...we're living in the ReGeneration, which includes people of all ages throughout the world who want to make a difference in improving the Earth we all share."
Michael Dell, London, England, June 5, 2007

Ever wonder what happens to your electronic waste, that old computer, or cell phone you discarded? Are you concerned that chemicals from landfills can harm the environment? If so, here is your chance to do something about it by creating innovative new uses for electronic waste.

Photography by Marissa Dolin

Sustainable E-waste Design Competition

INTRODUCTION: Electronic waste, or "e-waste," generated by computers, TVs, cameras, printers, and cell phones is a new and growing global issue. Through the *Sustainable E-waste Design Competition* participants will explore solutions to this problem on the local level and beyond. The spirit of this competition is to invigorate the academic and industry dialogue about product designs for environmentally responsible green computing. With your participation and through this design competition, we hope to begin a new dialogue, refresh awareness, and explore new directions in sustainable, environmentally responsible product designs for computing.

As we understand more about a product's entire life cycle, from concept through end of life, we become better equipped to design products that lessen the impact on the environment and still provide the necessary functionality. Furthermore, through better design process tools such as Life Cycle Analysis (LCA) we can design computer products that are more sensitive to the total carbon footprint they generate.

Entries will be presented to the public through the www.ewaste.illinois.edu website and press events. In that same spirit, the organizers will not claim rights to the intellectual

property of the entries, but all entrants should know that their submissions will be made public.

ELIGIBILITY: University of Illinois at Urbana Champaign (UIUC) students from all majors, undergraduate and graduate, may participate. Engineering, design, sustainability, or business backgrounds will be helpful, but not required for success in this competition. Teamwork across disciplines is encouraged. We invite students to create a broad range of design concepts and innovations for technology products that demonstrate fresh approaches and responsible solutions for green computing technologies. Participating students will be exposed to hands-on experiences with electronic waste re-use methods, collection methods, and other strategies intended to curb the impacts of electronic waste. The goals are to learn about ways to re-use e-waste for new and productive means, explore your own ideas for how to address e-waste problems and contribute to the body of knowledge that advances the practice of environmentally responsible product design for current and future computing technology products. Participants may work in teams of no more that 5 people and all team members must be currently enrolled UIUC students.

EDUCATIONAL COMPONENT: Participants are encouraged to enroll in the Sustainable E-Waste course ARTD 391/591. Course enrollment is not required in order to enter the competition and participants may attend course lectures and seminars without enrolling. This course will cover relevant topics such as history and theory of sustainable design and sustainable e-waste design techniques.

REGISTRATION: Registration is online at ewaste.illinois.edu.
Participants can register as individuals or as teams as long as the team has no more than 5 members. Entrants need to register for the competition between January 29 and March 16, 2009. There will be no opportunity for early or late registration. For additional questions contact Professor William Bullock at wbullock@illinois.edu or 217.265.0873.

ENTRY "FEE": As an entry fee to the competition, contestants are encouraged to donate an old computer that is no longer being used. Donors are encouraged to delete personal information before donating equipment; however, hard drive data will be treated securely and erased. Electronic components for the competition teams to use will be made available through a campus wide e-Waste collection event.

COLLECTION EVENT: A e-waste collection event will be held on campus from 9:00-2:00 p.m., Saturday, February 21, 2009 at Lincoln Hall, 702 S. Wright St., to collect unused CPU's, monitors, keyboards, mice, printers, scanners and cell phones. (TV's and other electrical e-waste cannot be accepted). Donors are encouraged to donate there old computers as specified above as these items will be made available to students entering the competition. Donations will be limited to "one carload" of computer e-waste per donor. Additional material from donors beyond "one carload" will be accepted on a space available basis.
WORK AREAS: Those entering the competition will be provided with a secure work area in Lincoln Hall on a first come first served basis. E-waste for projects will be

provided. E-waste distribution details will be sent to entrants. Approximately 30 secure workspaces for building models and designs will be provided on a first come first served basis in Lincoln Hall. Information regarding distribution of e-waste will be sent to teams entering the competition.

COMPETITION CATEGORIES: Entries can be submitted in one of two categories.

1. **DESIGNER/ARTIST CATEGORY:** focusing on the aesthetic elements and physical interaction with the device.

2. **GEEK/TECHNICAL**: Electronic Components

SUBMISSION OF ENTRIES: There are no submission presentation requirements for your proposal except as follows. Entrants are encouraged to submit working prototypes or models but can also submit hand drawings or computer models of their designs. Reuse of existing components and parts is strongly encouraged and will be a factor considered in judging. Each submission should include a list of e-waste and new components used. Each team will submit a 20"x30" poster explaining their submission. Judging will take place on the Quad. Design teams must set up their projects between 9am and 11am for judging. Judging will begin promptly at 11am on April 16, 2009. At least one team member must be present during judging.

REQUIREMENTS FOR ENTRIES: By submitting an Entry, you represent that (a) the Entry is original, (b) you or your registered team are the sole creator of the Entry, (c) the Entry does not infringe the intellectual property rights, including, any patent, copyright, trademark or other proprietary rights of any third party, (d) the Entry has not previously been entered in any other contest or competition, (e) the Entry has not been previously published in any medium, (f) the Entry does not violate any local, state, national or foreign laws. Use of any elements that are not original will result in disqualification of an Entry, is the Sponsor's sole discretion. Entries must be exhibited before a panel of judges.

AGREEMENT TO OFFICIAL RULES: Participation in this Competition constitutes your full and unconditional agreement to and acceptance of these Official Rules and the decisions of the Sponsor, which are final and binding. Winning a prize is contingent upon fulfilling all requirements set forth herein. Sponsor reserves the right to disqualify any Entry, at any time, for any violation of the Official Rules.

COMPETITION SCHEDULE:
- January 29: On-Line Registration Opens
- February 21: A community wide e-waste drive will be conducted to collect computer e-waste for the competition.
- March 5: E-waste available at Lincoln Hall for participants; details of this and subsequent pick-ups will be sent to participating teams.
- March 16: Registration closes
- April 8-10: Sustainable Design Conference, Environmental Council, Illini Union.

- April 16: Submissions due at 09:00 a.m.-11:00 a.m. (Lincoln Hall, campus; room to be announced) Judging begins at 11:00 a.m.
- April 16: Judging and e-waste competition public display on the Quad

SPONSORS: Design competition sponsors invited from Fortune 500 companies.
Tentative List of Sponsors:
PC Rebuilders and Recyclers, Chicago
Product Innovation Research Laboratory (PIRL), University of Illinois Urbana-Champaign

FACULTY/ADVISORS:
- William Bullock, Professor, wbullock@uiuc.edu; 265-0873, Art and Design
- Brian Deal, Assistant Professor, Regional and Urban Planning
- Alex Lobos, Visiting Professor, Industrial Design
- Brian Lilly, Adjunct Associate Professor, Tech. Entrepreneurship Center, IESE
- Tim Lindsey, Director, Illinois Sustainable Technology Center
- Bill Sullivan, Professor, Director, Environmental Council
- Eric Benson, Assistant Professor, Graphic Design
- Howard Guenther, Associate Vice Chancellor for Research
- David Wilcoxen, Facilities Director of Safety and Compliance
- Jeffery Poss, Associate Professor, Architecture

INDUSTRY LIAISON: Willie Cade, CEO, PC Refurbishers and Recyclers, Chicago.
JURY: Specific jury members will be announced. Juror invitations have gone out to industry leaders representing fortune 500 companies such as Google, Microsoft, the U.S. EPA, Boeing, PCRR, Chicago, Dell and others.

JUDGING: After the Submission Period, a panel of judges selected by the Sponsor will select five (5) finalists in each of the two categories according to the Judging Criteria set forth below. The decisions of the Judges are final. The odds of being selected as a finalist depend entirely on the quality of the Entry pursuant to the Judging Criteria, relative to the performance of all entrants and the number of eligible entries received, and does not involve chance.

JUDGING CRITERIA DESIGNER/ARTIST CATEGORY: All Entries will be judged according to the following equally weighted Judging Criteria.
- DESIGN SOLUTION: Aesthetics as well as a sensitivity to form following function. The design must not only be visually appealing but be purposeful in its form factor and highly usable by the intended users.
- INNOVATIVENESS: What is the big idea relating to green computing technology? How profound is the idea and how innovative is the solution from a green computing technology product design perspective?
- FEASIBILITY & CONCEPT VALIDATION: How realistic is it? Can it be manufactured in the near term or long term under green manufacturing constraints? Did the entrant do a sufficient amount of investigation regarding what is possible

from a functional and manufacturing perspective? Are the research sources cited, varied, and valid? Did the entrant provide proper citations and credit for research and intellectual property referenced?

- GOOD USE OF COMPONENTS: How good and innovative is the use and implementation of the e-waste components, based on the "Submission Component Point Values" chart.
- UTILIZATION OF GREEN ASSESSMENT TOOLS: Did the entrant make good use of assessment tools such as Life Cycle Assessment (LCA) and other green validation and product development process tools that provide guidelines and standards for current thinking and current regulation for environmental product designs and manufacturing?
- DOCUMENTATION OF PROCESS AND METHODOLOGY: How well has the entrant captured the process of creating the final design solution?
- PRESENTATION: Has the entrant effectively presented the concept? Are entry materials neat and well-organized? Has the entrant made effective use of visualization tools? How well did the entrant communicate the ideas and solution using text and imagery? How well did the entrant make use of media to express ideas?

JUDGING CRITERIA TECHNICAL/GEEK CATEGORY: All Entries will be judged according to the following equally weighted Judging Criteria.

- INNOVATIVENESS: What is the big idea relating to green computing technology? How profound is the idea and how innovative is the solution from a green computing technology product design perspective?
- GREEN COMPUTING TECHNOLOGY CONSIDERATIONS: How well did the design solution address each of the various Green Computing Technology Considerations listed on the Website?
- FEASIBILITY & CONCEPT VALIDATION: How realistic is it? Can it be manufactured in the near term or long term under green manufacturing constraints? Did the entrant do a sufficient amount of investigation regarding what is possible from a functional and manufacturing perspective? Are the research sources cited, varied, and valid? Did the entrant provide proper citations and credit for research and intellectual property referenced?
- GOOD USE OF COMPONENTS: How good and innovative is the use and implementation of the e-Waste components, based on the "Submission Component Point Values" chart.
- UTILIZATION OF GREEN ASSESSMENT TOOLS: Did the entrant make good use of assessment tools such as Life Cycle Assessment (LCA) and other green validation and product development process tools that provide guidelines and standards for current thinking and current regulation for environmental product designs and manufacturing?
- DOCUMENTATION OF PROCESS AND METHODOLOGY: How well has the entrant captured the process of creating the final design solution?
- PRESENTATION: Has the entrant effectively presented the concept? Are entry materials neat and well-organized? Has the entrant made effective use of

visualization tools? How well did the entrant communicate the ideas and solution using text and imagery? How well did the entrant make use of media to express ideas?

VERIFICATION: Sponsor reserves the right to independently verify the originality and ownership of the Entry, and to validate that the Entry does not violate the proprietary rights of any third party.

PRIZES: Winning teams will receive scholarships and other prizes. Honorable Mention awards will be given at the discretion of the judges. Any prize details not specified above will be determined by the Sponsor at their sole discretion. Prizes are not transferable or refundable and must be accepted as awarded. No cash or other substitution may be made, except by the Sponsor, who reserves the right alter prizes if required by local laws. The winner is responsible for any and all other costs and taxes associated with receipt of a prize.

SPONSOR'S RIGHTS TO ENTRIES: You will retain ownership of your Entry, including all intellectual property rights that may exist in your Entry. Sponsor shall not acquire any right, title or ownership interest to your Entry. However, by submitting an Entry, you grant the Sponsor the unconditional and perpetual right, license, and consent to reproduce, encode, store, copy, transmit, publish, post, broadcast, display, and exhibit the Entry in any media throughout the world in relation to the competition, without limitation, and without additional review, compensation, or approval from you or any other party. Sponsor shall have the right, but not the obligation, to use your name, likeness, biography and other information about you in connection with your Entry.

CONTENT: By participating in the Competition, you agree that your Entry, including but not limited to, any uploads, text, links, communications, software, images, sounds, data, or other information, will not contain any content that is unlawful, harmful, threatening, abusive, harassing, defamatory, libelous, invasive of another's privacy, vulgar, profane, sexually explicit, obscene, racially or ethnically offensive or otherwise objectionable;
- Constitutes advertising or promotion, or any other form of unauthorized solicitation;
- Contains viruses, Trojan horses, worms, time bombs, cancelbots or any other computer code or files that are designed to disrupt, damage, or limit the functioning of any software or hardware;
- Provides any nonpublic information about Sponsor or any other company or person without the proper authorization to do so;
- Attacks or insults another Entry or contestant; or
- Suggests or encourages illegal activity.

RESULTS: The finalists and winner will be posted on the competition
Website: ewaste.illinois.edu