What is needed to grow a local and regional Green Economy (GE) that brings good jobs with good wages, benefits, and secure careers?

- A cultural shift is needed to: recognize that improper waste management not only harms the environment but is also detrimental to human health; increase the consumer-base for improved waste disposal practices; and, view waste not as disposable but as valuable materials that could be turned into revenue.

- Waste management teams need to diversify and include experts across a variety of fields (e.g., engineering, geology, chemistry, and logistics). They also need to include generalists able to synthesize resultant information into well-informed, executable, and measurable strategies.

- The area would benefit from a citywide composting program. Currently, only limited services are available to industry and residents. Such a program would not only divert waste from the landfill but also produce a valuable product for the agricultural industry.

What current strategies address these needs?

- In 2011, the City of Knoxville won a federal grant and contracted with Waste Connections of Tennessee, Inc. to implement what is now a very successful household curbside single stream recycling program. For those not participating in the program, the City, working with Kroger, Goodwill, Waste Connections, and RockTenn Recycling, offers several recycling drop-off supercenters where residents can recycle plastics, aluminum cans, paper, glass, and more. The City also sponsors yearly events that offer free recycling for hard-to-recycle items, such as computers, televisions, and medications.

- For Knox County residents, Waste Connections offers subscription curbside recycling. Residents can also recycle at one of seven drop-off centers operated by the County’s Solid Waste administration. The County also hosts several yearly recycling events, and they also offer “green event planning,” which has helped events, such as Earth Fest, Brewers Jam, and the Market Square Farmers’ Market, reduce their ecological footprint.

- Several innovative partnerships are being forged between private waste management companies and industry to improve waste flows. More attention is being paid to how byproducts from one industry can be used as raw materials by another. Because this approach is fiscally and socially responsible, it is an attractive option for industries looking to profit from their waste or needing to comply with increasing standards.

Assets- what other current activity can be leveraged to support specific strategies in place?

- Standards put forth in the International Organization for Standardization (ISO) 14000 series are elevating sustainability awareness among industries with waste streams to
manage. Introduced in 1996 and often updated, ISO 14000 is a series of voluntary environmental management standards for organizations looking to improve waste flows.

- Mirroring national trends, area municipalities are experiencing a generational shift in leadership. Younger generations of civil servants have grown up in a culture with a greater environmental awareness and bring with them an integrated sustainability ethic that is becoming more pervasive across government departments.

- The area has several material processing centers, such as RockTenn, Shamrock Industries, and 5R Processors. These centers create a hub of recycled material stock that is increasingly valuable to green businesses and eco-entrepreneurs.

**Obstacles - what keeps these assets from being more successfully pursued at this time?**

- Because land is cheap in the Southeast, it costs little to send waste to landfills, perpetuating a “throw-away” mentality. This is especially problematic when municipalities own landfills, because there is little incentive to explore alternative waste streams.

- Among area residents, there is resistance to recycling, which prevents full participation in the recycling opportunities offered. Additionally, when residents do not properly sort their waste, recycling supplies are polluted, requiring extra labor to remove the items that don’t belong. This raises the costs of recycling, making services more expensive.

- Financial success for many waste management companies is tied to commodity markets. When commodities like cardboard are down, this negatively affects bottom-lines and increases risk.

**What are some suggested strategies?**

- Much of the area’s waste could be captured and repurposed for revenue. Subsidies could be used to keep recycling operations afloat during low commodity markets. This would ensure a steady flow of recycled material, which is necessary to attract and retain businesses that rely on such stock. This could position Knoxville to more aggressively market itself as a hub of recycled materials.

- Next year is critical in defining what waste collection in Knoxville will look like for the next five years. Green waste (e.g., brush, trees, and other organic matter), recycling, and municipal solid waste collection will all receive new contracts. Although the City is actively looking for ways to improve waste flows, greater public support may push leaders to institutionalize more sustainable waste management practices.

- Private business and public services could think more creatively about how sustainable practices can improve bottom-lines. For example, long-term cost reductions often come from making energy efficiency upgrades, contracting with local businesses, and investing in a skilled and educated workforce.

**Action priorities- what to do and in what order? Stay tuned for the breakout session.**