

Report on Sustainability Workshop

ASCE Student Chapter
Department of Civil and Environmental Engineering
January 26, 2012



On January 19th, 2012, six ASCE students from the University of Tennessee Knoxville (UTK) attended the Integrated Approach to Sustainability Workshop held by ASCE in the Sheraton Music City Hotel in Nashville, TN. This workshop was offered at two other cities in the U.S. prior to its stop in Nashville, TN. The workshop began with Robin Kemper, Member of Committee on Sustainability at ASCE, giving an introduction and defining sustainability for the eyes of an engineer, “Enough for everyone forever” – Douglass Tsoi. She then introduced senator Mark Huffer of Chattanooga, TN who spoke about ways in which civil engineers, students, and ASCE members can be involved in the political process of moving towards a more sustainable infrastructure and completing more sustainable and environmentally friendly projects.

Next, Mike Sanio, Director of Sustainability and International Alliances at ASCE, spoke on the advances that ASCE has been making in sustainability. He defined the triple bottom line by pointing out that not only does a project have to be environmentally friendly but it has to be needed on a social level and be economically feasible as well. These three cores must be in equilibrium for a project to be truly sustainable. Mike gave valuable statistics and numbers showing how the civil engineering profession, in general, has been sustainable and ways in which it needs to advance.

After Sanio, Dr. Richard Wright, professor at the University of Illinois at Urbana-Champaign, presented two case studies to the audience including one on the city of Olympia, WA and its crisis pertaining to the rising sea level. After presenting the scenario in full detail, he opened the floor to the audience for discussion on sustainable solutions to the problem. After coming up with nine possibilities, he went on to explain that the city has decided to raise the height of its levies and, in the future, to build major establishments farther away from the coastline.

Next, Tom Pederson, Director of Sustainability, presented on the newly developed Institute of Sustainable Infrastructure (ISI) rating tool called "Envision". He showed how the free website-based, self rating tool can be used by anyone for any project. Towards the end, Tom faced difficulties with the system, but luckily a few students were able to point him in the right direction.

Lastly, a panel of civil engineers from various departments of the Mayor's Office of Nashville fielded a variety of questions pertaining to Nashville and its future with respect to sustainability. The topics mentioned were probably the highlight of the trip and ranged from solar panels to bike routes to new rapid bus transit systems in Nashville. A representative from the water company spoke about lowering the water pressure from 140psi to 100psi thus using less electricity. He also presented another example and encouraged folks to stop watering their lawns with clean drinking water and instead using reclaimed storm water.

Overall, the participants from UTK considered the trip to be a great success and learned a lot. They learned a lot about sustainability and how to use our Earth's resources in a conservative manner. Also, they learned that a project cannot be considered sustainable due to a simple component of a project but that rather the whole spectrum of a project should include sustainable qualities pertaining to environmental, social, and economic criteria. After the workshop, the group enjoyed networking with presenters and attendees alike. Many made contact with people who might be able to provide internships and/or co-ops.

The group would like to thank the Institute for a Secure and Sustainable Environment and the Department of Civil and Environmental for providing financial support for the trip and thank Dr. Cox, Dr. Penumadu, and Dr. Ma for being supportive of our travel to such an informative workshop. The groups feels that workshops like this are necessary for the advancement of our education and would like to see every member be able to attend a workshop such as this or host something similar to this on campus. All the presenters, including the governor, offered themselves to come speak at any function on the information discussed at the workshop.

Respectfully submitted,

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