

LET'S TALK

GEORGIA BIOMASS

Georgia Dept of Economic Development

Costas Simoglou and Loren Heyns
with Freedom Energy Tech CEO, Nat Mundy

HOW CAN WE MAKE INFORMED DECISIONS ABOUT BIOMASS OPTIONS?

Georgia is the first state to partner with the US EPA to include environmental outcomes in supply chain modeling.

Positive Outcomes

Value Added
Quality Jobs
Clean Water
Clean Energy
Green Materials
Local Agriculture
Family-Friendly
Health+Happiness
Inclusiveness
Creates Beauty

Impacts Created or Averted

Acid Rain (ACID)
Freshwater Ecotoxicity (ETOX)
Water Eutrophication (EUTR)
Global Climate Change (GCC)
Respiratory Effects (HRSP)
Toxic to Humans (HTOX)
Ozone Depletion (OZON)
Smog Formation (SMOG)

Resources Used or Conserved

Energy Use (ENRG)
Land Use (LAND)
Minerals and Metals (MINE)
Water Use (WATR)

Waste Generated or Avoided

Food Waste (FOOD)
Hazardous Waste (HAZW)
Municipal Solid Waste (MSW)

The 10 positive outcomes encompass the 7 petals of the Living Community Challenge.



SUSTAINABLE MATERIALS MANAGEMENT

U.S. Environmentally-Enable Input Output (USEEIO) Model

The U.S. EPA is partnering with Georgia communities to create online tools to evaluate how technological innovation in local industries, utilities and logistics can reduce carbon footprints and protect the environment while creating jobs and new business opportunities.

Who's using the model...

- 24 universities including the University of Pennsylvania, Yale, Carnegie Mellon Harvard and the University of Washington
- Colorado School of Mines
- Alameda County Supply Chain Sustainability
- NREL/DOE Bioeconomy Assessment Framework
- EPA's Sustainable Material Management Prioritization Tool Suite

Look who's using USEEIO:

amazon

2040 Net Zero Goal Setting



U.S. DEPARTMENT OF
ENERGY



 **Georgia**[®]
USA

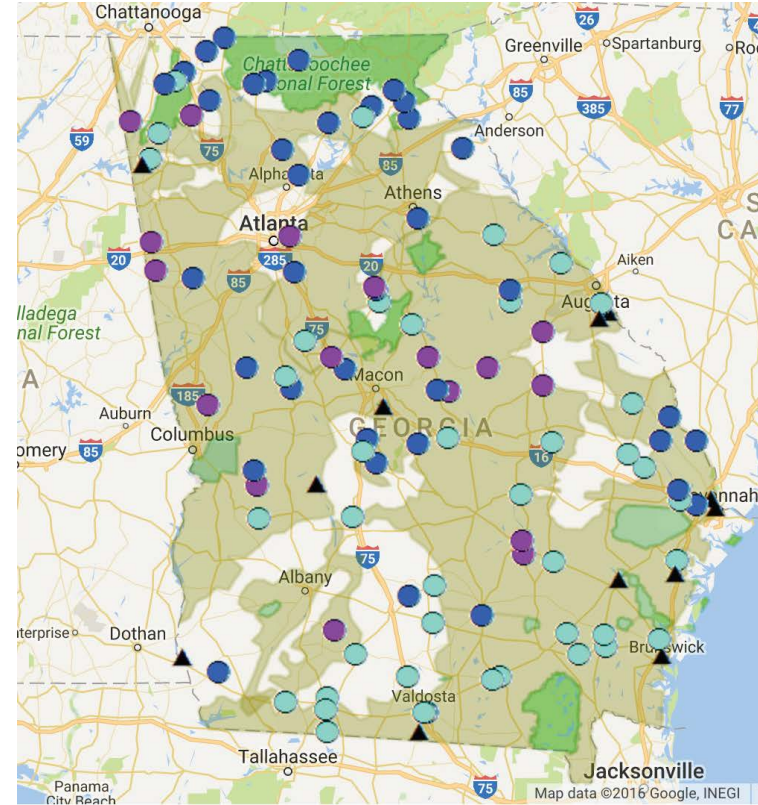
GEORGIA FORESTRY INDUSTRY

Georgia has 22.4 million acres of private timberland, more than any other state.

Forestry provides 148,414 direct and indirect jobs and 48% annual growth vs. removals.

Georgia produces 21% of U.S. exports of pulp and paper, and 26% of U.S. wood pellet exports.

Source: Georgia Forestry Assoc.



BIRDS EYE VIEW

TOTAL LAND AREA
38 million acres

FORESTED ACRES
24.6 million total acres
» Public (Green): 9 percent
» Private (Purple): 91 percent

▲ PULP AND PAPER
12 mills

● SAWMILLS (HARDWOOD,
SOFTWOOD & BOTH)
95 mills

LET'S TALK

GEORGIA INNOVATES

Join our Sustainable Communities Challenge – Post your ideas at model.Georgia.org

Costas Simoglou, Centers for Innovation Energy Director	404.661.5554	csimoglou@georgia.org
Loren Heyns, Georgia Programmer Analyst	678.468.1000	lheyns@georgia.org
Nat Mundy, Freedom Energy Tech CEO	407.925.3300	natmundy@gmail.com

