



Sustainability Opportunities

Let us know if you'd like more information. (Red font = JSC internal event)



Here are your **May 2015 Sustainability Opportunities** at the Johnson Space Center and in the greater Houston area. Please participate, and contact JSC-Sustainability@mail.nasa.gov with additional opportunities.

Get this electronically at <http://www.nasa.gov/centers/johnson/about/sustainability/index.html>

Within this notification:

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- ⇒ **Internal NASA Links**



A Look Back before we Look Ahead...

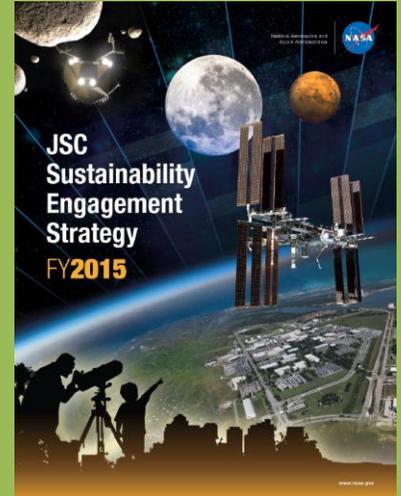
NASA's Earth Day 2015. Out of this world!!!

Over 2500 people participated in the NASA JSC Safety, Health and Environment Fair. See all the pictures (internal link only) at <http://io.jsc.nasa.gov/app/browse.cfm?cid=60440>

Ask for details at your next meeting. → Jsc-sustainability@mail.nasa.gov



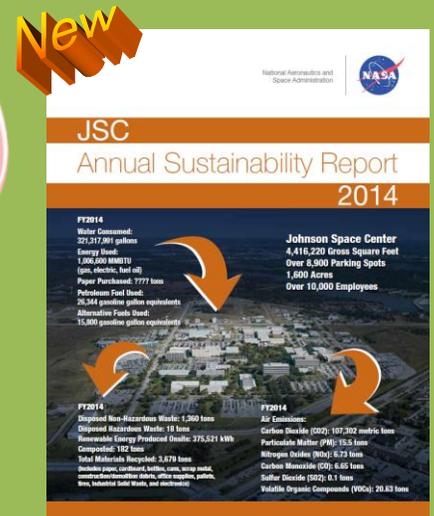
Do you know what "Sustainability" actually means? Read our **JSC Sustainability Engagement Strategy!!**



In our **JSC Sustainability model**, there are 6 natural resources we're trying to protect. Employees can find out more at our internal **JSC Sustainability Webpage!**



You're making a difference in our **JSC Annual Sustainability Report!!**



2015 Monthly Sustainability Focus Areas

- Jan - Feb = **LAND**
- Mar - Apr = **WATER**
- **May - Jun = PEOPLE**
- July - Aug = **AIR**
- Sept - Oct = **ENERGY**
- Nov - Dec = **MATERIALS**

Every Month
Join the Fun &
Educational Sustainability
Activities related to our
JSC Sustainability Model

Check out all the
Red Font activities on
the following pages!!



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Upcoming Events

- **Every Saturday or Sunday: Enjoy the Armand Bayou Nature Center**
 - From Breakfast on the Bayou to Nature Hikes, from Farm Life Demonstrations to Canoe Trips, check out this local gem for a weekend of nature-filled fun!
 - <http://www.abnc.org/things-to-do.html>
- **May 9th: Harmony Public Schools I-SWEEEP Judging**
 - I-SWEEEP = International Sustainable World Energy, Engineering, and Environment Project
 - *We need NASA employees and contractors to volunteer to judge student projects!!*
 - George R. Brown Convention Center
 - POC: Laurie Peterson
- **May 9th: Tour the City of Houston's Green Building Resource Center**
 - 10:00AM – 2:00PM
 - 1002 Washington Ave, Houston, 77002
 - <http://www.codegreenhouston.org/>
- **May 14th – 17th: STAR Master Composter Program**
 - Green Building Resource Center, 1002 Washington Avenue
 - Become a certified YardWise Master Compsters (MC)
 - <http://www.greenhoustontx.gov/gbreeducation-2015spring.pdf>
- **May 12th: JSC's Environmental Brown Bag – "Exploration Green"**
 - Every 2nd Tuesday of the month
 - 12:00PM – 1:00PM
 - B45/751
 - POC: Michelle Fraser-Page
- **May 20th: Upward Mobility – Redefining Transportation in Houston**
 - Workshop; 8:30AM – 11:00AM, Transportation Fair; 11:00AM – 1:00PM
 - Two Allen Center, 1200 Smith St.
 - Register: <https://www.eventbrite.com/e/upward-mobility-redefining-transportation-in-houston-tickets-16382625875>
- **Jun 2nd – 4th: JSC APPEL Introduction to Green Engineering**
 - 8:30AM – 4:30PM
 - JSC B12
 - [Click here to Register](#); [Click Here for Course Information](#)
- **Jun 3rd: The Market-Moving Link Between Sustainability & Wellness**
 - 8:30AM – 11:00AM
 - Location TBA
 - POC: Houston's Green Office Challenge, Lisa Lin
- **Jun 22nd: EPA brings CREAT train the trainer workshop to Houston**
 - CREAT = Climate Resilience Evaluation & Awareness Tool
 - City of Houston's Green Building Resource Center, 1002 Washington Ave.
 - POC: Laurie Peterson

Find more opportunities and contribute to the [Citizen's Environmental Coalition](#).



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Featured Story "What's so Green about Engineering?"

Join us for the 4th annual NASA JSC Green Engineering Course (June 2nd – June 4th, 2015)

This course is designed as graduate-level seminar for engineers, scientists, project managers, and others who design products, processes, or systems and want to understand, quantify, and reduce the associated environmental impacts. It provides an introduction to the topic of green engineering, a tool for reducing the environmental impact of products, processes, and systems and making them more sustainable. From a NASA perspective, green engineering is an engineering best practice that considers environmental impacts as another design risk for mission success.

"This course got me to understand the importance of considering the entire product life cycle in order to assess its potential environmental impact."

Upon completion of this course, participants will be able to:

- Identify and communicate NASA engineering challenges with respect to environmental impacts as well as future risks, requirements, and potential solutions.
- Explain the different phases for a product, process, or system over the entire life cycle and give examples of potential environmental impacts and risks in each.
- Describe and apply basic life-cycle assessment (LCA) techniques for engineering projects.
- Develop an inventory of inputs/outputs for products/processes/systems.
- Develop a simple streamlined LCA template for use in their job function.
- Identify best practices and resources for continued learning and application of sustainability principles to NASA projects.
- Employ environmentally conscious designs, materials selection, and manufacturing techniques—enhanced through interdisciplinary teamwork.
- Design and develop materials, products, processes, hardware, and systems that are inherently safer, generate less waste, and use energy efficiently.
- Practice minimizing impacts associated with environmentally-driven risks, especially through an understanding of policies, regulations, and other external requirements (U.S. and international).
- Use available green engineering and sustainability tools and resources, along with NASA expertise, within system design and development efforts.
- Explain their role in fostering a sustainability culture within NASA.

"The 12 principles of green engineering helped me understand that green engineering is not just about buildings, but about doing good engineering period."

Sign up today! [Click here to log in to SATERN and Register](#)

Find information on all [NASA JSC Sustainability effort on the external homepage](#) (Click hyperlink, scan this QR code, or Google "NASA JSC Sustainability").



"My goal as the JSC Center Operations Director is to create a working environment where JSC employees feel happy, comfortable, and productive to support our mission. Similarly, my vision for sustainability is that it's something we don't even think about; it's ingrained in our thinking. We just do it."
- Joel Walker, JSC Center Sustainability Officer



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How can I be more sustainable?

Calculate your ecological footprint! How many Earth's does it take to sustain your lifestyle if everyone in the world lived like you?

<http://www.footprintnetwork.org/en/index.php/GFN/page/calculators/>



Internal NASA Links

JSCs Internal Sustainability Webpage

(also accessible via the JSC Internal Homepage → Around JSC → Sustainability Initiatives)

<http://jsc-web-www6.jsc.nasa.gov/ja/ja13/capp.cfm>

JSC Photos of JSC's Earth Day, Natural Champions Meet Up, and local wildlife

<http://io.jsc.nasa.gov/app/browse.cfm?cid=60440> (new)

<http://io.jsc.nasa.gov/app/browse.cfm?cid=56553&ord=4>

<http://io.jsc.nasa.gov/app/browse.cfm?cid=59636&ord=4>

<http://io.jsc.nasa.gov/app/browse.cfm?cid=55905&ord=4&&pn=3&rpp=25&ct=1>

<https://io.jsc.nasa.gov/app/browse.cfm?cid=49948>

<https://io.jsc.nasa.gov/app/browse.cfm?cid=51063&&pn=1&rpp=25&ct=1>

How do I monitor the energy usage in my JSC building?

<http://ebiem:8080/idashboards/?guestuser=guest>

JSC Environmental Brown Bag Presentations

<http://jsc-web-www6.jsc.nasa.gov/bbs/scripts/>

(Scroll down to "Environmental Brown Bag")

JSC Environmental Newsletter Archives

<https://jsc-web-www6.jsc.nasa.gov/ja/ja13/greenside.cfm>