attendance as well as planned events at our offices—we are not prepared to report on this. As an example, our restroom fixtures use efficient designs, but we do not currently have access to billing and usage data to perform a comparison.

The pandemic forced us to reevaluate many aspects of operating in a changing business environment. We have vastly improved our ability to communicate both internally and externally through the heavy adoption of unified communications platforms. Non-essential travel is limited and is now actively discouraged, although we will need to review and strengthen related policies if necessary. Our annual user conference, DIUC, was held as an entirely virtual event in 2023, avoiding a heavy CO_2 footprint. While we recognize the need for customer-facing employees to continue to meet in person with our partners, customers, and prospects at key points in those relationships, we ask all participants to consider virtual options for most scheduled meetings and billable consulting work.

Dimensional Insight would like to show more active involvement in community leadership. Ideas include organizing neighborhood cleanup events, planting trees, participating in a community garden program, sponsoring relevant training or perhaps even a scholarship program, and partnering with organizations who are committed to environmental protection. It would also be worthwhile to work out an agreement with our landlord to make EV charging stations available for the Burlington office. Resources are tightly constrained, and some activities would therefore require executive support, but we can promise that we will be open to ideas.

Sustainability Product

Dimensional Insight had a functional prototype of a sustainability dashboard product about 10–15 years ago. It was developed by Dimensional Insight Asia, and it mostly centered around tracking energy usage. This data was used to calculate an organization's carbon footprint, which could then determine a need for carbon credits to meet regulatory requirements. This was a forward-thinking product, but environmental discussions at the time missed the mark. The cap-and-trade system never got off the ground apart from its forced—and weakly regulated—adoption by the energy sector. Today, there is growing interest in voluntarily purchasing carbon credits to offset certain activities, especially air travel and energy use by facilities. Naturally, reducing expenditure is the most interesting selling point for executive decision-makers.

Where sustainability used to be a niche interest, it is now part of the conversation within most Fortune 500 companies, and it is beginning to drive the policies of many governments around the world. Sustainability is being viewed less as a burden and more as an opportunity for investment, not only in our future on this planet but for clear financial gains. In Q1 2022, General Electric announced that it plans to split into three public companies. The three new businesses will focus on healthcare, aviation, and renewable energy. Organizations that show that they care about this issue will have an advantage in attracting top talent. This factor must not be overlooked by Dimensional Insight.

Sustainability Product

Much the same way that recycling was a distraction devised by plastic companies as an excuse to produce more virgin product, BP popularized the concept of a personal carbon footprint to divert focus from its own glaring responsibility for the climate crisis and instead shift blame to individual consumers. That isn't to say that these are not useful tools; they will arguably play a role in any global effort. Estimating the carbon footprint of an organization can serve as a valuable baseline to guide future decisions. A good start would be to determine which situations truly require air travel, and then update policies to maximize efficiency.

Dimensional Insight should adjust to changing realities in the market landscape and position itself as a leader in one of the most important sectors of the new economy. Like its precursor, a new dashboard product should be developed to track relevant internal data, including patterns of energy consumption and air travel. However, rather than focus on a system of carbon credits, emphasis should instead be placed on how decisions made using this data produces direct financial benefit to the business. Such a product is in early development by DI Netherlands. We encourage prospective users to help guide our product design to meet the needs of today as well as tomorrow.

> Estimating the carbon footprint of an organization can serve as a valuable baseline to guide future decisions.

Conclusion

We are part of the natural world, our interactions with its other parts have a real impact, and we depend entirely on the health of the environment for our own survival and well-being. Lessons learned in optimizing our internal operations should be used to educate and assist our customers in translating small but meaningful, actions into tangible results which can have a real impact. The publication of this report marks our first step in doing so, and we hope that it serves to benefit others. Please send inquiries to **info@dimins.com**.

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Appendices

Appendix A — Plastic Types — Resin Identification Codes (RICs)

It is important to note that most recycling plants, or materials recovery facilities (MRFs), do not accept all types of plastics. The recycling process weakens chemical bonds, meaning that products cannot be recycled infinitely.

Types 1, 2, and 5 are the most commonly accepted materials. Many plastic products that are "wishcycled" by consumers are rejected by MRFs and end up in landfills or polluting waterways.

A handful of facilities are learning to convert plastics of all types back into petroleum, but this is yet to be proven to be commercially viable and it is not being done at scale.

The system cannot handle the volume of waste that we produce. Reducing use of plastic products and increasing their lifecycles are our best options.

Type 1 — PET/PETE *(Polyethylene Terephthalate)*

Original products: Soft drink bottles, juice bottles, peanut butter jars.

Recycled products: Carpets, polyester string to manufacture clothing.

Note: 96% of bottles and containers in USA. Intended for single use.

Type 2 — HDPE *(High Density Polyethylene)*

Original products: Milk jugs, detergent/bleach bottles.

Recycled products: Binders, fencing, new detergent bottles.

Note: Resists temperature extremes.

Type 3 — PVC *(Polyvinyl Chloride)*

Original products: Shampoo bottles, mineral water bottles, house siding, pipes.

Recycled products: New house siding, piping, other building materials.

Note: Not commonly recycled.

Type 4 — LDPE *(Low Density Polyethylene)*

Original products: Grocery bags, trash bags, sandwich bags, plastic wrap.

Recycled products: New bags.

Note: Safe for food storage.

Type 5 — PP *(Polypropylene)*

Original products: Margarine tubs, dairy tubs, diapers, medical supplies.

Recycled products: Car parts, milk crates, ice scrapers, other durable goods.

Note: Flexible, resists solvents.

Type 6 — PS *(Polystyrene, aka Styrofoam)*

Original products: Plastic utensils, packing peanuts, meat trays, coffee cups.

Recycled products: DVDs, CD trays.

Note: Styrofoam makes up approximately 35% of landfill mass in the US and takes an estimated 500 years to decompose.

Type 7 — Other *(Acrylic, Nylon, Polycarbonate, Polyactic acid, aka PLA)*

Original products: Ketchup bottles, baby bottles, other plastics.

Recycled products: Park benches, picnic benches.

Note: Miscellaneous plastic.

Appendices

Appendix B — Renewable Energy Mix (Burlington H