



Energy, Art, And Project Management

Implementing Energy Conservation Projects At W



WUSM has a long history of imple that improve operations, save ene operating costs with as little disrup to the daily operations of the Univ Dochwat, Senior Engineering Proj in the Physical Planning & Capital Group, is often behind the scenes these complex projects. During hi WUSM, Nick has submitted over 8 requests and has managed projec cost of over \$125,000,000, includi improvements, as well as energy-r Currently, Nick is working on an A

incentive program called Ameren Act on Energy: "We just recently asked for \$70 to implement energy conservation measures in 8 of our buildings. The project is have a payback in 1.5 years, but with the incentives, we will break even on our in 9 months and 18 days. That means we will be saving \$707,000 every year after th

"I have to admit," Nick shared, "I am a very fortunate person because of the ass assignments given to me. I am being challenged every day. One day, it could be piece of Chilhuly's artwork because we need to move it for construction and hav The next day, it could be learning about variable refrigerant flow systems as a me and heating offices or dorm rooms." Nick is involved with implementing LED light frequency drives, boiler and chiller replacements, and HVAC upgrades. He noted install variable frequency drives on fans instead of belt drives, we retain the abilit and airflow without the added maintenance of adjusting sheaves and replacing b to lower utility and maintenance costs. Nick, the proud owner of a hybrid, gasoli concluded: "Saving energy is one place we can all make a difference."

WUSM NEWS

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Active Transportation Month In Full Swing



Active Transportation Month is in full swing across Washington University's School of Medicine and Danforth campuses. It is a time to get more active in your daily routine. If you cannot imagine going car-free, consider carpooling or budgeting time to try transit one or two days during the month. If you are an everyday cyclist, try and commit to going grocery shopping or getting to and from the laundromat on two wheels. Whatever your commitment to active transportation is today, we ask

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UPCOMING EVENTS

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- Saturday, October 17: [FOOD ROCKS Fundraiser](#)
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- Friday, November 6: [Sixth Annual Green Ball](#)

SCHOOL OF MEDICINE NEWS



ENERGY

Home Energy Consumption And When To Replace Equipment

that you step it up this month!

Upcoming activities include the Bike-In Movie on Forest Park's Art Hill. Bike or take the Metro over and join us for food and games at 6pm, followed by a screening of "Ghostbusters" at 7pm next Friday, October 16.

WUSTL faculty, staff, and students living off-campus are also encouraged to form teams and participate in the Active Transportation Challenge at <http://Bit.ly/activetransportationmonth2015>. The Challenge runs October 5-28, and all participants will receive a free t-shirt. Please remember to log your trips to and from campus through shiftyourcommute.com. Awards will be given to teams with the highest number of car-free trips, greatest number of car-free miles, and largest number of team members at the end of the month. The winners will celebrate together over a catered lunch.

Happy transit!



The month of October has started with a chill in the air! Chances are we will all be using our home's heating system soon, but when is it time to replace equipment such as a furnace, air conditioner, thermostat, or duct work?

Signs that it may be time to call a professional contractor to make a change include: You have a heat pump or air conditioner over 10 years old, your equipment needs frequent repairs and your energy bills are increasing, some rooms in your home are too hot or too cold, your home has humidity problems, and your heating or cooling system is noisy. The U.S. Department of Energy offers guidance on addressing these and other related issues [here](#).

The U.S. Department of Energy surveys and reports on residential energy consumption trends. The most recent report, which uses 2009 energy consumption, shows significant changes have occurred in how we consume energy at home, with a rise in the percentage of total energy use attributed to appliances, electronics, and lighting. Space heating remains the largest percentage of energy use at 41.5% of site-based energy consumption for the average U.S. household. The 2009 average household expenditure in Missouri was reported to be around \$1,900 per year. With these operating costs

in mind, adjusted for 2015 utility rates, should your current equipment stay, or should it go?

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Home Indoor Air Quality



It's not too late to get your home's furnace ready for the cold winter months that lie ahead. Most of us remember to change out air filters at the beginning of the heating season. However, many times the condition of the furnace's humidifier goes entirely unnoticed.

If you have a humidifier and want to expand your do-it-yourself horizons, find the humidifier model number. With this information in hand, go online and find out what work should be done to your particular model to get it ready for winter. If the maintenance instructions are more than you can take on, hire a reputable heating and air conditioning contractor to do the work.

If you elect to do it yourself, first disconnect all power to the furnace and humidifier. In addition, close the domestic cold water shut-off valve that feeds the humidifier. Inspect all interior surfaces of the humidifier for signs of mold growth. If you find any signs, visit the EPA's website on how to safely clean up the mold. Once the mold has been removed, thoroughly clean all interior surfaces of the humidifier. If your humidifier has some type of evaporative media, replace it. If your humidifier has a drain hose, and the hose is an opaque, garden-type hose, replace it with a clear hose. If mold does begin growing in your clear hose, you will be able to catch it early in its development and take appropriate action. For the do-it-yourself types, periodically check to see that your humidifier is working well. By keeping your humidifier in tip-top shape, you can be assured that your home will be comfortably, reliably, and safely humidified throughout the entire winter.

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2015 WUSM Employee Picnic Diversion



The annual WUSM Employee Appreciation Picnic took place on September 18 at Hudlin Park. Employees enjoyed catering from Kenrick's BBQ, frozen custard from Ted Drewes, and a variety of games. The picnic was sponsored by the Dean's Office and the Medical School Management Council.

As part of Washington University's efforts to reduce waste from events, the planning team worked with Kenrick's to provide compostable plates, napkins, and silverware. Volunteers staffed three Green Waste Stations to help attendees sort their waste into recycling, composting, and landfill bins. A total of 500 pounds of compost material was diverted from landfills.

According to volunteer Theresa Hildebrandt, "The first few years, people would come up to the Green Waste Stations and ask where the trash cans were located. They didn't understand why we were there, and they were frustrated that the garbage cans were covered. We've educated the staff over the years, and now they thank us!"

Next year, in order to move closer to our goal of holding a zero-waste event, the sustainability team will work with vendors to eliminate Styrofoam to-go boxes and plastic water bottles and to use compostable containers and utensils.

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Benefits Of Hybrid Vehicles



According to the World Health Organization, vehicle emissions are one of the largest contributors to urban air pollution. Walking, cycling, and using the Metrolink are great ways to cut down on those emissions. However, for some, those options cannot fully replace a personal vehicle. Opting for a hybrid vehicle is one popular way to drive, while still reducing the environmental impact of transportation, as a typical hybrid car produces up to 80% fewer emissions compared to traditional vehicles.

Several members of WUSM's Facilities Management Department (FMD) have chosen hybrid vehicles to reduce their carbon footprint, while reaping personal benefits. Karen Seifert, Director of Business Operations, said she chose a hybrid because, "My commute is 28 miles each way, so it was really important to me to have a fuel

efficient

vehicle.”

Because hybrids use a combination of an electric motor and a gasoline-powered motor, many can reach over 50 miles per gallon, resulting in significant fuel savings. While the increased fuel economy was appealing, Nick Dochwat, Senior Engineering Project Manager, said that he had initially been hesitant about driving a hybrid: “I always thought that hybrids wouldn’t have any ‘giddy-up and go’ but boy was I wrong! A co-worker picked me up in his hybrid to go play golf, and I thought with the weight of both us and our golf bags, the car would be loaded down. When he pushed on the pedal to get on the highway, I was amazed. After that, I was hooked and started looking for my own.”

The electric motor found in hybrid cars provides instant torque. Unlike the gasoline-powered motor, there is no need to wait for the motor to spool or rev up. Additional benefits of hybrids include high resale value and lower maintenance costs.

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University College Offers Sustainability Courses And Degrees



Have you heard of University College, Washington University's Professional and Continuing Education Division? Did you know it offers a variety of options related to sustainability? There are different ways to take classes, including a traditional classroom style,

online, and a hybrid of the two. View the spring 2016 sustainability course [offerings](#) today, and stop by a preview night at the Danforth campus on November 4 to learn more!

You do not need to be admitted to begin, just enroll and select WUSTL Employee benefit at the payment page. You can study for your own personal interest or use your credits for Certificates in Sustainability and GIS or a Bachelor of Science.

If you have worked for a year or longer at Washington University, you can earn a free college degree through University College. Full-time employees may enroll in two undergraduate classes (up to 7 credits) per semester. You can study sustainability, art, science, and even philosophy – all tuition-free. Learn more about the WUSTL Tuition Assistance Benefit [here](#).

If you have questions, please email ucollege@wustl.edu or call 314-935-6700.

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LOCAL AND INTERNATIONAL NEWS

The Global Financial Impacts Of Land Degradation



In a new report, experts estimate the value of ecosystem services worldwide forfeited due to land degradation at \$6.3-10.6 trillion annually, or the equivalent of 10-17 percent of global GDP. Approximately 50 million people may be forced to seek new homes and livelihoods within 10 years. That many migrants assembled would constitute the world's 28th largest country by population.

"The Value of Land" report was produced by The Economics of Land Degradation Initiative. With guidance by United Nations University's Canadian-based Institute for Water, Environment and Health and the CGIAR's Research Programme on Drylands Systems, it culminates a four-year collaboration involving 30 international research and policy institutes.

The report calls on countries to recognize the huge value of improved land management and to enhance institutional capacity and knowledge in the area, together with national policy, economic, legislative and regulatory frameworks.

To read more, click [here](#).

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UPCOMING EVENTS



Earth Friendly Labware Symposium

Thursday, October 15, 12-2p

WUSM, McDonnell Sciences, Room 501

Want to reduce lab waste? Join us for the Earth Friendly Labware Symposium and learn about innovative, sustainable design and manufacturing practices. The symposium will include product demos that showcase minimum packaging waste, maximum product recyclability, bioplastics for a renewable and low carbon option, and new sterile packaging options. It will also include a discussion on solar powered factories, scrap recycling with zero plastic waste, local sourcing and production, and ways to reduce water, emissions, and environmental impacts in manufacturing.

If you cannot attend on October 15, join a second session Friday, October 16, 11:30 to 1:30p in CSRB North Tower, Room 1001!

Lunch will be provided by Chipotle Mexican Grill for both sessions.

RVSP to jmcdougell@labcon.com.

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FOOD ROCKS FUNDRAISE



FEATURING:

Cole Vosbury from NBC's The Voice & Amanda June of Na

FOOD ROCKS Fundraiser

Saturday, October 17, 5:30-8:30p

1335 Convention Plaza, St. Louis 63103

Join Urban Harvest STL for an exclusive event to celebrate the first season of the FOOD ROOF Farm. The first annual FOOD ROCKS fundraiser will support this unique rooftop farm and will feature Cole Vosbury from NBC's The Voice with Amanda June of Nashville, TN. Hor d'oeuvres, drinks, and parking will be provided.

The FOOD ROOF is St. Louis' first rooftop farm. It connects city dwellers to an organic-based food system right in their neighborhood. It is located atop a two-story building on 14th and Convention Plaza, just one block north of Washington Avenue, and one block east of the famed City Museum. To learn more about the FOOD ROOF Farm,

visit the Urban Harvest STL [website](#).

To purchase tickets for the FOOD ROCKS fundraiser, click [here](#).

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Midwest Biodiesel Products LLC Tour

Tuesday, November 3,4-5p

Free bus departs from Brookings Hall steps, 3p

Join Washington University's Photosynthetic Antenna Research Center ([PARC](#)) and [I-CARES](#) for a tour of the Midwest Biodiesel Products LLC facility in Roxana, IL. Participants will explore how biodiesel fuel is created and distributed in the greater St. Louis area. We recommend wearing comfortable shoes and dressing for the weather, as the tour will be an hour in length and may include some time spent outside.

This tour is part of the PARC and I-CARES "Events & Topics in

Renewable Energy & The Environment" series. Free bus transportation will be provided, departing from the foot of the Brookings Hall steps. Participants may also meet the tour group at the site and should contact Erin Plut at eplut@wustl.edu for directions and parking instructions. Register for the tour [here](#).

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Sixth Annual Green Ball

Friday, November 6,7-11p

Moonrise Hotel at 6177 Delmar, St. Louis 63112

Shimmer into your emerald sequins and shake your tuxedo tails at the 6th annual Green Ball. Tickets include an evening full of fun: creative cocktails, beer and wine, locally-sourced cuisine and desserts, and dancing to live music as you mingle with local sustainability champions.

The Green Ball benefits the EarthWays Center of the Missouri Botanical Garden, supporting some of our region's best sustainability education work. Creative "green" attire is encouraged. Costume contest prizes are fun and sustainable!

Tickets are \$40 for Garden members and \$50 for nonmembers. Purchase tickets [online](#), or call (314) 577-5118.

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The Office of Sustainability newsletter is intended as a clearinghouse of sustainability-related news and events at the university, in the region and around the world. Listings in the newsletter do not necessarily represent Office of Sustainability endorsements or views. To submit an event or news item to include in the newsletter, [email sustainability@wustl.edu](mailto:sustainability@wustl.edu).

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