

Congressional Testimony

Implications of Electric Vehicle Investments for Agriculture and Rural America

Lincoln E. Wood

Electrification Policy Manager

Southern Company

Testimony before the

Committee on Agriculture

United States House of Representatives

January 12, 2022

Chairman Scott, Ranking Member Thompson, and Members of the Committee, thank you for inviting me to testify today. My name is Lincoln Wood, and I serve as the Electrification Policy Manager of Southern Company.

Southern Company is one of America's largest energy companies, with 42,000 megawatts of generating capacity and 1,500 billion cubic feet of combined natural gas consumption and throughput volume serving 9 million customers through its subsidiaries, as of July 31st, 2021. The company provides clean, safe, reliable, and affordable energy through electric operating companies in three states, natural gas distribution companies in four states, a competitive generation company serving wholesale customers in 11 states across America and a nationally recognized provider of customized energy solutions, as well as fiber optics and wireless communications.

I am pleased to address the Committee today to share what steps Southern Company and its affiliates are taking to electrify the transportation sector. This is an important hearing on an important topic. According to EIA¹ the transportation sector is now the number one emitter of greenhouse gases; moving people and goods with electricity represents an un-paralleled opportunity to reduce the sector's carbon footprint. Additionally, it makes good economic sense---electric vehicles typically are cheaper to fuel, operate, and maintain.

First, on behalf of Southern Company, thank you to Congress for passing the bipartisan Infrastructure Investment and Jobs Act. The EV charging infrastructure investment of \$7.5 billion is a welcome development for the transportation sector and growing number of EV drivers nationwide. Paired with existing EV infrastructure investment both through regulated utility programs and private market investment, the Infrastructure Investment and Jobs Act will dramatically increase the availability of EV charging.

¹ <http://www.eia.gov/todayinenergy/detail.cfm?id=29612>

The energy we provide to charge electric vehicles continues to become cleaner. In 2018, Southern Company was among the first U.S. utilities to set a bold goal of net zero greenhouse gas (GHG) emissions by 2050 - and we're on the right track. We have rapidly transitioned our system's generation fleet. In 2020, the Southern Company system reduced GHG emissions 52% from its 2007 benchmark levels, exceeding its intermediate 2030 goal to reduce GHG emissions by 50%.

Electric Transportation Programs

Southern Company has a long history of supporting electric transportation. For more than five decades, Southern Company's world-class Research and Development (R&D) organization has remained at the forefront of innovation, including researching electric transportation technologies, both on-road and off-road. The Company is testing Smart Charging strategies to maximize the number of vehicles that can be charged with our current energy capacities, as well as ways to maximize range from battery packs. Additionally, Southern Company is a founding member of Energy Impact Partners², a venture capital fund focused on clean energy technologies including electric transportation.

Southern Company's electric operating companies offer specific electric vehicle programs and pricing options designed to meet customer electric transportation requirements. Alabama Power and Georgia Power both offer EV rates that provide clean, reliable, and affordable electricity for all EV charging requirements, from home charging to public fast charging.

As part of DOE's Clean Cities Program, Southern Company affiliates hold board seats in Alabama Clean Fuels Coalition and Georgia Clean Cities. These organizations work to promote the use of domestic, affordable alternative fuels including electricity, and improve transportation efficiency at the local, state, and national levels.

Both Alabama Power and Georgia Power are actively supporting EV charging infrastructure rollouts in their respective states. Alabama Power Company (APC) contributed \$737k to Alabama Dept. of Economic and Community Affairs (ADECA) awardees served by APC to assist their installation of DCFC along Interstate Corridors at ten sites.

As the largest of SoCo's electric subsidiaries, Georgia Power Company (GPC) offers additional infrastructure programs to accelerate adoption of EVs. GPC offers EV charger rebates for both residential

² www.energyimpactpartners.com

and business customers. The rebates range from \$100 to \$500 depending on the type and purpose of the installation.

Additionally, Georgia Power offers an EV time-of-use rate that offers 1 cent/kWh charging overnight, which allows an EV customer to charge their vehicle all month long for about \$20.¹

Georgia Power offers two regulated electric vehicle charging infrastructure programs:

Community Charging Program – Business & Residential (GPC branded charging)

- Georgia Power's Community Charging program provides fast-charging sites along travel corridors to give charging options and increase EV drivers' confidence traveling throughout Georgia. Through this program, Power is addressing gaps in EV corridors according to the Federal Highway Administration in hopes to help Georgia become "EV Corridor Ready."
- The Community Charging locations are sited in partnership with GPC commercial business customers on their properties. Through this structure, both the business (site host) benefits as well as the public who rely on the EV charging infrastructure to travel both short and long distances.

Make Ready Program – Business & Residential: this program pays for infrastructure from the electricity meter up to but not including the charger.

- Georgia Power's Make Ready EV infrastructure program provides charging infrastructure to business owners to significantly reduce the cost of installing chargers for public, employee, or their business operations use.
- The Company partners with a variety of business customers that want to install infrastructure to support electric mobility technology charging. Examples of customer installations include public transit agencies, warehouse applications, multifamily residential properties, colleges and universities, and many others.

Additional programs in 2022

Southern Company Fleet Electrification Turnkey Offering: Strategic partnerships provide a turnkey offering for our customers who want to electrify their transportation fleets.

- Through strategic partnerships, each of Southern Company's electric subsidiaries offers:
 - software and consulting to analyze current fleet needs and understand the power implications of transitioning a customer's fleet.
 - resources for charging installation and financing, to effectively meet customers' needs and leverage any regulated utility programs.

Southern Company Electric Transportation---Industry Involvement

In 2020, Southern Company played a leadership role with the Department of Energy to produce a state-of-the-industry report, "Voices of Experience: An EV Transition³". This report represents the feedback from more than 3,500 industry stakeholders worldwide, representing 700 unique entities. Topics covered include deploying EV charging infrastructure, managing load, fleet electrification, new technology implications, and conventional fuel retailing.

Southern Company is a founding member of two dynamic electric transportation trade associations, the Alliance for Transportation Electrification, and the Zero Emissions Transportation Association.

Established in late 2017, the Alliance for Transportation⁴ (ATE) is state-focused, aligning EV policy at the state level. Counting automakers, utilities, EV charging providers, engineering firms, and standards-based organizations in its membership roster, ATE is one of North America's largest electric vehicle industry coalitions. Priorities include:

- Increasing EV charging infrastructure
- A strong utility role in EV charging
- A "big-tent" approach for all stakeholders
- Open standards among EV charging hardware and firmware

³ www.evplusgridworkshop.com

⁴ www.evtransportationalliance.org

The Zero Emission Transportation Association⁵ (ZETA) was established in 2020 with a singular vision: 100% electric vehicle sales in 2030. ZETA's policy focus is at the federal level; policy pillars span light, medium, and heavy-duty vehicles; recommendations for a national charging initiative, domestic manufacturing, performance and emissions standards, and federal leadership.

Southern Company is a founding member of the National Electric Highway Coalition⁶ (NEHC). The NEHC, which was announced in December 2021, is comprised of 50 investor-owned utilities, one electric cooperative, and the Tennessee Valley Authority, and represents approximately 120 million U.S. electric customers across 47 states and the District of Columbia. The NEHC is committed to providing electric vehicle (EV) fast charging stations so that the public can drive EVs with confidence along major U.S. travel corridors by the end of 2023.

Workforce Development

In 2021, Southern Company and Georgia Power partnered with the University of Georgia's College of Engineering to create an e-Mobility Certificate program. With elements of engineering, public policy, public health, and business acumen, this new program will prepare Georgia's workforce for an electrified future. The Company is also working closely with design students at Georgia Tech to evaluate the environmental benefits and future workforce opportunities of transportation electrification.

Also in 2021, Alabama Power, in partnership with Mercedes-Benz and the University of Alabama, launched the Alabama Mobility and Power (AMP) Center in Tuscaloosa. The AMP Center will serve as a research and development hub for creating and sustaining modern mobility and power technologies, developing charging infrastructure and managing power delivery to support large-scale growth in electric vehicles.

⁵ www.zeta2030.org

⁶ [National Electric Highway Coalition \(eei.org\)](http://NationalElectricHighwayCoalition.eei.org)

Considerations for ongoing Congressional assistance

As Congress looks to 2022 and beyond, I wanted to leave you with a few ideas to provide additional support to transportation electrification:

- Create a multi-stakeholder, agriculture-focused electrification research program where new technology can be tested at reduced risk to farmers
- Continue to provide budgetary support to ARPA-E and other research programs, especially battery recycling and autonomous technologies
- Consider funding a specific electric vehicle education center at the federal level as a resource for K-12, technical schools, and universities nationwide, using the joint DOT and DOE office as a starting point

I am honored to have the chance to testify. I look forward to your questions.