



Leonardo Academy's Cleaner and Greener® Program

Greenbuild 2010

Post Event Emissions and Offset Summary

Event Statistics

Dates of Event:	November 17 th – 19 th , 2010
Location of Event:	McCormick Place, Chicago, IL
Organization Holding Event:	US Green Building Council
Event Attendance: 25,354=	4,847 local, 4,007 regional, 13,915 national, and 2,585 international
Total Event Meeting Floor Space:	828,000 square feet
Total Electricity Consumption:	3,056,974 kWh
Total Natural Gas Use:	112,784 therms
Total Air Passenger Miles:	26,111,724 miles
Total Personal Vehicle Miles:	1,970,091 miles
Total TMS Shuttle Diesel Use:	11,428 gallons

Estimated Emissions and Emissions Reductions/Offsets for Greenbuild 2010						
Pollutant Type	Emissions Caused by Event Energy Use (lbs)	Emission Reductions by Amount (lbs)				Percent of Emissions Offset to Date
		WindCurrent (RECs)	TMS Transportation (Offsets)	Attendee Donations (Offsets)	Pledged USGBC Purchase (Offsets)	
Carbon Dioxide (CO ₂)*	24,888,893	5,147,820	255,714	99,208	19,386,151	100%
Sulfur Dioxide (SO ₂)	12,462	19,857				159%
Nitrogen Oxide (NO _x)	18,380	7,161				39%
Particulate Matter (PM10)	1,572					0%
Particulate Matter (PM2.5)	1,256					0%
Mercury (Hg)	1.38E-01	7.87E-02				57%

*Includes carbon dioxide equivalents of methane (CH₄) and nitrous oxide (N₂O)

Emission Reductions

WindCurrent donated 3,057 MWh of renewable energy certificates (RECs) to offset all of the electricity used at the event. (www.windcurrent.com) The WindCurrent company has been providing LEED-spec Renewable Energy Certificates to US institutions since 2002. The company has greened Greenbuild since 2006. Its current customers include the US Department of Energy, NASA, the National Institute of Health, M&T Bank, and Random House. WindCurrent has greened LEED projects across the US, and has greened most of the US federal buildings across the planet.



Transportation Management Services (TMS) has offset all of the greenhouse gas emissions associated with the shuttle services it provided to Greenbuild 2010.



these attendees.

The USGBC has committed to purchasing the remainder of the greenhouse gas emissions offsets needed to make Greenbuild 2010 a carbon-neutral event, totaling 8,793 metric tons of carbon offsets. The specifics of the offsets to be purchased are to be determined.

Additional Information

How the Event Emissions are Calculated

The pre-event estimate of emissions caused by the energy use associated with this event are calculated based on the travel to and from the event plus the emissions associated with the facilities used for the event, including conference space, lodging, and meals. Our calculations include the full range of emissions caused by energy use. This includes emissions that contribute to climate change (like CO₂) and emissions that are harmful to human health (SO₂, NO_x, Hg, and particulates). Starting with Greenbuild 2007, events that are Cleaner and Greener® Certified have had emissions and offsets quantified using methodology referencing the Leonardo Academy Draft Standard for Trial Use on Emission Inventories, Offsets and Emission Reductions.

How Emission Offsets Work

We can reduce emissions directly by our own actions, such as increasing the efficiency of our buildings and vehicles. We can install renewable energy sources in our homes and encourage the choice of renewable energy sources in our workplaces. We can also acquire ownership of emissions reductions created by others to offset the emissions caused by our own energy use. Setting up score-keeping standards for quantifying emissions reductions and tracking the ownership of these reductions creates the opportunity for formally creating emission reduction certificates and holding, retiring, donating, and buying and selling emission reductions. These quantified emission reductions can be used to offset the emissions caused by our events, our businesses, our organization and our families. This empowers us to take responsibility for our energy use and to offset the emissions we cause. A new idea to think about: "Keeping carbon sequestered in existing forests is just as important for total carbon sequestered as sequestering carbon in newly planted forests!"

What Leonardo Academy does with Donations by Event Participants for Emission Offsets

For many events, participants make donations to offset the emissions caused by their individual energy use and transportation associated with attending the event. Leonardo Academy uses participant donations to purchase emissions offsets on behalf of the event attended. Because Leonardo Academy is a charitable (501c3) nonprofit organization, donations are deductible to the full extent allowed by law in the USA. When Leonardo Academy purchases emissions offsets, we use a competitive procurement process to maximize the amount per dollar of the desired offsets we buy. Leonardo Academy permanently retires all offsets acquired to offset events so they can never re-enter the emissions market or be used for any other purpose in the future.

About the Cleaner and Greener® Program

www.cleanerandgreener.org Leonardo Academy's Cleaner & Greener® program addresses the full range of emissions that contribute to climate change and those that have adverse affects on human and environmental health. We work with companies and organizations, families and individuals to quantify their emissions footprints; develop strategies to soften their environmental impact through reduced energy use, alternative transportation, and other sustainable actions; and offset remaining emissions through offset purchases. The Cleaner and Greener Program recognizes program participants for their environmental stewardship through Cleaner and Greener Certification of the level of emission reductions and offsets achieved.

About Leonardo Academy



LEONARDO ACADEMY
THE SUSTAINABILITY EXPERTS®



CLEANER + GREENER
Leonardo Academy® is a 501(c)(3) non-profit organization founded in 1997 that is dedicated to advancing sustainability and putting the competitive market to work on improving the

environment. We develop and distribute strategies, guidance, metrics, standards, education, and information on how to increase sustainability. We also help companies, organizations, families, and individuals successfully promote, encourage, and implement sustainability. Our integrated approach makes sustainability very practical for our clients. We provide sustainability assessments and strategies for companies and organizations, LEED® implementation and certification, emissions footprint analysis plus emission reduction and offset strategies, sustainable land management, sustainability education and training, and certification of emission reduction and offset achievements through our Cleaner and Greener® Program for events, companies and organizations.