Value Chain Analysis of the U.S. Transit Bus Industry  
Key Findings presented to the President’s Council on Environmental Quality  
Marcy Lowe  
Center on Globalization, Governance & Competitiveness, Duke University  
February 25, 2010

1. Jobs in bus manufacturing are high-quality and are spread throughout the eastern United States. The bus manufacturing industry comprises an estimated 25,000-33,000 jobs, including many that overlap with the heavy truck industry. The value chain involves small and large manufacturers in nearly every state in the eastern United States, including Indiana, Michigan, Ohio and other hard-hit industrial states.

2. The bus industry has high relevance, sharing important skills and competencies with heavy trucks and other automotive segments. Manufacturers of buses and bus components help strengthen and broaden the supply base of the motor vehicle industry, which is crucial for the United States to maintain a leadership position throughout the recovery period and beyond.

3. Under current U.S. transportation policy, demand for buses is small and sporadic; this makes it difficult for the bus industry to grow. Manufacturers cite steady, predictable public transit investment as the main factor needed for future expansion and addition of jobs.

4. U.S. leadership in “green” buses can lead the way for technology innovation in other motor vehicles. About 32% of U.S. transit buses have an alternative power source (other than diesel or gasoline). Since transit agencies have a well-defined base of centrally managed fleets, they are ideal for testing and proving new technologies. While the United States is about 10 years behind Japan in hybrid technology for passenger vehicles, U.S. firms are global leaders in the development of hybrid trucks and buses. Further advances in hybrids, all-electric, hydrogen fuel cell and other new bus technologies are leading the way for innovations in passenger vehicles.

5. Manufacture of public transit vehicles involves key synergies with other clean energy technologies. The value chain for hybrid buses includes energy storage, comprising advanced battery development and perhaps other innovations we don’t even know of yet. Also included are power electronics and control systems—hardware and software used for simulating, modeling, and optimizing energy flows. These advances have significance way beyond vehicles. Because the wind does not blow all the time and the sun does not shine all the time, advances in energy storage and power electronics represent synergies that will be crucial to the future of wind, solar, the smart grid, and other areas the United States should be investing in, in order to compete globally in the clean energy economy.