



***Advancing Economic Development
Through Innovation in Energy Technology***



Aerospace



Agribusiness



Energy
Technology



Information
Technology



Logistics



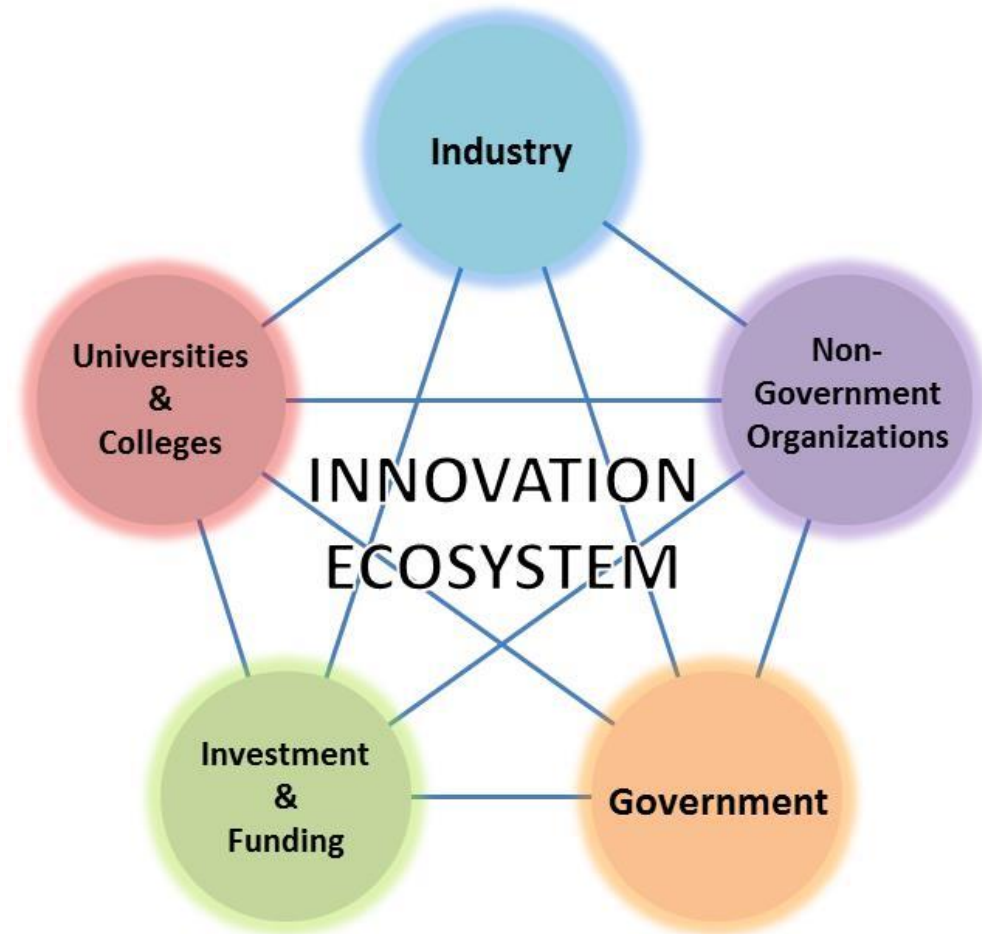
Manufacturing



a division of the Georgia Department of Economic Development

Georgia's Centers Of Innovation Connecting To The Innovation Ecosystem

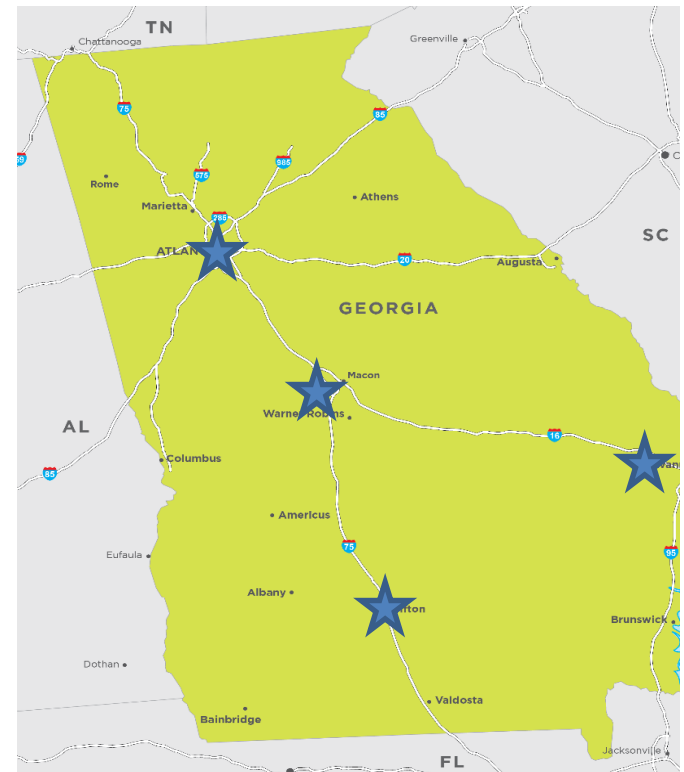
- The **Centers of Innovation** are **“solution integrators”** connecting companies to the vast resources of Georgia's Innovation Ecosystem through:
 - Technical Industry Expertise
 - Collaborative Research
 - Partnerships



Georgia's Centers of Innovation

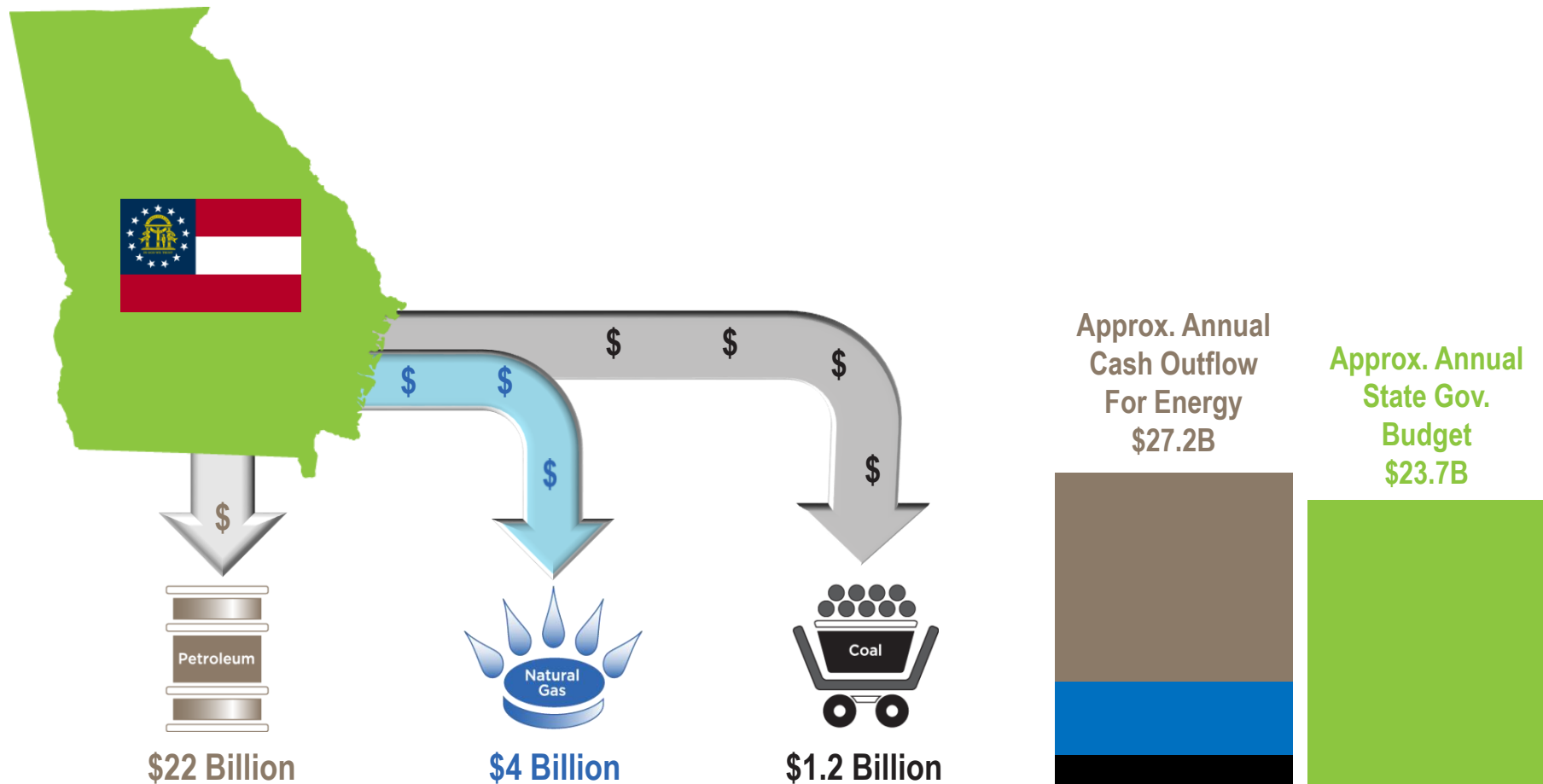
Advancing Economic Development Through Innovation

- A **focus on Key Industries** to accelerate businesses ability to connect, compete and grow
 1. Logistics (Savannah)
 2. Agribusiness (Tifton)
 3. Aerospace (Macon)
 4. Manufacturing (Atlanta)
 5. Information Technology (Atlanta)
 6. **Energy Technology (Atlanta)**



Energy Technology

\$\$\$ Outflow for Fossil Fuels



(Source: US Energy Information Administration 2014-2015)



ENERGY TECHNOLOGY

“NEW” INDUSTRY

- New Ideas
- New Products
- New Business Models



Energy Technology Research in Georgia's Universities

- Georgia Research Alliance 

Georgia Research Alliance

 - University of Georgia
 - Georgia Institute of Technology
 - Georgia State University
 - Augusta University
 - Clark Atlanta University
 - Emory University
 - Mercer University
 - Morehouse University
- Other Engineering Research Universities 

BOARD OF REGENTS OF THE UNIVERSITY SYSTEM
OF GEORGIA

 - Georgia Southern University
 - Kennesaw State University



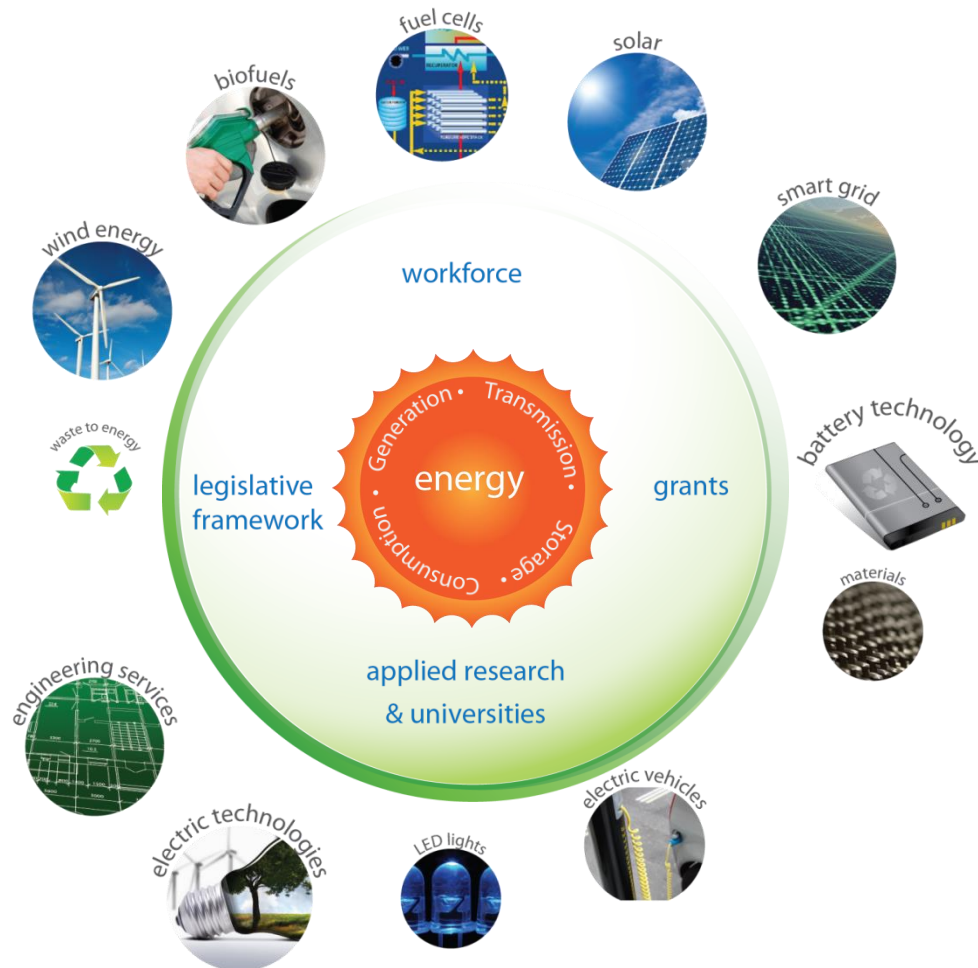
~\$1 Billion in University Research Annually

(Source: National Science Foundation)



Energy Technology

Georgia's Sustainable Energy Ecosystem



**Localize the
Energy Model**



**Invest in
local/regional
economy**



FOCUS ON OUR “UNFAIR” ADVANTAGE BUILD INDUSTRY ECOSYSTEMS

Biomass

- Recruited Wood Pellet manufacturers

Solar

- Recruited Solar manufacturers (Suniva, Mage Solar, SolarMax, Sonnen Batterie, ect.)

Electric Vehicles support

- Worked with partners to support EV Charger deployment

Waste to something useful...



Energy Technology

Advancing Economic Development

- Solar Energy – A Growing Segment
 - Approx. 3,000 new jobs in Solar Industry
 - \$2B in Capital Investment in the State
 - Approximately 1.4 GW of Solar
 - Top 10 Solar Portfolio in USA
- Electric Vehicles - Almost 20,000 sold in Georgia
 - [EV Charger infrastructure](#) expansion
 - [Electric Buses](#) – Blue Bird school bus project



Energy Technology

Advancing Economic Development

- Waste Streams as a Resource
 - [GIS maps of waste streams](#) by COI-Energy with Ga Environmental Protection Division, EPA and the Ga Recycling Coalition to connect waste streams to potential users
- Sustainable Materials Management (Pilot Project)- Seeks most productive use of resources. Seeks to minimize/manage waste.
- Three waste to Energy Projects
 - Tire pyrolysis (underproductive oil wells and refineries)
 - Consumer Waste to transportation fuel
 - Plastics to petroleum



DID YOU KNOW?

- Novelis, with its North American headquarters in Atlanta, is the largest aluminum recycler in the world.

Processing plant is located in Greensboro, GA.



DID YOU KNOW?

- 1/3rd of all plastic beverage containers recycled in North America end up in Georgia and are turned into carpet (mainly in Northwest Georgia).



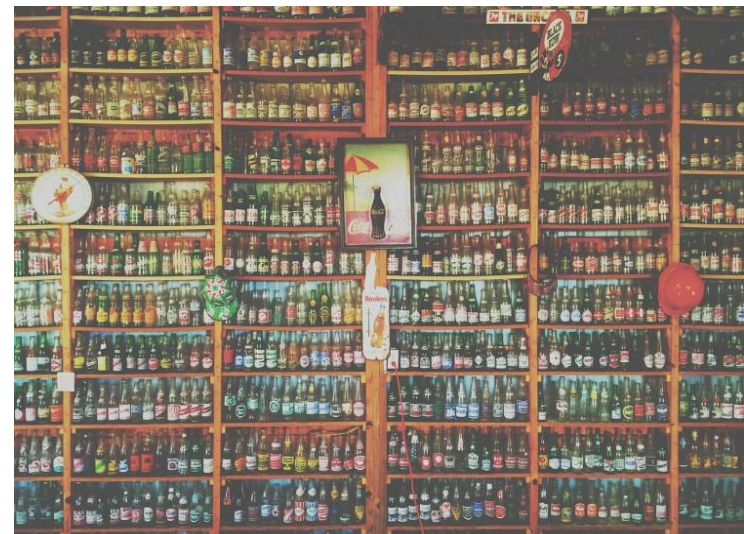
DID YOU KNOW?

- Georgia's Paper Industry recycles almost 8% of all the paper consumed in the United States



DID YOU KNOW?

- More than **120** Georgia businesses use recovered materials to manufacture a variety of new consumer products.



Georgia.org/Innovation



ENERGY TECHNOLOGY

Advancing Economic Development

- Georgia's "Clean Tech" Industries
 - ✓ **800+** companies
 - ✓ **20,000** jobs
 - ✓ **\$3B+** in annual revenues



“THE POWER” OF COLLABORATION

PRIVATE, PUBLIC, PHILANTHROPIC PARTNERSHIP

- A partnership between The Ray, The Georgia Department of Transportation (GDOT), Georgia Department of Economic Development (GDEcD) and Private Industry
- Use State owned facilities as a “laboratory” to test innovative technologies in the areas of renewable energy, highway safety and sustainability.



Georgia's Centers Of Innovation

Center of Innovation for Energy Technology



Focused on:



Energy Generation



Energy Storage



Energy Consumption



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Director

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Georgia energy firms can accelerate the development of new energy solutions with assistance from the Georgia Center of Innovation for Energy Technology. The Center is the state's key resource to create, connect and grow Georgia's energy ecosystem.



Georgia.org/Innovation

