Community Resource Guide on Climate Resilience

The purpose of this guide is to provide information on County climate change initiatives and to provide suggestions on engagement opportunities and actions that can be taken by individuals to adapt to a changing climate and reduce contribution of greenhouse gases.

GET INFORMED

To learn about how the County is planning for a more sustainable future, become familiar with GreenPrint, the County's roadmap to achieve its sustainability and climate change goals, which culminates in the County's first Climate Action Plan. There are 137 separate initiatives outlined in GreenPrint, many of which will directly contribute to a reduction in GHG emissions. It is estimated that these initiatives will result in a reduction of 1.5 million metric tons of GHG emissions and an avoidance of 3.1 million metric tons by 2015, and move us toward even deeper reductions in the future. These are our first collective and comprehensive steps to address climate change and create a resilient Miami-Dade County: http://www.miamidade.gov/GreenPrint/ .

The Southeast Florida Regional Climate Change Compact was executed by Broward, Miami-Dade, Monroe, and Palm Beach Counties in January 2010 to coordinate mitigation and adaptation activities across county lines. The Compact represents a new form of regional climate governance designed to allow local governments to set the agenda for adaptation while providing an efficient means for state and federal agencies to engage with technical assistance and support. The Compact outlines an on-going collaborative effort among the Compact Counties to foster sustainability and climate resilience at a regional scale. The technical work products developed by the Compact Counties, including the Unified Sea Level Rise Projection *A Unified Sea Level Rise Projection for Southeast Florida* and an *Analysis of the Vulnerability of Southeast Florida to Sea Level Rise* provide information on the local impacts and vulnerabilities and can be accessed here: http://southeastfloridaclimatecompact.org/compact-documents/ . These work products were used as a foundation for the development of the Regional Climate Action Plan, which can be accessed here: http://southeastfloridaclimatecompact.org/pdf/Regional%20Climate%20Action%20Plan%20FINAL%20ADA%20Compliant.pdf

Both of the documents listed above and their host websites offer links to more information on climate change science, policy, and action.

GET ENGAGED

One of the most important things that you can do is to get involved and advocate for a more sustainable and resilient Miami-Dade County.

- Talk to your friends and family about climate change and how it is and will continue to affect you. Share your concerns and your actions.
- Invite a skeptic to watch documentaries on the subject, such as Chasing Ice, Carbon Nation, etc.
- Write letters to your elected officials (local, state, and federal) as well as letters to the media telling them how important climate change is to you as a community member, encouraging the adoption of policy, programs, and processes that integrate the issue into planning, programs, and fiscal decision making.
- Attend local government meetings and speak out in support of proposed resolutions and ordinances that integrate climate change and to speak about issues that concern you. You can subscribe to and receive agendas for Miami-Dade County Board and Committee meetings at this link

http://www.miamidade.gov/govaction/create_account.asp . You can search Miami-Dade County legislation by using a keyword search at http://www.miamidade.gov/govaction/create_account.asp .

- Public participation is allowed during certain agenda items at the Metropolitan Planning Organization (MPO) Governing Board meetings (http://www.miamidade.gov/mpo/board/default.htm) and through several MPO public advisory committees (http://www.miamidade.gov/mpo/outreach/default.htm) such as the Pedestrian and Bike Advisory Committee and the Citizens Transportation Advisory Committee.
- Join organizations that are working on effecting change in our community. Organizations with many members sometimes attract more attention than individuals working alone, but both strategies are important.

    While we cannot recommend that you join one particular organization over another, for your convenience, we have provided links to some of the many organizations that are working to make Miami-Dade a better place. Climate Change Focused:
    - The CLEO Institute - Go to their website and answer the question "What is climate change all about and what is my role?". This organization also offers introductory, one-day, and advanced two-day trainings designed for both general and specific audiences, and offer many other engagement opportunities: http://www.cleoinstitute.org/ .
    - The South Florida Climate Action Partners group is building civic support for the Southeast Florida Regional Climate Action Plan (RCAP). Their goal is to create a regional network of policymakers, citizen advocates, members of the scientific-technical community, the faith-based community and educators in support of the RCAP. http://sflclimateactionpartners.org/
    - The South Florida Resilience System is a nested sub-system of the U.S. Resilience System (USRS), The USRS is a society-wide initiative with the goal of improving the health, well-being, and prosperity of American citizens and their communities by fostering a resilient response to change. http://southflorida.resiliencesystem.org/about-south-florida-resilience-system
    - o Climate Change Supportive (mitigate greenhouse gases, promote protection of natural systems, work with youth on energy efficiency and other issues):
        - TrAC – Transit Action Committee, dedicated to improving and expanding transit options in Miami-Dade County: http://www.tracmiami.org/get_miami_on_trac
        - Advocacy & Becoming a Park Champion
          Park Champions are needed to share with elected officials the many ways parks and recreation agencies improve health and wellness, increase economic vitality and preserve natural resources in communities. Political decisions are being made today that will determine the fate of parks and recreation facilities for years to come. How to Advocate for Parks:
            - o Telephone, write or visit your elected officials and tell them what you expect from them in making parks funding a priority in your community.
            - o Write an opinion editorial and submit to your local newspaper
            - o Get your newspaper to write an editorial
            - o Support Parks' legislative and policy platform (http://www.miamidade.gov/parks/legislative_news.asp)
            - o South Florida National Parks Trust, Inc. - http://southfloridaparks.org/
        - Slow Food Miami-Dade County: http://www.slowfoodmiami.org/community-resources.htm
        - Earth Learning: http://www.earth-learning.org/
        - Tropical Audubon Society: http://www.tropicalaudubon.org/
        - Urban Environment League: http://uel.org/
        - Sierra Club Miami: http://florida.sierraclub.org/miami/
        - Dream In Green, Inc. – www.dreamingreen.org
        - Youth Environmental Programs, Inc. - http://www.7-dippity.com/edprog/ep_osinfo.html
        - Citizens for a Better South Florida, Inc. – www.abettersouthflorida.org
        - Marjory Stoneman Douglas Biscayne Nature Center - www.biscaynenaturecenter.org
        - Fantasy Theatre Factory, Inc. - http://ftfshows.com/
        - Friends of the Everglades, Inc. – www.everglades.org

- Many other environmental education organizations are listed here with our partner, the Environmental Education Providers of Miami-Dade County: http://www.eepmiami.org/
- Local universities are another good resource. Many of them have sustainability offices or similar programs.
  - Miami Dade College has the Earth Ethics Institute: http://www.earthethicsinstitute.org/
  - University of Miami: http://www.miami.edu/finance/index.php/green_u
  - FIU – http://gogreen.fiu.edu/sustainability-office/index.html
  - FAU – http://www.fau.edu/broward/sustain/
  - Barry – https://www.barry.edu/best/
  - NOVA - http://www.nova.edu/gogreen/sustainability/index.html

- Other types of Community Participation: You can encourage your friends, families, or employees to participate in these community events either individually, or all together as work group or team:

  - BAYNANZA: The annual cleanup celebration of Biscayne Bay is held every April and attracts thousands of residents who help clean up one of our most important ecological and economic systems. Go to http://www.miamidade.gov/environment/baynanza.asp .

  - ADOPT-A-TREE: Free trees (both fruit and shade trees) are available to county residents who own single family homes or duplexes in this program, designed to strengthen our community's tree canopy. Go to http://www.miamidade.gov/environment/adopt-a-tree.asp

  - RAIN BARREL WORKSHOP: Residents can discover an inventive and inexpensive way to capture and store rainwater for later use while conserving water at monthly workshops. Go to http://miami-dade.ifas.ufl.edu/environment/natural_resources.shtml

  - ENVIRONMENTALLY ENDANGERED LAND WORKDAYS: http://www.miamidade.gov/environment/endangered-lands-volunteer.asp

  - DEERING ESTATE VOLUNTEER WORKDAYS: http://www.deeringestate.com/pages/Volunteer-Workdays-.aspx

  - VOLUNTEER PROGRAMS AT PARKS & MARINAS http://www.miamidade.gov/parks/about-volunteering.asp

Create Your Own Sustainability/Climate-Friendly Project:
To start your own sustainability project, we recommend partnering with our GreenPrint Partner, ioby (http://www.ioby.org/miami), a non-profit organization that helps grassroots community activists raise money and attract volunteers for environmentally-friendly projects.

TAKE ACTION TO REDUCE YOUR CARBON FOOTPRINT

Generally speaking, whatever you can do to minimize fuel and electricity consumption will have the greatest environmental benefits.

<u>Transport</u>
- Walk, bike, or take public transportation whenever possible. http://www.miamidade.gov/transit/mobile/

BIKE305.com is your one-stop-shop for all things cycling related in Miami – from maps to a calendar of events: http://bike305.miamidade.gov/events/bike305/

- Consider fuel efficiency when purchasing a new car
  Check out tools to estimate and compare fuel savings from different vehicle makes and models: http://www.fueleconomy.gov/

- Get regular tune-ups
  Regular tune-ups for your car will increase its fuel efficiency and reduce air pollutant emissions by more than half. Check out the online AAA Maintenance Guide: http://www.aaasouth.com/automotive/auto_maintenance_guide.aspx for more information.

- Keep tires properly inflated.
  If your tires are under-inflated by just four pounds, it will cost you a half-mile per gallon.

- Avoid car-idling in personal and company cars. (Two minutes of idling uses about the same amount of gas as one mile driving. Turning off and starting an engine uses less gasoline than letting the engine idle for 30 seconds.)

- If you commute to work regularly, contact South Florida Commuter Services: http://www.1800234ride.com/ . They have a vanpool program, a carpool match program, and an emergency taxi voucher program for those who carpool/ride public transportation.

- If you are running errands, take a few minutes to plan a route that can incorporate multiple stops in one trip, instead of taking several individual trips throughout the day. This is known as trip chaining and reduces fuel consumption.

- If you live in apartment complex, work with management / condo association to bring charging units for electric vehicles to the complex and consider giving priority parking spots to carpoolers / electric or hybrid vehicle owners.

- Work within your office to encourage teleconferencing or webconferencing whenever possible to minimize travel.

- Work within your office environment to develop policies that encourage telecommuting.

Electricity Usage
- Switch off lights and appliances that you are not using!
- Insulate your water heater.
- Use energy efficient appliances (see under purchasing).
- Clean or change your air filter. Regular maintenance will increase efficiency by 5 to 10%.
- Outside, plant native shade trees on the east and west sides of your house. Strategic landscaping for energy conservation can save up to 30% on your cooling costs.
- Heating water is the second highest use of energy in the home, so saving energy here can yield big results. The simplest thing to do is to adjust the thermostat on your water heater to between 120 and 130F. This will save energy and prevent scalding burns from excessively hot water. In fact, for every 10F you drop the water temperature, you can save 6% on your water heating cost.
- Through a grant from the federal government, the Office of Sustainability purchased "Kill A Watt EZ Power Meters" to help residents measure the electricity consumption of their home electronics. There are over one hundred of these meters in our public libraries that can be checked out for free: http://catalog.mdpls.org/search/searchresults.aspx?ctx=1.1033.0.0.6&type=Default&term=power%20meter&by=KW&sort=RELEVANCE&limit=TOM=*&query=&page=0

- In the summer, raise the temperature when you leave the house. In the winter, lower the temperature when you leave the house.   A programmable thermostat is recommended.
- Use energy efficient lighting, such as compact fluorescent or LED (light emitting diode) bulbs.   Remember to open curtains /shades and use natural light whenever possible.
- Ensure that computer and fax machines, copiers, monitors and printers default to energy-saving mode (standby) when idle for 15 minutes or more. (Computers and monitors in awake-mode use 270 watts, while they use less than 60 watts on standby mode.)
- Enable an automatic disconnect or turn-off for personal or shared electronic devices (such as computers) set for the when you leave for the day from the office or when you go to sleep at night. (As long as they are plugged in, your computer, cell phone chargers, and other electronic devices continue to use electricity (vampire energy) – even when they are turned off or in standby mode. A computer uses up to 10 watts when it's turned off but still plugged in.)

Waste

- Use reusable bags for grocery shopping.
- All businesses in Miami-Dade are required to recycle at least three materials. Find out how here: http://www.miamidade.gov/publicworks/business-recycling.asp
- All residential properties are required to recycle, whether they are single family homes or multi-family apartments or condos. Find out more here: http://www.miamidade.gov/publicworks/recycling.asp
- Make sure all printers/copiers default to duplexing so that printout jobs are automatically double-sided. User can manually select single-sided copies when necessary.
- Set a narrow margin-width as the default for your computer-generated documents; you will be able to get more on each page that way, thereby reducing the amount of paper you use.
- Encourage e-faxing in lieu of using a fax machine.
- Try composting. Our Miami-Dade Cooperative Extension Service can teach you how: http://miami-dade.ifas.ufl.edu/lawn_and_garden/home_gardening.shtml. There are also techniques that can be used for those living in apartments such as vermiculture: http://www.fertileearth.org/
- E-mail or use file-sharing servers to send/share documents, especially those with multiple pages.
- Make sure you drink from refillable containers and do not buy bottled water. (Most plastic water bottles end up in a landfill, and filling up from the tap with clean, safe Miami-Dade water instead of purchasing bottles can save you hundreds of dollars a year.)
- Make sure to recycle printer cartridges; many companies will accept these days, some will even pay you for them.
- If you work at an office, be aware that some companies will pay you for your clean office paper and cardboard and certain kinds of printer cartridges.

Water
- Turn off the sink while brushing your teeth, shaving, and washing your hands. You can save about one gallon of water per hand wash.
- Make sure you fix any leaky faucets, toilets or other water-wasting incidents. Even a small leak can waste 70 to 100 gallons of water each day.
- If you have areas to landscape at home or outside the office: do not use sprinklers – instead, use xeriscaping to minimize water use: http://www.sfwmd.gov/portal/page/portal/xrepository/sfwmd_repository_pdf/ww0_waterwise_all.pdf
- Permanent water restrictions are in effect for exterior landscape watering. In Miami-Dade County, watering outdoors is not allowed from 10 a.m. to 4 p.m. daily. Residents and businesses with odd-numbered street addresses can water on Wednesdays and Saturdays. Those with even-numbered addresses can water on Thursdays and Sundays.
- Replace your standard thermostat with one that has an automatic timer. This will keep your A/C off while you're at work and turn itself back on before you get home.

- Don't pave over your lawn. Instead, use porous pavers or bricks for your driveway. This will allow rainwater to soak back into the ground.
- Compost. When you compost, vegetable scraps, leaves, grass clippings and other organic materials break down into a material you can mix into your soil, helping to improve your garden condition. Besides being inexpensive, composting helps reduce watering needs by allowing the soil to retain more moisture. Visit the Miami-Dade Cooperative Extension Service for more information on lawn, gardening, and other sustainable strategies http://sfyl.ifas.ufl.edu/

Green Business and Certification
- Miami-Dade County has a Green Business Certification program and tips. See this link to find out more: http://www.miamidade.gov/green/business.asp

Purchasing/Procurement:
- Do not buy disposable plates / cups. At the office, encourage all employees to bring in their own plates /cups / tableware and to put their name on it.   Make sure that the office provides an area where employees can wash and dry their dishes. (Be prepared for initial grumbling, but they will get used to it.)
- Do not buy bottled water for the home or office (see above, under waste).
- Buy environmentally preferable products (EPP) whenever possible such as certified recycled content paper.
- For an office environment, do not buy desktop printers; buy larger printers/copiers that are networked to work groups. Having to get up and walk to a printer substantially cuts down on unnecessary printing.
- Buy green janitorial products for your janitorial/cleaning staff to use.
- Buy EnergyStar certified appliances (http://www.energystar.gov/) and EPEAT (http://www.epeat.net/) certified computers and other electronics.
- Visit a local Farmers Market to lower food transport miles and support local, small farms and sustainable producers: http://localfoodsouthflorida.org/farmersmarkets.html

Additional Resources:
Here are pages filled with additional tips that you might find helpful: http://www.miamidade.gov/environment/tips-environmental.asp   and http://www.miamidade.gov/environment/business.asp