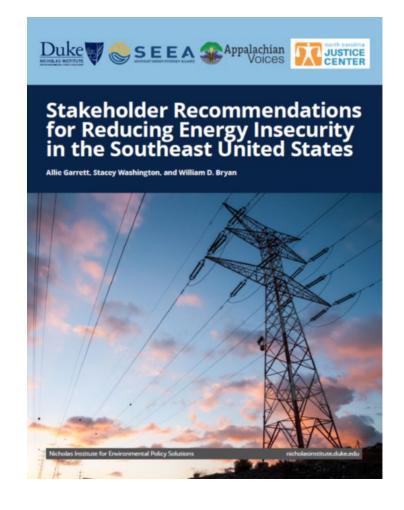


### **Energy Insecurity Webinar Series**

Wednesday, September 14, 2022

#### Stakeholder Recommendations for Reducing Energy Insecurity in the Southeast United States

- In early 2022, SEEA assumed leadership of the *Southeast Energy Insecurity Project*, formerly known as the *Southeast Energy Insecurity Stakeholder Initiative*, led by the Nicholas Institute for Environmental Policy Solutions at Duke University.
- The initiative produced a report, Stakeholder Recommendations for Reducing Energy Insecurity in the Southeast United States, which includes 24 recommendations to address energy insecurity in the region.





#### Webinar Series Intentions and Format

- The intention of the webinar series is to provide a forum for organizations to profile outstanding projects that align with the working groups presented within the stakeholder recommendations.
- Ideally, each webinar will have at least one person presenting on a project that aligns with one of the six working groups
  - -30 min presentation
  - -30 min questions
- We are pleased to announce that we have selected the Southeast Energy Insecurity Leadership Forum.
  - As members, you have the opportunity to present on work and ongoing projects.



### **Expected Timelines**



Please contact jward@seealliance.org for further involvement and information



# State Representative in Georgia House District 99 Marvin Lim

marvin.lim@house.ga.gov



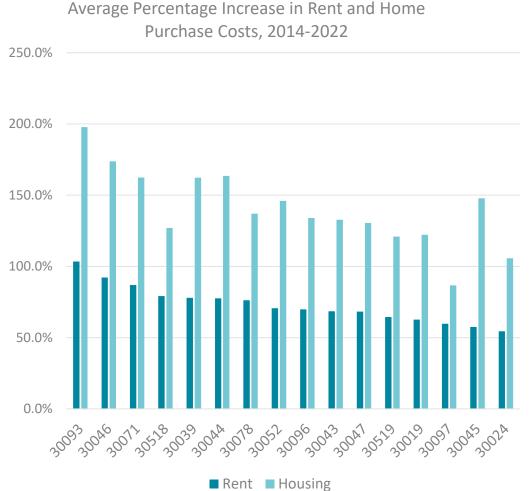


# Advancing Efficient and Healthy Housing in Georgia State House District 98

Will Bryan
Director of Research
wbryan@seealliance.org

# Unaffordable and unstable housing

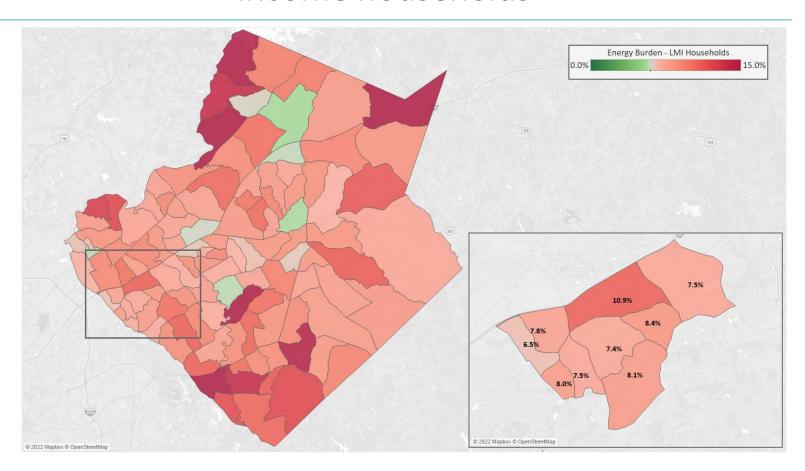
#### Rising rent/mortgage costs have outpaced Gwinnett



Home prices in HD98
 increased by 198% and
 rents increased by 103%
 between 2014 and 2022 –
 the largest increases of any
 zip code in Gwinnett
 County.



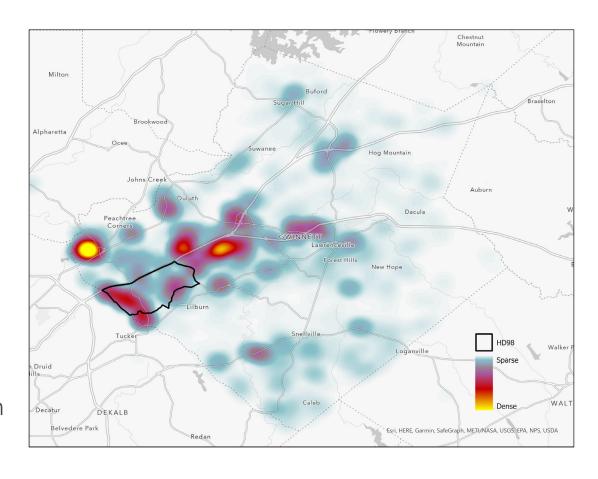
### Energy burdens fall heavily on low- and moderateincome households



- The highest energy burdens for low- and moderate-income households in HD98 is in census tract 504.21, where energy costs average almost **11% of annual income**, followed by tract 504.22 at 8.4%.
- There are more than **5,000 households in HD98** that face either extreme (>10%) or high (6-10%) energy burdens.

### Unaffordable housing frequently results in evictions

- Between 2019 and the
  July 2022 there were
   9,244 formal eviction
  filings for residents of
  HD98 in Gwinnett County
  Superior Court, even
  accounting for the CDC's
  COVID-19 eviction
  moratorium.
- This is 15% of all eviction filings in Gwinnett County despite HD98 having 12% of all renter households in Gwinnett.



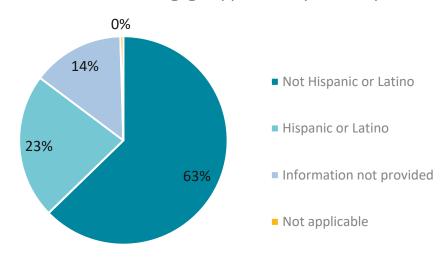


## It is difficult for residents of HD98 to access capital for home purchase and/or improvements

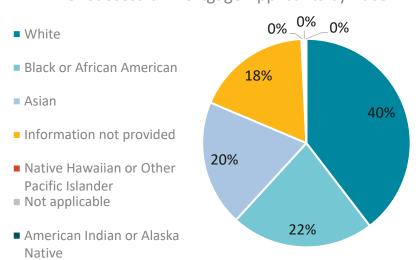
- Of the 1,541 applications in HD98 for financing for a home purchase, home improvement, or refinancing in 2017, nearly 42% were unsuccessful either because the application was denied, approved but not accepted, withdrawn, or closed for being incomplete. This is a higher rate than in Norcross or Gwinnett.
- 65% of unsuccessful applicants are people of color. (23% of those identify as Hispanic and/or Latino, 20% identify as Asian, and 22% identify as Black)





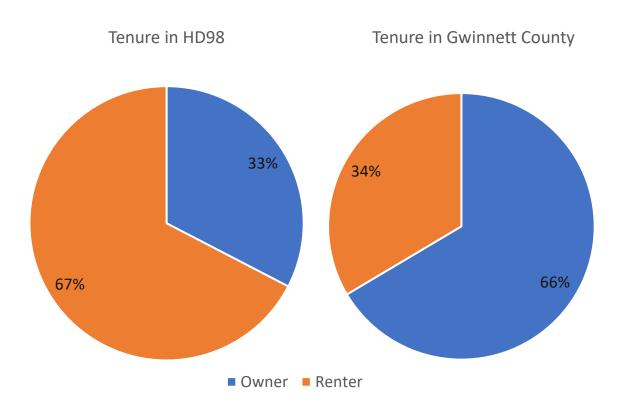


#### Unsuccessful Mortgage Applicants by Race



## The prevalence of renters makes it difficult to access energy and housing assistance

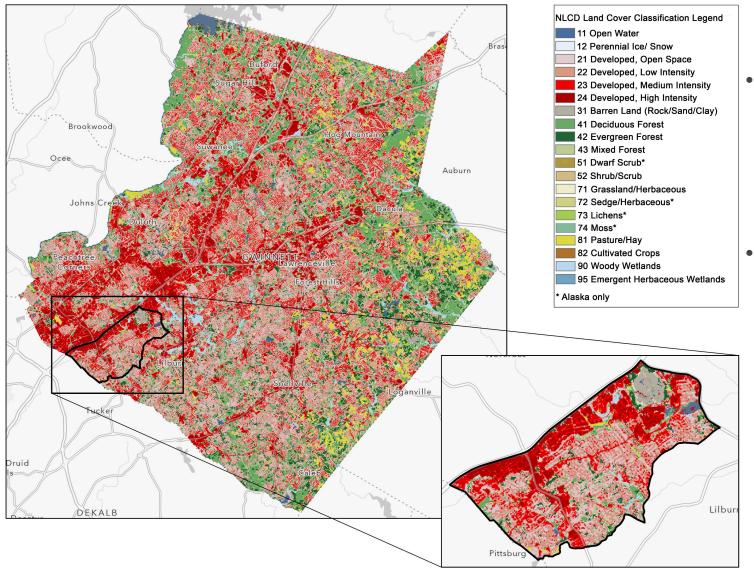
• The proportion of renters in HD98 is the inverse of the proportion of renters across Gwinnett County.





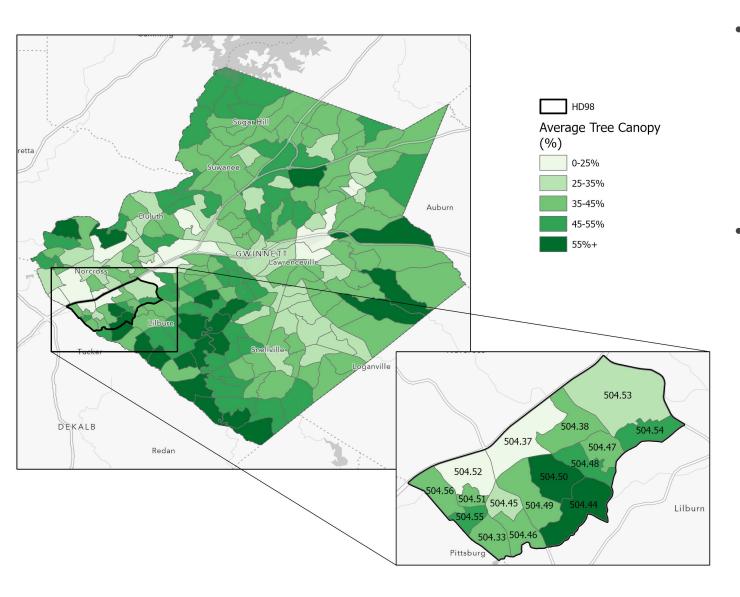
### Lack of resilience to disasters

### Developed land and impervious surface are expanding



- High intensity developed land uses dominate in HD98.
  - The amount of high intensity developed land grew by 31% in Gwinnett County between 2001 and 2019.

## Low levels of greenspace/tree canopy contribute to affordability and health challenges



- Overall, HD98 has

  5% less tree

  canopy than

  Gwinnett and

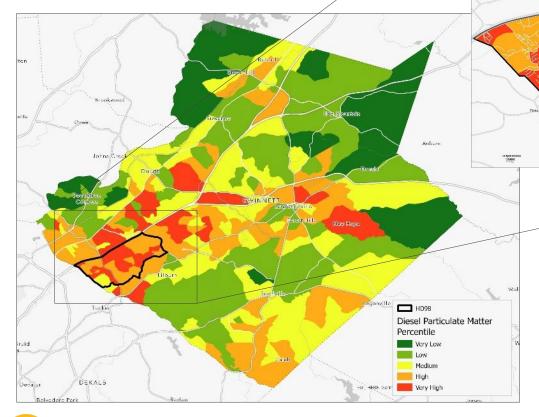
  10% less than

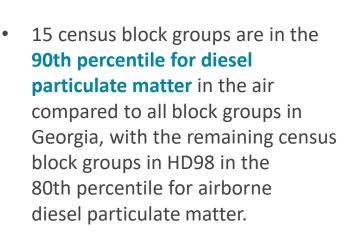
  Atlanta.
- However, canopy ranges from 22% in in commercial areas to 57% in several residential neighborhoods.

### Community health risks

### Residents of HD98 face poor air quality that exacerbates chronic health conditions

Residents of HD98 are vulnerable to diesel particulate matter in the air, caused by the operation of diesel vehicles, particularly freight.

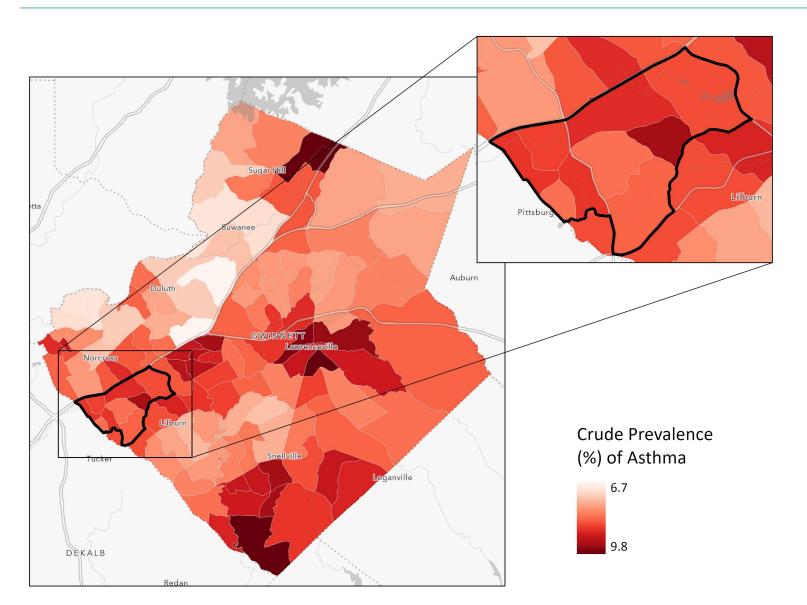




Diesel Particulate Matter



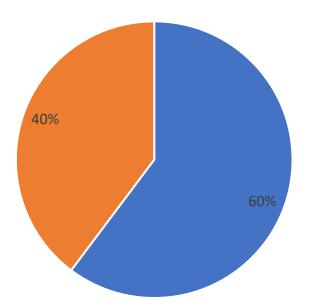
## Poor quality housing contributes to health risks like asthma



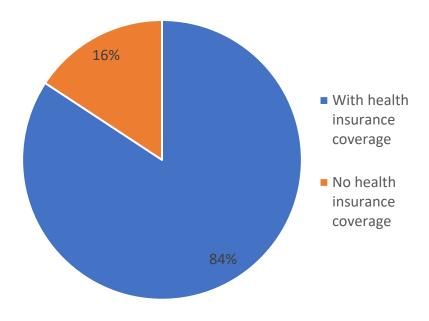
#### Residents lack access to insurance for medical care

- 40% of HD98 residents (22,304 people) lack health insurance.
- Though a larger proportion HD98 participates in the work force than in Gwinnett County, a much lower proportion of Gwinnett residents live without health insurance.

Health Insurance in HD98



Health Insurance in Gwinnett County





# Contributing to climate change

## Investing in LMI housing is a key pathway to address greenhouse gas emissions (GHG)

Table 1 EAG+Emissions for All (Top 15 Cohorts by Sorted Column)

- Low- and moderate-income households in HD98 generate 167,392,717 pounds of CO2e per year, or 11% of Gwinnett County's total GHG emissions.
- Reducing this demand by 7%

   the typical electric use savings from the
   Weatherization Assistance
   Program (WAP) would result in an emissions savings of
   1,147,490 pounds of CO2e
   every year, the equivalent of burning 575,878 pounds of coal.

Cohort Category	Avg. Annual Energy Costs	Avg. Energy Burden	Household Count	Avg. Annual EAG Per Household	Total Annual EAG by Row	Annual S um GHG E missions =
60-80% Owners, Newer SF	\$2,407	596	15,128	\$112	2M	245M
30-60% Owners, Newer SF	\$2,248	796	15,277	\$307	4M	231M
0-30% Owners, Newer SF	\$2,367	20%	10,265	\$1,599	17M	160M
30-60% Renters, Newer MF	\$1,515	596	11,006	\$44	OM	123M
30-60% Renters, Newer SF	\$2,325	796	6,323	\$368	2M	96M
0-30% Renters, Newer MF	\$1,476	12%	7,648	\$691	5M	86M
0-30% Renters, Newer SF	\$2,392	17%	4,835	\$1,466	7M	77M
60-80% Renters, Newer SF	\$2,333	596	4,461	\$31	OM	73M
60-80% Renters, Newer MF	\$1,468	396	6,703	\$0	MO	71M
30-60% Owners, Older SF	\$2,101	796	4,299	\$294	1M	61M
60-80% Owners, Older SF	\$2,407	5%	3,052	\$81	OM	46M
0-30% Renters, Older SF	\$2,514	17%	2,170	\$1,536	4M	41M
0-30% Owners, Older SF	\$2,029	18%	2,558	\$1,311	4M	35M
30-60% Renters, Older SF	\$2,297	796	2,199	\$374	1M	35M
30-60% Renters, Older MF	\$1,577	596	2,378	\$80	OM	27M
60-80% Renters, Older SF	\$2,478	596	1,449	\$68	OM	25M

# Addressing these Issues through Housing

### Housing is infrastructure

Rooftop solar decreases energy expenditures and emissions: improve resilience, affordability, climate, and health

Weatherization

improves energy
performance and
reduces health
hazards: improve
resilience,
affordability,
climate, and health
outcomes

flooding: i affordabili outcomes

Expanding greenspace and decreasing impervious surfaces reduce air temperature and flooding: improve resilience, affordability, climate, and health outcomes

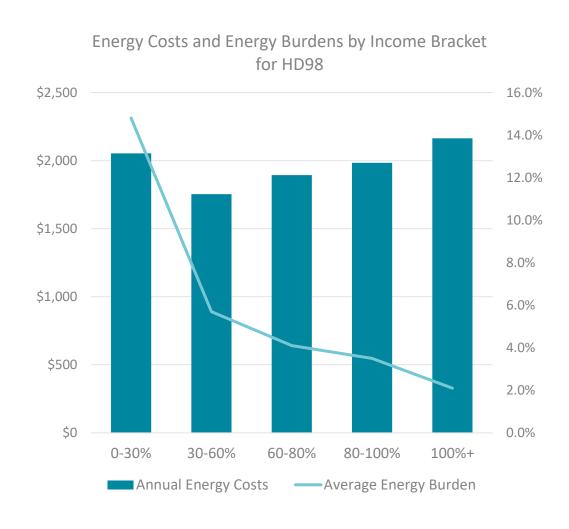
charging provides
backup power and
reduces auto
emissions: improve
resilience, climate,
and health outcomes



# Who is at risk? Where should funds be focused?

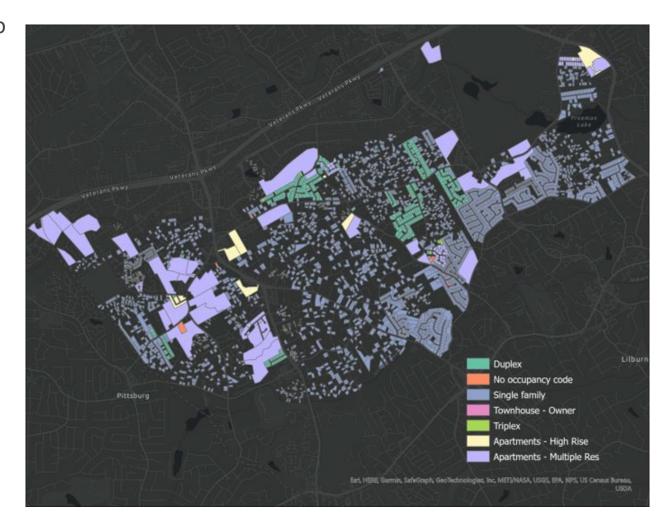
#### Low- and moderate-income households

- Households with lower incomes struggle with high energy costs, which exacerbate housing unaffordability and instability.
   Households in the lowest income bracket face energy costs that make up nearly 15% of income.
- Nearly 60% of all households in HD98 are low- or moderateincome (~12,000 households).



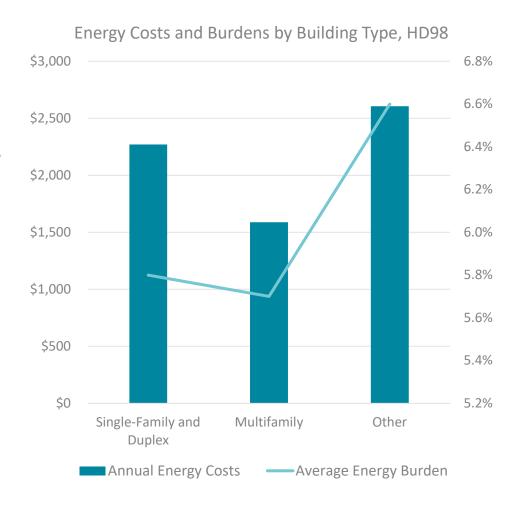
#### Renters

- Renters in HD98 tend to pay less overall than homeowners, but they have energy burdens nearly 30% higher than owners, and there are significantly more renters in HD98 than owners.
- On top of the disproportionate burdens that they face, renters also have barriers to accessing energy efficiency programs that do not exist for homeowners.



### Single-family households

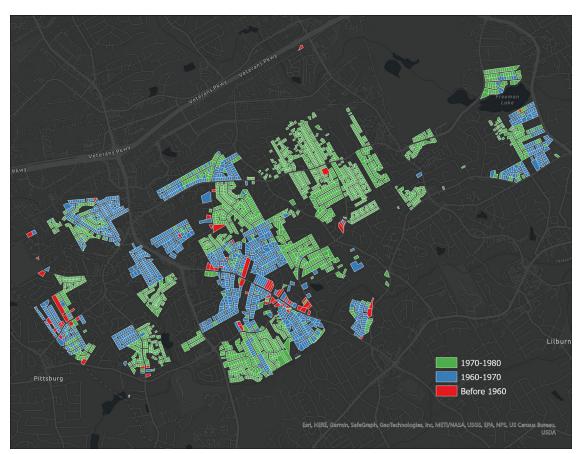
- Residents of other building types (mobile homes, RVs, etc.) face the highest energy costs and energy burdens in HD98 by a significant margin. Yet there are only around 200 of these units in the district.
- Given this, residents of single-family households – the most common housing type in the district – are also at risk given their comparatively high energy costs and cost burdens.





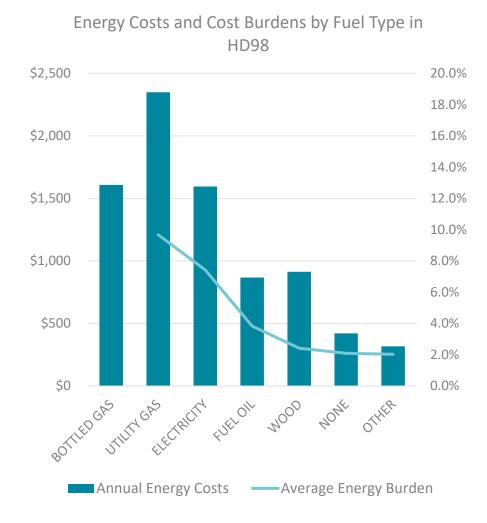
### People who live in old buildings

- residents of buildings built before 1980 are especially at risk for high energy costs and cost burdens. Older housing stock is typically less efficient, and units built before 1980 were built before any meaningful building energy codes existed, the only minimum standards for efficiency and safety in new housing.
- There are more than 3,000
  housing units built before 1980
  with LMI residents. These
  residents face average energy
  costs that are 9% higher and
  energy burdens that are 24%
  higher than newer housing
  units.



### Utility gas customers

- Households that use utility gas for heating equipment have both higher annual energy costs and energy burdens when compared to customers who rely on electric heating (and are more likely to be all-electric households). Utility gas customers pay 45% more each year on energy compared to all-electric households.
- Utility gas customers face 31%
   higher energy burdens compared to electric customers.





### Thank You



**SMART ENERGY. STRONG ECONOMY. FOR ALL.** 

**WWW.SEEALLIANCE.ORG** 

### Southeast Energy Summit

October 2-5, 2022 | Atlanta, GA



After a two-year hiatus, the <u>Southeast</u> <u>Energy Summit</u> is returning to Atlanta for three days to reconnect with friends and colleagues, explore innovative efficient energy solutions, and plan for a brighter, more prosperous future in the Southeast.

Tickets and sponsor opportunities are available now! Learn more at <a href="mailto:southeastenergysummit.com">southeastenergysummit.com</a>

