



**US Environmental Protection Agency and the
Georgia Department of Economic Development**

Job 2 Description – New Technology Scenario Analysis

Communities are interested in evaluating the costs and benefits of new technologies and investments on their sustainability. To evaluate this with the EPA’s USEEIO model, the new technologies need to be modeled as a change in the monetary production recipe (the purchases made by an industry) as well as in their direct resource use and emissions. The candidate will help translate new technologies models into this format using the useeior modeling framework to enable scenario analysis.

The work will require close technical collaboration with the research mentors and GA Tech research partner, the USEEIO modeling team and other community-based interns.

The candidate will be expected to play a leading role in the September community application development event @GA Tech to leverage this tool to serve community applications.

The candidate will be exposed to the latest in sustainable materials management modeling, make contacts at federal, state agencies, GA Tech, in industry, and become part of a dynamic modeling and research team.

Learning Goals

Learn essentials of environmentally-extended input-output modeling; Learn how to model compare sustainability of new and existing technologies; Learn USEPA’s useeior (R language) modeling framework.

Top Desired Skills

R language; Github; Team code development in a git-environment; Strong interest in sustainability and economic development.

Deliverables

R code and documentation to model new technologies in USEEIO.

