

Panel Discussion Explores Use of Green Technology

Recently a panel of experts discussed how Knoxville and the rest of the nation can utilize green technologies to increase energy efficiency, and diminish environmental impact. Leader of the City of Knoxville Energy and Sustainability Task Force Madeleine Weil, State Senator Tim Burchett, former Science Adviser to the Environmental Protection Agency, current Director of the Oak Ridge Center for Advanced Studies Paul Gilman, Republican staff director of the U.S. Senate Committee on Energy and Natural Resources Frank Macchiarola, all used their backgrounds to discuss specific problems the energy crisis presents at local, state and national levels.

Weil said that Knoxville has joined the Cities for Climate Protection campaign and Local Governments for Sustainability, which consists of over 350 governments nationwide and accounts for 20 percent of the population. When it comes to combating rising energy prices, climate change, ecosystem challenges, and the resulting impact it has on forestry, tourism and water quality, quickly become major challenges for local governments. “How Knoxville grows will matter a lot in the quality of life for its residents, visitors and workers,” said Weil. She also said combating the problem will create jobs in new fields and the area could become a hot spot for energy development because of its ties with Oak Ridge. “There is no need to reinvent the wheel, when there are all these great programs in other cities,” Weil said. Knoxville is considering the standards set by the U.S. Green Building Council in its *Leadership in Energy and Environmental Design* rating system for building sustainable homes, transit oriented development, the KAT and downtown development. The city is also encouraging better recycling practices in the city and county buildings and the downtown restaurants, according to Weil.

Sen. Burchett described the energy challenges at the state level, stressing the need to protect small farmers, reduce hill top coal mining and our dependence on foreign oil. He said the state spends \$5 million a year on switchgrass research and that Tennessee is number two in the nation in switchgrass research. Switchgrass helps the environment by reducing runoff into streams and because of its viability as a bio-fuel. By developing switchgrass, he said “Tennessee is one vital cog in (solving) the whole problem” of foreign oil dependence.

Paul Gilman spoke about energy challenges on a regional level. He praised a dramatic increase in environmental awareness of the general public in recent years, but said current carbon emission projections are worse now than in the past. Gilman stated, “The region lags behind the rest of the nation in exploiting energy efficient programs. However, this creates an opportunity for positive change.” Gilman further stated that renewable energy stores, such as nuclear technologies and efficient clean coal, need to be used more in the future in addition to carbon-capturing technologies.

Knoxville hopes to reduce its total energy consumption 15 to 20 percent by 2015.