Marion Institute

GREENING THE OFFICE

Everyday Practices for a More Sustainable Office

The Marion Institute team thinks of creative ways to green the office by implementing innovative solutions. We are taking the theory of "Walk your Talk" to a whole new level! We envision this to become a tradition at the Marion Institute – to take it one step further and embody the words of Ghandi and

"be the change that you wish to see."

SUSTAINABILITY

In a broad sense, sustainability is the capacity to endure. In ecology, the word describes how biological systems remain diverse and productive over time. For humans, it is the potential for long-term improvements in wellbeing, which in turn depend on the wellbeing of the natural world and the responsible use of natural resources.

In addition to living in a green building, we at the Marion Institute have implemented and continue to implement everyday practices that will make our office more sustainable. Below is a partial list of practices that we hope can serve as a positive model for others. This is also available at www.marioninstitute.org.

REDUCE, REUSE, RECYCLE

We reuse as much as possible in the office, almost nothing here has one life or purpose.

- Recycle all materials that the town accepts, including **plastic, paper, cardboard and metal**.
- Save all **one sided printouts** and either reuse them by printing on the other side or turn them into notebooks.
- **Edit on screen** as possible, printing only what we need.
- **Print double sided** whenever possible.
- Use **100% post-consumer* recycled paper** for all of our paper needs, including copy paper, paper towels, toilet paper, etc.

  **Post-consumer content is a material that has served its intended use and instead of being disposed of it is being reused in a different product. If a product is labeled "recycled content," the material might have come from excess or damaged items generated during normal manufacturing processes-not collected through a local recycling program.*

- Use **cloth hand towels** in the bathroom and in the kitchen, reducing the use of paper towels.
- Reduce and eliminate **unwanted junk mail, catalogs and magazines** by calling and asking to be removed from their lists, saving hundreds of pounds of paper a year.

REDUCING OUR CARBON FOOTPRINT AND ENVIRONMENTAL IMPACT

- **Carpoo**l to meetings and events as much as possible. In addition, most teammates "earn" the opportunity to work from home one day per week. We try to have the teammate park their car and not drive it that day. Also, when leaving the office for meetings we try to group as many meetings or errands into that one day out of the office.

- **Promote cycling** to work. There is a bike rack out front for use made from recycled steel.
- **Shut off** all **lights** when not in use.
- **Shut off printers** and **computers** at night.
- Use as much **natural lighting** as possible, increasing the overall working conditions and saving on the amount of electricity used.
- Use **power strips** on almost all equipment that can be powered down at the end of the work day.
- Use **green power** by converting to Viridian. Viridian buys its green power from the community it is supplying to. In other words, as their green customer our power will come from Viridian's support of local wind and solar farms in the SouthCoast and cape region.

- Use **heat and air conditioning** as sparingly as possible. Also, we dress accordingly and utilize natural cross breezes and ventilation for cooling.
- **Use stones instead of pavement/concrete in the driveway.** Utilizing natural, unprocessed stone for a driveway diminishes the impact rainwater runoff will have on the surrounding environment. This type of surface allows water to naturally move through while purifying the water and diminishes drainage issues by providing numerous avenues to seep in to the ground. A benefit is that point source issues of toxins and water pooling are alleviated, making it a more environmentally friendly paving option. Other materials such as asphalt and concrete do not allow for natural seepage of water and can drag toxins in to the water system through runoff.

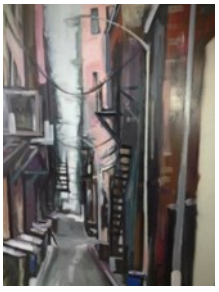
"GREENING" TIPS FOR THE KITCHEN & GARDEN

- Run the **dishwasher** only when full.
- Have **reusable dishware** for all staff members and guests, eliminating the use of disposable items.
- Have **take-out containers** that we bring to restaurants for our take-out, eliminating the use of Styrofoam or other disposable containers (and over-eating!).
- **Compost** all kitchen waste for use in our garden. We love our Earthmaker Composter that sits right outside our building and feeds our garden beds in the spring!
- Use **dehumidifier water** in the garden.
- Have a **water purifying machine**. Eliminating the use of individual water bottles, while at the same time promoting better health for our staff and guests. We use the Akai Ionizer Plus.
- Use **cloth napkins and dish towels** reducing the need for paper towels.
- The Marion Institute practices the principles of **edible landscaping**:
  - This is our effort to localize our food system as much as possible and provide healthy, organic, fresh produce for our team, interns and guests.
  - The garden greatly increases our connection with our food.
  - It is the most sustainable means of landscaping that is possible on our site.

PURCHASES

Utilize Your Purchasing Power! Support local, ethical and socially-responsible businesses; and whenever possible, buy local to reduce your carbon footprint while supporting your local community!

- Utilize all **green cleaning** products that are purchased locally.
- Build shelves using local wood and buy **used furniture.**
- Buy **local soap** and use a refillable container. Have you looked at the ingredients in your soap? If you can't pronounce it, it is probably not good for you or the planet! We use Olde Maids, Inc products.
- Buy **fairly-traded** items. *Fair Trade* is an organized social movement that uses the market to aid developing countries in utilizing more sustainable farming practices. A common goal of this initiative is to increase the money returned to the farmers. Equal Exchange, located in West Bridgewater, MA, is a co-op that has partnered with farmers to provide high quality products such as coffees, teas, chocolates, bananas, olive oil, and snacks to its patrons. The owners vowed to provide goods based on a system that balances the values of the farmers, consumers, and the Earth. What Makes Equal Exchange unique is that it is worker owned- meaning the farmers and workers have just as much of a say in what happens with the company and entitled to the same shares of the company as the owners. Having a company function in this manner is very democratic and requires all involved to work together to be profitable. Currently Equal Exchange is one of the largest democratic work cooperatives in the country.
- We decorate our office with artwork made by local **artists**. This mural was painted by local artists at the 3rd EyE Unlimited event.



THINK BEFORE YOU BUY

Before you buy something, know how you are going to dispose or reuse the packaging! We all know that there is no such thing as waste! Here are some the places that we properly dispose of our unwanted or used items.

- **Plastic Bags** can be returned to the grocery store to be recycled. Usually there is a large plastic bin at the entrance/foyer of the store. Of course we prefer to use cloth reusable bags whenever possible.
- **Alkaline Batteries** can be brought to Interstate All Battery Center on Faunce Corner Road in Dartmouth. However, we prefer rechargeable batteries.
- **Compact florescent light bulbs** can be recycled at Lowe's Home Improvement stores.
- **Hardware and Electronics** can be brought to Best Buy. We recently brought this old printer, a laptop and a back-up power supply to be recycled.
- Buy in **bulk** so that shipping and packaging waste are reduced, and reuse the shipping boxes.
- Recycle empty **ink cartridges** and purchase recycled ink cartridges.
- **Blank cds** can be donated to local nonprofits. We give ours to 3rd EyE Unlimited.
- **Clothing, shoes and household items** can be brought to Savers or The Salvation Army.

HEALTHY TEAM

- **No WIFI — We Plug In Instead!** The World Health Organization began the International EMF Project in 1996 to assess the scientific evidence of possible health effects of EMF. In June 2011, they released the Electromagnetic fields and public health: mobile phones fact sheet in which they state that the International Agency for Research on Cancer (IARC), "has classified radiofrequency electromagnetic fields as possibly carcinogenic to humans (Group 2B), a category used when a causal association is considered credible, but when chance, bias or confounding cannot be ruled out with reasonable confidence." Our Biological Medicine Network program works very closely with Dr. Thomas Rau, world renowned biological medicine doctor and director of the Paracelsus Clinic in Switzerland, who speaks publically on the degenerative and damaging effects of EMF radiation on the human body. In response to this information as well as several studies performed in Europe, the Marion Institute turned off our WiFi router and is only using ethernet for our internet service. In addition, several of our teammates have found that turning off their cell phone and home internet router at night significantly improves their sleep and they have more energy in the morning.

- **Make your lunch.** Our office is equipped with a full kitchen including a full-sized refrigerator, gas stove, sharp knives and cutting boards, pots and pans, glassware, china and cutlery, encouraging our team to prepare local, healthy food in the office.

- Use a **standing desk.** Have you heard that sitting is the new smoking? Research has shown that the cumulative impact of sitting all day for years is associated with a range of health problems and that standing at work may reduce your risk of obesity, type 2 diabetes, cardiovascular disease and cancer. In fall 2013, we had five standing desks made from local wood from Round the Bend Farm.

GREEN BUILDING

Our office building is a renovated home and we utilized green building techniques in the renovation process. Green Building is the practice of increasing the efficiency with which buildings use resources – energy, water, and materials – while reducing building impacts on human health and the environment during the building's lifecycle, through better siting, design, construction, operation, maintenance, and removal.

The Gurney House Green Restoration Project—October 2008

The following is a short list of some of the key features that made the project green:

- The Gurney House has been in this exact same location since it was built in the late 1850s. When the Marion Institute needed a larger office, it was decided that rather than tear this house down, it should be reconditioned and reused.
- Only 15% of the entire 1 acre office campus, of which the Gurney House is part, is covered by impervious surfaces and adaptive and native plantings fill over 50% of the total site.
- All storm water is retained and managed on site. "Rain Gardens" strategically placed in the landscaping capture runoff and slowly return the water to the ground via natural plant filtration.
- Planted trees will provide natural shade that will help reduce the heat island effect of the entire site, and also reduce the energy load required to cool the building during the hot summer months.
- Operating windows on all sides of the building allow for natural cross breezes for passive cooling. The windows are double pane insulated glass, specially treated to be air tight and glazed with low E glass that helps suppress radiative heat flow.
- In the winter, sun penetrating the south and east facades provide passive solar heating.
- The high density spray foam insulation used is rated to have a standing R-Value of 6.8 per inch, but because it is able to prevent all air and moisture penetration it has an effective R-Value of 20+ per inch. This allows a relative R-Value rating of R-33 in the walls and R-60 in the ceiling.
- All appliances and fixtures including boilers, furnaces, AC condensers, refrigerator, dishwasher, and light fixtures are Energy Star rated.
- Interior lighting is provided mainly by the use of T-5 low energy fluorescent strip fixtures, and CFL lamped low energy recessed fixtures.
- The building's exterior siding is composed of natural raw and recycled materials including wood pulp, sand, water, and cement and is very low in toxicity. It offers great durability (the company warrants the product for 50 years, and the factory paint finish for 15 years), and low maintenance.
- The interior paint used is environmentally friendly with Low-VOC, low odor and also meets stringent environmental safety requirements.
- The carpet is manufactured from recycled carpeting without the use of toxic glues or other substances harmful to the environment. No glues or staples were used in the carpet installation itself; each carpet square is attached to its neighboring carpet square via an adhesive patch that is completely reusable.
- The resilient floors found in the restrooms and kitchens are high in recycled content and applied with non-toxic, low VOC emitting glues. Bamboo, a renewable natural material, was used in the lobby floor.
- Indoor Air Quality: The Gurney House was renovated using non-toxic, low VOC emitting materials. The windows are operable, allowing access to fresh air as needed. Plants are also known to produce oxygen and absorb many potentially harmful air born substances.
- Controllability of Systems: The building occupants maintain a measure of control over the thermal properties and lighting levels of their personal workspace. Occupants have access to adjustable light level and HVAC controls.
- Natural Light and views: It is difficult to scientifically quantify the benefit of such amenities, but it is common sense that people who have lots of natural light and direct access to nature will be happier and that happiness will shine through in productivity and the quality of their work.