ASU Global Institute of Sustainability
ARIZONA STATE UNIVERSITY

March 31, 2010

Dear Board Member,

This month I am pleased to introduce Dr. Kevin Dooley, an internationally recognized expert in sustainable supply chain management and senior advisor at the ASU-University of Arkansas led Sustainability Consortium. Professor Dooley's interview follows a brief list of select news and activities, below.

Highlights of ASU's sustainability activities

- Graduate students in the School of Sustainability launched a new journal designed to promote discussion about sustainability. *The Sustainability Review* features both academic and non-academic authors and covers a broad range of topics including innovation, water, energy, transportation, biodiversity, and justice. SOS students Maren Mahoney and Zach Hughes created the publication with help from fellow students and SOS faculty. To date more than 200 media outlets carried the story of the journal's launch nationally and more than 20 internationally, including translations into German and French. Read more.

- ASU's Ira A. Fulton Schools of Engineering have been chosen by the National Academy of Engineering to host a regional summit aimed at solving engineering challenges critical to building sustainable societies. The Academy recently identified 14 "grand challenges" for engineering and the Ira A. Fulton Schools of Engineering are now organized in accordance with addressing those issues. The April Grand Challenges Summit in Phoenix will tackle four of the Academy's grand challenges — making solar energy economical, engineering better medicines, managing the nitrogen cycle, and advancing personalized learning. Read more.

- ASU and the University of Tokyo — Japan's leading solar-energy research institution — have established a partnership to strengthen solar energy technology research and education at both universities. The collaboration will focus on developing lower cost "third-generation" photovoltaics and also creating breakthrough "intermediate-band" solar cells that can capture significantly more solar energy by reacting to a broader spectrum of sunlight. As part of the agreement, ASU solar researchers and students will exchange information, materials, and services with their counterparts at University of Tokyo's Research Center for Advanced Science and Technology. Read more.

- Humanities students will have the opportunity to study sustainability through a new certificate program in environmental humanities, administered jointly by the College of Liberal Arts and Sciences and the School of Letters and Sciences. The certificate requires eight courses and encourages study abroad programs focused on culture and the environment, such as the Human Dimensions of Sustainability program in Australia. Students will gain theoretical and practical knowledge to guide meaningful social and environmental change, make informed decisions on sustainable personal lifestyles, and create ecologically responsible public policy. Read more.

- Two ASU researchers working with an international team of scientists at the Max Planck Institute in Germany have discovered a way to mimic photosynthesis as part of an effort to create cleaner fuels. Associate professor Kevin Redding, Department of Chemistry and Biochemistry, and graduate student Rajiv Luthra helped reveal how charge separation occurs in plants during the electron transfer process. They created unique strains of algae that enabled Max Planck Institute researchers to capture the less-than-a-billionth-of-a-second process under ultra-fast lasers. Read more.

You can reach me at rob.melnick@asu.edu or 480-965-5233 with any questions or comments about this briefing.
The interview with Dr. Dooley follows on page two.

Best regards,

Rob

Rob Melnick
Executive Dean

cc: Jim Buizer

PO Box 875402 Tempe, AZ 85287-5402
Tel: (480) 965-2975 Fax: (480) 965-8087
http://sustainability.asu.edu

Q&A with Dr. Kevin Dooley

driving sustainability in consumer products

Dr. Dooley is a professor of Supply Chain Management and Dean's Council of 100 Distinguished Scholar in the W. P. Carey School of Business, and an affiliated faculty member of the School of Sustainability. He is a world-known expert in applying complexity science to help organizations improve and has consulted with numerous global companies, including Motorola, Raytheon, Citibank, and Toyota. As senior advisor at the Sustainability Consortium, he is responsible for leading sustainability research initiatives in electronic products, home and personal care products, life cycle analysis, and consumer science.

How did "sustainability" become part of your research focus?

Two years ago, several colleagues asked me to help them in a study about green purchasing. At the same time the School of Business needed someone to interact with the Global Institute of Sustainability and School of Sustainability. During my ensuing crash course to learn about sustainability I became convinced that I not only could, but should, make a professional commitment to address sustainability. One of my first projects involved studying the environmental impacts of seaports — collecting data to see if port efficiency and environmental excellence can co-exist.

What is your most important sustainability-related research project?

At the Sustainability Consortium we are developing the standards and systems needed to assess consumer product sustainability across the entire supply chain and product life cycle. This work will drive innovation for improving global consumer product sustainability. Our project started with a major gift from Walmart and we have added more than 40 additional retailers and manufacturers as members in less than a year, including Best Buy, General Mills, Cargill, and Waste Management.

How will your research affect policy or other "real world" decisions?

The Sustainability Consortium provides a natural platform to diffuse product research directly into companies and government agencies. Companies such as Intel or Dial-Henkel can use the research to improve their operations, while government agencies such as the U.S. Environmental Protection Agency and the U.K. Department for Environment, Food, and Rural Affairs can use it set policy.

What world sustainability challenge concerns you most?

As a sustainability-aware person, I know Earth's systems are in big trouble. As a business school professor, I know we'll be hard-pressed to shed the habits of our current consumer economy. I am working to find the common ground that will make sustainability work.

Dr. Dooley at the Sustainability Consortium's research facility.

Research staff and students at the Sustainability Consortium help develop energy standards for assessing consumer products.

The port at Long Beach, Calif., cuts air pollution by plugging ships and trucks into electric power to reduce engine idling.